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Final Report of the Select Committee
 On Tax Equity

VOLUME 2
Analysis of the Tax System
January 1989

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# Rethinking Texas Taxes VOLUME 2 <br> ANALYSIS OF THE TAX SYSTEM 

# Rethinking Texas Taxes 

# Final Report of the Select Committee on Tax Equity 

VOLUME 2
ANALYSIS OF THE TAX SYSTEM

EDITED BY<br>BILLY C. HAMILTON

FEBRUARY 1989

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## Preface

State tax studies recur on a regular basis. Periodically, it is simply time to reexamine tax policy, just as it is periodically time to have automobile engines tuned-up or watches cleaned. The last major study of the Texas tax system was conducted in the late 1950s, appropriately enough in a time of fiscal difficulty for the state. The Select Committee on Tax Equity was also created in a period of fiscal difficulty, although it has viewed its mission as the general improvement of the tax system and not as a search for short-term solutions to short-term problems.

Tax studies invariably have many goals. The Introduction to this volume contains the mission statement the Committee developed soon after its creation. The statement outlines six tasks the Committee set for itself. Among these, one of the first and most important was to "analyze the current state and local tax system."

In large measure, that is what this volume is about. It contains edited versions of 35 analytical papers prepared for the Committee during the course of its work. Included are studies analyzing tax system performance, comparing the Texas system with tax systems in other states and examining individual revenue sources and the issues surrounding them. The volume also contains analyses of possible tax alternatives not currently used in Texas, including the value added tax, the personal income tax and the lottery.

This information was the basis of the Committee's findings and recommendations, which are presented in Volume 1. For readers so inclined, this volume is also designed to encapsulate a fairly comprehensive overview of the Texas tax system and its various pieces, circa 1988. The volume should also serve as a reference, both to the evolution of tax policy in Texas and to various tax issues like business tax policy and the personal income tax-which have a way of reappearing periodically in the state's fiscal policy debate.

As in any publication of this type, the list of people who merit acknowledgement and thanks is a long one. In Volume 1, many of these people aze recognized, and the list for this volume would be similarly long. We are, of course, especially grateful to the individuals who authored papers included in this volume. They invested a considerable amount of time and effort into the production of these chapters and contributed immeasurably to the successful completion of the Committee's work.

We are also grateful to Patsy Spaw and the Senate Engrossing and Enrolling staff for help in the tedious job of proofing this volume and to Lance Rauhoff and Randy Fritz for assistance in the seemingly endless task of laying out the chapters.

Finally, the production of this report would have been impossible without the exceptional effort, optimism and good humor of Kathy McElveen and the patience and support of Chris Hamilton. They are two of the finest people it has been my good fortune to know.

Billy C. Hamilton
Austin, Texas
January 1989

# Final Report of the Select Committee on TAX EQUITY 

VOLUME 2
ANALYSIS OF THE TAX SYSTEM

## ntroduction

## Analysis of the Texas Tax System

Since 1983 , Texas state and local governments have faced a difficult period financially. In part, their problems have been a result of the state's economic difficulties, which began with the slump in the oil and gas industry and eventually expanded to other industries such as construction, real estate, finance and manufacturing.

However, the state's economic woes provide only part of the explanation for Texas state and local government's fiscal dilemma over the past half decade. The state's economic difficulties also uncovered other problems with the tax system which were present even in the late 1970s, when the state economy and state and local finances were at their zenith.

The Texas Legislature wrestled with these problems during regular legislative sessions in 1983, 1985 and 1987 and during special legislative sessions in 1984 and 1986.

## House Bill 2

Despite a general consensus about the need for changes in state and local tax policy, actual structural changes proved difficult to achieve in a period when the primary concerns were dealing with large budget shortfalls and ensuring funding for vital budget areas. This being the case, the Legislature adopted House Bill 2 in March 1987, creating the Select Committee on Tax Equity.
H.B. 2 created a 13 -member panel with the task of reviewing the state and local tax system in detail and reporting its findings to the Governor and the Legislature.

The Governor, the Lieutenant Governor and the Speaker of the House each selected four members of the Committee. The 13th member, the Comptroller of Public Accounts, is a designated member under the provisions of H.B. 2.

## The Committee's Work

The Committee began meeting in May 1987 , shortly after the selection of Committee members. Early on, the Committee set an ambitious mission for itself, focusing on a complete review of the state and local tax system and the available options for changing the system. A mission statement developed by the Committee in the summer of 1987 is shown in Table 1.

The work of the Committee stretched between May 1987 and December 1988. During that time, the Committee held more than two dozen meetings in Austin and around the state to gather information, to hear from experts in the field of state and local tax and expenditure policy and to take testimony from individual Texans and business leaders. The Committee's work generally progressed through four phases:

- Committee organization and development of basic information on the state and local tax system.
- Public hearings at locations across the state.
- Data collection, research and the gathering of views from leading state and local tax experts.
- Development of findings and recommendations.


## The Committee's Report

From this work comes the Committee's final report. Volume 1 of the report contains the Committee's findings and recommendations. Volume 2 contains the major analytical studies produced as part of the Committee's work. They provide the information about the tax system from which the Committee's findings and recommendations are drawn.

Volume 2 is organized into seven parts:
Part I provides an overview of the Texas state and local tax system, including evaluation criteria, interstate comparisons and analyses of the tax system's recent and prospective performance.

Part II focuses on the sales tax, the state's most important tax source and a critical local revenue source as well.

The chapters in Part III deal with state business tax policy, including discussions of current policies and possible alternatives and the impact of taxes on the state economy.

Part IV concerns the property tax, the major local tax source, as well as other local fiscal issues.
Part V deals with other current state revenue sources, including the motor fuels taxes, the alcohol and tobacco taxes and various fees. It also discusses the lottery as a possible revenue option.
Part VI contains a number of chapters examining the personal income tax, the last major tax source not used by the state.

Finally, Part VII contains chapters on assorted topics, including an analysis of the impact of federal tax policy on Texas.

TABLE 1. Mission Statement of the Select Committee on Tax Equity

In August 1987, the Select Committee on Tax Equity adopted this mission statement as a guide to its work in examining the Texas state and local tax system and preparing recommendations for the Governor and the Legislature.

The mission of the Select Committee on Tax Equity is to rec-. ommend to the State the standards and options for deoeloping a fatr, viable and economically competitive state and local tax system capable of generating sufficient revenues to meet expected needs in the future.

In fulfilling this mission, the Committee will:

1. Establish criteria for determining and evaluating state and local revenue options.
2. Analyze the current state and local revenue system, including:

- The composition, dependability and flexibility of the tax system and its adequacy to meet the state's longer-term needs.
- The relative burden imposed by the tax system on taxpayers and the relative equity of that burden.
- The relationship between taxes and the overall revenue needs of state and local government in Texas.
- The relationship between the tax burden and the benefits citizens receive from government in Texas.
- The impact of the state and local tax system on economic development.
- The relative simplicity of the tax system-both in terms of government administration and taxpayer compliance.

3. Determine the impact of federal tax reform on the Texas state and local tax system and on businesses and individuals.
4. Review and evaluate forecasts of the most likely range of state and local revenue needs.
5. Identify and analyze the revenue options available to Texas state and local government by:

- Examining the revenue potential of each option.
- Analyzing how each option compares to the evaluation criteria established and its impact on the various segments of business and individual taxpayers.
- Assessing the relative impact of each option on economic development.

6. Make recommendations that fulfill the overall mission of the Select Committee on Tax Equity.

## Part I: The Tax System Today

# W hat Is a "Good" Tax System? 

Criteria for Evaluating the Texas State and Local Tax System

## Summary

This chapter discusses nine recommended criteria which can be used as a framework of reference to evaluate the Texas state and local tax system and possible tax policy alternatives. These criteria combine generally accepted concepts found in the literature of public finance and in tax study efforts in other states. They are essentially the features which can be said to characterize a "good" state and local tax system. As they appear in the chapter, they include:
Adequacy: The tax system should produce the necessary revenue in the most efficient manner possible.
Equity: The state and local tax burden should be distributed fairly. Two approaches to fairness are benefits received and ability to pay. The benefits received principle implies that taxpayers who benefit from a government service bear its cost. In cases where the benefits principle does not apply, the ability to pay principle means that taxpayers pay according to their resources.
Efficiency: The tax system should not unnecessarily or unintentionally interfere with private economic decisions.
Economic Competitiveness: To the extent possible, the tax system should be designed to enhance state and local economic development or at the least should not retard development.

Stability: The tax system should be constructed to avoid unpredictable shifts due to changing economic conditions or other factors. The system should promote certainty on the part of taxpayers and government.

Simplicity: The tax laws should be as simple as possible to minimize compliance costs for taxpayers and enforcement costs for government tax administrators.
Balance: To the degree possible, government should avoid over-reliance on any one tax or set of taxes. The tax system should be balanced among a number of taxes.
Broad Base: Individual taxes should be broadly based, minimizing tax preferences, to provide even-handed treatment of all taxpayers and to keep tax rates as low as possible.

Intergovernmental Linkages: Tax decisions should recognize the connections between state and local tax systems.

This chapter examines these factors, what they are generally defined to mean by tax experts and how well Texas' current state and local tax system meet them.

The criteria were also used to evaluate the various tax policy options before the Select Commitee. Each option was evaluated in terms of how well it contributed to the accomplishment of all the various criteria.

By Billy Hamilton
Executive Director of the Select Committee on Tax Equity

Aman named George Smyth came to Texas as a surveyor in the 1830 s and found a large, untamed and largely lawless land where many of the citizens were fugitives from justice. Smyth did well in Texas. Within five years of arriving, he was appointed land commissioner in the Nacogdoches area by the Mexican authorities, and despite the rising tide of revolution, he was optimistic about Texas' future. In 1835, he wrote: "I am convinced that Texas must prosper. We pay no taxes, work no public roads, get our land at cost, and perform no public duties of any kind. ${ }^{11}$

Some might argue that Smyth's comments for all practical purposes have become the credo of Texas' development. Others might be less certain. Nevertheless, it is clearly true that government plays a much more prominent role in Texans' lives today than it did 150 years ago. And taxes are central to that role.
Read the newspapers of almost any day of any month, and you are sure to find discussions of state or local fiscal issues. The creation of the Select Committee on Tax Equity is evidence of the

[^0]attention being given to taxes and tax policy in Texas today. Government involves the provision of schools and roads, help for the needy and the insurance of public safety. Taxes-however much they are disliked-are the price citizens pay for those services. For one side of the fiscal equation to function properly, the other must function properly as well.

In creating a tax system, governments typically piece together a variety of taxes and other revenue sources that operate in a variety of ways. Presumably, a government could rely on a single tax to pay for its spending, but practically, that is difficult to imagine. Even Alaska, which relies heavily on petroleum-based taxes, uses other taxes.

Because there is a range of options available in creating a tax
system, choices must be made. Unfortunately, there is no single correct set of tax choices. The diversity of tax systems in the 50 states is ample evidence of that. Tax systems always represent the reconciliation of different views about who or what should be taxed, how they should be taxed and by how much.

This does not mean that there are not common goals or themes that can be looked for in any tax system or any tax proposal. Over the years, a number of factors have gained recognition as relevant to any thorough assessment of a tax system. Just as we want our cars to run well in hot weather and our children to be polite, there are certain standards for what comprises a "good" tax system. These standards are, for the most part, not complex

TABLE 1. Criteria for Evaluating the Texas State and Local Tax System

Adequacy: The tax system should produce the necessary revenue in the most efficient manner possible.

Equity: The state and local tax burden should be distributed fairly. Two approaches to fairness are the concepts of benefits receivedor ability to pay. The benefits principle implies that taxpayers who benefit from a government service bear its cost. In cases where the benefits principle does not apply, the ability to pay principle means that taxpayers pay according to their resources.

Efficlency: The tax system should not unnecessarily or unintentionally interfere with private economic decisions.

Economic Competitiveness: To the extent possible, the tax system should be designed to enhance state and local economic development or at the least should not retard development.

Stability: The tax system should be constructed to avoid unpredictable shifts due to changing economic conditions or other factors. The system should promote certainty on the part of taxpayers and government.

Simplicity: The tax laws should be as simple as possible to minimize compliance costs for taxpayers and enforcement costs for government tax administrators.

Balance: To the degree possible, government should avoid over-reliance on any one tax or set of taxes. The tax system should be balanced among a number of taxes.

Broad Base: Individual taxes should be broadly based, minimizing tax preferences, to provide even-handed treatment of all taxpayers and to keep tax rates as low as possible.

Intergovernmental Linkages: Tax decisions should recognize the connections between state and local tax systems.
economic formulations. They are familiar-if somewhat elusivevalues.

For example, when President Reagan went before the nation in 1984 to deliver his State of the Union address, he called for basic reform of the federal tax system, which became a reality in 1986. While taxpayers may agree or disagree with the results of the federal effort, it is difficult to argue with the simple goals he laid out. The tax system, he said, should be simple and fair.

In reality, we probably want our tax systems to accomplish more than those two goals, but they are a sound place to begin.

In examining the literature of public finance and the findings of tax study efforts in other states, it is possible to identify nine criteria which serve as a frame of reference for evaluating tax policy alternatives. They admittedly are not easily defined and quantified, but they can be useful touchstones in deciding what should and should not be part of a "good" tax system. These criteria are summarized in Table 1.

## Adequacy

While we may agree with President Reagan about the importance of simplicity and fairness as standards for a tax system, a pragmatic first question is whether the system adequately meets the revenue needs of government. The lessons of history suggest that a tax system that produces inadequate revenues will quickly surrender fairness and simplicity in the scramble to balance the books.

Like most of the criteria to be discussed in this chapter, what constitutes adequacy is elusive. At a minimum, it might best be defined as meaning the tax system-and the broader revenue system-should produce at least enough income in a given year to
provide the same level of services provided in preceding years. At a minimum, that means the tax system should grow-without tax increases-at a rate that keeps up with inflation in the cost of government services and growth in the number of people who use those services.

That simple definition offers considerable room for debate, since it assumes that the programs currently being provided represent the right bundle of services to meet the state's needs. Fortunately, that is not our concern on the revenue side. We care only that income matches outgo. If what we might call "current" revenues and spending are in balance, the decision to spend less or more revolves-as it shouldaround the merits of the services and not how much is available to buy them.

Of course, there could be other views of adequacy. One is the idea that the tax system should provide a stable, largely unchanging level of income. There appears to be a flaw in this notion in an era when there is well-documented consumer inflation of four percent and when the state's population is increasing. Commitment to a static level of revenues necessarily implies commitment to providing a shrinking basket of services, negating the policy choices that created the basket in the first place.

The flip side is that the tax system's growth should be maximized to realize the largest gains possible year in and year out. This seems equally problemmatic since large rewards also carry large risks. Some might argue that Texas fell into this cycle in the late 1970s and has paid the price for it ever since.

Whatever conclusions are reached about the 1970s, it is fairly clear that the tax system that existed earlier at the beginning of
the 1987 legislative session when this Committee was created was not adequate to meet the state's needs. In May 1987, the Texas Association of Taxpayers estimated that in 1988-89, about $\$ 27.5$ billion would be needed in state General Revenue-related income (essentially tax income) to pay for the level of services the state was providing in 1987. ${ }^{2}$ By contrast, state General Revenue sourceswithout the recent tax increaseswere expected to produce about $\$ 22.5$ billion over the two years, and a billion of that was needed to eliminate the deficit expected at the end of 1987.

At the end of a special legislative session in July 1987, the budget for 1988-89 was balanced. There should be no deficit to eliminate at the end of 1989 , as there was in 1987. But what about the years after 1989? That is much less clear. It depends on factors as
diverse as the performance of the state economy, the progress of the Iran-Iraq war or the accuracy of estimates of the tax changes enacted in the 1987 legislative session.

One factor that clearly will affect the longer-run adequacy of the tax system is the degree to which a part of the 1988-89 budget was financed by measures that will not contribute to the revenue stream in 1990 and beyond. Table 2 shows a list of these items. At best, they add to about $\$ 1.1$ billion over two years. Under more conservative calculations, they total more than $\$ 1.3$ billion.

The adequacy of many local tax systems in Texas is equally open to question. Economic problems have hurt the value of property
2. Texas Association of Taxpayers, Decoding the Budget: A Special Report (May 1987), Table 3.

| TABLE 2. Temporary Measures Used to Finance the State Budget in 1988-89 (Millions of Dollars) |  |
| :---: | :---: |
| Franchise Tax Rate Increase to $\$ 6.70$ per $\$ 1,000$ in Taxable Base (Returns to $\$ 5.25$ in Fiscal Year 1990) | \$375.1 |
| Professional Fee Increase (\$110 Annual Increase in Certain Fees-Expires After 1989) | 79.1 |
| Insurance Tax Surcharge Equal to $20 \%$ of the Regular Tax (Expires After 1989) | 114.2 |
| Manufacturing Equipment Exemption from Sales Tax (Begins 1-1-91; Amount Shown Is Effect During the 1990-91 Budget Period) | 89.3 |
| Highway Fund Financing Provisions: <br> -Land Sale Proceeds <br> -Temporary Transfers to the School Program (Plus Repayment to Highway Fund) | 120.6 324.0 |
| Subtotal-Temporary Measures | \$ 1,102.3 |
| ADD: Protested Insurance Tax Payments Deposited in the General Fund Which May Not Be Available in 1990-91 | \$229.4 |
| Total Possible Losses from 1988-89 Financing | \$ 1,331.7 |

[^1]statewide, which is the critical base of the property tax. Local sales tax collections have followed the same anemic path that has characterized the state sales tax. In fact, of course, the statewide figures tend to mask the diversity locally, where the situation may be much better or much worse than the statewide averages suggest. The frequency with which local governments seek new paths of access to the sales tax suggests that they, at least, feel their current systems may be inadequate and may not be doing the job.

## A Fair Tax System

Having recognized the basic need for the tax system to produce an adequate amount of income, we can turn to the more difficult questions of what the broader results of the system's functioning are. The most obvious guiding principle in this area is that the tax system be equitable. Once again, we have a characteristic that cannot be defined, much less measured quantitatively. The burden of the tax system should be distributed fairly among all citizens, but what constitutes fairness is a matter of opinion, meaning judgement must play a role.
To decide what constitutes a fair tax system, it is useful to decide first what tax fairness is. Again, there is no simple definition. Generally, economists base their analysis on two concepts: benefits received and ability to pay.
Benefits received means that the
3. Billy Hamilton and Stuart Greenfield, ."The State Tax Burden," Fiscal Notes (Comptroller of Public Accounts, August/ September 1979), pp. 1-7.
4. Donald Phares, Who Pays State and Local Taxes? (Cambridge, Massachusetts: Oelgeschlager, Gunn and Hain, Publisher, Inc., 1980), pp. 130-131.
persons who benefit from the service pay the bill. For example, the state's motor fuel taxeslevied on those who buy gasoline and diesel for their motor ve-hicles-essentially work on the benefits received principle, since they are primarily used to pay for highway construction and maintenance. Similarly, state and local governments use any number of fees to pay for services rendered,

> The burden of the tax system should be distributed fairly, but what constitutes fairness is a matter of opinion.

whether it is inspection, licensing or providing street curbs.

The second principle, ability to pay, means that taxpayers should be taxed according to their resources. Normally, this is split into two parts: horizontal equity and vertical equity. A tax system is horizontally equitable if taxpayers in the same economic situation pay the same tax. It is vertically equitable if it treats differently situated people in appropriately different ways.
Much of the recent debate over the Texas tax system appears to be over the issue of horizontal eq-uity-more specifically, over whether the state tax system provides a "level playing field" to different industries so that a retailer, a service firm and a manufacturer of roughly the same economic size pay approximately the same tax. Obviously, this leaves unanswered the questions of how to measure relative size and what constitutes similar amounts of tax. Is the base of comparison sales or assets or profitablity or some other measure
all together?
The same is true of the question of vertical equity. In fact, it is, if anything, an even thornier issue. Vertical equity is frequently stated as meaning that persons with greater capacity should bear a larger tax burden. Intuitively, this seems reasonable, but how much more? Should it be large enough to make the burden propor-tional-so that two people of different incomes pay the same relative share of their income in taxes-or should it be progres-sive-the goal of, for example, the federal tax system-so that those who make more pay proportionately more in taxes as well?
These are issues uppermost in the minds of the state's leaders, as evinced by the creation of a committee on tax equity.
Whatever the case, the best available evidence suggests that the Texas tax system up to now has been neither proportional nor progressive. Studies have found the system to be regressivemeaning that it takes proportionately more of the income of lowincome Texans than it does those in higher income brackets.
A 1979 study by the Comptroller's Office concluded: "[T]he burden of state taxes [in Texas] falls more heavily on lower income groups than higher, with the degree of burden varying somewhat according to the . . . assumptions employed. ${ }^{3}$ In a study of overall state and local tax burdens, Donald Phares found that the Texas tax system was one of the three most regressive nationally, trailing only Wyoming and Florida. ${ }^{4}$ A similar conclusion is reached in a study elsewhere in this report (see Chapter 3).
In this context, however, it is important to note that tax systems in general tend to be regressive, at least in part because they rely heavily on sales, excise (gasoline, alcohol, tobacco) and property
taxes, all of which are frequently structured so that they put a larger burden on low-income persons. In his study, Phares found four state and local tax systemsMassachusetts, Minnesota, New York and Oregon-that were progressive and nine more that were more or less proportional. The other 37 were like Texas' with some degree of regressivity.

One final caveat on this issue: realistically, the distribution of tax burden-progressive, proportional or regressive-becomes increasingly an issue as the overall level of taxes go up. In theory, of course, fair is fair and regressive is regressive, but it is one thing to have a regressive tax system in a low tax state and another to have a regressive system that imposes a heavy tax burden.

## Efficiency

Another principle of sound tax policy is that the tax system should represent as little unintended interference with privateproducer, worker, consumerdecisions as possible. Any feasible tax system will, of course, take resources from the private part of the economy in the form of tax payments and the time and cost of complying with the tax laws. The goal in this area is to have as little impact as possible, unless that impact is an intended consequence of government policy.

Texas has recently made a series of decisions focused on this very issue, although it was not explicitly stated as such. Since its inception, the Texas sales tax has been levied on sales of production machinery. This tax, in effect, imposed a significant extra cost on capital investment in the state. This poses a particular burden on industries which have heavy capital investment requrirements or which are just starting business.

A number of other states either
don't have this tax or have done away with it as a lure to industry. Under House Bill 61, enacted during the 1987 special legislative session, Texas, too, will begin to eliminate this tax on capital beginning in 1991, with a phaseout over five years. Whatever its other intended purposes, the change clearly will mean that the tax system will have less impact on capital investment decisions in the 1990 s than it has had to date.

Another increasingly recognized concern of tax policy in recent years is the issue of how the tax system influences economic development.

It is important to bear in mind that any tax will affect economic decisions to some extent. A tax on consumption discourages-at some level-working to earn money to spend. So does a tax on income. Some argue that the Texas oil and gas production taxes discourage some production of the state's mineral wealth. Again, these consequences must be borne in mind and weighed against other objectives of tax policy.

## Economic Competitiveness

The manufacturing equipment exemption example raises another issue, which has become an increasingly recognized concern of tax policy in recent years-that is, the issue of how the tax system influences economic development. To a degree, this is a subset of the efficiency criterion, but it carries that concept further in that state and local governments have become heavily involved in direct efforts to develop their economies.

As a result, many more do not want tax policy to be simply neutral in its economic effects; they want policy to shape private decisions in a positive way.
To an extent, this has always been of some importance in state and local finances. However, recent economic difficulties in many states and the growing competitiveness of world markets have focused even more attention on it. As Table 3 shows, tax incentives designed to enhance state and local economic attractiveness have become extremely widespread, and Texas is by no means one of the most extensive users of incentives.

One study calls this attention to the development aspects of the tax system "competitiveness," and it appears to be a relevant standard along with efficiency in deciding how the tax system affects economic activity. ${ }^{5}$

## Stability

Moving beyond questions of how the tax system affects individuals and the economy, there are a series of goals relating to how effectively the tax system operates. For Texas, one of the most important of these would have to be stability-that the tax system should behave in a relatively predictable and certain manner.

In one sense, stability is a close cousin of the adequacy criterion discussed earlier. Generally, a tax system that is adequate will tend to be stable, but that is not always the case. During the 1970s, Texas' state and local tax system produced what might be judged to have been adequate-or even

[^2]better than adequate-levels of revenue, but some parts of the system-notably the severance taxes-were extraordinarily unstable. They just happened to be growing in an unstable fashion rather than declining.
Similarly, it is possible to be stable and inadequate. If we based our tax system on the fuels tax, we would have a highly predictable tax system, but one that did not keep pace with inflation
and population pressures. As might be expected, Texas' recent history has been marked by significant instability in the tax system. This can be seen in Figure 1, which shows state tax growth rates, with growth resulting from tax increases excluded. This essentially is how the old, pre-1984 tax base would have performed without the recent tax changes. Without the tax increases in 1984, 1986 and 1987, the overall growth

TABLE 3. Selected Tax and Financial Incentives for Industry

| Incentive | Number of <br> States | Available <br> in Texas? |
| :--- | :--- | :--- |
| Corporate income tax exemptions ${ }^{1}$ <br> Personal income tax exemptions ${ }^{2}$ | 33 | Yes (no tax) |
| Excise tax exemptions | 26 | Yes (no tax) |
| Tax exemption or moratorium on land <br> and capital improvements | 18 | No |
| Tax exemption or moratorium <br> on equipment and machinery | 34 | Yes (local) |
| Inventory tax exemption on goods in <br> transit (freeport exemption) | 35 | No |
| Tax exemption on business inventories | 43 | No |
| Sales tax exemption on new machinery | 39 | No |
| Tax incentives for job creation | 31 | Yes (1991) |
| Tax incentives for industrial investment | 29 | No |
| Tax credits for use of specified state products | 5 | No |
| Tax stabilization agreements for industries | 5 | No |
| Tax exemptions to encourage research and |  |  |
| development | 24 | No |
| Accelerated depreciation of equipment | 34 | No |

Source: Site Selection Handbook/86 and Industrial Development, Vol. 155, Number 5 (September-October 1986), pp. 1008-1024; All States Tax Handbook (Englewood Cliffs, New Jersey: Prentice-Hall, 1985).

1. In addition to states like Texas which have no corporate income tax, this includes such incentives as credits for new hires, tax credits for pollution control equipment investment, tax moratoriums for new businesses, exemptions for businesses in approved enterprise zones, tax credits for research and development and similar tax abatements. This category overlaps slightly with other categories.
2. In addition to states like Texas which have no personal income tax, this includes exemptions from tax for business corporations (legal individuals in some states), credits for income generated from new businesses by individual owners and similar tax abatements.
3. A constitutional amendment on this issue was defeated by voters in November of 1987.
of the tax system has been poor and highly unstable. The prospects for stability in the future under the current tax system is a critical issue. The state has added several billion dollars in new taxes to the system in the past three years, but has it improved the prospects for stability?
In this case, instability has bad consequences for both government and taxpayers. It puts government in the position, as Texas has been, of having to scramble to find new sources of income, while taxpayers are uncertain about what the scrambling may lead to, making for uncertainty in private decision making as well.

## Simplicity

A superficial definition of tax simplicity is easy to formulate. A tax should be easy for taxpayers to understand and for government to collect.
Unfortunately, this is another goal difficult to achieve in practice, particularly in a tax system like Texas' where taxpayers range from huge multinational corporations to the proverbial "mom and pop" stores. Simplicity must necessarily balance the needs of the various groups of taxpayers with the needs of government to have enough information to adequately enforce the tax laws.
In any case, any proposal should be assessed by the degree to which it adds to the complexity of compliance and administration. It is possible for a theoretically sound tax to be too unwieldy to work in practice.
Generally, the current tax system in Texas is relatively simple as tax systems go, but there are aspects that work against simplicity. The Comptroller, for example, has warned against the proliferation of overlapping local sales taxes, which can produce a morass of potential rates when
combined. In a July 1987 report, he underscored the problem:

The state-with city, state and metropolitan transit authority sales taxes-has eight [possible sales tax] rates. That's more than any of the other 10 most populous states. And one new law already on the books will increase the possible combinations to 31 rates effective January $1,1988$.
... The Legislature this spring considered a number of additional local-option measures, intended to raise money for such local government projects as economic development and crime prevention. They would have created two new sales taxes with up to 61 combinations of state and local sales tax rates. . . . If enacted, these measures would have confused consumers and made nightmares come true for merchants who must collect taxes. ${ }^{6}$

The franchise tax provides another example. It has relatively simple reporting requirements, but in this case, simplicity of specification does not equate with simplicity of interpretation. The laws are not specific in some areas, leaving major issues which are being litigated daily, often with a resulting loss of millions of dollars in expected revenue to the state.

## Balance

Another criterion frequently used to judge tax systems is overall balance. A balanced tax system is one that does not rely heavily on any single tax or group of taxes to produce the bulk of its income. In this regard, the ideal approach is not unlike the management of an investment portfolio. To maximize return in the
safest way possible, it is necessary to diversify-to not put all your eggs in one basket.
One of the frequent charges in recent years is that the Texas tax system is not particularly well balanced.
In one ranking of states based on revenue balance, analysts at the U.S. Advisory Commission on Intergovernmental Relations (ACIR) ranked Texas 41st in terms of overall balance in its state and local tax system based on their idea of a balanced system. ${ }^{7}$
Naturally, there is much room for disagreement over what a "balanced" tax system should look like. In the ACIR's study, a balanced state and local system is composed of:
(1) 20-30 percent of revenue each from the sales and property taxes;
(2) 20-35 percent from personal income taxes; and
(3) The remainder from a com-
bination of excise taxes, corporate taxes, user fees and so on.

Texas' state and local mix, based on the most recent data, is 36.8 percent property tax, 24.9 percent sales tax, no income taxes and the remaining 38.3 percent coming from other taxes, such as the motor fuel taxes, alcoholic beverage taxes and so on. This obviously is far from the ideal mix that the ACIR study envisioned. The states with the most nearly balanced systems under this scheme are Arkansas, California, Georgia, Missouri and South Carolina.
A primary cause for Texas'
6. Comptroller of Public Accounts, "Local Option Taxes Could Lead to Chaos,"
Fiscal Notes (July 1987), p. 5.
7. Robert Kleine and John Shannon, Characteristics of a High Quality StateLocal Tax System (U.S. Advisory Commission on Intergovernmental Relations, September 1985).

FIGURE 1. Growth in State Revenue Collections (Pre-1984 Base)


[^3]relative imbalance-until recently at least-is the use of severance taxes, as opposed to income taxes, to carry a large share of the tax load, a fact which the ACIR report acknowledges. The ACIR analysis does not suggest, however, that states like Texas which have a unique tax base like mineral wealth should simply ignore them in favor of a more "normal" revenue mix. The key is to avoid allowing individual taxes-particularly those with narrow or volatile bases-to become too important in the tax base, a sin Texas was guilty of in the 1970s.

## Broad-Based Taxes

Just as a tax system can become too narrowly based on a few taxes, the tax system also can be plagued by individual taxes that are levied on too narrow a base. The issue is twofold: the safety of not putting too many eggs in one basket and the equitable treatment of similarly situated taxpayers.
The second reason, which ties back to the earlier equity criterion, seems particularly compelling. Raising a disproportionate amount of income from a narrow base will color economic decisions, probably favoring some activities over others. It also requires a higher tax rate than normally would have been necessary with a broader base.
All other things being equalwhich, of course, they never areit is better to have the broadestbased tax possible whatever variety of tax it may be. Here again, there is arguably room to question the current Texas system on at least two counts. First, it uses a number of special industry taxes, like the oil and gas taxes, various insurance taxes and utility taxes, which are collected from a single industry using a limited base, albeit an important one in most cases. How well these taxes
perform thus becomes a function of how well one given industry is doing.

Second, Texas' generally broadbased taxes-the franchise tax and the sales tax-have been structured in ways that prompt many to argue that they fall too heavily on a few industries while excluding others or affecting them in only limited ways.

> There is no line clearly marking the boundary between equity and inequity or between simplicity and complexity.

The state has taken stepsprimarily in the sales tax area-to deal with this problem through the 1984 and 1987 tax bills. In both cases, the sales tax base was expanded to include a number of items and services not previously taxed. Any single alternative should be evaluated in part on whether it adds to the breadth of the individual and the overall tax system.

## Intergovernmental Linkages

In the 1986-87 fiscal year, the most recent year for which complete state and local data are available, governmental units in Texas collected more than $\$ 22.3$ billion in taxes. Almost half of that total was raised at by local governments, and the property tax, a completely local tax, was the largest single tax employed in the state.
The point of this criterion is to keep in mind the relative equality of size between the state and local tax systems in Texas. Moreover, the two levels have a constant
interplay, irrespective of size. They share some of the same tax bases and many of the same taxpayers. Many experts feel that the tax competition between the two levels is likely to intensify in coming years as both struggle to make ends meet and provide for a growing population.
It would be poor policy to consider any tax alternative solely in terms of its effect on the state tax system or solely in terms of its local impacts. The two must be considered as pieces of a single fabric.

## Making Tax Choices

It undoutedly would be possible to identify other useful criteria for evaluating tax systems. Not mentioned, but obviously important, for example, is the political acceptability of any tax choice that is made. But that takes the discussion into another realm-the area of legislative debate and decision making.
Although the list could be extended, it is probably fair to say that if a tax system satisfied the nine criteria discussed above, it would be a remarkably good tax system. Too good, in fact, to be true.
The list of criteria is sufficiently long so that no one tax system-or any single policy alternative for that matter-can fully meet them all. Almost all tax policy options have both advantages and disadvantages. They will meet some of the criteria better than others. They will not meet some of the criteria not at all. The best policy choices will be those which strike a balance among the criteria outlined.
The list is also sufficiently lacking in quantitative specificity to allow much room for disagreement over definitions. There is no line clearly marking the boundary between tax equity and inequity or between simplicity and complexity. They are, finally, value judgments.

# H ow Texas Compares 

## Economic and Fiscal Comparisons with Other States

## Summary

This chapter examines some of the more common measures used to compare state and local economic and fiscal systems. Not surprisingly, it finds both differences and similarities between Texas and the other states. Texas has experienced rapid population growth in recent years. Since 1980, only four states have grown faster than Texas. It is the third most populous state (behind California and New York) and has the third largest labor pool.

On the other side of the scale, Texas obviously experienced some rough times economically in the mid-1980s. Its job growth rate between 1984 and 1987 was one of the slowest nationally, ranking 41st according to one study. Much of its job growth in this period was in the service and government sectors, rather than the goods-producing industries like manufacturing and mining.

Slower job growth and other effects of the recession pushed the state's per capita income level below the national average, where it had long been. During the height of the economic boom, the state's per capita income actually exceeded the national average for several years.
In terms of state and local government spending, Texas spent an average of $\$ 2,816$ per capita in 1987, about 88.4 percent of the national average. State and local spending in Texas ranked 31st among the states. A key driver
of both state and local spending in Texas is education, which accounts for about half of state spending and about 40 percent of all local spending. Texas ranks above the national average in its educational expenditures.
Texas government pays for its services with a mixture of tax and nontax revenue sources, the most important of which are federal funds, the property tax and the sales tax. Texas receives relatively fewer federal funds than most states and is relatively more reliant on property taxes.
Among major taxes, Texas relies on the property and sales taxes and a host of other taxes. In 1987, about 41 percent of the state and local tax mix was accounted for by property taxes. About 26 percent came from general sales taxes, and 33 percent came from other taxes, like the oil and gas severance taxes. Texas has no corporate or personal income taxes.
In the absence of income taxes, the state's tax mix is somewhat skewed toward a reliance on property and miscellaneous taxes compared with other states. Nationally, the "average" state and local tax system generates 26.3 percent of its tax revenues from income taxes, 29.9 percent from property taxes, 23.9 percent from sales taxes and 19.9 percent from various other taxes.

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Much can be learned about governments by examining how they raise and spend money. Spending priorities reflect the relative importance attached to particular policy objectives, and the revenue system reflects the government's fundamental attitudes toward business, economic competitiveness and individual economic and social well-being.

A critical examination of Texas' state and local tax system must ultimately focus on what makes the most sense for the state's specific future needs. Recommendations for change should be based on some consensus about where the state is-or should be-going in terms of its own, unique policy needs. Texans pride themselves on the unique aspects of their state's economy and culture, and the state's fiscal policies should reflect an awareness of that uniqueness.
That does not mean, however, that comparisons with the taxing and spending policies of other states are without merit. There is much that can be learned from studying how other states approach the problems of equitably raising and spending money.

Such interstate comparisons are an important step in understanding the Texas tax system and how it has evolved.
Naturally, these comparisons are best approached with a clear understanding of their inherent limitations. The first of these is a recognition that what works in one state will not necessarily work in others-or vice versa. For example, Oregon has no general sales tax, the trade-off being a personal income tax that raises over 65 percent of the state's total tax revenue. In contrast, Massachusetts levies substantial income and sales taxes on its citizens, despite the fact that its economy is presently the envy of the nation with its strong high tech manufacturing sector and supporting industries. Similarly, it is impossible to draw a pure direct comparison between Texas and other major industrial states because of the important role the state's oil and gas resources play in financing both state and local government.
Also to be avoided is the tendency to focus on state or local government tax and spending policies to the exclusion of the other level. The split between state and local spending responsibilities differs greatly among the states. For example, some states fund public education largely at the state level, others fund it primarily at the local level and the rest split the responsibility between the two levels. The total tax burden on a state's citizens consists of combined state and local taxes (as well as federal taxes), just as the state's overall spending policy reflects combined state and local policies. Consequently, this chapter shows spending and tax comparisons for both state and local government.

## Economic Comparisons

A useful starting point for any discussion of interstate comparisons is to gain some sense of how Texas compares with other states in general economic terms. This can be seen in broad brush in Table 1, which shows a 50 -state comparison for such common economic barometers as population, income and employment.
Texas is one of the most populous states and has one of the largest state labor pools. It ranks third among the states both in population and the number of nonagricultural jobs, trailing only California and New York in both instances.
The table also illustrates the relatively strong population growth that Texas has experienced during the 1980 s, recent economic problems notwithstanding. Texas' overall population grew by 17.3 percent from 1980 to 1986, according to Census Bureau estimates. This is well ahead of the overall U. S. population which grew by 6.4 percent over the period. It is also higher than the growth rate for the other ten most populous states except Florida. In fact, only four of the 50 states-Alaska, Arizona, Nevada and Floridagrew faster than Texas during the first half of the decade. The state added almost 2.5 million people from 1980 to 1986, according to Census Bureau estimates.
On the other hand, Texas' per capita personal income-essentially all income earned in the state annually divided by state population-is not among the nation's leaders. In fact, it has lagged the national average in recent years. In the second quarter of 1986, for example, Texas per capita personal income totaled $\$ 13,704$, ranking Texas 28th among the states, $\$ 767$ below the national average of $\$ 14,471$. Significantly, in 1981 and 1982,

Texas per capita personal income actually exceeded the national average, but with the economic problems of the 1980s and concurrent strong economic growth in other states, the state has sunk back below the national average. (Prior to the 1981-82 period, Texas personal income per capita had historically been below the national average.)

A final observation which can be drawn from Table 1 is the degree to which Texas' economic mix has come to resemble the national mix. In 1986, about 24 percent of the state's nonfarm jobs were in goods-producing sectors of the economy-manufacturing, mining and construction. This was relatively close to the 24.8 percent national average. About 59 percent of state employment was in the so-called service sectors, including retail and wholesale trade, transportation, utilities, financial services, general services and related industries. This was only slightly higher than the national average. Seventeen percent of the state's jobs were in government employment at all levels, almost identical to the 16.9 percent average.
These job figures are another area where the state has witnessed significant changes in recent years. As recently as 1984, 26.5 percent of the state's jobs were in the goods-producing industries, with 57.1 percent in the service sectors and 16.4 percent in government. The shift in composition away from the goods-producing industries to the service and government sectors is not large but nevertheless is fairly dramatic, coming as it did over only a two-year period. The shift illustrates the degree to which the Texas economy is being affected by the diverging fortunes of some of its most important industries.

TABLE 1. Interstate Economic Comparisons

| State | 1986 Population |  |  | Personal Income |  | Non-Farm Jobs |  | Job Distribution, 1986² |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Rank | $\begin{gathered} \text { \% Change } \\ 1980-86 \\ \hline \end{gathered}$ | Per Capita 1986/Q2 | Rank | Number ${ }^{1}$ | Rank | GoodsProducing | ServiceProducing | Government |
| Alabama | 4,053 | 22 | 4.1\% | \$10,950 | 46 | 1,461 | 24 | 30.5\% | 49.2\% | 20.3\% |
| Alaska | 534 | 49 | 32.8 | 17,575 | 3 | 222 | 49 | 15.6 | 53.7 | 30.7 |
| Arizona | 3,317 | 25 | 22.1 | 13,294 | 29 | 1,341 | 25 | 23.0 | 60.1 | 16.9 |
| Arkansas | 2,372 | 33 | 3.8 | 10,761 | 48 | 814 | 33 | 31.0 | 51.1 | 17.8 |
| California | 26,981 | 1 | 14.0 | 16,594 | 6 | 11,272 | 1 | 23.3 | 60.4 | 16.3 |
| Colorado | 3,267 | 27 | 13.1 | 15,335 | 10 | 1,402 | 23 | 20.6 | 61.3 | 18.1 |
| Connecticut | 3,189 | 28 | 2.6 | 19,077 | 1 | 1,602 | 21 | 29.2 | 58.6 | 12.2 |
| Delaware | 633 | 47 | 6.5 | 14,513 | 16 | 303 | 44 | 28.8 | 56.1 | 15.1 |
| Florida 11 | 11,675 | 5 | 19.8 | 14,121 | 20 | 4,590 | 6 | 28.9 | 65.9 | 15.2 |
| Georgia | 6,104 | 11 | 11.7 | 13,012 | 33 | 2,675 | 12 | 27.3 | 55.6 | 17.1 |
| Hawaii | 1,062 | 39 | 10.1 | 14,419 | 18 | 437 | 42 | 9.4 | 69.1 | 21.5 |
| Idaho | 1,003 | 41 | 6.2 | 11,398 | 41 | 335 | 43 | 20.8 | 58.0 | 21.2 |
| Illinois 11 | 11,553 | 6 | 1.1 | 15,467 | 9 | 4,777 | 5 | 23.6 | 61.4 | 14.9 |
| Indiana | 5,504 | 14 | 0.2 | 13,104 | 31 | 2,228 | 14 | 31.8 | 52.8 | 15.4 |
| lowa | 2,851 | 29 | -2.2 | 13,823 | 24 | 1,077 | 29 | 22.2 | 53.5 | 19.3 |
| Kansas | -2,461 | 32 | 4.1 | 14,538 | 15 | 983 | 31 | 23.5 | 56.6 | 19.8 |
| Kentucky | 3,728 | 23 | 1.9 | 11,227 | 42 | 1,277 | 27 | 27.5 | 53.9 | 18.6 |
| Louisiana | 4,501 | 18 | 7.0 | 11,223 | 43 | 1,524 | 22 | 21.1 | 57.9 | 21.0 |
| Maine | 1,174 | 38 | 4.3 | 12,529 | 35 | 477 | 39 | 27.4 | 54.3 | 18.3 |
| Maryland | 4,463 | 19 | 5.8 | 16,442 | 7 | 1,951 | 18 | 17.9 | 61.9 | 20.1 |
| Massachusetts | 5,832 | 12 | 1.7 | 17,269 | 4 | 2,981 | 10 | 24.9 | 62.1 | 13.0 |
| Michigan | 9,145 | 8 | -1.3 | 14,068 | 21 | 3,639 | 8 | 30.9 | 52.7 | 16.4 |
| Minnesota | 4,214 | 21 | 3.4 | 14,895 | 13 | 1,891 | 19 | 23.8 | 59.9 | 16.3 |
| Mississippi | 2,625 | 31 | 4.1 | 9,824 | 50 | 849 | 32 | 31.3 | 46.4 | 22.4 |
| Missouri | 5,066 | 15 | 3.0 | 13,724 | 27 | 2,132 | 15 | 24.7 | 59.4 | 15.9 |
| Montana | 819 | 44 | 4.1 | 11,758 | 39 | 276 | 45 | 13.6 | 60.9 | 25.5 |
| Nebraska | 1,598 | 36 | 1.8 | 14,676 | 14 | 654 | 34 | 17.2 | 62.0 | 20.8 |
| Nevada | 963 | 43 | 20.3 | 15,036 | 12 | 469 | 40 | 11.9 | 75.0 | 13.1 |
| New Hampshire | re 1,027 | 40 | 11.5 | 15,719 | 8 | 489 | 38 | 31.3 | 56.0 | 12.7 |
| New Jersey | 7,620 | 9 | 3.5 | 18,183 | 2 | 3,487 | 9 | 24.3 | 60.3 | 15.4 |
| New Mexico | 1,479 | 37 | 13.5 | 11,085 | 45 | 528 | 37 | 16.9 | 57.0 | 26.2 |
| New York | 17,772 | 2 | 1.2 | 16,992 | 5 | 7,906 | 2 | 19.8 | 62.7 | 17.5 |
| North Carolina | 6,331 | 10 | 7.7 | 12,189 | 38 | 2,732 | 11 | 36.4 | 48.0 | 15.6 |
| North Dakota | 679 | 46 | 4.1 | 13,236 | 30 | 249 | 47 | 12.4 | 62.0 | 25.6 |
| Ohio | 10,725 | 7 | -0.4 | 13,792 | 25 | 4,475 | 7 | 28.9 | 55.9 | 1,5.2 |
| Oklahoma | 3,305 | 26 | 9.2 | 12,476 | 36 | 1,140 | 28 | 22.6 | 55.3 | 22.0 |
| Oregon | 2,698 | 30 | 2.5 | 13,099 | 32 | 1,057 | 30 | 22.0 | 59.2 | 18.9 |
| Pennsylvania | 11,889 | 4 | 0.2 | 13,842 | 23 | 4,795 | 4 | 26.8 | 59.0 | 14.2 |
| Rhode Island | 975 | 42 | 2.9 | 14,471 | 17 | 442 | 41 | 30.9 | 36.0 | 13.1 |
| South Carolina | 3,378 | 24 | 8.2 | 11,100 | 44 | 1,338 | 26 | 33.9 | 47.2 | 18.9 |
| South Dakota | 708 | 45 | 2.5 | 12,189 | 37 | 252 | 47 | 16.1 | 69.6 | 23.3 |
| Tennessee | 4,803 | 16 | 4.6 | 11,712 | 40 | 1,929 | 17 | 30.5 | 53.2 | 16.3 |
| Texas | 16,682 | 3 | 17.3 | 13,704 | 28 | 6,581 | 3 | 24.0 | 58.9 | 17.0 |
| Utah | 1,665 | 35 | 14.0 | 10,808 | 47 | 634 | 35 | 29.9 | 56.8 | 22.3 |
| Vermont | 541 | 48 | 5.8 | 12,669 | 34 | 234 | 48 | 27.9 | 55.7 | 16.4 |
| Virginia | 5,787 | 13 | 8.2 | 15,200 | 11 | 2,557 | 13 | 23.8 | 55.8 | 20.4 |
| Washington | 4,463 | 20 | 8.0 | 14,386 | 19 | 1,770 | 20 | 22.2 | 58.1 | 19.7 |
| West Virginia | 1,919 | 34 | -1.6 | 10,662 | 49 | 597 | 36 | 25.1 | 53.4 | 21.6 |
| Wisconsin | 4,785 | 17 | 1.7 | 13,729 | 26 | 2,015 | 16 | 28.7 | 55.2 | 16.1 |
| Wyoming | 507 | 50 | 8.0 | 13,995 | 22 | 199 | 50 | 22.4 | 50.9 | 26.8 |
| U.S. Total 2 | 240,452 | -- | 6.4\% | \$14,471 | -- | 99,045 | -- | 24.8\% | 58.3\% | 16.9\% |

Source: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System; U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Vol. 34, Number 5 (May 1987).

1. Annual data for 1986.
2. Goods-producing industries include mining, construction and manufacturing. Government includes all levels of government. Service industries include transportation, utilities, trade, finance, services and related industries. Nonagricultural jobs only.

## Government Spending Patterns

Beyond the basic economic comparisons, another important question is how governments in the various states spend their money. After all, governments tax to pay for their various programs, and any tax system inevitably must be designed to underwrite budgetary decisions.
Table 2 shows figures for per capita state and local spending among the 50 states for fiscal year 1987, the most recent year for which comparative data are available. Texas ranked 31st in overall state and local spending per capita in that year. The state's total state and local spending per capita was $\$ 2,816$, well below the U. S.
average of $\$ 3,185$. It was lower than the other ten most populous states except Florida (35th), North Carolina (41st) and Pennsylvania (34th).
The table also illustrates that the division between state and local spending differs somewhat in Texas compared with the majority of the states. In Texas, state government spending made up 45.9 percent of total state and local expenditures in 1987. In 45 of the states, state government spending accounted for more than half of the state-local total, with a national average of about 59 percent. This difference appears to be related to several factors, including the large number of local government units in Texas (cities, counties, school
districts and special districts) and the large share of public education expenses borne locally.

In fact, education in Texas is a prime driver of overall spending at both the state and local levels. This can be seen in Table 3, which compares the percentage spent on selected governmental functions at the state and local levels in Texas compared with the U.S. average.
As Table 3 shows, a large percentage of state spending in Texas is comprised of aid to local governments. Although this total does include some minimal grant programs administered by the state in other program areas, the vast majority of the total is state funding for local public schools.

TABLE 2. State and Local Government Spending Per Capita, 1987

| State | Per Capita Government Spending | Rank | State Share of Total | State | Per Capita Government Spending | Rank | State Share of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alaska | \$11,281 | , | 74.6\% | Ohio* | \$2,922 | 26 | 65.9\% |
| Wyoming | 4,951 | 2 | 67.2 | Louisiana | 2,912 | 27 | 65.1 |
| New York* | 4,683 | 3 | 56.9 | Georgia | 2,892 | 28 | 50.4 |
| Washington | 3,802 | 4 | 57.9 | Illinois* | 2,885 | 29 | 56.3 |
| Minnesota | 3,758 | 5 | 57.7 | Tennessee | 2,859 | 30 | 47.4 |
| California* | 3,745 | 6 | 60.3 | Texas* | 2,816 | 31 | 45.9 |
| Massachusetts | 3,602 | 7 | 66.5 | Kansas | 2,814 | 32 | 52.1 |
| Colorado | 3,449 | 8 | 48.0 | lowa | 2,814 | 33 | 63.6 |
| New Jersey* | 3,431 | 9 | 65.2 | Pennsylvania* | 2,792 | 34 | 61.7 |
| Nebraska | 3,431 | 10 | 41.7 | Florida* ${ }^{\text {a }}$ | 2,749 | 35 | 46.7 |
| Arizona | 3,385 | 11 | 51.5 | South Dakota | 2,744 | 36 | 65.9 |
| Utah | 3,357 | 12 | 57.8 | Maine | 2,737 | 37 | 70.4 |
| Michigan* | 3,333 | 13 | 61.3 | Virginia | 2,641 | 38 | 62.2 |
| Nevada | 3,288 | 14 | 60.7 | West Virginia | 2,635 | 39 | 76.8 |
| Delaware | 3,287 | 15 | 73.3 | Oklahoma | 2,628 | 40 | 64.1 |
| Oregon | 3,281 | 16 | 57.5 | North Carolina* | 2,624 | 41 | 60.2 |
| Montana | 3,250 | 17 | 64.6 | South Carolina | 2,556 | 42 | 68.1 |
| Connecticut | 3,237 | 18 | 64.1 | New Hampshire | 2,476 | 43 | 56.7 |
| Hawaii | 3,191 | 19 | 75.6 | Alabama | 2,475 | 44 | 62.7 |
| North Dakota | 3,170 | 20 | 74.4 | Indiana | 2,425 | 45 | 62.2 |
| Wisconsin | 3,154 | 21 | 62.2 | Kentucky | 2,383 | 46 | 71.3 |
| Rhode Island | 3,113 | 22 | 73.6 | Idaho | 2,361 | 47 | 68.1 |
| Maryland | 3,084 | 23 | 62.3 | Missouri | 2,329 | 48 | 59.8 |
| Vermont | 3,065 | 24 | 68.7 | Mississippi | 2,306 | 49 | 65.4 |
| New Mexico | 2,988 | 25 | 73.8 | Arkansas | 2,185 | 50 | 66.6 |
|  |  |  |  | U.S. Average | \$3,185 | - | 58.8\% |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1987).
*One of the ten most populous states according to current Census Bureau estimates.

Coupled with higher education funding, this implies that about half of all state spending is for education. This compares to a smaller national figure.
Moreover, a large percentage of local spending in Texas in 1987 was for education, with 34.7 percent going to support public schools and another 2.7 percent spent on higher educationprimarily local support of junior colleges. Nationally, 34.7 percent of local spending nationally was dedicated to public schools, with an additional 2.7 percent for local higher education support.
In the other two functional categories shown in the tablewelfare and health and public safety and highways-Texas is relatively similar to the national averages. It spends a smaller percentage at both the state and local levels on health and welfare. It spends somewhat more at the state level on public safety and highways. However, it spends a smaller percentage at the local level on that function.

Per capita spending. The analysis can be taken a step further to
look at how Texas compares nationally and with the other more populous states in terms of its per capita state and local spending in key functional areas (Table 4). According to the Census Bureau data, Texas spent less per capita than the national average in 1987 in all of the functional categories shown except education, where Texas was about
one percent above the national average. Education and corrections were the areas where Texas is above the majority of the other populous states. It ranked near the middle of the ten states on per capita spending for health and hospitals. It ranked last among the states on per capita spending on welfare programs. In overall per capita spending, Texas ranked

| TABLE 3. State and Local Spending for Selected Functions, Texas and the U.S. Average, 1987 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Function ${ }^{1}$ | Texas |  | U.S. Average |  |
|  | State | Local | State | Local |
| Aid to Local Governments | 28.7\% | - | $30.5 \%^{2}$ | - |
| Public Schools | ${ }^{3}$ | 34.7\% | - ${ }^{3}$ | 33.5\% |
| Higher Education | 15.9 | 2.7 | 11.1 | 2.0 |
| Welfare and Health | 18.3 | 5.8 | 19.4 | 10.5 |
| Public Safety and Highways | 14.4 | 11.7 | 10.1 | 12.6 |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988).

1. Does not include all spending categories. Does not add to 100 percent.
2. Includes state aid to public education-virtually 100 percent of the total in Texas' case but considerably less than 100 percent in the case of the U.S. average.
3. Included in the aid to local governments total.

TABLE 4. Per Capita State and Local Spending For Selected Functions, Most Populous States and U.S. Average, 1987

| State | Education | Welfare | Health and Hospitals | Public Safety and Highways | Total (Rank)' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| California | \$977 | \$408 | \$269 | \$363 | \$3,745 (7) |
| Florida | 751 | 171 | 242 | 344 | 2,749 (36) |
| Illinois | 863 | 337 | 158 | 384 | 2,885 (30) |
| Michigan | 1,087 | 462 | 287 | 320 | 3,333 (14) |
| New Jersey | 997 | 350 | 175 | 405 | 3,431 (10) |
| New York | 1,137 | 641 | 395 | 434 | 4,683 (4) |
| North Carolina | 900 | 197 | 203 | 250 | 2,624 (42) |
| Ohio | 892 | 391 | 205 | 307 | 2,922 (27) |
| Pennsylvania | 830 | 371 | 129 | 313 | 2,791 (35) |
| Texas | 938 | 159 | 188 | 359 | 2,816 (32) |
| U.S. Average | \$931 | \$329 | \$234 | \$361 |  |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988).

[^4]32nd among the 50 states, behind all of the most populous states except Florida, North Carolina and Pennsylvania.

## State and Local Revenues

State and local governments pay for the services they provide with a mix of income sources of which taxes are an important-but not entirely predominant-part. According to the Census Bureau, in fiscal 1987, state and local revenue in Texas from all sources totaled $\$ 39.69$ billion. Table 5 shows how the mix of sources of this income compares with the national average mix for all states.
As the table shows, Texas-with its traditionally strict qualifying requirements for federal matching income assistance programs like Aid to Families with Dependent Children and Medicaid-is much less reliant on federal assistance than the average state. In fact, among the 50 states, only four states-Alaska, Arizona, Florida and Nevada-had a smaller percentage of their total revenues coming from federal sources in 1987.

Texas is more reliant on the property tax than the national average. Surprisingly, however,
the share of total revenues coming from the sales tax-the leading state revenue source and an important source locally-is only slightly higher in Texas than it was nationally. The role played by the tax appears to be related to the fact that state government has historically guarded the tax and has limited its use locally to cities, transit authorities and a small number of counties. This, of course, is one area where later data may show changes, given the recent increases in the sales tax rate and expansion of the tax base in Texas.
The table also illustrates that Texas has neither personal nor corporate income taxes. As the table shows, the personal income tax plays a fairly prominent role in most states, while the corporate income tax is a relatively less significant percentage of the average state's overall revenue mix.

One area where Texas diverges sharply from the national trend is in the "Other Taxes" category. In part, this is misleading, since this category contains the state franchise tax, which is essentially equivalent to the corporate income tax in other states, both in size and

TABLE 5. Sources of State and Local Revenue, Texas and U.S. Average, 1987

| Source | Texas | U.S. Average |
| :--- | :---: | :---: |
| Federal Assistance | $14.1 \%$ | $16.8 \%$ |
| Property Taxes | 23.2 | 17.7 |
| General Sales Tax | 14.4 | 14.1 |
| Personal Income Tax | 0.0 | 12.2 |
| Corporate Income Tax | 0.0 | 3.3 |
| Other Taxes | 18.7 | 11.8 |
| User Fees | 13.4 | 12.6 |
| All Other Sources | 16.2 | 11.6 |
| Total | $\underline{100.0 \%}$ | $\mathbf{1 0 0 . 0 \%}$ |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988).
collected 41.3 percent of their tax revenue from property taxes, 25.7 percent from the general sales tax and the remainder from other taxes. Texas ranks 21st nationally in its use of the property tax, 31st in its use of the sales tax and sixth for other taxes.

In contrast, the U. S. averages are 29.9 percent for the property tax, 23.9 percent for the sales tax and 19.9 percent for other tax sources. The remaining 26.3 percent of tax revenue under the U. S. average is raised through income taxes in 1987.

Examination of the tax mix data yields several points. In many
cases, states trade reduced reliance on one tax for much heavier reliance on other taxes (a trade-off that is most conspicuous in states that choose not to levy a particular kind of major tax). For instance, Oregon levies a personal income tax with no sales tax. Washington has no state income tax, relying instead on sales and property taxes. Texas has followed a similar pattern. States with considerable mineral wealth accrue the bulk of their tax revenue through other taxes. The property tax dominates local governmental entities, with 19 states generating more than 90
percent of their local tax revenue through ad valorem taxation.

## The Business-Individual Split

Another form of "tax mix"-one that is more subtle and less easily identifiable than the simple categorization of taxes by type-is the mix of taxes that have their initial impact on business or individuals. While it is a fairly simple matter to determine what percentage of revenue a government collects from the property, sales or income taxes, it is more difficult to ascertain the extent to which a governmental entity is

TABLE 6. State and Local Government Taxes Per Capita, 1987

| State | Per Capita Tax Revenue | Rank | State Share of Total | State | Per Capita Tax Revenue | Rank | State Share of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alaska | \$3,162 | 1 | 64.7\% | Ohio* | \$1,509 | 26 | 59.5\% |
| New York* | 2,773 | 2 | 50.0 | Kansas | 1,508 | 27 | 56.8 |
| Wyoming | 2,293 | 3 | 57.3 | Nebraska | 1,460 | 28 | 52.2 |
| Connecticut | 2,216 | 4 | 62.0 | New Hampshire | 1,389 | 29 | 37.3 |
| Massachusetts | 2,105 | 5 | 69.1 | Georgia | 1,372 | 30 | 62.4 |
| New Jersey* | 2,099 | 6 | 59.0 | Montana | 1,366 | 31 | 53.6 |
| Hawaii | 1,955 | 7 | 81.0 | Florida* | 1,365 | 32 | 59.8 |
| California* | 1,926 | 8 | 67.2 | North Carolina* | 1,363 | 33 | 71.3 |
| Minnesota | 1,904 | 9 | 67.9 | Utah | 1,360 | 34 | 60.9 |
| Maryland | 1,904 | 10 | 60.5 | Texas* | 1,329 | 35 | 50.2 |
| Wisconsin | 1,787 | 11 | 66.3 | New Mexico | 1,308 | 36 | 80.3 |
| Michigan* | 1,776 | 12 | 57.0 | Indiana | 1,304 | 37 | 66.7 |
| Delaware | 1,752 | 13 | 85.5 | North Dakota | 1,276 | 38 | 66.9 |
| Rhode Island | 1,720 | 14 | 64.7 | Missouri | 1,247 | 39 | 60.9 |
| Washington | 1,697 | 15 | 72.7 | South Carolina | 1,233 | 40 | 76.2 |
| lllinois* | 1,650 | 16 | 54.5 | Louisiana | 1,227 | 41 | 61.8 |
| Vermont | 1,631 | 17 | 60.7 | Oklahoma | 1,218 | 42 | 67.5 |
| Nevada | 1,622 | 18 | 68.8 | West Virginia | 1,217 | 43 | 78.3 |
| Maine | 1,614 | 19 | 68.4 | Kentucky | 1,210 | 44 | 77.8 |
| Oregon | 1,612 | 20 | 50.9 | South Dakota | 1,194 | 45 | 49.2 |
| Colorado | 1,602 | 21 | 49.1 | Idaho | 1,178 | 46 | 69.1 |
| Arizona | 1,595 | 22 | 64.8 | Tennessee | 1,156 | 47 | 64.3 |
| Pennsylvania* | 1,554 | 23 | 61.6 | Alabama | 1,088 | 48 | 72.7 |
| Virginia | 1,548 | 24 | 60.4 | Arkarsas | 1,037 | 49 | 76.0 |
| lowa | 1,530 | 25 | 62.8 | Mississippi | 990 | 50 | 73.1 |
|  |  |  |  | U.S. Average | \$1,665 | - | 61.0\% |
| Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988). <br> - One of the ten most populous states according to current Census Bureau projections. |  |  |  |  |  |  |  |

TABLE 7. The State and Local Tax Mix, 1987

| State | Income Taxes | Property Taxes | General Sales Taxes | Other Taxes |
| :---: | :---: | :---: | :---: | :---: |
| Alabama | 24.7\% | 11.4\% | 30.2\% | 33.7\% |
| Alaska | 8.5 | 37.6 | 3.3 | 50.6 |
| Arizona | 17.8 | 29.3 | 34.8 | 18.1 |
| Arkansas | 26.3 | 19.0 | 31.4 | 23.4 |
| California* | 35.0 | 25.7 | 25.7 | 13.6 |
| Colorado | 22.0 | 35.7 | 26.7 | 15.7 |
| Connecticut | 16.1 | 38.0 | 25.6 | 20.3 |
| Delaware | 42.9 | 13.8 | 0.0 | 43.4 |
| Florida* | 3.6 | 33.2 | 33.6 | 29.6 |
| Georgia | 30.4 | 25.3 | 28.0 | 18.3 |
| Hawaii | 29.3 | 18.4 | 38.6 | 15.8 |
| Idaho | 26.6 | 28.4 | 25.3 | 19.7 |
| Illinois* | 20.7 | 34.5 | 24.2 | 20.6 |
| Indiana | 25.2 | 31.9 | 31.2 | 11.6 |
| lowa | 25.5 | 37.8 | 19.1 | 17.6 |
| Kansas | 20.7 | 37.4 | 24.6 | 17.4 |
| Kentucky | 31.8 | 16.9 | 19.8 | 31.5 |
| Louisiana | 11.5 | 16.1 | 39.6 | 32.8 |
| Maine | 25.7 | 32.9 | 22.9 | 18.5 |
| Maryland | 39.8 | 24.4 | 15.1 | 20.8 |
| Massachusetts | 42.0 | 30.4 | 15.1 | 12.4 |
| Michigan* | 31.9 | 37.7 | 17.3 | 13.1 |
| Minnesota | 33.8 | 30.1 | 18.3 | 17.8 |
| Mississippi | 16.1 | 23.7 | 39.1 | 21.1 |
| Missouri | 26.0 | 21.8 | 33.7 | 18.5 |
| Montana | 20.7 | 48.3 | 0.0 | 31.0 |
| Nebraska | 18.3 | 43.6 | 19.7 | 18.4 |
| Nevada | 0.0 | 22.2 | 34.2 | 43.6 |
| New Hampshire | 10.9 | 62.0 | 0.0 | 27.0 |
| New Jersey* | 22.9 | 40.3 | 18.1 | 18.7 |
| New Mexico | 17.4 | 11.7 | 41.7 | 29.2 |
| New York* | 37.6 | 28.8 | 19.2 | 14.4 |
| North Carolina* | 35.8 | 21.4 | 23.8 | 19.0 |
| North Dakota | 13.3 | 31.7 | 23.4 | 31.7 |
| Ohio* | 31.7 | 27.4 | 23.4 | 17.5 |
| Oklahoma | 19.1 | 20.1 | 26.3 | 34.4 |
| Oregon | 36.4 | 44.4 | 0.0 | 19.2 |
| Pennsylvania* | 28.8 | 26.5 | 19.2 | 25.4 |
| Rhode Island | 26.3 | 37.9 | 20.7 | 15.0 |
| South Carolina | 28.4 | 23.3 | 27.8 | 20.4 |
| South Dakota | 2.9 | 41.5 | 31.3 | 24.3 |
| Tennessee | 6.5 | 21.5 | 45.9 | 26.1 |
| Texas* | 0.0 | 41.3 | 25.7 | 33.0 |
| Utah | 25.9 | 28.9 | 29.9 | 15.2 |
| Vermont | 22.4 | 39.5 | 12.3 | 25.9 |
| Virginia | 30.3 | 27.7 | 16.2 | 25.8 |
| Washington | 0.0 | 28.5 | 48.1 | 23.5 |
| West Virginia | 24.5 | 17.5 | 33.9 | 24.1 |
| Wisconsin | 31.4 | 34.5 | 19.2 | 14.9 |
| Wyoming | 0.0 | 48.3 | 17.0 | 34.7 |
| U.S. Average | 26.3\% | 29.9\% | 23.9\% | 19.9\% |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988).
*One of the ten most populous states according to current Census Bureau projections
levying a disproportionate share of taxes on business or individuals. Part of the difficulty lies in a functional definition of "initial impact." Another problem lies in collecting accurate data that are detailed enough to allow a split to be estimated. In some cases-as with Texas' corporation franchise tax-this is not a particular problem. With others-notably the sales and excise taxes which reflect a mix of transactions by businesses and individuals-it is a major analytical hurdle.
A detailed analysis of the busi-ness-individual split by state was completed as part of the work of the Select Committee. It showed that about 63 percent of Texas state and local taxes have an initial impact on business.

Based on a recent national study of this issue, this direct business share is significantly higher than the average state. In a 1987 study, Robert Tannenwald of the New England Federal Reserve Bank found that nationally, about 31.8 percent of state and local taxes had an initial impact on business (Table 8).
The reason for this divergence is obvious: the majority of states rely on the personal income tax as a key revenue source, while the Texas tax system, with the strong role of the severance taxes, has a much larger direct business impact. In fact, Tannenwald found that only two states-Alaska and Wyoming-had a heavier business tax burden, and they are, of course, also major severance tax states. However, the effects of severance taxes do not completely explain the large share of the state's taxes which are directly on business. Tannenwald also found that the Texas tax system had the third largest percentage of state and local taxes with an initial impact on business when severance taxes were excluded, following only West Virginia and Delaware.

The argument that busiress taxes estimates should not include severance taxes is based on the assumption that taxes levied on energy products are passed on to energy consumers, the majority of

## Texas' mix differs from the average in the degree of reliance on the property tax and the fact that it has not had to resort to personal or corporate income taxes.

whom live in other states. In the majority of cases, it is argued, the actual burden of the severance tax falls outside of the state, so the tax's impact on the state's economy and business climate is minimal. Unfortunately, this analysis ignores the very high percentage of Texas oil and gas production that is consumed in the state-either directly by Texas consumers or as inputs to various industries. Thus, including the severance taxes among the taxes with an initial impact on business makes more sense, so estimates of Texas' mix should remain at just over 60 percent with a direct impact on business and 40 percent directly impacting individual Texans.

## Conclusion

Any study of the state and local tax system should begin with a broad understanding of how the system under study compares with similar systems in other states. This report has presented some of the major statistics used to compare state economies, government spending policies and revenue systems.

This chapter shows both differences and similarities between

Texas and the other states. As might be expected, much of the difference between Texas and other, non-energy-producing states stems from the prominent role the energy industry plays in the state. Texas' recent economic problems, for example, have not been mirrored in other states, so Texas' ranking in per capita personal income has slipped below the national average. On the other hand, federal statistics show the state has continued to grow and add jobs, although the character of the jobs that have been created in recent years-largely in the service and governmental areas-is slowly reshaping the face of the state economy.
In the spending area, much of state and local policy hinges on education. The state spends half of its income on education and has actually increased its spending in this area significantly in the last few years. In fact, education is one of the few areas where Texas spends significantly above the national average. It spends below the national average in most areas.
State and local government in Texas pays for this spending with a mixture of taxes based heavily on the sales and property taxes and a combination of other sources-both tax and nontax. Texas' mix differs from the average in the degree of reliance on the property tax and the fact that it has not had to resort to personal or corporate income taxes.
Surveying the range of tax and spending patterns offered in the various states, it is obvious that they develop in response to diverse situations which often cannot-and probably should not-be replicated anywhere else in exactly the same way. There is no model tax and spending system. Interstate comparisons represent a useful set of benchmarks and a source of ideas, but each state must craft its fiscal system in line with its particular needs.

TABLE 8. State and Local Taxes with an Initial Impact on Business, 1985

| Including Severance Taxes |  |  | Excluding Severance Taxes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State | Ratio of Taxes on Business to Total Taxation | Rank | State | Ratio of Taxes on Business to Total Taxation | Rank |
| Alaska | 84.4 | , | West Virginia | 48.6 | 1 |
| Wyoming | 67.6 | 2 | Delaware | 41.6 | 2 |
| Texas | 49.9 | 3 | Texas | 39.4 | 3 |
| West Virginia | 48.6 | 4 | New Jersey | 37.6 | 4 |
| New Mexico | 45.7 | 5 | New Hampshire | 37.0 | 5 |
| North Dakota | 45.6 | 6 | Wyoming | 36.8 | 6 |
| Louisiana | 43.7 | 7 | Washington | 36.4 | 7 |
| Montana | 43.1 | 8 | Connecticut | 36.2 | 8 |
| Delaware | 41.6 | 9 | Tennessee | 33.9 | 9 |
| Oklahoma | 38.4 | 10 | Illinois | 33.0 | 10 |
| New Jersey | 37.6 | 11 | Nevada | 32.3 | 11 |
| New Hampshire | 37.0 | 12 | Mississippi | 32.3 | 12 |
| Washington | 37.0 | 13 | Vermont | 31.8 | 13 |
| Mississippi | 36.2 | 14 | Pennsylvania | 31.6 | 14 |
| Connecticut | 36.2 | 15 | Florida | 31.5 | 15 |
| Tennessee | 33.9 | 16 | Louisiana | 30.9 | 16 |
| Illinois | 33.0 | 17 | Indiana | 30.2 | 17 |
| Florida | 32.8 | 18 | Virginia | 30.1 | 18 |
| Kansas | 32.4 | 19 | Montana | 29.9 | 19 |
| Nevada | 32.3 | 20 | California | 29.7 | 20 |
| Kentucky | 31.9 | 21 | Arizona | 29.4 | 21 |
| Vermont | 31.8 | 22 | Ohio | 29.3 | 22 |
| Pennsylvania | 31.6 | 23 | Kansas | 29.0 | 23 |
| Alabama | 30.9 | 24 | North Carolina | 28.8 | 24 |
| Indiana | 30.2 | 25 | Alabama | 28.7 | 25 |
| Virginia | 30.1 | 26 | Missouri | 28.5 | 26 |
| California | 29.7 | 27 | New York | 28.4 | 27 |
| Arizona | 29.4 | 28 | Oregon | 28.4 | 28 |
| Ohio | 29.4 | 29 | Rhode Island | 27.4 | 29 |
| Oregon | 29.2 | 30 | Maryland | 27.1 | 30 |
| North Carolina | 28.9 | 31 | Colorado | 26.7 | 31 |
| Utah | 28.5 | 32 | North Dakota | 26.6 | 32 |
| Missouri | 28.5 | 33 | Alaska | 26.2 | 33 |
| NewYork | 28.4 | 34 | Utah | 26.1 | 34 |
| Rhode Island | 27.4 | 35 | Kentucky | 26.0 | 35 |
| Colorado | 27.3 | 36 | Hawaii | 25.8 | 36 |
| Maryland | 27.1 | 37 | South Carolina | 25.7 | 37 |
| Arkansas | 26.4 | 38 | Arkansas | 25.2 | 38 |
| Hawaii | 25.8 | 39 | South Dakota | 24.9 | 39 |
| South Carolina | 25.7 | 40 | Idaho | 24.7 | 40 |
| South Dakota | 25.5 | 41 | New Mexico | 24.2 | 41 |
| Minnesota | 25.2 | 42 | Minnesota | 24.2 | 42 |
| Idaho | 24.8 | 43 | Michigan | 23.3 | 43 |
| Michigan | 23.9 | 44 | Georgia | 23.3 | 44 |
| Georgia | 23.3 | 45 | lowa | 23.1 | 45 |
| lowa | 23.1 | 46 | Wisconsin | 22.8 | 46 |
| Wisconsin | 22.8 | 47 | Maine | 22.1 | 47 |
| Maine | 22.1 | 48 | Oklahoma | 21.7 | 48 |
| Massachusetts | 20.7 | 49 | Massachusetts | 20.7 | 49 |
| Nebraska | 18.9 | 50 | Nebraska | 18.7 | 50 |
| United States | 31.8 |  | United States | 29.7 |  |

Source: Robert Tannenwald, "Rating Massachusetts' Tax Competitiveness," New England Economic Review (November/ December 1987), p. 43.

# The Burden of State and Local Taxes on Individual Taxpayers 

## Summary

The question, "Who pays Texas taxes?" can be answered by examining the burdens state and local taxes impose on families at various income levels. One of the problems in identifying the final burden of taxes is that they often are collected from one person (the "impact") while someone else actually absorbs the cost (the "incidence"). Whether the impact and incidence of a tax are the same depends on whether it falls initially on individuals or business.

Businesses-which have no taxpaying capacity in and of themselves-must shift their taxes to individuals. It is not known, however, in what proportion business taxes are shifted to consumers (higher prices), employees (reduced wages) or owners (lower profits or shareholder value). In most cases, no tax-shifting scenario can be shown to be persuasively superior to the others. For that reason, it is necessary to set up various hypothetical scenarios that define a range within which the actual incidence lies.

Once taxes are allocated to household income groups based on consumption, wages or assets, they can then be expressed as a percentage of income. Taxes that impose ever smaller percentage burdens as incomes increase are "regressive"; "proportional" taxes are those with steady percentage burdens across all family incomes; and "progressive" tax
systems result in larger burdens as incomes rise.

This chapter generally finds that combined Texas state and local taxes are highly regressive in the low-income categories, while being somewhat proportional or even slightly progressive for middle- and upperincome households.

The sales tax and property tax have the greatest impact on the overall distribution of tax burdens. While the sales tax is not noticeably regressive for middle- income families, it is clearly regressive for families living at the bottom of the economic scale. The property tax is somewhat less regressive than the sales tax across all income categories.

If the state's distribution of tax burdens is to be meaningfully changed, substantive structural reforms in the sales tax are likely to be unavoidable. Similarly, the property tax's disproportionately negative impact on poor families should be considered if local tax systems are to be made less regressive.

Alternatively, if the sales tax or property tax was scaled back-lessening its relative im-pact-and the lost revenue was recouped with a proportional or progressive tax, the result would likely be a clear change in the relative burdens of state and local taxes on Texas families.

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## Introduction

The formulation of a comprehensive government tax policy is usually a provocative and contentious undertaking, but not because there is disagreement over the ultimate objectives. Virtually everyone agrees that the best tax systems will be distinguished, above all else, by fairness and equity. The problems arise when policymakers confront the practical matter of what constitutes equity-who should pay taxes and how much should their share be?
This chapter documents who currently pays Texas taxes. Its purpose is to describe broadly how Texas state and local governmental tax policy affects its citizens according to their particular financial situations.

There are a number of ways the population of a state or locality can be divided for the purpose of distributing taxes. However, in virtually every tax study that has been published in the past 20 years, comparisons are made by family income. As a result, it is fairly easy to construct a way of measuring the impact of tax systems on individual families
that is well-grounded in previous research. ${ }^{1}$

This report divides the population of Texas into a number of broad household income catego-ries-with a corresponding set of household "average incomes"that are accurate in the sense that they reasonably describe a population of almost 17 million persons.

## The Concept of Tax Incidence

Economists call the initial or "direct" effect of taxes the impact, while the eventual tax effect-its "final resting place"-is termed the incidence. The idea of "incidence" is essential because taxes are frequently collected from one person (the "impact") while someone else ultimately bears the cost (the "incidence").

Of course, there are instances where impact and incidence are the same. Any time taxes are collected directly from consum-ers-as in the cases of the tobacco or alcoholic beverage taxesimpact and incidence coincide. For analysts, problems arise when impact and incidence are different. The cliche that "businesses don't pay taxes, people pay taxes" is just another way of saying that there is more to determining tax burdens

1. Among the most often cited studies of state and local tax burdens are: Richard A. Musgrave and Darwin W. Daicoff, "Who Pays Michigan Taxes," Michigan Tax Study Staff Papers (Lansing, Michigan: Secretary of Finance, 1958), pp. 131-184; Richard A. Musgrave, The Theory of Public Finance (New York: McGraw-Hill, 1959); Wisconsin's State and Local Tax Burden (Madison: Wisconsin Tax Study Commission, 1959); Joseph Pechman and Benjamin A. Koner, Who Bears the Tax Burden? (Washington D.C.: The Brookings Institute, 1972); and Donald Phares, Who Pays State and Local Taxes? (Cambridge, Massachusetts: Oelgeschlager, Gun \& Hain, 1980).
2. Joseph A. Pechman, Who Paid the Taxes, 1966-65 (Washington, D.C.: The Brookings Institute, 1986), p. 2.
than simply identifying the initial impact.

Economist Joseph Pechman has written extensively on federal, state and local tax policy issues. He defines tax incidence this way:

## Although it is clear that all taxes are eventually paid by individual households, it is not known in what proportion business taxes are passed on to business owners, employees or consumers.

The "incidence" of a tax-a term that is used synonymously with "tax burden"-is measured by the reduction in real incomes that results from the imposition of that tax. Taxes affect real income in either or both of two ways. They may reduce the incomes of individuals in their roles as producers; or they may increase the prices of consumer goods and thus reduce the purchasing power of a given amount of money income. The former effect is the burden of taxation on the "sources" of income; the latter is the burden on the "uses" of income. ${ }^{2}$

Pechman's definition is most useful when it is applied to taxes levied on businesses. To illustrate, the members of a city council pondering a 12 percent property tax increase must consider not only the direct cost of such a tax hike to their constituents, they must also consider the indirect burden resulting from the added cost of doing business in that city. Pechman's tax incidence
concept suggests that higher business property taxes would either be passed on to owners through diminished profits or lowered shareholder value, to wage earners in the community in the form of reduced income or to individual households through higher consumer prices.
To further clarify the example, imagine what happens when the owner of an automobile dealership located in that city receives the 12 percent higher property tax bill. The increased levy (the "impact" of the tax) immediately changes the net economic situation of the dealership's owner. Since, in reality, it is not the "business" that receives the additional tax burden but rather the owner of the business, the question then becomes how does the owner deal with the added cost of doing business (i.e., what is the "incidence" of the tax)?

There are three basic choices. The owner can either accept reduced profits, instruct the salesmen to negotiate sales prices above their current average level or notify the sales force that their commissions are being decreased. Alternatively, the individual effects can be minimized by combining all three approaches. The decision will naturally be influenced by, among other things, the competitiveness of the local auto market and/or labor market. A high level of competition in both markets would leave the owner little choice but to absorb the full cost of the tax increase through lowered profits. Softer conditions in either market would open up the possibility of shifting all or part of the cost to either employees or customers.

The point of this example is to demonstrate the practical problem of tax incidence analysis. Tax analysts must first estimate how much tax collected by a governmental unit comes from business,
and then make some guesses as to how those taxes are shifted to certain classes of individuals.

Although it is clear that all taxes are eventually paid by individual households, it is not known in what proportion business taxes are passed on to business owners, employees or consumers. Economic theory is inconclusive.

As a result, any serious tax incidence study has to make some theoretical assumptions about business tax-shifting. But because, in many cases, no specific shifting scenario can be shown to be persuasively superior to the others, it is useful to set up a number of hypothetical situations that define a range within which the actual incidence of the tax system lies.

This study makes use of four taxshifting scenarios. At one end of the range is Case 1, which assumes that all taxes are borne by consum-ers-either directly on their taxable purchases or indirectly through higher prices. Case 1 is always the most regressive scenario because higher consumer costs have a disproportionately negative effect on lower-income families who must spend a relatively large share of their income on consumer purchases. At the other extreme is Case 2 which shifts the entire business-tax burden to business owners. It is always the least burdensome for lower-income families because a disproportionate share of business profits, dividends and royalties flow to higher-income families.

The true distribution of businesstax shifting probably lies somewhere between these two extremes, but it is impossible to identify it definitively. As a middle ground, Case 3 splits the burden equally between consumers and owners, and Case 4 assumes an equal tax distribution among owners, employees and consumers.

Of course, it is important to
remember that every business-tax shifting scenario includes some taxes paid directly by households. For example, according to the Comptroller's office, 54 percent of sales tax receipts are paid by individuals. That amount-which added up to almost $\$ 2.5$ billion in fiscal year 1984, the base year for this study-is figured into each taxshifting scenario in the same manner. The differences between Cases 1, 2, 3 and 4 are based on the ways the 46 percent business share of the sales tax is shifted to individual households.

> Cases 1, 2, 3 and 4 are based on the ways the 46 percent business share of the . . . tax is shifted to individual households.

The allocation of tax by income category is accomplished with expenditure, asset and income data from the Consumer Expenditure Survey, conducted by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). The Consumer Expenditure Survey, which provides information on the buying habits of American consumers, is based on interviews with thousands of selected households conducted at three-month intervals. The interviews are carried out on an ongoing basis in 101 areas of the country with each household interviewed five times over a 15 -month period. ${ }^{3}$

Although the Consumer Expenditure Survey is well regarded, it does present a number of limitations for a Texas tax incidence analysis. First, because the BLS information is collected on a national scale, it is necessary to estimate Texas consumption, income and asset trends from the
nationwide data.
Second, use of 1984 allocators necessitates the use of 1984 tax data. While it would be mathematically possible to plug 1987 tax figures into a 1984 consumer expenditure model, such a practice would be inadvisable because it would push the data one more step away from accuracy. In any case, it does not matter statistically whether 1984 or 1987 tax data is used because the incidence patterns do not appear to have changed significantly over the past three years despite the numerous changes in the tax code. That is because tax distributions are fundamentally based on the overall structure of a tax system, and not incremental changes in the rates or bases.

Finally, certain aspects of pre1986 federal tax law-particularly the widespread use of tax shelters and "passive losses"-have the potential of distorting the lowest average income categories. Before the 1986 tax reform bill was passed, it was possible for wealthy households to reduce their beforetax income to virtually nothing through the creative use of tax shelters or "passive losses." Those households would then be included in the lowest BLS-income category despite the fact that they are upper-income families by any other reasonable measure.

The inclusion of families with apparent-but not real-low incomes could seriously undermine the data patterns. Moderately regressive taxes would become severely regressive, and

## 3. Each family is quizzed on expenditure

 types which can be recalled for a period of three months or longer. These would include relatively large purchases-like real property, appliances or health careand regularly occurring costs-like rent, utilities or insurance. Those interviewed estimate their food costs for each threemonth period and their responses are averaged for consistency.progressive taxes would appear to be nearly proportional. To address this problem, the lowest BLS-income category with its consumption and asset data has been modified to eliminate taxsheltered families. ${ }^{4}$ The effect of such a change on effective tax burdens and elasticity coefficients is notable (all tax systems become
4. The tax-sheltered families were eliminated by BLS staff through a special computer run designed to identify and remove any households that had sharply negative income. The average income of the eliminated households was $-\$ 28,000$. They represented about four percent of the original BLS interview sample. The new demographics for the lowest income category show that over 61 percent of the households are either elderly or under 25 (a fair number of whom are probably college students drawing some measure of parental support).
less regressive).
Even with the elimination of taxsheltered families, there is an apparent statistical anomaly in the lowest BLS-income group (\$010,000 ). When state taxes are figured as a percentage of income, the lowest-income families appear to have an unreasonably high tax burden. Specifically, their taxes imply consumption levels higher than their income levels.

This can be largely explained by the concept of "dissavings"financing purchases partially with savings rather than entirely with income. Those most likely to dissave are the temporarily unemployed and the elderly living off inadequate fixed incomes.

A principal reason that the property tax extracts a high percentage of tax from low-income families is home ownership by
elderly persons-who represent a disproportionate share of all localincome households. It is common for elderly persons living on low fixed incomes to own their homes free and clear. Their level of assets-which initially appears peculiar given their low income level-is explained by their unencumbered home ownership.
Table 1 shows the demographics of the six income categories used in this study. It is worth reiterating that over half of the elderly population is in the lowest-income category; likewise, over half of the youngest age group is in the lowest category. Just as significant, elderly people represent over one-third of all low-income families. Those numbers are important for policymakers wanting to mitigate the effects of taxes that impose a disproportion-

TABLE 1. Income Category Age Statistics

| Age Group | \$0-10,000 | \$10-15,000 | \$15-20,000 | \$20-30,000 | \$30-40,000 | over \$40,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Income | \$5,577 | \$12,393 | \$17,716 | \$24,568 | \$34.441 | \$61,078 |
| Under age 25: |  |  |  |  |  |  |
| Percent of Age Group' | 53.6\% | 18.6\% | 12.2\% | 11.4\% | 3.1\% | 1.1\% |
| Percent Income Group ${ }^{2}$ | 21.9\% | 15.3\% | 11.2\% | 6.8\% | 2.9\% | 0.9\% |
| 25-34: |  |  |  |  |  |  |
| Percent of Age Group ${ }^{1}$ | 22.2\% | 13.9\% | 15.5\% | 24.6\% | 15.8\% | 12.0\% |
| Percent Income Group ${ }^{2}$ | 16.4\% | 25.2\% | 31.6\% | 32.1\% | 31.7\% | 20.8\% |
| 35-44: |  |  |  |  |  |  |
| Percent of Age Group ${ }^{\prime}$ | 12.5\% | 9.0\% | 11.0\% | 24.2\% | 18.5\% | 24.8\% |
| Percent Income Group ${ }^{2}$ | 8.1\% | 11.7\% | 16.0\% | 22.6\% | 26.6\% | 30.3\% |
| 45-54: |  |  |  |  |  |  |
| Percent of Age Group ${ }^{1}$ | 15.1\% | 10.6\% | 9.1\% | 20.2\% | 17.3\% | 27.7\% |
| Percent Income Group ${ }^{2}$ | 7.0\% | 10.1\% | 9.7\% | 13.7\% | 18.1\% | 24.9\% |
| 55-64: |  |  |  |  |  |  |
| Percent of Age Group ${ }^{1}$ | 24.1\% | 12.9\% | 12.8\% | 19.7\% | 12.8\% | 17.7\% |
| Percent Income Group ${ }^{2}$ | 12.1\% | 13.2\% | 14.7\% | 14.5\% | 14.5\% | 17.2\% |
| 65 and over: |  |  |  |  |  |  |
| Percent of Age Group ${ }^{1}$ | 51.6\% | 18.1\% | 11.0\% | 10.6\% | 4.2\% | 4.5\% |
| Percent Income Group ${ }^{2}$ | 34.5\% | 24.5\% | 16.8\% | 10.3\% | 6.3\% | 5.8\% |
| Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey (Washington, D.C., Bulletin 2267, 1984). |  |  |  |  |  |  |
| 1. This line is the percent of the age group in each income category (the line adds up to 100 percent). <br> 2. This line is the percent of each income category represented by that age group (the income categories add up to 100 percent). |  |  |  |  |  |  |

ate burden on elderly persons or families just starting out. Almost half of the 35-44 and 45-54 age groups-the peak wage-earning periods for most workers-are in the two highest-income categories.

For all the tax-shifting scenarios, direct consumer taxes are distributed according to the degree to which taxable purchases occur in individual income classes. For example, the cigarette tax is allocated based on cigarette purchases by BLS-income class, and motor fuel taxes are distributed based on motor fuel purchases.

Similarly, BLS figures are used to transform the business tax levy into a series of household tax burdens. For Case 1, business taxes are shifted to consumers according to total family expenditures. ${ }^{5}$ Case 2 tax-shifting is proportional to a combination of business, self-employment, securities, dividend and royalty income. Case 3 uses each method equally. The taxes that are shifted to workers under the Case 4 scenario are calculated using wage and salary estimates.

All four shifting scenarios are used to analyze the incidence of each state and local tax except for taxes imposed on the production of oil and natural gas. For each nonseverance tax, Case 1 and Case 2 define the boundaries within which the "real-life" tax shifting occurs. Although it may be intuitively satisfying to assume that the "real-life" situation is probably best approximated by Case 4 , such an assumption is not recommended. The tax-shifting information presented in this report should be viewed as only defining a set of parameters.

The oil and natural gas production taxes are treated differently in this analysis. Ten years ago, it was generally believed that severance taxes were largely passed on to energy consumers. But the nature of today's energy-
production markets makes it highly unlikely that any marginal costs are shifted to either consumers or employees. Oil and natural gas prices are now established by the forces of the global marketplace and not by any explicit economic link between production costs and a targeted level of profitability.

> There is probably no tax system in existence that is completely proportional, although research has shown that many taxes are relatively proportional over the middle- or upperincome ranges.

Dr. Stephen McDonald, an economics professor at the University of Texas, has written extensively on the subject of severance taxes. He argues that landowners bear the full burden of oil and natural gas production taxes:

The domestic price of oil cannot rise above the world level, regardless of changes in marginal costs and shifts in domestic supply. [It] must be assumed that the world price is independent of marginal costs in the United States. Given the world price, the higher the marginal costs-including a severance tax-the lower must be the rents. In this sense, the full burden of the severance tax is borne by landowners as recipients of rents. ${ }^{6}$

McDonald's position makes sense because energy prices today are largely determined by the market's interpretation of interna-
tional events and pressures, combined with the estimated worldwide supply of oil. The notion that landowners bear the cost of severance taxes through reduced royalty payments is used in this report to apportion oil and natural gas production taxes.

## Measuring Tax Incidence

Estimating how taxes are shifted to families is a fundamental part of tax analysis; but more is needed if the "fairness" or "equity" of a tax system is to be judged. Equity and fairness are philosophical concepts that are difficult-if not impossible-to define in a way that everyone agrees with. Consequently, economists have chosen to evaluate tax systems by concentrating on how tax burdens are distributed to different income classes.

They do this by categorizing tax distributions according to the following terms: "regressive," "progressive" and "proportional." Those terms describe the three trends that are possible when taxes are measured as a percentage of income over a number of income categories.
"Regressive" describes tax policies that impose ever smaller percentage burdens as incomes increase. Past studies have shown that most state and local taxes are generally regressive at least across the lower-income categories. ${ }^{7}$
"Proportional" taxes are those that
5. This encompasses virtually all monetary outlays, including spending for food, consumables, energy products, housing costs and auto expenses. Outlays not covered include financial services, alimony and tuition.
6. Stephen McDonald, "The Incidence of an American Oil Severance Tax Under World Pricing by OPEC: A Note," Natural Resources Journal, Vol. 20 (1980), p. 547.
7. These include, among others: Kenneth V. Greene, William B. Neenan and Claudia Scott, Fiscal Interactions in a Metropolitan Area (Lexington: Lexington Books, 1974).
impose an equal percentage burden across all income groupseveryone pays the same amount of tax relative to their income. There is probably no tax system in existence that is completely proportional, although research has shown that many taxes are relatively proportional over the middle- or upper-income ranges. "Progressive" tax systems are those that impose rising burdens along with rising incomes.

Tax incidence trends can be measured in a number of ways. The most common is "effective tax burdens," which are taxes divided by average income expressed in percentage terms. For example, a family with an income of $\$ 30,000$ that pays $\$ 3,000$ in tax has an effective tax burden of $\$ 3,000$ / $\$ 30,000$ or ten percent. The effective burdens of a regressive tax system decline as income increases; proportional burdens stay the same; and progressive taxes have rising effective rates.

Effective burdens-which are best expressed graphically-are useful in two ways: for any family in a particular income group, they provide a "snapshot" of probable average tax burdens; taken as a trend across all income groups, they portray the direction of the overall burden of the system-regressive, proportional or progressive.
"Elasticity coefficients" are another way of depicting the overall trend of tax burdens as household incomes increase. They are calculated this way: the rate at which taxes increase over all households is compared statistically to the rate at which income increases. The statistical comparison results in a number carried to two decimal points. The value of
8. Billy Hamilton and Stuart Greenfield, "The State Tax Burden," Fiscal Notes (Comptroller of Public Accounts, August/ September 1979), p. 1.
the elasticity coefficient is that it provides an answer to this simple but very important question: given a one percent increase in income, by what percent should taxes be expected to increase?

An elasticity coefficient of 1.00
> . . . given a one percent increase in income, by what percent should taxes be expected to increase?

would portray a perfectly proportional tax system-a one percent rise in income would be accompanied by a one percent rise in tax payments. A coefficient of less than 1.00 would indicate a regressive tax system, while a coefficient larger than 1.00 would describe a progressive tax system. The further the number moves away from 1.00 , the greater the regressivity or progressivity of the tax system.

The sales tax can illustrate the practical value of the elasticity coefficient. Using the Case 4 business tax-shifting scenario (borne equally by owners, employees and consumers), the elasticity coefficient for the tax in this study was found to be 0.62 meaning that a one percent increase in income is likely to be accompanied by about a six-tenths percent increase in sales tax. The 0.62 figure can be used to compare the tax burdens of different families or project the probable change in a family's tax burden resulting from a change in their income.
For example, if one family has an annual income of $\$ 20,000$ and another earns $\$ 40,000$ per year, the comparative difference between the two is 100 percent. The sales tax elasticity coefficient implies that the higher-income family will
pay 62 percent more in sales tax. In other words, the $\$ 40,000$ family will have a smaller tax burden relative to their total income than the $\$ 20,000$ family. Similarly, wage earners given a ten percent salary increase can expect to pay 6.2 percent more in sales tax on the salary increase.

To summarize, effective rates and elasticity coefficients provide policymakers with a set of economic calipers that can enable them to measure the relative fairness of various tax programs.

## The Incidence of Texas

 TaxesThe first step in creating a model that estimates how state and local taxes affect individual households is estimating what percent of taxes have an initial impact on individuals as opposed to businesses. In a 1979 study, the Comptroller's office identified two generic types of taxes with an impact on individuals:
(1) those levied directly on individuals and (2) those levied on businesses but shifted directly to consumers--generally as a result of state law. The ad valorem tax on residential property and the inheritance tax make up the first category. Portions of the state consumption taxes-sales, motor fuel, alcoholic beverage, motor vehicle sales and tobacco taxesand the state utility taxes allocable to residential users are examples of the latter. The impact and incidence of these taxes are the same. That is, the burden is borne by the person who pays the tax, since there is no opportunity to shift it to others. ${ }^{8}$

Alternatively, businesses that pay taxes that are not immediately passed on to consumers must
eventually shift that tax burden some place else because businesses have no taxpaying capacity apart from their owners, workers or customers. In the case of those taxes, the impact and incidence do not coincide.
Table 2 shows estimates of how the impact of Texas state and local taxes is split between individuals and business for fiscal year 1984. (That year is used because of the availability of BLS consumer information for that year). The information comes from agencies or associations that are familiar with the collection patterns of various kinds of taxes. ${ }^{9}$
After a particular tax is divided between business and individual impact, the next step is spreading out the "individual-impact" portion of that tax across income categories as defined in the Consumer Expenditure Survey.

The amount of tax revenue that is assigned to each income group is based on a BLS expenditure or asset figure that is directly related to the specific tax being analyzed. To cite two examples: sales volume of taxable consumer expenditures is used to allocate the sales tax; and average home value is used to distribute property-tax receipts. Household tax burdens are calculated by dividing the tax revenue allocated to each income group by the estimated number of family units in those income groups. The final step is transforming those average household figures into a series of effective tax burdens and elasticity coefficients. This method fits with the approach taken by most past tax incidence studies. ${ }^{10}$
There is one other factor that affects the final burden of state and local taxes in Texas: tax exporting or the payment of state or local taxes by out-of-state residents. The extent to which taxes are exported depends on the business tax-shifting scenarios being used.

Under the Case 1 scenario, out-ofstate consumers of Texas products will absorb the exported tax. Out-of-state owners of companies doing business in Texas will pay the tax under the Case 2 scenario.

## The degree to which taxes are exported inversely affects the amount of taxes paid by Texans.

Consumers and business owners share the tax burden under Cases 3 and 4.
The degree to which various taxes are exported inversely affects the amount of taxes paid by individual Texans. The more taxes are exported, the smaller the average household tax burden for Texas residents. Of course, just as

Texas state and local governments export some of their taxes to other states, other states also export some of their taxes to Texas. However, the effects of tax importing are beyond the control of state policymakers and so they are not considered in this report.
In his comprehensive 1980 national tax incidence study, Who Pays State and Local Taxes, economist Donald Phares identifies two generic causes of interstate tax importing and exporting: "price migration" that occurs when goods that are taxed by one state are bought by the residents of
9. These include the Comptroller of Public Accounts, Texas Hotel and Motel Association, State Board of Insurance, Public Utility Commission and State Property Tax Board.
10. These include work by Phares and Pechman, as well as state studies in Indiana and Wisconsin.

TABLE 2. Estimated Direct Impact of Texas Taxes on Businesses and Individuals, 1984

| Tax | Individuals | Business |
| :---: | :---: | :---: |
| Alcoholic Beverage Taxes | 87\% | 13\% |
| Cigarette and Tobacco Products Taxes | 100 | 0 |
| Corporation Franchise Tax | 0 | 100 |
| Hotel/Motel Tax | 15 | 85 |
| Inheritance Tax | 100 | 0 |
| Insurance Tax | 44 | 56 |
| Motor Fuel Taxes | 66 | 34 |
| Motor Vehicle Sales and Rental Taxes | 71 | 29 |
| Natural Gas Tax | 0 | 100 |
| Oil Production Tax | 0 | 100 |
| Property Tax | 31 | 69 |
| Sales Tax | 54 | 46 |
| Telephone Tax | 46 | 54 |
| Utility Taxes | 41 | 59 |
| Total (Weighted Averages) ${ }^{\text {t }}$ | 37\% | 63\% |
| Sources: Select Committee on Tax Equity, based on data from Comptroller of Public Accounts; Texas Hotel and Motel Association; Public Utility Commission; State Board of Insurance; and State Property Tax Board. |  |  |
| 1. One recent study has estimated that roughly 50 percent of Texas taxes have an initial impact on business. The difference can be explained primarily by the treatment of the sales tax and property tax, which are estimated to have a smaller direct impact on business than state estimates suggest. (See: Robert Tannenwald, "Rating Massachusetts' Tax Competitiveness," New England Economic Review (November/December, 1987), p. 43. |  |  |

another state and federal income tax deductibility of state and local taxes. ${ }^{11}$ Phares observed that Texas had a substantial price migration advantage at the time covered by his study-because severance taxes were thought to be exported to out-of-state energy consumers-while it had no federal deductibility advantage.

Phares' argument that Texas has no federal offset advantageoriginally based on the fact that the state has no personal or corporate income tax-is even mor valid today because Congress has eliminated the sales tax deduction. What has changed is Texas' once sizeable price migration advantage-mainly because severance taxes are no longer exported to out-of-state energy consumers. Any severance tax exportation today appears to be limited to out-of-state owners of productive lands.
After the old severance tax exporting effect is removed, the Phares approach leads to the conclusion that only about 3.2 percent of Texas state and local taxes are exported to out-of-state consumers under the Case 1 scenario. The net result is a 3.2 percent reduction in tax burdens spread out among all Texas households. The 1979 Comptroller study estimated exporting at about four percent of state taxes. Implicit in both those figures is the assumption that the research methods are still valid today. Such an assumption is necessary

[^5]because there are not any updated studies or data available that permit a different estimate.

Estimating the extent to which business taxes are shifted to out-of-state owners is a trickier process. Using information from the Securities and Exchange Commission (SEC) and the Internal Revenue Service's 1981 Statistics of Income, it is possible to roughly estimate the extent to which companies doing business

## This analysis assumes

 that approximately 20 percent of stock in corporations doing business in Texas is owned by Texas residents.in Texas are owned by out-of-state shareholders. ${ }^{12}$ Precise figures are not possible because of the fluid and ever-changing nature of the securities markets.
This analysis assumes that approximately 20 percent of stock in corporations doing business in Texas is owned by Texas residents. That figure is probably the most conservative estimate possible given the constraints of the IRS and SEC information. ${ }^{13}$ The significance of the 20 percent estimate is that 80 percent of the taxes having an initial impact on publicly held corporations are exported to out-of-state shareholders under the Case 2 scenario.
When the ownership of sole proprietorships, partnerships and corporations is grouped together, a sizeable percentage of business taxes is projected to be shifted to out-of-state owners under the Case 2 tax-shifting scenario. The actual effect of that shifting on particular Texas households would be based on their relative
level of business income (lowerincome families experiencing a much smaller effect than higherincome families).
The large tax exporting difference between Cases 1 and 2 means that the total amount of tax that is allocated to Texas households is different for each tax-shifting scenario. For example, about $\$ 65$ million of the total 1984 sales tax levy is exported to out-of-state consumers under Case 1, while over one billion dollars is passed to out-of-state owners or shareholders under Case 2. Case 3 and Case 4 fall roughly in the middle. This means sizable differences in effective tax burdens among the four tax-shifting scenarios.
The remainder of this report details the incidence of the Texas state and local tax system. The incidence of all state and local taxes is analyzed, as well as state taxes separately. Local taxes are not considered separately because, for all practical purposes, the property tax is the local tax roll (generating over 83 percent of all local tax revenue in 1984). The sales, motor fuels and property taxes are examined individually because of their significant and easily understood impact on individual households. The two largest types of business taxesseverance and franchise-are examined together, and the remaining taxes are analyzed as a single group. Those "other" taxes are: motor vehicle sales and rental; hotel/motel; telephone; cigarette and tobacco; alcoholic beverage; utilities; insurance; inheritance; and assorted other minor taxes. For each different tax-shifting scenario, elasticity coefficients are given, and effective tax burdens are presented graphically.

## State and Local Taxes

The incidence of all state and local taxes is detailed in Figure 1;
the incidence of state and local taxes that only have a direct impact on individual households is shown in Figure 2. Figure 3 is the inclusion of the property tax and local sales taxes as part of the state and local tax total.
In each instance, the most regressive scenario-measured by both elasticity coefficients and effective tax burdens-is Case 1. Its consistent regressivity across all income categories is a reflection of the disproportionately negative effect of consumer costs on lowerincome families. Conversely, the Case 2 scenario, which has the greatest effect on higher-income families, is the least regressive.

What is perhaps most noteworthy about Figure 1 is the movement from regressivity to progressivity for every tax-shifting scenario except Case 1, which alone exhibits a persistent pattern of regressivity for all families. Tax burdens turn slightly progressive above $\$ 20,000$ of family income for Case 4, and they become progressive above $\$ 30,000$ for Cases 2 and 3.

On the other hand, the elasticity coefficients portray a tax system that is regressive overall for every tax-shifting scenario. But that is mainly reflective of the steeply regressive distributions in the lowest family income groups and not the trends across all income groups. When the shape of the effective tax burdens is considered with the elasticity coefficients, it is apparent that an overall pattern of regressivity does not necessarily imply a consistent pattern of regressivity for all households.

The primary factor driving the slight progressivity in the middleand upper-income categories of Figure 1 is the shifting of some portion of business taxes to owners. When business owners-the majority of whom are higher-income-absorb some or all of the 63 percent of state and local taxes that are initially paid by business,
the natural result is movement toward a less regressive tax system.

> The property tax's influence is based on the disproportionate volume of money it raises-over 40 percent of all state and local tax revenue.

This effect is underscored by comparing Figure 1 with Figure 2, which illustrates the distribution of all state and local taxes that have the same "impact" and "incidence"-the taxes that are most visible to Texas families. Those taxes-which added up to almost $\$ 7$ billion in 1984-are consistently regressive across all income groups. That is not surprising since the bulk of individ-
ual state and local taxes are based on some type of consumption or ownership measure-factors that have the greatest impact on lowerincome families.
The similarity of the effective tax burden trends in Figure 1 and Figure 8 (property tax distribution) shows the substantial influence exerted by the property tax on the distribution of all state and local taxes. The property tax's influence is based on the disproportionate volume of money it raises-over 40 percent of all state and local tax revenue.
The economic structure of the property tax makes it less regressive than the consumption-based taxes administered on the state level. Because the individual property tax is based on home ownership value-which tends to rise with income-it has a moderating effect on the overall tax system's regressivity. This is illustrated by the differences

FIGURE 1. Combined State and Local Tax Incidence


1. The significantly higher effective burdens in the lowest income category are partly explained by unencumbered home ownership by the elderly and partly by dissavings (partial financing of consumer purchases with savings).

Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half to consumers and half to business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.
between Figure 1 and Figure 3, which documents the incidence of all state taxes.
The elasticity coefficients for combined state taxes-Figure 3are nearly the same as those for the sales tax alone shown in Figure 4. And the general shape of Figure 3 is nearly the same as Figure 4. This suggests that the
sales tax has the same type of impact on state taxes that the property tax has on combined state and local taxes. That is not surprising considering that the sales tax generates over 40 percent of the state's tax revenue.

## The Sales Tax

In fiscal year 1984, the sales tax

FIGURE 2. Individual State and Local Tax Incidence


FIGURE 3. State Tax Incidence


[^6]raised almost $\$ 4.5$ billion, about one-fourth of all state and local tax revenue. Over 80 percent of that went into state coffers, with the remainder going to local governments.
The main force behind the sales tax's regressivity-as it is for any consumption tax-is its effect on low-income families who have little choice but to spend much of their income-and possibly some of their savings-on purchases subject to the sales tax.
The undesirable impact on lowincome families is worsened over time if their incomes fail to keep up with inflation. Specifically, if the prices of taxable consumer goods rise faster than family income, then effective tax burdens have to increase (higher consumer prices mean higher sales taxes even when the rate remains constant). Consequently, the sales tax's regressive impact on poor families is compounded by inflationary pressures.
Figure 4 illustrates the effect of the sales tax's low-income regressivity, especially for Cases 3 and 4. Although the effective tax burdens for those scenarios are nearly proportional past the second income category, the elasticity coefficients nevertheless indicate a clear overall trend of regressivity. The low-income effect can also be demonstrated by dropping the $\$ 0$ 10,000 group and refiguring the elasticity coefficients. When the poorest households are removed, the coefficients jump by an average of over 30 percent.
The regressive impact of the sales tax on lower-income families is most clearly shown in Figure 5, which illustrates the incidence of the sales tax levied directly on individual taxpayers. The effective tax burdens slope downward across all income groups, although they flatten somewhat past $\$ 20,000$. But the most striking feature of Figure 5-and the one
that best explains the low elasticity coefficient of 0.62 -is the sharp drop in effective burdens between the lowest two income categories.
The information conveyed in Figures 4 and 5 points to the conclusion that while the sales tax is not noticeably regressive for middle-income families, it is unmistakably regressive for families living at the bottom of the economic scale. Of course, the relative burden of the Texas sales tax on the poor and elderly is lessened somewhat by exemptions for groceries and medicine.

Over the past ten years, the changes in the sales tax base and rates have had little impact on the tax's distribution of burdens. This is corroborated by Figure 6, which illustrates the Case 4 sales tax effective burdens for fiscal years 1974, 1979 and 1984. The three lines' similar slopes show that the distribution trend has not changed appreciably.

Because the sales tax generates so much revenue, it is likely that significant changes in the sales tax will be necessary and unavoidable if the state's distribution of tax burdens is to be meaningfully improved. Moreover, those changes should be directed toward the tax structure and not the rate. Merely lowering the rate will do little to lessen the sales tax's structural regressivityalthough it would result in lower effective burdens for all families.

## The Motor Fuel Taxes

The motor fuel taxes produced $\$ 531.7$ million for the state in 1984 when the rate was five cents per gallon. (There is no local fuels tax.) It is a constitutionally dedicated tax, with 75 percent of the revenue earmarked for roads and highways and 25 percent for public schools.

Although the motor fuel tax rates have tripled since fiscal year 1984, the level of regressivity as
measured by elasticity coefficients has remained virtually constant. (This was proved by figuring the elasticity coefficients for the rates as they changed between 1984 and 1987.) The level of taxes as a percent of income has, of course, increased significantly for all households; but the distribution
patterns have not really changed. The constancy of the tax's regressivity in the face of two significant tax increases underscores the fact that it is the basic structure of a tax system-and not changes in the rates-that most influences its distribution.
Although the motor fuel taxes


1. The high effective burdens in the lowest-income category-which imply consumption of taxable goods at a higher level than income-are largely explained by partial financing of consumer purchases with savings ("dissavings").

Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.

FIGURE 5. Individual Sales Tax Incidence

turn progressive at $\$ 30,000$ of family income, the elasticity
14. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), p. 55.
coefficients show that the taxes are regressive at a level comparable to the sales tax. The regressive effect of the sales tax is considerably stronger, however, for two reasons.
First, the sales tax's effective

FIGURE 6. Sales Tax Incidence Trends, 1974-84


Note: Case 4 is an equal tax-shifting distribution to consumers, business owners and wage earners. Average incomes are scaled since inflation changes the figures from year to year.

FIGURE 7. Motor Fuel Taxes Incidence


Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.
burdens are much higher for lower-income families because it is a much more pervasive tax. The extent of the difference between the two taxes is shown when the scale of the vertical axes for Figures 4 and 7 are compared.

Second, the effect of the motor fuel taxes is mitigated in lowerincome families somewhat by a relatively low average level of automobile ownership- 1.1 cars per family compared to an average of three cars per household for the highest-income group.

## The Property Tax

The property tax is the revenue mainstay of local government. In 1984, it raised just under $\$ 8.2$ billion for local governments-- 83 percent of all local taxes. It provides virtually all of the tax revenue for public schools and county government. The property tax also casts a very large shadow over other tax systems in Texas, generating 41.5 percent of net tax revenue in $1984 .{ }^{14}$ By way of comparison, its nearest competitor-the sales taxraised about 25 percent.
Because only property owners pay it directly, allocating the family or residential share of the property tax presents a problem. Some people argue that any family that has a regular place of residence pays property taxeswhether it is a house or apartment, owned or rented. Others argue that the competitiveness of residential real estate markets and the economic qualities of fixed capital assets (like buildings or land) makes it unlikely that nonproperty owners pay property tax to any significant extent.
This question sets the property tax apart from other taxes. For other state and local taxes with an initial impact on individual households, the matter of "indirect" taxation arises only in
connection with business taxshifting. But because the residential portion of the property tax can be levied either on homeowners or landlords, the first step in calculating its incidence is coming up with a reasonable approach to distributing residential property taxes to all families.

The approach taken in this report-that residential property taxes on rental property are primarily shifted to rentersgrows out of several earlier economic studies. The following excerpts provide a brief summary of their points of view. The first comes from Purdue University economist James Papke:

The property tax. . . is largely passed on or shifted to the final consumer of the services of the property, renters [bearing] the tax on residential buildings through higher rent. Because outlays for housing and consumer goods tend to account for a larger fraction of current family income of low income groups than high income groups, the tax is regressive. ${ }^{15}$

In a similar vein, Joseph Pechman has written:

The property tax raises the price of housing services and other goods and services produced in buildings, relative to other prices. Since the proportion of total income spent on housing falls when income rises (with income measured on an annual basis), this would suggest that the burden of the property tax falls as family income rises. ${ }^{16}$

And the following is quoted from the 1986 Minnesota Tax Study Commission report:

The traditional view [of the property tax on improvements]
says it is shifted forward in the form of higher rents. The property tax is viewed as reducing the rate of return on capital improvements, thereby slowing the rate of investment
15. James A. Papke (ed.), Indiana's Revenue Structure: Major Components and Issues (West Lafayette: Purdue University, 1983), p. 98.
16. Pechman, pp. 29-30.

FIGURE 8. Property Tax Incidence


Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers and wage earners.

FIGURE 9. Property Tax Ircidence Trends 1974-84


Note: Case 4 is an equal tax-shifting distribution to consumers, business owners and wage earners. Average incomes are scaled since inflation changes the figures from year to year.
17. Final Report of the Minnesota Tax Study Commission, Vol. 1: Findings and Recomendations (St. Paul, Minnesota: Butterworths Legal Publishers, 1986), p. 267.
18. Unpublished information compiled by the State Property Tax Board:
19. State Property Tax Board, Annual Report for Tax Year 1986 (Austin, 1987), pp. 4-5.
(e.g., new structures, rehabilitation, and maintenance). ${ }^{17}$

Property taxes are distributed to households in this case based on two BLS figures: the average percentage of home ownership in each income category and average home value in each category. To

FIGURE 10. Individual Property Tax Incidence


FIGURE 11. Franchise and Severance Taxes Incidence


Notes: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.
severance taxes are assumed to follow the Case 2 scenario only since the nature of the world oil market makes shifting to consumers or wage earners unlikely.
verify the accuracy of the BLS home value figures, the estimated number of Texas households in each income category was multiplied by the average home value, and those numbers were added together. The result-which would be the BLS estimate of total taxable residential property in Texas-matched the State Property Tax Board's 1984 estimate of total residential property very closely.

As shown in Figure 8, the Case 3 and 4 property tax elasticity coefficients are the closest any state or local tax comes to being proportional-except for those taxes that are levied exclusively on business. The Case 2 property tax scenario is the most progressive of all the taxes that have some initial impact on individuals; conversely, the Case 1 scenario is regressive across all income categories and severely so for the poorest households.

The major property tax change that occurred between fiscal years 1974 and 1984 did not have to do with the rates; it had to do with the base. During those ten years, the percentage of taxable property represented by residential housing climbed from less than 24 percent to over 30 percent. ${ }^{18}$ The bulk of that increase happened between 1980 and 1984.

The most obvious reason for that was Senate Bill 621 passed by the 66th Legislature, which substantially modified the residential tax appraisal process by requiring more frequent appraisals at full market value.

Additionally, according to the State Property Tax Board, a jump in residential real estate prices (especially between 1981 and 1984) and weakness in values for industrial, agricultural and mineral properties after 1982 contributed to the increasing share of residential property values. ${ }^{19}$ The impact of the greater residential

Select Committee on Tax Equity
property share-reflected by higher tax burdens across the entire income scale-is seen in Figure 9.
Figure 10 shows that taxes levied on residential property (i.e., property tax receipts with the same "impact" and "incidence") are distributed in a clearly dichotomous manner. For families with annual incomes less than $\$ 20,000$, the property tax results in a pattern of regressivity that is almost as pronounced as the direct sales tax illustrated in Figure 5. But families earning more than $\$ 20,000$ experience a progressive distribution. The low-end regressivity is strong enough, however, to result in an elasticity coefficient less than one (0.83).

Figures 8 and 9 suggest a number of alternatives for making the distribution of state and local tax burdens more proportional. First, if the moderating effect of the property tax is to be reinforced or enhanced, the tax's low-end regressivity-particularly as it affects residential property own-ers-should be addressed in a way that relieves some of the burden on the poor and the elderly.
Second, policymakers could substitute one or more of the major taxing methods with a new form of taxation. Adding a new layer of taxation to the present system without drastically scaling back or removing one of the current layers would probably have little or no effect on the distribution trends because of the heavy influence of the sales and property taxes.
But if the sales tax or property tax was sharply scaled backdiminishing the relative importance of those taxes-and the lost revenue was recouped with a proportional or progressive tax, the result would almost certainly be a noticeable improvement in
the system's distribution of tax burdens.

## The franchise tax as paid by business owners is the only Texas tax that is progressive for virtually all families.

## Franchise and Severance

 TaxesThe state's three largest business taxes are the corporation franchise tax (yielding $\$ 606.8$ million in 1984) and the oil and natural gas production taxes (generating $\$ 2.2$ billion in 1984). As explained earlier, the severance tax is distributed only to business owners.
The franchise tax as paid by business owners is the only Texas tax that is progressive for virtually all families. This seems reason-
able because it is generally assumed that stock or business ownership rises with income. Similarly, the overall trend of severance tax effective burdens slopes upward, which reflects a greater concentration of dividend and royalty income in the upperincome categories.

At first glance, the severance and franchise taxes appear to offer the best situation for Texas households-they do not directly affect families, and those in the lowest-income categories experience the smallest relative tax burdens.

Consequently, it might seem logical that cash-strapped policymakers should focus their attention on those business taxes. While it may be true that Texas households could realize a shortterm gain from that approach, the long-term effect is considerably murkier. Like any other tax, business taxes have direct and indirect effects. Higher business taxes could have the indirect effects of discouraging investment, stifling


[^7]attempts at economic development, and-in the case of franchise tax exporting-encouraging acts of retribution by other state legislatures.

## Other Taxes

The other state taxes, with their 1984 revenue figures in parentheses, are: motor vehicle sales and rental ( $\$ 717.5$ million); hotel/motel ( $\$ 44.9$ million); telephone ( $\$ 84.7$ million); cigarette and tobacco ( $\$ 340.3$ million); alcoholic beverage ( $\$ 284.8$ million); utilities ( $\$ 211.0$ million); insurance ( $\$ 362.4$ million); inheritance ( $\$ 97.5$ million); and "minor" taxes ( $\$ 23.7$ million). Collectively, these taxes are the only ones that are regressive to some extent across virtually the entire income scale for every taxshifting scenario. Their steady pattern of regressivity is emphasized by the elasticity coefficientsthe lowest of all the tax categories.

When the taxes are considered separately, there are some notable variations. As measured by elasticity coefficients, the cigarette and tobacco taxes are the state's most regressive tax at 0.20 . The alcoholic beverage taxes are also highly regressive, with an elasticity at 0.42. Together, these two consumption taxes have a substantial influence on the overall distribution of the "secondary taxes."

The utilities, hotel/motel and insurance taxes have similar elasticity coefficients, with Case 4 scenario figures of $0.75,0.74$ and 0.70 respectively. Also similar are the Case 4 distributions for the taxes on inheritances ( 0.60 ), telephone company receipts (0.56) and motor vehicle sales and rentals (0.63).

## Conclusions

This chapter examines the relative impacts of Texas state and local tax policy on families of varying incomes. It does not-and is not meant to-provide specific
direction to policymakers weighing the alternatives. Rather, its goal is to describe the status quo. And, to the extent that lawmak-

## Finally-and perhaps most importantly-the sales tax and property tax exert an enormous influence on the system's overall distribution of burdens.

ers wish to achieve particular policy goals, this study is intended to give them some idea about what can or should be changed in the present system.

The results first show thatgiven certain tax-shifting as-sumptions-a significant share of business taxes are passed to out-of-state shareholders. On the face of it, that would seem to be good for all Texas taxpayers because it not only reduces the amount of tax they pay, it also lessens the tax system's regressivity.

But policymakers must also weigh the effects of tax exporting on economic development, out-of-state investment in Texas, and possible acts of retribution by other legislatures. When that is done, it is not immediately clear whether an increase in tax exporting would result in a long-term gain or loss for Texas families. Moreover, Texas also imports tax burdens from other states, an issue outside the range of this study.

Second, the relative burden of the Texas tax system is distributed in a more or less proportional manner across the middle and upper ranges of family
income and can be shown to be slightly progressive at the high end of the income range under certain sets of assumptions about how business taxes are shifted. The flip side of that is that lowincome families experience severe tax burdens relative to their incomes under virtually every assumption. In demo-: graphic terms, the elderly and young persons or families are the most negatively affected because they constitute the majority of all low-income households.

Finally-and perhaps most importantly-the sales tax and property tax exert an enormous influence on the system's overall distribution of burdens. Substantive modifications of the status quo probably cannot be achieved without either major changes to one or both of those taxes or substitution of one with a completely new tax.

Which, if any, of the alternatives would be most worth pursuing would depend on the full set of goals established by the state's leadership. Moving toward a more proportional tax system is one set of goals. Another would be economic development and creating incentives for investment. Still another would be moving toward a fee system to finance certain types of state services.

Ultimately, there must be tradeoffs between the differing and frequently conflicting objectives. But to the extent that state lawmakers want to move toward a more proportional tax structure or lessen the negative effects of the present system on the poor and the elderly, they will have to concentrate their efforts on modifying the sales and property taxes or scaling them back and making up the lost revenue with other forms of taxation.

# S ources of Texas State and Local Tax Growth 

## Summary

Texas' state and local tax systems have resembled a roller coaster in recent yearssoaring up and plunging down.

Many factors have affected tax growth, including: oil prices, the national economy, population, inflation, the Mexican peso, court disputes and legislative changes.
The price of oil has long been a major driver of the Texas economy and both state and local finances. Rising oil prices resulting from OPEC's attempts to control world oil markets added almost $\$ 18$ billion to the state treasury during the 1970s and early 1980s. This enabled the state to go 14 years without a major tax bill. But falling oil prices also had a dramatic effect, contributing to the adoption of several tax increases since 1984.

Since the state's oil and gas production has been declining steadily, and with prices likely to remain weak, the oil and gas industry is unlikely to trigger a new boom in Texas in the near future. As a result, the Texas economy and revenue system will become more dependent on national economic conditions.

The impact of population growth on tax revenue is fairly straightforward-a higher population means more taxpayers. More important than total numbers, however, is the age mix of the state's population.
As the children of the post-war
baby boom move into adulthood, their family budgets add to the sales tax base, as well as the local property tax base.
The international economyspecifically, the value of the peso and the stability of the Mexican economy-has had and will continue to have an impact on those state taxes that are collected along the border.

Court challenges are a recent threat. Two of the state's major business taxes-the franchise and insurance taxes-are under fire in cases that could cost the state hundreds of millions of dollars over the next few years. These cases loom among the largest uncertainties facing the state's finances.
Locally, the property tax has been the major source of revenue, with an increasing share of the tax burden falling on homeowners.
With the decline in property values following the state's economic woes, the property tax has also experienced prcblems which have resulted in tax increases.

Because there are many uncertainties ahead, the best hope is for revenue growth to be modest. While it is possible that an improving economy could mitigate the need for new revenue in the immediate future, history illustrates that volatility-which underlies the Texas tax system-will eventually surface again.

By Dale K. Craymer
Office of the Speaker of the House and House Ways and Means Committee

The past few years have been difficult ones for Texas state and local finances. Revenues have risen and fallen, as many unpredictable factors have influenced the state's economic performance and tax base. These volatile factors have caused sharp revenue fluctuations and have led to several tax increases.
This combination of tax volatility and rate hikes makes it difficult to identify underlying revenue trends. However, this chapter will analyze recent revenue trends and focus on the major factors affecting state and local revenue growth, including the following:
(1) oil prices;
(2) the national economy;
(3) state population growth;
(4) inflation;
(5) the peso and the Mexican economy;
(6) court disputes; and
(7) legislation.

## Tax Hikes Push Up State Tax Trends

In estimates at the end of fiscal 1987 used to certify the state appropriation bill, the Comptroller of Public Accounts estimated that Texas state government will
collect $\$ 25$ billion during the 1988-89 budget period-up 22.5 percent from the previous biennium. The increase was due entirely to recently enacted tax legislation. Otherwise, projected state tax collections would actually have declined by 1.7 percent.
Sales taxes are expected to provide the lion's share of state tax revenue in the coming two years, accounting for 50.7 percent of total collections (Table 1). Motor fuels taxes were forecast to rank second at $\$ 3.0$ billion ( 12 percent). In third place is expected to be oil and gas severance taxes, which together will generate $\$ 2.2$ billion ( 8.9 percent). The motor vehicle sales tax was expected to follow at 2.0 billion (eight percent), with corporate franchise tax a notch behind at $\$ 1.9$ billion ( 7.5 percent).
From 1980 to 1987, the fastest growing major source of state tax revenue was the motor fuels tax-up 164.9 percent (Table 2)although there was little under-
lying growth in the fuels tax base in this period. The revenue gain was largely attributable to the increase in the motor fuels tax rate from five cents per gallon to 15 cents per gallon.

> Sales taxes are expected to provide the lion's share of state tax revenue in the coming two years, accounting for 50.7 percent of total collections.

The franchise tax ranks second in growth at 156.4 percent. While much of its revenue increase was due to economic growth, a fair portion was due to legislative rate hikes and additions to the franchise tax base. Most recently, franchise tax revenues have begun to fall due to a combina-
tion of a weak Texas economy and court litigation. These negative factors will be somewhat offset in the 1988-89 budget period by a temporary 27 percent hike in the tax rate enacted in 1987.

Insurance taxes rank third at 140 percent. Part of the gain is due to legislative changes, but most of it is due to rising insurance rates and the growing Texas economy.

Motor vehicle and general sales taxes have grown 83 percent since 1980, partly due to rate and base changes but mostly due to inflation and economic growth.

On the minus side of the ledger, the oil and natural gas taxes have declined 22.5 percent due to the drop in prices and production.

The telephone tax and the state property tax have shown the largest declines since 1980 as a direct result of legislative changes. The property tax was abolished, and much of the telephone tax base had been put under the state sales tax as part of a restructuring of the state's telecommunications tax policy.

TABLE 1. Texas Tax Collections by Source

| Type of Tax | $\begin{gathered} 1988-89 \\ \% \text { of Total } \\ \hline \end{gathered}$ | Estimated 1988-89 <br> Revenues <br> (millions) | Actual 1986-87 Revenues (millions) | \% Change |
| :---: | :---: | :---: | :---: | :---: |
| Limited Sales and Use Tax | 50.1\% | \$12,553.4 | \$8,946.4 | 40.3\% |
| Motor Fuels Taxes | 11.8 | 2,963.7 | 2,284.6 | 29.7 |
| Oil and Natural Gas Taxes | 8.8 | 2,206.1 | 2,726.0 | -19.1 |
| Oil Production and Regulation Taxes | 4.1 | 1,014.3 | 1,302.4 | -22.1 |
| Natural Gas Production Tax | 4.8 | 1,191.8 | 1,423.6 | -16.3 |
| Motor Vehicle Sales and Rental | 8.0 | 1,994.1 | 1,668.8 | 19.5 |
| Corporate Franchise Tax | 7.9 | 1,981.2 | 1,774.8 | 11.6 |
| Insurance Occupation Taxes | 3.6 | 899.8 | 832.2 | 8.1 |
| Cigarette and Tobacco Taxes | 3.3 | 838.3 | 749.5 | 11.8 |
| Alcoholic Beverage Taxes | 2.8 | 690.9 | 672.6 | 2.7 |
| Utility Taxes | 1.6 | 388.2 | 383.6 | 1.2 |
| Inheritance Tax | 0.9 | 217.3 | 233.2 | -6.8 |
| Hotel/Motel Tax | 0.8 | 195.9 | 127.7 | 53.4 |
| Telephone Tax | 0.1 | 31.2 | 61.0 | -48.9 |
| Other Taxes | 0.3 | 81.9 | 36.5 | 124.4 |
| Total | 100.0\% | \$25,042.0 | \$20,496.9 | 22.2\% |

Source: Comptroller of Public Accounts, Revenue Estimate, October 1987.

## Local Trends Focus on

Property and Sales Taxes
At the local level, property taxes remain the most important source of revenue, accounting for 38.8 percent of total school district revenues, 25 percent of total city revenues and 47.4 percent of total county revenues (Table 3).
Property tax revenues have increased substantially over the past few years, nearly doubling since 1980 (Table 4). This is due both to an increase in the assessed value of the tax base and to increases in the property tax rates.
The sales tax is the next most important source of local revenue but is available only to cities, transit authorities and, as of January 1, 1988, to counties. The one percent city sales tax accounts for 13.3 percent of municipal revenues.

In recent years, city sales tax growth has lagged that of the state because the state has increased its tax rate while cities are locked in by law at a one percent rate (Table 5). Since 1984 , cities have gained from an expansion of the sales tax base of about 12 percent. The state has gained not only from base expansion but also from a 50 percent increase in the tax rate (from four percent to six percent).

## Oil Prices Have Driven Texas Revenues

Oil prices have been the single most important factor in the un-

TABLE 2. Texas State Tax Collections, 1980 and 1987

| Type of Tax | 1980 <br> (millions) | 1987 <br> (millions) | Change <br> Cimited Sales and Use Tax |
| :--- | ---: | ---: | ---: |
| $\$ 2,521.4$ | $\$ 4,616.5$ | $83.1 \%$ |  |
| Motor Fuels Taxes | 480.7 | $1,273.1$ | 164.9 |
| Oil and Natural Gas Taxes | $1,519.9$ | $1,178.1$ | -22.5 |
| Oil Production and Regulation Taxes | 785.7 | 533.2 | -32.1 |
| Natural Gas Production Tax | 734.2 | 644.9 | -12.2 |
| Motor Vehicle Sales and Rental | 437.9 | 802.8 | 83.3 |
| Corporate Franchise Tax | 340.8 | 873.8 | 156.4 |
| Insurance Occupation Taxes | 176.1 | 423.3 | 140.3 |
| Cigarette and Tobacco Taxes | 321.8 | 370.8 | 15.3 |
| Alcoholic Beverage Taxes | 200.5 | 325.5 | 62.4 |
| Utility Taxes | 111.5 | 185.9 | 66.7 |
| Inheritance Tax | 75.6 | 113.7 | 50.5 |
| State Property Tax | 47.4 | 0.0 | -100.0 |
| Telephone Tax | 59.8 | 24.4 | -59.1 |
| Other Taxes | 50.5 | 78.1 | 54.7 |
| Total | $\$ 6,343.8$ | $\$ 10,266.2$ | $61.8 \%$ |

Source: Comptroller of Public Accounts.

TABLE 3. Texas Local Government Revenue by Source, 1985

| Revenue <br> Source | Counties | Municipal <br> Governments | School <br> Districts | Special <br> Districts |
| :---: | :---: | :---: | :---: | :---: |
| Federal Aid | $3.8 \%$ | $8.5 \%$ | $1.1 \%$ | $10.2 \%$ |
| State Aid | 5.2 | 2.2 | 51.1 | 6.4 |
| Other Aid | 1.8 | 1.1 | 0.2 | 2.7 |
| Taxes: | 47.4 | 25.0 | 38.8 | 9.2 |
| Property | 0.0 | 13.3 | 0.0 | 3.6 |
| Sales Tax | 2.8 | 0.0 | 0.0 | 0.0 |
| Motor Vehicle License | 1.4 | 8.5 | 0.0 | 0.0 |
| Other Taxes | 51.7 | 46.7 | 38.8 | 12.9 |
| Total Taxes | 19.6 | 21.1 | 5.0 | 32.7 |
| Charges for Services | 180 | 20.4 | $\mathbf{3 . 7}$ | 35.1 |
| Miscellaneous Revenue | $\mathbf{1 8 0}$ | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{1 0 0 . 0 \%}$ |
| Total | $\mathbf{1 0 0 . 0 \%}$ |  |  |  |

Source: U.S. Department of Commerce, Bureau of the Census.
Note: Table excludes utility and retirement system revenues. The Census Bureau classifies license fees as taxes. License fees are excluded from state tax tables.

TABLE 4. Texas Property Tax Revenues by Taxing Jurisdiction, 1980-86

| Year | School Districts (millions) | Municipalities (millions) | Counties (millions) | Special Districts (millions) | Total Property Taxes (millions) | $\begin{gathered} \% \\ \text { Change } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 | \$2,481.0 | \$1,051.0 | \$820.6 | \$5¢4.5 | \$4,947.1 | 19.1\% |
| 1981 | 2,864.9 | 1,202.9 | 1,009.4 | 677.3 | 5,754.6 | 16.3 |
| 1982 | 3,288.6 | 1,359.2 | 1,166.1 | 740.8 | 6,554.7 | 13.9 |
| 1983 | 3,621.3 | 1,465,9 | 1,291.3 | 8 88.3 | 7,216.8 | 10.1 |
| 1984 | 4,168.7 | 1,628.9 | 1,342.8 | 950.9 | 8,091.2 | 12.1 |
| 1985 | 4,663.6 | 1,820.3 | 1,427.8 | 1,057.1 | 8,968.8 | 10.8 |
| 1986 | 5,026.5 | 1,968.8 | 1,482.3 | 1,141.6 | 9,619.2 | 7.3 |

[^8]derlying economic and financial health of Texas in this century.
Oil prices not only drive severance taxes (which are based on the value of production) and property taxes (which are based on the value of oil reserves), they affect other taxes as well. Changes in oil prices have an impact on drilling activity, which generates capital investment, jobs, payrolls, sales, profits and so on. This in turn affects the sales tax, property tax, corporate franchise taxes and a number of other taxes as well.

Because of the importance of
oil and gas to Texas, recent history shows that the state's revenue system has only been a good provider in times of rising oil prices. Unfortunately for Texas, times of rising oil prices have been few and far between. When oil prices have been flat or falling, the state's underlying tax base has failed to keep up with the growing needs of the state. Almost every major tax bill enacted since the end of World War II has come during times when oil prices were either falling or failing to keep up with inflation.
For example, in the few years

FIGURE 1. Effect of OPEC Policies on Texas Oil Prices


Source: House Ways and Means Committee.
immediately following World War II, oil prices rose, and there were no major tax bills.

During the 1950s, however, oil prices trended down. At the same time, the rising public school enrollment of the baby boom fueled spending pressures. As a result, new taxes were passed in all but one legislative session during the 1950s, causing it to be remembered as the "decade of taxation."

Oil prices continued their sluggish ways during the 1960s and early 1970s, leading to the creation and subsequent rate hikes of the state sales tax.
The oil price slide reversed course in the mid-1970s, as the Organization of Petroleum Exporting Countries (OPEC) moved to exert control over the world oil markets. Because OPEC at the time produced over half of the world's oil supplies, it was able to force prices above the historical trend (Figure 1). For example, in 1981 and 1982, oil prices averaged over $\$ 30$ a barrel-six times the historical trend level.
With the expectation that oil prices would soon surpass $\$ 50$ a barrel, there was a tremendous surge in drilling activity (Figure 2).
This oil boom created huge

TABLE 5. State and Local Sales Tax Collections, 1978-89

|  | State Average <br> Tax Rate | State Sales <br> Tax <br> (millions) | \% <br> Change | City Sales Tax <br> (millions) | \% <br> Change | MTA Sales Tax <br> (millions) | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1978 | $4.000 \%$ | $\$ 2,023.7$ | N.A. | $\$ 415.9$ |  | N.A. | $\$ 7.4$ |
| 1979 | 4.000 | $2,174.3$ | $7.4 \%$ | 457.8 | $10.1 \%$ | 96.0 | $1199.1 \%$ |
| 198 | 4.000 | $2,521.4$ | 16.0 | 529.1 | 15.6 | 136.1 | 41.7 |
| 1981 | 4.000 | $2,982.9$ | 18.3 | 630.0 | 19.1 | 164.6 | 20.9 |
| 1982 | 4.000 | $3,461.1$ | 16.0 | 711.5 | 12.9 | 185.1 | 12.5 |
| 1983 | 4.000 | $3,304.6$ | -4.5 | 712.9 | 0.2 | 181.7 | -1.9 |
| 1984 | 4.000 | $3,784.8$ | 14.5 | 822.8 | 15.4 | 274.1 | 50.9 |
| 1985 | 4.104 | $4,191.8$ | 10.8 | 884.7 | 7.5 | 366.2 | 33.6 |
| 1986 | 4.125 | $4,329.9$ | 3.3 | 901.9 | 1.9 | 414.1 | 13.1 |
| 1987 | 4.781 | $4,616.5$ | 6.6 | 842.6 | -6.6 | 388.7 | -6.1 |

[^9]gains for the Texas state treasury.
Severance tax collections increased from $\$ 307$ million in 1972 to $\$ 2.4$ billion in 1982. Sales and franchise tax collections increased at an annual rate of 15.4 percent and 14.1 percent, respectively.
Most local Texas governments also enjoyed sizable revenue growth in this period. Cities benefitted from sales tax growth, while all property-taxing jurisdictions benefitted from growth in the value of their tax bases.

While only a few property tax jurisdictions directly benefitted from the doubling in assessed value of oil and gas properties, almost all did gain indirectly-the energy boom fueled a huge runup in real estate values. From 1977 to 1986, the assessed value of residential property in the state increased over three and one-half times.

Rising oil prices shielded Texas from national recessions during 1979 through 1982-probably saving the state from the need to increase taxes. For example, taxes grew by 22 percent in 1981. Without the oil boom, tax revenue growth would have been flat. All totalled, Texas has gained almost $\$ 18$ billion from the oil boom since 1973 (Figure 3).

And though it may seem hard to believe, Texas is still benefitting from distortions in the price of oil. Even though OPEC's control over oil markets has been on the wane, the cartel still has enough influence to hold oil prices well above the historical trend. Had there been no energy boom and had historical trends continued, oil prices would be near six dollars a barrel today, and there would be only about 100 rigs operating in Texas. Instead, oil prices hover around $\$ 15$ a barrel, and there are more than 300 rigs drilling in Texas.

While oil has held sway over state finances and economic
growth throughout much of the post-war years, its grip may be loosening to some degree.
Texas oil production today is only about half of what it was at its peak in 1972 (Figure 4). Where a one dollar increase in oil prices would directly have added $\$ 1.3$ billion to the Texas economy in 1972, today it would add less than $\$ 700$ million. That translates into fewer tax dollars as well.

At the height of the energy boom in Texas, a one dollar change in the price of oil trans-
lated into a $\$ 100$ million change in taxes flowing into the state treasury. Only $\$ 40$ million of that was directly due to oil severance taxes. The remainder was due to the indirect impact oil prices had on other taxes-natural gas tax, sales tax, franchise tax, etc.

The Comptroller now estimates that due to declining oil production and the closing of many oil-related businesses, a one dollar change in the price of oil now accounts for only a $\$ 50$

FIGURE 2. Impact of Oil Boom on Texas Drilling Rig Count


Source: House Ways and Means Committee.

FIGURE 3. Impact of Oil Boom on Texas Tax Collections


[^10]million change in state tax revenues.

And the oil industry, which accounted for over 33.9 percent of state tax revenues in 1981, now accounts for roughly half that percentage.

Legislation may also contribute to Texas' diminishing ties to oil. In November 1988, Texas voters adopted a constitutional amendment which will direct a portion of future revenue gains from higher oil prices into a "rainyday" fund for state government.

One-half of any oil or gas severance tax revenues above the amount collected in 1987 is to be deposited into this economic stabilization fund under the provision. This money could be available should oil prices fall again, providing a helpful cash cushion.

## Texas Becomes More Reliant on the National Economy

Rising oil prices helped the Texas economy grow substantially

FIGURE 4. Texas Oil Production


Source: House Ways and Means Committee.
-1988-89 are estimated.

FIGURE 5. Employment Growth for Texas and the U.S., 1960-89


Source: House Ways and Means Committee.
above the rate of the national economy. Since the security of high oil prices is no longer there, the mature Texas economy is much more dependent on the U.S. business environment.

In the 1960 s and early 1970 s , before the oil boom, Texas employment generally grew at the same rate or slightly above the national rate (Figure 5).
From 1973 to 1982-the years of rising oil prices-Texas prospered in spite of the poor national economy. Texas employment soared at an average annual rate of 4.7 percent-almost three times the 1.7 percent national clip.

Since 1982, annual Texas employment growth has lagged behind the nation as a whole- 0.8 percent versus 2.6 percent. Not coincidentally, the last time Texas employment grew below the national rate was 1961-also the last time state government experienced a deficit prior to 1985.

Without the oil industry to rely on, Texas growth will more closely parallel that of the United States as Texas companies now must compete nationwide for business. The stronger the U.S. economy, the greater number of opportunities for Texas businesses.

For policy considerations, that means Texas tax growth will be increasingly affected by national factors-interest rates, the value of the dollar, the stock market and related factors.

## Population Growth

Population growth is another factor that affects the tax baseafter all, more people mean more taxpayers. In the aggregate, though, population changes have less influence on revenue than most other factors discussed here. At the height of the oil boom, Texas' population was growing at an annual rate of more than five percent. Even in today's hard
times, the state's population continues to grow-at an annual clip of under two percent. A three percentage point difference in the rate of population growth pales in comparison to the dramatic shifts in oil prices.
Much more important than the total numbers is the age mix of the population base. As the children of the post war baby boom age into their young adulthood, the number of cars sold and drivers licensed increased more rapidly than the state's total population. This has had a positive impact on motor vehicle sales tax, license revenue and motor fuels taxes. This type of growth, in effect, "pays for itself" since much of the revenues generated are dedicated for highway construction and repair.
The sales tax has also benefitted from the aging of the baby boom. As these young adults left their parents' homes and married, they bought their own homes (adding to the local property tax base). This new household formation also stimulated sales of home building materials and major appliancestaxable items that help fuel sales tax collections.

The last of the baby boomers are now in their early twenties, so the long-term rate of car sales and new household formation have begun to slow. This will have a slightly dampening effect on state tax revenues over the long run.

The age structure of the population probably has a much greater impact on the spending side of the ledger than the revenue side. Spending for education accounts for over half of the state budget. Consequently, the state's revenue versus spending balance is most sensitive to the number of school children. Now that most of the baby boomers are in their child-
bearing years, the likelihood of a so-called "echo" of the baby boom suggests that school enrollment and spending will continue to increase in the coming years.

## The Effect of Inflation

Ironically, while high inflation adds more tax dollars to the state treasury, it is bad for state finances overall.

## Mexico plays an important role in the South Texas economy, and consequently in the state economy as a whole.

Over the long-term, general price inflation helps produce a mismatch between government spending and revenues. Taxes rise less with inflation than does the cost of providing state services. Every dollar inflation adds to the cost of providing state services only adds 75 cents to the state's tax collections.
Three-fourths of the state's taxes
generally do increase with inflation. The sales tax is a good example of this, since it applies to the sale price of an item. As inflation adds to the price, the amount of tax due on the sale of the item automatically increases. Other taxes that rise with inflation include the motor vehicle sales tax, the franchise tax, most utility taxes, the insurance taxes and the inheritance tax.

One-fourth of the state's taxes, however, are generally not affected by inflation.

Oil and gas severance taxes (8.9 percent of total state taxes) under today's market conditions do not rise directly with inflation. Nor does the 16 percent of the state's excise taxes on such items as motor fuels, alcohol and tobacco rise. These taxes are levied on volume, rather than value. For example, inflation may add to the price of a package of cigarettes, but the cigarette tax is 26 cents a pack, regardless of the price (under current law). In fact, inflation can even hurt excise tax collections, since higher prices can discourage consumption.

Figure 6 illustrates just how the excise tax base has lagged behind

FIGURE 6. Excise Tax Base Growth Compared to Population Growth and Inflation, 1970-87


[^11]Note: index excludes tax increases.
spending pressures, as measured by population and inflation since 1970. While population and inflation have increased 320 percent, the excise tax base has increased only 40 percent.

Because of the revenue/spending inflation mismatch, the current tax system almost assures that tax increases will be necessary to maintain a consistent level of state services over time.
Fortunately, inflation is expected to be modest during the next several years-somewhere in the four to six percent range. Consequently, it should not have as much of an impact on the revenue/spending gap.

## The Peso's Value Affects Border Taxes

Almost ten percent of the state's population lives along the $1,250-$ mile border with Mexico. As would be expected, Mexico plays an important role in the South Texas economy and consequently in the state economy as a whole.

Mexican nationals shop in border stores and contribute to the South Texas economy. The value of the peso relative to the dollar
determines just how much a Mexican national has to pay for a Texas product. The more dollars a peso will buy, the cheaper it is to buy the item in the U.S. rather than Mexico. However, the more pesos it takes to buy a dollar, the

> The state faces numerous court cases that could have a substantial impact on state tax revenues and on state finances generally.

more expensive an item will be on the Texas side of the border. As a result, the value of the peso has a substantial and almost immediate impact on the border economy and ultimately on tax revenues in the border area.
In 1976, as Mexico's new president, Jose Lopez-Portillo, was awaiting inauguration, the peso was devalued from eight U.S. cents to four cents in a move to improve the Mexican economy. This made U.S. items more

FIGURE 7. The Impact of the Mexican Peso's Value on Texas Border Area Sales Tax Growth


Source: House Ways and Means Committee.
Note: Border areas include Brownsville, Harlingen, Eagle Pass, McAllen and Laredo.
expensive to Mexicans and discouraged Mexican traffic in Texas stores. That led to a corresponding drop in sales tax collections in selected Texas' border cities (Figure 7).
From 1978 to 1981, the peso/ dollar exchange rate remained fairly stable, but high inflation in Mexico meant that the peso became overvalued relative to the dollar. That, coupled with Mexico's newfound oil wealth, encouraged Mexicans to shop in Texas, and border sales tax collections increased substantially.

The fall in oil prices hurt Mexico, which by that time had become one of the world's leading oil producers. As the Lopez-Portillo administration prepared to leave office, it moved again to put Mexico's fiscal house in order, and the government turned to a series of peso devaluations. In 1982, the peso fell by almost 60 percent against the dollar. Border sales tax revenues dropped by 3.8 percent (after a 32 percent increase the previous year). In 1983, the peso fell by 51 percent, and border sales tax fell a corresponding 30 percent.

The slide in the value of the peso continued in 1984 and 1985, but high inflation in Mexico again helped to make American items relatively more affordable. That helped bring a return to doubledigit growth in border sales tax revenue.

More recently, border sales have dropped off again as the peso has fallen again. At best, the prognosis is for a continuation of problems along the border because of Mexico's instability.

## Court Rulings

The greatest threat to Texas finances may come from within its own borders. The state faces numerous court cases that could have a substantial impact on state tax revenues and on state finances generally.

Texas' corporation franchise tax has come under increasing challenge in recent years. The original franchise tax was written in 1907, and it has failed to keep up with many changes in modern accounting principles. Many corporations are beginning to successfully challenge various provisions of the tax in court, at a substantial cost to the state.

In 1985, the courts upheld a challenge by Samedan Oil Corporation against the state. Samedan charged that they were denied "equal and uniform taxation" as guaranteed by the constitution. As a private corporation, Samedan maintained a single set of account books in which its intangible drilling costs (e.g., exploration and geophysical costs) were expensed in accordance with a cash method of accounting. When Samedan became a public corporation, it was required to maintain an additional set of books based on Generally Accepted Accounting Principles (GAAP), in which intangible drilling costs were capitalized over time.

Under the rules of the franchise tax, state tax administrators assessed tax based on the GAAP books, which resulted in a higher tax liability. The courts in an "unpublished" decision, that would not set a precedent for other cases, sided with Samedan in a broad decision calling into question the state's ability to require taxes to be filed in accordance with a certain set of books.

Sage Energy Corporation successfully filed suit on the same grounds. While that case was on appeal, the Legislature passed a bill to amend current law to protect the future revenue stream. Nonetheless, the Comptroller has estimated that the potential loss to the state due to refunds is over $\$ 100$ million.

In a separate case, Sun Oil

Company challenged the inclusion of contingent liability accounts in their franchise tax base. In spite of legislation to protect the revenue stream, the Comptroller has estimated a potential refund liability of over $\$ 40$ million.

By far, the most significant factor influencing state tax growth is tax legislation.

While these franchise tax cases involve different issues, they are indicative of a continuing erosion of the franchise tax base. There will likely be more franchise tax cases on other issues in the future that will threaten state tax revenues.

The state insurance premiums tax is also under fire in the courts. Out-of-state life insurance companies doing business in Texas are suing the state. They claim that current statutes are designed so that only domestic (Texas-based) insurers can qualify for certain investment credits, enabling them to lower their tax liability. The net effect, it is argued, is that out-ofstate insurers must pay higher taxes than domestic insurers.

In a separate case, out-of-state property and casualty insurers are suing against the current application of Texas retaliatory insurance taxes. The out-of-state insurers claim they are being denied the full tax reduction benefits they are qualified to receive.

Should the state lose these two insurance tax cases, the potential refund loss could total about $\$ 400$ million and about $\$ 100$ million annually thereafter.

All of these court cases-franchise, insurance and otherwiseare difficult to predict and represent a growing level of uncer-
tainty for future state revenues. The potential losses to the state are staggering.

## Legislative Changes

By far the most significant factor influencing state tax revenue growth is tax legislation. Since 1960, there have been at least 12 major bills affecting state taxes and several others affecting local taxes (Table 6).

Of the $\$ 25$ billion in taxes the state expects to collect during the 1988-89 budget period, $\$ 18.6$ billion will result from legislation enacted since 1960 . Only $\$ 6.2$ billion is the result of the existing tax base as it stood in 1960. Fully 75 percent of the state's current tax system has been put in place since 1960.

It was with the advent of the sales tax in 1961 that the "modern" Texas tax system was born. Most of the special sales taxes on certain "luxury" items-such as cosmetics, radios and televisionswere replaced with the broadbased "Limited Sales and Use Tax" in legislation enacted in that year.

The state sales tax was initially established at a rate of two percent, but falling oil prices and rising demand for government services led to rate increases to three percent, 3.25 percent and four percent by 1971.

Local sales taxes were added on top of the state rate, as well. In 1967, the Legislature authorized a one percent sales tax for cities, while transit authorities were allowed an optional tax in onequarter percent increments in 1973, up to a maximum of one percent.

In the mid-1970s, it seemed that a state income tax might soon be in the works. Oil prices had been falling for years, and Texas oil production was on the decline as well. State revenues were sluggish, at best. The sales tax rate

TABLE 6. Major Texas Tax Legislation Since 1960

1961: House Bill 20; 57th Session, 1st Called

1963: House Bill 106; 58th Regular Session

1965: House Bill 1181; 59th Regular Session
1967: House Bill 162; 60th Regular Session House Bill 207 (same session)
1968: House Bill 2; 60th Session, 1st Called
1969: House Bill 4; 61st Session, 2nd Called

1971: House Bill 730; 62nd Regular Session

1971: House Bill 3; 62nd Session, 1st Called
1973: Senate Bill 642; 63rd Regular Session
1975: House Bill 819; 64th Regular Session
1978: House Bill 1; 65th Session, 2nd Called
House Bill 18 (same session)
House Joint Resolution (same session)

1979: Senate Bill 621; 66th Regular Session

1981: House Joint Resolution 81; 67th Regular Session

1982: House Joint Resolution 1; 67th Session, 2nd Called

1984: House Bill 122; 68th Session, 2nd Called

1986: House Bill 79; 69th Session, 3rd Called

1987: House Bill 61; 70th Session, 2nd Called

House Bill 62; 70th Session, 2nd Called

Established state sales tax at two percent; temporary franchise tax surcharge of 22.22 percent until 1964.

Clarified sections of sales tax act; raised motor vehicle sales tax to two percent; extended 22.22 percent franchise tax surcharge until 1965.
Raised the cigarette tax to 11 cents per pack.
Established temporary franchise tax surcharge based on debt. Established one percent local option city sales tax.
Raised franchise tax rate to $\$ 2.75$; raised state sales tax to three percent; raised motor vehicle sales tax to three percent.
Raised state sales tax to 3.25 percent; expanded sales tax base to take-out sales of alcoholic beverages; raised cigarette tax to 15.5 cents per pack and increased other tobacco taxes; established temporary 18.18 percent franchise tax surcharge until 1972; modified franchise tax allocation formula; established airline beverage tax; raised natural gas tax to 7.5 percent.
Raised sales tax to four percent; raised motor vehicle sales tax to four percent; raised cigarette tax to 18.5 cents per pack.
Legalized liquor-by-the-drink; established the mixed drinks gross receipts tax.
Created one-fourth percent to one percent local option sales tax for transit authorities.

Established the public utility gross receipts tax.
Revised inheritance tax exemption; exempted residential gas and electricity from the sales tax.
Established procedures for capping local property tax increases. Eliminated the property tax on intangibles; established a broader tax deduction for agriculturally productive land; increased the homestead exemption for school taxes to $\$ 5,000$; provided tax relief for persons over 65 and disabled persons; exempted certain types of personal property.
Established central appraisal districts for property tax; created the State Property Tax Board; specified uniform administrative procedures.

Allowed local authority for providing additional property tax homestead exemptions.

Abolished the state property tax.

Raised state sales tax to 4.125 percent; expanded the sales tax base; raised motor fuels taxes to ten cents per gallon; increased cigarette tax to 19.5 cents in 1985 and 20.5 cents thereafter; added smokeless tobacco to the tobacco products tax; raised franchise tax to $\$ 5.25 / \$ 1,000$; raised state hotel/motel tax to four percent; raised alcoholic beverage taxes by 20 percent; repealed ad valorem tax on bank stock, placing banks under the franchise tax; revised foreign/domestic provisions of the insurance tax code; repealed exemption for first year insurance premiums; established quarterly payment procedures.
Temporary increase in state sales tax to 5.25 percent; temporary increase in motor fuels taxes to 15 cents per gallon; allowed local option sales tax to reduce property taxes.

Increased the sales tax to six percent; expanded the sales tax base to include certain services; increased the cigarette tax to 26 cents per pack; increased smokeless tobacco taxes by 12.5 percent; increased the motor vehicle sales tax to six percent; created a 2.5 percent tax on certain insurance administration fees; established a $\$ 25$ annual sales tax permit fee; temporary two-year increase in franchise tax to $\$ 6.70$ per $\$ 1,000$; temporary one-year surtax of 20 percent on the insurance premiums tax; temporary two-year increase in selected professional fees; raised state hotel/motel tax to six percent. Motor fuels tax at 15 cents per gallon made permanent.

Source: House Ways and Means Committee.
already totaled six percent in many areas of the state, making further rate hikes politically difficult.

But instead of an income tax, Texas benefitted from soaring oil prices during the remaining years of the 1970s and early 1980s. This time of booming oil prices was a period of tremendous economic growth for Texas. State tax revenues mirrored the boom. Texas went 13 years without a major tax hike, a record no other state could match over the same period.

But 1982 brought a reversal in the upward spiral of the oil patch. Still, for two years, the Legislature was able to stave off tax hikes, mainly through spending controls and various one-time revenue measures.

For example, one 1983 measure that actually increased tax revenues without raising tax rates was the "speed-up" bill. This moved forward the due dates for the taxes on sales, oil, natural gas, motor vehicle sales, motor fuels, insurance and utility taxes, enabling the Comptroller to process an extra month's revenue for many of these taxes. This produced a one-time gain in the 1984-85 budget period estimated at $\$ 464.1$ million at the time.

In 1984, in an effort to revamp the state's public education system and improve the highway network, lawmakers passed House Bill 122. This bill expanded the sales tax base to some limited services, raised the sales tax rate by one-eighth of a percent and increased various other taxes. The three-year revenue gain from the bill was estimated at the time at $\$ 4.6$ billion.

Unfortunately, the oil price drops continued even more dramatically, and in a 1986 effort to reduce an unanticipated deficit, the Legislature enacted a temporary 5.25 percent sales tax and a 15
cent per gallon motor fuels tax.
Most recently, the continued slump in oil prices forced further tax increases in the 1987 legislative session, with even more services coming under the sales tax umbrella while the rate was increased to six percent. In addition, the motor fucls tax hike was made permanent and various other taxes were increased. The estimated gain from these tax measures is put at $\$ 5.6$ billion for the 1988-89 biennium.

Had there been no tax legislation enacted in recent years, state
tax revenues today would probably be at or below 1981 levels (Figure 8). While the Texas economy has shown some modest growth since 1981, this has occurred in industries such as services and finance-industries that are largely untaxed by state and local government.

## Property Tax Law

 ChangesThe Legislature also provides for the administration of the local property tax. While most

FIGURE 8. Impact of Major Tax Bills Since 1980


Source: House Ways and Means Committee.

FIGURE 9. Texas Property Tax Assessments


[^12]of the significant changes to the local property tax require a constitutional amendment to be approved by the voters, those measures must originate in the Legislature.
In 1979, the Legislature brought about sweeping reforms to the fragmented system of property tax collection in the state. Senate Bill 621 created central appraisal districts and established uniform procedures for the administration of the tax.
Just prior to that, voters had approved the "Tax Relief Act." This eliminated the largely uncollectable property tax on intangible
assets and added expanded exemptions for agriculturally productive land, veterans and the elderly, while also increasing the homestead exemption for school taxes from $\$ 3,000-5,000$. These measures, along with other minor exemptions granted since then, have increased the dollar value of property tax exemptions from $\$ 19.4$ billion in 1979 to $\$ 132.2$ billion in 1986-a nearly sevenfold increase (Figure 9).
Other types of properties have been removed from the property tax rolls. Since 1979, the property tax on farm and ranch personal property has been eliminated, as
have the taxes on motor vehicles and bank stock. (While banks are now covered under the franchise tax, bank franchise taxes amount to roughly half of what would have been paid under the old property tax.)
While the property tax base has been shrinking, property tax rates have been on the rise. There are two major reasons for this.

First, when a local unit of government has a major capital improvements program, it usually must be financed through bonds. General obligation bonds are often used-bonds which are normally paid back through an additional

TABLE 7. School District Property Tax Base and Rates, 1981-86

| Year | Gross Property <br> Value (billions) | Exemptions Value <br> (billions) | Net Taxable <br> Value (billions) | School Tax <br> Revenue (millions) | Effective Tax Rate Per <br> $\$ 1,000$ of Property |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | $\$ 616.0$ | $\$ 59.1$ | $\$ 556.9$ | $\$ 2,864.9$ | $\$ 5.14$ |
| 1983 | 745.5 | 109.0 | 636.6 | $3,621.3$ | 5.69 |
| 1984 | 812.8 | 120.9 | 691.9 | $4,168.7$ | 6.03 |
| 1985 | 830.7 | 128.4 | 702.3 | $4,663.6$ | 6.64 |
| 1986 | 824.0 | 132.2 | 691.8 | $5,026.5$ | 7.27 |

Source: State Property Tax Board.
Note: The numbers are statewide averages and may vary substantially among local districts.

TABLE 8. Characteristics of School District Property Tax Base, 1981-86

|  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Property | $\mathbf{1 9 8 1}$ | $\mathbf{1 9 8 2}$ | $\mathbf{1 9 8 3}$ | $\mathbf{1 9 8 4}$ | $\mathbf{1 9 8 5}$ | $\mathbf{1 9 8 6}$ |
| Single-family Residences | $27.36 \%$ | $28.01 \%$ | $29.97 \%$ | $30.53 \%$ | $31.61 \%$ | $32.19 \%$ |
| Multifamily Residences | 4.13 | 4.41 | 4.57 | 4.93 | 5.18 | 5.37 |
| Vacant Lots and Tracts | 3.05 | 3.81 | 4.01 | 4.43 | 4.62 | 5.11 |
| Acreage (Land Only) | 6.59 | 6.44 | 6.16 | 6.09 | 6.20 | 6.05 |
| Farm and Ranch Improvements | 1.03 | 1.47 | 1.47 | 1.36 | 1.44 | 1.53 |
| Commercial Real Estate | 19.39 | 21.10 | 21.25 | 22.06 | 22.33 | 23.20 |
| Oil, Gas and Minerals | 15.29 | 13.57 | 12.51 | 11.90 | 11.26 | 9.08 |
| Vehicles | 0.94 | 0.42 | 0.39 | 0.42 | 0.12 | 0.11 |
| Banks | 2.04 | 2.04 | 0.98 | 0.97 | N.A. | N.A. |
| Utilities | 6.44 | 5.67 | 5.96 | 5.62 | 5.57 | 5.79 |
| Farm and Ranch Personal | 0.45 | 0.11 | N.A. | N.A. | N.A. | N.A. |
| Business Personal | 12.89 | 12.30 | 12.03 | 11.02 | 11.01 | 11.01 |
| Other Personal | 0.40 | 0.65 | 0.70 | 0.67 | 0.66 | 0.56 |
| All Residential Property |  |  |  |  |  |  |
| All Business Property | 32.92 | 34.54 | 36.71 | 37.49 | 38.89 | 39.65 |
| All Other | 56.05 | 54.68 | 52.73 | 51.57 | 50.17 | 49.08 |
|  | 11.03 | 10.78 | 10.56 | 10.94 | 10.94 | 11.27 |

[^13]Note: Numbers shown are percent of total net taxes paid.
levy of the property tax.
Second, local governments have the most control over the property tax. Unlike the sales tax, local governments can set the annual property tax rate based on how much revenue is needed.
The combination of eliminating or exempting certain properties while needing increased tax revenue has lead to substantial increases in local tax rates. Table 7 illustrates that the average school tax on each $\$ 1,000$ of taxable property has increased from $\$ 5.14$ in 1981 to $\$ 7.26$ in 1986.
The fall in the value of oil and gas property, coupled with the exemptions and base removals of recent years, compounds the tax burden on the average homeowner. Residential property is bearing a growing share of the property tax burden. In 1981, residential property accounted for 32.9 percent of the property tax. In 1986, it had grown to almost 40 percent of the tax base and will likely increase further (Table 8).
Not only have property tax rates been on the upswing, the number of taxing jurisdictions has grown as well. Cities, counties and school districts are not the only jurisdictions that can levy the property tax; there are also hospital districts, junior college districts, drainage and flood districts, navigation districts and water districts.
In a 1976 study, the Municipal Advisory Council of Texas reported that there were 124 taxing jurisdictions which levied taxes over all or part of the state's ten largest cities. By 1980, the number had increased to 160 ; by 1985 , it was down slightly to 156 .

The number of taxing jurisdictions has increased as Texas' population growth strained the existing capacity of public facilities. Special purpose districts have been established to provide these facilities. Financing the district
public facilities through fee revenues alone could cause prohibitive service costs. The property tax has proven to be one of the most convenient revenue sources for these districts.
The demands on the existing tax properties will likely continue to increase over the next several years, as weak oil prices continue to depress the valuation of oil and gas properties, and with the further tax exemptions approved by Texas voters in November 1987.

The economy may improve and eliminate the need for new revenue in the immediate future; however, history points out just how volatile our tax system is and suggests that revenue problems will eventually surface again.

## The Outlook

Based on the outlook for those factors which affect state and local revenues, "modest" will likely become the key word for Texas' finances over the next few years.
Texas is unlikely to see a major run-up in oil prices again in the near future. OPEC and many other producing nations have the ability to produce much more oil than they do today, so the ample supply of oil will likely prevent another Texas boom.
The Comptroller forecasts that oil prices will creep upward past $\$ 20$ a barrel by the end of this decade but warns that prices will be volatile and could actually fall. Oil prices cannot be predicted through an economic forecast anymore-too much hinges on

OPEC policy decisions.
Should oil prices move upward, that should help bring some stability to the oil patch, stimulating a modest recovery in drilling activity.
Rising oil prices would be welcome news for state and local government coffers after so many years of hard times. However, because the recovery will be modest and because oil has less of a grip on Texas finances, the price rise will contribute little to Texas' revenue growth over the next few years.
On the other hand, if prices fall, state and local revenues could drop again.
Most national economic forecasts also point to modest growth in the coming years, although the recent plunge in the stock market has increased the likelihood of a recession. If a national recession lies ahead, Texas will feel it far more than previous ones, and that could affect Texas state and local finances substantially. The same would be true of any significant changes in the Mexican economy.
Additionally, the question of the numerous court cases and potential tax losses remains unanswered and potentially ominous.
With so much uncertainty, it is too early to know for sure how much revenue will be available for state government in the coming years.
Similarly, the outlook for local governments is clouded, varying from locality to locality. If there are additional revenue shortfalls, that bodes ill for property owners, since the property tax is the most common method of generating additional local revenue.
The economy may improve and eliminate the need for new revenue in the immediate future; however, history points out just how volatile our tax system is and suggests that revenue problems will eventually surface again.

# T he Past and Future of Texas State Finances 

## Summary

This chapter looks at trends in Texas state government finances over four decades-from the end of the 1940s to the late 1980s. It traces the sources of growth in state spending and revenues through five distinct periods: the Post-War era, the Fifties, the Sixties, the Boom (1970s) and the Eighties.

Each of these periods has its own particular characteristics, but taken as a whole, they provide a coherent picture of the state fiscal system that may be missed by focusing only on the events of the past decade in the state's fiscal history.

From this review, several patterns emerge. First, on the spending side, there appears to be an underlying dynamic that has pushed state spending upward, more often than not at rates higher than the growth in state personal income (a proxy for general state economic growth) and state revenues, as well.

This is partly explained by the nature of a changing Texas and the changing needs of its citizens. But over the period, state government also became much more involved in such areas as public and higher education, public welfare and public safety than it was at the end of World War II.

Second, a key to determining the direction of state spending in the past-and in the future-is public education. Chart the
state's commitment in this spending area, and you will project the direction of the state's overall finances as well.

Third, the state's general attitude has been to be conservative in its spending policies relative to other states. It has consistently ranked near the bottom among states in most major spending areas-except education.

Despite this conservative tendency, finding a revenue system to keep pace with spending growth has been a continual challenge for Texas. The state revenue system has chronically underperformed both the growth in the state economy and state spending. This has led to major tax legislation once every three to four years since 1947.

The main exception to this trend was the Boom period of the 1970s and early 1980s, when the revenue system was able to consistently outperform the demands placed on it. However, that appears largely to be a result of high inflation in energy prices and their effect on state severance taxes.

Based on current projections of modest growth in the Texas economy over the next decade, these past trends are likely to continue unless the revenue and spending systems used by the state are substantially changed to make them more closely coincide.

By Billy Hamilton
Executive Director, Select Committee on Tax Equity

Ever since the days of the old Republic, the problems and policies of state finances have been at the core of Texas politics. Most of the significant public policy debates of the past 150 years have contained a fiscal element, regardless of whatever else they may have concerned. The doctrine of fiscally responsible state government was as real a century ago as it is today. Just as real have been the continuing demands of Texans for more and better public services and the pressures created by the state's sheer physical size and its cultural and economic diversity.

Because of the longstanding tension between the desire for conservative government and the demands for governmental services, Texas's fiscal history frequently has been rocky. There are almost as many "bad" years in the state's fiscal history as ".good" ones, and the state's fiscal debates have focused more often on how to raise additional money or reduce spending than on how to slice up large budget surpluses.

In fact, one of the seeming fallacies in many Texans' impressions of the state's current fiscal problems is the notion that what we have today is the wreckage of what was, until very recently, a well-oiled fiscal machine. This is a fiscal illusion created by the
circumstances of the 1970s. The state's fiscal system performed well in that decade, and Texans escaped new state taxes for a remarkable 13 years. However, a review of the historical evidence before and since suggests that this boom period was an exception, born of rising oil prices and strong state economic growth. It may very well be repeated in the future, but common sense and recent history suggest that no economy will enjoy unbroken growth, and public policy cannot be built on that assumption
anymore than a family can base its finances on the likelihood of winning the Reader's Digest Sweepstakes.

To plan for the 1990s and beyond, it is necessary to see the state's finances whole-as more than a simple contrast between the boom and the bust of the 1970s and 1980s. It is also necessary to see how, over long periods, our state's financial decisions have translated into actual dollars collected and spent. From such a review, it is possible to speculate on the fiscal situation the state
may face as it approaches the next century.
This chapter looks at the trends in Texas state government finances over the past four decades. Its starting point is 1947, a particularly significant year in the state's fiscal history. It was the year of the first post-war session of the Texas Legislature. It was also a period when Texans were free of wartime restrictions for the first time since the early 1940s. The Depression also was receding into the past, carrying with it the memory of the state's long era of

TABLE 1. Selected Comparative Statistics for Texas in 1947 and 1987

| Item | 1947 | 1987 | Overall Change | Average Annual Change |
| :---: | :---: | :---: | :---: | :---: |
| State population (thousands) | 7,388 | 16,832 | 9,444 | 2.1\% |
| \% in urban areas | 63\% | 80\% | - | - |
| Nonfarm employment (thousands) | 2,145 | 6,512 | 4,367 | 2.8 |
| Agriculture as a \% total employment | 15\% | 3\% | - | - |
| Gross state product (millions) | \$9,432 | \$302,870 | \$293,438 | 9.1 |
| Per capita personal income | 1,128 | 13,819 | 12,691 | 6.5 |
| Share of state economy by industry: |  |  |  |  |
| Agriculture | 18.0\% | 1.9\% | -16.1\% |  |
| Mining | 6.3 | 8.3 | 1.9 |  |
| Construction | 5.0 | 4.7 | -0.3 | - |
| Manufacturing | 13.8 | 16.1 | 2.3 | - |
| Trade | 20.3 | 16.6 | -3.7 | - |
| Finance, insurance, real estate | 8.1 | 15.9 | 7.8 | - |
| Transportation, public utilities | 10.2 | 10.0 | -0.3 |  |
| Services | 8.9 | 15.1 | 6.2 | - |
| Government | 9.3 | 11.5 | 2.2 | - |
| Retail sales (millions) | \$6,519 | \$107,450 | \$100,931 | 7.3 |
| Price of a barrel of oil | \$1.95 | \$15.50 | \$13.55 | 5.3 |
| Oil production (thousands of barrels) | 733 | 820 | 87 | - |
| Other indicators: |  |  |  |  |
| Public school students (thousands) | 1,499 | 2,978 | 1,480 | 1.7 |
| Public colleges and universities | 52 | 95 | 43 | - |
| Persons in state prisons | 4,246 | 39,652 | 35,406 | 5.7 |
| Miles of state highways | 27,626 | 72,749 | 45,123 | 2.5 |
| Motor vehicles | 2,192,654 | 13,491,877 | 11,299,223 | 4.7 |
| Source: Legislative Budget Board, Fiscal Size Up, 1988-89 Biennium; Texas Almanac; Bryan Adair, "An Aggregate and Sectoral Analysis of Economic Growth in Texas, 1914-72," Doctoral Dissertation (Austin: The University of Texas at Austin, 1978); Fred W. Norwood, "Statistical Study of Secular Trends and Cyclical Fluctuations in Texas Business in Relation to the United States," Doctoral Dissertation (Austin: The University of Texas at Austin, 1951); Caleb Patterson, Sam McAlister and George Hester, State and Local Government in Texas (New York: The McMillan Company, 1948); Comptroller of Public Accounts. |  |  |  |  |
| 1. Employment for month of October. |  |  |  |  |

fiscal distress, when virtually the entire decade of the 1930s passed without a balanced state budget. Enacted in 1947 in the wake of this period of red ink, the state's "pay as you go" provision was still relatively new and largely untested.

It was also the year that the Legislature created the GilmerAiken Committee, which a year later would make the recommendations that form the basis of modern public school finance in Texas. The Legislature also proposed a constitutional amendment, approved by the voters the next year, which began to phase out the state's reliance on the property tax for general revenue purposes, leaving the tax primarily to local government and creating one of the key elements in Texas' modern intergovernmental fiscal mix.

## Out of the Forties

Texas in 1947 was a very different place than it is today (Table 1). It was less urban, had fewer than half as many people and was poorer, with a per capita income equal to less than 80 percent of the national average, compared with income just under the national average today. Fifteen percent of the state's jobs were still in agriculture, compared with only three percent today, and the state's gross product-its output of goods and services-was a fraction of today's level.

In other ways, the state has not changed so dramatically. The oil and gas industry and the manufacturing sector were integral parts of the state's industrial base, and many of the state's economic concerns focused on ways of attracting and building industry and jobs. Government and trade were important industries, and though the finance and service industries were less


Source: Select Committee on Tax Equity.
Note: "General Government" includes legislative, judicial, administration and business regulation.
prominent than today, they nonetheless accounted for an estimated 17 percent of state economic activity, more than manufacturing.
State government finances also reflected both similarities and differences. Then, as now, a large share of the state budget was spent on public education (29 percent of state spending in 1947), highways ( 28.5 percent) and public welfare ( 28.2 percent). On the other hand, Texas in 1947 spent only three million dollars on its prison system, under one percent of the budget, compared with more than half a billion dollars annually today. The state spent only $\$ 13$ million for higher education-four percent of state spending-versus $\$ 3$ billion spent today, nearly 17 percent of the budget.
The state paid for its services 40 years ago with a mix of motor fuel

1. There was a temporary tax bill enacted in 1950 as a result of oil production tax losses; however, the budget in 1949 had been written without the need for additional revenue. Thus, the 1950 bill was an emergency, not a planned event. The last major tax bill prior to 1950 was the Omnibus Tax Bill of 1941.
taxes ( 17 percent of total revenues), oil and gas taxes ( 16 percent), federal funds ( 23 percent) and a host of smaller taxes and fees, including selective sales taxes on such "luxuries" as automobiles, radios, cosmetics and playing cards. The tax system, in short, was different in the mix of sources but resembled the patchwork quilt composition that characterizes the system today.
There was no general sales tax in 1947, and there would not be for 15 years. With the surge in consumer spending following the end of wartime restrictions (largely for selectively taxed "luxury" items like automobiles), there also was not a fiscal crisis in the state. Revenue growth was strong, stronger even than in the best days of the 1970s. Unfortunately, the state's fiscal ease would not last long, and the years between then and now have often been turbulent.

## Five Periods

The simple answer to the question of what has happened to Texas state finances in the past 41 years is that expenditures have risen dramatically. This is

FIGURE 2. Trend in Texas State Government Spending, 1947-87
(Millions of Dollars)


[^14]reflected in Figure 2, which shows the upward sweep of state spending since 1947. Between 1947 and 1986, state government in Texas experienced an unbroken string of annual spending increases. Over the entire four decades from 1947 through 1987, there was only one year-1987-where spending actually fell from the previous year, largely because of the state's actions in dealing with its fiscal crisis.
But taking this remote view of the trends in state finances is at once too removed and too simplistic. It conceals the forces shaping state finances during the period and does nothing to explain why the state's fiscal system has evolved the way it has-fundamental questions which must be addressed to reach any conclusions about the future.
To more easily understand the last four decades, it is useful to break the years into several segments reflecting the different economic and fiscal circumstances confronting the state. In this case, five separate periods can be identified, and these are summarized in Table 2. The first of these, the "Post-War" period, stretches from 1947 to 1951. It covers the period of post-war prosperity, when the state was was largely untroubled by the fiscal pressures that marked later years. That situation began to change in 1950, when efforts by state regulators to curb oil production and boost prices put a pinch on state finances because of falling oil tax collections.
A new period definitely had begun by 1952, when the state began a new two-year spending cycle with a budget built on a major tax bill enacted the preceding year. It was the first time in a decade that the state had to increase taxes to write a budget that balanced. ${ }^{1}$
This second period, the "Fifties," covers the years from 1952
through 1961 and was a turbulent time in state finances. Major revenue measures were enacted in 1954, 1955, 1957 (fees and tuition increases only), 1959 and 1961. This was the last period where the state experienced serious, persistent budget deficits. The end of the era was marked by the enactment of the Texas limited sales tax in August 1961, as part of a bill labeled "the largest tax bill in the State's history," a phrase with a familiar ring to modern Texans. ${ }^{2}$

The third period is the "Six-ties"-1962-71-the first era where the sales tax dominated state finances. During this period, the state made a number of major new spending commitments, particularly to higher education, and it experimented briefly with oneyear budgeting. Despite the new sales tax, tax bills remained a fact of state fiscal life, with tax increases adopted in 1963, 1965, 1969 and finally in 1971.

The end of this era is marked by the adoption, in 1971, of the last major state tax bill before the economic boom of the 1970 s. Although the possibility of new taxes was often discussed in the intervening years, 13 years passed before the Legislature again voted on a major tax increase.

Much of that 13 years is covered by the period labeled the "Boom" in Table 2. Revenue growth-led by the sales and the oil and gas taxes-was strong, and the state was able to pay for fairly substantial annual increases in spending. However, much of this growth was also illusory, a product of the period's high general inflation.

The final period is the "Eight-ies"-the post-boom cycle. The beginning of this phase became most readily visible to Texans during the 1983 legislative session, when the state faced a major financing dilemma for the first time in more than a decade. However, the period more accurately began in 1982, when world oil prices began to slide and the Texas economy began to weaken noticeably. The demarcation of fiscal periods is, at best, an arbitrary undertaking and is best done in retrospect, but most evidence suggests that this postboom phase in the state's fiscal history continues in the late 1980 s.

As Table 2 illustrates, these periods are characterized by varying economic circumstances as measured by such common indicators as inflation, population growth and income growth. The state's spending and revenue
policy decisions in these periods also differed. To understand what happened, it is necessary to look more closely at the statistics. This is best done in two parts, looking first at how the state has spent its money and then at how it has gone about paying for the spending decisions it has made.

## Problems in Measuring Government's Growth

A major difficulty in decoding the long stretch of historical record is the problem of finding appropriate standards of measurement to evaluate the raw fiscal trends. Comparisons over just a few years-much less over several decades-are too often distorted because of changes in the social and economic environment in which government operates and because of changes in the value of the most common unit used to measure the cost of its operations-namely the dollar.
Government statistics are most often presented in current dollar terms. That is, the actual dollar amounts spent or col-
2. Texas Research League, Liaison, August 16, 1961, p. 1.

TABLE 2. Comparative Statistics for Five Periods in Recent Texas State Fiscal History

| Period | Years Covered | Total Years in Period | Average Annual Growth in Personal Income ${ }^{\dagger}$ | Average Annual Growth in Population ${ }^{2}$ | Average Rate of Consumer Inflation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The Post-War Period | 1947-51 | 5 | 8.2\% | 2.5\% | 3.9\% |
| The Fifties | 1952-61 | 10 | 4.6 | 1.9 | 1.3 |
| The Sixties | 1962-71 | 10 | 8.9 | 1.4 | 3.3 |
| The Boom | 1972-81 | 10 | 14.4 | 2.6 | 9.0 |
| The Eighties | 1982-87 | 6 | 5.1 | 2.0 | 3.3 |
| Overall | 1947-87 | 41 | 8.6\% | 2.1\% | 4.2\% |
| Source: Computed from U.S. Department of Commerce, Bureau of Economic Analysis, personal income estimates for Texas; Wharton Econometric Forecasting Associates; and Council of Economic Advisers, Economic Report of the President. |  |  |  |  |  |
| 1. Personal income and inflation figures have been adjusted to coincide with state fiscal years. <br> 2. Based on population estimates as of July 1 of each year. |  |  |  |  |  |

lected in a given year. That is what makes the graph of state spending in Figure 1 so misleading. The simple statement that Texas state government spent $\$ 320$ million in 1947 and almost $\$ 18$ billion in 1987, representing an increase of well over 5,000 percent, obscures a world of changes separating those two years. The dollar today is worth about a fifth of its value in 1947. Texas, like the rest of the United States, suffered through a difficult period of inflation during the 1970s. These factors make the fiscal statistics of 30 or 40 years ago even more remote than they are in any event because of the simple passage of time.

Like the average Texan, government is a consumer, and the prices it pays have risen faster on the average than have consumer prices generally. ${ }^{3}$ To make any meaningful comparisons of public finance over the long term, adjustments must be made for these price changes. Comparisons of financial data are better understood, in other words, if they can be converted to constant (infla-tion-adjusted) dollar values.
Another problem with normal financial statistics is their failure to reflect the changing size and composition of the society government serves. From the standpoint of size alone, the population of Texas has more than doubled in the past 40 years, and the state's
3. Between 1947 and 1987, inflation in the goods and services purchased by state and local governments rose by an average 5.6 percent annually, while consumer prices generally rose at an average rate of 4.2 percent a year over the same period.
4. Personal income comparisons are based on personal income adjusted to coincide with the state fiscal yearSeptember through August. The source for personal income estimates is the U.S. Department of Commerce, Bureau of Economic Analysis.
population growth has grown an average of more than two percent a year over this entire period, well above the national average. Growth in sheer size has at least two important implications for the state's finances: there is a growing number of people to share the cost of public services, but there also are more people demanding services. At the state level, many of the services provided-and particularly education and human services-are directly affected by the number of people in the state.
A final question is what the state has bought with its resources. It is not as easy to judge the qualitative value of services as it is the quantitative level of spending. In general, such judgments are made by individuals based on their own values. In general, people expect more from government today than they did in 1947. Texas diverse and growing population exerts a broader range of demands today than in the past.

## The Cost of State Government

Table 3 is an expansion on Figure 2 presented earlier. It shows the progression of overall state spending, year by year, from 1947 to 1987. It also shows the results of adjustments in spending for inflation (to render all of the years in constant 1982 dollars) and for population changes (to put each year's inflation-adjusted total on a per capita basis). The table also shows average annual growth rates for each of the five historical periods discussed earlier and for the overall 41-year stretch.
Over the last four decades, state spending has grown at an average of 10.6 percent annually, driven by a host of individual factors as different as demographic changes in the population, new demands for public and higher education and heightened concerns over the
quality of water supplies in the state. This overall rate is well above the growth in the state economy as it is reflected in the growth of state personal income.
During the period, income grew at an average rate of about 8.6 percent a year. An initial tendency might be to attribute the level of spending growth to the effects of the 1970s, but simply glancing down the year-to-year growth rates shows that is not entirely the case. While state spending has moved up at widely varying rates through the years, in more than six of every ten years in the past four decades-26 years out of 41-spending increased faster than personal income (Table 4). ${ }^{4}$
Relative to personal income, state spending growth was strongest in the Post-War period, when it grew faster than income in four of the five years, and in the Sixties, when spending increased faster than personal income in eight of ten years. In the highinflation Boom period, spending growth exceeded personal income only half the time, although the average rate of spending growth in the period was second only to the Post-War era. Although the growth rate was high during the Boom, spending growth exceeded income growth fewer times in the 1970s than in any of the other four periods, except the current, fiscally troubled era.
One final point to observe about the average growth rates-and this may be one of the most critical elements in predicting the future of state government finances-is the degree to which there has been a certain inherent velocity to state spending which has been slowed from time to time but has not been entirely curbed in 41 years. State finances were under heavy pressure for most of the Fifties, and yet, spending still grew at an average rate of 7.7 percent (see Table 3), three percentage points

TABLE 3. Trends in Texas State Government Spending, 1947-87

|  | Fiscal Year | Actual Spending |  | Inflation-Adjusted Spending |  | Inflation-Adjusted Spending Per Capita |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (millions) | \% Change | ('82 millions) | \% Change | ('82 dollars) | \% Change |
|  | 1947 | \$319 | 34.1\% | \$2,212 | 20.4\% | \$299.50 | 17.7\% |
| The | 1948 | 403 | 26.2 | 2,508 | 13.3 | 328.88 | 9.8 |
| Post-War | 1949 | 443 | 9.9 | 2,583 | 3.0 | 336.05 | 2.2 |
| Period | 1950 | 527 | 18.8 | 3,037 | 17.6 | 391.99 | 16.6 |
|  | 1951 | 568 | 7.8 | 3,017 | -0.7 | 370.37 | -5.5 |
|  | 1952 | 617 | 8.6 | 3,109 | 3.1 | 372.02 | 0.4 |
|  | 1953 | 662 | 7.3 | 3,238 | 4.1 | 384.75 | 3.4 |
|  | 1954 | 706 | 6.6 | 3,384 | 4.5 | 399.44 | 3.8 |
|  | 1955 | 777 | 10.1 | 3,636 | 7.5 | 414.54 | 3.8 |
| The | 1956 | 805 | 3.7 | 3,590 | -1.3 | 401.40 | -3.2 |
| Fifties | 1957 | 872 | 8.3 | 3,688 | 2.7 | 402.25 | 0.2 |
|  | 1958 | 1,027 | 17.7 | 4,238 | 14.9 | 454.61 | 13.0 |
|  | 1959 | 1,163 | 13.3 | 4,677 | 10.3 | 497.31 | 9.4 |
|  | 1960 | 1,184 | 1.8 | 4,656 | -0.4 | 483.35 | -2.8 |
|  | 1961 | 1,200 | 1.4 | 4,604 | -1.1 | 467.22 | -3.3 |
|  | 1962 | 1,305 | 8.8 | 4,834 | 5.0 | 477.46 | 2.2 |
|  | 1963 | 1,467 | 12.4 | 5,303 | 9.7 | 516.33 | 8.1 |
|  | 1964 | 1,574 | 7.3 | 5,554 | 4.7 | 533.34 | 3.3 |
|  | 1965 | 1,610 | 2.2 | 5,544 | -0.2 | 525.16 | -1.5 |
|  | 1966 | 1,860 | 15.5 | 6,147 | 10.9 | 574.41 | 9.4 |
| Sixties | 1967 | 2,060 | 10.8 | 6,421 | 4.4 | 592.17 | 3.1 |
|  | 1968 | 2,339 | 13.5 | 6,903 | 7.5 | 626.88 | 5.9 |
|  | 1969 | 2,514 | 7.5 | 6,950 | 0.7 | 629.26 | 0.4 |
|  | 1970 | 2,954 | 17.5 | 7,555 | 8.7 | 671.81 | 6.8 |
|  | 1971 | 3,436 | 16.3 | 8,182 | 8.3 | 710.91 | 5.8 |
|  | 1972 | 3,790 | 10.3 | 8,535 | 4.3 | 725.96 | 2.1 |
|  | 1973 | 4,019 | 6.0 | 8,436 | -1.2 | 702.00 | -3.3 |
|  | 1974 | 4,426 | 10.1 | 8,502 | 0.8 | 693.12 | -1.3 |
|  | 1975 | 5,377 | 21.5 | 9,299 | 9.4 | 739.86 | 6.7 |
|  | 1976 | 6,203 | 15.4 | 9,990 | 7.4 | 774.28 | 4.7 |
| Boom | 1977 | 6,606 | 6.5 | 10,005 | 0.1 | 758.42 | -2.0 |
|  | 1978 | 7,864 | 19 | 11.110 | 11.0 | 823.10 | 8.5 |
|  | 1979 | 8,600 | 9.4 | 11,152 | 0.4 | 803.04 | -2.4 |
|  | 1980 | 10,210 | 18.7 | 11,928 | 7.0 | 831.96 | 3.6 |
|  | 1981 | 11,367 | 11.3 | 12,194 | 2.2 | 825.82 | -0.7 |
|  | 1982 | 12,074 | 6.2 | 12,074 | -1.0 | 785.26 | -4.9 |
|  | 1983 | 13,539 | 12.1 | 12,849 | 6.4 | 812.36 | 3.5 |
| The | 1984 | 14,348 | 6 | 13,003 | 1.2 | 808.53 | -0.5 |
| Eighties | 1985 | 16,186 | 12.8 | 13,971 | 7.4 | 852.50 | 5.4 |
|  | 1986 | $18,483$ | 14.2 | 15,370 | 10.0 | 921.19 | 8.1 |
|  | 1987 | 17,753 | -3.9 | 14,173 | -7.8 | 842.07 | -8.6 |
| Average Annual Growth Rates: |  |  |  |  |  |  |  |
| The Post-War Period |  |  | 15.4\% |  | 8.1\% |  | 5.5\% |
| The Fifties |  |  | 7.7 |  | 4.5 |  | 2.6 |
| The Sixties |  |  | 11.4 |  | 6.0 |  | 4.5 |
| The Boom |  |  | 13.0 |  | 4.0 |  | 1.4 |
| The Eighties |  |  | 8.0 |  | 3.3 |  | 1.4 |
| 1947-87 |  |  | 10.6\% |  | 4.8\% |  | 2.6\% |

Source: State of Texas, Annual Financial Report, various years; Wharton Econometric Forecasting Associates; Texas Almanac.
Note: Deflator used is the price index for purchases of state and local government goods and services converted to state fiscal year basis.
above the growth in personal income in the period and very strong for a period when consumer inflation averaged less than two percent. Similarly, state spending has averaged eight percent annually during the Eighties, and this includes one year during which state spending fell. For the period from 1982-86-before the decline in 1987-state spending averaged 11 percent a year, well above the three to four percent rate of inflation.

Although it is common to think of the Boom era as a period of exceptionally high spending growth-which it was-the state experienced strong growth before then. The 41 -year trend in state spending growth is 10.6 percent a year, but the growth during the period from 1947-71, before the high inflation of the 1970s, averaged 10.4 percent annually. As Figure 3 shows, state spending growth moved above the long-term trend briefly in the 1970s but then fell

FIGURE 3. State Spending Growth Versus the Long-Term Spending Trend, 1947-87


Source: Select Committee on Tax Equity
Note: Trends for 1988-89 are based on estimates by the Legislative Budget Board.

TABLE 4. Number of Years State Spending Growth Exceeded Growth in State Personal Income, 1947-87

| Period | Years <br> Covered | Total Years <br> in Period | Number of Years <br> Spending Growth <br> Exceeded Personal <br> Income Growth |
| :--- | :---: | :---: | :---: |
| The Post-War Period | $1947-51$ | 5 | 4 |
| The Fifties | $1952-61$ | 10 | 6 |
| The Sixties | $1962-71$ | 10 | 8 |
| The Boom | $1972-81$ | 10 | 5 |
| The Eighties | $1982-87$ | 6 | 3 |
| Overall | $\mathbf{1 9 4 7 - 8 7}$ | $\mathbf{4 1}$ | $\mathbf{2 6}$ |

[^15]back to it. If current estimates of spending in the 1988-89 budget period are correct, spending will actually fall below the long-term trend over the next two years. Such a decline has not been sustained for any significant period in the the Post-War decades.

## Measuring the Impact of Inflation and Population Growth

Returning to Table 3, it is possible to see what effects inflation and population growth have had on state spending. Inflation accounted for more than half of the growth in actual spending since 1947. Adjusting for inflation, state spending grew at an average rate of 4.8 percent annually.
In real terms, spending grew fastest in the Post-War period and in the Sixties and has grown most slowly in the Eighties, as might be expected. During the 1970s, average inflation-adjusted growth was four percent, below the longterm average and above only the rate of the Eighties. In effect, much of the perceived spending growth in the 1970s was illusory, the product of rapid inflation, which pushed up costs without increasing the level of services provided. In terms of the real value of its purchases, the state spent far more heavily in the Sixties than it did during the Boom.
The trends are similar, if more striking, when population growth is taken into account. The state's population increased by just under 9.5 million people during the last four decades, and these increasing numbers have translated into growing demands on state govern-ment-more demand for schools, for highways, for state-supported hospitals and prisons and so on. Obviously, not all Texans use state services to the same degree, but the best adjustment that can be
made for their impact is to show each year's real spending on a per capita basis. This is done in the final set of columns in Table 3.
Over the 41 years, inflationadjusted spending per capita increased at an average rate of 2.6 percent annually. Again, the contrasts among the five historical periods are evident, and in fact are much starker than they were before the population adjustment.

Real per capita spending grew at a rapid 5.5 percent per capita in the Post-War period and 4.5 percent in the Sixties. The actual growth in the Boom period was only 1.4 percent, as state population surged along with inflation. Ironically, the real per capita growth rate during the Boom is not much different than the current period, and in fact, if the effects of declining spending in 1987 are removed, state spending has actually grown at a slightly faster real rate per capita in the early 1980s than it did in the 1970s. In half the years of the Boom period, real state spending per capita actually declined over the preceding year. By comparison, there was only one year of relative decline in the Sixties.
How much do these adjustments change the picture of state spending growth? Significantly. Visually, this change can be seen in Figure 4, which charts indexed values for actual, inflation-adjusted and real per capita spending for the last four decades. (In this case, 1947 is set at a constant value of 100 for all three trends, and growth in subsequent years is charted relative to this base value.) It would be wrong to argue that the State of Texas has consistently held the line on its spending, but it is also clear that with adjustments for changing economic circumstances, the growth in spending has followed a much flatter trajectory than might initially be assumed.

More importantly, the adjustments show that too much has probably been made of the high rates of spending growth in the 1970s. In unadjusted current dollar terms, there undoubtedly was rapid growth, but once inflation and population demands are accounted for, the evidence is far less compelling. In fact, it moves in the other direction. Texas real spending clearly was strong in the late 1940s and in the 1960s. In real terms, it was not particularly strong in the 1970s. The state spent more and more dollars that were worth less and less in an effort to maintain a relatively stable basket of services for a growing population. It is not the purpose of this report to judge how well the state succeeded, but in the case of the 1970s, there clearly was less to the period's growth than meets the eye.

The next obvious question in making some judgments about these trends is to ask how the state has used its resources. The next section looks at that question and
finds a number of relative constants that have characterized the fiscal system throughout its recent history.

## Sources of State Spending Growth

Appendix A presents a compressed history of state finances since the mid-1940s. It does not purport to reveal every event in the fiscal affairs of the State of Texas but focuses on the more significant fiscal events of the last 40 years.

Before looking at what the data shows about the sources of spending growth, it is useful to get a sense of what this history reveals about the recurring themes in state finances. In fact, the one major recurring theme in Texas state finances is education-public education over the long haul and more recently higher education. From time to time, state government's attention has been focused on highways or mental hospitals or simply how to find money to

FIGURE 4. Actual and Inflation-Adjusted Patterns in State Government Spending Growth, 1947-87


Source: Select Committee on Tax Equity.
Note: Growth is indexed so that 1947 is equal to 100 for each series. The figure charts relative growth from this common base value.
balance a budget badly out of balance, but in almost every year that the Legislature has met in the post-World War II period, education has been a key priority, which paradoxically, both explains and is explained by its prominent role in the budget.

Other elements, like highways and public welfare, have been important in state budget deliberations, but none have held the stage as often or dominated the state's collective attention as completely as the issue of how to provide a quality educational system.

Table 5 shows the trends in state spending for key functions over the period from 1947 through 1987. The table underscores the continuing significance of education (in this case combining public and higher education), social services and highways in the state

TABLE 5. Major Areas of State Spending, 1947-87

| Fiscal Year | Education' |  |  | Social Services |  |  | Transportation (Highways) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Total } \\ & \text { (millions) } \end{aligned}$ | \% Change | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ |  | \% Change | \% of <br> Total | $\begin{gathered} \text { Total } \\ \text { (millions) } \end{gathered}$ | \% <br> Change | $\%$ of <br> Total |
| 1947 | \$106 | - | 33.1\% | \$90 | - | 28.2\% | \$91 | - | 28.5\% |
| 1948 | 149 | 41.4\% | 37.1 | 100 | 11.2\% | 24.8 | 115 | 27.0\% | 28.7 |
| 1949 | 165 | 10.6 | 37.4 | 119 | 19.0 | 26.9 | 111 | -4.0 | 25.1 |
| 1950 | 211 | 27.8 | 40.2 | 132 | 10.5 | 25.0 | 118 | 6.2 | 22.4 |
| 1951 | 227 | 7.5 | 40.1 | 119 | -9.8 | 21.0 | 136 | 15.8 | 24.1 |
| 1952 | 255 | 12.4 | 41.5 | 120 | 0.8 | 19.5 | 137 | 0.7 | 22.3 |
| 1953 | 253 | -1.0 | 38.2 | 138 | 15.7 | 21.0 | 162 | 17.7 | 24.5 |
| 1954 | 269 | 6.5 | 38.2 | 158 | 13.7 | 22.4 | 166 | 2.9 | 23.6 |
| 1955 | 314 | 16.5 | 40.4 | 157 | -0.2 | 20.3 | 190 | 14.3 | 24.5 |
| 1956 | 341 | 8.7 | 42.4 | 147 | -6.6 | 18.3 | 210 | 10.3 | 26.1 |
| 1957 | 356 | 4.2 | 40.8 | 159 | 8.0 | 18.2 | 242 | 15.5 | 27.8 |
| 1958 | 409 | 14.9 | 39.8 | 173 | 9.0 | 16.9 | 312 | 28.6 | 30.4 |
| 1959 | 432 | 5.7 | 37.2 | 189 | 9.0 | 16.2 | 404 | 29.5 | 34.7 |
| 1960 | 471 | 9.0 | 39.8 | 187 | -0.6 | 15.9 | 386 | -4.4 | 32.6 |
| 1961 | 477 | 1.4 | 39.8 | 189 | 0.6 | 15.8 | 371 | -4.0 | 30.9 |
| 1962 | 535 | 12.1 | 41.0 | 212 | 12.5 | 16.3 | 372 | 0.2 | 28.5 |
| 1963 | 636 | 18.8 | 43.3 | 239 | 12.5 | 16.3 | 397 | 6.7 | 27.1 |
| 1964 | 666 | 4.7 | 42.3 | 250 | 4.5 | 15.9 | 451 | 13.6 | 28.6 |
| 1965 | 699 | 5.0 | 43.4 | 256 | 2.6 | 15.9 | 436 | -3.3 | 27.1 |
| 1966 | 892 | 27.6 | 48.0 | 270 | 5.4 | 14.5 | 454 | 4.1 | 24.4 |
| 1967 | 939 | 5.3 | 45.6 | 297 | 9.9 | 14.4 | 543 | 19.6 | 26.4 |
| 1968 | 1,077 | 14.7 | 46.1 | 374 | 26.1 | 16.0 | 517 | -4.7 | 22.1 |
| 1969 | 1,149 | 6.6 | 45.7 | 399 | 6.6 | 15.9 | 557 | 7.7 | 22.2 |
| 1970 | 1,305 | 13.6 | 44.2 | 553 | 38.6 | 18.7 | 633 | 13.6 | 21.4 |
| 1971 | 1,552 | 19.0 | 45.2 | 695 | 25.5 | 20.2 | 667 | 5.4 | 19.4 |
| 1972 | 1,807 | 16.4 | 47.7 | 758 | 9.1 | 20.0 | 605 | -9.3 | 16.0 |
| 1973 | 1,897 | 5.0 | 47.2 | 811 | 7.0 | 20.2 | 583 | -3.6 | 14.5 |
| 1974 | 2,093 | 10.3 | 47.3 | 797 | -1.7 | 18.0 | 649 | 11.3 | 14.7 |
| 1975 | 2,560 | 22.3 | 47.6 | 929 | 16.5 | 17.3 | 831 | 28.1 | 15.5 |
| 1976 | 3,099 | 21.1 | 50.0 | 1,090 | 17.3 | 17.6 | 731 | -12.1 | 11.8 |
| 1977 | 3,285 | 6.0 | 49.7 | 1,217 | 11.7 | 18.4 | 661 | -9.5 | 10.0 |
| 1978 | 3,999 | 21.7 | 50.9 | 1,334 | 9.6 | 17.0 | 921 | 39.3 | 11.7 |
| 1979 | 4,322 | 8.1 | 50.3 | 1,509 | 13.1 | 17.5 | 1,019 | 10.6 | 11.9 |
| 1980 | 5,044 | 16.7 | 49.4 | 1,601 | 6.1 | 15.7 | 1,580 | 55.0 | 15.5 |
| 1981 | 5,593 | 10.9 | 49.2 | 1,889 | 18.0 | 16.6 | 1,642 | 3.9 | 14.5 |
| 1982 | 6,317 | 13.0 | 52.3 | 1,802 | -4.6 | 14.9 | 1,353 | -17.6 | 11.2 |
| 1983 | 6,966 | 10.3 | 51.4 | 2,150 | 19.3 | 15.9 | 1,520 | 12.4 | 11.2 |
| 1984 | 7,285 | 4.6 | 50.8 | 2,315 | 7.7 | 16.1 | 1,437 | -5.5 | 10.0 |
| 1985 | 8,583 | 17.8 | 53.0 | 2,421 | 4.6 | 15.0 | 1,553 | 8.0 | 9.6 |
| 1986 | 8,625 | 0.5 | 46.7 | 2,517 | 4.0 | 13.6 | 2,428 | 56.4 | 13.1 |
| 1987 | 8,617 | -0.1 | 48.5 | 2,870 | 14.0 | 16.2 | 2,428 | 0.0 | 13.7 |

Source: State of Texas, Annual Financial Report, various years.

1. Includes public education, higher education and contributions to the Teacher Retirement System.
2. Corrections include spending by the Department of Corrections, the Texas Youth Commission and predecessor agencies, the Board of Pardons and Paroles and related agencies.

Note: Table pertains to expenditures from state funds 1-899 only. It does not include trust or suspense funds.
spending mix. Taken together, these three areas of state spending have accounted for anywhere from three-quarters to almost 90 percent of state budget dollars in the last four decades.

As this range suggests, the relationship among the three
functions has shifted over time. In 1947, the three functions each accounted for almost a third of state spending, with education accounting for only slightly more than the other two at a third of the total. By 1987, education accounted for almost half of state
expenditures, while social services had sunk to 16 percent and highways to just under 14 percent.
In large measure, this is explained by the fairly sizable increases in state spending on education relative to other

| Corrections ${ }^{2}$ |  |  | All Other Spending |  |  | Total State Spending |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total (millions) | $\%$ <br> Change | $\begin{aligned} & \hline \% \text { of } \\ & \text { Total } \end{aligned}$ | $\begin{aligned} & \text { Total } \\ & \text { (millions) } \end{aligned}$ | Change | $\begin{aligned} & \hline \% \text { of } \\ & \text { Total } \end{aligned}$ | $\begin{gathered} \hline \text { Total } \\ \text { (millions) } \end{gathered}$ | \% Change | $\%$ of Total |
| \$2.9 | - | 0.9\% | \$30 | - | 9.3\% | \$320 | - | 100.0\% |
| 3.3 | 14.3\% | 0.8 | 35 | 16.7\% | 8.6 | 403 | 26.2\% | 100.0 |
| 4.5 | 36.3 | 1.0 | 43 | 23.5 | 9.7 | 444 | 9.9 | 100.0 |
| 5.2 | 14.7 | 1.0 | 60 | 40.3 | 11.4 | 527 | 18.8 | 100.0 |
| 6.3 | 20.8 | 1.1 | 78 | 30.3 | 13.8 | 568 | 7.8 | 100.0 |
| 7.0 | 11.4 | 1.1 | 96 | 23.3 | 15.6 | 617 | 8.6 | 100.0 |
| 7.4 | 6.2 | 1.1 | 101 | 4.4 | 15.2 | 662 | 7.3 | 100.0 |
| 7.2 | -3.5 | 1.0 | 104 | 3.6 | 14.8 | 706 | 6.6 | 100.0 |
| 8.2 | 15.3 | 1.1 | 106 | 2.0 | 13.7 | 777 | 10.1 | 100.0 |
| 9.1 | 10.0 | 1.1 | 98 | -8.3 | 12.1 | 806 | 3.7 | 100.0 |
| 9.3 | 2.4 | 1.1 | 105 | 8.2 | 12.1 | 873 | 8.3 | 100.0 |
| 11.3 | 21.7 | 1.1 | 121 | 15.0 | 11.8 | 1,027 | 17.7 | 100.0 |
| 11.6 | 2.7 | 1.0 | 126 | 3.9 | 10.8 | 1,163 | 13.3 | 100.0 |
| 14.7 | 26.4 | 1.2 | 124 | -1.8 | 10.5 | 1,184 | 1.8 | 100.0 |
| 16.8 | 14.8 | 1.4 | 145 | 17.4 | 12.1 | 1,200 | 1.4 | 100.0 |
| 18.4 | 9.1 | 1.4 | 167 | 14.8 | 12.8 | 1,306 | 8.8 | 100.0 |
| 18.3 | -0.2 | 1.2 | 177 | 5.8 | 12.0 | 1,468 | 12.4 | 100.0 |
| 20.0 | 9.0 | 1.3 | 188 | 6.2 | 11.9 | 1,575 | 7.3 | 100.0 |
| 23.7 | 18.5 | 1.5 | 194 | 3.6 | 12.1 | 1,610 | 2.2 | 100.0 |
| 23.9 | 1.1 | 1.3 | 220 | 13.0 | 11.8 | 1,861 | 15.5 | 100.0 |
| 24.3 | 1.3 | 1.2 | 257 | 16.8 | 12.5 | 2,061 | 10.8 | 100.0 |
| 32.0 | 31.8 | 1.4 | 338 | 31.8 | 14.5 | 2,340 | 13.5 | 100.0 |
| 34.1 | 6.5 | 1.4 | 375 | 10.8 | 14.9 | 2,515 | 7.5. | 100.0 |
| 39.0 | 14.5 | 1.3 | 424 | 13.0 | 14.3 | 2,955 | 17.5 | 100.0 |
| 45.7 | 17.2 | 1.3 | 476 | 12.4 | 13.8 | 3,437 | 16.3 | 100.0 |
| 45.8 | 0.2 | 1.2 | 574 | 20.5 | 15.1 | 3,791 | 10.3 | 100.0 |
| 48.4 | 5.7 | 1.2 | 679 | 18.4 | 16.9 | 4,019 | 6.0 | 100.0 |
| 59.5 | 23.0 | 1.3 | 827 | 21.8 | 18.7 | 4,427 | 10.1 | 100.0 |
| 68.9 | 15.7 | 1.3 | 986 | 19.3 | 18.3 | 5,377 | 21.5 | 100.0 |
| 83.8 | 21.7 | 1.4 | 1,198 | 21.4 | 19.3 | 6,203 | 15.4 | 100.0 |
| 98.7 | 17.8 | 1.5 | 1,343 | 12.1 | 20.3 | 6,607 | 6.5 | 100.0 |
| 111.6 | 13.0 | 1.4 | 1,497 | 11.4 | 19.0 | 7,864 | 19.0 | 100.0 |
| 126.7 | 13.6 | 1.5 | 1,622 | 8.4 | 18.9 | 8,600 | 9.4 | 100.0 |
| 155.9 | 23.0 | 1.5 | 1,828 | 12.7 | 17.9 | 10,211 | 18.7 | 100.0 |
| 198.3 | 27.2 | 1.7 | 2,043 | 11.8 | 18.0 | 11,368 | 11.3 | 100.0 |
| 294.9 | 48.7 | 2.4 | 2,305 | 12.8 | 19.1 | 12,074 | 6.2 | 100.0 |
| 330.3 | 12.0 | 2.4 | 2,572 | 11.6 | 19.0 | 13,539 | 12.1 | 100.0 |
| 363.6 | 10.1 | 2.5 | 2,946 | 14.6 | 20.5 | 14,349 | 6.0 | 100.0 |
| 414.2 | 13.9 | 2.6 | 3,214 | 9.1 | 19.9 | 16,187 | 12.8 | 100.0 |
| 492.7 | 18.9 | 2.7 | 4,419 | 37.5 | 23.9 | 18,483 | 14.2 | 100.0 |
| 463.7 | -5.9 | 2.6 | 3,374 | -23.7 | 19.0 | 17,753 | -3.9 | 100.0 |

spending categories. Growth in state investment in education has been relatively consistent year in and year out over the last four decades, but it has also been pushed along by periodic "ramp ups" in the level of state commitment that worked to elevate education's role in the budget mix. The first of these occurred as a result of the creation of the Minimum Foundation Program as part of the Gilmer-Aiken public school reforms in the late 1940s and early 1950s. This was followed by an increase in the state commitment to higher education spending in the 1960s, based on budget recommendations by Governor John Connally and recommendations of the blue-ribbon Committee on Education Beyond the High School in the mid-1960s.

Additional increases in the state's commitment to public education came in the mid-1970s, following the Rodriguez court case ${ }^{5}$ and subsequently with the adoption of many of the recommendations of the Select Committee on Public Education (SCOPE) in 1984 and 1985.
5. San Antonio Independent School District v. Rodriguez, 411 U.S. 1 (1973).

In contrast, spending for transportation and social services has undergone a much more variable cycle since the late 1940s, with spending for the two functions held down in some periods, only to surge ahead later as the state increased spending, often in an effort to "make up" for past restraint.

In the case of highways, this partly results from the fact that a large segment of the program's funding comes from user-based revenue sources, mainly automobile registration fees and motor fuel taxes. These are quantitybased revenues-that is, they grow with population but not infla-tion-and ultimately they lag behind the growth in the current dollar costs of maintaining the highway system.

These problems came to a head in 1977 after a number of years of strong inflation and resulted in the creation of the Highway Cost Index, which attempted to index highway costs to inflation. It also was a major reason underlying the increases in the motor fuel taxes and automobile fees in recent years.

The main thrust of growth in social services came from the various federal programs that expanded rapidly in the 1960s, including the
full adoption of the Medicaid program in 1969. The state also expanded its spending on social welfare programs generally in 1971. Both of these trends helped boost spending rates and the function's share of the state spending in the early 1970 s.

One other area of the state budget which has received recent attention far more significant than its share of the state budget is corrections. Spending in this area is also shown in Table 5. The state has always spent less than three percent of its budget on its correctional system, and in the 1940s, it spent less than one percent. Corrections is an area where the costs have been increasing rapidly, both because of inflation and population increases and because of the demands of the decade-old prison system lawsuit, Ruiz v. Estelle. As most Texans are now aware, one of the major problems with the system is the lack of space to house prisoners.

Whatever other explanations there may be for this problem-and there are several-one obvious cause has been the dramatic increase in the state's prison population. The number of inmates in Texas prisons has increased at an average rate of 5.7

TABLE 6. Average Annual Growth in State Spending for Selected Periods and Functions, 1947-87

| Period | Fiscal Years Covered | Education |  | Social Services |  | Transportation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average Annual Growth | Average Real Growth Per Capita' | Average Annual Growth | Average Real Growth Per Capita' | Average Annual Growth | Average Real Growth Per Capita ${ }^{1}$ |
| The Post-War Period | 1947-51 | 21.1\% | 10.6\% | 7.2\% | -1.7\% | 10.7\% |  |
| The Fifties | 1952-61 | 7.2 | 2.1 | 5.2 | 0.2 | 11.7 | 6.4 |
| The Sixties | 1962-71 | 12.6 | 5.7 | 14.1 | 7.1 | 6.7 | 0.2 |
| The Boom Years | 1972-81 | 13.4 | 1.8 | 10.7 | -0.6 | 11.7 | 0.3 |
| The Eighties | 1982-87 | 6.4 | 0.3 | 9.8 | 3.0 | 12.4 | 5.5 |
| 1947-87 | - | 11.6\% | 3.6\% | 9.0\% | 1.2\% | 8.6\% | 0.8\% |

[^16]1. Represents average annual increases in spending totais adjusted to remove the effects of inflation and population growth.
percent a year since 1947, more than twice as fast as the state's overall population.

## Growth by Spending Function

A clearer pattern in the spending trends for individual functions of state government can be found in Table 6, which shows average growth rates for major spending categories for the overall 1947-87 period and for the five historical periods.

Among the major functional categories shown in the table, state spending on education (public and higher) has grown at an average rate of 11.6 percent over the past 40 years, well above the average growth in state personal income and above the 10.6 percent average increase in overall state spending.

When this total is adjusted for inflation and population growth, real per capita spending on education has increased by 3.6 percent, faster than either public welfare or highway spending but slower than corrections and the catch-all category "all other," which received much of its impetus during the Post War period when spending for general administration, health and institutions (mental institutions,
state tuberculosis hospitals, etc.) grew extremely rapidly.

The periods of strongest real per capita growth in state spending for education were in the Post-War period, following the GilmerAiken reforms, and during the Sixties, when real growth averaged 5.7 percent a year on a per capita basis. There are at least a couple of reasons for the rate of growth in public education spending in the Sixties. First, a large segment of the so-called "Baby Boom" generation passed through the public school system during this period, and school enrollment growth was generally more rapid than the growth in the state's general population. Spending during this period was also boosted by the sizable increase in higher education investment by the state beginning in the early 1960s.

Although there have been wellpublicized efforts to expand spending on public education over the past decade, the gains in real per capita terms have been smaller than in earlier periods. Both the Boom period and the Eighties have recorded gains below the 40-year trend for education.
State spending on social services has averaged a nine percent annual growth rate for the past four

| Corrections |  | All Others |  | Total Spending |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average Annual Growth | Average Real Growth Per Capita' | $\overline{\text { Average }}$ Annual Growth | Average Real Growth Per Capita ${ }^{1}$ | Average Annual Growth | Average Real Growth Per Capita' |
| 21.2\% | 10.8\% | 27.4\% | 16.4\% | 15.4\% | 5.5\% |
| 10.3 | 5.1 | 4.7 | -0.3 | 7.7 | 2.6 |
| 10.7 | 3.9 | 12.3 | 5.5 | 11.4 | 4.5 |
| 17.7 | 5.7 | 15.2 | 3.4 | 13.0 | 1.4 |
| 9.5 | 2.8 | 7.9 | 1.3 | 8.0 | 1.4 |
| 13.5\% | 5.4\% | 12.6\% | 4.5\% | 10.6\% | 2.6\% |

decades- 1.2 percent a year in real per capita terms. This spending area also grew rapidly in the Sixties in both actual and real per capita terms. Social services is one of the few areas of state spending where real growth shows to be negative in two of the periods-the Post-War and the Boom-and in which real per capita spending has actually grown more rapidly in the Eighties than in the Boom years. This should not be a surprising result: relative public assistance costs would be expected to rise when economic conditions are poor and fall when conditions are good, and this apparently has been the case over the past 15 years.

State spending on highways has grown at the slowest pace among the major budget categories shown in Table 6, averaging 8.6 percent a year and 0.8 percent annually when inflation and population growth are factored out. The spending data for the five periods suggests that there have been two great periods of state investment in its transportation infrastructure-during the Fifties, when real per capita spending rose at an average rate of 6.4 percent, and in the Eighties, as recent user tax increases have helped push up real per capita spending at a 5.5 percent rate, more than triple the average for all state spending in the period.

Real spending on corrections has shown the strongest overall growth trend from 1947-87 among the spending categories shown in Table 6. In real per capita terms, spending on corrections-largely the prison system-has grown by a yearly average of 5.4 percent, more than double the average for all state spending. Interestingly, spending on corrections has actually been less in the Eighties in real terms than in any of the earlier periods, although prison system problems have received
more attention. However, real growth in this period has still been double the trend for overall spending.

## Interstate Comparisons

An assessment of how state spending policies have evolved qualitatively over the last four decades can be derived by comparing trends in Texas state expenditures with national averages for all state governments. These comparisons for select years are shown in Table 7. The table compares per capita trends for education, highways, public welfare, corrections and hospitals. In most states, as in Texas, these functions account for a vast majority of the state budget.
One caveat is necessary in using these figures. This report focuses on trends in state government spending and revenues, and for this reason, the information in Table 7 covers only state government spending. There are,
6. David Fellman and Kenyon E. Poole, The Costs of American Governments (New York: Dodd, Mead \& Company, 1968), p. 49.
however, significant differences in how states finance public services, with state and local roles larger or smaller in various areas. It is misleading to judge any state's performance in a given area solely on state or on local data. This comparison is primarily of value as a measure of how Texas' state government involvement in various functional areas has changed over time relative to general state government commitment to these areas nationally.
In terms of per capita general spending, Texas began the 41 -year stretch near the bottom among the 50 states, and it continues to occupy a low rung today. The state ranked 46th in state spending per capita in 1947 (at the time, of course, there were only 48 states); it ranked 48th in 1987. Among the years included in the table, there was only one point at which the state was better than 40th-in 1952. This was largely a result of the surge of spending that occurred in the Post-War period, and it soon diminished. The state had fallen to 41st by 1957 and to 45 th by 1965. Even during the 1960s, which was a strong period for expansion of
state government spending in Texas, the state's relative ranking remained among the lowest nationally. The Sixties was a period of strong growth in state spending in most other states as well. ${ }^{6}$
The state's ranking in per capita spending also eroded somewhat in the early 1970s but improved in the latter stages of the Boom, before falling back again by 1986 . Since Texas state spending fell in 1987, the state's ranking presumably has not changed much since 1986, the most recent year for which comparative data are available.
Examination of the trends for individual spending functions shows variations in Texas' rankings that roughly parallel the earlier findings about spending growth. For example, the state ranked 23 rd in its spending on education in 1986-above the national average. This is not a recent phenomenon. The state has always ranked higher in educational spending than in virtually any other budget area. It ranked 24th nationally in 1947, reached as high as 14th in 1952 and fell as low as 38 th in 1972. Overall, though, the state has maintained

TABLE 7. Texas and Average U.S. Per Capita State Expenditures for Various Functions, Selected Years, 1947-87

| Fiscal Year | All General Expenditures' |  |  | Education ${ }^{2}$ |  |  | Transportation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Texas | All-State <br> Average | Texas Rank | Texas | All-State Average | Texas Rank | Texas | All-State Average | Texas Rank |
| $1947{ }^{3}$ | \$35.99 | \$49.43 | 46 | \$12.84 | \$12.53 | 24 | \$8.99 | \$11.01 | 0 |
| $1952^{3}$ | 74.75 | 89.78 | 39 | 32.64 | 26.39 | 14 | 17.64 | 21.56 | 41 |
| $1957{ }^{3}$ | 103.20 | 126.69 | 41 | 41.61 | 39.37 | 22 | 30.45 | 35.79 | 35 |
| 1962 | 137.21 | 168.96 | 45 | 60.59 | 57.99 | 24 | 37.64 | 43.02 | 41 |
| 1967 | 206.44 | 269.69 | 47 | 98.94 | 107.72 | 32 | 53.16 | 57.26 | 38 |
| 1972 | 355.38 | 476.22 | 48 | 169.09 | 184.82 | 38 | 67.20 | 74.13 | 40 |
| 1977 | 572.81 | 769.77 | 49 | 297.78 | 296.96 | 29 | 54.63 | 81.14 | 46 |
| 1982 | 926.93 | 1,192.91 | 45 | 474.38 | 455.87 | 22 | 137.99 | 111.24 | 21 |
| $1986^{4}$ | 1,134.02 | 1,565.89 | 48 | 583.15 | 583.03 | 23 | 151.85 | 152.47 | 37 |

Source: U.S. Department of Commerce, State Government Finances, various years; Legislative Budget Board.

1. General expenditures include all state spending other than liquor store expenditures, insurance trust expenditures and utility expenditures.
2. Includes spending on both pubic and higher education.
3. Based on 48 states in these years.
4. Most recent year for which comparative data are available.

Note: Individual categories do not add to total. Some individual expenditure categories are not included.
its ranking at or near the national average and around the middle of the states for 40 years.

In other areas, the trends are different. One reason the state's overall spending ranking is so low while ranking as high as it does in education is that the state ranks at the bottom in both health and social welfare spending. These are simply not areas where Texas state government has been willing to spend as much money as other states and a sizable portion of the spending that does occur in these areas takes place locally.

Insofar as social services are concerned, Texas' low per capita ranking has only emerged in the past two decades, as other states have expanded their welfare spending. Thirty years ago, Texas spent above the national average on public welfare; by 1986, its expenditures totaled less than half of the national average per capita.
The trend in spending on hospitals and institutions has been more up and down. In the late 1940s, the state was near the bottom in per capita spending in
this area. It rose as high as 15 th in the mid-1970s, following a sharp increase in spending to finance repairs and renovations at state hospitals and mental institutions during the 1975 legislative session. Since then, the state's ranking has fallen back to near the bottom among the states.

In the highway area, Texas' ranking has also varied over time, though not to the degree that social services and hospitals have. The state ranked 40th in per capita spending on highways in 1947; it climbed as high as 21st in 1982, as other states cut back infrastructure spending in the face of poor economic conditions in the early 1980s. In 1986, the state ranked 37th among the states. Presumably, that ranking will rise as the effects of the motor fuel increases enacted in 1985 and 1987 become visible in the national comparative statistics.

## Paying for State Services

To finance the services they ultimately decide to provide, state governments rely on literally hundreds of revenue sources that
may range in size from a few hundred dollars to several billion. Table 8 details the long-term trends in the most significant of the revenue sources Texas uses.
As the table shows, overall revenue collections have grown from $\$ 374.3$ million in 1947 to $\$ 17.8$ billion in 1987, an average annual growth rate of 10.1 percent, well above the average growth in state personal income over this period but below the growth in state spending at a 10.6 percent average growth.
This difference is explained by several factors. First, the revenue base was larger to begin with, so the dollars match up better than the growth rates. Second, the state has relied on existing balances from time to time to finance a part of its spending, which does not show up in the revenue totals. Finally, there is the fact that the state had a major deficit in 1987, and there was a literal mismatch between revenue and expenditure during that year of over $\$ 700$ million.
The most important state revenue sources are the sales tax, which produced $\$ 4.6$ billion in

| Social Services |  |  | Corrections |  |  | Hospitals and Institutions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas | All-State Average | Texas Rank | Texas | All-State Average | Texas Rank | Texas | All-State Average | Texas Rank |
| \$8.57 | \$9.64 | 29 | \$0.39 | N.A. | - | \$1.22 | \$3.26 | 47 |
| 13.47 | 15.64 | 33 | 0.77 | N.A. | - | 4.74 | 8.24 | 44 |
| 16.83 | 16.64 | 22 | 1.01 | N.A. | - | 4.99 | 8.04 | 37 |
| 19.68 | 23.16 | 32 | 1.75 | 2.83 | 41 | 6.26 | 10.66 | 45 |
| 25.61 | 36.47 | 37 | 2.12 | 3.95 | 45 | 9.51 | 15.08 | 45 |
| 62.25 | 92.49 | 31 | 3.46 | 6.69 | 46 | 17.86 | 24.34 | 35 |
| 91.48 | 152.01 | 39 | 7.18 | 13.37 | 47 | 45.66 | 40.54 | 15 |
| 114.04 | 244.60 | 49 | 21.91 | 26.07 | 33 | 57.10 | 61.70 | 26 |
| 135.05 | 301.74 | 49 | 28.60 | 44.79 | 34 | 61.24 | 71.33 | 49 |

1987 or 25.9 percent of overall state income, and federal funding, which amounted to just under $\$ 4.1$ billion or about 23 percent of state revenues. Taxes of various
kinds make up most of the other important sources of collections, and overall tax collections accounted for 57.5 percent of state revenue in 1987. Historically,
about six of every ten dollars the state uses to finance its services have come from taxes.

The table shows average growth rates for the major revenue

TABLE 8. Trends in Major State Revenues, 1947-87

| Fiscal Year | Sales Tax |  | Oil \& Gas Taxes |  | Motor Fuel Taxes |  | Motor Vehicle Taxes |  | Tobacco Taxes |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount (millions) | $\begin{gathered} \% \\ \text { Change } \end{gathered}$ | Amount (millions) | Change | Amount (millions) | $\begin{gathered} \% \\ \text { Change } \end{gathered}$ | Amount (millions) | $\%$ <br> Change | $\begin{aligned} & \text { Amount } \\ & \text { (millions) } \end{aligned}$ | Change |
| 1947 | 0 | - | 41.1 | - | 64.4 | - | 6.4 | - | 20.8 | - |
| 1948 | 0 | - | 93.1 | 126.1\% | 71.6 | 11.1\% | 9.8 | 52.6\% | 22.6 | 8.5\% |
| 1949 | 0 | - | 96.3 | 3.4 | 76.4 | 6.6 | 10.8 | 10.5 | 23.5 | 3.8 |
| 1950 | 0 | - | 91.4 | -5.0 | 87.2 | 14.1 | 13.9 | 29.0 | 29.3 | 24.7 |
| 1951 | 0 | - | 87.6 | -4.0 | 95.6 | 9.6 | 15.7 | 13.0 | 33.2 | 13.4 |
| 1952 | 0 | - | 103.8 | 18.4 | 104.7 | 9.4 | 16.9 | 7.2 | 34.8 | 4.7 |
| 1953 | 0 | - | 111.1 | 7.0 | 109.8 | 4.8 | 17.5 | 3.8 | 35.4 | 1.6 |
| 1954 | 0 | - | 116.2 | 4.6 | 112.9 | 2.8 | 16.1 | -7.7 | 34.2 | -3.4 |
| 1955 | 0 | - | 127.9 | 10.0 | 121.0 | 7.1 | 20.3 | 25.5 | 34.6 | 1.1 |
| 1956 | 0 | - | 135.4 | 5.9 | 157.3 | 29.9 | 20.3 | 0.2 | 43.9 | 26.8 |
| 1957 | 0 | - | 145.4 | 7.3 | 164.0 | 4.6 | 20.1 | -1.2 | 45.2 | 3.0 |
| 1958 | 0 | - | 129.7 | -10.8 | 169.9 | 3.1 | 19.4 | -3.7 | 47.5 | 5.0 |
| 1959 | 0 | - | 134.5 | 3.7 | 178.7 | 5.1 | 20.4 | 5.3 | 51.3 | 7.9 |
| 1960 | 0 | - | 176.7 | 31.3 | 185.3 | 3.6 | 27.3 | 34.0 | 85.8 | 67.2 |
| 1961 | 0 | - | 180.2 | 1.9 | 189.0 | 2.0 | 25.3 | -7.4 | 91.9 | 7.0 |
| 1962 | 148.6 | - | 182.7 | 1.3 | 198.2 | 4.8 | 29.6 | 17.2 | 94.6 | 2.9 |
| 1963 | 180.4 | 21.4\% | 187.8 | 2.7 | 206.3 | 4.0 | 33.7 | 13.9 | 97.2 | 2.7 |
| 1964 | 204.7 | 13.4 | 193.0 | 2.8 | 218.3 | 5.8 | 41.5 | 23.0 | 97.4 | 0.2 |
| 1965 | 221.9 | 8.4 | 199.0 | 3.0 | 229.1 | 4.9 | 44.7 | 7.8 | 110.3 | 13.2 |
| 1966 | 240.8 | 8.4 | 207.2 | 4.0 | 25.0 | 5.5 | 49.3 | 9.9 | 130.8 | 18.6 |
| 1967 | 259.4 | 7.7 | 220.8 | 6.5 | 256.3 | 5.9 | 50.2 | 2.0 | 133.4 | 1.9 |
| 1968 | 279.6 | 7.7 | 239.9 | 8.6 | 272.7 | 6.4 | 57.2 | 13.6 | 135.8 | 1.8 |
| 1969 | 438.5 | 56.8 | 240.6 | 0.3 | 294.0 | 7.7 | 89.9 | 57.3 | 139.4 | 2.6 |
| 1970 | 550.0 | 25.4 | 268.9 | 11.7 | 312.3 | 6.2 | 96.6 | 7.5 | 186.3 | 33.6 |
| 1971 | 632.5 | 15.0 | 303.6 | 12.8 | 333.8 | 6.8 | 97.5 | 1.0 | 203.9 | 9.5 |
| 1972 | 824.0 | 30.2 | 307.3 | 1.2 | 355.7 | 6.5 | 167.1 | 71.2 | 232.2 | 13.9 |
| 1973 | 926.2 | 12.4 | 334.0 | 8.9 | 385.3 | 8.3 | 197.4 | 18.1 | 244.2 | 5.1 |
| 1974 | 1,126.2 | 21.6 | 518.2 | 54.7 | 389.9 | 1.1 | 197.8 | 0.2 | 248.4 | 1.7 |
| 1975 | 1,266.6 | 12.5 | 664.3 | 28.1 | 395.2 | 1.3 | 202.6 | 2.4 | 260.9 | 5.0 |
| 1976 | 1,478.3 | 16.7 | 795.9 | 19.8 | 427.2 | 8.1 | 270.5 | 33.5 | 279.2 | 7.0 |
| 1977 | 1,689.0 | 14.2 | 875.8 | 10.0 | 444.1 | 3.9 | 328.0 | 21.2 | 287.5 | 2.9 |
| 1978 | 2,023.7 | 19.8 | 955.0 | 9.0 | 477.6 | 7.5 | 401.0 | 22.2 | 299.8 | 4.2 |
| 1979 | 2,174.2 | 7.4 | 1,021.0 | 6.9 | 489.5 | 2.5 | 433.3 | 8.0 | 309.2 | 3.1 |
| 1980 | 2,521.3 | 15.9 | 1,519.9 | 48.8 | 480.7 | -1.8 | 437.8 | 1.0 | 321.7 | 4.0 |
| 1981 | 2,982.8 | 18.3 | 2,192.8 | 44.2 | 480.7 | 0.0 | 511.0 | 16.7 | 339.5 | 5.5 |
| 1982 | 3,461.0 | 16.0 | 2,373.8 | 8.2 | 496.4 | 3.2 | 575.3 | 12.5 | 346.0 | 1.9 |
| 1983 | 3,304.6 | -4.5 | 2,251.3 | -5.1 | 490.3 | -1.2 | 584.3 | 1.5 | 354.9 | 2.6 |
| 1984 | 3,794.7 | 14.8 | 2,215.6 | -1.5 | 531.7 | 8.4 | 717.5 | 22.8 | 340.2 | -4.1 |
| 1985 | 4,191.8 | 10.4 | 2,163.0 | -2.3 | 986.1 | 85.6 | 895.0 | 24.7 | 373.7 | 9.8 |
| 1986 | 4,329.8 | 3.2 | 1,547.9 | -28.4 | 1,011.4 | 2.5 | 866.0 | -3.2 | 378.7 | 1.3 |
| 1987 | 4,616.5 | 6.6 | 1,178.0 | -23.8 | 1,273.1 | 25.9 | 802.8 | -7.3 | 370.8 | -2.0 |
| Average Growth Rates: |  |  |  |  |  |  |  |  |  |  |
| Post-War | 947-51) | N/A |  | 20.8\% |  | 10.4\% |  | 25.3\% |  | 12.4\% |
| The Fifties | 1952-61) | N/A |  | 6.3 |  | 6.8 |  | 4.6 |  | 11.4 |
| The Sixtie | 1962-71) | 17.5 |  | 5.8 |  | 6 |  | 14.2 |  | 8.9 |
| The Boom | (972-81) | 15.4\% |  | 24.4 |  | 3.4 |  | 13.2 |  | 4.3 |
| The Eight | (1982-87) | 5.9 |  | -7.5 |  | 20.7 |  | 6.9 |  | 1.4 |
| 1947-87 |  | 14.7\% |  | 8.7\% |  | 7.7\% |  | 12.8\% |  | 7.5\% |

Source: State of Texas, Annual Financial Report, various years; Comptroller of Public Accounts.
sources for the entire 41-year period and divided among the five historical periods. The highest average growth rates have been registered by the sales tax
and by licenses and fees. The weakest growth among the sources shown was registered by the tobacco taxes. Most of the revenue sources achieved their
highest growth rates during the Boom and Post-War periods. The weakest growth has been in the Eighties, although overall growth was also slow in the Fifties.

| Franchise Tax |  | Federal Aid |  | Licenses and Fees |  | Other Revenues |  | Total Revenues |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount (millions) | \% Change | Amount (millions) | \% Change | Amount (millions) | \% <br> Change | Amount (millions) | $\%$ <br> Change | Amount (millions) | $\%$ <br> Change |
| 5.2 | - | 87.7 | - | 5.0 | - | \$143 3 | - | 374.2 | - |
| 6.1 | 15.9\% | 113.9 | 29.9\% | 5.1 | 2.6\% | 185.8 | 29.7\% | 508.2 | 35.8\% |
| 7.4 | 21.5 | 124.2 | 9.0 | 5.6 | 8.6 | 178.8 | -3.8 | 523.1 | 2.3 |
| 8.6 | 15.7 | 131.5 | 5.8 | 6.1 | 9.4 | 193.7 | 8.3 | 561.9 | 7.4 |
| 9.8 | 13.9 | 128.0 | -2.6 | 6.2 | 1.0 | 244.2 | 26.1 | 620.7 | 10.4 |
| 14.0 | 42.6 | 140.3 | 9.5 | 13.2 | 113.9 | 261.3 | 7.0 | 689.3 | 11.0 |
| 14.1 | 0.6 | 163.6 | 16.5 | 14.0 | 5.3 | 271.5 | 3.9 | 737.1 | 6.9 |
| 20.1 | 42.6 | 176.3 | 7.7 | 14.1 | 1.2 | 306.3 | 12.8 | 796.5 | 8.0 |
| 30.1 | 49.6 | 181.7 | 3.1 | 15.6 | 10.0 | 307.1 | 0.3 | 838.5 | 5.2 |
| 31.8 | 5.5 | 173.6 | -4.4 | 17.4 | 11.7 | 333.4 | 8.6 | 913.4 | 8.9 |
| 34.8 | 9.5 | 209.5 | 20.6 | 18.2 | 4.7 | 326.6 | -2.0 | 964.9 | 5.6 |
| 38.3 | 9.9 | 255.6 | 21.9 | 23.5 | 28.8 | 335.2 | 2.6 | 1,019.2 | 5.6 |
| 39.8 | 3.8 | 328.5 | 28.5 | 24.5 | 4.2 | 361.2 | 7.7 | 1,139.1 | 11.7 |
| 59.9 | 50.6 | 349.7 | 6.4 | 114.4 | 366.3 | 250.6 | -30.6 | 1,250.0 | 9.7 |
| 53.2 | -11.1 | 298.4 | -14.6 | 117.5 | 2.7 | 265.1 | 5.8 | 1,221.0 | -2.3 |
| 55.3 | 3.9 | 325.6 | 9.1 | 130.9 | 11.3 | 275.5 | 3.9 | 1,441.5 | 18.0 |
| 57.6 | 4.0 | 376.7 | 15.6 | 137.2 | 4.8 | 288.8 | 4.8 | 1,566.1 | 8.6 |
| 60.4 | 4.8 | 427.8 | 13.5 | 148.6 | 8.3 | 306.6 | 6.2 | 1,698.7 | 8.4 |
| 52.4 | -13.2 | 444.8 | 3.9 | 157.6 | 6.0 | 389.4 | 27.0 | 1,849.7 | 8.8 |
| 55.1 | 5.2 | 520.1 | 16.9 | 171.2 | 8.6 | 365.8 | -6.1 | 1,982.4 | 7.1 |
| 58.7 | 6.4 | 583.8 | 12.2 | 178.7 | 4.3 | 361.9 | -1.1 | 2,103.4 | 6.1 |
| 62.6 | 6.6 | 705.6 | 20.8 | 204.1 | 14.1 | 389.9 | 7.8 | 2,347.6 | 11.6 |
| 77.8 | 24.2 | 709.3 | 0.5 | 223.9 | 9.7 | 415.2 | 6.5 | 2,628.8 | 11.9 |
| 110.2 | 41.7 | 845.0 | 19.1 | 231.9 | 3.5 | 448.6 | 8.0 | 3,050.3 | 16.0 |
| 131.2 | 18.9 | 1,007.0 | 19.1 | 249.0 | 7.3 | 502.3 | 11.9 | 3,461.9 | 13.4 |
| 128.7 | -1.8 | 1,150.5 | 14.2 | 273.4 | 9.8 | 569.3 | 13.4 | 4,008.6 | 15.8 |
| 133.8 | 3.9 | 1,293.1 | 12.3 | 292.0 | 6.7 | 636.5 | 11.8 | 4,443.4 | 10.8 |
| 154.4 | 15.4 | 1,283.3 | -0.7 | 307.5 | 5.3 | 773.4 | 21.5 | 4,999.5 | 12.5 |
| 166.6 | 7.8 | 1,523.5 | 18.7 | 310.2 | 0.8 | 884.4 | 14.3 | 5,674.6 | 13.5 |
| 213.5 | 28.1 | 1,799.6 | 18.1 | 339.5 | 9.4 | 995.9 | 12.6 | 6,599.9 | 16.3 |
| 236.6 | 10.7 | 1,878.3 | 4.3 | 374.1 | 10.2 | 1,253.8 | 25.9 | 7,367.3 | 11.6 |
| 264.8 | 11.9 | 2,052.9 | 9.3 | 414.4 | 10.7 | 1,427.6 | 13.9 | 8,317.2 | 12.8 |
| 293.8 | 10.9 | 2,279.6 | 11.0 | 408.2 | -1.5 | 1,579.8 | 10.6 | 8,988.8 | 8.1 |
| 340.7 | 15.9 | 2,612.7 | 14.6 | 477.9 | 17.0 | 1,947.7 | 23.3 | 10,660.8 | 18.6 |
| 417.4 | 22.4 | 2,854.7 | 9.2 | 501.4 | 4.9 | 2,454.4 | 26.0 | 12,735.3 | 19.4 |
| 481.2 | 15.2 | 2,433.9 | -14.7 | 540.0 | 7.6 | 2,730.6 | 11.2 | 13,438.4 | 5.5 |
| 555.3 | 15.3 | 2,848.8 | 17.0 | 542.2 | 0.4 | 2,643.3 | -3.2 | 13,575.3 | 1.0 |
| 606.7 | 9.2 | 3,114.9 | 9.3 | 648.0 | 19.5 | 2,952.1 | 11.7 | 14,921.9 | 9.9 |
| 855.5 | 40.9 | 3,469.8 | 11.3 | 848.1 | 30.8 | 3,381.0 | 14.5 | 17,165.0 | 15.0 |
| 901.0 | 5.3 | 4,109.4 | 18.4 | 1,136.2 | 33.9 | 4,117.8 | 21.8 | 18,398.5 | 7.2 |
| 873.8 | -3.0 | 4,078.1 | -0.7 | 1,233.1 | 8.5 | 3,414.3 | -17.1 | 17,840.7 | -3.0 |
|  | 16.8\% |  | 9.9\% |  | 5.4\% |  | 14.3\% |  | 13.5\% |
|  | 16.0 |  | 8.8 |  | 27.4 |  | 1.6 |  | 6.6 |
|  | 10.1 |  | 13.4 |  | 7.4 |  | 6.9 |  | 10.2 |
|  | 14.0 |  | 10.6 |  | 7.0 |  | 17.6 |  | 13.7 |
|  | 12.7 |  | 10.9 |  | 18.0 |  | 2.5 |  | 5.8 |
|  | 13.6\% |  | 10.1\% |  | 14.7\% |  | 8.3\% |  | 10.1\% |

There are problems with these overall trends that are simil-ar-though not identical-to the problems associated with examination of state spending trends. To understand how the state revenue system has performed and to make meaningful judgements about how it may perform in the future, it is necessary to distinguish between growth in the tax system that is the result of the normal economic workings of the revenue system and growth that is a result of other factors. There are a number of these other factors, and they can distort the performance of the revenue system.

## Noneconomic Factors in <br> Revenue Growth

The most obvious factors outside normal economic conditions affecting revenue collections over time are legislative changes, primarily tax legislation or increases in other revenue sources such as fees or tuition. A good example of this can be seen by looking at overall revenue collections in 1962, which were up 18 percent over the previous year. This was not solely the result of strong economic growth or high inflation pushing up collections. In fact, the state was having serious trouble with its revenue system at that time, and the gain was largely the result of the major tax bill which was adopted in 1961 and which first introduced the sales tax. There were $\$ 148$ million in additional revenue added to the fiscal system in 1962 because of the new tax.

As might be expected, state legislation affecting the revenue system is most commonly designed to increase state income, either through tax rate increases (common), base expansions (less common) or the imposition of new taxes or fees (much less common). However, legislation
can affect the tax system in the other direction as well. In 1978, the state adopted a tax relief package that reduced the state inheritance tax and exempted residential gas and electricity sales from the sales tax base.

From time to time in recent years, the state has granted sales tax exemptions for such items as Sesquicentennial medallions, flight training simulators, ice for cooling shrimp and manufacturing equipment (starting in 1991).

Less obvious than actual revenue raising-measures are other factors influencing tax growth, such as changes in tax due dates and various changes in administrative and reporting requirements under various taxes. Collections may also be affected by the results of court decisions or audits in the case of particularly large taxpayers.

A major concern in the outlook for future tax growth, for example, is the franchise tax, not because of economic factors but because of uncertainty over how much of the tax's base might be lost through litigation. In 1985 and 1986, state inheritance tax collections were boosted dramatically by the settlement of the Howard Hughes estate, which produced an additional \$25 million for the state in each of those two years. Obviously, such events not only affect the overall revenue system but also produce significant distortions in the patterns of the individual revenues affected.

One way to deal with these distortions in the revenue pattern is to "normalize" the revenue stream to eliminate or at least smooth out the rough edges created by these noneconomic factors. This allows a clearer picture of how the overall system and its individual components perform in different economic circumstances.

For purposes of this chapter, all major revenue sources were adjusted to reflect the revenue system as it was in 1982. That is, collections adjusted so that the rates and bases in effect mirror those in effect in the common base year of 1982. Tax rate and base assumptions for 1982 compared with the current revenue system are shown in Table 9.

The 1982 base was selected because most government statistics currently use 1982 as the base of constant (inflation-adjusted) statistics. This base was used for the inflation adjustments discussed earlier in this report. The year 1982 also is a logical base because it is largely unaffected by the various upheavals in the revenue system-rate and base changes, due date speed-ups, administrative requirement and court cases-that have accompanied the state's recent fiscal problems.

Appendix B shows the detailed results of these adjustments for the overall revenue system, state tax collections, and for the sales tax. In reviewing these figures, it is important to recognize that the actual dollar values for the adjusted series are less important than the growth rates that they reflect. The rate and base normalized totals essentially represent the performance of the revenue system as it would have been without legislative or legal influences.

There is one caveat to this. No attempt has been made to push the sales tax back to 1947 , owing to a lack of data. Thus, the overall growth figures in the early 1960s are distorted to some degree by the imposition of the tax. In fact, the average rates of growth reported tend to be just under half a percent more than they might have been had the sales tax been part of the 40 -year series. Since the normalization process is not
an exact science anyway, this does not appear to pose a significant problem for the analysis.

## Underlying Performance of the Revenue System

Table 10 shows average annual growth rates for key elements of the state revenue system for the overall 1947-87 period and for each of the five historical periods used in this report. For comparative purposes, the table also shows the average growth rates in state personal income and state government spending during the periods.

A brief review of the table makes it clear that when base and rate changes are factored out, the
state revenue system has chronically underperformed growth in both personal income and spending-slightly in the case of income but much more substantially in the case of state spending. Over the past four decades, the underlying revenue base has grown at an average of 8.4 percent annually, compared with growth in actual (unadjusted) collections which averaged 10.1 percent. In contrast, state spending over the same period grew at an average rate of 10.6 percent annually, while personal income rose at an average rate of 8.6 percent.

State "own-source" revenue, essentially all revenue less federal aid, has grown at an average rate of eight percent. The critical
component of overall tax collections, which is the largest portion of the general revenue component of state revenues, has averaged only 7.4 percent annual growth, and it should be underscored that that figure includes the jump in collections caused by adoption of the sales $\operatorname{tax}$ in 1962. Had the sales tax been in effect the entire period so that the jump in collections after 1962 was smoothed out, overall tax growth would have been under seven percent annually and overall revenue growth would have been under eight percent. Although the sales tax has outperformed personal income, it has also underperformed the growth in expenditures, and its overall strength has not been

TABLE 9. Tax Rates for Selected Major State Taxes, 1982 and 1988

| Tax | Base Year Rates (1982) | Current Year Rates (1988) |
| :---: | :---: | :---: |
| Sales and Use Tax | 4.0\% | 6.0\% (broader base) |
| Oil Production Tax | 4.6 | 4.6 |
| Natural Gas Tax | 7.5 | 7.5 |
| Motor Fuels Taxes | Gasoline: 5 cents/gallon Diesel: 6.5 cents/gallon LPG: 5 cents/gallon | All fuels: 15 cents/gallon |
| Motor Vehicle Sales and Use Tax | 4.0\% | 6.0\% |
| Cigarette Tax | 18.5 cents/pack | 26 cents/pack |
| Corporation Franchise Tax | $\$ 4.25$ per $\$ 1,000$ of taxable capital | $\$ 6.70$ per $\$ 1,000$ of taxable capital (temporary to $8 / 31 / 89$ ) |
| Alcoholic Beverage Taxes | Beer: $\$ 5$ per barrel Liquor: $\$ 2$ per gallon Mixed Drinks: 10\% | Beer: $\$ 6$ per barrel Liquor: $\$ 2.40$ per gallon Mixed Drinks: 12\% |
| Insurance Tax $\quad$ Ta | based on gross premiums according to of assets invested in Texas. Rates vary. | Tax is based on gross premiums according to percentage of assets invested in Texas. Rates vary. $20 \%$ surcharge is applied. |
| Utility Taxes $\begin{gathered}\text { Pu } \\ \\ \text { Gas } \\ \text { Gas }\end{gathered}$ | Utilities: $1 / 6$ of $1 \%$ of gross receipts ater and Electric: varies with city size tility: $1 / 4$ of $1 \%$ of gross receipts | Public Utilities: $1 / 6$ of $1 \%$ of gross receipts Gas, Water and Electric: varies with city size Gas Utility: $1 / 4$ of $1 \%$ of gross receipts |
| Hotel-Motel Tax | $3 \%$ of consideration | 6\% of consideration |

[^17]Note: Does not include all state revenues.
sufficient to pull the overall revenue system up to a level where it can outperform either spending or income on any consistent basis.

The only one of the five historical periods where the revenue system actually outperformed both personal income and spending was during the Boom era, when growth was spurred by high sales and severance tax
collections. In part, this is attributable to the strong economic growth the state experienced during the period. However, it also is directly related to the effects of inflation in certain key tax bases-namely the oil and gas severance taxes. Consumer prices rose at an average rate of nine percent during this period, while the cost of government goods and services rose at an annual rate of 8.6 percent.

In contrast, oil prices rose at an average rate of over 28 percent annually during this period, and natural gas prices, though somewhat constrained by federal price controls, rose at a similarly rapid clip. In short, for one period in the years since World War II, a major part of the tax base rose at a rate faster than the inflation in the cost of governmental services for an extended period, and for that

TABLE 10. Average Annual Growth in Major State Revenue Categories, Selected Periods, 1947-87

| Period | Fiscal Years Covered | State Personal Income Growth ${ }^{+}$ | State Government Spending Growth | Total State Revenue |  | Own-Source Revenue* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Unadjusted (Actual) Growth ${ }^{2}$ | RateAdjusted Growth ${ }^{3}$ | Unadjusted (Actual) Growth | RateAdjusted Growth |
| The Post-War Period | 1947-51 | 8.2\% | 15.4\% | 13.5\% | 9.6\% | 14.5\% | 9.5\% |
| The Fifties | 1952-61 | 4.6 | 7.7 | 6.6 | 4.3 | 5.9 | 3.4 |
| The Sixties | 1962-71 | 8.9 | 11.4 | 10.2 | 7.8 | 9.2 | 6.2 |
| The Boom Years | 1972-81 | 14.4 | 13.0 | 13.7 | 13.8 | 14.8 | 14.8 |
| The Eighties | 1982-87 | 2.8 | 8.0 | 5.8 | 2.8 | 2.5 | 0.4 |
| 1947-87 | - | 8.6\% | 10.6\% | 10.1\% | 8.4\% | 10.2\% | 8.0\% |

Source: Select Committee on Tax Equity, calculated from State of Texas, Annual Financial Report, various years; Wharton Econometric Forecasting Associates.

1. Adjusted to reflect income growth based on state fiscal years.
2. Includes state income from all sources as reported in state annual reports for various years.
3. All rate-adjusted categories are adjusted to reflect state revenues "normalized" to tax rates in effect in 1982 and to remove the effects of various changes in the tax base, tax speed-ups and other changes which distort year-over-year growth patterns.
4. All state income excluding federal funding.

Note: To maintain consistency with revenue definitions from earlier years, tax collections includes some license fee income.

TABLE 11. Growth in Selected Rate-Adjusted State Revenue Sources Versus Personal Income and State Spending Growth, 1947-87

| Period | Years Covered | Total Years in Period | Number of Years Source Grew Faster than State Income |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sales Tax | Federal Funds | $\underset{\text { Taxes }}{\text { All }}$ | OwnSource Revenue | Total State Revenues |
| The Post-War Period | 1947-51 | 5 | N.A. | 1 | 1 | 1 | 1 |
| The Fifties | 1952-61 | 10 | N.A. | 6 | 3 | 3 | 4 |
| The Sixties | 1962-71 | 10 | 3 | 8 | 1 | 2 | 4 |
| The Boom | 1972-81 | 10 | 6 | 3 | 3 | 4 | 5 |
| The Eighties | 1982-87 | 6 | 2 | 4 | 0 | 0 | 2 |
| Overall | 1947-87 | 41 | 11 | 22 | 8 | 10 | 16 |

Source: Select Committee on Tax Equity, based on data from State of Texas, Annual Financial Report, various years.

1. Reflects actual growth in all state spending from state accounting funds 1-899.

Note: All revenue sources have been "normalized" to reflect the rates and base components in effect in the base year of 1982. That is, the growth rates do not reflect growth caused by rate increases, administrative or legislative changes in tax bases or similar factors.
one period, overall revenue growth was actually faster than the growth in state spending. In fact, if the effects of the rapid growth in the oil and gas taxes are removed from the revenue base, growth in the base during the Boom, as in the other periods, would have been below both state spending growth and state personal income growth.

Before the Boom, problems with revenue system performance were
particularly acute in the 1950 s, when the revenue system grew at a rate only slightly below state economic growth, but own-source revenues grew at less than half the rate of state spending. Much of the thrust underlying revenue growth in this period came from federal aid, which grew at an average of 8.8 percent.

The advent of the sales tax in the Sixties improved the performance

| State Tax Growth |  |  | Sales Tax Growth |  |
| :---: | :---: | :---: | :---: | :---: |
| Unadjusted <br> (Actual) | Rate- <br> Adjusted <br> Growth |  | Unadjusted <br> (Actual) <br> Growth | Rate- <br> Adjusted <br> Growth |
| $15.2 \%$ | $9.1 \%$ | N.A. | N.A. |  |
| 6.3 | 3.1 | N.A. | N.A. |  |
| 9.6 | 6.0 | $17.5 \%$ | $9.8 \%$ |  |
| 14.2 | 14.2 | 15.4 | 16.0 |  |
| 3.5 | -1.4 | 5.9 | $1 . \overline{7}$ |  |
|  |  |  | $14.7 \%$ | $\mathbf{1 0 . 4 \%}$ |
| $\mathbf{1 0 . 2 \%}$ |  |  |  |  |


| Number of Years Source Grew Faster Than State Spending ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sales <br> Tax | Federal <br> Funds | All <br> Taxes | Own-Source <br> Revenue | Total <br> Revenues |
| N.A. | 1 | 1 | 1 | 1 |
| N.A. | 7 | 2 | 2 | 3 |
| 3 | 9 | 2 | 2 | 2 |
| 7 | 4 | 5 | 5 | 6 |
| 3 | 3 | 2 | 2 | 1 |
| 13 | 24 | 12 | 12 | 13 |

Given the apparent and significant gap between what the revenue system will produce in the way of revenues based on economic factors alone and the actual trend in state spending, it is not surprising that the state's fiscal history during the last 40 years-and really long before that-has been checkered with tax and other revenue legislation. As spending and revenue grow on diverging paths-spending higher,
revenue lower-the Legislature has periodically had to infuse new income into the system to bring the revenue level up to spending demand; however, since they are trending along different paths, they soon diverge again, and another tax bill becomes inevitable.

Over the past 40 years, the Legislature has enacted nine major revenue bills to increase collections and one to decrease them. Their distribution among

FIGURE 5. Growth Patterns in State Spending Versus Rate-Adjusted State Revenue, 1947-87


Source: Select Committee on Tax Equity.
the five historical periods is shown in Table 12. On average, the state has adopted a new revenue bill increasing revenues just over once every four years-or about every other legislative session. This average is improved somewhat by the Boom period when no major revenue increases were adopted. Without the 1970s, the state has averaged one major revenue bill about every three years since 1947 .
Based on the number of revenue bills adopted, the Fifties and the Eighties have been the most problematic, as revenue bills were passed on average during every legislative session. However, the other periods-with the exception of the Boom years-were not significantly better. In the Sixties, four revenue bills were adopted. Two increases were also adopted at the end of the prosperous PostWar period, largely because of oil production tax problems.

## Stability and Growth in the Revenue System

Most of the discussion of the revenue system thus far has dealt with its growth characteristics, but tax experts generally recognize

TABLE 12. Performance of State Revenues Versus Spending and Major State Revenue Measures, 1947-87

|  | Fiscal <br> Period | Average Growth <br> in Spending | Average Revenue Growth <br> Years Covered | Actual <br> Collections | Rate-Adjusted <br> Collections |
| :--- | :---: | :---: | :---: | :---: | :---: |

[^18]that the performance of a revenue system has two components: growth and stability.

Growth is a longer-term consideration. In general, government finance experts evaluate the growth of a revenue system in terms of how it performs relative to some growth target, such as the performance of the state economy or state spending growth. Does it grow apace with the economy or with spending needs or does it, like the Texas system, require periodic infusions of new income sources?

Stability, on the other hand, is a more short-term consideration. Revenues need to be as insulated as possible from the most extreme fluctuations of the economic cycle to prevent revenue unanticipated shortfalls. ${ }^{7}$ The more stable a revenue system is the more predictable it is. A stable tax system may or may not grow at a rate that keeps up with the desired growth in spending, but it at least does not fluctuate erratically.

The goals of growth and stability are frequently at odds. Often, the more stable taxes are the slowest growing, and faster growth must often be traded off against less stability. Within the context of the spending demands that it seeks to meet, government must find an appropriate tradeoff between these two concepts.

Historically, state tax systems, including Texas', have not achieved this trade-off very well. Research in the 1960s and mid1970s, for example, found that state tax systems in the 1960s tended to be relatively stable but did not grow well over time, largely because of their heavy reliance on quantity-based taxes like the motor fuel taxes and various selective excise taxes, like the alcoholic beverage and tobacco taxes. ${ }^{8}$ The natural result was a frequent need for rate
increases and new taxes. One reason states have come to rely more heavily on sales and income taxes recently is their desire to make their revenue systems more responsive to economic growth.

It is clear from the foregoing that the Texas revenue system has not performed well enough in terms of growth to avoid periodic tax increases. On the other hand, a frequent criticism of the revenue system is that it is unstable, largely because of the influence of severance taxes. To get some clearer idea of the actual stability and growth characteristics of the revenue system over time, Table 13 gauges the performance of various major components relative to set criteria for what constitutes various levels of stability and growth.

Stability. In the case of stability, a revenue is judged to exhibit relatively high stability if it grows within two percentage points of its long-term growth trend (adjusted to remove rate and base changes) in a majority of years. (See Table 13.) Its growth pattern can be predicted relatively closely by reference to its long-term growth trend. Its stability characteristics fall into the middle tier if it grows within two percent of its long-term trend a quarter to half the time. It has relatively low stability characteristics if it grows within two percent of its longterm trend in less than a quarter of the years examined in the analysis.

It should be noted that these criteria are largely arbitrary distinctions. Whether a revenue is stable or not is, to some degree, a matter of individual perception. The sales tax, for example, rates as a fairly stable tax under these criteria, but that distinction would have been lost on state analysts trying to predict the tax's performance in late 1982 and early 1983, when it deviated sharply
from its long-term trend for several quarters.

Based on these criteria, the state motor fuel and tobacco taxes exhibit high stability. The alcoholic beverage taxes had high overall stability characteristics before the mixed drinks tax was adopted. The sales tax rated medium stability. Were it simply based on consumer purchases, it probably would be more stable since personal consumption spending tends to be fairly consistent over time; however, the tax has a large and fairly volatile capital component which reduces its overall stability significantly.

Other key state revenues sources-the oil production tax, the natural gas tax, the motor vehicle sales tax, the franchise tax and federal aid-all proved to have low stability under the evaluation criteria.

One important factor to note here is that the more stable a revenue source tends to be, the lower its average growth rate tends to be as well, although this is not always the case. Over 40 years, the state oil production tax has grown at an average rate of only 5.5 percent, even including the strong growth trends in the 1970s.

However, its growth pattern has been highly erratic, and its growth fell into the zone around this longterm growth trend in only 15 percent of the years. The tax's growth rate has rocketed to the high double-digit level, but it has also fallen at double-digit rates.
7. See, for example, Harold Groves and Harry Kahn, "The Stability of State and Local Tax Yields," American Economic Review 42 (March 1952), pp. 87-102.
8. See, for example, Walton T. Wilford, "On the Sensitivity of State Revenues to Gross State Product: Louisiana's Rev-enue-Income Elasticity Coefficients," Review of Business and Economic Research 11 (Fall 1975), p. 3.

Because of the rise in the value of natural gas as a fuel in the past 40 years, the natural gas tax has shown a stronger average growth rate than the oil tax, but it has proved no more stable.

Another curiosity shown in the table is the relatively low stability of the franchise tax. Until its recent legal problems, the tax was generally considered to be a fairly reliable tax, but its growth rates over time have fluctuated widely, and while its growth path has generally been positive, its precise growth pattern has not been particularly predictable from year to year.

Even in its earlier days, a portion of this instability was probably explained by legal challenges to various parts of the tax. In theory, the economic base of the tax-capital assets-should be relatively stable, but the legal base
of the tax clearly is not.
The federal funds category has displayed similarly unstable tendencies. Although the state receives large amounts of federal aid every year, the actual level of year-to-year receipts can be affected significantly by such factors as the rate at which the state applies for reimbursement under various grant programs and the vagaries of federal budget policy.

Looking at the tax system as a whole, its performance falls in the middle range in terms of stability. Just under a third of the time, overall tax collections were within two percent of the 7.4 percent long-term trend. State ownsource revenues-which combine not only taxes but also land income, interest and fees-were actually less stable than the tax system, falling on the border
between low and medium stability.

This appears largely to be a result of state land income fluctuations, which can be fairly dramatic and which in recent years have been linked to oil and gas prices, as well as the fluctuating nature and timing of state lease sales.

Finally, the table shows that the overall state revenue system rates in the middle range in terms of stability. In just under a third of the years, the system performed within two percent of the longterm trend. This result is highly affected by the performance of the sales tax and federal aid receipts.

Growth. Table 13 also shows an evaluation criteria for the growth performance of the revenue system. In this case, a highgrowth revenue source is one where the average growth is

TABLE 13. Stability and Growth in the State Revenue System, 1947-87

| Selected Revenue$\qquad$ Sources | Rate-Adjusted Average Growth 1947-87 ${ }^{1}$ | Percent of Years Within $2 \%$ of Average | Relation to Personal Income Growth (Avg. $=8.6 \%$ ) | Relation to Consumer Inflation (Avg. $=4.2 \%$ ) | Ratings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Stability ${ }^{2}$ | Growth ${ }^{2}$ |
| Sales Tax | 10.4\% | 32.0\% | Above | Above | Medium | High |
| Oil Production Tax | 5.5 | 15.0 | Below | Above | Low | Medium |
| Natural Gas Tax | 11.8 | 12.5 | Above | Above | Low | High |
| Motor Fuels Taxes | 4.8 | 52.5 | Below | Above | High | Medium |
| Tobacco Taxes | 2.3 | 55.0 | Below | Below | High | Low |
| Motor Vehicle Sales Tax | 8.2 | 12.5 | Below | Above | Low | Medium |
| Franchise Tax | 9.2 | 15.0 | Above | Above | Low | High |
| Alcoholic Beverage Taxes |  |  |  |  |  |  |
| Pre-Mixed Drinks Tax ${ }^{3}$ | 2.0 | 33.3 | Below | Below | High | Low |
| Post Mixed Drinks Tax ${ }^{3}$ | 7.6 | 13.3 | Below | Above | Low | Medium |
| All Taxes | 7.4 | 30.0 | Below | Above | Medium | Medium |
| Federal Funds | 10.1 | 17.5 | Above | Above | Low | High |
| Own-Source Revenues ${ }^{4}$ | 8.0 | 25.0 | Below | Above | Low ${ }^{5}$ | Medium |
| Total Revenues | 8.4\% | 32.5\% | Below | Above | Medium | Medium |

Source: Select Committee on Tax Equity, based on state fiscal data for various years.

1. Adjusted to eliminate effects of tax rate and base changes. Sales tax is based on $1962-87$ period only.
2. Standards for stability and growth measures are as follows:

Stability: High-growth in half or more of years is within $2 \%$ of overall average growth rate; Medium-growth between $25-50 \%$ of years within $2 \%$ of overall average growth rate; Low-growth rate in $25 \%$ or less of years is within $2 \%$ of overall average growth rate.
Growth: High-average growth exceeds average growth in state personal income (8.4\%); Medium-average growth is equal to or less than state personal income growth but equal to or above growth in consumer prices ( $4.2 \%$ ); Low-growth is below growth in consumer prices.
3. Inflation prior to enactment of the mixed drinks tax averaged $2.5 \%$; after enactment, the average was just under seven percent.
4. State revenues excluding federal aid.
5. Borderline between low ( 25 percent or less) and medium.

Note: This analysis includes all revenue sources in overall totals.
above the rate of state personal income growth. A mediumgrowth source has an average growth rate between the rate of inflation and personal income growth, while a low-growth source grows more slowly than inflation and therefore loses real value over time.

As the table shows, the sales, natural gas and franchise taxes and federal funds have consistently performed at a high level, while growth in the tobacco taxes has been low.

The alcoholic beverage taxes were low performers until the mixed drinks tax was enacted. Since it is based on price, the mixed drinks levy has tended to grow at or above the rate of inflation. Finally, the oil, fuels and motor vehicle sales taxes have generally performed in the middle range in terms of growth.

It is worth noting that the recent trends in some of these sources do not necessarily reflect these longer-term results. For example, the oil tax has clearly severely underperformed both the rate of personal income and its own long-term trend, as has the natural gas tax.

Similarly, concerns about the effects of drinking and health would also push the performance of the alcoholic beverage taxes into the low-growth rating if only the most recent trends were considered.

In terms of overall tax growth, the system falls into the middle category, falling below the rate of personal income growth but above the general inflation rate. The same is also true of ownsource revenues, which actually have a better growth performance than taxes alone, although they are more unstable.

Finally, overall state revenues have grown in the medium range, slightly underperforming the overall rate of growth in personal
income over the 41- year period.

## Lessons from History

Taken as a whole, the revenue and spending trends examined in this report lead to several basic conclusions about the long-term nature of the state fiscal system in Texas.

First, on the spending side, there appears to be an underlying dynamic that has pushed state spending upward, more often than not at rates higher than the growth in state personal income (in this case, a proxy for general state economic growth). Over the past four decades, this is partly explained by the nature of a changing Texas and the changing needs of its citizens.

In the Post-War period, the state was adjusting to very different circumstances than were found in the relative privations of the war years and the Depression before that. The 1940s, 1950s and 1960s span a period when the state was becoming much more urban and economically more in tune with the rest of the nation. Particularly in the 1960 s, state government invested in building the tools of a modern industrial state-investing in education, building the state's infrastructure and developing an improved set of social services to take care of its neediest citizens.

In the Boom years, despite the rapid increases in spending that undeniably occurred, the state mainly was able to hold its own. Although we generally believe that Texas benefitted from the run-up in energy prices in this period, it appears that in reality whatever benefits the state derived from higher severance taxes were largely dissipated in increased costs of government goods and services. Based on gains in inflation-adjusted dollars, it is difficult to see the 1970s as making any significant gains over the 1960s, and it is difficult to see
the state's spending efforts in the 1980s as markedly lower than the 1970s, even though financing spending in the current decade unquestionably has been more difficult than during the Boom years.

Despite these differences, the figures indicate only a limited slowing in the tendency of spending to outstrip overall state economic growth. In its analysis of longer-term future spending needs prepared for the Select Committee on Tax Equity, the staff of the Legislative Budget Board made the assumption that "spending will continue to track growth in personal income [as it generally has recently]." ${ }^{\prime 9}$ Whatever may be said for or against state spending policies, that is a reasonable, if not conservative, assumption based on the evidence of the past 41 years.

Second, a key to determining the direction of state spending will be education. Chart the future of the state's commitment in this spending area and, in all likelihood, you will project the direction of the state's overall finances as well. State spending on education has shown one of the most consistent growth patterns over the past four decades, and each decade seems to bring additional special efforts that push up the level of spending. Obviously, the Eighties have already seen one of these special efforts, House Bill 72 in 1984, and it could easily see another, depending on the outcome of the Edgewood v. Kirby school finance case.

Also on the spending side, it is important to note that whatever Texans may think of the services
9. Legislative Budget Board, Projections of Long-Term Spending Requirements, report to the Select Committee on Tax Equity, December 17, 1987, p. 2.
that their state government provides-and there obviously is wide room for debate on different perceptions about quantity and quality-the State of Texas has not been a particularly big spender over the past 41 years in comparison with other states. It is difficult to find any period in recent history when the state's spending has ranked particularly high nationally. For the most part, Texas state government spending traditionally has ranked near the bottom among the states in most areas.
In the one area where public policy in this state has arguably been the most generous and the most focused-education-Texas has done no better than reaching the middle ranks of the overall trend. One result of this, of course, has been a greater level of spending locally than is found in many other states.

Despite this conservative bent at the state level, finding the revenue to keep pace with spending growth has been a continuing problem for the state. The evidence amassed by examining the last four decades of state revenue performance suggests several major points complementary to the observations about historical state spending trends.

The most important of these is that the revenue system has chronically underperformed both the growth in the overall economy and in state spending. This has led to additional tax legislation on an average of once every four years since 1947. The exception to this trend can be found in the 1970s, when the revenue system was able to consistently outperform the demands placed on it. However, that appears to largely have been a result of the extraordinarily high inflation in energy prices in the period.
Without the impact of the severance taxes, growth in the overall revenue system would
have fallen below both the rates for both state spending and personal income. In effect, the severance taxes were the difference between more than a decade without tax increases and a decade of fiscal struggle like those that have come before and after the Boom. Unfortunately for Texas, commodity prices proved to be a poor foundation on which to erect its fiscal structure.
During the years it has been in effect, the sales tax has generally performed well. It is a relatively

> Whatever Texans may think of the services that their state government provides-and there obviously is wide room for debate on different perceptions about quantity and quality-the State of Texas has not been a particularly big spender over the past 41 years in comparison with other states.

high-growth tax that, because of its broad base, has also been relatively stable over the long term. However, even as it has come to account for a growing share of total revenues, it is just as evident that it will never be large enough to pull the overall revenue system up to its level of economic responsiveness and stability. Moreover, other revenue sources, like the oil and gas taxes and the franchise tax, will continue to inject a fair amount of instability -and therefore uncertainty-in revenue collection patterns.
This historically has been a result of economic factors, but in
recent years, it has also come to be related to the increased litigation involving the franchise tax, the insurance tax and other sources. As long as the state is continuously in court arguing the validity of major portions of its tax base, the system will continue to have a significant degree of underlying potential for instability.

The evidence presented here shows that Texas today has a moderately stable revenue system that grows at modest rates. Its main problems are that those modest rates do not consistently generate enough money to finance the normal spending demands of the state, and that the otherwise moderately stable body of the revenue system is prone to random periods of high instabili-ty-whether caused by the volatile nature of commodity prices or the success of tax litigation.

As the state looks ahead to what should be done to the revenue system, there appear to be three basic directions from which it must either choose or among which it must find a workable compromise.
First, it can choose to contain spending at a rate closer to personal income growth than to the long-run trend in state spending growth. This would give the existing revenue system a chance to keep pace.
The obvious question is what benchmark is appropriate to accomplish this goal? This is a difficult question to answer precisely and would amount to the worst kind of public policy if it were translated into some sort of budgetary-decision rule. Clearly, though, the level would have to be below the rate of personal income growth-the level identified by the Legislative Budget Board staff as a likely trend.
For example, if spending had been held at an annual rate one percent less than personal income
growth, the current revenue system would have been adequate to meet the spending needs without rate or base increases in about half of the last 40 years. If spending were held to two percent below the rate of income growth, the revenue system would have matched or bettered spending growth in two-thirds of the years.
Second, the state can restructure the revenue system to make it more responsive to economic changes. To a degree, this has already been done by expanding the sales tax base to many services, but it will have to be accomplished on a broader front if the normal rate of spending growth is to be pushed up significantly. Unfortunately, any move in this direction is likely to have to tradeoff against some level of stability in the system. Even with such adjustments, there may still be periodic mismatches in the fiscal system whenever new services are added or in times of economic problems.

Third, the state can continue as it has for the past four decades, facing the need for new revenue legislation every three to four years to bring revenues up to the level of spending demand.

One thing is clear: whatever choice-or compromise among choices-the state makes will not come easily. State policy making in this area will continue to be shaded by the longstanding split between the desire to control the growth of government and the desire to invest in the state's basic public services-education, transportation, assistance for the needy-as a means of developing and improving the state. This conflict has been present in every legislative session in recent memory, regardless of the condition of the state treasury. It unquestionably will be at the heart of deliberations in future legislative sessions as well.

At its best, this conflict creates a dynamic tension that forces the state's leaders to balance-with greater or lesser success-the diverse demands of the state's citizens. At its worst, it can paralyze decision making. As a result, bad decisions already made may be perpetuated as an alternative to the uncertainties of change.

> Given the history of state finances, is it reasonable to ask if the state can expect similar trends to lie ahead? With full recognition of the dangers of making predictions about anything as complex as a state economy or a government's finances, it is difficult to escape any answer other than yes, the future may very well reflect many of the same trends as the past.

The overriding need to balance these ends-and the hope that Texans can successfully find such a balance-was summed up by former Governor Allan Shivers in 1960. He said government spending in areas like education was not only appropriate but lies at the heart of the state's continued prosperity. But he went a step further: "In stating that governmental costs will inevitably rise, that government will do more and more for people, and that people will expect more and more of government, we do not abandon utterly the dream of individual reliance and enterprise. Even in
the midst of governmental 'togetherness,' we see a recognition .
.. that Jefferson may have been right when he warned against government attempting more good than the people can bear. ${ }^{10}$

## Is the Past Prologue?

With an understanding of the recent history of Texas state finances, it is reasonable to ask if the State of Texas can expect similar trends to lie ahead. With full recognition of the dangers of making predictions about anything as complex as a state economy or a government's finances, it is difficult to escape any answer other than yes, the future may very well reflect many of the same trends as the past.
Many of the forces that have shaped state finances in the past four decades can be expected to continue to play a role in the future. That is, demands on government will continue to outstrip the resources easily available to meet them, and the state will continue to face periodic fiscal problems of varying degrees of severity. It is true that some factors which have driven the trends in the past will fade, but they are likely to be replaced by others.

Most analysts believe, for example, that there will be an easing in the growth in educational demands as the Baby Boom generation and its children move through-and out of-the public and higher education systems. However, that trend is likely to be balanced by the new needs of an aging and increasingly diverse population. The eventual completion of the state highway system will give way
10. Allan Shivers, "The Wealth of Texas and How It Is Used," text of a speech delivered in Austin, Texas, 1960, pp. 2829.
to the less visible, but equally consuming, task of maintaining the system. The evolution of the state economy toward a service and high technology base will inevitably generate pressure for the state to provide new avenues of training and retraining as a means of maintaining a work force attractive to economic growth.
The timing of these changes is elusive and will depend, in large measure, on the course of the
state economy. To get at least one view of what that course may be, Table 14 summarizes a set of projections for the state and national economies over the next decade. The forecast was prepared by the national forecasting firm of Wharton Econometric Forecasting Associates and was released in March 1988. As with most such long-term projections, it is useful in providing some idea of what the relative magnitude of change in
the state may be over the next decade, but it also has the weakness of not being able to capture in any meaningful way the economic turbulence that inevitably is part of an economy's actual performance.
Under this set of projections, the state is expected to experience steady, but largely unspectacular, growth over the next decade.
Personal income will grow on the order of seven to eight percent a year, above the rate of inflation

TABLE 14. Long-Term Economic Forecast for the State of Texas, 1988-97

|  | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Texas Assumptions |  |  |  |  |  |  |
| Personal Income (Billions \$) | 243.0 | 258.4 | 276.5 | 294.5 | 315.7 | 339.5 |
| \% Change | 5.2 | 6.3 | 7.0 | 6.5 | 7.2 | 7.5 |
| Real Income (Billions 82\$) | 196.1 | 199.3 | 204.4 | 207.4 | 212.8 | 219.5 |
| \% Change | 0.9 | 1.6 | 2.6 | 1.5 | 2.6 | 3.1 |
| Per Capita Income (\$) | 14,104 | 14,763 | 15,569 | 16,349 | 17,261 | 18,275 |
| \% Change | 1.0 | 4.7 | 5.5 | 5.0 | 5.6 | 5.9 |
| State Population (Thousands) | 17,229 | 17,503 | 17,760 | 18,013 | 18,290 | 18,577 |
| \% Change | 1.6 | 1.6 | 1.5 | 1.4 | 1.5 | 1.6 |
| "School-Aged" Population (5-24) | 5,456.1 | 5,493.6 | 5,537.7 | 5,598.5 | 5,674.8 | 5,763.2 |
| \% Change | 0.7 | 0.7 | 0.8 | 1.1 | 1.4 | 1.6 |
| "Older" Population (65 and Over) | 1,652.1 | 1,684.4 | 1,714.5 | 1,745.9 | 1,776.7 | 1,807.2 |
| \% Change | 2.1 | 2.0 | 1.8 | 1.8 | 1.8 | 1.7 |
| Nonfarm Employment (Thousands) | 6,570.9 | 6,674.9 | 6,807.8 | 6,921.9 | 7,087.4 | 7,279.1 |
| \% Change | 1.0 | 1.6 | 2.0 | 1.7 | 2.4 | 2.7 |
| Manufacturing Employment | 988.9 | 1,011.7 | 1,031.5 | 1,048.1 | 1,064.7 | 1,077.1 |
| \% Change | 3.1 | 2.3 | 2.0 | 1.6 | 1.6 | 1.2 |
| Unemployment Rate | 8.4\% | 8.4\% | 8.6\% | 8.5\% | 7.9\% | 7.4\% |
| Retail Sales (Billion \$) | 115.3 | 123.0 | 131.1 | 140.1 | 150.0 | 161.7 |
| \% Change | 6.1 | 6.7 | 6.6 | 6.9 | 7.1 | 7.8 |
| New Car Registrations (Thousands) | 551.3 | 545.2 | 552.6 | 567.1 | 604.5 | 642.8 |
| \% Change | 3.2 | -1.1 | 1.4 | 2.6 | 6.6 | 6.3 |
| Housing Starts (Thousands) | 45.9 | 45.3 | 68.8 | 84.1 | 89.3 | 99.9 |
| \% Change | -20.59 | -1.3 | 51.9 | 22.2 | 6.2 | 11.9 |
| National Assumptions |  |  |  |  |  |  |
| Gross National Product (Billions 82\$) | 3,913.9 | 4,007.6 | 4,078.7 | 4,207.2 | 4,323.0 | 4,448.5 |
| \% Change | 2.5 | 2.4 | 1.8 | 3.2 | 2.8 | 4,4.9 |
| U.S. Unemployment Rate | 6.0\% | 6.1\% | 6.5\% | 6.0\% | 5.6\% | 5.2\% |
| Consumer Prices (\% Change) | 4.0 | 4.8 | 4.1 | 3.8 | 4.3 | 4.4 |
| Bank Prime Rate (\%) | 8.77 | 10.23 | 9.26 | 8.88 | 8.86 | 9.55 |
| Growth in Real Non-Defense 9.5 |  |  |  |  |  |  |
| Federal Spending (\%) | 4.9 | 3.0 | 1.4 | 7.0 | 9.0 | 1.0 |
| Oil Price (\$/Barrel) | 14.84 | 15.98 | 16.08 | 17.27 | 18.26 | 19.88 |
| \% Change | -6.8 | 7.7 | 0.1 | 7.4 | 5.8 | 8.9 |
| Natural Gas Price (\$/MCF) | 1.85 | 1.96 | 2.08 | 2.29 | 2.57 | 2.78 |
| \% Change | 3.3 | 5.9 | 6.1 | 10.1 | 12.2 | 8.3 |

Source: Wharton Econometric Forecasting Associates, Regional Forecast-Long-Term Tables (Spring 1988); and U.S. LongTerm Forecast, Annual Model (March 1988).
but well below the levels achieved during the Boom. State population growth is projected to average 1.6 percent a year, below the two percent rate that is the state's long-term historical trend. The state will see fairly steady growth in jobs, but significantly, the state's unemployment rate is expected to remain above the national rate throughout the decade. Oil and natural gas prices are expected to grow only moderately in the next few years but are
projected to climb more rapidly beginning in the mid-1990s. Looking at this forecast, it is striking how similar the projected conditions are to those experienced by Texas in the 1950s and 1960s. Those also were times of slower, more steady state growth at a time of similarly steady growth nationally.

Based on the long-term historical performance trends examined in this report and this set of economic assumptions, it is

| 1994 | 1995 | 1996 | 1997 | Average Annual Growth 1988-97 |
| :---: | :---: | :---: | :---: | :---: |
| 366.4 | 395.8 | 428.2 | 463.1 |  |
| 7.9 | 8.0 | 8.2 | 8.2 | 7.4\% |
| 226.1 | 233.6 | 241.2 | 249.3 |  |
| 3.0 | 3.3 | 3.3 | 3.4 | 2.7 |
| 19,418 | 20,633 | 21,942 | 23,311 |  |
| 6.3 | 6.3 | 6.3 | 6.2 | 6.3 |
| 18,869 | 19,183 | 19,515 | 19,866 |  |
| 1.6 | 1.7 | 1.7 | 1.8 | 1.6 |
| 5,853.3 | 5,950.1 | 6,051.8 | 6,158.9 |  |
| 1.6 | 1.7 | 1.7 | 1.8 | 1.4 |
| 1,837.5 | 1,869.9 | 1,904.4 | 1,941.5 |  |
| 1.7 | 1.8 | 1.8 | 1.9 | 1.8 |
| 7,464.4 | 7,662.4 | 7,853.2 | 8,045.7 |  |
| 2.5 | 2.7 | 2.5 | 2.5 | 2.3 |
| 1,091.2 | 1,103.3 | 1,113.1 | 1,122.1 |  |
| 1.3 | 1.1 | 0.9 | 0.8 | 1.0 |
| 6.9\% | 6.5\% | 6.1\% | 5.7\% | - |
| 174.5 | 188.8 | 204.1 | 220.9 |  |
| 7.9 | 8.2 | 8.1 | 8.2 | 7.5 |
| 666.2 | 696.7 | 728.2 | 764.9 |  |
| 3.6 | 4.6 | 4.5 | 5.0 | 3.7 |
| 109.3 | 118.5 | 127.7 | 137.0 |  |
| 9.4 | 8.4 | 7.8 | 7.3 | 12.9 |
| 4,563.1 | 4,714.9 | 4,846.5 | 4,965.0 |  |
| 2.6 | 3.3 | 2.8 | 2.4 | 2.7 |
| 5.0\% | 4.9\% | 4.8\% | 4.9\% | - |
| 4.5 | 4.8 | 4.7 | 5.3 | 4.5 |
| 9.92 | 10.38 | 10.76 | 11.34 | - |
| 1.2 | 1.1 | 1.2 | 1.2 | 1.3 |
| 22.14 | 24.50 | 27.28 | 30.01 |  |
| 11.3 | 10.7 | 11.3 | 10.0 | 8.1 |
| 3.06 | 3.52 | 3.92 | 4.21 |  |
| 10.2 | 14.7 | 11.4 | 7.4 | 9.6 |

difficult to see how the state revenue system can be expected to grow at a rate much above five to seven percent annually-that is, at a rate just below the forecast for state personal income growth.
Of course, actual growth from year to year will be different and more complex than this sort of smooth relationship, but as a longterm trend, a five to seven percent annual range for overall state revenues appears reasonable based on the data in the forecast table.

An important caution needs to be raised here, though. Great care should be exercised in making and using long-term projections of this type. It is impossible to foresee events-from court cases to wars-which can radically alter what appears to be reliable long-term economic and financial trends, and the literature of economics and public finance is littered with examples of projections, thoughtfully made, that appear at best ill-considered in retrospect.
A classic example of this problem at the national level can be found in a 1959 study of longterm governmental spending requirements commissioned by the Committee for Economic Development. ${ }^{11}$ In two separate studies, federal, state and local expenditure trends over the next decade (to 1968) were projected using the major assumption that " $[t]$ he political attitudes toward expenditures will not undergo a revolution."
Of course, a revolution was exactly what occurred in both the social area and in the totally unforeseen scope of the Vietnam build-up. The projections

[^19]prepared for the group predicted federal spending in a range from about $\$ 120$ billion to $\$ 140$ billion by 1969 and state and local spending at about $\$ 55$ billion. This implies a combined total of $\$ 175$ billion to $\$ 190$ billion. In fact, the federal budget alone was $\$ 166.4$ billion, while state and local spending reached a total of $\$ 116.2$ billion, for a combined total of $\$ 282.6$ billion. ${ }^{12}$ This means that the 1959 projections were underestimated by 50 to 70 percent.
The state's finances have also confounded the experts from time to time. Throughout the Boom years of the 1970 s, fears of an impending tax bill continually crept into discussions of state finances whenever a legislative session drew near.
These fears were unfounded, largely because no one was able to foresee that dramatic increases in energy prices could continue for the larger part of a decade. ${ }^{13}$ Similarly, when the Comptroller of Public Accounts prophetically warned in mid-1982 that there were "thorns in the roses" of the state's economic outlook, who could have foreseen their size or sharpness?

There are similar risks inherent in any general speculation about the coming decade in Texas state government finances, and they move in both positive and negative directions.
One of the most obvious risks is the possibility of a national
12. Thomas E. Borcherding, "The Sources of Growth in Public Expenditures in the United States, 1902-1970," in Borcherding (ed.), Budgets and Bureaucrats: The Sources of Government Growth (Durham, North Carolina: Duke University Press, 1977), p. 36.
13. For example, see Texas Research League, "No New State Taxes This Year But 1975 Outlook Bleak," TRL Bulletin on Texas State Finances (June 4, 1973), p. 1.
recession in the next few years which is not part of the Wharton assumptions summarized in Table 14. Many economists expect a national economic

> There are . . . risks inherent in any general speculation about the coming decade in Texas state government finances, and they move in both positive and negative directions.

slowdown within two years. Given the already modest growth path in this forecast for Texas with the national economy expanding at two to three percent a year in real terms, such a national downturn could seriously erode the state's prospects. This would be reflected in lower overall state economic growth, lower job growth and lower revenue growth for state government.
On the other hand, there continue to be uncertainties in the energy area. Athough they lack the force over the state's fiscal system and the state economy they held five years ago, oil and gas prices will continue to have an important role in shaping Texas' future over the next decade.

There are other uncertainties that are unrelated to the economy but are instead tied to tax policy. At this point, the most ominous is the franchise tax problem. Until official revisions are made in the revenue estimate, there is no way of knowing how significant the various legal problems confronting the tax are likely to be. There are
similar legal uncertainties with the insurance occupation tax and with the new insurance administrative services tax.

Revenue growth in the mid1990s will also be dampened by the phase-out of the sales tax on manufacturing machinery and equipment, which will result in increasingly larger reductions in the sales tax base between 1991 and 1995, when the loss is expected to total approximately $\$ 450$ million a year. It is uncertain at this point to what degree this change may be offset by higher rates of capital invest-ment-and therefore greater economic activity-in the state.

Laying these caveats aside, however, the bottom line is that modest growth in the state's economy is a reasonable guess for the foreseeable future, and modest economic growth implies similarly modest growth in the revenue system as it is currently structured.

All of this merely underscores the degree to which the state's fiscal future will continue to mirror its fiscal past in many ways. As always, the process of financing the budget will be a tumultuous one, and the results will be difficult to predict with precision. There are too many unknowns involved.
This much is certain: while the state is beyond the fiscal crisis of 1986-87, the evidence in this report demonstrates that the basic fiscal problems that underlay the crisis remain unresolved.

The best hope is that the focus of debate in coming legislative sessions can shift from ways to fill widening revenue gaps to the more productive discussion of what basket of services state government should be providing and how it should be structuring its revenue system to pay for those services.

## APPENDICES

## APPENDIX A. A Brief History of Texas State Finances, 1946-87

State revenues surge at end of World War II. Spending still restrained by wartime restrictions.
1947 First post-war legislative session. Major increases in appropriations; creation of Gilmer-Aiken Committee to study the Texas school finance system. Amendment proposed to phase out state property tax for general spending purposes.
Constitutional amendment ending the general revenue property tax passed, with complete phase out by January 1, 1951.
Gilmer-Aikins school reforms adopted; Colson-Briscoe farm-to-market road program adopted. Other proposed new spending on state hospitals and special schools postponed because of the effect of falling oil production (under stateimposed production controls) on oil tax income.
1950 Special legislative session called by Governor Shivers to deal with capital improvements at state institutions and to deal with revenue shortfalls caused by problems with oil production tax income. Omnibus tax bill adopted temporarily increasing virtually all state taxes to expire at the end of 1951. Korean War demand subsequently ends oil tax problem.
1951 Legislature faces fiscal shortfall due to approaching end of temporary taxes and phase out of property tax. Legislature makes the temporary taxes permanent, increases several taxes above the temporary levels and enacts a new gas gathering tax similar to one in Louisiana. Legislature asks Texas Legislative Council to study tax system.
1953 Regular legislative session finances current service levels. Major fiscal issues are a demand for increased teachers' salaries (not funded) and questions over whether the new gas gathering tax will be declared unconstitutional.
1954 In February 1954, the gas gathering tax is declared unconstitutional by the U.S. Supreme Court. The Legislature convenes in special session to deal with the lost revenue and to finance a pay increase for teachers. Tax bill adopted with increases in franchise, beer and natural gas taxes.
1955 Available revenue for 54th Legislature is estimated to be below the level needed to fund existing services. Another issue: demands for added funding for highways. A tax bill is adopted raising the cigarette, gasoline, franchise and beer taxes.
Suez Canal blockaded, boosting demand for Texas oil and improving state revenue outlook.
No major budget problems. Major issue is a teacher pay raise, which is funded. Motor vehicle registration fees are increased, as is tuition at state colleges and universities. Suez Canal opens in spring, demand for domestic oil begins to fall. Texas Tax Study Commission is created.

1958 October: General Fund goes into deficit and remains there, owing largely to oil tax problems.
1959 56th Legislature faces General Fund deficit, plus recommendations of Hale-Aiken Study Committee for added education spending. Finally, "Bookkeeping Bill" is adopted changing state accounting practices to avoid deficit in 1959. Third called session adopts mix of permanent and temporary tax increases, including permanent increases in the tobacco taxes, motor vehicle sales tax and other excise taxes; a temporary increase in the franchise tax; a new "severance beneficiaries" tax; and several new taxes on the sales of certain "luxuries" (e.g., air conditioners). Texas Commission on State and Local Tax Policy is created.

1961 Shorffalls in collections of income from 1959 tax increase plus additional problems with the oil tax insure a third consecutive General Fund deficit. In addition, there are strong pressures for increased spending for teacher pay, college salaries, prisons, public welfare and for state institutions and schools. On August 8, the Legislature adopts "largest tax increase in the state's history"-an estimated $\$ 350$ million over two years, including adoption of the sales tax. Teacher and college pay is increased, and more is spent on welfare, prisons and institutions.
1963 The major budget issue is higher education spending, with Governor Connally calling for a sizable increase. A "small" tax bill making certain sales tax changes, extending the temporary franchise tax rate and increasing the motor vehicle sales tax is approved. Committee on Education Beyond the High School is created to study higher education financing.
1965 Major increases are made in spending for higher education (a 50 percent increase over the previous budget period), plus public school teacher salaries are increased. Overall spending package is financed with available revenue except for an increase in the cigarette tax.
1967 Governor Connally calls for one-year appropriations bill, and Legislature approves single-year bill, using virtually all of a General Fund surpius that had developed for fiscal 1968 spending but avoiding a tax bill. Major spending issue again is teacher pay. Legislature approves Medical Assistance Act of 1967, marking full state participation in the Medicaid program. A major state employee pay raise is also approved.
1969
Despite stable major revenues, the Legislature faces a probable fiscal problem because of increased demands. Spending issues include increases for Medicaid, as well as sizable increases in education (mainly teacher pay raises), junior colleges, senior colleges and state employee pay. Spending is financed with an increase in the sales, franchise, natural gas and cigarette tax rates. Mixed drinks are taxed, and alcoholic beverages are taxed under the sales tax for the first time.

## APPENDIX A. A Brief History of Texas State Finances, 1946-87, Continued

## Year <br> Major Issues

1971 The 62nd Legislature convenes facing a potential deficit because of unanticipated growth in certain open-ended state expenditures, such as teacher retirement and school aid. Extra funding is also needed for state welfare programs. To finance added spending above available sources, the Legislature increases the sales, motor vehicle sales, cigarette and franchise taxes. This proves to be the last major state tax increase until 1984.

1973 With strong revenues, the state finances just under a 30 percent two-year spending increase without new taxes. Public education (again teacher pay changes), higher education and general government functions receive sizable increases.

1975 Major spending increases are again focused on public education, including a restructuring of school finance and increases for higher education. Spending for mental health and mental retardation increases sharply, an important part of which is for renovation and repair of various state hospitals and schools and to adjust for inflation and increases in patient-care services. Zero-based budgeting is adopted for use in state budget preparation

1977 The financial picture is again positive. Most areas of the state budget experience increases, with the largest increases in public education and highways. State public school aid increases by $\$ 953$ million over two years, including increases for teacher pay, reductions in the local share of education costs and an increase in equalization aid to poor districts. The state also approves a major increase in new spending on the state highway program, including creation of a Highway Cost Index, indexing highway construction and maintenance costs to inflation.

1978 State exempts residential utilities from sales tax and reduces the inheritance tax. Also sent to the voters is a proposed Tax Relief Amendment, providing various forms of local property tax relief and other changes, including a limitation on spending from certain state tax revenues. Voters approve amendment in November 1978.

1979 Strong state revenue growth continues, allowing nearly a 25 percent increase in appropriations, spread across most major spending functions. State employee longevity pay is approved for the first time. The Legislature adopts S.B. 621, a major restructuring of the local property tax, including provision for market value appraisal of property. H.B. 1060 implements the 1978 tax relief amendment, with a substantial increase in education cost to hold local school districts harmless following implementation of homestead exemptions that are part of the tax relief package.
1981 Texas' strong fiscal situation continues, and spending increases by about 20 percent over two years. Public education receives the largest share, although junior and senior colleges also receive increases above the average for all functions. Employees receive a pay increase of $14.3 \%$ in the first year of the budget period and 8.7 percent in the second.

1983 Revenue problems appear in state finances for the first time in more than a decade. Legislature finances 16 percent increase in spending through a combination of fee increases and one-time measures totalling about $\$ 1.3$ billion. Package includes spending available fund surpluses, speeding up various tax due dates and reductions in state contribution rates to the Teacher Retirement System. Joint Select Committee on Fiscal Policy is created to study fiscal problems expected in next legislative session. Select Committee on Public Education is created to study state public school system.

1984 During a special legislative session, major increases in public education and highway spending are approved. To fund these increases, the first major state tax increase since 1971 is adopted, increasing state taxes by an estimated $\$ 4.8$ billion over three years. It includes increases in the motor fuels tax rate, the sales tax rate, motor vehicle registration fees, the franchise tax and the motor vehicle sales tax. The sales tax base is also expanded to a number of services.

1985 Revenue growth continues to be sluggish, resulting in one of the lowest two-year spending increases in recent state history in percentage terms. The Legislature avoids a major tax bill by approving major increases in various state fees and tuition at state colleges and universities.

1986 Sharp drops in world oil prices send the state budget into the red in early 1986. Meeting in special session, the Legislature makes a number of spending reductions and approves a temporary tax bill increasing the sales and fuels tax rates.

1987 The state faces a major financing problem in 1987, with a carried-over deficit in the General Fund and major needs for additional revenue to finance current services. Major spending increases are limited, although significantly more is spent in the corrections and human service areas to comply with court mandates. There are also some increases in higher education designed to restore cuts made in previous budget periods. The overall budget is financed through H.B. 61, adopted in the second called session, which raises $\$ 5.7$ billion in new taxes in 1988-89. Taxes increased include the sales, franchise, cigarette, motor vehicle and insurance taxes. The sales tax base is also expanded and a temporary fee was placed on selected professions. Select Committee on Tax Equity is created.

Source: Legislative Budget Board, Fiscal Size Up, various years and Legislative Tax Handbook; Texas Commission on State and Local Tax Policy, Our State Tax Policy: Its History; Its Future (Austin, 1959); Texas Research League, Bulletin, various years.

APPENDIX B. Actual and Rate-Adjusted Amounts for Major State Revenue Sources, 1947-87

|  | Year | Actual Revenue Collections |  | Rate and Base <br> Normalized Revenues (1982 Base) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (millions) | \% Change | (millions) | \% Change |
| The Post-War Period | 1947 | \$374 | - | \$625 | - |
|  | 1948 | 508 | 35.8\% | 816 | 30.5\% |
|  | 1949 | 523 | 2.9 | 834 | 2.2 |
|  | 1950 | 562 | 7.4 | 876 | 5.1 |
|  | 1951 | 621 | 10.5 | 901 | 2.9 |
| The Fifties | 1952 | 689 | 11.0 | 989 | 9.7 |
|  | 1953 | 737 | 6.9 | 1,019 | 3.0 |
|  | 1954 | 797 | 8.1 | 1,053 | 3.3 |
|  | 1955 | 839 | 5.3 | 1,105 | 4.9 |
|  | 1956 | 913 | 8.9 | 1,179 | 6.7 |
|  | 1957 | 965 | 5.6 | 1,239 | 5.2 |
|  | 1958 | 1,019 | 5.6 | 1,297 | 4.6 |
|  | 1959 | 1,139 | 11.8 | 1,396 | 7.6 |
|  | 1960 | 1,250 | 9.7 | 1,475 | 5.7 |
|  | 1961 | 1,221 | -2.3 | 1,442 | -2.2 |
| The Sixties | $1962{ }^{1}$ | 1,442 | 18.1 | 1,867 | 29.5 |
|  | 1963 | 1,566 | 8.6 | 2,008 | 7.5 |
|  | 1964 | 1,699 | 8.5 | 2,153 | 7.2 |
|  | 1965 | 1,850 | 8.9 | 2,304 | 7.0 |
|  | 1966 | 1,982 | 7.2 | 2,441 | 6.0 |
|  | 1967 | 2,103 | 6.1 | 2,590 | 6.1 |
|  | 1968 | 2,348 | 11.6 | 2,852 | 10.1 |
|  | 1969 | 2,629 | 12.0 | 3,006 | 5.4 |
|  | 1970 | 3,050 | 16.0 | 3,298 | 9.7 |
|  | 1971 | 3,461 | 13.5 | 3,660 | 11.0 |
| The Boom | 1972 | 4,009 | 15.8 | 4,025 | 10.0 |
|  | 1973 | 4,443 | 10.8 | 4,462 | 10.9 |
|  | 1974 | 5,000 | 12.5 | 5,019 | 12.5 |
|  | 1975 | 5,675 | 13.5 | 5,690 | 13.4 |
|  | 1976 | 6,600 | 16.3 | 6,610 | 16.2 |
|  | 1977 | 7,367 | 11.6 | 7,356 | 11.3 |
|  | 1978 | 8,317 | 12.9 | 8,295 | 12.8 |
|  | 1979 | 8,989 | 8.1 | 9,059 | 9.2 |
|  | 1980 | 10,661 | 18.6 | 10,766 | 18.9 |
|  | 1981 | 12,735 | 19.5 | 12,843 | 19.3 |
| The Eighties | 1982 | 13,438 | 5.5 | 13,438 | 4.6 |
|  | 1983 | 13,575 | 1.0 | 13,684 | 1.8 |
|  | 1984 | 14,922 | 9.9 | 14,739 | 7.7 |
|  | 1985 | 17,165 | 15.0 | 15,647 | 6.2 |
|  | 1986 | 18,399 | 7.2 | 16,863 | 7.8 |
|  | 1987 | 17,841 | -3.0 | 15,598 | -7.5 |

Source: Select Committee on Tax Equity, calculated from state and national economic data.

1. Sales tax takes effect.

| Actual Tax Collections |  | Rate and Base Normalized Collections (1982 Base) |  | Actual Sales Tax Collections |  | Rate and Base Normalized Collections |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (millions) | \% Change | (millions) | \% Change | (millions) | \% Change | (millions) | \% Change |
| \$213 | - | \$457 | - | - | - | - | - |
| 280 | 31.3\% | 579 | 26.6\% | - | - | - | - |
| 287 | 2.4 | 587 | 1.4 | - | - | - | - |
| 318 | 11.1 | 624 | 6.3 | - | - | - | - |
| 375 | 17.9 | 648 | 3.9 | - | - | - | - |
| 406 | 8.1 | 697 | 7.5 | - | - | - | - |
| 425 | 4.8 | 697 | 0.1 | - | - | - | - |
| 456 | 7.3 | 702 | 0.7 | - | - | - |  |
| 499 | 9.4 | 757 | 7.8 | - | - | - | - |
| 561 | 12.4 | 817 | 8.0 | - | - | - | - |
| 594 | 5.8 | 858 | 5.0 | - | - | - | - |
| 591 | -0.4 | 861 | 0.4 | - | - | - | - |
| 622 | 5.2 | 870 | 1.0 | - | - | - | - |
| 692 | 11.4 | 909 | 4.4 | - | - | - | - |
| 704 | 1.6 | 916 | 0.8 | - | - | - | - |
| 877 | 24.6 | 1,293 | 41.2 | \$149 | - | \$317 | - |
| 933 | 6.3 | 1,364 | 5.5 | 180 | 21.4\% | 352 | 11.0\% |
| 995 | 6.7 | 1,439 | 5.4 | 205 | 13.4 | 399 | 13.4 |
| 1,054 | 6.0 | 1,497 | 4.1 | 222 | 8.4 | 433 | 8.4 |
| 1,124 | 6.6 | 1,571 | 4.9 | 241 | 8.5 | 470 | 8.5 |
| 1,198 | 6.5 | 1,671 | 6.4 | 259 | 7.7 | 506 | 7.7 |
| 1,276 | 6.6 | 1,773 | 6.1 | 280 | 7.8 | 546 | 7.8 |
| 1,523 | 19.3 | 1,893 | 6.8 | 439 | 56.8 | 598 | 9.6 |
| 1,783 | 17.0 | 2,023 | 6.9 | 550 | 25.4 | 659 | 10.2 |
| 1,995 | 11.9 | 2,185 | 8.0 | 633 | 15 | 733 | 11.2 |
| 2,344 | 17.5 | 2,336 | 6.9 | 824 | 30.3 | 784 | 6.9 |
| 2,584 | 10.2 | 2,572 | 10.1 | 926 | 12.4 | 881 | 12.4 |
| 3,026 | 17.1 | 3,006 | 16.9 | 1,126 | 21.6 | 1,071 | 21.6 |
| 3,375 | 11.5 | 3,347 | 11.3 | 1,267 | 12.5 | 1,205 | 12.5 |
| 3,914 | 16.0 | 3,880 | 15.9 | 1,478 | 16.7 | 1,406 | 16.7 |
| 4,420 | 12.9 | 4,355 | 12.2 | 1,689 | 14.3 | 1,588 | 13.0 |
| 5,032 | 13.9 | 4,953 | 13.7 | 2,024 | 19.8 | 1,908 | 20.2 |
| 5,390 | 7.1 | 5,394 | 8.9 | 2,174 | 7.4 | 2,154 | 12.9 |
| 6,344 | 17.7 | 6,369 | 18.1 | 2,521 | 16.0 | 2,521 | 17.1 |
| 7,742 | 22.0 | 7,741 | 21.5 | 2,983 | 18.3 | 2,983 | 18.3 |
| 8,650 | 11.7 | 8,650 | 11.7 | 3,461 | 16.0 | 3,461 | 16.0 |
| 8,498 | -1.8 | 8,472 | -2.1 | 3,305 | -4.5 | 3,305 | -4.5 |
| 9,306 | 9.5 | 8,981 | 6.0 | 3,795 | 14.8 | 3,641 | 10.2 |
| 10,721 | 15.2 | 9,187 | 2.3 | 4,192 | 10.5 | 3,892 | 6.9 |
| 10,232 | -4.6 | 8,687 | -5.4 | 4,330 | 3.3 | 3,833 | -1.5 |
| 10,266 | 0.3 | 8,045 | -7.4 | 4,617 | 6.6 | 3,764 | -1.8 |

# $\mathbf{R}$ evenue Dedications and the Fund Structure of Texas State Government 

## Summary

Texas state government has a wide variety of revenue sources and a myriad of funds through which they flow. Constitutional and statutory restrictions reserve almost half of the state's revenues for specific purposes. For example, federal funds are earmarked for certain programs, as are most state permit fees. The bulk of the state's land income is deposited into endowment funds and cannot be spent.

Taxes are less affected by dedications than most other state revenue sources. Less than 20 percent of the state's tax collections today is reserved for specific purposes-highways and education being the two largest recipients.

Revenue earmarking has spawned a complicated system of special accounting funds by which these dedicated revenues are channelled to the appropriate programs. Although most state checks are written on the General Revenue Fund, nearly two-thirds of the state's agencies operate out of their own special fund.

In recent legislative sessions, the state's dedicated fund structure has made it difficult to trim certain programs. While lawmakers could cut spending in some areas, whatever constitutionally dedicated money might be saved could not be used for any other purposes. In response, the Legislature has made it easier to transfer accu-
mulated balances from special funds to the General Revenue Fund, effectively "freeing" certain dedicated revenues in these funds.

Except for the highway program, the state's major spending programs that receive dedicated revenue also must rely on General Revenue appropriations. This suggests that dedicated funding may not be as severe a limitation on legislative budget discretion. Complicating the situation, however, are numerous formula-funded spending programs and court orders for improvements in some programs. The formula-funding mechanisms can be changed by the Legislature statutorily. While they are a restraint, they are not finally a binding restraint.

Combining numerous state funds could simplify the state's financial structure. Fund censolidation could also generate substantial additional revenues for the state, but this would likely be a one-time gain.
This chapter provides an overview of the state's fund structure and its impact on state finances. First, the arguments for and against dedicated funding are discussed, followed by an overview of Texas revenue dedications and special funds. Finally, recent developments in the debate over revenue dedications and funds consolidation and the implications of doing so are examined.

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Earmarking and fund dedication have been among the more controversial aspects of state finances over the past several years as lawmakers have wrestled with unprecedented budget shortfalls. Some lawmakers have criticized the system of dedicated funding, arguing that it "ties their hands" by protecting certain programs from the budget knife. Those who support the programs involved have countered that dedicated funding is doing exactly what was intended-ensuring that key programs receive a relatively stable level of funding.

## The Arguments In Favor of Earmarking

There are several reasons why lawmakers may choose to dedicate certain revenues for specific programs.

First, it is a way of ensuring that groups who receive a particular service pay for it. Many regulatory functions of Texas government are designed so that the industry regulated bears the cost of state oversight. For example, to practice in Texas, a barber must be certified by the Board of Barber Examiners. Fees are charged by the Board for examination and licensing. This revenue is dedicated by statute to the Board to
cover its expenses and is deposited in the Barber Examiners Fund, a separate state accounting fund apart from the state's purse for general spending purposes, the General Revenue Fund. Most of the regulatory revenues that are reserved for self-supporting programs are dedicated through statutory law and can be changed with a majority vote of the Legislature and the Governor's approval.

Second, dedicating funds is a way of ensuring that certain programs will receive a suf-ficient-or at least a minimallevel of revenue. The early political leaders of Texas set aside specific tracts of state land for particular purposes. Their hope was that the endowment funds created with the income from these lands would fully fund certain programs. Public and higher education are notable examples of this policy. While both require substantial funding far above what the endowment funds generate today, the dedicated income nonetheless is an important source of revenue that saves hundreds of millions of what would otherwise be tax dollars.

Another benefit of earmarking is that it provides "automatic" budget cuts in times of falling revenues. Except for general revenue, state funds must operate without incurring even a temporary deficit-they must operate in the "black." Agencies and programs operating out of these funds are often given "estimated" appropriations in the budget, based on anticipated revenues. Agencies may spend only those amounts in the fund. If the revenues do not materialize, their spending authority automatically adjusts downward. For example, if an agency is given an appropriation of $\$ 2$ million out of their fee revenues, but only $\$ 1.5$ million materializes, the agency may only
spend the $\$ 1.5$ million. This automatic mechanism eliminates the potential for costly special legislative sessions to deal with what could be hundreds of small agency deficits.
Dollars may also be restricted for specific purposes as a condition of their receipt. For example, the state received $\$ 4.1$ billion from the federal government in 1987. Federal law requires the bulk of these funds be spent for certain purposes, such as social service programs. Otherwise, the state is not eligible to receive them. Proceeds from bond sales are another example of conditional revenues. The bonds are marketed for specific projects and uses, and the proceeds are segregated in separate funds in the state accounting system to facilitate their management.
Finally, earmarking can help generate popular support for what might otherwise be unpopular tax increases. Dedicating a revenue increase for a particular function of government, such as education or transportation, may help the public better identify the need for the tax increase. It is not coincidental that the state's top dollar and most popular spending programs-public education, higher education, highways and social services-all have dedicated revenues and special state funds on which they draw.

## Arguments Against Dedicated Funding

There are several arguments against dedicating revenues, most of which center around the fact that it limits legislative discretion over state agency budgets.

During the recent budget crisis, several state funds, particularly the permanent education endowment funds, boasted large balances at a time when popular general reve-nue-funded programs were undergoing major reduc-
tions-higher education among them. The inability of lawmakers to tap these earmarked funds resulted in a higher tax in-crease than otherwise would have been the case. By the same token, the restrictions helped preserve the revenue streams of the endowment funds-a benefit for the future.

Restrictions on revenues may also lead to an inefficient allocation of funds as the policy needs of the state change. This is especially a problem with constitutional dedications that cannot be changed without voter approval.

An argument specifically against statutory earmarking is that it may violate the spirit of the Texas Constitution. Constitutional provisions prohibit the appropriation of money by one Legislature for any budget period beyond the two-year budget term. Critics of dedicated funding argue that earmarking is used to ensure the continuation of a public program beyond the current budget period-in effect, limiting the policy discretion of future budget writers.
Another disadvantage of dedicating revenues is that it can force the Legislature to rely on less popular means of generating revenue. Surveys suggest that increasing motor fuels taxes is more acceptable to the public than raising many other types of taxes. Higher gasoline taxes also have the added policy benefit of reducing consumption, thereby indirectly limiting dependence on foreign oil.

Part of any increase in the motor fuels tax rate however, is dedicated to the State Highway Fund (generally 75 percent), with the remainder going to the Available School Fund for public education. This constitutional dedication prevents the Legislature from using any motor fuels tax increase for general purposes. Supporters
of the current system are quick to point out that the motor fuels tax is, in essence, a user fee. The money is used to build the highways on which the vehicles consume the fuel.

## Taxes and the Fund

## Structure

Dedicated funding is certainly no stranger to Texas. In fact, Texas has a long history of reserving certain revenue streams for particular purposes.
The state receives revenue from a variety of sources. Taxes are the largest source of state revenues. During the 1988-89 budget, they are expected to account for 60.4 percent of state income. Federal aid accounts for 22.3 percent of state revenues, interest and dividends total 6.4 percent, permits and fees, five percent.
Taxes are among the most discretionary of the state's revenues. They are covered by fewer dedications than most other receipts. Over 80 percent of the taxes Texas state government is expected to collect during the current budget period are unburdened by any statutory or constitutional reservation (Table 1).
This has not always been the case. Originally, most of the taxes the state levied were reserved in some manner, primarily for education. The Constitution of 1876 , under which Texas still operates, specifically granted the Legislature the power to levy:
(1) property taxes;
(2) poll taxes;
(3) occupation taxes; and
(4) income taxes.

The Legislature was also given the authority to levy other taxes as well, although these are not itemized.
Of the four listed taxes, a por-
tion of occupation taxes and poll taxes was reserved for public education, along with a special assessment of the property tax. The past few decades have seen the end of the poll tax and the state property tax, while the Legislature has begun to rely more on sales and other nonreserved taxes. As the state's tax mix has changed, the proportion of Texas state taxes which are dedicated has declined.

## Over 80 percent of the

 taxes Texas state government is expected to collect during the current budget period are unburdened by any statutory or constitutional reservation.The major types of taxes still covered by constitutional dedications are occupation taxes and the motor fuel taxes. In addition to the education and highway dedications of these taxes, other state taxes are partly reserved for local governments, enforcement and miscellaneous other purposes.

## Occupation Taxes and the Foundation School Fund

The Constitution dedicates onefourth of all "occupation taxes" for public education, after allowing a deduction for the costs of enforcing the tax. Curiously, the term "occupation tax" was never defined.

Most commonly, occupation taxes are imposed on those who conduct a certain commercial activity. Unlike a license fee, which is a charge for the privilege of doing business, an occupation tax is a levy on the prosecution of the business itself.

Throughout much of the state's history, it has fallen on the Legislature to determine whether a tax is an occupation tax or not. As lawmakers added new taxes over the years, there was often a tendency to label them occupation taxes, just to fit them into the list of four taxes specifically authorized in the Constitution.
In a 1950 Attorney General's opinion, clarification was offered that the state's severance taxes, utility taxes, oil and gas well servicing tax and insurance occupation tax were true occupation taxes.

Through practice, taxes on alcohol and motor vehicle sales had historically been treated as occupation taxes (these were levied prior to the 1950 opinion) and continue to be treated as such today.
The Texas Constitution does not specify that occupation taxes be deposited into a particular fund, only that a portion of the money be used for public education. For many years, occupation taxes were distributed to local school districts through the Available School Fund, along with income from the state's Permanent School Fund. From there, aid was distributed to local districts using a constant per-student basis.
The disparity of property wealth among school districts suggests that state aid is a tool for equalizing public education finance (if not a court-mandated one). In 1984, as a part of the education reforms enacted during a summer special session, the Legislature moved the occupation tax dedication to the Foundation School Fund, which uses equalizing formulas in distributing money to school districts, rather than following a per-student distribution.

For the current two-year budget period, occupation taxes (including alcohol and motor vehicle sales taxes) will total
over $\$ 5.6$ billion, with $\$ 52$ million used to offset enforcement costs and $\$ 1.4$ billion dedicated to public education. The remaining
$\$ 4.2$ billion is deposited in the General Revenue Fund and may be used for any public purpose the Legislature chooses.

TABLE 1. Percentage Allocation of State Tax Revenues, 1988-89

| Tax Source | 1988-89 <br> Revenue ${ }^{1}$ (millions) | General <br> Revenue Fund | State Highway Fund | Available School Fund | Foundation School Fund |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sales and Use Tax ${ }^{2}$ | \$13,006.5 | 99.6\% | 0.4\% | - | - |
| Gasoline Tax ${ }^{3}$ | 2,520.9 | - | 73.1 | 24.7\% | - |
| Motor Vehicle Sales Tax | 1,830.7 | 75.0 | . | 24.7\% | 25.0\% |
| Franchise Tax ${ }^{4}$ | 1,340.7 | 93.6 | - | - | , |
| Natural Gas Tax | 1,190.4 | 74.6 | - | - | 24.9 |
| Oil Production Tax | 1,019.6 | 74.6 | - | - | 24.9 |
| Cigarette Tax ${ }^{5}$ | 785.0 | 89.2 | - | - | 2.8 |
| Insurance Occupation Tax | 842.4 | 75.0 | - | - | 25.0 |
| Diesel Fuel Tax (net) | 431.5 | - | 4.2 | 24.7 | 25.0 |
| Gas, Electric and Water Utilities Tax | 313.2 | 75.0 | 4 | 24.7 | 25.0 |
| Mixed Drinks Tax ${ }^{6}$ | 361.2 | 75.6 | - | - | - |
| Inheritance Tax | 202.3 | 100.0 | - | - |  |
| Hotel/Motel Tax | 185.1 | 100.0 | - | - | - |
| Beer Tax ${ }^{7}$ | 168.0 | 63.9 | - | - | 21.3 |
| Liquor Tax ${ }^{7}$ | 88.6 | 63.9 | - | - | 21.3 |
| Motor Vehicle Rental Tax | 75.9 | 75.0 | - | - | 25.0 |
| Insurance Administration Tax | 58.7 | 100.0 | - | - | . |
| Cigar and Tobacco Products Tax | 53.3 | 100.0 | - | - | - |
| Public Utilities Gross Receipts Tax | 51.2 | 100.0 | - | - | - |
| Insurance Maintenance Tax ${ }^{\text {a }}$ | 53.0 | 38.3 | - | - | - |
| Telephone Company Tax ${ }^{\text {a }}$ | 26.5 | 75.0 | - | - | 25.0 |
| Use Tax on Motor Carriers | 17.4 | 75.0 | - | - | 25.0 |
| State Bingo Tax | 16.4 | 100.0 | - | - | 25.0 |
| Wine Tax ${ }^{\text {² }}$ | 14.1 | 63.9 | - | - | 21.3 |
| Cement Tax | 10.2 | 75.0 | - | - | 25.0 |
| Gas Utility Administration Tax | 9.1 | 100.0 | - | - |  |
| Liquefied Petroleum Gas Tax | 8.8 | , | 74.2 | 24.7 | - |
| Amusement Machine Tax | 8.3 | 74.5 | . |  | 24.8 |
| Oil and Gas Well Servicing Tax | 8.1 | 75.0 | - | - | 25.0 |
| Tax on Attorneys | 7.5 | 75.0 | - | - | 25.0 |
| Manufactured Housing Tax | 7.2 | 100.0 | - | - | 25.0 |
| Malt Liquor Tax ${ }^{\text {² }}$ | 6.9 | 63.9 | - | - | 21.3 |
| Sulfur Tax | 5.8 | 75.0 | - | - | 25.0 |
| Oil and Gas Regulation Tax | 2.5 | 100.0 | - | - | 25. |
| Airline Beverage Tax | 0.7 | 75.0 | - | - | 25.0 |
| Boxing and Wrestling Admissions Tax | 0.4 | 100.0 | - | - | 25.0 |
| Bedding Tax | 0.3 | 100.0 | - | - | - |
| Motor Vehicle Use Tax | 0.0 | 75.0 | - | - | 25.0 |
| All State Taxes | \$24,728.6 | 80.8\% | 9.0\% | 3.0\% | 5.7\% |

## Source: Select Committee on Tax Equity.

1. Estimated income for 1988 - 89 from the Comptroller's June 1988 revenue estimate.
2. The sales tax on motor lubricants is constitutionally dedicated for highways.
3. Only taxes collected on motor fuels used on Texas roads are constitutionally dedicated for highways. Taxes collected on motorboat fuel on which refunds are not claimed are statutorily dedicated to the Available School Fund and the Game, Fish and Water Safety Fund.
4. Franchise taxes paid by financial institutions are allocated to tocal units of government.
5. One cent of the 26 -cent-per-pack tax is dedicated to the State Parks Fund. Another one cent is dedicated to the Local Parks Recreation and Open Spaces Fund.
6. Cities and counties are each allocated 12.5 percent of the mixed drinks taxes collected within their borders. The state retains the city share of amounts collected outside cities' limits.
7. A fixed dollar amount is dedicated/appropriated to the Alcoholic Beverage Commission.
8. All maintenance taxes except for the 0.7 percent tax on the gross receipts tax on workers' compensation taxes are dedicated to the State Board of Insurance Operating Fund.
9. The telephone tax will be repealed in 1989.

Note: Twenty-five percent of those taxes which are considered to be "occupation" taxes is constitutionally dedicated for education purposes.

Motor Fuel Dedications
After allowing for refunds and enforcement, the Constitution dedicates three-fourths of the
taxes collected on motor fuels used "to propel motor vehicles on the state's roadways for the purpose of acquiring rights-of-

| Local Governments | Enforcement | Other <br> Funds | Type of Dedication/ Allocation |
| :---: | :---: | :---: | :---: |
| - | - | - | Statutory ${ }^{1}$ |
| - | 1.0\% | 1.2\% | Constitutional |
| - | - | - | Const. (Occ.) |
| 6.4\% | - | - | Statutory |
| - | 0.5 | - | Const. (Occ.) |
| - | 0.5 | $7{ }^{\circ}$ | Const. (Occ.) |
| - | 0.3 | 7.7 | Statutory |
| - | - | - | Const. (Occ.) |
| - | 1.1 | - | Constitutional |
| - | - | - | Const. (Occ.) |
| 24.4 | - | - | Statutory |
| - | - | - | Statutory |
| - | - | - | Statutory |
| - | 14.8 | - | Const. (Occ.) |
| - | 14.8 | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Statutory |
| - | - | - | Statutory |
| - | - | - | Statutory |
| - | 61.7 | - | Statutory |
| - | - | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Statutory |
| - | 14.8 | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | 1.0 | - | Constitutional |
| - | 0.6 | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Statutory |
| - | 14.8 | - | Const. (Occ.) |
| - | - | - | Const. (Occ.) |
| - | - | - | Statutory |
| - | - | - | Const. (Occ.) |
| - | - | - | Statutory |
| - | - | - | Statutory |
| - | - | - | Const. (Occ.) |
| 0.7\% | 0.4\% | 0.4\% |  |

into the Foundation School Fund along with the state's other occupation taxes.

Motor fuels taxes are expected to generate $\$ 2.2$ billion for the State Highway Fund during the 1988-89 budget period. The Available School Fund is expected to garner over $\$ 700$ million.

## Local Government Tax Revenue Collected by the State

State taxes allocated to local governments account for only 0.4 percent of all taxes that show up on the state's books (excluding, of course, state aid for public education). This category consists of the mixed drinks gross receipts tax and the local bank franchise tax.

The state levies a 12 percent tax on the gross receipts from the sales of mixed drinks in the state. These collections are deposited into a special Mixed Drinks Gross Receipts Tax Clearance Fund. Of the amount collected, 12.5 percent is returned to the cities in which the sales occurred; another 12.5 percent is returned to the county. The remainder is transferred to the state's General Revenue Fund. In 1987, cities received $\$ 21.2$ million from the mixed drinks tax; counties, $\$ 23$ million. The state's general fund received $\$ 139.4$ million.

The state also collects the franchise tax on banking corporations for local governments. Prior to 1985, banks paid a property tax on their assets, but out of concern that the tax might not stand up to a court challenge against taxing intangible assets, the "bank stock" tax was replaced by extending the franchise tax to banking corporations. The state collects the tax and deposits it in a special Local Government Corporate Banking Franchise Tax Fund. All other franchise taxes are deposited in the General Revenue Fund. In

1987, the local bank franchise tax netted $\$ 64.9$ million for Texas local governments.

The state also collects the local sales taxes for Texas cities, metro-

## State taxes allocated to

 local governments account for only 0.4 percent of all taxes that show up in the state's books.politan transit authorities and certain counties and the local bingo tax. These are deposited in separate "trust" accounts that do not appear with figures usually reported for state funds and are excluded from the figures in Table 1.

## Enforcement and

 Administrative AllocationsAs mentioned previously, the Constitution allows the state to recoup its enforcement costs prior to allocating revenue. Enforcement costs for the constitutionally dedicated motor fuels and severance taxes, along with the statutorily dedicated cigarette tax income are calculated as a fixed percentage of each of these taxes. These amounts are transferred to the Comptroller's Operating Fund-a special fund the Comptroller draws on to help fund his agency. The Comptroller also receives the first $\$ 25,000$ out of the Amusement Machine Tax for enforcement.
These enforcement allocations to the Comptroller are expected to tally $\$ 66.3$ million in 1988-89. This money is not sufficient to pay for the administration of the state's
other taxes, nor was it ever intended to. To administer the collection of the sales tax, franchise tax and other major taxes, the Comptroller receives an additional appropriation of $\$ 158$ million out of general revenue.
The Alcoholic Beverage Commission and the State Board of Insurance also receive enforcement money. The enforcement allocation from the alcoholic beverage taxes is determined through the appropriations process by the Legislature- $\$ 40.5$ million in 1988-89. This amount is appropriated directly to the Alcoholic Beverage Commission out of the alcohol tax receipts.
Several levies of the state insurance maintenance tax are set aside for the operations of the State Board of Insurance. Except for a special tax on workers' compensation policies, which is deposited in the General Revenue Fund, all other maintenance taxes are deposited in the State Board of Insurance Operating Fund.

## Other Tax Dedications

In addition to the allocation to tax enforcement, the cigarette tax also comes under other dedications as well. Of the 26 -cent-perpack tax, one cent is deposited to the State Parks Fund, and one cent is deposited to the Local Parks Recreation and Open Space Fund. These two funds are administered by the Texas Parks and Wildlife Commission and are used to purchase, maintain and improve Texas parks.

## Nontax Revenues and Their Dedications

Nontax revenues account for almost 40 percent of all state revenues. This includes federal funds, interest and dividends, noncommercial permits and fees, land income, state service fees, business and professional fees,
sales, rental and repayments, violations, fines and penalties, grants and donations and miscellaneous other revenues. Unlike taxes, the majority of these revenues is set aside for special purposes (Table 2).
Federal funding. The most sizeable nontax revenue source is federal funding. Texas received $\$ 4.1$ billion from the federal government in 1987 (Table 3). In 1988-89, the two-year total is expected to top $\$ 9$ billion.
Much of this aid is conditional, meaning it has to be used according to federal restrictions. For example, just over $\$ 1.4$ billion of the federal aid Texas received in 1987 was provided for specific purposes. The remaining $\$ 2.6$ billion consists of federal "matching" funds. The federal government uses matching funds to encourage states to establish programs in certain areas. For every dollar the state spends, the federal government provides additional financial assistance using a complex series of formulas.

The bulk of federal matching
money also comes with the restriction that it be used for the matched programs. The major

> The state's interest and dividend income is largely tied to state land income, a relationship that dates back to the days of the Republic.

exception to this is the federal matching highway money- $\$ 1.8$ billion or about one-fifth of total federal aid to Texas in 1988-89. This money is actually a "reimbursement" and therefore does not come under any federal restrictions on its use. Instead, it is Texas statutory law that dedicates this money to the State Highway Fund. In November 1988, Texans approved an amendment that which will constitutionally dedicate the federal highway matching funds for state
highway purposes.
Dividends, interest and rents. The state's interest and dividend income is largely tied to state land income, a relationship that dates back to the days of the Republic. When granted statehood, Texas was allowed to retain ownership of its public lands rather than transferring it to the federal government. In return, the federal government did not accept liability for Texas' public debt-an amount estimated at $\$ 10$ million.
Texans antipathy to taxes was even greater in 1845 than it is today. In a desire to limit the need for tax dollars, the land-rich early Texas state government set aside tracts of land for special purposes-public education, the establishment of a university, the support of a home for orphans and the support of institutions for the physically and mentally impaired. These lands were to be sold or leased, and the land income was to be deposited in a permanent endowment fund. The principal of the fund would be invested and the income would be

TABLE 2. Percentage Allocation of Texas State Revenues, 1988-89

| Revenue Source | 1988-89 <br> Revenue ${ }^{1}$ <br> (millions) | General <br> Revenue <br> Fund | State Highway Fund | Available School Fund | Foundation School Fund | Local Governments | Tax Enforcement | Other <br> Funds |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax Collections \$ | \$24,728.7 | 80.8\% | 9.0\% | 3.0\% | 5.7\% | 0.7\% | 0.4\% | 0.4\% |
| Federal Receipts | 9,124.5 | - | 18.8 | - | - | - | - | 81.2 |
| Interest and Dividends ${ }^{2}$ | 2,607.4 | 0.4 | 2.6 | 44.1 | - | - | - | 52.9 |
| Noncommercial Permits and Fees ${ }^{3}$ | 2,033.2 | 5.7 | 65.6 | - | - |  | - | 28.7 |
| Other Receipts ${ }^{4}$ | 674.2 | 100.3 | -39.6 | 0.1 | 46.6 | - | - | -7.5 |
| Land Income | 671.7 | 1.6 | - | 0.4 | - | - | - | 98.0 |
| State Service Fees | 345.2 | 50.9 | - | - | - | - | 16.8 | 32.3 |
| Business/Professional Fees | 331.0 | 64.2 | - | - | 4.9 | - | - | 30.8 |
| Sales, Rental and Repayment | 217.5 | 3.4 | 65.0 | - | - | - | - | 31.6 |
| Violations, Fines and Penalties | - 167.7 | 11.6 | - | - | - | - | - | 88.4 |
| Grants and Donations | 1.5 | - | - | - | - | - | - | 100.0 |
| All Revenue | \$40,902.6 | 51.8\% | 15.8\% | 4.6\% | 4.3\% | 0.4\% | 0.4\% | 22.7\% |

[^20]1. Estimates for 1988-89 are from the Comptroller's June 1988 revenue estimate.
2. Investment earnings from the state's Permanent School Fund are constitutionally dedicated to the Available School Fund.
3. Motor vehicle registration fees are constitutionally dedicated to the state highway program.
4. Other revenues includes transfers between funds. Other revenue may be negative in those funds which make transfers out to other funds.
used to support the stated purpose of the fund.
Only the lands set aside for the Permanent School Fund and the Permanent University Fund were substantial, and after the discovery of their oil and gas reserves, extremely profitable. Together, the two funds account for 92.3 percent of all state land income and 61.1 percent of state interest and dividend income.
During the 1988-89 budget period, the Permanent School Fund tracts are expected to generate $\$ 447.9$ million- 66.7 percent of all state land income. The Permanent University Fund is expected to generate $\$ 172$ million- 25.6 percent of state land income.
The Permanent School Fundwith assets of $\$ 6.1$ billion at the end of 1987-invests in government and corporate securities. Realized capital gains are retained by the fund and reinvested. The interest and dividends from the fund are expected to total $\$ 1.1$ billion in 1988-89. This income is distributed to local school districts through the Available School Fund. This amounts to 44 percent of the state's interest and dividend income.
The Permanent University Fund's assets totalled $\$ 2.9$ billion
at the end of 1987. Like the school fund, it invests in government and corporate securities and retains its realized capital gains. Interest and dividends from the fund are deposited into the Available University Fund and are expected to total $\$ 445.4$ million during the 1988-89 budget period-17.1 percent of the state's interest and dividend income. These earnings are used exclusively for programs at the University of Texas and Texas A\&M University.
Noncommercial permits and fees. Only a small portion-less than six percent-of the state revenues from noncommercial permits and fees are deposited into the state's General Revenue Fund. The majority of these fees- 65.6 percent-are motor vehicle registration fees, which are constitutionally reserved for highways and deposited in the State Highway Fund. Much of the remaining amounts are tuitions retained by the colleges and universities charging them. Also included are many miscellaneous fees, such as hunting and fishing licenses (which are dedicated to the Game, Fish and Water Safety Fund for the use of the Parks and Wildlife Commission).
State service fees. State service

TABLE 3. Federal Aid Revenue by Program Category for Nontrust Funds, 1987 (Millions of Dollars)

| Program | Requiring State <br> Matched | Unmatched | Total |
| :--- | ---: | ---: | ---: |
| Welfare | $\$ 1,574.3$ | $\$ 102.5$ | $\$ 1,676.7$ |
| Education | 5.9 | 701.8 | 707.7 |
| Highways/Transportation | 848.2 | 0.5 | 848.8 |
| Health/Social/Rehabilitative Services | 157.7 | 426.7 | 584.4 |
| Unemployment Compensation | 0.0 | 147.7 | 147.7 |
| Public Safety | 33.8 | 13.3 | 47.1 |
| Environment | 25.5 | 13.7 | 39.2 |
| General Government | 0.0 | 19.1 | 19.1 |
| Other | 3.2 | 4.2 | 7.4 |
|  | $\$ 2,648.6$ | $\mathbf{\$ 1 , 4 2 9 . 5}$ | $\$ 4,078.1$ |
| Total |  |  |  |

Source: State of Texas, Annual Financial Report, 1987.
fees are the fees charged for services performed by the state. Approximately half of this income is placed in the General Revenue Fund. This includes fees for state services such as providing records on licensed Texas drivers and general business filing fees on corporations.
Service fees allocated to the Comptroller's Operating Fund are for the administration and enforcement of the local sales taxes. The state retains two percent of the amount collected. Other fees are deposited in special funds and are normally reserved for the agency assessing them.
Business and professional fees. Business and professional fees are assessed as a part of licensing practicing professionals. Most of these receipts are deposited in the General Revenue Fund, though they may be directly appropriated to the administering agency. Just over 30 percent of these fees are deposited in special funds before being appropriated to the administering agency.

The recent temporary fee increase for selected professionals is included in this category and is dedicated in a manner consistent with occupation taxes- 25 percent to the Foundation School Fund and 75 percent to the General Revenue Fund.

Sales, rentals and repayments. Sales, rental income and repayments are the other significant nontax source of state revenue. The bulk of these receipts consists of contract revenues by the Highway Department for federal highway construction. Also included are highway department receipts from the sale of its machinery and equipment and subscription revenues from its publications.
Revenues in other funds are also partly the result of equipment sales and publications subscriptions.

## The Texas Fund Structure

Texas' system of dedicated revenues has spawned an even more complex system of state funds. Texas today has 452 separate state funds, up from 415 just two years ago and up from 344 just a decade ago. In recent years, new funds have been added for numerous purposes, from holding proceeds from the state's increasing bonded debt issues ( 32 new special funds in the past ten years), to managing state employee deferred compensation contributions, to controlling bee diseases. Many of these new funds have been established so that certain state programs will be self-supporting. The Bee Disease Control Fund, for example, receives regulatory and inspection fees assessed on the bee industry. These proceeds are used exclusively to finance the state's bee regulatory program.

Over 100 of the state's 452 funds are currently inactive-holding no revenue and showing no transactions for the previous fiscal year. Inactive funds are retained on the state's books for a few years in case delinquent money or transactions surface. Eventually, the Comptroller, with the consent of the Treasurer and the State

Auditor, may eliminate the fund.
As of the end of 1987, the state had 323 active funds (Table 4). Over half, 185, of these were general state operating and disbursing funds-the state's General Revenue Fund among

## Over 100 of the state's 452 funds are currently inactive-holding no revenue and showing no transactions for the previous fiscal year.

these. Many of these are the special operating funds created for self-supporting agencies; also included are numerous special funds for institutions of higher education. These operating funds have been created by statute and could be consolidated by the Legislature without submitting a constitutional amendment to the voters.

The state has 50 constitutional funds expendable for specific purposes, including the Available

School Fund and the State Highway Fund. Most of these constitutional funds, however, are bond funds holding the proceeds of Texas debt issues. The Legislature may make appropriations from these funds provided they are for the specific purposes stated in the Constitution or bond covenants.

There are six constitutional funds from which the Legislature may not make direct appropriations. These are the permanent endowment funds: the Permanent School Fund, the Permanent University Fund, the Permanent Blind Institute Fund, the Permanent Deaf and Dumb Asylum Fund, the Permanent Lunatic Asylum Fund and the Permanent Orphans Home Fund. Interest income from these funds may be appropriated only through the respective available funds.
The state maintains 20 separate funds to hold federal funds reserved for specific uses-running the gamut from child welfare and school lunches to disaster relief. Federal money targeted for specific uses may also be deposited in general operating funds.

There are 50 state trust funds in which the state holds money in trust for someone else. These include the state's accounts for

TABLE 4. Active State Funds, August 31, 1987

| Type of Fund | Number <br> of Funds | 1987 Revenue <br> (millions) |
| :--- | ---: | ---: |
| General State Operating and Disbursing Funds | 185 | $\$ 15,507.5$ |
| Constitutional Funds Expendable for Specific Purposes | 50 | $5,131.1$ |
| Nonexpendable Constitutional Funds | 6 | $5,107.6$ |
| Federal Funds | 20 | $1,281.0$ |
| Trust Funds | 50 | $14,917.0$ |
| Trust or Pledged Funds | 6 | $5,107.6$ |
| Suspense Funds | $\mathbf{4}$ | $1,001.6$ |
| Tax Clearance Funds | $\mathbf{3 2 3}$ | 106.4 |
| Total |  | N.A.' |
| Source: State of Texas, Annual Financial Report, 1987. |  |  |
| 1. Because of transfers among funds, a dollar total is not meaningful. |  |  |

teachers and employees retirement, employee deferred compensation and the distribution of local sales tax collections.

In a separate category are six special trust funds which serve as pass-through accounts for trust money. The largest of these is the Tax and Revenue Anticipation Note Fund, which holds the proceeds of the state's short-term debt issues used to finance the temporary general revenue cash deficiencies.

The state also keeps four suspense funds. One is to hold revenues in question and revenues paid to the state under protest. The remaining suspense funds are used to facilitate payroll deductions and only temporarily hold revenue.

Finally, the state has two clearance funds for the distribution of local mixed drinks taxes and local bank franchise taxes.

## Selected Programs and Their Dedicated Funds

To understand the implications of how the system of revenue dedications works within the state's fund structure, it is important to view the system from the spending side, as well as the previously discussed revenue side.

This section looks at how dedicated revenues and special funds play a role in several of the state's major spending programs-public education, higher education, highways and human services. Together, these programs account for over threefourths of total state spending.

Public education finance. Public education in Texas is largely financed through a complex series of formulas established in statutory law known as the Foundation School Program. This program includes money from the Available School Fund, the Foundation School Fund and
the General Revenue Fund.
While almost nine percent of all state revenue is dedicated to the Foundation School Program, this falls far short of the amount needed to finance the program fully. Consequently, the Legisla-

> While almost nine percent of all state revenue is dedicated to the Foundation School Program, this falls far short of the amount needed to finance the
> program.

ture must appropriate general revenue dollars over and above these dedications. In fact, statutory law determines the amount of total state aid. In effect, the amount the state must reserve for public education is formulafunded and "automatic." Unless the Legislature changes statutory law, a predetermined amount must be set aside for the program.
As provided in the constitution, each school district receives a constant dollar amount per student in state aid from the Available School Fund. This amount is calculated based on expected revenues in the fund (after a setaside for textbooks) and the average daily attendance for the previous school year. In 1988, Available School Fund aid (resulting from Permanent School Fund income and the motor fuels tax transfers) amounted to $\$ 276$ per student or a total of $\$ 822$ million. For some property-wealthy school districts-77 in 1988-this amount was actually greater than that which they were eligible to receive from the statutory foundation program. These "budget-balanced" school districts still receive this per capita allocation, however.

These districts are expected to receive $\$ 143$ million under this allocation over and above their Foundation School Fund entitlement for the 1988-89 biennium.

The remaining Foundation School Program payments to the local districts come from the Foundation School Fund. In 1988-89, the state is expected to deposit $\$ 1.7$ billion in dedicated revenues in the Foundation School Fund. Unfortunately, this is $\$ 6.6$ billion short of financing the cost of the program. This $\$ 6.6$ billion is appropriated to the Foundation School Fund from the General Revenue Fund (Table 5).
In addition to the aid determined through the Foundation School Program, local districts also receive federal money which is passed through state coffers$\$ 1.5$ billion in 1988-89. Most of this total- $\$ 932.1$ million-is federal aid channelled through the state's Federal Health, Education and Welfare Fund. This money is given to the state for discretionary grants and certain education programs, such as vocational and technical training. The remaining $\$ 623.8$ million is reserved exclusively for school lunches and passes through the Federal School Lunch Fund for distribution to the local school districts.

The state also provides free textbooks for the local districts in a separate program through the State Textbook Fund, as directed by the Texas Constitution. In 1988-89, the state will spend over $\$ 200$ million on textbooks.

Counting all programs, the state appropriated $\$ 11.8$ billion for public education in 1988-89, using six separate state funds. Of this, $\$ 6.7$ billion-more than half-was paid for out of nondedicated general revenues.

Higher education. Like public education, the state's colleges and universities also receive dedicated
revenues far short of the totals needed to finance their programs (Table 6). While state institutions of higher education receive no dedicated tax receipts, they are allowed to retain their tuition charges and other general income (such as student fees, admissions, etc.).

There are 50 separate state operating funds to hold the tuition and general income of the institutions. This money is dedicated automatically to the individual institutions through riders in the appropriations bill and is not considered part of the process of determining general revenue appropriations. In 1988-89, this income will likely total $\$ 1$ billion-or only 16 percent of total state support for higher education.

Two schools-the University of Texas and Texas A\&M University-receive dedicated revenue from the Available University Fund. Two-thirds of the earnings are used for the support of the University of Texas and one-third for Texas A\&M University. The Constitution prohibits the Legislature from appropriating general revenue for construction at these two institutions, so the Available Fund money is used for their building programs. Any of this money left over may be used for the two universities' general operations.

Even adding the Available University Fund money with their tuition collections and general income puts the University of Texas and Texas A\&M far below the amount needed to finance their education and research programs, so additional general revenue appropriations are required. In 1988-89, the University of Texas system received a general revenue appropriation totalling $\$ 1.6$ billion, while Texas A\&M received $\$ 500$ million.

Other state colleges and universities are constitutionally prohib-
ited from using Available University Fund money. Instead, they may draw on an annual building appropriation of $\$ 100$ million required by the Constitution. To finance the operations and other construction at these institutions of higher education, the Legislature appropriated $\$ 2.3$ billion in discretionary dollars.
In sum, the Legislature provided a grand total of $\$ 6.3$ billion for higher education in 1988-89. Dedicated revenues provided only $\$ 1.9$ billion of this total. The remaining $\$ 4.4$ billion came from discretionary appropriations out of the General Revenue Fund.

Highways. The state highway program is essentially the only major state program totally
funded through dedicated revenues (Table 7). Constitutionally dedicated motor fuels taxes are transferred to the State Highway Fund each month, while constitutionally dedicated motor vehicle registration fees are deposited directly in the fund, as are federal highway reimbursements.

Critics of dedicated funding often use the Highway Fund as an example of a totally protected fund. Because of the dedications, the Legislature cannot reduce appropriations to highways and use the savings for other purposes.

The Legislature could reduce money flowing into the Highway Fund by lowering motor fuels tax rates or by reducing the fee

TABLE 5. Sources of Income for Texas Public Education, 1988-89 (Millions of Dollars)

|  | Dedicated <br> Revenue | Nondedicated <br> Money | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Program | $\$ 3,390.2$ |  | $\$ 6,590.4$ | $\$ 9,980.6$ |
| Foundation School Program | 230.2 | 0.0 | 230.2 |  |
| Textbooks | $1,472.2$ | 52.2 | $1,524.4$ |  |
| Other Programs | 0.0 | 72.2 |  |  |
| Administration | $\$ 5,092.6$ | $\$ 6,714.8$ | $\$ 11,807.4$ |  |
| Total |  |  |  |  |

Source: Legislative Budget Board, Fiscal Size Up, 1988-89 biennium; and Comptroller of Public Accounts, Revenue Estimate, June 1988.

TABLE 6. Sources of Income for Texas Higher Education, 1988-89

| Revenue Type | Amount <br> (millions) | \% of Total |
| :--- | :---: | :---: |
| Dedicated Revenues/Required Spending: |  |  |
| Available University Fund | $\$ 439.2$ | $7.0 \%$ |
| Tuition and General Income | $1,026.6$ | 16.4 |
| Non-PUF Building Fund | 220.0 | 3.5 |
| Grants and Other | 171.9 | 2.7 |
| Subtotal, Nondiscretionary | $\$ 1,857.7$ | $29.7 \%$ |
| Discretionary General Revenue Appropriation | $\$ 4,393.3$ | $70.3 \%$ |
| Total | $\$ 6, \mathbf{2 5 1 . 0}$ | $\mathbf{1 0 0 . 0 \%}$ |

Source: Legislative Budget Board, Fiscal Size Up, 1988-89 biennium.
schedule for motor vehicle registrations, but this would not create any new discretionary income, unless the tax or fee reduction was replaced with other nondedicated revenues.

Human services. The Department of Human Services oversees a broad range of programs operating out of a myriad of special funds. The department administers Aid to Families with Dependent Children, food stamps, Medicare and protective services for children and families, among others. Federal funds will pay for almost 60 percent of the agency's budget in 1988-89. Spending from the state's General Revenue Fund accounts for 40 percent. Unlike other general fund appropriations, however, budgeting options for the Department of Human Services are more limited. Federal funds for the Department are generally matching funds based on the amount of state spending. Changes in state-originated spending impacts the amount of federal aid-the more the state spends,
the more federal dollars it is eligible to receive and vice versa.

The agency uses a total of 17 special funds for its programs, including the Welfare Administration Operating Fund, Welfare Assistance Operating Fund, Social Worker's Fund and Child Abuse and Neglect Prevention Operating Fund.

## Spending Formulas Add Further Complications

It is clear that there are factors complicating state finances other than revenue dedications. While only half of the state's revenues are reserved for specific purposes, when formula-funded programs, programs under the influence of federal matching funds and agencies subject to court mandates are included, almost 86 percent of the state's budget is under limited discretion (Table 8).
As mentioned previously, the Foundation School Program establishes total spending for public education through a statutory formula based on the number of public school children. In 1988-89, this formula

[^21]| Revenue Type | Amount |
| :--- | ---: |
| Constitutionally Dedicated Tax Revenue: <br> Motor Fuels Taxes <br> Motor Vehicle Registration Fees <br> Motor Lubricants Sales Tax | $\$ 2,169.0$ |
| Total Constitutionally Dedicated Tax | $1,268.6$ |
| Receipts Currently Dedicated by Statute: <br> Federal Funds <br> Other Revenues' | $\$ 3.0$ |
| Total Statutory Dedications | $\$ 3,491.6$ |
| Totai Highway Program Revenue | $\$ 1,716.3$ |
| Source: Comptroller of Public Accounts, Revenue Estimate, June | -1989.9 |
| 1. Other revenues are negative due to a one-time borrowing of $\$ 280$ million in statutory |  |
| funds for public education. |  |

dictated that $\$ 6.6$ billion over and above dedicated revenues be spent for public education.
Social services spending is not under statutory formula funding, but it is strongly influenced by federal matching programs. Almost $\$ 2.9$ billion of the stateoriginated spending for social services is budgeted to agencies qualifying for substantial amounts of federal dollars. Certainly any of these social service budgets could be cut at the discretion of lawmakers (and have been in recent sessions), but this could automatically translate into a loss of restricted federal funds.
Employee benefits is the other major formula-funded area of the budget. The state contributes an amount equal to a certain percentage of employees pay into retirement accounts. This percentage is specified in statutory law and can be changed by the Legislature without voter approval. In addition, the state pays for employees' group health insurance (the amount per employee is capped). The state also pays up to $\$ 965$ of each employee's Social Security taxes-costing a total of $\$ 815.5$ million in 1988-89 (\$564.7 million from general revenue). All totalled, employee benefits costs the state over $\$ 3$ billion this biennium, $\$ 2.5$ billion of which will come from general revenue. The Legislature can decrease this amount by reducing the number of state employees. Any major change in the appropriation requires a change in the funding formula written into statutory law.
Court orders have placed further limitations on lawmakers' discretion. Currently, the Texas Department of Mental Health and Mental Retardation, the Texas Department of Corrections and the Texas Youth Commission are all under federal court mandates to improve conditions for current user populations. The total
general revenue budgets of these agencies amount to $\$ 2.3$ billion.
While revenue dedications, formula funding, court orders and federal matching programs influence state spending, they do not necessarily tie lawmakers' hands. The $\$ 9.6$ billion in for-mula-driven spending could be "freed" through statutory change (such as reducing the retirement match-a moneysaving measure taken in recent legislative sessions), as could the $\$ 4.3$ billion in statutorily dedicated revenue. And while constitutional tax dedications cannot be changed solely by the Legislature, lawmakers do have
the authority to set the tax rates which determine how much money is reserved.

For example, the Legislature can reduce the amount of funding for highways by reducing the motor fuels tax rate. Further, the court orders never required a certain dollar amount be spent, only that certain improvements be made. In truth, Table 8 overstates the limitation of the state's budget system. It does, however, underscore just how complex state finances have become.

## Recent Attempts at Funds Reform

There have been several at-
tempts by the Legislature to consolidate and simplify the state's fund system in recent years. In spite of the net increase in the overall number of state funds in the past decade, the Legislature has abolished 61 funds and has rendered almost 40 others inactive. However, there has been no major legislative overhaul of the funds system, although several committees have studied it.
The Senate Committee on Agency Funds Management in 1984 determined "the need for significant fund consolidation is of major import to the overall fund management of the state."
In 1985, the House Appropria-

TABLE 8. Dedicated Revenues and Formula-Influenced Spending, 1988-89 (Millions of Dollars)

|  | Public Education | Higher Education | Highways | Social Services | Employee Benefits | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dedicated Revenues: |  |  |  |  |  |  |  |
| Constitutional | \$3,620.4 | \$659.2 | \$3,491.5 | \$0.0 | \$0.0 | \$943.3 ${ }^{\text {2 }}$ | \$8,705.4 |
| Statutory | 0.0 | 1,117.6 ${ }^{3}$ | 1,899.04 | 0.0 | 0.0 | 1,280.9 ${ }^{\text { }}$ | 4,287.5 |
| Federally Restricted | 1,499.96 | $80.9{ }^{7}$ | 0.0 | 4,530.5 | 0.0 | $610.9{ }^{8}$ | 6,722.2 |
| Subtotal, Dedicated Revenues | \$5,120.3 | \$1,857.7 | \$5,380.5 | \$4,530.5 | \$0.0 | \$2,826.0 | \$19,715.1 |
| Formula Spending: |  |  |  |  |  |  |  |
| Formula Driven | \$6,590.4 ${ }^{\text {² }}$ | \$0.0 | \$0.0 | \$0.0 | \$1,959.7 ${ }^{\text {9 }}$ | \$0.0 | \$8,550.1 |
| Federally Influenced | 29.711 | 0.0 | 0.0 | 2,852.312 | $564.0^{13}$ | 0.0 | 3,446.7 |
| Court Mandates | 0.0 | 0.0 | 0.0 | 1,315.714 | 0.0 | $1,002.0^{15}$ | 2,317.7 |
| Subtotal, Formula Spending | \$6,620.1 | \$0.0 | \$0.0 | \$4,168.0 | \$3,035.9 | \$0.0 | \$14,314.5 |
| Discretionary | \$67.0 | \$4,393.0 | \$0.0 | \$263.1 | \$0.0 | \$2,219.5 | \$6,452.4 |
| Total Appropriations | \$11,807.4 | \$6,251.0 | \$5,380.5 | \$8,961.6 | \$3,035.9 | \$5,045.5 | \$40,482.0 ${ }^{15}$ |

Source: Select Committee on Tax Equity.

1. Available University Fund and mandated spending for the College Building Fund.
2. Royalties and rents to the permanent funds and permanent fund capital gains. This money is not available for appropriation.
3. Tuition and general income.
4. Federal matching money; contract and miscellaneous revenues.
5. Regulatory revenues, bond proceeds, etc.
6. School funches, vocational/technical education.
7. Grants.
8. Department of Community Affairs, Department of Commerce, etc.
9. Foundation School Program.
10. Retirement system and health benefits-general revenue amount.
11. Federally required state spending for school lunches.
12. General revenue budget for agencies receiving federal funds (excludes MH/MR).
13. Statutory state contribution for social security-general revenue amount.
14. General revenue budget for Department of Mental Health and Mental Retardation.
15. General revenue budget of the Department of Corrections and Youth Commission.

Note: Figures are based on the General Appropriations Act, but also include nonappropriated income deposited in the permanent funds. Since these figures are based on spending, they may differ slightly from figures calculated using revenues presented earlier.
tions Committee established a subcommittee chaired by State Representative Mike Toomey. In the subcommittee's 1986 report, it determined:

Automatic dedications of revenue have limited legislative discretion with regard to certain budgetary decisions. This policy has hindered the Legislature in adjusting to unforeseen changes in the state's revenue picture.

The subcommittee recommended that the Appropriations Committee should consider ways to eliminate some of the dedications.

In 1987, Representative Richard Williamson introduced House Bill 1786 , which would have consolidated all state funds previously created by statute into six "super funds":
(1) General Operating Fund;
(2) Federal Fund;
(3) Trust of Pledge Fund;
(4) Tax Clearance Fund;
(5) Trust Fund; and
(6) Suspense Fund.

This bill was amended in the House Appropriations Committee so that rather than consolidating

| TABLE 9. Unexpended Special |  |
| :--- | ---: |
| Fund Balances Transferred to |  |
| General Revenue (Millions of |  |
| Dollars) |  |

funds, it instructed the Comptroller to study funds consolidation and make recommendations to the Legislature. The bill was never brought to a vote before the full House and did not become effective.

While special funds may complicate state finances, they are not untouchable piles of money.

## Targeting Special Fund Balances

While special funds may complicate state finances, they are not untouchable piles of money. There may not have been a major overhaul of the state's funds over the past few years, but there have been substantial changes impacting special funds. The Legislature, while creating more dedicated state funds, has also moved to loosen the purse strings of the special funds by confiscating their unused cash balances.
Many special state funds were created by statute with the stipulation that any surpluses at the end of the year be transferred to the General Revenue Fund. For years, this was the source of anywhere from $\$ 30$ to $\$ 80$ million annually for general revenue.
Texas law still permitted many statutorily created funds to retain their excess funds, just as constitutional funds tend to do. As Texas entered into difficult budget times, however, even these protected statutory funds came under closer scrutiny.
In 1985, the Legislature required all state agencies to
report annually to the state's leadership the amount of unobligated cash balances held in their special operating funds. Further, Senate Bill 1322 (S.B. 1322), enacted into law by the 69th Legislature, found:
. . . to ensure the efficient operation of state agencies and to provide for the necessary costs of state government operation, it is in the public interest to provide a means for periodic legislative review and control of unobligated cash balances and income held by state agencies in funds other than the General Revenue Fund. It is the intent of the legislature that: (1) funds possessing an unobligated balance at the end of a fiscal year in excess of that amount necessary for the fulfillment of an agency's statutory duties shall be identified within the General Appropriations Act by fund; and (2) the amounts of unobligated actual or projected balances held in such funds in excess of the amounts determined by the legislature to be sufficient for the fulfillment of statutory requirements shall be appropriated to the General Revenue Fund.

Exempted from this provision are constitutional funds, trust funds (e.g., retirement and local tax-clearing funds), funds holding bond proceeds, higher education local funds and capital trust funds.
Armed with this authority, the Legislature met in special session in 1986 to deal with a rising state deficit and identified $\$ 66.1$ million in 48 state funds that was in excess of agency operational needs. This money was transferred to the General Revenue Fund to reduce the
state deficit. Adding these special transfers to the automatic transfers yielded a record total gain to the state's General Revenue Fund of $\$ 146.7$ million in 1987 (Table 9).

In the appropriations bill for the 1988-89 biennium, excess funds for 25 state agencies were targeted in the state appropriations bill. Given that many unused balances were cleared the previous year, the total gain to general revenue was only $\$ 80.7$ million, still substantially higher than revenues that would have been received prior to the enactment of the special fund-clearing legislation. Today, most nontrust statutory funds are subject to an end-ofyear balance sweeping for general revenue.

It is not only at the end of the fiscal year that the General Revenue Fund can draw on special funds. Throughout the year the state's General Revenue Fund may be short of funds. Statutory law allows temporary borrowing of cash balances from many of the state's special funds. In recent years, these special fund balances have not been sufficient to cover General Revenue warrants, so the Legislature has granted the authority to the Treasurer to do short-term taxexempt borrowing by issuing cash management notes.

## The Impact of Revenue Dedication and Funds Reform on State

## Government

It is not clear that reducing the number of revenue dedications would necessarily result in a substantial increase in the discretionary power of the Legislature. Excluding highways, the state's major programs that receive dedicated revenues do not get an amount
sufficient to eliminate the need for discretionary General Revenue funding. Essentially, the Legislature already has the decision-making power to either reduce or increase appropriations for these programs. Dedicated revenues for these programs act as a floor below which appropriations cannot fall, and in most cases, the floor is so low as to be nonexistent.

> Funds consolidation at the very least, however, could have the lasting benefit of greatly simplifying the finances of state government.

The major constraint dedicated funds pose on the Legislature stems from the constitutional funds. Statutory funds can be changed by simple majority vote of the Legislature. It requires a twothirds vote of both houses and approval by state voters to amend the Constitution. The most common areas of reform mentioned in recent years concerning the state's constitutional dedications are:
(1) transferring realized capital gains on the investments in the state's permanent endowment funds to their appropriate available funds (a procedure consistent with other endowment funds);
(2) allowing equalization factors to be used in distributing Available School Fund money; and
(3) loosening dedications of money for highways.

To the extent that there are numerous regulatory and other agencies operating out of their own special funds, the Legislature does have the authority under S.B. 1322 of the 69th Legislature to appropriate a lesser amount than their expected revenues and then transfer the excess to the General Revenue Fund. While this may be a round-about way of freeing dedicated revenues, it is at least a method on which lawmakers may rely.
Funds consolidation at the very least, however, could have the lasting benefit of greatly simplifying the finances of state government.
At best, it could have a substantial revenue impact on state finances. Many special funds maintain sizeable balances at the end of each fiscal year, though much of this money is to meet the agency/program payroll due the next day. Combining these numerous special funds with the General Revenue Fund would substantially increase the available year-end General Revenúe cash balances.

However, this gain would tend to be a one-time effect, realized in the first year of fund consolidation. Because the appropriations bill is certified on a cash basis, these balances might be available for certification and for general purpose appropriations. Spending this money would reduce the overall level of operating cash balances in the State Treasury, however, and the state would likely have to make up the difference during the year by increasing the amount of short term borrowing through cash management notes.

# T exas Local Government Finance 

The Effort to Make Ends Meet

## Summary

The finances of Texas cities, counties and school districts are shaped by several important influences including: the ongoing local relationship with state and federal governments, inflexible revenue sources that are susceptible to economic fluctuations and a mandate to deliver essential public services regardless of prevailing economic conditions.
State and federal officials affect local finances through various aid programs, the conferring or withholding of taxing authority and the imposition of new program responsibilities.
The primary sources of local governmental revenue are property taxes, intergovernmental aid, local-option sales taxes and user fees. With the exception of user fees, the control that local officials have over their funding sources is relatively constrained. Local options may be dictated as much by legislative action or economic circumstances as by local action.
For example, state and federal budgetary woes have resulted in a trend of decreasing local aid, a trend that is unlikely to be reversed soon. The Legislature has the ultimate authority over the property tax and sales tax, and new forms of tax revenue can be granted only by the Legislature or the voting public through approval of municipal charter amendments.

Economic downturns erode the local property tax roll and push down retail sales, resulting in lower sales tax receipts.

Local government provides services that are basic to economic competitiveness and public well-being-education, roads, police, fire and health care. These services require substantial infrastructure investment, as well as ongoing maintenance and support. In addition, greater responsibilities have been placed on local officials for education reforms, prison overcrowding and indigent health care.

The combination of inflexible and potentially inadequate revenue sources and rising service demands puts local officials in a fiscal vise with few agreeable alternatives. Deep spending cuts may pose a threat to public safety or local development, changes in the bond market have created the possibility of unfavorable conditions for financing capital improvements with debt, and state lawmakers have shown little inclination to provide targeted assistance to cities or counties or enhance local revenue-raising abilities.

Consequently, local officials faced with budget shortfalls frequently postpone needed capital investments indefinitely. This strategy can have a negative impact on economic competitiveness and result in greater longterm costs.

By Randy Fritz

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The finances of Texas local government mirror the state itself. Texas is large, diverse and multifaceted. So, too, Texas local government is large (currently spending around $\$ 30$ billion a year), diverse (comprising well over 2,000 independent units) and multifaceted (providing education, public safety, utilities and human services).
There are a number of sharply drawn differences between the major forms of Texas local government. Counties are local agents of the state, and their responsibilities and revenue-raising capabilities are somewhat narrow. School districts provide a single servicepublic education-and their finances are tied closely to state government. Municipalities, which have the most revenue options, must also juggle the broadest range of spending programs.
Moreover, within each type of government there are significant differences among individual units. This chapter will underscore the broad range of financial strategies that are used by local officials, depending upon the unique characteristics of their county, city or school district.
Despite the differences, however, there are a number of common themes that unite all Texas local governments. One of the most basic is the ongoing and
dynamic relationship among the three levels of government-local, state and federal. Actions by national or state officials can affect the way local governments exercise their responsibilities.
Probably the most important intergovernmental relationship is the conferring of taxing authority. No local government can impose or raise taxes unless the state's constitution or a statute specifically grants that power, or there are court interpretations to that effect, and providing such action does not violate federal law.
Another common theme is local government's mandate to provide services that are closely related to what is commonly called "quality of life." While the actions of federal or state lawmakers can have a definite effect on their constituencies, they rarely have the immediate and visible impact of basic local services like elementary education, fire protection, water distribution or streets.
The essential nature of many local services implies several things:
(1) because they are so easily scrutinized by the public, local services must be delivered in an efficient and cost-effective manner;
(2) spending cuts are often considered undesirable because they can pose a risk to economic development or public safety and well-being; and
(3) many local services require a fiscal combination of longterm capital investment and routine operating support.

The intergovernmental relationship combined with the nature of local expenditures leads to the

1. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987), p. 90.
final common theme: in a worsening economic situation, local governments are faced with the threat of increased service demands that cannot be adequately financed with deteriorating and inflexible revenue sources. Or, to put the dilemma another way, local officials may lack the means or the authority to deal efficiently with the pressures that mount when their revenues fall and service requirements remain flat or increase.
This chapter shows that, within the context of a diverse and energetic network of local government, fiscal storm clouds are gathering that threaten the ability of local officials to meet their responsibilities without being forced to choose between highly undesirable alternatives.
The largest and most serious problems are easily identified: a federal shift away from financial assistance to local government; a revenue system whose inflexibility and inadequacy are most pronounced and serious during periods of economic weakness; changes in the debt market that could make it more difficult and expensive for Texas local governments to finance their capital improvements; an increasing tendency on the part of state and federal government to shift spending responsibilities to local officials without providing them with the means to fund those programs; and a systemic pattern of deferred spending and investment that will eventually have to be confronted.
Not all local governments will be affected equally by these trends. And the three major forms of local government are also unlikely to be affected in the same way. But the common themes of local government suggest that virtually all county, school district and city officials have an interest in changing the status quo in a
way that could avert future financial instability.
Whether or not the storm clouds develop into a major fiscal storm depends on whether existing fiscal imbalances can be addressed successfully. This chapter does not propose specific ways of dealing with the financial difficulties facing local government. Rather, its purpose is to document the current trends that collectively make an argument for some type of systemic adjustment that would provide local officials with a more reliable and flexible way of funding their activities.

## Federal-Local Relations

The federal-local relationship has frequently been based on the attitude of national lawmakers that the best places to achieve policy goals like safety, education and environmental integrity are at the levels of government closest to the people.
In practical terms, that has meant that an important feature of federal spending has been the transfer of money to local programs in support of a broad range of operating and capital requirements. Some of that money flows to the local level through state disbursements, while other funding is remitted directly to local government. During fiscal year 1986, just under $\$ 1$ billion in federal assistance was sent directly to all Texas local govern-ments-over half of which went to municipalities. ${ }^{1}$ That same year, over $\$ 4.5$ billion in federal aid earmarked for support of local programs was sent to the state.
The way federal funds arrive at the local level is important because it affects the stability and flexibility of local budgeting. Local officials who receive federal funds that are routed through the state have more alternatives if the funds are reduced than those who
get their money directly from Washington. Direct assistance is more difficult to replace, while the state at least has the option of using its own resources to supplement diminished federal aid that is distributed through a statewide program.

The practical effect of this difference is easily demonstrated. Cities receive the bulk of their federal funds directly, and when they experience a significant loss of assistance-such as the elimination of general revenue sharingthey must make up the shortfall on their own. School districts, on the other hand, receive much of their federal money through the Texas Education Agency (TEA). In the event of a major federal cutback, state lawmakers could choose to maintain a consistent flow of revenue by increasing the appropriation under the state's Foundation School Program.
Municipalities are the most affected by the federal-local relationship because they have traditionally received the largest share of direct aid. Since 1980, city officials have had to deal with a persistent erosion in federal assistance.
For example, Community Development Block Grant expenditures have been cut 28 percent, Urban Development Action Grants 68 percent and federally subsidized housing 70 percent. ${ }^{2}$ The loss in funds is a function both of budgetary policy (shifting more governmental responsibility back to the local level) and politics (cuts in aid are a palatable way to reduce the massive federal budget deficit because national lawmakers receive virtually no direct political benefit from transfer payments to local officials).

When measured both in terms of percentage loss and impact on operating revenue, the greatest recent upheaval in federal-local fiscal relations was the loss of
general revenue sharing, which was originally created to facilitate a more equitable and efficient funding mechanism to support essential local programs:
[R]evenue sharing was intended to have a desirable effect on the national tax structure by causing a heavier reliance on more progressive and efficient federal tax sources and, in turn, less reliance on state and local sales and property taxes. Revenue sharing has been an important factor in allowing some governments to stabilize or limit tax increases. ${ }^{3}$

Throughout the 1970s and early 1980s, revenue sharing's popularity increased and it became an integral part of many municipal budgets. Although city officials initially used the funds mainly to support capital spending, the trend moved quickly toward subsidization of routine operating expenses-a natural budgeting strategy for local governments experiencing financial distress brought on by either increased spending pressures or declining revenues. A 1985 federal Treasury Department report described the importance of the revenue sharing program to local governments this way:

It has been demonstrated repeatedly that revenue sharing has become an indispensable source of funds for local governments, integrated into their budgets and used for police, fire and sanitation services, mandated capital expenditures, emergency social services, and health programs. The program becomes all the more vital to cities and localities in a time of recession and other federal cutbacks. ${ }^{4}$

There can be little doubt that
revenue sharing was a useful source of funds for Texas cities as the state's economy went into decline. In 1985, the program sent roughly $\$ 250$ million to Texas municipalities. But the pressures of the worsening federal budget deficit moved Congress to eliminate revenue sharing in 1986, despite a strong and unified lobbying effort by local governments in support of the program.

The 1985 Treasury Department report warned-to no avail-that the termination of revenue sharing might result in layoffs, service cuts, property tax increases or user fee hikes. Although the loss of $\$ 250$ million in federal funds has not had a disastrous impact on Texas cities, the change is nevertheless significant because no new forms of federal assistance have taken the place of revenue shar-ing-and none are likely anytime soon because of the federal government's budgetary woes.

Congress still sends a sizable amount of money to local government to support housing, education and infrastructure. But the loss of untargeted aid means Texas municipalities must now cope with diminished operating revenue at the same time their tax receipts may be flat or declining and service demands are increasing.
2. Alex Kotlowitz, "Issues of the Cities Surface in Election Campaign, But Candidates' Discussions Still Lack Substance," Wall Street Journal, April 14, 1988, p. 54.
3. Richard P. Nathan and Charles F. Adams, "The Record of Revenue Sharing," in Laurence J. O'Toole, Jr. (ed.), American Intergovernmental Relations (Washington, D. C.: Congressional Quarterly Inc., 1985), p. 148.
4. U.S. Department of the Treasury, Office of State and Local Finance, Federal-StateLocal Fiscal Relations: Report to the President and the Congress, September 1, 1985, p. 458.

## The State Role

While federal-local relations are characterized mainly by revenue transfers, the state-local relationship is more complex and farreaching. Significant revenue transfers do take place-most notably in support of school districts-and the state has imposed some new spending responsibilities on local officials. But the state's most important intergovernmental role is defining the parameters of local fiscal powers.

Simply put, no school district, county or city can impose or increase taxes unless it is granted such authority through state legislation, the state's constitution or case law fashioned in the Texas court system. The general inability of local government to create new sources of tax revenue without state participation is a principal cause of one of local government's most vexing revenue problems-inflexibility, the inability to react quickly and effectively to budget shortfalls.

Counties have the least autonomy of the three forms of local government. In fact, virtually all county lawmaking authority is explicitly granted-or withheldby the state. A recent Texas Rescarch League report points out that this is because counties have

[^22]traditionally been viewed as local agents of state government:

Counties do not have home rule; all Texas counties have the same governmental structure and practically the same long list of elected officers. What little regulatory or ordinance-making power counties have is derived almost totally from their position as agents of the state. Their taxing and debt authorities are strictly limited. However, the actual budgeting procedures of counties are not controlled by the state. ${ }^{5}$

Counties can independently adopt budgets and, within the scope of their authority, create programs that address such diverse policy concerns as health, public safety, transportation, welfare and economic development. But their ability to raise sufficient revenues to support their programs is fundamentally derived fromand limited by-the state's property tax code.
Although the property tax is the only source of tax revenue for school districts, the prominent role state assistance plays in most school budgets means school trustees generally enjoy greater revenue stability than county officials. According to Legislative Budget Board data, over 53 percent of 1987 Texas school district funding came from state or federal sources.
Substantial state and federal support means Texas school districts are not as susceptible as counties or cities to downturns in property values. Nevertheless, because state or federal lawmakers could deal with their own budget problems by reducing payments to local school districts, trustees remain vulner-
able to a system that grants them only limited authority to make autonomous revenue decisions apart from increasing property taxes.
Cities are similar to counties and school districts in that their taxing power comes from either the state constitution or statutes. But the actual impact of the state's role is determined by the legal status of municipal governments. Home rule-cities have greater inherent taxing powerand therefore revenue flexibil-ity-than general-law cities. ${ }^{6}$
Article XI, Section 5 of the Texas Constitution statesthat municipalities with populations over 5,000 -the point at which city councils may propose home rule-"may levy, assess and collect such taxes as may be authorized by law or by their charters." Although this constitutional provision almost certainly prevents a home-rule city from unilaterally adopting a new tax, it does permit locally created taxes within the framework of a city charter amendment. However, there is a critical-and limitingdifference between new state or federal taxes and new taxes imposed by a home-rule city: any city charter amendment, including the imposition of a new tax, must first be approved by the voters before it has the force of law.
Texas courts have upheld the principle that cities cannot tax without authority articulated by a home-rule city charter or state law. ${ }^{7}$ The courts have also consistently held that none of Texas' general law cities can levy taxes without a specific grant of power by the state. ${ }^{8}$ Additionally, when there has been uncertainty as to whether the state has delegated the power of taxation to a municipality, the courts have operated under the rule of strict construction, which essentially says the
benefit of doubt must be in favor of the taxpayer and against the city. ${ }^{9}$

The inability of local governments to unilaterally impose new taxes-or restructure existing ones-does not mean local officials have no way of generating new revenue. State law does not prevent local officials from raising existing locally administered taxes. Counties and cities often cope with budget shortfalls by increasing user fees or imposing new ones. School districts can attempt to persuade the state to provide additional support either through the legislative process or the courts. In fact, the landmark Edgewood I.S.D. v. Kirby lawsuit could be viewed as a new revenue strategy-property-poor school districts using the court system to gain more state assistance.

Nevertheless, the impact of tax-authority limits on local government budgeting should not be underestimated. Local officials who are faced with serious budget shortfalls have only a few workable alternatives: they can increase property taxes, raise fees, cut services or defer needed spending indefinitely. Although some might argue that new or restructured taxes are even less attractive than the preceding alternatives, there can be little doubt that reliance on the state for taxing authority limits the ability of local leaders to respond quickly and efficiently to changing revenue situations.

## Local Government Revenue Resources and Issues

Probably the most troublesome fiscal problem facing local government is a revenue system that is inflexible and inadequate during periods of economic contraction. As discussed earlier, the inflexibility grows out of the state's control over local government's taxing
power. Inadequacy (i.e., the inability to generate sufficient revenue to meet spending needs) is a problem inherent in the revenue sources available to local officials.

The inadequacy of a particular revenue source is related to the breadth of its base, its sensitivity to economic conditions and its susceptibility to political or popular pressures. But while there are varying degrees of inadequacy across the gamut of local revenue sources, what is important is the extent of collective inadequacy. For Texas local governments, the question is how the revenue side of their budgets have been affected as a whole by the state's weak economy.

The major categories of local general revenue are: intergovernmental aid, property taxes, the sales tax, "other" taxes, user fees and miscellaneous revenue, including interest income and utility transfers. Large capital investments are often financed with bonds that have traditionally paid tax-free interest. The distri-
bution of general revenue sources for all Texas local governments is illustrated in Figure 1.
Virtually every local government levies property taxes and receives some intergovernmental aid from the state or federal government. The sales tax is a localoption tax available only to cities, counties and metropolitan or regional transit authorities. User charges are generally not imposed by school districts. The majority of miscellaneous revenue-particularly utility transfers-is raised by muncipalities.

Almost all school district revenue in Texas comes from either intergovernmental aid or property taxes, although there is diversity between school systems in terms of proportional share. In addition, the Edgewood I.S.D.v. Kirby lawsuit holds out the possibility of shifting the differences that currently exist between school districts.

As a group, school districts have largely held their ground during
9. Testimony by Frank Sturzl.

the past several years. Although school district property values have declined overall, state and federal support has remained strong.

Collectively, cities have had a more difficult struggle keeping their budgets in balance during the state's economic downturn. The Texas Municipal League (TML) has studied recent municipal finance trends by surveying 64 of the state's largest cities with a combined population of almost nine million. According to TML testimony before the Select Committee, the following changes occurred in principal municipal revenue sources since 1980: federal aid as a percentage of total revenue fell from 19.8 percent to 8.5 percent; property taxes declined from 27.5 percent to 25
10. Testimony by Frank Sturzl.
11. Texas Municipal League, Texas Cities Facing Troubling Times, Working Paper (Austin, 1987).
12. Sam Seale, Texas Association of Counties, testimony before the Select Committee on Tax Equity, December 17. 1987.
percent; and user fees, interest and miscellaneous income rose from 29.9 percent to 42.5 percent. ${ }^{10}$ Another TML study found that:

Nearly 45 percent of all Texas cities experienced a revenue decrease for FY 1987. Almost 57 percent of the state's cities are collecting less revenue this year than they budgeted and have been forced to take quick corrective actions. Cities in the 2,000-10,000 population range (more than 340 cities) have been the hardest hit, with more than half of them experiencing revenue downturns. ${ }^{11}$

Table 1 illustrates the revenue breakdown for the state's ten most populous cities, which together account for about one-third of total state population. Per capita revenue for those cities in 1984 ranged from $\$ 428$ for El Paso to $\$ 780$ for Amarillo, with the average being $\$ 548$. The state average was $\$ 480$.
Of the three major forms of local government, counties have experienced the sharpest fiscal downturn, with 60 percent

TABLE 1. Revenue Sources for Ten Most Populous Texas Cities, 1984

| City | Aid | Property Tax | $\begin{gathered} \text { Sales } \\ \text { Tax } \end{gathered}$ | Other <br> Taxes | Fees | Interest | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Houston | 11.0\% | 28.0\% | 14.0\% | 10.0\% | 19.0\% | 11.0\% | 7.0\% |
| Dallas | 10.0 | 30.0 | 14.0 | 11.0 | 21.0 | 10.0 | 4.0 |
| San Antonio | 19.0 | 18.0 | 13.0 | 5.0 | 22.0 | 15.0 | 8.0 |
| El Paso | 24.0 | 19.0 | 8.0 | 7.0 | 22.0 | 12.0 | 8.0 |
| Fort Worth | 17.0 | 27.0 | 12.0 | 9.0 | 19.0 | 9.0 | 7.0 |
| Austin | 9.0 | 19.0 | 10.0 | 6.0 | 36.0 | 14.0 | 6.0 |
| Corpus Christi | 19.0 | 23.0 | 14.0 | 9.0 | 20.0 | 9.0 | 6.0 |
| Arlington | 7.0 | 27.0 | 12.0 | 9.0 | 24.0 | 13.0 | 8.0 |
| Lubbock | 11.0 | 25.0 | 15.0 | 7.0 | 16.0 | 20.0 | 6.0 |
| Amarillo | 7.0 | 18.0 | 8.0 | 5.0 | 53.0 | 5.0 | 4.0 |
| Average | 13.0\% | 23.0\% | 12.0\% | 8.0\% | 25.0\% | 12.0\% | 7.0\% |
| State Average ${ }^{1}$ | 10.0 | 26.0 | 15.0 | 9.0 | 23.0 | 9.0 | 8.0 |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant
Features of Fiscal Federalism (Washington, D.C. 1987). Features of Fiscal Federalism (Washington, D.C., 1987).

1. These figures are the averages for all cities, regardless of size.
receiving less federal aid and over half suffering from declining property values. ${ }^{12}$ Table 2 shows the distribution of revenue sources for the state's ten most populous counties, which together account for more than half of the Texas population. Per capita revenue for those counties in 1984 ranged from $\$ 82$ for Cameron County to $\$ 339$ for Nueces County, with the average being $\$ 164$. The state average was $\$ 167$.

## Intergovernmental Aid

State and federal aid is a mixed blessing for local government. On the one hand, the use of intergovernmental revenue poses practically no popular risks to local officials. Funding essential services in a way that extracts no obvious fiscal pain from the local electorate is a politically safe budgeting manuever. By the same token, there are clear financial risks associated with using funds that could be cut off at any time-as in the recent case of revenue sharing-to support programs that would be difficult to pare back or eliminate.
State or federal aid has a builtin problem of potential inadequacy because local officials have little or no power to maintain or increase their levels of support. They are at the mercy of national and state lawmakers.
Of course, the budget problems inherent in intergovernmental aid do not incline local officials to turn down transfer payments. But any examination of state or federal aid must start with the understanding that it is manifestly susceptible to inadequacy during periods of statewide or national economic distress.

School districts rely most heavily on such aid. In 1987, 46 percent of the $\$ 12.2$ billion in public school revenue came from the state, and seven percent came
from the federal government. ${ }^{13}$ Counties, on average, received just over 11 percent of their revenue from intergovernmental sources in 1984, while cities received just under 11 percent.

Federal support of Texas schools is tied to specialized programs like remedial reading, migrant children services, health care and staff development. State aid is targeted to the operating costs connected with the Foundation School Program (instructional services, pupil services and administration).

For the 1986-87 school year, the state covered 72 percent of the foundation program's statewide costs (an average grant of $\$ 1,497$ per student). ${ }^{14}$ However, the program does not support capital expenses or debt service, and most school districts spend more than the foundation level anyway. When the local operating funds are added to capital costs and debt service, local spending amounted to an average of $\$ 1,578$ per student. The local share is financed largely through the property tax.

State and federal support for counties and cities is currently targeted mainly to infrastructural projects. The federal government also makes job training money available through the Job Training Partnership Act (JTPA).

Federal agencies that assist Texas local governments include the Departments of Education ( $\$ 510$ million in fiscal year 1987), Health and Human Services (over \$200 million), Housing and Urban Development (about $\$ 500$ million) and Transportation (\$70 million). In addition, the Environmental Protection Agency was also active ( $\$ 140$ million). ${ }^{15}$ The primary state agencies involved in disbursing moneysboth federal and state - to county and city officials include the Department of Commerce, the

Water Commission, the State Department of Highways and Public Transportation and the Department of Community Affairs.

While it would be unwise to predict the long-term direction of state and federal support, several current trends provide some insight into the probable direction of future aid. Education remains popular with state and national lawmakers. The federal government's well-publicized budget woes make it unlikely that federal subsidization of operating costs will make a legislative comeback. Congressional help for infrastructure projects and inner-city development is steadily eroding, while job training for private sector jobs continues to enjoy modest but stable support.

The property tax. The property tax is not only the dominant local tax (generating well over 80 percent of all local tax revenue), it is also the most important tax used by Texas governments (resulting in 44 percent of state and local tax revenue). Over the past
five years, its prominence has increased markedly-rising from 37 percent of all state and local tax revenue in 1981 to 44 percent in 1986. ${ }^{16}$ During the same period, per capita property tax burdens adjusted for inflation have risen from \$143 to \$190.

Over half of all property tax proceeds go to finance public schools, while 20 percent is spent by cities, 16 percent by counties and 11 percent by special taxing districts (to provide, among other things, utilities, roads and fire protection). ${ }^{17}$

[^23]| TABLE 2. Major Revenue Sources for the Ten Most Populous Texas Counties, 1984 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | Intergovernmental Aid | Property Tax | Other Taxes | Fees | Interest | Other |
| Harris | 13.0\% | 62.0\% | 3.0\% | 8.0\% | 9.0\% | 5.0\% |
| Dallas | 15.0 | 50.0 | 3.0 | 23.0 | 6.0 | 3.0 |
| Bexar | 16.0 | 46.0 | 3.0 | 23.0 | 9.0 | 3.0 |
| Tarrant | 19.0 | 52.0 | 4.0 | 15.0 | 8.0 | 2.0 |
| El Paso | 18.0 | 46.0 | 3.0 | 24.0 | 3.0 | 6.0 |
| Travis | 20.0 | 47.0 | 2.0 | 8.0 | 6.0 | 17.0 |
| Hidalgo | 16.0 | 55.0 | 2.0 | 7.0 | 15.0 | 5.0 |
| Nueces | 11.0 | 32.0 | 1.0 | 45.0 | 10.0 | 1.0 |
| Jefferson | 7.0 | 70.0 | 3.0 | 10.0 | 5.0 | 5.0 |
| Cameron | 14.0 | 25.0 | 6.0 | 28.0 | 21.0 | 6.0 |
| Average | 15.0\% | 49.0\% | 3.0\% | 19.0\% | 9.0\% | 5.0\% |
| State Ave | rage'11.0 | 46.0 | 5.0 | 17.0 | 7.0 | 14.0 |
| Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington D.C., 1987). <br> 1. These figures are the averages for all counties, regardless of size. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

The property tax has a structural feature that inhibits its adequacy and two statutory limitations that affect its flexibility. The structural feature is the relationship between economic cycles and the tax base. The statutory limitations are the rollback provision that impedes the ability of local officials to fully rely on the property tax to meet their budgetary requirements and the state's power to exempt particular categories of property value from the tax rolls.

Property tax receipts are directly related to the scope and value of a tax roll. Naturally, a deterioration in value caused by falling real estate or energy prices will have an impact on the amount of revenue that a taxing district can raise with a particular tax rate.

Although the state has been going through a period of general economic weakness, its effects have not been spread evenly. Regions with close ties to the oil and gas industry have experienced the greatest loss of taxable
18. Ibid., p. 6.
19. Testimony by Sam Seale.

TABLE 3. Change in Urban Taxable Values, 1986-87

| City | Change in Value |
| :--- | :---: |
| San Antonio | $-4.1 \%$ |
| Austin | -8.5 |
| El Paso | -9.4 |
| Corpus Christi | -12.9 |
| Dallas | -0.5 |
| Houston ${ }^{1}$ | -9.7 |
| Fort Worth $^{2}$ | +18.0 |

Source: Texas Municipal League.

1. Because of data availability, TML had to calculate this decline over 24 months.
2. This apparent anomaly is largely explained by the city's annexations during the period examined.
wealth. For example, between 1985 and 1986, the value of the state's mineral reserves dropped by 26 percent. ${ }^{18}$ Industrial property and rural land have also posted significant losses.
The State Property Tax Board (SPTB) estimates the state's tax roll by compiling the records of the state's 1,061 school districts. According to its most recent annual report, the taxable wealth of all school districts fell by 1.5 percent between 1985 and 1986, the first time a statewide decline was reported. Over this period, 604 of the state's school districts lost taxable value. Value losses in 420 of these districts-most of which were in energy-related regionsexceeded five percent.
When the state is examined by county, the story is similar. Fiftyfive percent of all counties had declining appraised values in 1986 ( 60 percent of rural counties and 45 percent of urban counties). ${ }^{19}$ Over 98 counties had tax rolls that were at least 30 percent dependent on mineral valuations.
On its face, a 1.5 percent statewide loss in taxable value seems notable only because a tax roll depreciation of any size is unprecedented. But when the focus is narrowed to particular cities, the inherent vulnerability of the property tax to economic downturns becomes more obvious.
TML has studied the behavior of large city tax bases over the past year. The results, shown in Table 3, indicate the state's largest urban areas have been losing taxable wealth at a much greater rate than the state as a whole. The losses have been occurring at the same time major urban populations-and service demands-have been rising.
The state's rollback provision is a statutory limit against "effective" property tax increases greater than eight percent. The "effective" property tax rate is a
figure that produces the same amount of revenue generated by the previous year's rate-in effect, leveling out changes in the tax base due to reappraisals, new property, economic losses and so on. A rollback election is triggered if a petition objecting to an effective tax increase greater than eight percent is signed by ten percent of the voters in a taxing district.
If the election is successful, the tax rate for the year being budgeted is rolled back to the eight percent limit. Special rules apply to school districts-a successful rollback election limits the following year's tax rate to an eight percent effective increase.
The chief importance of the rollback statute is its effect on the psychology of local budgeting. The mere threat of a rollback election may be enough to inhibit local officials from fully realizing the potential of their only locally controlled and broad-based tax in the event of a significant fiscal imbalance. The result is a reduction of budgeting flexibility.

It is impossible to know how many times tax increases have been held in check by the threat of a rollback. What is known is the record of rollback elections. This record is significant in two ways: it says something about taxpayer support for the activities of local government in its various forms; and it implies which forms of local government are most constrained by the rollback law.
The SPTB has monitored rollback activity since 1982. The rates of success for legally filed petitions are listed in Table 4 by governmental level and in the aggregate.

As Table 4 shows, school districts have most often faced a rollback election but are also the most likely to beat back the threat. A likely explanation for
that paradox is that increasing enrollments and state mandates sometimes force school trustees to adopt significant tax increases. The increased taxes trigger rollback petitions, but popular support of public education defeats the rollback efforts. This pattern suggests healthy support for local schools and only a mildly inhibiting rollback effect on trustee decision making.

The threat of a rollback petition has a greater effect for municipal governments, which have only had a 33 percent chance of prevailing in a rollback election. And, until recently, counties appeared to be the most affected by the constraints of the rollback law. Petitioners attempting to roll back large county tax increases enjoyed a 100 percent success rate. The performance of Texas counties in rollback elections suggests volatile taxpayer support for many of the activities of county government-things like jail construction, county recordkeeping or indigent health carewhich are not as visible or as easily appreciated as public education, fire protection or trash collection.

Volatile support is also demonstrated by recent voter dissatisfaction with elected officials who have raised property taxes to finance county spending. In 1986, for instance, over half of the incumbent county judges running for reelection in Texas were defeated, along with nearly half of the incumbent county commissioners. County representatives attribute much of this turnover to the fallout from property tax increases. ${ }^{20}$
The county situation changed dramatically on September 22, 1987, with Attorney General's Opinion JM-792. The decision held that the rollback provisionas it affects counties-is unconstitutional. The opinion, which was
requested by the DeWitt County Commissioners Court, stated that county rollback elections were impermissible because the state's constitution specifically vests county commissioners with the power to set tax rates at levels sufficient to fund their spending requirements. Consequently, any state law impairing the authority of county commissioners to make independent taxing decisions is in violation of the constitution.

Subsequent Attorney General opinions held that school districts (JM-835) and hospital districts (JM859) do not enjoy protection from the rollback provision, because the constitution does not specifically empower trustees or district board members with authority to set tax rates at levels sufficient to fund their activities.

At this writing, no city or other special district has requested an attorney general's opinion vis-a-vis the constitutionality of their rollback status. But there is no language in the constitution pertaining to municipalities or other special districts that corresponds to the unique county provision.

While these opinions have made interpretation of the property tax code somewhat more confusing and uncertain, they have had the clear effect of blunting the rollback provision's impact on county government.

The other impediment to full
utilization of the property tax is the state's power-and demonstrated willingness-to exempt particular types of property from the ad valorem tax rolls. As in the case of the rollback law, there is a tradeoff between the policy benefits inherent in restricting local government's taxing authority and the impact of that policy on budgeting efficiency.

In testimony before the Select Committee, Dr. John Horn, President of the Texas Association of School Administrators, described the growth in property tax exemptions:

While many [property tax] exemptions represent only a small portion of the local property tax base, the total number of exemptions allowed is 17 , and their cumulative effect is significant. The State Property Tax Board first kept records of the value of state-mandated exemptions in 1981. That year, exemptions totalled $\$ 14$ billion. Two years later, state-mandated exemptions had increased to $\$ 25$ billion. By 1986, state-mandated exemptions were $\$ 34$ billion. ${ }^{21}$
20. Ken King, Texas Association of Counties, interview on May 5, 1988.
21. Dr. John Horn, Texas Association of School Administrators, testimony before the Select Committee on Tax Equity, December 17, 1987.

TABLE 4. Rates of Successful Rollback Elections in 1982-87

| Type of Taxing Unit | Total | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School districts | 18 of 45 | 11 of 24 | 2 of 4 | 0 of 3 | 1 of 1 | 2 of 4 | 2 of 9 |
| Counties | 16 of 16 | 6 of 6 | 4 of 4 | 1 of 1 | 4 of 4 | 1 of 1 | 0 of 0 |
| Cities | 14 of 21 | 2 of 3 | 0 of 9 | 4 of 4 | 3 of 5 | 2 of 3 | 3 of 5 |
| Special districts | 5 of 9 | 2 of 2 | 0 of 0 | 0 of 1 | 0 of 0 | 1 of 2 | 2 of 4 |
| Total | 53 of 91 | 21 of 35 | 6 of 9 | 5 of 9 | 8 of 10 | 6 of 10 | 7 of 18 |

[^24]The most recent legislative attempt to further narrow the property tax base was the constitutional amendment exempting goods in transit (the so-called "freeport" amendment) that was defeated in the November 1987 general election.
Good arguments can be made in support of virtually every existing exemption-as well as for others that have been unsuccessfully introduced-but critics of proliferating exemptions argue that a key question is whether state lawmakers should carry out their policy objectives in a way that impairs the ability of local budgeters to meet their spending obligations. Every time the tax roll is statutorily diminished, the ability of local officials to rely on their most significant locally controlled tax is further eroded.
The sales tax. While the property tax is the preeminent local tax source, the sales tax also generates a considerable amount of money for cities, local transit systems and some counties. As of January 1988, more than 1,000 Texas cities had levied at least a one percent local sales tax. In addition, six metropolitan transit authorities levy a sales tax. ${ }^{22}$ During fiscal year 1986, the local share of the sales tax amounted to roughly 13 percent of all municipal revenue.
House Bill 79, passed during the third called session of the 69th Legislature in 1986, authorized for the first time a sales tax for counties located outside existing metropolitan or regional transit authorities. Commissioners can adopt the one-half cent tax expressly for the purpose of reduc-
22. Robert G. Powers, City of Dallas, testimony before the Select Committee on Tax Equity, February 18, 1988.
23. Frank Sturzl, "Sales Tax Receipts Improving," Texas Town and City (January 1988), p. 12.
ing property taxes. H.B. 79 also granted cities that are not part of a transit authority the right to impose an additional one-half cent sales tax for property tax relief or to fund city transit programs. At the beginning of 1988, 87 counties and 60 cities had approved the new sales taxes.
While the sales tax is a valuable source of local revenue, its rigidity remains a serious liability. Local governments with pressing revenue needs cannot rely on the sales tax rate or base adjustments to make up the difference. That is because the sales tax is strictly controlled by the Legislature, which currently has capped total local option sales taxes at two percent (including municipalities, counties and transit authorities). The Legislature also controls the sales tax base.
Moreover, the sales tax is similar to the property tax in terms of its sensitivity to economic downturns. Economic weakness can show up in numerous ways that have a negative impact on tax collections. For example, rising unemployment or contracting discretionary income tend to inhibit the growth of taxable consumer spending. More importantly, the tax can be significantly affected by business spending in reaction to poor economic conditions.

The susceptibility of the sales tax to economic downturns or increasing joblessness is depicted in Figure 2, which charts the 1987 change in municipal and transit authority sales tax receipts from the previous year. The improving trend begun in September can largely be attributed to the expanded sales tax base included in H.B. 61 in 1987 and the beginning of a statewide economic recovery. ${ }^{23}$

Figure 2 not only suggests a causal link between variable sales tax proceeds and a changing economy, it also shows the immediate and visible impact of beneficial legislative action on local government finances. But it is important to remember that passage of H.B. 61, while it was strongly supported by municipalities, was ultimately a legislative act independent of local authority. In other words, the facts of H.B. 61 imply a mixed blessing for local government. The broadened sales tax base provides a much-needed revenue windfall, but it is also a demonstration of the extent to which local officials must rely on state policy making in this area.

User fees. User fees are based on the philosophy that certain types of government services should be funded in whole or in part by those who directly use the service. While taxes are levied on individuals according to a broad tax base and rate-with the revenue going to support a wide variety of spending require-ments-user fees are narrowly tied to use of a particular service, and the resulting revenues normally support that service. Unlike taxes, which are typically thought of as involuntary, individuals can avoid paying user fees by declining to use the service.
The only state or local taxes that operate in principle and in practice like a user fee are the motor fuels taxes, which are state taxes mainly dedicated to support highway construction and maintenance. Because the taxes are levied on motor fuels consumed for highway use, a higher rate of consumption-which implies a heavier use of the highway system - results in a greater tax bill. There is a clear connection between highway usage and financial support for the highway system.
Nontax user fees run the gamut
from higher education tuition to recreational or park fees to garbage collection or waste-water charges. In 1984, 23 percent of all municipal revenue came from user fees, while counties collected 17 percent of their revenue from fees. ${ }^{24}$ On average, large population centers generate an even larger proportion of their funds through user charges. While school districts occasionally levy fees-admission to sports events, for instance-the share of revenue represented by user charges is inconsequential.

As a category, fees are the only ongoing local revenue source that are truly independent of state government oversight. Local officials can impose user fees without specific statutory or charter authority, and they can raise the fees as high as popular opinion will permit. For that reason, fees are unique among local revenue sources for their flexibility and adequacy.

Those characteristics are why county and city officials rely heavily on user fee hikes during periods of falling revenue. TML reports that 58 percent of Texas cities have raised fees within the past several years. ${ }^{25}$ A 1985 survey of the U.S. Conference of Mayors showed that of 157 responding cities, 49 percent had raised fees during the previous year. ${ }^{26}$ No other fiscal remedy was used more often or more heavily.

While user fees provide some flexibility for local government, they are far from a revenue panacea. Certainly, the problems inherent in the property tax, sales tax and intergovernmental aid do not apply to user fees. But it would be wrong to assume that city and county governments can ignore the problems of revenue inflexibility and inadequacy because they have user fees at their disposal.

There is a limit to how often local officials can turn to fee-based services to solve their fiscal imbalances, just as there is a point beyond which fees cannot practically be raised.

Additionally, because user fees are population-based (i.e., they rise or fall based on the number of people using a particular service), they are not sufficiently sensitive to economic changes. That is important because, as inflation drives up the operating costs of local government, user fees must be increased to maintain a consistent flow of revenue.

Debt financing. Many local governments fund major capital projects-such as buildings, water lines or bridges-with debt financing. They do this for two principal reasons: the high cost of major capital investment often makes borrowing the only practical or feasible method of funding; and it is reasonable to spread out the cost of projects that yield longterm benefits so that future beneficiaries shoulder some of the responsibility.

Collectively, Texas local governmental units have a sizable
amount of outstanding debt-over $\$ 41$ billion as of January 1988. To put that number into perspective, all Texas local governments spent almost $\$ 29$ billion in fiscal 1986. When the state is included, all Texas governmental units owed $\$ 47.5$ billion through 9,779 outstanding bond issues, an average annual debt increase of 18 percent over eight years. ${ }^{27}$

The large increase in local government debt between 1980 and 1988 is principally explained by heavy spending on infrastructure and other major capital investments. This spending was necessitated by the rising service demands of an expanding state population, particularly during
24. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), Appendix.
25. Texas Municipal League, Texas Cities Facing Troubling Times, p. 2.
26. U.S. Department of Treasury, Federal-State-Local Fiscal Relations, p. 447.
27. Municipal Advisory Council of Texas, Public Debt in Texas: Special Report No. 170 (Austin, 1988), p. 1.

FIGURE 2. Monthly Changes in Local Sales Tax Collections, 1987


Source: Comptroller of Public Accounts.
the early part of this decade. Also contributing to the rise in local debt has been a steady rise in construction costs. Thus, while local capital spending has jumped over the past eight years, the real rate of growth is considerably smaller when the effects of population growth and inflation are factored out.

Table 5, which shows public debt trends by governmental unit over the past eight years, indicates that debt is a major source of financing for Texas local government. It also implies that debt service is an important spending obligation.
General obligation (GO) and revenue bonds are the two generic types of local government debt. The difference between the two is the security pledge underlying the bonds. GO bonds are backed by the full faith and credit of the issuing entity and are payable by any means possible, usually implying a pledge of the unit's taxing powers. In fact, most GO debt in Texas is called "ad valorem tax debt" because it
28. "Texas Municipal Taxation and Debt 1987," Texas Town and City (March 1987), p. 7.
29. Danny Burger, Executive Director of Municipal Advisory Council, interview on March 13, 1988.
is payable through property taxes. Once voters approve an ad valorem tax debt issue, rollback elections for tax increases linked to debt service are not permitted.
Revenue bonds are backed by revenues derived from an income-producing activity, usually connected to the project being financed. They are sometimes further secured by a first mortgage on the physical plant or property whose revenues are pledged. ${ }^{28}$

In general, ad valorem debt finances all local capital investment for activities that do not generate income, including streets, libraries, fire stations or school buildings. Conversely, revenue bonds support incomeproducing activity like water or electric utilities or airports. Texas ad valorem tax debt in 1988 is estimated to be $\$ 1,217$ per capita, and per capita gross public debt (tax and revenue debt) is projected to be $\$ 2,852 .{ }^{29}$ Table 6 breaks down local governmental debt by security pledge.

While Tables 5 and 6 invite comparisons with local debt in other states, such comparisons are problematic because of state-to-state differences in how debt is accounted for and how capital

TABLE 5. Outstanding Public Debt in Texas (Billions of Dollars)

| Governmental Unit | Amount <br> (January 1980) | Amount <br> (January 1986) | Amount <br> (January 1988) |
| :--- | :---: | :---: | :---: |
| Cities | $\$ 7.0$ | $\$ 13.4$ | $\$ 16.6$ |
| School Districts | 3.7 | 5.8 | 6.5 |
| Counties and Roads | 0.8 | 2.5 | 2.9 |
| Water Districts | 2.3 | 4.4 | 5.4 |
| River Authorities | 1.9 | 4.0 | 4.5 |
| Hospital Districts | 0.5 | 1.4 | 1.1 |
| State of Texas | 0.9 | 2.1 | 2.3 |
| Texas Agencies | 0.1 | 1.9 | 2.1 |
| Other | 2.4 | 5.3 | 6.1 |
| Total | $\$ 19.6$ | $\$ 40.8$ | $\$ 47.5$ |

Source: Municipal Advisory Council of Texas.
projects are funded. One of the most obvious differences is school construction. In Texas, school districts fund building projects entirely with local tax revenue. As a result, Texas school district debt seems high relative to some states where school construction is a financial responsibility of state government. In other states, schools are municipally run and their capital expenditures are funded out of the municipal budget. Consequently, state-to-state school district comparisons of bonded indebtedness are substantively meaningless.
There are no legal limits as to how much revenue debt a local government can issue. The only constraints are the credit worthiness of the issuing body and the reliability and sufficiency of the revenue source. And, unlike tax debt, revenue bonds are not subject to voter approval.

All Texas tax debt-except certificates of obligation-has to be ratified in an election. A certificate of obligation (CO) is tax debt-most often used to finance jail construction-that can be put to a vote only by a successful voter petition. COs are rarely used at present.
School districts and special districts-like water, road or hospital districts-have no legal limits on their taxing authority. Their only debt constraints are voter attitudes and the vicissitudes of the economy and the bond markets. The legal restrictions on county or municipal tax debt, which are established in Texas case law and enforced by the Attorney General, have to do with how much property taxation can be levied for purposes of debt service.
The property taxing powers of counties are limited to a maximum of 80 cents per $\$ 100$ of assessed valuation, no more than
half of which can be for debt service. In addition, county voters have the right to approve up to a 15 cent tax for road and bridge operations and 30 cents for farm-to-market road operations and debt. General-law cities cannot levy above $\$ 1.50$ per $\$ 100$ of assessed value, with a 50 cents maximum for debt service. Home-rule cities are limited to $\$ 2.50$ per $\$ 100$ overall, with no more than one dollar earmarked for debt service.

Local officials pondering a debt issue must consider possible legal limitations on their taxing authority, voter attitudes (unless it is a revenue bond offering) and the economic viability of the issue.

According to Danny Burger, Executive Director of the Municipal Advisory Council, the legal constraints on tax-debt financing normally do not have a substantive impact on the adequacy or flexibility of local budgeting. It is rare for a city or county to approach its legal taxing limit for debt service because the economic viability and voter attitude factors act as a built-in barrier against excessive borrowing.
Specifically, Burger believes that local governments saddled with heavy debt or unreliable operating revenues will have trouble obtaining credit at an affordable rate. He also argues that local officials will be reluctant to propose major capital projectsand the bond elections to finance them-without popular support and a strong probability of voter approval. He points to an average approval rate of 75-80 percent for Texas school district bond elections over the past several years, compared to a national average of around 50 percent. Popular support is unlikely for bond issues nearing the legal limit for debt service taxation.
Still, the current level of debt is
cause for some concern. That is because any one or a combination of several developments could impede the flow of funds to Texas local governments for essential long-term investments. These include increased competition for investor dollars, a constriction in the money supply designed to force up interest rates, a downgrading of Texas local governmental bond ratings or a perception by the investment community that Texas local governments are nearing their safe borrowing limits.
The availability of bond revenue in view of the state's large outstanding aggregate debt is fundamentally a long-term problem. Of more immediate concern are the terms being offered to Texas local governments issuing bonds. Unfavorable terms mean higher interest rates and related costs, which increase the debt-service burden on operating revenue-whether it's tax-based or fee-based. Three recent events have the potential of creating more unfavorable conditions for Texas local government borrowing: the 1986 federal Tax Reform Act, a recent U.S.

Supreme Court ruling affecting the taxability of interest on state and local bonds and the deterioration of the Texas banking industry.
The traditional attraction to buyers of local government debt has been its tax-free statuswhich allows local governments to pay lower interest rates while still attracting investor dollars. Interest costs for tax-free bonds have typically run between 25 and 35 percent below rates for taxable bonds. ${ }^{30}$
A common strategy for investors in high tax brackets has been purchase of relatively safe municipal bonds that, while they paid lower yields than corporate bonds, resulted in more attractive after-tax earnings. Although the income produced by GO bonds and some revenue bonds is still tax-free, their relative attractiveness has declined in light of the significantly lowered top income tax rates mandated by the 1986 Tax Reform Act. As bond pur-
30. Stephen Wermiel, "Supreme Court Rules Congress is Free to Tax Interest on State, Local Bonds," Wall Street Journal, April 21, 1988, p. 3.

TABLE 6. Public Debt in Texas According to Security Pledge, 1988 (Billions of Dollars)

| Governmental Unit | Total <br> Amount | Ad Valorem <br> Tax $^{\prime}$ | Revenue | Contract <br> Revenue |
| :--- | :---: | :---: | :---: | :---: |
| Cities | $\$ 16.6$ | $\$ 7.1$ | $\$ 9.4$ | $\$ .1$ |
| School Districts | 6.5 | 6.5 | 0.0 | 0.0 |
| Counties and Roads | 2.9 | 2.2 | 0.7 | 0.0 |
| Water Districts | 5.4 | 3.8 | 1.6 | 0.0 |
| River Authorities | 4.5 | 0.0 | 2.1 | 2.4 |
| Hospital Districts | 1.1 | 0.3 | 0.8 | 0.0 |
| State of Texas | 2.3 | 0.0 | 2.3 | 0.0 |
| Texas Agencies | 2.1 | 0.0 | 2.1 | 0.0 |
| Other | 6.1 | 0.4 | 5.0 | 0.7 |
| Total | $\$ 47.5$ | $\$ \mathbf{2 0 . 3}$ | $\$ \mathbf{2 4 . 0}$ | $\mathbf{\$ 3 . 2}$ |

Source: Municipal Advisory Council of Texas.

1. Ad valorem tax debt is payable through property taxes; revenue bonds and contract revenue are secured by an income-producing activity.
chasers rethink their investment strategies in light of the new tax laws, the demand for tax-free bonds could decline and interest costs for those bonds could rise.

The 1986 tax law also imposed "volume caps" on certain "private activity" bonds-local government debt that yields some benefit to trades or businesses. These bonds are most often sold to enhance the economic attractiveness of a community to new business investment. In 1987, the total amount of Texas tax-free debt that could be issued for "private activity" was $\$ 1.2$ billion; in 1988, the limit is $\$ 800$ million. ${ }^{31}$ The limit does not affect debt issued to finance certain exempt "private activities," including airports, docks and wharves, water or sewer facilities, solid waste disposal facilities and hazardous waste plants. Revenue bonds for nonexempt activities that fall outside the volume cap will produce taxable income, substantially reducing their appeal to investors. The probable effect will be an increase in interest costs and greater debt service costs for these types of obligations.

The Tax Reform Act has already had a noticeable impact on aggregate state and local borrowing. According to staff of the National Governors' Association, \$104 billion in bonds was issued in 1987 compared to $\$ 205$ billion in 1986. The drop is largely attributable to the effects of tax reform, including
31. Interview with Danny Burger.
32. Wermiel, p. 3.
33. Ibid.
34. Interview with Danny Burger.
35. Ibid.
36. Charles Boisseau, "Buying Texas: Lone Star State's Municipal Bonds Have Higher Yields than Comparable Bonds from Other States," San Antonio Light, April 25, 1988.

1986 debt issued in anticipation of the legislation.

To make matters worse, the taxfree status of state and local bonds has also been thrown into question with a recent U.S. Supreme Court ruling. The Court ruled that a previous high court decision

> Interest costs have risen, and Texas local governments now borrow at rates that are at or above the national average.

making state bond interest exempt from federal taxes was no longer valid because it has been gradually overruled by a series of other judicial decisions.

The high court's decision is unlikely to have a substantive impact on local borrowing anytime soon because congressional taxwriters do not appear to be inclined to take advantage of the ruling by taxing interest on government debt. Seeking to reassure bondholders and local officials, Senator Lloyd Bentsen, Chairman of the Senate Finance Committee, said: "With regard to basic garden-variety state and local bonds, it's hard to imagine any Congress or administration proposing to tax that interest. Tax exemption on those bonds is extremely popular."32

Nevertheless, considering the large amount of revenue that could be raised by revoking the bonds' tax-exempt status-about \$55 billion over five years-lawmakers might be tempted to take such action in the future, especially if the budget deficit continues to be an annual struggle. State and local officials have already declared the ruling to be a major legal and philosophical defeat and a threat to their financing options. Alan

Beals, director of the National League of Cities, said it was like "a decree of unconditional surrender imposed on state and local government." ${ }^{33}$ At the very least, the effect of the ruling is likely to be additional uncertainty and nervousness in the market for state and local general-purpose debt.

Problems in the Texas banking industry are one of the most ominous developments-at least in the short run-for Texas local officials considering new capital investments. Large Texas banks used to buy the majority of Texas local government bonds. ${ }^{34}$ The statewide decline in real estate and energy values has had a severe impact on many of those banks and, as a result, they have greatly curtailed their purchase of tax-free bonds. The banks have done this because they no longer have the funds to make wholesale investments in Texas local government, and they do not need the benefits associated with taxexempt investments.

Consequently, Texas debt is being sold more and more to out-of-state investors, who are generally demanding more favorable terms because of the state's wellpublicized problems with declining mineral and property values. ${ }^{35}$ Interest costs have risen, and Texas local governments now borrow at rates that are at or above the national average. Perhaps more importantly, negative perceptions of the state by outside investors-whether or not they are justified-mean that marketing Texas local debt has become more difficult. ${ }^{36}$

As the state's economy rebounds, it is probable that investors' perceptions of Texas capital markets will improve, and the terms being offered to finance Texas capital improvements will become more attractive. However, because it is unlikely that

Texas banks will regain their dominant position in the market for Texas local government bonds anytime soon, Texas local officials remain vulnerable to unfavorable credit terms in the event of a future economic downturn.

Miscellaneous revenue. This category includes, but is not limited to, interest income, utility income transfers, administrative charges, building permits and law enforcement fines. On average, miscellaneous revenue accounts for 21 percent of county funding and 17 percent of municipal revenue. Roughly one-third of miscellaneous county revenue and just over half of miscellaneous municipal revenue is interest income. School districts, which fundamentally rely on intergovernmental aid and property tax revenue, generate less than two percent of their total revenue through interest income.

The accrual of interest income is partially the result of a conscious attempt by local budget writers to avoid temporary imbalances or shortfalls by overbudgeting expenditures and underbudgeting revenues. Except during periods of economic weakness, this purposefully conservative fiscal policy tends to result in healthy ending balances that generate interest earnings. For example, at the end of the 1985-86 school year, Texas school districts reported aggregate fund balances in excess of more than $\$ 3$ billion. ${ }^{37}$
Some Texas cities routinely transfer utility "profits" to their general operating budget, and those funds are considered to be a type of miscellaneous revenue. For example, Texas has over 70 public power cities that sell electric power-either through wholesale purchase or generation. ${ }^{38}$ Those-and other-cities also transfer a portion of their water or waste-water proceeds to their general funds.

A 1987 Texas Public Power Association study of the cities that generate their own power revealed no clear pattern regarding the size of electric revenue transfers to municipal operating funds. However, according to the Municipal League, one trend that does seem to be emerging is a general move away from utility transfers. Utility fees have risen to the point that they are no longer considered "inexpensive," and as a consequence, there is a growing feeling among many city officials in the state that utility transfers are essentially an invisible "tax" on utility consumption that should be curtailed.
While miscellaneous revenue plays an important role in many county and city budgets, it cannot realistically be viewed as even a partial budgeting solution to the serious problems of diminishing intergovernmental aid, inflexible and potentially inadequate tax sources or a changing bond market. For example, interest income should not be viewed as a flexible or dependable revenue source because interest rateswhich determine the amount of income that can be earnedcannot be controlled by local officials. Similarly, the revenue generated by fines, building permits or administrative charges is neither highly predictable nor reliable.

## Spending Responsibilities

The fiscal storm clouds facing local governments are not just connected to the way governments raise their money. There are also worrisome trends having to do with how they spend it.
On the revenue side, local officials have to work with a funding system that is inflexible, potentially inadequate and frequently outside their direct control. The revenue shortcomings are directly linked to expen-
ditures to the extent that budget imbalances necessitate budget cuts or spending deferrals.
More specifically, budget cuts or postponement of needed capital investments can cause even greater budgeting problems in the future because the need for essential services like water distribution and public transportation does not decrease with falling revenues. As local officials are forced to put off needed improvements or cut essential programs, the ultimate effect can be an erosion of public services and infrastructure that can be extremely costly to repair over the long run. After all, spending deferrals imply a fiscal responsibility that has not been eliminated, only temporarily put aside.
Other problems on the spending side are additional responsibilities being placed on local government without a commensurate increase in assistance or revenue authority, rising debt service costs driven by less favorable terms in the bond market and the "doublewhammy" of rising demand for public services (especially health care and human service programs) occurring during periods of diminishing revenue and economic sluggishness.
The frustration of Texas local officials was reflected in comments by Bexar County Judge Tom Vickers before the Select Committee:

Our traditional functions-jails, streets, health services, courts, mental health, juvenile serv-ices-are all high growth needs in our metropolitan areas. They

[^25]continue to place the maximum possible pressure on the property tax. . . . The state, acting under the mandate of the Federal Superfund Act, has asked each Texas county to appoint a local emergency planning committee to inventory the storage of local hazardous chemicals and devise plans fortoxic spills or other disasters. In the largest counties, this will result in substantial filings of information and computer costs. No funding has accompanied this new requirement. Congress had a good idea, the State of Texas passed it on to its 254 local agents, and we are left to translate this good idea into the pockets of our local property taxpayers. ${ }^{39}$

Table 7 illustrates how all local expenditures-which totalled just under $\$ 27$ billion in fiscal year 1985 or $\$ 1,306$ per capita-are categorized by function. Included in the "other" category are administrative and judicial services,
39. Tom Vickers, Bexar County Judge, testimony before the Select Committee on Tax Equity, December 18, 1987.
40. W.N. Kirby, Texas Education Agency, testimony before the Select Committee on Tax Equity, December 17, 1987.

TABLE 7. Distribution of Texas Local Government Spending, 1985

|  |  |
| :--- | :---: |
| Service | Distribution |
| Public Schools | $44.9 \%$ |
| Higher Education | 3.6 |
| Public Welfare | 0.4 |
| Health and Hospitals | 8.0 |
| Highways | 4.8 |
| Police and Fire | 7.3 |
| Other | 31.0 |
| Source: U.S. Advisory Commission on |  |
| Intergovernmental Relations, |  |
| Significant Features of Fiscal |  |
| Federalism (Washington, |  |
| D.C., 1987). |  |

utilities, recreation, housing and environmental programs.

Unlike revenue, the troubles associated with spending are not necessarily connected to a particular type of expenditure. Spending cuts or investment deferrals forced by insufficient revenue, additional responsibilities mandated by state or federal lawmakers or higher debt service costs can-and frequently doaffect the capital and operating budgets of virtually every major type of program or service.

Therefore, this section does not examine the trends specifically by spending function. Rather, expenditures are divided into education (which is the responsibility of school districts), basic local services (provided in various proportions by cities and counties) and infrastructure (which applies to all units of local government).

Education. Table 8 shows how the ten largest urban school districts budgeted their funds for the 1986-87 school year. Three categories require explanation. "Services" includes guidance counseling, health, transportation and extracurricular activities. "Debt service" is interest and principal on bonded indebtedness, and "Capital" includes all purchases of long-term items with nonborrowed or regularly recurring funds.

One of the most important elements of public education in Texas is the Foundation School Program (FSP), which is structured by the Legislature and administered by the Texas Education Agency (TEA). It is legislatively intended to provide the foundations of a basic education for every Texas schoolchild. Support for the program comes from state general revenue appropriations, several dedicated taxes and income from the state's permanent public school en-
dorsements. In addition to FSP support, the state also provides over $\$ 200$ million for the purchase of textbooks.

While the FSP ensures a minimum level of support for every child's education, it does so only by sharing the cost of routine operating expenses with school districts. All capital expenditures-everything from school buildings to library books-must be paid for with local revenue. In other words, all debt service and capital out-lays-which together account for almost 20 percent of school spending-are funded exclusively with property tax receipts.

According to TEA Commissioner William Kirby, several of the recent education reforms have increased the fiscal burden on local school districts without an accompanying enhancement in taxing authority or funding:

The cost of implementing the 22-1 class size requirement in kindergarten through the fourth grade will amount to more than $\$ 600$ million and the cost of advancement on the state salary schedule in the 1988-89 biennium would have been $\$ 200$ million a year. Neither of these two requirements are funded in the state budget for public education. ${ }^{40}$

New state mandates are not the only source of pressure on school district tax rolls. Higher enrollments-driven especially by the fast-growing minority segment of the population-are pushing up operating costs as well as necessitating new or enlarged capital facilities according to Kirby.

Unlike many public education systems in the United States that are experiencing declines in enrollment, the public
schools of Texas are growing by as many as 60,000 students each year .... [B]y the year 2000, we expect to be educating more than four million children compared to the 3.3 million in our schools today. The growth in minority students presents a specific challenge that compounds the task of meeting the demands of rising school enrollments. ${ }^{41}$

Presumably, the state's share of the FSP will continue to cover over two-thirds of the recurring expenses of educating up to 60,000 additional students each year. But a significant jump in long-term enrollment has obvious and serious ramifications for local school boards that must fund the construction of new school buildings and other facilities to accommodate the growth.
The projected increase in enrollment (and its implications for infrastructural investment funded by local tax sources), combined with the state mandates contained in the 1984 reform bill, mean that school trustees have good reason to be concerned
about the structural limitations of the property tax or potentially unfavorable changes in the market for Texas local government bonds. Their one reason for optimism appears to be a strong ongoing commitment to quality public education by the state's voters and legislative leadership.

Basic local services (county and city operating expenditures). Total municipal spending rose 54 percent between fiscal years 1980 and 1984 to $\$ 5.6$ billion. ${ }^{42}$ During the same period, per capita expenditures rose from $\$ 255.18$ to $\$ 342.30$ or 34 percent. The increase in spending is much smaller, however, when it is expressed as a percentage of per capita income-less than an average of one percent per year. Table 9 illustrates how the money was spent in the ten most populous cities and the state as a whole.

Per capita spending for the cities in Table 9 ranged from $\$ 373$ for El Paso to $\$ 783$ for Austin, with the average being $\$ 548$. The statewide average was $\$ 430$ in 1984. The Municipal League attributes the recent growth in spending to a number of factors, including
capital improvements (to serve a rapidly growing population), inflation, increasing personnel costs, greater public demand for safety-related programs (especially law enforcement) and higher liability insurance costs.
Table 10 lays out expenditures for the state's largest counties according to spending category. Per capita expenditures ranged from $\$ 81$ for Hidalgo to $\$ 304$ for Nueces with an average of $\$ 161$. The statewide average was $\$ 158$.
Table 10 shows that a principal function of county government is administration (services like public recordkeeping and voter registration). In nonurban counties, commissioners spend a significantly larger amount of their money on road building and maintenance. Urban counties devote a greater proportion of their revenue to health care. Roads are a smaller expenditure in urban-county budgets because there is considerable geographical
41. Testimony by W.N. Kirby.
42. Testimony by Frank Sturzl.

TABLE 8. Education Expenditures by Category for Ten Most Populous Cities, School Year 1986-87י

| District | Administrative | Instruction | Services | Plant | Debt Service | Capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Houston | 12.0\% | 53.0\% | 13.0\% | 11.0\% | 4.0\% | 5.0\% |
| Dallas | 9.0 | 42.0 | 9.0 | 9.0 | 5.0 | 2.0 |
| Fort Worth | 11.0 | 48.0 | 13.0 | 9.0 | 5.0 | 14.0 |
| El Paso | 10.0 | 54.0 | 11.0 | 10.0 | 4.0 | 10.0 |
| San Antonio | 12.0 | 58.0 | 14.0 | 9.0 | 4.0 | 3.0 |
| Austin | 9.0 | 42.0 | 12.0 | 9.0 | 9.0 | 20.0 |
| Arlington | 10.0 | 51.0 | 11.0 | 10.0 | 9.0 | . 8.0 |
| Corpus Christi | 10.0 | 46.0 | 12.0 | 9.0 | 4.0 | 19.0 |
| Lubbock | 12.0 | 50.0 | 15.0 | 10.0 | 4.0 | 9.0 |
| Amarillo | 10.0 | 56.0 | 14.0 | 12.0 | 4.0 | 5.0 |
|  | 11.0\% | 50.0\% | 12.0\% | 10.0\% | 5.0 \% | 12.0\% |
| State Average ${ }^{2}$ | 11.0 | 48.0 | 12.0 | 10.0 | 7.0 | 12.0 |

Source: Texas Research League, Bench Marks for 1987-88 School District Budgets in Texas (Austin, 1987).

1. Except for Lubbock and Amarillo, these cities represent the largest Texas school districts in terms of enrollment; Lubbock and Amarillo are ranked 18th and 20th.
2. These are the averages for all independent school districts, regardless of size.
overlap between municipal and county governments in those areas-meaning fewer per capita miles of county roads.
The spending priorities illustrated in Table 10, combined with recent developments on the state level, suggest that county officials currently face three basic problems with the expenditure side of their budgets.

The first is unreliable public support for certain kinds of county expenditures, which
could make it difficult for counties to keep property taxes at a level sufficient to finance new capital projects or pay for rising operating costs. Activities like courts, record keeping or jails are not as visible or as popular as, for example, police protection or garbage disposal. Potentially weak support for certain kinds of county spending programs is underscored by the perfect losing record of counties in rollback elections and the unfavorable
record of county incumbents running for reelection.

A second problem has to do with recent legislative attempts to deal with the state's budget shortfall. During the 1987 regular legislative session, 92 separate bills were introduced that would have raided a traditional source of county funds-fees and fines. The bills represented widely diverse approaches, but they shared this basic theme: part of the revenue that counties have historically

TABLE 9. Expenditures by Category for Ten Most Populous Cities, 1984

| City | Health | Streets | Safety | Corrections | Sanitation | Administration | Debt | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Houston | 3.0\% | 7.0\% | 28.0\% | 1.0\% | 18.0\% | 5.0\% | 11.0\% | 27.0\% |
| Dallas | 6.0 | 8.0 | 27.0 | 1.0 | 14.0 | 9.0 | 6.0 | 29.0 |
| San Antonio | 7.0 | 6.0 | 21.0 | 0.0 | 18.0 | 5.0 | 7.0 | 36.0 |
| El Paso | 3.0 | 9.0 | 24.0 | 0.0 | 14.0 | 4.0 | 12.0 | 34.0 |
| Fort Worth | 2.0 | 15.0 | 21.0 | 5.0 | 15.0 | 7.0 | 10.0 | 25.0 |
| Austin' | 28.0 | 5.0 | 18.0 | 0.0 | 11.0 | 7.0 | 11.0 | 20.0 |
| Corpus Christi | 3.0 | 13.0 | 20.0 | 1.0 | 17.0 | 9.0 | 10.0 | 27.0 |
| Arlington | 1.0 | 23.0 | 19.0 | 0.0 | 7.0 | 6.0 | 20.0 | 24.0 |
| Lubbock | 2.0 | 14.0 | 24.0 | 0.0 | 10.0 | 10.0 | 17.0 | 23.0 |
| Amarillo ${ }^{1}$ | 53.0 | 13.0 | 12.0 | 0.0 | 7.0 | 4.0 | 3.0 | 8.0 |
| Average | 11.0\% | 11.0\% | 21.0\% | 1.0\% | 13.0\% | 7.0\% | 11.0\% | 25.0\% |
| State Average ${ }^{2}$ | 5.0 | 13.0 | 25.0 | 0.0 | 16.0 | 10.0 | 8.0 | 23.0 |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987).

1. Amarillo and Austin each have city-owned and city-operated hospitals.
2. These figures are the averages for all cities, regardless of size.

TABLE 10. Expenditures by Category for Ten Most Populous Counties, 1984

| County | Welfare | Health | Roads | Safety | Corrections | Administration | Debt | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Harris | 2.0\% | 24.0\% | 16.0\% | 3.0\% | 8.0\% | 22.0\% | 10.0\% | 15.0\% |
| Dallas | 1.0 | 48.0 | 8.0 | 3.0 | 9.0 | 23.0 | 6.0 | 2.0 |
| Bexar | 1.0 | 49.0 | 4.0 | 4.0 | 10.0 | 18.0 | 6.0 | 8.0 |
| Tarrant | 2.0 | 32.0 | 5.0 | 5.0 | 10.0 | 24.0 | 6.0 | 16.0 |
| El Paso | 2.0 | 42.0 | 3.0 | 4.0 | 15.0 | 17.0 | 5.0 | 12.0 |
| Travis | 8.0 | 1.0 | 22.0 | 7.0 | 18.0 | 35.0 | 6.0 | 3.0 |
| Hidalgo | 5.0 | 7.0 | 12.0 | 11.0 | 14.0 | 34.0 | 12.0 | 5.0 |
| Nueces | 1.0 | 60.0 | 7.0 | 5.0 | 4.0 | 13.0 | 7.0 | 3.0 |
| Jefferson | 4.0 | 5.0 | 13.0 | 8.0 | 10.0 | 41.0 | 4.0 | 15.0 |
| Cameron | 2.0 | 6.0 | 10.0 | 8.0 | 10.0 | 34.0 | 21.0 | 9.0 |
| Average | 3.0 \% | 27.0\% | 10.0\% | 6.0 \% | 11.0\% | 26.0\% | 8.0\% | 9.0\% |
| State Average' | 2.0 | 14.0 | 19.0 | 10.0 | 8.0 | 28.0 | 10.0 | 9.0 |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987).

1. These figures are the averages for all counties, regardless of size.
relied on for their operating budgets would have been diverted to the state treasury. Although few of the bills passed, they represent an ominous trend if continued.
The third problem results from cases where state lawmakers shift major fiscal responsibilities to county governments without providing sufficient funds or enhanced revenue authority to pay for them. Two examples of this trend are the 1985 Indigent Health Care Act and the housing of state prison inmates in county jails.
Under the provisions of the Indigent Health Care Act, a county must spend up to ten percent of its property tax proceeds on medical care for lowincome persons who qualify. The state reimburses counties at an 80 percent rate for spending over the ten percent cap. The law has had a demonstrable impact on county property taxes-over two-thirds of Texas counties have raised their effective tax rates to meet their new obligations. ${ }^{43}$ Last year, Cameron County spent $\$ 1.2$ million on indigent health care and was reimbursed just under $\$ 500,000$. The county has a $\$ 15$ million general fund, and taxes had to be increased 13 percent to cover the program's cost. Hidalgo County officials-who met their ten percent statutory cap within the first six months of fiscal year 1987-estimate that they will be spending 15 percent of their total tax revenue on indigent health care within two years. ${ }^{44}$

A potentially greater problem is the impact of the state's prisonovercrowding problem on county jails. Because the state's prison system lacks sufficient space to fully comply with a federal court order, counties are being forced to hold state inmates in their jails. Currently, about 5,500 state prisoners are in county jails-
about 12 percent of the total prison inmate population. County sources are projecting that number will have risen to 7,500 by late $1988 .{ }^{45}$ The current operating cost to counties, which is around $\$ 70$ million, is expected to rise to $\$ 95$ million.
Even more troubling than the operating costs are the heavy demands being placed on county jail space. According to the Texas Association of Counties (TAC), there already is a serious jailovercrowding problem in nine of the state's ten largest counties. TAC believes that the overcrowding could ultimately lead to a federal court order similar to the one imposed on the state's correctional system. The worsening problem of housing state prison inmates has forced over 30 percent of all Texas countiesincluding 80 percent of urban counties-to plan or undergo jail construction programs. Some of those jail projects represent major capital investments that will require significant long-term ad valorem debt service.
It is hard to overstate the seriousness of this burden on county government. If the state remains unable to adequately house its prison population, county officials will have virtually no financial alternatives apart from steep property tax increases.
The problems hovering over municipal spending programs are somewhat different from those menacing county budgets. Like counties, municipal governments are having to maneuver their budgets around the obstacles of diminishing intergovernmental assistance and an inflexible and potentially inadequate revenue system. Unlike counties, however, city authorities are not having to cope with the same level of new responsibilities being placed on them by state lawmakers, and they generally do not
have to worry about voter support for their basic spending priorities.
In fact, the most serious spending problem faced by city officials is related to strong public demand for their services, which makes it difficult to pare back those services during times of austerity. Table 9 shows that the bulk of municipal revenue goes to support public safety (fire and police protection), utility activities (all of which are implied in the "others" category except for sanitation) and streets-all highly visible and generally well-valued services.
When shortfalls occur in municipal budgets, city officials have three broad alternatives: cut spending, raise revenue or defer new spending or investment. Spending cuts in police, fire protection, utilities, streets or health-unless they are proportionally very small-are traditionally both unpopular and difficult to structure without causing harm to public safety or well-being. This chapter has already shown that the only realistic short-term municipal revenue alternative is higher user fees. If that course of action proves to be unworkable or inadequate, spending deferrals are usually the only other practical choice.
As it turns out, the most common strategy-by far-is spending deferrals. According to the Municipal League, midyear budget shortfalls in Texas cities typically are met through layoffs or hiring freezes, postponement of salary hikes or cutbacks in planned capital improvementscentered on street construction,

[^26]water distribution systems or waste-water treatment. Even more important, the midyear budgeting problems are normally not corrected at the beginning of the new budget cycle-which, in effect, locks in the spending deferrals.

This recurring pattern of postponement of essential infrastructure improvements creates a situation that TML's Frank Sturzl likens to a "fiscal time bomb"-an increasing number of future capital and operating commitments that eventually will have to be paid for with an inflexible revenue system that is largely out of the control of local officials.

Whether or not such a "time bomb" exists on a large-scale basis and-if it does exist-when it is likely to explode are matters of conjecture. But Sturzl's argument is not easily dismissed. Eventually, if infrastructure needs are ignored, economic competitiveness disintegrates, new business opportunities deteriorate and public well-being suffers. Similarly, a persistent pattern of frozen salaries or hiring levels creates the likelihood of widespread employee morale problems resulting in costly turnovers and loss of valuable experience.
Infrastructure and capital improvements. Infrastructurethe permanent capital underpinnings of local governmentincludes buildings, roads, water and sewer lines and bridges. A recent Texas Research League (TRL) report describes the need for quality infrastructure this way:

The rationale for infrastructure investment is [often] predicated on economic development. And
46. Texas Research League, Building a Framework, p. 1.
47. Ibid., pp. 2 and 9
48. lbid., p. 57.
it is true that infrastructure is necessary to attract and retain business. But it also serves other critical purposes for area residents. The ability of governments to serve their constituents can be seriously impaired by the lack of sufficient facilities and this, in turn, affects overall quality of life. Of even more fundamental importance is the impact on physical health and safety. ${ }^{46}$

> Similarly, a persistent pattern of frozen salaries or hiring levels creates the likelihood of widespread employee morale problems that can result in costly turnovers and loss of valuable experience.

Of all local governmental units, cities spend the most on capital improvements. That is not surprising in view of the broad range of responsibilities conferred on them, particularly utility services. Counties spend the least on infrastructure, mainly because of the way the Legislature has delegated taxing and spending authority to "special districts." According to one view:

Counties operate in a... restricted environment. Rather than changing the fiscal and functional limitations of existing local governments, particularly counties, the state legislature often has authorized special districts and so created an integral tie between special districts and infrastructure provision. Water,
transit, roads, schools, hospitals, among other functions, all can be-and frequently arefurnished by special districts. At first, many of these districts were limited to an indebtedness of one-fourth of the assessed valuation of real property in the district. Now many have unlimited authority to tax and to incur debt. ${ }^{47}$

Table 11 indicates how total infrastructure spending between 1983 and 1986 was divided between the major types of local government, as well as how much was invested in capital improvements during each of the years examined.

School districts finance their infrastructure projects almost exclusively with property tax revenue-either directly or indirectly with ad valorem tax debt. That is because the state's Foundation School Program provides school districts with no support for capital outlays. Counties pay for their capital improvements mainly with tax debt or property tax revenue. State-shared motor vehicle registration fees and taxes are used to pay some of the costs of road maintenance and construction.
There is a broader range of revenue options for financing capital improvements available to cities. The most important source of funds for municipal water supply projects is revenue bonds ( $\$ 238$ million or 62 percent of the statewide total). GO bonds accounted for about 26 percent, and federal aid paid for the remainder. ${ }^{48}$ Revenue bonds account for 58 percent of wastewater infrastructure revenue, with GO bonds providing 25 percent and federal grants 17 percent. Three-fourths of the money used to pay for capital improvements for solid waste
disposal comes from GO bonds. Federal budget difficulties and the recent trends in assistance to local governments mean that the federal share of funding for water and waste-water projects is likely to continue to diminish.

In recent years, a number of Texas cities have adopted a "user charge" approach to pay for some of the infrastructure costs related to land development. "Impact fees" levied on builders or developers enable municipalities to recoup some of the costs of expanding their utility and road base in response to population growth. ${ }^{49}$

Table 12 shows how seven Texas cities financed their capital improvements over a recent threeyear period (statewide averages were unavailable). It underscores the diversity of municipal infrastructure funding.

It was noted in the previous section that local governmentsparticularly cities-postpone infrastructure projects when revenues fall or service demands increase without a commensurate rise in operating funds. A recent study by the American Planning Association (APA) noted that when budget shortfalls force the deferral of capital spending, the planned projects are prioritized according to a "worst first" scenario-i.e., those elements of the capital stock determined to be in the worst physical shape should be the first ones to be repaired or replaced. ${ }^{50}$

What that means in practical terms is those facilities that are deemed to be in need of even-tual-but not immediate-repair or replacement are put on indefinite hold until the need becomes too critical to put off any longer. APA describes the process as follows:

Total failure of an infrastructure system is a rare event. More
common is continuing infrastructure decline. Gradual decline, because its effects are cumulative, sometimes promotes a tendency . . . to defer investment decisions until things get "so bad" that [local officials are] forced to take action. ${ }^{51}$

While it is generally agreed that capital investment needs for Texas local government are mounting, there are no reliable data available at this time to document the full extent of the problem. A 1983 study prepared for the Lieutenant Governor's office made some projections concerning possible future infrastructure requirements. ${ }^{52}$ However, the study is of limited value because of the small number of sample cities used in the study ( 12 cities responded and not all of them sent back fully completed sets of data), and the largely speculative nature of the information requested by the survey.
Additionally, while most local officials concur that spending postponements are a commonly used budgeting strategy during times of falling revenue or in-
creased service demands, there has not been a systematic way of keeping track of the long-term record of the deferrals and the aggregate future cost of meeting the deferred needs.
That may change soon, however. At this writing, the Texas Municipal League is surveying all Texas cities with populations greater than 25,000 (representing about 75 percent of the state's population) regarding their infrastructure needs. TML's study could shed some light on current and future municipal infrastructure requirements and their costs.
Postponing needed capital improvements until they
49. Texas Research League, Texas Infrastructure: Elements and Issues (A Report to Governor Mark White) (Austin, 1986), p. xix.
50. Rita J. Bamberger, William A. Blazar, and George E. Peterson, Infrastructure Support for Economic Development, Report No. 390, American Planning Association (Washington, D.C., 1985), p. 3.
51. Ibid., p. 11.
52. William Claggett, Planning for Infrastructure Needs in Texas: The Scope of the Problem (Austin, 1983).

TABLE 11. Local Government Capital Outlays, 1983-86 (Millions of Dollars)

|  | Total | County | City | Schools | Special Districts |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital outlay: 1983 | \$4,046 | \$442 | \$1,564 | \$1,121 | \$919 |
| Percent of total | 100.0\% | 11.0\% | 39.0\% | 28.0\% | 23.0\% |
| Capital outlay: 1984 | \$4,300 | \$448 | \$1,708 | \$1,225 | \$919 |
| Percent of total | 100.0\% | 10.0\% | 40.0\% | 28.0\% | 21.0\% |
| Capital outlay: 1985 | \$4,638 | \$408 | \$1,992 | \$1,268 | \$970 |
| Percent of total | 100.0\% | 9.0\% | 43.0\% | 27.0\% | 21.0\% |
| Capital outlay: 1986 | \$5,790 | \$653 | \$2,430 | \$1,517 | \$1,190 |
| Percent of total | 100.0\% | 11.0\% | 42.0\% | 26.0\% | 21.0\% |

Source: Texas Research League, Building a Framework: Texas Public Capital (A Report to Governor Mark White) (Austin, 1986).
become impossible to ignore is undesirable for three reasons. First, effective local governmental longterm planning and short-term management is gradually replaced by a method that is driven by "crisis situations" in which costly and immediate action is unavoidable. A persistent pattern of cumulative infrastructure decline makes it impossible for local officials to work from a wellconceived and comprehensive approach to capital budgeting.
Second, deteriorating public infrastructure can generate ongoing hidden costs and can ultimately threaten public safety. One of the most common hidden costs is loss of water through leaks in corroded water supply pipes. For instance, according to a recently published report, more than seven billion gallons of water are thought to be lost annually in the Dallas water system. ${ }^{53}$ That is a loss of over six percent of the city's treated water. The report also estimated that Houston's water system experiences substantially greater annual losses, while leakage in the Fort Worth and San Antonio water supply networks are roughly comparable to Dallas'.

The final reason infrastructure
53. Bruce Tomaso, "Lost Water Costs Dallas Millions," Dallas Morning News, February 12, 1988.
deferrals are undesirable is the long-term economic risks they pose to local government. As needed capital improvements continue to mount and conditions in the bond market grow more uncertain, it becomes possibleand even likely-that the eventual future burden to local government of repairing or replacing its aging physical plant will be substantially greater than its present cost.
In addition, as basic service delivery deteriorates, the attractiveness of cities or counties to new businesses or economic opportunities declines, and citizen support for local government wanes. That results in a vicious circle in which the property tax base remains static or shrinks, tax revenues subsequently fall and budget constraints become even tighter. In a very real sense, the state of a local government's infrastructure and the record of its capital improvements pro- gram can be a barometer of its probable future economic growth. Declining or aging capital facilities and a persistent pattern of deferred investment do not bode well for a community's future prospects.

## Conclusions

The built-in problems of the local government revenue

TABLE 12. Infrastructure Funding Sources by City (Three-Year Average)

| Funding | Houston | Dallas | El Paso | Austin | Lubbock | Abilene | Waco |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue Bonds | 55.0\% | 31.0\% | 26.0\% | 78.0\% | 0.0\% | 0.0\% | 51.0\% |
| GO Bonds | 21.0 | 31.0 | 6.0 | 16.0 | 71.0 | 16.0 | 2.0 |
| Federal Aid | 24.0 | 20.0 | 14.0 | 4.0 | 11.0 | 44.0 | 0.0 |
| User Fees | 0.0 | 15.0 | 32.0 | 2.0 | 0.0 | 29.0 | 25.0 |
| Property Tax | 0.0 | 1.0 | 5.0 | 0.0 | 1.0 | 4.0 | 21.0 |
| Private | 0.0 | 1.0 | 14.0 | 0.0 | 0.0 | 3.0 | 0.0 |
| Other sources | 0.0 | 1.0 | 3.0 | 0.0 | 18.0 | 4.0 | 3.0 |
| Source: Texas Research League, Texas Infrastructure: Elements and Issues (A Report to Governor Mark White) (Austin, 1986). |  |  |  |  |  |  |  |

system, combined with budget imbalances on the federal and state level, have squeezed local officials into a fiscal vise that leaves them with few workable alternatives in the face of increasing spending obligations and stagnant or falling revenue.

The pressures on counties, cities and school districts are likely to worsen in the immediate future for several reasons: new spending obligations are being shifted to local government without the means to fund them; population growth will necessitate new investment in school buildings, municipal and county infrastructure and transportation; and a systemic pattern of deferred spending and capital improvement will have to be reversed if economic development efforts are to be successful.
Given the existing spending, at least one of several scenarios is possible: legislative action resulting in greater local revenue flexibility; an enhanced commitment by state lawmakers to provide monetary help to local government; deep cuts in basic services or a widening pattern of deferred spending and investment (with its negative repercussions for future business growth and job creation).

Possibly the simplest and most straightforward way of loosening the fiscal vise surrounding local government would be greater local revenue flexibility so that other options are available besides higher user fees or increased property taxes. One approach that is being actively pursued by groups representing local government is a significantly broadened sales tax. While that would certainly enlarge the flow of operating funds to counties and cities, it would do little to improve local control.
At present, there is scant
evidence that the Legislature is ready to enhance local fiscal autonomy appreciably. In fact, the regular recurrence of bills to further limit the local property tax base, com-bined with recent attempts to raid the traditional county revenue sources of fee and fine income, point in the opposite direction.

Another possible scenario is increased state support for local programs. State support for local services in Texas is relatively low when adjusted for population. In 1986, Texas per capita assistance to local govern-ment-including school dis-tricts-was $\$ 390$ or 31st nationally. ${ }^{54}$ The U.S. average was $\$ 528$. Of the 15 most populous states, only Illinois and Missouri sent fewer dollars to local officials on a per capita basis.

In the past, local government advocacy organizations have lobbied the Legislature for assistance targeted to specific needs. But their efforts have historically met with little success.

For instance, during the 1981 and 1983 sessions, so-called "pothole" bills were introduced that would have established a dedicated fund for the repair of Texas roads and streets outside of the state highway system. They failed in both sessions.

More recently, as part of the "Build Texas" bond program, the Legislature passed a constitutional amendment that would have provided state backing for bonds to pay for local capital improvements. The idea was that local governments would be able to borrow at more favorable interest rates by using the state's stronger presence in the debt market. But the amendment was rejected during the November 1987 election, shedding considerable doubt on the political attractiveness of state participa-
tion in local projects-even when that participation does not involve the actual transfer of state funds.

If there is going to be a move toward state subsidization of local government, it is likely to be infrastructure assistance, rather than support for routine operating costs.

## Because so many local services are so visible and

 popular, when local officials are forced to consider spending cuts, they often speak in terms of "eliminating waste" or "cutting out the fat."Because many local services are so visible and popular, when local officials are forced to consider spending cuts, they often speak in terms of "eliminating waste" or "cutting out the fat." But local budgets that are going through persistent cycles of inadequate funding eventually reach a point where either deep cuts have to be made that might affect the efficient delivery of services, or infrastructure programs have to be deferred indefinitely.

It is not difficult to understand why local officials who are forced to make significant cuts in basic local services-like education, public safety, streets and bridges, water distribution or waste-water treatment-are more likely to center on capital investment plans than operating budgets. This chapter has shown that numerous surveys of local
government indicate that capital investment deferrals are one of the most commonly used local fiscal strategies in the face of significant budget imbalances.

For instance, it is more likely that cash-strapped school districts will forgo a needed building project than cut teacher salaries or eliminate an extracurricular program. Similarly, cities or counties are more likely to put off widening an existing street than cancel a potholerepair program.

If local governments are not given greater revenue flexibility or enhanced intergovernmental assistance is not forthcoming, needed infrastructure improvements will probably continue to be deferred. This would be counterproductive to the widespread goal of economic development and creation of new jobs. Bob Bolen, Mayor of Fort Worth and past TML president, sums up the situation this way:

> It seems clear that Texas cities have availed themselves of virtually all taxing options open to them and still find themselves in need of revenue to address continued capital improvement needs. That is, despite adopting local option taxes which are available, despite stretching property taxes to their limits, cities still find themselves in shortfall positions and continue to defer capital formation so vitally needed for economic development. ${ }^{55}$
54. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87, pp. 40-92.
55. Bob Bolen, Mayor of Fort Worth, testimony before the Select Committee on Tax Equity, August 20, 1987.

# M unicipal Expenditures in Texas 

The Recent Past and Emerging Trends

## Summary

Between fiscal years 1980-81 and 1984-85, municipal spending in Texas increased by nearly 54 percent. Expressed as a percentage of per capita income, however, municipal spending remained stable at approximately 2.7 percent. Spending increased as a result of inflation, reductions in federal aid and heavy expenditures for capital improvements.
Cities spent the most on sewerage/sanitation services, followed by police/corrections, debt service and highways.
Among the state's largest cities, expenditures grew by 90.5 percent between 1980 and 1985, but by only 3.4 percent between 1985 and 1987. Spending leveled off as the state experienced a general economic downturn and despite growing demands for services and capital improvements, cities cut spending as revenues diminished.

As sales and property tax revenues declined, cities turned to increased user fees for water, wastewater and garbage collection services. The state's largest cities have, since 1980, raised water rates by an average of 78 percent wastewater rates by 112 percent and garbage collection rates by 56 percent.

Property taxes account for 25 percent of all municipal revenue; fees and charges account for 21.1 percent; and sales tax receipts account for 13.3 percent.

Continued slow growth in
local government revenue is expected through 1990. In response, cities are likely to postpone or defer capital spending, reduce services, impose wage and hiring freezes and may resort to lay-offs, according to the results of a survey conducted by the Texas Municipal League.
Cities have relatively little latitude with regard to revenue sources. For the approximately 700 general law cities, it is clear that no tax can be levied without specific statutory or constitutional authority.
For home rule cities, the law is less clear. The Texas Constitution provides that home rule cities "may levy, assess and collect such taxes as may be authorized by law or by their charters." But it also can be argued that cities cannot levy a tax which has been preempted by the state-for example, a gasoline tax-even if their charters allow it. Further, home rule cities cannot raise the rates of such statutorily authorized taxes as the local option sales tax.
The budget dilemmas facing the state and its cities are very similar. Both levels of government have sharply decreased the rate of growth in spending and for both, the current tax structure may be inadequate. Finally, cities have dramatically curtailed capital spending, which may have costly, long term implications.

By Frank Sturzl
Executive Director of the Texas Municipal League

This chapter reviews municipal spending trends in Texas since 1980 and attempts to project municipal spending through 1990. While spending trends for all Texas cities are included in this report, the most in-depth analysis details spending trends and projections for the state's largest cities.
The aggregate data pertaining to all cities was derived from published reports of the U.S. Bureau of the Census and the U.S. Advisory Commission on Intergovernmental Relations.
Data for the state's largest cities was derived from original Texas Municipal League survey research. Each of the state's 64 largest cities-each with a population in excess of 25,000 -was asked to complete a short questionnaire regarding spending trends and projections. Those 64 cities have a combined population of more than 8.8 million or approximately 70 percent of the state's urban population.

## Aggregate Municipal Spending

Between fiscal year 1980-81 and fiscal year 1984-85, total municipal spending in Texas rose from $\$ 3.631$ billion to $\$ 5.579$ billion, an increase of 53.6 percent. Per capita municipal expenditures rose as well-from $\$ 255.18$ to $\$ 342.25$, an
increase of 34.1 percent (Table 1). It is interesting to note, however, that during the same period, per capita income climbed from \$9,439 to $\$ 12,572$. As a result, per capita municipal expenditures, expressed as a percentage of per capita income, have remained relatively stable at approximately 2.7 percent.

It should be noted that the data in Table 1 are for direct general expenditures only; that is, expenditures for electric, water supply and gas utility operations are excluded. (Sewerage and sanitation are included.) These expenditures have been excluded primarily because they are for the most part "dollar-in/dollar-out" operations supported by user fees.

In addition, electric and gas utility operations are optional municipal activities which not all cities undertake. To include them in an analysis of expenditures would result in misleading figures.

Inflation accounts for much of the 34.1 percent increase in per capita municipal spending. Between 1980 and 1984, the consumer price index for urban consumers rose by 24.0 percent nationwide. For major Texas cities, the Consumer Price Index (CPI) rose at a similar rate: by 28.0 percent in the Dallas/Fort Worth Standard Metropolitan Statistical Area (SMSA) and by 24.1 percent in the Houston SMSA.
Per capita municipal expenditures rose for a variety of addi-

TABLE 2. Percentage Distribution of Municipal Expenditures by Function, 1985

|  |  |
| :--- | :---: |
| Sewerage and Sanitation | $16.7 \%$ |
| Police/Corrections | 15.4 |
| Debt Service | 10.7 |
| Streets/Highways | 10.5 |
| General Administration | 9.0 |
| Fire Protection | 8.8 |
| Parks and Recreation | 7.3 |
| Hospitals and Health | 5.4 |
| Air Transportation | 3.0 |
| Housing/Community Development | 2.1 |
| All Other Functions | 11.1 |
| Total | $100.0 \%$ |
| Source: U.S. Department of Commerce, Bureau of the Census, Government |  |
| Finances, various years. |  |

tional reasons. First, as per capita federal aid to Texas fell by 23 percent between 1980 and 1984, cities struggled to make up the difference with their own direct expenditures, particularly in the area of human services. Perhaps more importantly, cities invested heavily in capital improvements to serve an expanding population and to meet federal guidelines.
Table 2 lists the functions for which city governments expended funds in fiscal year 1984-85. Capital outlay, which accounted for 19.7 percent of all direct general expenditures, is included.
Although this report focuses on municipal expenditures, it is interesting to analyze the sources of municipal revenue. In fiscal year 1984-85, cities across Texas derived revenue from the sources listed in Table 3.

Since 1980, federal aid has dropped from 19.8 percent to 8.5 percent; property taxes fell slightly from 27.5 percent; while charges, interest and miscellaneous income rose from a combined total of 29.9 percent to 42.5 percent, most of that increase coming in the form of user charges.

## Spending Trends and Projections in the State's Largest Cities

Of the 64 cities surveyed, 32 completed responses. Among

TABLE 1. Municipal Direct General Expenditures (Fiscal Year)

|  | $1980-81$ | $1982-83$ | $1983-84$ | $1984-85$ |
| :--- | :---: | ---: | ---: | ---: |
| Expenditures (Millions) | $\$ 3,631.0$ | $\$ 4,622.9$ | $\$ 5,116.5$ | $\$ 5,578.7$ |
| Population | $14,229,000$ | $15,724,000$ | $15,989,000$ | $16,300,000$ |
| Per Capita Expenditures | $\$ 255.18$ | $\$ 294.00$ | $\$ 320.00$ | $\$ 342.25$ |
| Per Capita Personal Income | $\$ 9,349$ | $\$ 11,366$ | $\$ 11,590$ | $\$ 12,572$ |
| Per Capita Expenditures/Per Capita <br> Personal Income | $2.73 \%$ | $2.59 \%$ | $2.76 \%$ | $2.72 \%$ |
| Source: U.S. Advisory Commission on Intergovernmental Relations and Texas Municipal League. |  |  |  |  |

them were the state's largest cities-Houston, Dallas, San Antonio, Fort Worth and others. The combined population of the responding cities is 6.2 million, or about one-half of the state's urban population.
The survey asked cities for information related to municipal expenditures, except for enterprise funds. Table 4 is a summary of responses.

Between 1980 and 1985, expenditures in the surveyed cities grew dramatically-by more than 90 percent. While the growth in expenditures has slowed in the last three years (only a 5.2 percent increase for the entire three-year period), total expenditures have more than doubled since 1980.

The survey asked each city to identify the factors which account for these spending trends. Clearly, the determinants of spending trends between 1980 and 1985 exerted upward pressures on spending. Cities cited the following reasons (ranked in order of importance) for these spending trends:
(1) growing population;
(2) inflation;
(3) state and federal mandates;
(4) the provision of new services made necessary by decreased federal assistance and increased taxpayer demands;
(5) the increasing costs of salaries and benefits;
(6) a greater demand for spending on public safety, particularly police protection; and
(7) the rapidly escalating costs of liability insurance and court judgments.

Since 1985, the determinants of municipal spending have changed dramatically. Population growth has leveled off, sales tax receipts have declined, property values
and building starts are down and the state has been mired in a general economic downturn. As a result, municipal revenue has not grown as it did in the early 1980s, and despite growing demands for services and a great need for additional capital expenditures, the growth in spending has slowed.

Twenty-nine of the largest cities were able to project spending through 1990. Those cities, taken together, project a 2.6 percent increase in spending by fiscal year 1990. In other words, the state's largest cities believe that growth in expenditures will remain lowas it has since fiscal year 1985through the end of the decade. Most cities responded that they do not expect revenues to grow rapidly, and despite increasing pressures for spending (especially capital spending), cities will be forced to keep expenditures levels stable.

With regard to enterprise funds, the survey asked cities to indicate the extent to which water, wastewater and garbage collection fees had been increased since 1980.

The state's largest cities have raised water fees by an average of 78 percent since 1980, wastewater fees by over 112 percent and garbage collection fees by 56 percent. Some cities have doubled or even tripled one or more of these fees since 1980.

For the next two years (through fiscal year 1990), the cities project that water rates will increase by an average of 16 percent, wastewater rates will climb by an average of 21 percent and garbage collection fees will be raised by an average of 15 percent.

Expenditures in summary. What can be learned from this recent research, can be summarized as follows:
(1) Extremely rapid growth in municipal expenditures took
place between 1980 and 1985 as population grew, tax revenue was growing, capital spending accelerated, cities replaced federal programs with their own revenues and taxpayers asked for more and better services.
(2) Spending has stabilized since 1985, as revenue sources stagnated, the state's economy faltered and population growth slowed.
(3) Continued slow growth in expenditures is expected through 1990, as revenue collections remain flat.
(4) More and more cities face

| TABLE 3. Percentage Distribution <br> of Municipal Revenue by Source, <br> 1985 |  |
| :--- | :---: |
|  |  |
| Property Taxes <br> Charges (Fees) |  |
| Sales Taxes | $25.0 \%$ |
| Interest Earnings | 21.1 |
| Federal Aid | 13.3 |
| Other Taxes | 11.2 |
| State Aid | 8.5 |
| All Other Sources | 8.5 |
|  | 2.2 |
| Total | 10.2 |
| Source: U.S. Advisory Commission |  |
| on Intergovernmental |  |
| Relations. |  |

TABLE 4. Direct Expenditures of the State's Largest Cities (Billions of Dollars)

| Fiscal Year | Expenditures |
| :--- | ---: |
| 1980 | $\$ 1.7004$ |
| 1983 | 2.5885 |
| 1985 | 3.2396 |
| Current | 3.4071 |

Source: $\begin{aligned} & \text { Texas Municipal League } \\ & \text { survey }\end{aligned}$ survey.
mid-year revenue shortfalls and are turning to postponement or deferral of capital improvements, service reductions, hiring and wage freezes and lay-offs.
(5) To increase revenues, cities turn most regularly to increased user fees and, as a last resort, increased property taxes.

## Revenue Sources Available to Texas Cities

Cities have available to them the following tax sources: property tax, sales tax, local option sales tax on utilities, local utility gross receipts fee, for street rental, hotelmotel tax, bank franchise tax, mixed drinks gross receipts tax, bingo tax and the amusement machine tax.
How does that list compare with tax sources available to the cities of other states? Table 5 shows a selection of tax sources available and the number of states in which cities are authorized to levy each tax.

1. See Vance v. Town of Pleasanton, 261 S.W.2d 457 (Tex. Civ. App.-San Antonio 1924, no writ); City of Heath v. King 705 S.W.2d 812 (Tex. App.-Dallas 1986, no writ); Texas City v. J. L. Martin Inv. Co., 222 S.W.2d 139 (Tex. Civ. App.Galveston 1949, writ ref'd.).

Can the cities of Texas avail themselves of the tax sources listed in Table 5? For example, can a city impose a gasoline tax? The answer to this question revolves around a number of issues.
> [M]unicipalities of over 5,000 in population "may levy, assess and collect such taxes as may be authorized by law or by their charters."

First, with regard to the more than 700 general law cities in Texas, it is clear that no tax can be levied without specific statutory or constitutional authority. ${ }^{1}$
For the approximately 260 home rule cities, the analysis is a bit more difficult. Article XI, Section 5 , of the Texas Constitution provides in part, that municipalities of over 5,000 in population "may levy, assess and collect such taxes as may be authorized by law or by their charters." This provision almost certainly precludes a home rule municipality from adopting a tax in the absence of a

| TABLE 5. Municipal Tax Bases |  |  |
| :--- | :---: | :---: |
| $\begin{array}{c}\text { Number of States in } \\ \text { Which Cities Levy Tax }\end{array}$ |  |  | \(\left.\begin{array}{c}Levied <br>

in Texas?\end{array}\right]\).
statute or a charter provision which authorized the tax. There are two reasons for this conclusion. First, there is a general rule, applicable in Texas as well as in virtually all the other states, that a state's grant of power to tax, delegated to a municipal corporation, must be construed strictly against the power to tax. Second, the Texas Supreme Court's opinion in Anderson v. City of San Antonio, 67 S.W.2d 1036 (Tex. 1934), supports the position that a home rule municipality may not adopt a tax without specific statutory or charter authority.
The rule of strict construction is succinctly summarized as follows:

The grant of any power of tax, made by the state to municipal corporations, will be, according to the rule accepted by virtually all the authorities, construed strictly. A citizen cannot be subjected to the burden of taxation without clear warrant of law. Therefore, statutes authorizing the levy of taxes are to be strictly construed; they are not to be extended by implication, nor is their operation to be enlarged so as to embrace matters not specifically pointed out, though standing upon a close analogy. Stated briefly, in case of doubt a tax statute should be construed strictly in favor of the taxpayer and against the municipality.
The power of taxation can be exercised only in a manner prescribed by law. If the authority of the municipality to tax is doubtful, the doubt must always be resolved against the tax. The presumption is that the state has granted in clear and unmistakable terms all that it has intended to grant, and municipal officers must be able to show a warrant in words of the grant for whatever authority they assume to exercise. So, it has
been held, if a municipality attempts to exercise the power of levying an ad valorem tax on property within the municipality when such power has not been granted, the levy is ultra vires and void. ${ }^{2}$

The rule of strict construction is the law in Texas:

It is true that when a judicial inquiry arises as to the power of a municipality to tax, the rule of strict construction is applied against the existence of such power.... ${ }^{3}$

Application of the above rule will undoubtedly require the courts to adopt a literal interpretation of the requirement in Art. XI, Sec. 5, of the Texas Constitution, that the tax be authorized by law or by charter.

In Anderson, the City of San Antonio adopted an ordinance levying a tax for the purpose of creating a fund to advertise the city. The city argued that the tax was authorized by Article 1175, Section 7, which permitted home rule municipalities to "provide for the levying of any general or special ad valorem tax for any purpose not inconsistent with the Constitution of this State." The city also argued that the tax was authorized by its charter, which authorized the city to levy any ad valorem tax "for general purposes" and "for special purposes." The Court rejected these arguments and held that for the city to adopt such a tax, specific statutory or charter authority must exist.
It should be noted that on the same day that the Texas Supreme Court struck down the City of San Antonio tourism tax in Anderson $v$. City of San Antonio, the Supreme Court upheld a tourism tax in Davis v. City of Taylor. ${ }^{4}$ In its opinion in Anderson, the Court distinguished the City of Taylor's tax on the ground that the City of

Taylor had "an express charter provision in its home rule charter authorizing and providing for the tax. " ${ }^{5}$

Other attorneys believe that specific statutory or charter authority is not necessary for a home rule municipality to tax. This view is based on the notice that since a municipality may do any act which the Legislature could have authorized it to do, a home rule municipality is not required to have specific statutory or charter authority in order to adopt a tax. Research indicates, no case which has addressed this precise question. In two cases, the question was raised whether the rule of strict construction of tax powers applied to home rule municipalities. In each of these cases, however, the Court was able to dispose of the case without addressing this issue.

One additional concept is relevant. If the state has chosen to impose a tax, it can be argued that such a levy has been preempted by the state and is not available to cities. Where does this leave Texas home rule cities?
(1) Home rule cities probably cannot levy any tax, such as the gasoline tax, which has been pre-empted by the state, even if the home rule charter allows it.
(2) Home rule cities certainly cannot increase the rate of local-option taxes authorized by statute: e.g., the sales tax.
(3) Home rule cities probably cannot tax amusement admissions or meals, since such taxes would probably be considered to be sales taxes.
(4) Thus, the area in which a home rule city can unilaterally impose a tax, despite the rather liberal language of the home rule provision of the Constitution, is severely limited.

## Conclusions

The budgetary dilemmas facing the state and Texas cities have much in common:
(1) Both are caught between a demand for more and better services on the one hand, and stagnant revenues on the other.
(2) Both have critically examined their spending and their tax base and struggled to find a politically acceptable balance between spending and tax levels.
(3) Both have deferred spending on critical capital improvements.
(4) The current tax system works for both levels of government in that it produces revenue sufficient to fund a reduced level of spending.
(5) For both levels of government, though, the tax structure may be inadequate-in that it doesn't reflect the economy of today and tomorrow.

It seems clear that many Texas cities have availed themselves of virtually all taxing options open to them and still find themselves in need of revenue to address critical capital improvement needs. That is, despite adopting the local option taxes which are available, and despite stretching property tax rates to their limits, some cities still find themselves in shortfall positions and continue to defer the capital formation so vitally important to economic development.
2. McQuillin, Municipal Corporation, Sec. 44.13 (3rd Ed.-1984 Revised Volume).
3. Graham v. City of Fort Worth, 75 S.W.2d 930, 933 (Tex. Civ. App.-Eastland 1934, writ ref'd.).
4. 67 S.W.2d 1033 (Tex. 1934).
5. Anderson v. City of San Antonio, 67 S.W.2d 1036 (Tex. 1934).

## Part II: The Sales Tax

# T he Texas Sales and Use Tax 

## A Background Analysis

## Summary

The sales and use tax has been the single largest revenue source for Texas state government since 1967. For the 198889 budget period, the general sales tax and the selected sales tax on motor vehicles will produce 58.1 percent of the state's tax revenue.
The sales tax is the broadest of the state's taxes, touching almost all segments of the economy and is the only state tax that both businesses and individuals directly pay. Consequently, the tax has been a popular one to turn to in times of financial need. Since the tax was first enacted at a two percent rate in 1961, the rate has been increased eight times-to today's state rate of six percent and maximum local rate of two percent.
In recent years, more attention has focused on expanding the sales tax base. While the tax originally was limited to sales of tangible personal property, a sizeable list of services has been added to the tax base since 1984.
Today, the sales tax still applies to most sales of tangible personal property, except for food, residential and industrial utilities, sales for resale, fuels and raw materials. The major services taxed include nonautomotive repair, amusements, nonresidential repair and remodeling of real property, telecommunications, data processing and security services.

Two of the most frequent complaints against the sales tax are that it is regressive-(i.e., more burdensome to low income families than to upper income families)-and that sales taxation of business purchases hurts the state's business climate. In an effort to prevent the sales tax from being a barrier to business development, the state will phase in an exemption for industrial machinery starting in 1991.

Sales tax rates and bases vary widely across the nation. Texas ranks near the very top in terms of rate but is near the middle ranking of states in terms of base broadness. This suggests that in future times of revenue needs attention is more likely to focus on further base expansion zather than on rate increases. While this may prove difficult in the near future, given Florida's recent repeal of its services tax, the nationwide trend nonetheless seems to be in the direction of taxing services.

Sales tax expansion into services has always been controversial. Preliminary findings suggest that substantial base expansion into services is a heavier tax burden on businesses rather than consumers-not a minor concern given Texas' weakened economy. In addition, studies suggest that substantial taxation of services may make the sales tax even more regressive.

By Dale K. Craymer

Office of the Speaker of the House and House Ways and Means Committee

Sales taxes apply to the exchange of an item for money. The item is most often tangible personal property but can be a service as well. The sales tax can be assessed either on the volume of the item purchased (i.e., one gallon) or on the value. General retail sales taxes today are assessed as a percentage of the value of the item sold and apply to a broad base of transactions.

## A History of the Sales Tax

General sales taxes are essentially a 20th century phenomenon, although selective retail sales taxes have a long history. In the early years of the United States, Alexander Hamilton successfully pushed for a federal sales tax on selected items-liquor, tobacco, carriages and auction sales. The system was controversial and was hotly debated in Congress. Thomas Jefferson denounced the taxes as an "infernal system," and some Pennsylvanians were so incensed that they rioted (this was the so-called "Whiskey Rebellion"). Faced with such opposition, these sales taxes were abolished in 1802.
Federal sales taxes have resurfaced several times since then as a temporary tool for financing the nation's war efforts-the War of 1812, the Civil War, the Spanish

American War and World War I. With the establishment of the federal income tax, though, the possibility of a broad-based federal sales tax waned and states began to look at general retail taxation as their domain. ${ }^{1}$

1. The federal government did, however, enact a short-lived series of selected sales taxes on "luxury items" during the Depression in the Revenue Act of 1932.
2. Tax Survey Committee, Report of the Tax Survey Committee, Supplement to the Journal of the House of Representatives of the 43 rd Legislature (Austin, 1931).

## 3. The resolution actually received a

 majority vote of the House members but failed, since it did not receive the 100 vote, wo-thirds majority needed as a constitutional amendment.Sales taxes in other states. Numerous states employed selective sales or occupation taxes even in the 19th century, Texas among them. It was not until 1931, however, that Mississippi, in an attempt to end years of lingering budget deficits, arguably became the first state to impose a general sales tax on merchandise.

As the 1930s continued, the Depression deepened and the demands on government increased. Many states sought a way to lessen their reliance on the property tax-a particularly burdensome tax in times of high joblessness. The sales tax seemed an ideal. solution. The tax would be paid a little at a time and most people could afford the extra penny or two when making a purchase.

TABLE 1. Timetable for Approval of State General Sales Taxes

|  |  |  |  |
| :--- | :---: | :--- | :---: |
| State | Year of Adoption | State | Year of Adoption |
| Mississippi | 1932 | Alabama |  |
| Pennsylvania | $1932^{1}$ | Kansas | 1937 |
| Arizona | 1933 | Louisiana | 1937 |
| California | 1933 | Connecticut | $1942^{2}$ |
| Illinois | 1933 | Maryland | 1947 |
| Michigan | 1933 | Rhode Island | 1947 |
| New York | $1933^{1}$ | Tennessee | 1947 |
| North Carolina | 1933 | Florida | 1947 |
| Oklahoma | 1933 | District of Columbia | 1949 |
| South Dakota | 1933 | Georgia | 1949 |
| Utah | 1933 | South Carolina | 1951 |
| West Virginia | 1933 | Maine | 1951 |
| lowa | 1934 | Pennsylvania | 1951 |
| Kentucky | $1934^{1}$ | Nevada | $1953^{1}$ |
| Missouri | 1934 | Pennsylvania | 1955 |
| New Mexico | 1934 | Kentucky | 1956 |
| Arkansas | 1935 | Texas | 1960 |
| Colorado | 1935 | Wisconsin | 1961 |
| Hawaii | 1935 | Indiana | 1962 |
| New Jersey | $19355^{1}$ | New York | 1963 |
| North Dakota | 1935 | Idaho | 1965 |
| Ohio | 1935 | Massachusetts | 1965 |
| Washington | 1935 | New Jersey | 1966 |
| Wyoming | 1935 | Virginia | 1966 |
| Idaho | $1936^{1}$ | Nebraska | 1966 |
| Maryland | $1936^{1}$ | Minnesota | 1967 |
|  |  | Vermont | 1967 |

Source: John F. Due, State and Local Sales Taxation (Chicago: Public Administration Service, 1971).

1. Temporary tax
2. Louisiana repealed its sales tax in 1940 and reinstated it in 1942.

During the Depression era, 23 states established permanent general sales taxes, while six states experimented with temporary ones (Table 1). In the years immediately following the end of the World War II, several more states jumped on the sales tax bandwagon.
It was not until 1961 that Texas became the 35 th state in the nation to turn to a broad-based retail sales tax. Texas was one of 12 states to enact the sales tax during the 1960s.
The sales tax debate in Texas. Texas' political leaders had long argued the merits of a general sales tax. It was much debated during the Depression years when the state ran 14 consecutive years of general revenue deficits.
The 1931 Tax Survey Commit-tee-an interim panel of legis-lators-held that, due to its regressivity, "the advantages of the general sales tax [are] outweighed by its infirmities." ${ }^{2}$ The executive branch did not necessarily share this view, however, as two of the decade's governors, Miriam A. Ferguson and W. Lee O' Daniel, did endorse a broad-based sales or transactions tax.
In 1935, the special Senate Tax Program Committee recommended that the issue of the sales tax be decided by submitting a constitutional amendment to the voters of the state. Such an attempt was made and was passed by the Senate in 1939, only to fail to receive the necessary two-thirds vote needed in the House. The House members voting against the measure became known as the "Immortal $56^{\prime \prime}$-one of whom was a future governor, Price Daniel. ${ }^{3}$
Selective sales taxes on "luxury" items were to fare better with the state's lawmakers. In the Omnibus Tax Bill of 1941, legislators established new
selective taxes on the sale of motor vehicles (at a one percent rate), radios and cosmetics (both at two percent).

The list of sales taxes was expanded several times, most notably in 1959, with new levies on additional luxury items, including air conditioners, boats, phonographs, radio-television parts, jewelry, furs and transient lodgings.

Unfortunately, the revenue from these new taxes was not enough to overcome another round of fiscal problems for the state. The 1961 legislative session faced what at that time was the largest deficit in the state's history-over $\$ 60$ million.

Once again, the idea of a broadbased sales tax surfaced. In the regular session, the House passed and sent to the Senate a tax bill that increased some taxes and made some bookkeeping adjustments but without a general sales tax. The Senate rewrote the bill around a two percent general sales tax-a measure which Governor Price Daniel promised to veto. The House refused to concur with the Senate changes, and a conference committee was appointed.

In a game of legislative poker, the Senate conferees refused any compromise. On the final night of the session, the House members disbanded the conference committee and made one last attempt to pass the Senate's version of the bill. In what was one of the most dramatic moments in Texas legislative history, the measure appeared to pass by a 72 to 71 vote, but House Speaker Jim Turman cast a "no" vote and with a tie vote, the measure failed.
Governor Price Daniel called the Legislature into a July special session to finish the state's budget work. In the meantime, there were three separate study groups at work trying to reach some sort
of acceptable budget solution. The Governor still opposed a general sales tax, though he indicated he might accept a House proposal known as the "Pennsylvania Plan," patterned after the sales tax in that state.

## The sales tax dramatically changed the state's tax policy decisions and its revenue system.

Pennsylvania's sales tax at the time was unique among the states. Rather than hold that all sales were taxed unless specifically exempted, in Pennsylvania all sales were exempt unless specifically taxed.

In addition, House members generally favored a high tax threshold in which any sales less than five dollars would not be taxed.
The Senate, on the other hand, favored a two percent tax with all sales taxed unless specifically exempted, along with a "natural" threshold that all sales under 25 cents would not be taxed.
Ultimately, the Senate sales tax approach was recognized as easier to administer, and it prevailed with some compromises on exemptions. The tax was to apply to sales of tangible personal property and utilities, with exemptions for food, raw materials and utilities used in manufacturing and items subject to other. state taxes (such as motor fuels, cigarettes, beer and wine, oil and natural gas, etc.). Generally, merchants would assess the tax at the time of the sale and would remit the tax to the state on a quarterly basis.
The selective sales taxes were repealed, except for the motor
vehicle tax. The vehicle tax already had a satisfactory collection system in place in which counties collected the tax for the state and were allowed to keep five percent as reimbursement for their costs.
A "use" tax was included in the original sales tax statute to prevent tax erosion from out-ofstate purchasing. Federal law prevents the state from levying the sales tax on out-of-state businesses selling to Texans. Consequently, the use tax holds the Texas purchaser liable for the tax instead of the out-of-state seller.

## The Sales Tax in Texas

The sales tax dramatically changed the state's tax policy decisions and its revenue system. Prior to the sales tax, the state had no broad-based tax. This meant that whenever additional revenues were needed, specific industries had to be targeted-beer, liquor and cigarette wholesalers, motor fuels, insurers, corporations and so on. This required painstaking political bargaining and compromise.
With the sales tax touching a broad segment of the state's economy and shared by individuals, the burden of sales tax increases would be less damaging to a particular group. As a result, when additional revenues were needed to finance the state's budget, the sales tax rate was often the vehicle.
As shown in Table 2, this was the case in the late 1960s and early 1970s, when the sales tax rate was ratcheted up to four percent.
The sales tax proved to be such an effective revenue tool that the authority to add a one percent sales tax on top of the state tax was granted to cities in 1968. Metropolitan transit authorities were granted sales taxing authority in 1978.

Thanks to rising oil prices, sales tax relief was an issue in the 1978 special session of the Legislature, and residential utilities were exempted from the tax. To shield cities from the revenue loss, however, they were allowed to maintain the one percent city sales tax on utilities.
With the break in the upward spiral of oil prices in the early 1980s, though, the need for additional revenues surfaced again.
4. While the sales tax was originally to be remitted on a quarterly basis, the 63rd Legislature in 1973 required larger businesses to file on a monthly basis.

In an effort to increase revenues without raising taxes, the Legislature moved forward the due date for taxpayers to file their sales tax return in 1983. Instead of remitting their taxes on the last day of the month, merchants were to file their returns on the 20th day of the month. This allowed the Comptroller to process an additional month of sales tax revenue for the budget period-a one-time gain of $\$ 150$ million. ${ }^{4}$
When the Legislature met in special session in the summer of 1984 to consider the report of the Select Committee on Public

Education (sometimes referred to as the "Perot Commission"), the Comptroller reported that no revenue was available for any major spending increases. Funding education improvements would require a tax hike.
As before, most eyes focused on the sales tax. But this time a different approach was taken. Rather than increase the sales tax rate, House Ways and Means Chairman Stan Schlueter, charged with writing the bill, focused on broadening the sales tax base.

There were several advantages to broadening the base. First, expanding the sales tax base to

TABLE 2. Texas Sales Tax Structural Modifications and Revenue

| Fiscal Year | Revenue (millions) | \% Change | Structural Changes |
| :---: | :---: | :---: | :---: |
| 1961 | \$0 | - |  |
| 1962 | 149 | - | State tax at two percent (no local-option) |
| 1963 | 181 | 21.4\% |  |
| 1964 | 205 | 13.4 |  |
| 1965 | 222 | 8.4 |  |
| 1966 | 241 | 8.5 |  |
| 1967 | 259 | 7.7 | Offshore drilling equipment exempted |
| 1968 | 280 | 7.8 | Cities allowed one percent voter-approved tax |
| 1969 | 439 | 56.8 | Rate increased to three percent with broadened base ${ }^{1}$ |
| 1970 | 550 | 25.4 | Rate increased to 3.25 percent |
| 1971 | 633 | 15.0 | Commercial ships exempted |
| 1972 | 824 | 30.3 | Rate increased to four percent |
| 1973 | 926 | 12.4 |  |
| 1974 | 1,126 | 21.6 |  |
| 1975 | 1,267 | 12.5 |  |
| 1976 | 1,478 | 16.7 |  |
| 1977 | 1,689 | 14.3 | Exempted newspapers and magazines |
| 1978 | 2,024 | 19.8 | MTAs allowed voter-approved. 25 percent to one |
| 1979 | 2,174 | 7.4 | percent tax |
| 1980 | 2,521 | 16.0 | Residential utilities exempted |
| 1981 | 2,983 | 18.3 |  |
| 1982 | 3,461 | 16.0 |  |
| 1983 | 3,305 | -4.5 |  |
| 1984 | 3,785 | 14.5 | Tax due dates changed |
| 1985 | 4,192 | 10.8 | Rate increased to 4.125 percent; base broadened ${ }^{2}$ |
| 1986 | 4,330 | 3.3 | Certain telecommunications taxed |
| 1987 | 4,617 | 6.6 | Rate increased to 5.25 percent |
| 1988 | 6,243 | 35.2 | Rate increased to six percent; base broadened ${ }^{3}$ |
| 1989 (estimated) | 6,734 | 7.9 |  |

Source: House Ways and Means Committee.

1. Beer and wine takeout sales added.
2. Cigarettes, amusements, laundry and dry cleaning, canned computer software, newspapers and magazines, nonautomobile repair and cable television added.
3. Data processing, custom computer software, private club memberships, insurance services, landscaping, surveying, cleaning, exterminating, garbage collection, security services, information services, nonresidential repair and remodeling and security services added.
services would capture a greater portion of the economy and make the tax more stable-something of considerable concern after 1983's drop off.

Second, broadening the base would also help cities share in the revenue gain, since the local tax applied to the state tax base. Finally, avoiding a rate increase would retain that option should more money be needed in subsequent years.
As the end of the session neared, there was general agreement about a short list of items the tax bill-House Bill 122 (H.B. 122) by Schlueter-would include. But the House and Senate were at odds on taxing advertising or increasing the sales tax rate by one-quarter of one percent. Finally, in a last-hour compromise, advertising was dropped from the bill. Taking its place was a one-eighth of one percent sales tax rate hike and a tax on newspaper subscriptions and single-copy sales.
All totalled, H.B. 122 expanded the sales tax base by about 6.5 percent by including the following new taxable items:
(1) amusement services;
(2) cable television services;
(3) automobile parking fees;
(4) newspaper sales (single copies and subscriptions);
(5) fertilizer for home use;
(6) items used on federal realty;
(7) cigarettes and tobacco;
(8) prepackaged computer software;
(9) laundry and dry cleaning;
(10) repairs to tangible personal property other than automobiles; and
(11) leases which are purchases of sale made payable at time the contract is executed.

The Legislature reconvened in January 1985 to write the next
biennial budget with oil prices still weak. Nevertheless, it was successful in crafting a budget that maintained the school reforms without relying on any new taxes. This proved to be only a temporary cause for celebration, though, because in 1986, the bottom fell out of oil prices. Texas headed for its first deficit since the birth of the sales tax in 1961.

In a series of special sessions in the late summer of 1986, one of the measures the Legislature turned to to reduce the deficit was a temporary increase in the sales tax to 5.25 percent (House Bill 79 by Schlueter).

In a series of special sessions in the late summer of 1986, one of the measures the Legislature turned to to reduce the deficit was a temporary increase in the sales tax to 5.25 percent (House Bill 79 by Schlueter). Coupled with this measure was a local option sales tax for certain cities and counties outside of transit authorities to reduce their property taxes.
Despite the tax hike, Texas still ended the year with a billiondollar deficit. Lawmakers convened for their regular session in January 1987 with the goal of retiring this debt and writing a budget for the next two-year period. It was painfully obvious the existing level of state services could not be maintained without increasing taxes.
Lawmakers found themselves at odds with each other and with the

Governor on how to deal with the budget. Newly elected Governor William P. Clements moderated his position against a tax increase and endorsed maintaining the revenue stream by extending the temporary taxes-a position which would still require deep cuts in state services. The Senate generally held firm against such deep service cuts, while many House members positioned themselves between the Governor and the Senate.

Adding to the debate on taxes was Comptroller Bob Bullock. The Comptroller suggested a major revision of the state's tax system, focusing on rewriting the sales tax to include most services taxing professionals and nonprofessionals alike-and eliminating many exemptions. The issue of raising additional money could then be settled simply by choosing a sales tax rate.

This approach was opposed, not surprisingly, by the service industries which would become tax collectors and by the groups that were the most intensive consumers of these services. Opposition to full-scale base broadening grew as the session progressed.

While there was no shortage of solutions offered during the regular session, none could be agreed upon. As in 1961, lawmakers met during the summer to reach a tax and budget compromise.

The tax debate began again as the House passed a package that would maintain the 5.25 percent sales tax rate and would place insurance premiums under the sales tax. Proponents pointed out that this would reduce the regressivity of the sales tax, arguing the wealthy tended to spend a greater portion of their income on insurance. Opponents countered that placing insurance under the sales tax might trigger retaliatory tax increases against Texas companies
by other states. While passing the House, the insurance tax faced stiff opposition in the Senate.
In a final compromise, the House dropped the insurance sales tax, the Governor acceded to higher taxes and the Senate agreed to further spending reductions.

Sales tax figured heavily in the final compromise tax package. House Bill 61, sponsored by Representative Dan Morales, raised the sales tax rate to six percent and expanded the base. The bill also imposed a $\$ 25$ annual sales tax permit fee. Rather than expanding the base to include all services, however, a list of selected services was again added to the tax base, including:
(1) private club memberships;
(2) landscaping and lawn services;
(3) cleaning and exterminating;
(4) garbage collection;
(5) credit reporting and debt collection;
(6) data processing;
(7) security services;
(8) basic local telephone service;
(9) information services;
(10) nonresidential remodeling and repair; and
(11) insurance services. ${ }^{5}$

## The Texas Sales Tax Today

Texas' general state sales tax rate and the tax rate on motor vehicles and rentals currently stand at six percent. The general sales tax applies to the sale of all tangible personal property except:
(1) items sold for resale;
(2) oil, sulphur, motor fuels, cement, motor vehicles and mixed beverages (all of which are taxed under other
5. While premiums are not subject to the sales tax, insurance services such as actuarial analysis and claims adjusting are taxed.

Texas law);
(3) items on which the purchaser has paid sales tax in another state;
(4) newspapers and magazine subscriptions;
(5) religious writings;
(6) medical supplies, prescription drugs, syringes and prescribed medical devices;
(7) grocery food except for candy and soda;
(8) water;
(9) food sold for immediate consumption by certain nonprofit organizations;
(10) certain agricultural supplies and utilities;
(11) gas and electricity used for manufacturing;
(12) gas and electricity for residential use;
(13) raw materials used in manufacturing;
(14) raw materials used for newspapers;
(15) containers used in wholesale;
(16) packaging supplies used in wholesale;
(17) ships for commercial use;
(18) drilling equipment sold for use outside the state;
(19) rolling stock and related equipment;
(20) aircraft for commercial use; and
(21) items sold for use and delivery outside Texas.

The following sellers or purchasers are exempt from the sales tax:
(1) occasional sellers (e.g., garage sales);
(2) certain Indian tribes;
(3) certain nonprofit groups or organizations;
(4) the federal government;
(5) city, county and state government and special districts;
(6) religious, educational or charitable organizations
exempt from federal income tax; and
(7) fire and/or emergency medical service departments.

Services are excluded from the sales tax base unless specifically identified as taxable. The major taxable services include:
(1) telecommunications services;
(2) installation of taxable tangible personal property;
(3) Repairs of tangible personal property except for automotive repair;
(4) amusement admissions;
(5) laundry and dry cleaning;
(6) customized or packaged computer software;
(7) cable television;
(8) parking;
(9) insurance services such as claims adjusting and actuarial analysis, but not premiums;
(10) landscaping and lawn care;
(11) surveying;
(12) security services;
(13) information services, data processing, credit reporting and debt collection;
(14) exterminating;
(15) garbage collection;
(16) cleaning and janitorial; and
(17) nonresidential repair.

The administration of the sales tax in Texas. The administration of the sales tax is far more complex than just a merchant collecting and remitting the tax. There are approximately 430,000 sales tax permit holders throughout the state remitting taxes in several different ways.
Types of filers. Depending on the amount of tax merchants collect, they may file returns monthly, quarterly or annually.

Any sales tax permit holder with a liability over $\$ 500$ per month or $\$ 1,500$ per calendar quarter must remit the tax to the

Comptroller each month. The return and payment must be postmarked by the 20th day of the month following the month the taxes were collected. For example, sales tax a merchant collects in January must be remitted to the state by February 20.
Sales tax permit holders owing less than $\$ 500$ per month or $\$ 1,500$ per calendar quarter but more than $\$ 500$ for a calendar year must file their returns and payment by the 20th of the month following the calendar quarter. For example, the sales tax a small merchant collects in January, February and March is due by April 20th. About 100,000 of the state's sales tax permit holders qualify as quarterly filers.

Permit holders who owe less than $\$ 500$ for a calendar year file their returns on an annual basis. Their returns and payments for the previous year are due by January 20th. Approximately half of the state's sales tax permit holders fall below this threshold and qualify as annual filers.

All tax permit holders who file their returns on or before their appropriate tax due date are entitled to a one-half of one percent "timely filing" discount to help offset the costs involved in collecting the tax. The timely filing discount was originally one percent until it was cut in half in 1987.

Prepayers. Sales tax permit holders may elect to prepay their taxes on either a monthly or quarterly basis and receive a 1.25 percent discount in addition to the one allowed for timely filing. The prepayment provision was included in the original sales tax bill in 1961, although the discount was two percent. It was reduced to 1.25 percent in 1983.

The 1.25 percent discount is equivalent to approximately a 13.6 percent effective interest rate for monthly prepayers and a 13.9 percent interest rate for quarterly
prepayers.
A business electing to prepay the tax estimates the amount of tax it expects to collect for the filing period and remits this

> Sales tax permit holders may elect to prepay their taxes on either a monthly or quarterly basis and receive a 1.25 percent discount in addition to the one allowed for timely filing.

amount to the Comptroller at the midpoint of the filing period. To qualify for the prepayment discount, the estimate must be either at least 90 percent of the actual liability ultimately due or must be equal to the amount of tax remitted for the same filing period in the previous year. The final settlement is due 20 days after the end of the payment period.
For example, monthly prepayers would remit their January tax prepayments on January 15. After the end of January, they would calculate the actual taxes collected in January and would remit the difference to the Comptroller by February 20th.
Similarly, quarterly prepayers would remit their estimated tax for the January, February and March calendar quarter by February 15th. Final settlement of the account is due by April 20th.
While there are only about 1,100 prepayers, they are among the state's largest businesses. Prepayers account for only about onequarter of one percent of the sales tax permit holders but remit approximately 20 percent of the
sales tax collections. The great majority of the prepayers-about $1,000-\mathrm{opt}$ to file quarterly, largely because it requires filing fewer returns throughout the year.
Direct payers. Direct payers are a special type of sales taxpayer because when they make a purchase they pay their tax liability directly to the state rather than to the merchant. Technically, they pay "use" tax and are the only true "taxpayers" holding sales tax permits as all others are really tax "remitters."
Direct payers tend to be the state's largest corporations who make large purchases of taxable capital items. The state's 350 direct taxpayers account for less than one-tenth of one percent of the state's sales tax permit holders but pay approximately nine percent of the sales tax.

Direct payers file their returns on a quarterly basis. The direct payer is not entitled to the onehalf percent timely filer discount.

Sales tax remittances spread across industries. Table 3 illustrates which industries collect or pay the general sales tax and remit it to the state. While these data are for 1986 prior to the recent tax base changes-they still provides an accurate general snapshot.
As expected, retailers remit the largest amount of tax dollars, almost two-thirds of the state's general sales tax revenues. Almost all of this is money merchants collect from their customers.
On the other hand, the tax figures reported by manufac-turers- the second largest group of remitters-include a great deal of tax on the items they purchase for their own use. Over 40 percent of the tax dollars they remitted to the state were actually use tax and not sales tax. Mining companies, construction
firms and utilities are also big use taxpayers-although the largest portion of the taxes the state sees from utilities is actually from sales of utilities to commercial establishments.

## The Texas Sales Tax Compared to Other States

A total of 45 states and the District of Columbia levy a broad-based state sales tax. Alaska, Delaware, Montana, New Hampshire and Oregon are the exceptions.

The sales tax rate and base vary among the states as each has developed its own tax philosophy over the years. Table 4 shows some states provide special exemptions for their key industries, while others strive to capture them in the tax base.

Sales tax rate. Only two other states-Connecticut (7.5 percent) and Washington (6.5 percent)-have higher state tax rates. Six states other than Texas have a six percent rate Florida, Minnesota, Mississippi, New Jersey, Pennsylvania and Rhode Island.
The average state sales tax rate in the states that levy the
broad-based tax is approximately 4.7 percent.
Adding the one percent city tax and a maximum one percent transit authority tax brings Texas' combined state and local tax rate to eight percent. Louisiana (nine percent), New York (8.25 percent), Tennessee ( 8.25

> Most states generally try to limit the regressivity of the sales tax by providing exemptions for consumer necessities such as housing, groceries and utilities.

percent), and Washington (8.1 percent) have higher combined rates. Four other states have an eight percent combined rate Alabama, Arizona, Colorado and Illinois.

Alaska, which has no state sales tax, does allow for up to a six percent local sales tax (which cities and counties both use)-the highest local sales tax in the

TABLE 3. Reported Taxable Sales by Industry in Texas, 1986

| Industry | Reported <br> Taxable Sales <br> (millions) | \% of All <br> Taxable Sales |
| :--- | ---: | :---: |
| Agriculture | $\$ 101.5$ | $0.1 \%$ |
| Mining | $1,416.0$ | 1.5 |
| Construction | $1,765.7$ | 1.9 |
| Manufacturing | $8,437.5$ | 9.1 |
| Transportation, Communication and Public Utilities | $6,539.1$ | 7.1 |
| Wholesale Trade | $7,537.2$ | 8.1 |
| Retail Trade | $59,543.4$ | 64.2 |
| Finance, Insurance and Real Estate | 171.9 | 0.2 |
| Services | $7,091.3$ | 7.6 |
| Government | 119.3 | 0.1 |
| Other | 29.1 | 0.0 |
|  | $\$ 92,752.1$ | $\mathbf{1 0 0 . 0 \%}$ |
| Total |  |  |

Source: Comptroller of Public Accounts.
nation. Louisiana and Colorado have maximum five percent local rates which can be used by cities, counties, special districts and, in Louisiana, school districts.

Only ten states, including Texas, allow a local sales tax for transit purposes. Ohio allows up to a 1.5 percent transit tax, while Texas joins with four other states with the second highest maximum rate, allowing a one percent tax. Sixteen states have a state sales tax but no local taxes Connecticut, Hawaii, Idaho, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Jersey, Pennsylvania, Rhode Island, South Carolina, Vermont and West Virginia. Many of these states provide direct aid to local governments in lieu of the local tax.
The average combined state and local tax rate among the states with a sales tax is approximately 6.1 percent.
Sales tax base and exemptions. Texas' sales tax is officially titled the "Limited Sales and Use Excise Tax," though it is far less limited today than when it was first enacted. In spite of the base broadening of recent years, though, Texas' sales tax base essentially matches well with that in other states.
Consumer Exemptions. Most states generally try to limit the regressivity of the sales tax by providing exemptions for consumer necessities such as housing, groceries and utilities. However, all of the sales taxing states con-sider restaurant meals as more of a luxury and tax them. In fact, New Hampshire, which does not have a general sales tax, does have a specific sales tax applying to restaurant meals and overnight lodging.

No states directly tax housing, although almost all states with a sales tax do tax the building
materials used to construct the house.

While 17 states take the very regressive step of taxing groceries (i.e., food not for immediate consumption), 14 of these states have a personal income tax to help offset the sales tax regressivity on individuals-South Carolina and

Wyoming being the exceptions. Wyoming does, however, have a sales tax relief program for senior citizens. Texas does not tax grocery food.
Seventeen states tax residential electricity at their full sales tax rate, while two states apply the tax at a reduced rate. Seven states tax
residential water. Texas taxes neither today, although residential utilities were taxed prior to 1978.
Business/Commercial Purchases. The standard image of the sales tax as a tax on individuals is far from wholly accurate. In fact, the Comptroller estimates that as much as 46 percent of the Texas

TABLE 4. Major Sales Tax Exemptions Among the States

| Exemption | Taxed or Exempt in Texas | Number of States Taxing |  | States Exempting Or With No Tax |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Full Rate | Reduced Rate |  |
| Consumer Purchases |  |  |  |  |
| Food for home consumption | E | 17 | 0 | 34 |
| Food for immediate consumption | T | 47 | 0 | 4 |
| Clothing | T | 40 | 0 | 11 |
| Prescription medicine | E | 1 | 0 | 50 |
| Nonprescription medicine | T | 35 | 0 | 16 |
| Residential water | E | 7 | 0 | 44 |
| Residential electricity | E | 17 | 2 | 32 |
| Business or Commercial Purchases |  |  |  |  |
| Production machinery and equipment | T | 12 | 10 | 29 |
| Industrial electricity | E | 14 | 2 | 35 |
| Nonresidential repair and remodeling | T | 17 | 0 | 34 |
| Sales for resale | E | 0 | 1 | 50 |
| Industrial water | E | 12 | 1 | 38 |
| Agriculture |  |  |  |  |
| Farm machinery | E | 9 | 9 | 33 |
| Farm feed, seed and fertilizer | E | 2 | 1 | 48 |
| Commercial herbicides and pesticides | E | 7 | 0 | 44 |
| Services |  |  |  |  |
| Telephone services | T | 31 | 0 | 20 |
| Laundry and dry cleaning | T | 17 | 0 | 34 |
| Barber and beauty services | E | 4 | 0 | 47 |
| Funeral services | E | 10 | 0 | 41 |
| Automobile repair | E | 20 | 0 | 31 |
| Amusement admissions | T | 29 | 0 | 22 |
| Legal services | E | 3 | 0 | 48 |
| Medical services | E | 2 | 0 | 49 |
| Engineering services | E | 3 | 0 | 48 |
| Architectural services | E | 3 | 0 | 48 |
| Accounting services | E | 3 | 0 | 48 |
| The Media |  |  |  |  |
| Single-copy newspaper sales | E | 12 | 0 | 39 |
| Newspaper subscriptions | E | 8 | 0 | 43 |
| Magazine subscriptions | E | 26 | 0 | 25 |
| Advertising space and time | E | 3 | 0 | 48 |
| Government/Nonprofits |  |  |  |  |
| Sales to state governments | E | 7 | 0 | 44 |
| Sales to local governments | E | 7 | 0 | 44 |
| Sales to religious or charitable groups | E | 12 | 0 | 39 |
| Sales by religious or charitable groups | E | 9 | 0 | 42 |

[^27]sales tax may actually come from business, and not consumer, purchases. Businesses pay sales tax on a broad range of items from office furniture and supplies to equipment used in manufacturing.

The sales tax is an added cost of doing business, and varying tax policies across the nation can put businesses in some states at a disadvantage relative to others. Consequently, there has been a movement over the past several years to make the sales tax less burdensome to business.
For example, virtually every sales tax when first enacted taxed industrial machinery. This created a costly hurdle to new businesses. By 1971, though, only 22 out of 50 states and the District of Columbia fully taxed industrial machinery, while eight provided either a lower rate or an exemp-
tion for "start-up" businesses. Today, only 12 states fully tax machinery, while ten tax it at either a lower rate or provide a "start-up" exemption. Texas currently taxes industrial machinery but is scheduled to phase out the tax beginning in 1991.
Most states, like Texas, exempt industrial utilities, and those states which do tax them tend to have fewer indigenous "heavy" manufacturing industries which would be the greatest consumer of industrial utilities.
Only one state-Hawaii-has a broad policy of taxing sales for resale. It should be pointed out that Hawaii has a largely captive business community and taxes sales for resale at a greatly reduced rate ( 0.5 percent).
Agriculture. Most states now either exempt agricultural equipment and supplies entirely or tax

TABLE 5. Sales Taxation of Services Among the States, 1988

| No Tax on Services | Limited Taxation of Services |  |  | General Tax on Services |
| :---: | :---: | :---: | :---: | :---: |
|  | Narrow | Substantial | Broad |  |
| Alabama | Arizona | Arkansas | lowa | Hawaii |
| California | Connecticut | Florida | Washington | New Mexico |
| Colorado | North Carolina | Kansas | West Virginia | South Dakota |
| Georgia | South Carolina | Louisiana |  |  |
| Idaho |  | Mississippi |  |  |
| Illinois |  | New Jersey |  |  |
| Indiana |  | New York |  |  |
| Kentucky |  | Ohio |  |  |
| Maine |  | Pennsylvania |  |  |
| Maryland |  | Tennessee |  |  |
| Massachusetts |  | Texas |  |  |
| Michigan |  | Utah |  |  |
| Minnesota |  | Wisconsin |  |  |
| Missouri |  | Wyoming |  |  |
| Nebraska |  | District of Colu | bia |  |
| Nevada |  |  |  |  |
| North Dakota |  |  |  |  |
| Oklahoma |  |  |  |  |
| Rhode Island |  |  |  |  |
| Vermont |  |  |  |  |
| Virginia |  |  |  |  |

[^28]Note: Table excludes utilities, admissions and overnight lodgings.
them at a lower rate. Although these items were mostly taxed in the early history of the sales tax, the volatile farm economy caused many states to add the exemption over the past few decades.
Texas-one of the nation's leading agricultural states-has always exempted agricultural equipment and supplies for farm use from the sales tax.
Services. Tax policies across the states vary more widely for services than any other area. In most states, as in Texas, the sales tax was originally a tax on the sale of tangible personal property. Selected services were added later as additional revenue needs were established.
Taxing services is hardly a simple yes or no issue. The service industry is really a broad range of very different businesses providing a vast array of services from hotel accommodations to education and health care.
Economists John L. Mikesell and John F. Due have established subcategories of the range of service taxation (Table 5). Of the 45 states with a general sales tax, they identify 24 that have some form of service taxation-ranging from narrow to broad and general. The remaining 21 states tax only sales of tangible personal property.

Most states which do tax some form of services only tax nonprofessional services, while leaving professionals exempt.

Only three states-Hawaii, New Mexico and South Dakota-have a general tax on services which extends significantly into professional services. Rather than separately listing those taxable services in the tax code, these states tax all services unless specifically exempted. These three state sales taxes are the only ones taxing legal, engineering, architectural and accounting services. Hawaii and New Mexico tax
medical services as well.
The Media. Most states exempt newspapers from the sales tax, though most do tax magazines. Only three states tax some form of advertising space and time, Hawaii, New Jersey and New Mexico.

Taxation of the media has historically been controversial, partly because of concerns that freedom of speech may be impeded by the tax and partly due to the enormous popular pressure the media can exert against taxation.

Taxing the media under a broad-based tax such as a sales or gross receipts tax has not been found unconstitutional on the grounds that it prevented freedom of speech. If this were the case, no state would be able to tax newspapers, magazines or even books under the sales tax.

Some attempts to tax the media selectively have been found to be unconstitutional; but as long as a broad-based tax like the sales tax is used, there should be no constitutional restraints.

Governments and NonProfits. Most states exempt purchases by nonprofit organizations and governments. This exemption policy creates additional paperwork for the tax collectors, a major reason offered by the states that tax these transactions.

State governments taxing themselves offer no net revenue gain, but, since a fair amount of the states taxable purchases are paid for with dedicated highway funds, it is a way of redirecting dedicated highway funds to the states' general revenue account.

Comparing the Sales Tax Base's
Breadth. Comparing the sales tax base among the states is difficult, not only because the mix of what is taxed varies from state to state, but also because some states tax selected transactions under separate statutes. For example, in
addition to the general sales tax statute, Texas has separate statutes taxing motor vehicle sales, hotel and motel accommodations and oil field servicing. Other states, such as Hawaii, would tax all of these types of transactions under the general sales tax.

To develop a consistent base of comparison of the true tax base among all states, all of the selective sales taxes should be considered together with the general sales tax.

Table 6 presents a comparison of the tax bases among the 50 states for 1986. Tax receipts from the general and selected sales taxes were divided by their tax rates to determine the dollar value of sales subject to tax. To determine how comprehensive the tax base is relative to the economy of the state, taxable sales as a percent of the state's 1986 personal income was
calculated. It is possible for a state to have greater taxable sales than personal income because of the sales tax business pays.
By this measure, Hawaii and New Mexico have the broadest sales taxes in the nation. This is not surprising, given that these two states not only have very broad taxation of services (taxing professional services, such as medical and legal, as well as nonprofessional services) but also tax grocery food and manufacturing machinery and equipment. Hawaii also taxes motor fuels, raw materials and sales for resale, while New Mexico taxes residential and industrial utility services.
Adjusting for the recent tax bill, Texas ranks 19th among all states. Prior to the tax bill, Texas ranked 21st. Florida would have ranked sixth had it maintained its tax on services but now ranks 15th instead.

| Rank | State | Index | Rank | State | Index |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Hawaii | 121.1 | 26 | Missouri | 51.9 |
| 2 | New Mexico | 111.4 | 27 | Michigan | 51.8 |
| 3 | Wyoming | 90.3 | 28 | Maine | 51.8 |
| 4 | West Virginia | 81.1 | 29 | Kentucky | 49.9 |
| 5 | Washington | 72.6 | 30 | Alabama | 49.6 |
| 6 | Mississippi | 68.2 | 31 | Colorado | 49.4 |
| 7 | Georgia | 67.5 | 32 | California | 48.4 |
| 8 | Utah | 67.1 | 33 | Wisconsin | 47.0 |
| 9 | Arkansas | 67.0 | 34 | Nebraska | 46.4 |
| 10 | Arizona | 65.9 | 35 | Virginia | 44.7 |
| 11 | Nevada | 62.3 | 36 | Ohio | 42.8 |
| 12 | South Dakota | 61.4 | 37 | Illinois | 40.0 |
| 13 | North Carolina | 60.7 | 38 | New York | 39.2 |
| 14 | South Carolina | 60.5 | 39 | Minnesota | 36.5 |
| 15 | Florida | 60.5 | 40 | Connecticut | 35.6 |
| 16 | Indiana | 60.5 | 41 | Massachusetts | 34.6 |
| 17 | Tennessee | 59.5 | 42 | Rhode Island | 34.0 |
| 18 | Louisiana | 58.0 | 43 | Pennsylvania | 32.5 |
| 19 | Texas | 57.4 | 44 | Maryland | 32.3 |
| 20 | Oklahoma | 57.2 | 45 | New Jersey | 31.3 |
| 21 | Idaho | 55.2 | 46 | New Hampshire | 5.5 |
| 22 | North Dakota | 54.0 | 47 | Delaware | 0.5 |
| 23 | Kansas | 53.4 | 50 | Alaska | 0.0 |
| 24 | Vermont | 52.7 | 50 | Montana | 0.0 |
| 25 | lowa | 52.1 | 50 | Oregon | 0.0 |

[^29]
## The Sales Tax as a Revenue Tool

Texas has grown increasingly reliant on the sales tax as a revenue tool since the general tax was first enacted (Figure 1). In 1967, it was the leading revenue producer and has held the top spot ever since.

At a two percent rate, the
general and vehicle sales taxes accounted for roughly 25 percent of the state's tax income in the 1960s. At four percent throughout most of the 1970s and early 1980s, the sales taxes accounted for roughly 45 percent of the state's tax income.
With the broadening of the sales tax base in 1984 and 1987, along

FIGURE 1. Sales Taxes as a Percent of Total State Tax Revenue, 1961-89


FIGURE 2. Components of Sales Tax Growth, 1980-89


[^30]with the rate increase to six percent, these two sales taxes combined are expected to generate 58.9 percent of the state's tax income in 1989.
Texas depends much more on the sales tax as a revenue source than most states, primarily because Texas has no personal income tax. On average, the general sales tax accounts for about 33 percent of typical state tax revenue, with the personal income tax accounting for about 30 percent.
While Texas has made the policy decision to rely on the sales tax as the driver of its tax system, the policy has not been without problems. Over the past few years, the sales tax has proven to be a very unstable source of revenue for the state for several reasons.
First, transactions by nature fluctuate more with economic change than do state spending needs (often measured with population and inflation).
Second, sales of capital equipment in particular are very volatile. Since Texas is one of 22 states (including the District of Columbia) capturing these items under the sales tax, this adds a degree of volatility to the state's tax revenues. In fact, in 1983, the first year in history that general sales tax revenue fell, the drop was primarily due to the sharp drop in capital spending.
Third, while making the tax less regressive, exempting most of the consumer necessities such as food, housing and utilities, does remove some of the most stable transactions from the tax base.

## Recent Sales Tax Performance

The volatility of the sales tax was never so obvious as during the recent roller coaster ride of oil prices.

During the first years of the 1980s, oil price decontrol combined with OPEC's tight grasp on world oil supplies to drive oil prices near $\$ 40$ a barrel. Common expectations held that prices would continue to spiral upward. The economic boom revenues dropped 4.5 percent and sent the state into a financial quandary which lasted five years. Actually, taxable retail sales were up by 2.1 percent in the 1983 tax year, but sales taxes paid by oil and gas companies dropped 40.1 percent and sales taxes paid by manufacturers fell by 21.6 percent.

Generally, 1984 was a year of temporary recovery, and sales tax collections grew by 14.5 percent, aided by the $\$ 150$ million in onetime "speed-up" money generated by moving the sales tax due date forward. Without the speedup, sales tax receipts would have still grown a healthy 9.9 percent.

The recovery continued into 1985, but the need to finance education reform saw the passage of H.B. 122 in 1984, with its modest base expansion and oneeighth percentage increase in the sales tax rate. The underlying sales tax base grew by 7.9 percent, but ten months of H.B. 122 revenues brought total sales tax growth to 10.8 percent.

With 1986 came another round of oil price shocks, and, in February, the Comptroller notified the Governor that the state was likely to incur a deficit. Growth in the underlying sales tax base fell flat. While total sales tax collections grew by 3.3 percent, all of the growth was attributable to H.B. 122 and other minor sales tax law changes.

Total sales tax collections in 1987 grew by 6.6 percent, but this was the result of distortions caused by tax legislation, primarily to House Bill 79's temporary tax increase to 5.25 percent. Adjusting for all of the tax law
changes, underlying sales tax revenue actually fell by 7.5 percent.

## The Impact of the Sales Tax on Consumers

Much of the criticism of the sales tax focuses on the charge that it is regressive-i.e., the wealthier pay a lesser portion of their income for the tax than do the poor.

As already mentioned, most states-including Texas-limit the regressivity of the tax by exempting certain consumer necessities. Food, housing and utilities are among the most common exemptions. A few states also exempt clothing.
While these exemptions help lessen the regressivity of the sales tax, they do not eliminate it. Generally, any broad-based consumption tax is regressive due to the simple fact that people tend to save, rather than spend, a greater portion of their income as their income grows. As a result, the sales tax will take a greater portion of the family budget from the poor than it does from the wealthy.

In Texas, a family earning $\$ 7,315$ annually directly pays $\$ 208$ in sales taxes- 2.8 percent of their income. The family earning $\$ 61,077$ pays $\$ 933.09$ in sales taxes -1.5 percent of their income (Table 7). It should be noted that these figures do not include the indirect effects of the business portion of the sales tax that is shifted to consumers.

This does not mean that the poor pay most of the tax, however. In fact almost half of the sales tax is paid by families earning over $\$ 30,000$; over a third comes from those earning over \$40,000 (Figure 3).

Generally, for each one percent increase in income a Texas family receives, its sales tax burden in-
creases only about 0.69 percent in sales taxes. A regressive tax is any tax whose payments tend to increase less than the rate of increase in family income. The closer the ratio of tax growth to income growth is to 1.0 , the less regressive the tax.

On the other hand, any tax that increases greater than the change in family income-a regressivity index greater than 1.0-is said to be progressive. For example, prior to recent federal tax reform, a one percent increase in personal income tended to cause a 1.7 percent increase in federal income tax liability.

The mix of consumer purchases differs among income groups, so not all segments of the sales tax are equally regressive. For example, taxing entertainment admissions is less regressive than the tax as a whole (Table 8).

On the other hand, taxing grocery food or utilities would be extremely regressive, since people spend a much smaller portion of their income on groceries as their income rises.

In Texas, there has been much speculation about the impact that broadening the sales tax base would have on the regressivity of the tax. Economists Daniel Freenburg and Harvey Rosen analyzed the regressivity and comprehensiveness of the sales tax bases among the states. ${ }^{6}$ Their results suggested that the states with the broadest sales tax bases tended to have the most regressive sales taxes. Hawaii, with the broadest sales tax, also had the most regressive tax. In fact, the ten states with the most regressive sales taxes were also at the top of the list on most comprehensive
6. Daniel R. Feenburg and Harvey S. Rosen, State Personal Income and Sales Taxes, 1977-1983 (Cambridge: National Bureau of Economic Research, 1987).
base. The reverse was found at the other end of the spectrum. Pennsylvania, which was found to have the least regressive sales tax, also had one of the least comprehensive bases.
But, of course, the impact of expanding the sales tax on income groups in Texas would depend on which transactions the tax would be extended to. Some transactions, such as accounting services, are less regressive than the existing sales
tax base. Others, like medical services, are more regressive.
Despite its regressivity, the sales tax nonetheless can be argued to be a "fair" tax not only because all income groups pay it, but also because most businesses pay it. While statistics vary concerning the regressive burden of the tax, there is no denying that almost every Texan and every Texas business pays at least some sales tax.

TABLE 7. Family Sales Tax Burdens by Income Group

| Income | Sales Tax Paid | Median Income | Tax as \% of Income |
| :--- | :---: | :---: | :---: |
| Under $\$ 5,000$ | $\$ 219$ | $\$ 1,647$ |  |
| $5,000-9,999$ | 208 | 7,315 | $13.3 \%$ |
| $10,000-14,999$ | 299 | 12,393 | 2.8 |
| $15,000-19,999$ | 349 | 17,316 | 2.4 |
| $20,000-29,999$ | 437 | 24,568 | 2.0 |
| $30,000-40,000$ | 570 | 34,441 | 1.8 |
| Over 40,000 | 933 | 61,077 | 1.7 |

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey (Washington, D.C., Bulletin 2267, 1984), House Ways and Means Committee.

1. Data on this income group may be skewed by some groups spending out of savings.

TABLE 8. Income Regressivity of Certain Items Under the Sales Tax

| Hem | Income Regressivity ${ }^{1}$ |
| :--- | :---: |
| Entertainment admissions ${ }^{2}$ | .88 |
| Life insurance ${ }^{3}$ | .83 |
| Accounting services $^{2}$ | .73 |
| Restaurant food $^{2}$ | .73 |
| Clothing $^{2}$ | .72 |
| Current Texas sales tax $^{2}$ | .69 |
| Education expenditures $^{3}$ | .62 |
| Automobile insurance | .61 |
| Housing, owned and rented $^{3}$ | .56 |
| Medical services $^{3}$ | .45 |
| Grocery food $^{3}$ | .34 |
| Residential utilities $^{3}$ | .32 |

## Source: House Ways and Means Committee.

1. Income regressivity reflects the percentage increase in sales as a result of a one percent increase in a family's income. Items with a regressivity measure closer to 0.0 are more regressive than items with a regressivity measure closer to 1.0 .
2. Taxable in Texas.
3. Exempt from the sales tax in Texas.

Rating the Texas Sales Tax
In Reforming State Tax Systerns, Robert J. Kleine and John Shannon write:

The sales tax deserves heavy weight in a state-local tax system because it is: productive; relatively stable; exportable to nonresidents, particularly in tourist states; and, according to most public opinion surveys, the least unpopular tax-largely because it is viewed as voluntary by the taxpayer and is collected in small amounts.

Kleine and Shannon and John Mikesell offer seven criteria for a "good" sales tax. As these relate to Texas, they include:
(1) It should provide 20 to 30 percent of all state-local tax revenue. Texas relies more heavily than this on the sales tax, but that is a policy decision necessitated by the absence of a personal income tax. The trade-off for not having a personal income tax is a high rate (Texas has the fifth highest sales tax rate in the nation) and a broad base (Texas has the 19th broadest base). These comparative rankings suggest that should Texas seek additional revenue in the future from the sales tax, there is more room in the base than the rate.
(2) The sales tax rate should not be out of line with rates in surrounding states. Texas' combined state and local sales tax rate is eight percent, compared to nine percent in Louisiana, six percent in Arkansas, 7.25 percent in Oklahoma and 6.25 percent in New Mexico. At best, Arkansas has the greatest advantage over Texastwo percent-but then it also has the shortest border with Texas. Generally, the rate differential is not a problem for Texas because of the sheer size of the state. Most

Texans live a very long drive away from another state, so the savings of shopping out-of-state are generally overwhelmed by the cost of the trip. Texas' border with Mexico is a special situation, but shopping trends here are more impacted by currency differences between the dollar and the peso rather than any tax differential.
(3) It should exempt food, drugs and utilities or provide a tax credit for these items to limit the regressivity of the tax. Texas currently exempts grocery food, prescription drugs and residential utilities.
(4) It should tax most services, as well as goods, to improve the tax's growth potential and fairness. In recent years, Texas has expanded its sales tax base by 12-13 percent, as numerous services have been brought under the tax.
(5) The proceeds of the sales tax should be shared with local governments, or localities should be allowed to levy sales taxes subject to state-imposed safeguards. Texas does allow local sales taxes for general purposes, local transit programs and property tax relief.
(6) A strong audit and enforcement program should be maintained to protect the integrity of the tax base. Under the Comptroller of Public Accounts, Texas has one of the most sophisticated and successful audit and enforcement efforts among all states with a sales tax.
(7) The sales tax should not put a state's businesses at an economic disadvantage in comparison with other states. Specifically, producer purchases should not be included in the sales tax base. Their inclusion can distort business decisions, will cause a haphazard distribution of the final tax burden and can impede economic development by
discouraging capital investment and asset replacement. ${ }^{7}$

Although taxing services is generally considered a necessary part of a good sales tax structure, it does involve several problems:
(1) There is no tangible product delivered, so it is harder to identify a taxable transaction.
(2) Most service businesses are small, making tax enforcement more difficult and more costly.
(3) It is politically difficult to tax services, especially professional services, as the Florida experience suggests.
(4) Service taxation may put large companies at a competitive advantage over smaller businesses (smaller ones may have to hire their accounting or legal services, which would be taxable, while a large company might have on-staff accountants and lawyers).

A common complaint businesses offer against the Texas
sales tax is that it applies to capital machinery. This exemption is scheduled to phase out over a five-year period beginning in 1991.

If, in the future, more states elect to tax services, a tax structure that included them would not suggest a competitive disadvantage.

## Conclusion

Texas' sales tax is not without some blemishes, but overall the tax holds up very well under the scrutiny of the above standards of evaluation. Texas' sales tax has evolved over a 27 -year period, occasionally undergoing major revision, occasionally seeing just a bit of fine tuning. Texas policymakers have made the sales tax the tax of choice, so further changes are inevitable as revenue shortfalls or surpluses bring tax issues to the forefront.

[^31]FIGURE 3. Texas Sales Tax Receipts Grouped by Family Income


[^32]
# R ecent Directions in Texas Sales Tax Policy 

## A Critical Evaluation

## Summary

The sales tax is generally considered to be a tax on the individual consumer. In fact, almost one-half of the tax in Texas is paid on transactions between businesses. The exemption for manufacturing equipment, to be phased in between 1991 and 1995, will result in some shift in this distribution. Businesses must pass on the burden of the tax, either to customers, stockholders or employees. In any of these events, the pyramiding of the tax is a burden on the state's businesses.

For individual consumers, sales taxes tend to be regressive. They place a larger burden on those with smaller incomes. Exemptions of necessities, such as food for home consumption, residential utilities and prescription medicines, reduce the regressivity. Adding services to the sales tax base can increase the regressivity of the tax. It can also increase the share paid by business. Professional services in particular are paid predominantly by businesses. These results can be avoided by carefully selecting the services to be added to the tax base.

A small share of the sales tax is exported outside the state. This occurs when sales tax is paid on purchases made by visitors to the state and when the sales taxes paid by businesses are passed through to either customers or shareholders
outside the state. Some of the business share of the sales tax is exported through deductions from federal income taxes.
One final factor in evaluating the sales tax is the administrative burden to both the taxpayers and the tax collector. As the complexity of the tax increases, so do the administrative costs.
The Texas sales tax has grown increasingly complex over the years. There has been a proliferation of exemptions and a piecemeal addition of services. The most significant change in the distribution of the sales tax burden in the first 20 years of its existence was the exemption of residential utilities in 1977. This change made the tax less regressive and shifted its burden toward business.
The first addition of services to the tax base in 1984 shifted the burden toward individuals. The second, in 1987, shifted it dramatically toward business. Only the phase-in of the manufacturing equipment exemption will keep the burden of the tax balanced in the future.

The state Comptroller's 1986 and 1987 sales tax proposals would have drastically altered the sales tax by including most services. The "Bullock I" proposal would have added to the tax burden on business and made the part of the tax paid by consumers more regressive. The "Bullock II" plan would have been more neutral in its effects.

By Joe Thrash
Counsel to the Select Committee on Tax Equity

The last five years have seen major changes in both the sales tax base and rate in Texas. These changes have been driven by a continuing need for more revenue, first for school reform and then to offset an economic downturn. The first comprehensive plan to guide tax reform was offered by state Comptroller Bob Bullock in August 1986. It caused much debate and discussion, but only a few of the ideas contained in it have been adopted thus far.
The principles guiding that plan were that the Texas tax system was out of step with the economy and that the new service economy was not bearing its share of the load. Other considerations might include the incidence of the tax and its impact on the economy. The question of whether the rich or poor or individual consumers or businesses pay the tax is more relevant in the long term.
Sales taxes have certain basic characteristics that vary little from one state to the next. However, through the use of various exemptions and exclusions, the characteristics of the tax can be varied greatly. This chapter will first discuss the issues affecting sales tax policy and then will discuss the Texas tax and how it has performed measured by these policies.

## Major Policy Issues

Discussions of sales tax policy generally dwell on three considerations about the tax. The first is the tendency of the tax to pyramid on businesses and affect business decisions (the efficiency issue). The second is the regressive nature of the tax (the equity issue). Third is the question of the taxation of services (the tax base issue). Other frequently mentioned factors are the exportability of the tax, administrative costs and enforceability and, recently, deductibility from federal income taxes.
The sales and use tax is generally considered to be a consumer tax with its major incidence or burden on the final purchaser of a good or service. How well that comports with reality varies from state to state because of the pattern of exemptions from the tax. However, in Texas, the sales tax is the largest direct state tax on business, as well as on individual Texans.
The determination of sales tax incidence is the goal of much research but is still subject to some speculation because the nature of the tax does not lend itself to exact determination of its incidence. Researchers can determine fairly accurately who is collecting the tax, principally retailers, but they are less accurate when it comes to establishing the identity of the purchasers who are paying the tax.

Frequently, this research is conducted through indirect

[^33]4. Texas Tax Code Ann., sec. 151.318 (Vernon Supp. 1987-88).
means. Consumers at various income levels are determined to be spending their incomes on various essential and nonessential goods and services, and certain assumptions can be made about the taxability of the products they buy. Input-output models are constructed to determine what businesses are purchasing and, from this, the incidence of sales tax can be estimated. One frequently used source of information for this type of study is the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey.
For most purposes, this type of research is adequate. It lends itself well to answering comparative questions. For example, if a specific item is exempted from the tax, who will benefit? Will the tax be more or less regressive? Will business pay more?

Impact of sales tax on business. In Texas, the Comptroller of Public Accounts has estimated that as much as 46 percent of the total sales tax burden in 1987 was paid on sales from one business to another. ${ }^{1}$ This is a tax that is directly paid by business, not collected from an individual consumer and paid to the state. These tax payments are a cost of doing business. With a sales tax rate of up to eight percent in Texas, it is a significant cost.
The impact of these taxes is reflected in several ways. They may result in higher prices for the goods and services sold by the business. The ability of the business to pass on the costs may be limited by competition. If the business is in a national or international market, there may be no chance to raise prices without losing sales unless it has some advantage in another area, such as proximity to markets. If the business is in a local market where all competitors bear the burden of the same taxes, the taxes will almost undoubtedly be passed on.

They may result in lower profits for the owners of the business. If prices cannot be raised, the profits may be the item that suffers. Of course, if the burden is so great that the business is unprofitable, it may not last long.
The costs also may show up as lower wages for the employees of the business. If the part of the economy that is flexible is the labor supply, the workers may be the ones who suffer. This may result in higher turnover of labor, lower quality goods and other compounding of problems.
The Texas Legislature has recently addressed what many consider to be the worst feature of the Texas sales tax for business. This is the tax on materials and equipment used in the manufacturing and processing of goods to be sold at retail. Under House Bill 61 (H.B. 61) adopted in July 1987, this tax will be phased out over a five-year period beginning in 1991. The exemption is being phased in rather than adopted immediately because of the large amount of revenue the tax currently raises. Immediate adoption of the provision in 1990, prior to the first year of the phase-in, could result in a revenue loss to the state of over $\$ 533$ million in that year alone. ${ }^{2}$
The exemption, when finally effective, will place Texas with the majority of states that currently provide it. There has been a national trend toward the granting of this exemption. In 1971, 22 states taxed manufacturing equipment; in 1984, only 11 taxed it at the full rate, with four taxing it at a reduced rate. ${ }^{3}$ The new exemption is limited to manufacturing, processing and fabricating. ${ }^{4}$
It may be useful to look at an example of the kind of costs that are taxable for a business starting up in Texas. This is not intended to be a complete list but includes
the major expenses involved for a hypothetical manufacturer, divided between those that are and are not subject to the Texas sales tax (Table 1).
While other items could be added to both lists, this sample makes it easy to understand why businesses pay almost half of Texas' sales taxes.
Resale provisions are present in every sales tax statute, except in Hawaii, to reduce pyramiding of sales taxes on businesses. Hawaii is able to do this only because of its physical isolation from the other states. However, the resale exemption only prevents a portion of this impact.
The current trend in state taxes is to widen the range of tangible items that are exempt for business purchasers. However, no state has been able to forego all the very substantial revenue that businesses pay. There is no true "retail" sales tax. The best that Texas can hope to do is to insure that the exemptions available are competitive with the other states with which we directly compete and do not cause undue distortion in the decision process.

## Impact of sales tax on

 individuals. Regressivity in a tax is the tendency to extract a higher percentage of tax from individuals with lower incomes than those with higher incomes. Those with higher incomes may pay more tax in actual dollars but at a rate that is a smaller percentage of total income. A proportional tax would take equal percentages from all income groups, and a progressive tax results in higher tax rates to those with higher income.Most analyses show the sales tax to be regressive. There are two reasons for this pattern. First, low-income people tend to spend more of their income on taxable goods, and second, higher income people tend to save more. The regressive effect is reduced some-
what in Texas and many other states by exemptions of such items as food for home consumption, prescription medicines and residential utilities.
The burden of taxes on individuals is also affected by the direct taxes on business. The result depends on how businesses are able to shift these taxes to others, as previously discussed. Unfortunately, the actual impact of these taxes is virtually impossible to predict.
There have been some studies in the area of modifying the sales tax to reduce its regressivity. ${ }^{5}$ The studies show that the most important exemption for this purpose is the food exemption. Exemptions for gasoline and residential utilities also reduce regressivity. Texas has all of these exemptions. An exemption that is frequently discussed as helping the regressivity problem but which does not is the exemption for clothing. It seems that higherincome individuals buy both more and more expensive clothing. A variation is the exemption of work clothing. This approach may reduce regressivity but causes administrative headaches.

The effect of the taxation of services on regressivity is the subject of some dispute. It appears, in fact, to depend on which services are taxed. This issue will be considered in the next section.
Another approach to dealing with regressivity is used in seven states. This is a credit/rebate system for sales tax paid by lowincome individuals. It has the advantage of allowing relief to be tailored very specifically to lowincome groups and not helping the rich along with the poor as exemptions do. There can be some reduction of complexity in the tax structure by eliminating exemptions. However, this alternative also has its shortcomings. Disadvantages include the fact that any credit system requires the filing of a form, and the people who need the relief the most will be the least likely to file the form. Further, the forms are most likely to be used when they are linked to
5. John Mikesell, "Retail Sales and Use Taxation in Minnesota," in Minnesota Tax Study Commission, Final Report of the Minnesota Tax Study Commission, Vol. 2 (St. Paul, Minnesota: Butterworths Legal Publishers, 1986), pp. 170-175.

TABLE 1. Application of Sales Tax to the Purchases of a Hypothetical Manufacturer Starting Business in Texas

| Taxable | Exempt |
| :--- | :--- |
| Construction materials | Labor (except for specific services |
| Surveying of site | subject to tax) |
| Furniture and fixtures | Raw materials |
| Office supplies | Manufacturing machinery and |
| Nonmanufacturing utilities | equipment (after 1995) |
| Transportation equipment | Chemicturing utilities |
| Hand tools | Chapping and cacklysts |
| Landscaping | Legal, accounting and engineer- |
| Most computers and software | ing services |
| Sales and marketing items | Manufacturing materials and |
| Research and development items | equipment with useful |
| Leased or rented items | life under six months |
| Telecommunications |  |
| Manufacturing machinery and |  |
| equipment (prior to 1995) |  |
| Security services |  |
| Source: Select Committee on Tax Equity. |  |

a state personal income tax system, which Texas does not have. Additionally, there are advocates for the disadvantaged who say that the poor are helped much more by relief at the time of purchase than a rebate at the end of the year.

Taxation of services. The taxation of services under the sales tax is a subject of much recent concern. It offers a method of raising additional revenue without raising the rate. While some of the issues concerning taxation of services will be dealt with in other chapters, there are some points that need to be raised since they directly relate to parts of this
6. Texas Department of Water Resources, Texas Input-Output Model (1979, 1983).
presentation. These include the effects of the taxation of services on pyramiding of the sales tax on business, on regressivity and administrative efficiency.

An examination of the Texas Input-Output Model gives a reasonable approximation of the current purchases of services and sales, although it is based on 1979 data. ${ }^{6}$ Since no more recent data is readily available, this will have to be assumed to approximate current purchasing patterns. Overall, businesses consumed 53 percent of services in the state and households consumed 47 percent. There is, as might be expected, a great deal of variation among the various services as to who consumes them. For instance, consumers pay for over 95 percent of medical and dental services, but they

TABLE 2. Individual Consumer Purchases of Services

| Type of Service | Percent Purchased <br> by Consumers |
| :--- | :---: |
| Real property maintenance and repair | $12.4 \%$ |
| Gas utilities | 11.9 |
| Electric utilities | 25.9 |
| Water and sewage | 32.3 |
| Banks and credit agencies | 37.1 |
| Insurance carriers (premiums) | 0.0 |
| Other finance, insurance, real estate | 21.9 |
| Legal | 16.2 |
| Personal services | 86.4 |
| Motion pictures, amusements, recreation | 75.3 |
| Advertising | 0.3 |
| Employment agencies | 40.1 |
| Other business services | 0.7 |
| Parking | 89.9 |
| Electrical repair | 35.9 |
| Other repair | 22.4 |
| Physicians, dentists | 96.3 |
| Hospital and laboratory | 86.2 |
| Other medical | 97.7 |
| Engineers and architects | 1.4 |
| Computing and accounting | 10.8 |
| Other professional services | 16.9 |
| Other services | 47.2 |
| $\quad$ All Services | $47.0 \%$ |

purchase less than one percent of advertising services (Table 2).

An area of services most frequently mentioned as a candidate for sales taxation is professional services. Other than medical services, which are purchased by consumers almost exclusively (although most of these purchases are indemnified by insurance companies), professional services are used mainly by business. Households use 16.2 percent of legal services, 1.4 percent of engineering and architectural services, 10.8 percent of computer and accounting services and 21.9 percent of real estate and miscellaneous insurance and financial services. Business and industry use the remainder.

The impact of expansion of the sales tax base toward professional services would be to shift the burden of the tax further toward business. There will be greater pyramiding of the tax. Further, there are issues among different businesses concerning taxation of business services.

Small businesses are less likely to be able to perform services internally than large businesses. This may result in a greater burden on small business. One objection to the sales taxation of services is that there would be a tendency for more and more services to be performed in-house, placing independent law firms, accounting firms and similar firms at a disadvantage. However, this effect is likely to take place only marginally. For example, a company that is paying $\$ 5,000$ per year to have an accountant prepare its tax returns and payrolls is unlikely to hire a full-time accountant for $\$ 30,000$ per year to avoid $\$ 400$ in tax. Only in situations where the cost of outside professional services was very nearly equivalent to the cost of hiring an employee would the additional tax have an effect.

Another serious consideration in the taxation of services is the result in an environment where most other states do not tax services. One of the major problems leading to the repeal of the comprehensive tax on services in Florida was the state's attempt to impose what some labeled a "worldwide unitary use tax" on services. The idea was to create a totally level field where all services that had a connection with Florida would be taxed in proportion to the benefit that was received in Florida. In particular, national advertising was taxed in proportion to the part of the media market that was in Florida. While the Florida Supreme Court tentatively ruled this practice legal, it proved to be so unpopular that it was repealed.
Even without an attempt to tax advertising, there are problems with the taxation of services in interstate commerce. The worst case is a situation in which the state's service industry can be placed at a competitive disadvantage vis-a-vis other states and lose out-of-state and local business to providers who do not collect the tax. Aggressive enforcement of the use tax, coupled with a liberal exemption for services performed for out-of-state customers, can limit this problem, but there will be enforcement problems as long as there is a substantial incentive to avoid the tax. With the rate as high as eight percent in major metropolitan areas in Texas, the incentive is substantial.
Another issue concerning the taxation of services is the effect on the regressivity of the tax. Some studies have found that the taxation of services tends to make the sales tax less regressive;? however, one recent Massachusetts study concluded that there are great disparities in effect based on which services are taxed. ${ }^{8}$ The study found that taxation of
personal services and property maintenance and repair is regressive for incomes up to about $\$ 20,000$, but proportional above that. This same pattern applied to laundry, tailoring and dry cleaning and to personal care services such as barbers and beauticians. Taxation of entertainment services tends to be roughly proportional. Taxation of auto repairs was highly regressive. Professional services, as previously mentioned, tend to be used by business much more than individual consumers. However, to the extent that the services are used by consumers, sales tax on them would tend to be regressive. Sales taxation of insurance premiums would be progressive.

An Indiana study of the effect of taxing selected services found a slight increase in regressivity when the services were added to the tax base in that state. The services added included repairs, lawn and garden services, moving and freight, service contracts, parking and towing, personal services, club dues, season tickets, photography, cleaning and laundry, casualty insurance, lessons, banking fees, accounting and legal service. ${ }^{9}$
Exportability of the tax. The sales tax differs from alternative sources of revenue because the burden of the tax, to some extent, can be shifted to the citizens of other states or countries. This takes place in two ways. One is through the purchases of tourists and other travelers who are in the state temporarily and pay tax on all they consume while here. The other way is through the increase in prices of products manufactured in Texas and sold in other locations. As discussed above, this is an imperfect system at best. At some level the tax is no longer exported and causes a diminution of the state product by making the Texas producer noncompetitive.

The other side of this coin is that if the tax results in a reduction of dividends to out-of-state shareholders, they are bearing the burden of the tax and it is again exported.
Before the federal Tax Reform Act of 1986, sales taxes could also be exported to the federal government through the deduction on the personal income tax. To some extent, businesses can still export it through federal tax deductions, since taxes for business expenditures are still deductible as part of the purchase price. There is a more detailed analysis of this topic presented in Chapter 35.
The amount of the tax that can be exported is not a very large percentage. A study of the sales tax in Massachusetts found that about 4.6 percent of the tax was exported. ${ }^{10}$ Texas would be unlikely to export any more than that now, since the Massachusetts study was performed while the sales tax was still deductible from the federal income tax.
Enforcement. The sales tax is considered to be a relatively easy tax to enforce for the amount of revenue it raises. The tax is collected from licensed retailers rather than the population at large. This significantly reduces the number of taxpayers and the administrative burden on the

[^34]10. Joint Center for Urban Studies, p. 22.

Comptroller's office which administers the tax. Businesses are audited rather than individuals, increasing the sophistication of the audience somewhat.

Exemptions and other exceptions to the law tend to increase the complexity of the tax and the enforcement of it. The current piecemeal taxation of services is a good example of this problem. There are also disparities in the effect of this complexity on different taxpayers. Large businesses tend to be able to respond more readily to changes since they have the personnel available to monitor the actions of government that affect them.

One other longstanding problem of sales and use tax collection is the taxation of interstate mailorder sales. In the National Bellas Hess case, the Supreme Court ruled that a state could not require a mail order business that did not have a presence in a state, such as salesmen or an office, to collect the state's use tax. ${ }^{11}$ This situation affects local businesses, as well as the Comptroller, because the local merchant must compete at a disadvantage with the mail order business. The loss of sales to the local merchant costs the state not only tax dollars, but also the profit to the businesses that will keep the local economy thriving.
There are currently two avenues of pursuit being taken. Many states have banded together to support federal legislation to require mail order merchants to collect and remit the tax to the customer's state tax collector. The legislation has been introduced in the last two sessions of Congress and may have a good chance of

[^35]passage in the future.
In lieu of a federal law, California, Florida and other states have enacted laws that attempt to require firms that have minimum contacts with the taxing state to collect and remit tax. These laws are just beginning to be tested in the courts and it is not yet possible to tell if they will be effective. Texas has passed such a law and has been a principal advocate of the federal legislation.

## The Policy Evolution of the Texas Sales Tax

Since its enactment in 1961, the Texas Limited Sales, Excise and Use Tax Act has been the subject of constant amendment by the Legislature. In only one session (1965) did the tax statute escape revision.
One constant over the life of the tax has been the upward movement of the tax rate. The original two percent rate lasted from the adoption in 1961 until October 2, 1968, when it increased to three percent. That rate quickly went to 3.25 percent on October 1, 1969, and four percent on July 1, 1971. With the surging oil market and generally booming Texas economy following the 1973 Middle East war, the rate was held constant until 1984. The rate was then raised to 4.125 percent on October 2, 1984, to 5.25 percent on January 1, 1987, and to six percent on October 1, 1987.

It has been said that a rising tide raises all boats. Accordingly, rate increases do not greatly affect the incidence of the tax on specific groups. The burden increases uniformly, although the incentive to evade the tax increases and border areas may see a larger number of people crossing into other states with a lower tax rate to purchase goods. Therefore, to see how the burden
of taxation has shifted, one must look to the changes in the tax base.
The original sales tax. The Texas sales and use tax as originally enacted was limited to tangible personal property and utility services. There were a number of the standard exemptions, including resale, charitable and governmental organizations, occasional sales, prescription drugs, food, water, certain agricultural and manufacturing items, containers and telephone and telegraph services. There were references to taxable services in several places, but none were actually taxed. Utilities, the closest thing to a taxable service, were treated as tangible personal property. ${ }^{12}$
Early amendments. In the 1963 legislative session, the sales tax act was reconsidered in its entirety. The original statute was replaced with a new version that cleaned up some problematic areas and generally tightened the language of the act. It added some penal provisions and the direct payment procedure.
The first additional exemption was added to the sales tax in 1967. It covered drill pipe and casing used offshore outside Texas territorial waters. The effect of this was to reduce the direct impact of tax on one segment of Texas industry.
In 1969, beer and wine were included in the tax and lease or sale of motion pictures to theaters was exempted. Thus at this point, a consumer item was taxed, and a business item was exempted. The tax on the sale of alcoholic beverages is highly regressive but was justified as a " $\sin ^{\prime \prime}$ tax.

In 1971, exemptions were added for motion picture films sold or rented to licensed television stations, for certain commercial vessels and mixed drinks. This provided an equivalent exemption for television stations to the one
theaters had been granted the previous session. The commercial vessels exemption was a reduction of a business tax justified on competitive grounds, since the vessels were in interstate commerce and could have been purchased in another state. Mixed drinks were available in Texas for the first time outside private clubs,and were subject to a ten percent gross receipts tax.

In 1973, volunteer fire departments were exempted. This was justified as a charitable, public service exemption, affecting neither business nor consumers.

The boom years. Following the 1973 session, the state went through a period of steady growth in revenues from severance taxes and other taxes fueled by the strong state economy. No tax increases were necessary and tax issues were more likely to be which additional exemptions to grant. The easiest approach to the changes in the law for this period is to detail them for 1973 through 1981 and discuss the impact of the amendments as a group.

In 1975, the Legislature exempted agricultural processing equipment used by producers to process their own products, voluntary gratuities, component parts of newspapers, food sales by Parent-Teacher Associations and youth athletic organizations, solar energy devices, aircraft used for flight instruction, and vessels over eight tons displacement used for commercial purposes and the federal excise tax on tires and fishing equipment.

In 1977, exemptions or exclusions were added for mandatory gratuities, one-day sales or auctions by charitable or educational organizations, leasing or licensing of films by theaters or television stations, bad debts, newspapers and magazines, 501(c)(3) organizations, film, tape or photographs used by broadcasters, needles and
syringes and purchases by emergency medical service organizations. In the second special session of 1977, the Legislature exempted residential use of gas and electricity.
In 1979, the Legislature exempted special signaling or printing equipment used by the deaf to communicate with telephones.

In 1981, the Legislature exempted or excluded therapeutic equipment prescribed by a doctor, 501 (c)(4), (c)(8), (c)(10) and (c)(19) organizations, nonprofit chambers of commerce and sales of handicrafts by senior citizen organizations.

Of the exemptions granted during this period, the one with the most significant impact on the incidence of the tax, as well as revenue, was the exemption for the residential use of gas and electricity. It cost the state an estimated $\$ 125$ million per year to start and more in later years. This exemption also has a significant effect on equity, making the tax less regressive on the lowest income groups. It shifts the balance of the tax toward business rather than the individual consumer. The agricultural and commercial vessel exemptions provided some relief to particular industries but were not very significant in terms of total dollars.

The newspaper and magazine exemptions were a larger break for consumers than business but were probably not large enough to affect overall distribution of the tax. In terms of equity, the change was probably regressive, since reading tends to be a habit of the higher income groups. Other changes were small in terms of revenue impact, and exemptions for nonprofits and service organizations do not have much impact on the balance or equity of the tax.

The boom fades. By the 68th
session of the Texas Legislature in 1983, the Texas economy was beginning to slow, and the Legislature was forced to resort to accelerated collection measures to balance the budget. Nonetheless, several exemptions were added to the law, although they had little revenue impact. These included bins used to transport fruit or vegetables from field to market; gold bullion sales over $\$ 10,000$; certain equipment used by the blind; sales to or by certain native Indians, nonprofit conventions and tourist promotional agencies; in-flight magazines; purchases by hospital equipment financing councils; and certain purchases in an enterprise zone.
For the most part, these were not economically significant items. By this time, the Legislature was not granting consumer exemptions as had been done in earlier years. The era of belt tightening was beginning.
In the second called session of the 68th Legislature in 1984, a major tax bill was passed for the first time since 1971. It was needed to fund extensive education reforms and increase spending on highways. ${ }^{13}$ For the first time, services were added to the list of taxable items under the sales tax. A host of administrative changes were made to accommodate the new area of taxation. Several items that had been exempt became subject to taxation. And, of course, some new exemptions were created.
The services that were taxed included a mix of consumer and business services. The services included amusement services (admission to most entertainment and sports events), personal services (massages, escorts and Turkish baths), cable television,

[^36]canned computer software, parking, repair and remodeling of tangible personal property except aircraft, motor vehicles and vessels. Other than repairs and software, these services are used predominantly by consumers.

Input-output data shows that individual consumers purchase about 75 percent of amusement services and about 25 percent of repairs of the type taxed here. After comparing similar factors for the other items taxed, it appears that of the items subjected to tax in this bill, about one-third are purchased by business and about two-thirds are purchased by individuals. The net result is a slight shift of the tax burden away from business.

Amusement services were the largest part of the revenue from the services taxed by H.B. 122, about 36 percent of the total from services. Repairs were about 27 percent. The other item used by business to a great degree was computer software, only about six percent of the service total. ${ }^{14}$
In addition to the services, certain tangible items were added to the sales tax. This included cigars, cigarettes and other tobacco products, newspapers, magazines, fertilizer not used on a commercial farm or ranch, food sold through vending machines and certain leases and manufacturing equipment. Exemptions were added for audio or video masters used for reproduction and certain flight simulators.
It is difficult to analyze the effect of this tax bill on equity with great precision. Taxation of amusement services tends to be proportional, and taxation of repairs and dry
14. Comptroller of Public Accounts.
15. It must be noted that another part of the Comptroller's tax plan would have dramatically increased the franchise tax paid directly by business.
cleaning and laundry tends to be regressive. Taxation of tobacco products tends to be highly regressive. Most of the other items are narrow subsets of the categories in the available research and predictions would be difficult to make. Given that the preponderance of the revenue was raised in regressive categories, it appears the effect would be at least mildly regressive.
In the regular session of 1985, only minor tinkering with the sales tax took place. Telecommunication services other than "basic local exchange service," interstate long distance and some intercompany charges were subjected to the sales tax. Exemptions were added for sales of Sesquicentennial commemorative medallions and sales to and by Kickapoo Indians.
The significant change in the sales tax took place in the third called session when the rate was raised to 5.25 percent. None of these changes had significant effects on the incidence of the tax.
The Bullock proposals. The revenue crisis that led to the 5.25 percent rate saw, before its conclusion, two of the most farreaching tax proposals ever to surface for serious consideration by the Texas Legislature. These were the tax plans issued by State Comptroller Bob Bullock, now commonly referred to as "Bullock I" and "Bullock II." The sales tax portions of these plans involved inclusion of most services in the tax base and, in the case of "Bullock I," a reduction of the tax rate to 3.5 percent. The "Bullock II" proposal would have reduced the tax rate to 4.5 percent and included fewer services in the tax base.

The sales tax portion of "Bullock $\mathrm{I}^{\prime \prime}$ was introduced in the third called session of the 69th Legislature as H.B. 49 by Representative Juan Hinojosa. That bill included
the touchstone of comprehensive taxation of services under a sales tax. It would have taxed all services except those specifically excluded rather than just those services specifically included. Major items excluded were such things as advertising, medical services, insurance premiums and most educational and child care services. Most other services were included in the proposal, including professional services, commercial leases and construction labor.
Many exemptions were proposed for repeal. However, one key provision was expanded. The exemption for materials and equipment used in manufacturing or processing of items for sale was to be extended to all such purchases. This was specifically in recognition of the additional burden the Texas sales tax has long placed on business. It was also in recognition of the fact that without such a provision, adding all of these services to the tax base would have shifted the incidence of the tax dramatically toward business. ${ }^{15}$ With the provision, the effect was more neutral.
There was no corresponding break for individual consumers, or for other types of business, other than the reduction of the rate to 3.5 percent. As previously mentioned, studies have indicated that such comprehensive taxation of services tends to make the sales tax somewhat less regressive. Texas was, at that time, already taxing some of the most regressive items such as repairs. The overall effect was still likely to have been somewhat regressive. This was largely due to the fact that residential gas and electricity would have been taxed.
"Bullock II" was a refinement of the original plan. The first plan was a demonstration of the
extent to which the base could be extended. The second plan was more attuned to the practical problems of taxing services. The contraction of the base resulted in a proposed rate of 4.5 percent, still a reduction from the "temporary" rate of 5.25 percent then in effect. It was still a comprehensive approach to service taxation.
A number of significant services were removed from the "Bullock II" tax base compared with "Bullock I." Among them were construction services, commercial leases, insurance commissions, residential utilities and travel agency services. The exemption for manufacturing machinery and equipment was proposed for phase-in beginning in 1989.
The equity of the "Bullock II" proposal was thought by the Comptroller to approximate that of the law as it existed at that time. Since, in this version, the residential utilities exemption was maintained, along with the food, medicine and medical services exemptions, it would have let those in lower income groups "break even."

House Bill 61. After several months of wrestling with the issues of service taxation, insurance premium taxation and several other variations, the Legislature passed H.B. 61 in July 1987, raising the state tax rate to six percent and adding a modest number of new services to the sales tax. The approach taken was the established method of defining and taxing specific services. Among the services taxed were private club memberships, credit reporting services, debt collection services, information services, insurance services, real property services, security services, data processing services and real property repair and remodeling services other than owner-occupied residential. In
some cases, the services were loosely defined and subject to broad interpretation. The lines between taxable and nontaxable services have been difficult to draw.
In addition, several exemptions were modified or repealed. These included the expansion of telecommunication services taxation to all local and most long distance service, repeal of exemptions for solar energy devices, broadcasters, master tapes or films, sale or lease of film by or to a theater or television station, sesquicentennial medallions and bullion and restored exemptions for magazines and newspapers. Exemptions were added for intercorporate services, certain lawn and yard services performed by individuals under 18, cooperative research and development ventures, official state coins, food stamp purchases and a manufacturing material and equipment exemption to be phased in between 1991 and 1995.
There were several procedural changes, including imposition of a $\$ 25$ fee for a sales tax permit. In addition, the local sales tax was capped at two percent, no matter how many jurisdictions might be eligible to levy a tax in a particular area. The sales tax permit fee has proven to be particularly unpopular and did not really accomplish its original goal. As originally conceived, the fee was to have been $\$ 100$ creditable toward tax liability. This would be an incentive to keep people who only had a permit to make tax-free purchases off the roles, without costing legitimate businesses anything.

The initial impact of the base changes in H.B. 61 is mostly on business. The phase-in of the manufacturing exemption will eventually change this balance.

Until that time, or until the Legislature meets again, business will bear the brunt. The only items that are heavily used by individual consumers are telecommunications services and repair services. Even these are predominantly used by business, according to the input-output estimates.
The principal consumer services included in H.B. 61 are telecommunications and repairs. Taxation of both of these services is regressive. The new telecommunications services taxed are particularly regressive since they are basic services-premium services were already subject to tax. This bill taxed the basic local exchange service and interstate long distance.

## Conclusions

Any sales tax tends to be regressive. Different exemptions can modify that tendency. The Texas tax contains many of the exemptions that reduce regressivity.
The burden of the sales tax on business also varies according to the particular subjects of taxation. The sales taxation of business and professional services adds largely to the business share of the tax.

The chronology of the expansion of the sales tax base in Texas does not reveal any consistent guiding principle. Rather, the Legislature has considered the candidates available for enhancing revenue and added several on a largely ad hoc basis. Consumers were taxed one year, business the next. Certainly there was some awareness of the need to remove disincentives for investment in business capital with the phaseout of the tax on machinery and equipment for manufacturing. However, the same bill contained numerous additional taxes on services used principally by those same businesses.

## A Local Perspective

## Summary

This chapter presents a brief history of the development of the local sales tax in Texas and addresses its significance, specifically as it relates to cities. It also provides a comparative analysis of the sales tax's use in Texas versus other states. The chapter highlights limitations of the sales tax for Texas cities and other local jurisdictions and considers ways the state can increase the tax's usefulness as local governments face increasing pressures to revitalize their economies and make them more competitive.
The sales tax plays an important role in local finances. In fiscal year 1985, it comprised 15 percent of total locally produced general revenue. With legal and economic factors restraining other significant sources of local revenue-particularly the property tax, current charges and interest earnings-the sales tax can be expected to maintain its status as an anchor for local government revenue systems.

Twenty years of changing expenditure demands and local economies in the state have limited the potential of the sales tax in what it can accomplish for local governments. The maximum allowable rate for most cities of one percent may no longer be adequate. When sales tax revenue is combined with
other tax and nontax revenue sources, some cities may continue to lack adequate resources to meet current service demands and provide for economic growth.
Further expansion of the tax base may be needed to ameliorate some of the disadvantages which now result when a local economy has a low proportion of taxable sales to gross sales relative to other Texas cities.
Other things being equal, a city with a strong and diversified revenue base may be able to retain and attract more businesses than a city which is heavily reliant on a single revenue source.
The addition of a few incremental rates, up to a specified maximum, would allow cities to tailor their particular revenue mix to their particular circumstances and thus increase the balance in their revenue systems.
Economic growth in Texas will occur more efficiently if the state and individual local governments work in concert to strengthen the overall economic environment.
It is possible that, as the state looks at the entire spectrum of its tax policy, the local sales tax will be seen as a tool to assist not only local governments but the state as well through healthier, stronger, more competitive and diversified local economies.

By Robert G. Powers

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In fiscal year 1986-87, the sales tax accounted for 23 percent of the General Fund revenues for the City of Dallas, Texas. The significance of this revenue source is not unique to Dallas. Since its authorization for cities in 1968, the one percent sales tax has come to play a major role in Texas' local government finance. As of the first quarter of 1988, 1,044 cities had levied the tax. Since authorization in 1977, six metropolitan transit authorities (MTA) have adopted the tax-San Antonio, Houston, Dallas, Fort Worth, Austin and Corpus Christi.

Beginning in January 1988, qualified cities and counties without an MTA were granted authority to levy an additional one-half percent sales tax to reduce property taxes. Approximately 80 counties and over 50 cities have instituted the taxes with voter approval. If a county does not include any incorporated city or town, it may levy a one percent sales tax. This same legislation allows cities with at least 56,000 residents to enact a one-quarter to one-half percent sales tax to pay for a city transit department. Thus far, only El Paso has approved this additional tax.

[^37]This chapter presents a brief history of the development of the local sales tax in Texas, addresses its significance-particularly as it relates to cities-and provides a comparative analysis of its use in Texas versus other states. The chapter also highlights the limitations of the tax for Texas cities and other local jurisdictions and considers ways in which the state can increase the tax's usefulness locally as local governments face increasing pressures to revitalize and stimulate local economies.

## Legislative History

On August 28, 1967, the "Local Sales and Use Tax Act" went into effect in Texas, authorizing incorporated cities, towns and villages to levy a one percent sales and use tax to be administered by the state for local benefit. The Texas Municipal League and many of the state's larger cities had lobbied the Legislature to grant cities an alternative means to raise what the city groups argued was badly needed local revenue.
The Legislature passed the measure, but not without a fight. Representatives Traeger, Clayton, Schiller, Ligarde, Simpson and Blaine proposed the one percent sales tax to be piggybacked on the state sales tax, which was two percent at that time. The state had adopted the tax in 1961, at what proved to be the end of several years of fiscal problems.
The local tax proposal was narrowly approved in the House Committee on Revenue and Taxation by a vote of 10-9. A few days later, it was passed by the full House on an 85-63 vote. The bill was sent to the Senate with an uncertain fate. With the qualified backing of Governor John Con-

[^38]nally and strong support from Lieutenant Governor Preston Smith, the bill finally became law.

Although its beginning was less than auspicious, the local sales and use tax has become a fixture in local finances. Of the 1,044

> On August 28, 1967, the "Local Sales and Use Tax Act" went into effect in Texas, authorizing incorporated cities, towns and villages to levy a one percent sales and use tax to be administered by the state for local benefit.

cities which levy the local sales and use tax, 55 percent adopted the tax between 1968-70, 33 percent between 1971-79 and the remainder since 1979. ${ }^{9}$
Since 1967, the law has been modified periodically. In 1969, the minimum time period between elections on the question of imposing or abolishing the tax was decreased from two years to one year. In 1973, provisions were made for reports from the Comptroller to taxing cities relating to taxpayer compliance. A 1975 law empowered cities to bring suit for delinquent taxes. In 1977, metropolitan transit authorities were permitted to levy the tax. In 1978, cities were given the option of taxing or exempting gas and electricity sold for residential use. In 1979, standards were provided for determining the place of sale and the place of consumption of use for the purpose of determining the taxability of goods in interstate and intrastate transit.
In 1983, legislation enabled cities to provide conditional sales tax
refunds to qualified businesses in local enterprise zones. House Bill 122, passed in 1984, expanded the taxable sales base to include amusement services, cable television services, certain personal services, motor vehicle parking and storage services and certain repairing, maintenance and restoration services. Computer programs became taxable and exemptions of agricultural items were expanded.
During the third called session of the 69th Legislature, qualified counties and certain cities were authorized to adopt an additional one-half percent sales tax, shifting some of the local tax burden from property owners to retail customers. The new law requires that local governments reduce their effective property tax rate by about the same amount brought in by the additional sales tax. The law also allows cities with at least 56,000 residents to enact a one-quarter or one-half percent sales tax to pay for a city transit department.
Voters in El Paso-the only Texas city to vote thus far on a transit tax-approved the additional one-half percent sales tax. In 1987, Senate Bill 299 provided that the additional one-half percent tax may be imposed by qualified cities that do not impose a property tax, if voters approve. As of this writing, approximately 91 counties and over 50 cities had adopted the additional tax.
In 1987, House Bill 61 eliminated the sales tax exemption for basic local exchange telephone services and certain other telecommunications services. Local jurisdictions were given the option of continuing the exemption.

The new local option sales taxes created a number of possible rate combinations. Several of those combinations were elimi-
nated with Senate Bill 58, which capped the combined rate of all sales and use taxes imposed locally within the taxing jurisdiction at a rate not to exceed two percent at any location in the municipality, county, transit district, regional transportation authority or city mass transit district.

## How the Tax Works

With voter approval, the sales tax is imposed on rentals, leases or sales of taxable items within a taxing jurisdiction. The complementary one percent use tax is imposed on the storage, use or other consumption within a taxing jurisdiction of tangible personal property on which the sales tax has not been paid.

The local tax is collected and enforced by the Comptroller of Public Accounts.

All discounts allowed for the collection and prepayment of state sales and use taxes also pertain to local taxes. The local sales tax is reported and paid at the same time and with the same forms as the state tax. The penalties provided for the state tax are applicable to the local tax.

On or before the 12th of the month following receipt of taxes by the Comptroller, the allocations are sent to the local taxing jurisdictions. Local governments are charged a two percent administration fee and a two percent retainage fee for bad checks, amended returns, etc. The "unused" portion of the two percent retainage amount is reallocated back to the local jurisdiction the following month.

The Comptroller makes quarterly reports available to each taxing jurisdiction containing the name, address and account number of each taxpayer who has remitted a tax payment. The Comptroller also releases reports of taxpayers who have failed to pay the tax.

The Role of the Sales Tax in Local Finance
The sales tax plays an important role in local government finance.

This can be measured by comparing use of the tax locally in Texas with other states. This comparison is most easily done

| TABLE 1. Municipal Sales Tax Receipts as a Percent of Total Locally Produced Revenue |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State | 1967 | 1972 | 1977 | 1982 | 1985 |
| Alabama | 16.3\% | 17.4\% | 19.9\% | 20.0\% | 23.2\% |
| Alaska | 9.9 | 13.0 | 10.5 | 6.9 | 5.8 |
| Arizona | 27.4 | 33.7 | 35.6 | 30.4 | 25.7 |
| Arkansas | 0.0 | 0.5 | 0.5 | 1.4 | 6.6 |
| California | 19.7 | 18.2 | 19.2 | 18.7 | 17.3 |
| Colorado | 17.3 | 27.1 | 32.8 | 33.3 | 32.4 |
| Connecticut | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delaware | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Florida | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Georgia | 0.0 | 0.0 | 2.4 | 2.8 | 2.9 |
| Hawaii | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Illinois | 10.8 | 18.7 | 20.9 | 19.4 | 19.5 |
| Indiana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| lowa | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kansas | 0.0 | 0.4 | 1.6 | 3.2 | 6.1 |
| Kentucky | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 |
| Louisiana | 18.5 | 26.7 | 30.0 | 29.5 | 30.1 |
| Maine | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Maryland | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Massachusetts | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Michigan | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Minnesota | 0.0 | 0.4 | 0.5 | 0.3 | 0.6 |
| Mississippi | 19.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| Missouri | 0.0 | 7.3 | 15.8 | 14.4 | 17.1 |
| Montana | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| New Hampshire | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nebraska | 0.0 | 9.3 | 11.9 | 14.6 | 14.1 |
| Nevada | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| New Jersey | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| New Mexico | 20.8 | 0.0 | 8.7 | 12.9 | 16.6 |
| New York | 11.6 | 10.2 | 10.9 | 12.7 | 12.8 |
| North Carolina | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| North Dakota | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ohio | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Oklahoma | 11.3 | 23.5 | 36.0 | 43.1 | 35.7 |
| Oregon | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pennsylvania | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Rhode Island | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| South Carolina | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| South Dakota | 0.0 | 7.7 | 14.5 | 20.0 | 23.4 |
| Tennessee | 4.3 | 6.6 | 5.9 | 7.3 | 9.4 |
| Texas | 0.0 | 15.7 | 17.3 | 18.1 | 15.1 |
| Utah | 15.4 | 16.2 | 26.5 | 22.7 | 21.7 |
| Vermont | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Virginia | 10.7 | 9.1 | 9.0 | 8.4 | 8.6 |
| Washington | 0.0 | 10.0 | 14.0 | 11.2 | 17.1 |
| West Virginia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wisconsin | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wyoming | 10.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| United States | 6.9\% | 8.0\% | 9.6\% | 10.6\% | 10.9\% |

[^39]with cities, since transit author-ities-the other major local jurisdiction using the tax in Texas-are not funded by sales taxes in many other states.
Texas cities generally rely on the general sales and use tax more than other U.S. cities.
Table 1 provides a comparison of the reliance on the municipal general sales tax among states for selected years. In 1984-85, the sales tax accounted for about 15 percent of total general revenue for Texas cities.
Figure 1 illustrates the upward trend over the past 20 years of municipal governments' reliance on this revenue source. National reliance on the local tax peaked in the early 1980s. For Texas cities, the trend declined to the level of the early 1970s, as the oil and real estate-driven economic boom began to wane. A national economic downturn, lower inflation and the peso devaluation also contributed to this decline.
2. Richard W. Campbell, "State and Local Finance: The Search for Fiscal Relief," State and Local Government Review, Vol. 15, Number 3 (Fall 1983), p. 119.

Table 2 reveals wide variation among individual Texas cities in their reliance on the sales tax. For example, the sales tax accounted for 25 percent of the local revenue mix for Longview, but only about four percent for Galveston.

> The advent of the municipal sales tax came about while the most traditional local revenue source-the property tax-was losing some its political luster.

The advent of the municipal sales tax came about while the most traditional local revenue source-the property tax-was losing some of its political luster. The public's longstanding distaste for property taxes culminated nationally in 1978 following the adoption of Proposition 13 in California. Although only three states adopted Proposition 13style restraints on property taxation, political officials in

FIGURE 1. Municipal Sales Tax Receipts as a Percent of Total Locally Produced Revenue


Source: U.S. Department of Commerce, Bureau of the Census, Finances of Municipal and Township Governments, various years.
nearly every state became hesitant to rely further on the tax.
Texas cities hover near the national average in their reliance on property tax revenue, while relying on it more than their regional counterparts. Nonetheless, this reliance has declined somewhat in the last 20 years, as the sales tax has risen in prominence locally.
As with the reliance on the sales tax, Table 3 reveals wide variation among Texas cities in their reliance on the property tax. In fiscal 1984-85, Port Arthur topped the list of selected cities with 46 percent of its locally produced general revenue coming from property taxes. The tax accounted for only nine percent of Galveston's local general revenue.
Cities have also begun to rely more upon user fees and charges. Between 1972 and 1980, user fees and charges emerged nationally as the fastest growing source of local revenue, experiencing a 20 percent increase in constant 1972 dollars. ${ }^{2}$ Texas cities receive proportionately more revenue from these sources than the U.S. average, yet less than their regional counterparts.
In addition to the changing mix of locally produced revenues, federal aid to cities has declined and become more unpredictable. Federal General Revenue Sharing, initiated during the Nixon Administration, ended in 1986. The program disbursed nearly $\$ 85$ billion over its lifetime. For some Texas cities, revenue sharing had accounted in previous years for a sizeable percentage of their total general revenue. This is shown in Table 4.

The loss of federal funds has not been accompanied by fewer federal mandates. Several contentious laws require state and local governments to comply with certain national objectives or to administer federal statutes.

Examples include the 1974 Fair Labor Standards Act-including its overtime provisions-and legislation mandating Medicare coverage for state and local workers hired after April 1, 1986.
Generally, a locality wants its revenue tools to be more flexible during economic expansion and less flexible during economic contractions. It is desirable for revenue tools to be highly responsive to rising income and less responsive to, or increasingly rigid with, a fall in income.

An analysis by the International City Management Association suggests that certain revenue sources are more responsive to changes in income than others. ${ }^{3}$ This analysis is presented in Table 5. A value of 1.00 implies that changes in collected revenues and per capita income were exactly proportional-a one percent increase in per capita income produced a one percent rise in revenue. Values greater than 1.00 indicate faster revenue growth while values less than 1.00 indicate revenues lagging behind changes in per capita income.
Table 5 shows that during the period 1979-84, locally generated revenues rose in greater proportion to per capita income. Although the values resemble elasticity coefficients, they should not be interpreted as such. The property tax is the dominant, but least responsive, of all taxing tools in local government finance.
The property tax is less responsive than sales taxes or income taxes. Rising income translates into increased sales and additional sales tax revenue. Also, changes in income can be tapped directly through income taxes.
Significant differences appear in Table 5 between the respon-
siveness coefficients for 1979-81 compared to those for 1982-84.
The time periods of 1979-81 and 1982-84 correspond roughly to two different phases of the business cycle. The first period was one of economic contraction and culminated in the 1982 recession, while the second period was one of expansion. The low measures of responsiveness in the data for 1979-81 highlight the revenue production tradeoffs between income-sensitive taxes and the stability of revenue collection. Revenue tools that are less sensitive to income provide a degree of insulation to
cities during major economic contractions. However, in periods of long-term economic growth, punctuated by minor cyclical downturns, these taxes hinder long-term revenue growth.

Cities are wary of relying too heavily on a property tax base for their revenues for other reasons as well. Since the sales tax is often thought of as a

[^40]TABLE 2. Sales Tax Receipts as a Percent of Total Locally Produced Revenue for Selected Texas Cities

|  |  |  |  |  | Rank in |
| :--- | :---: | :--- | :--- | :--- | :--- |
| City | 1976 | 1983 | 1984 | 1985 | 1985 |
| Longview | N.A. | $30.40 \%$ | $28.16 \%$ | $25.08 \%$ | 1 |
| Richardson | $13.41 \%$ | 21.69 | 20.89 | 22.01 | 2 |
| San Angelo | 21.28 | 22.51 | 22.40 | 20.91 | 3 |
| Tyler | 23.43 | 26.83 | 23.61 | 19.67 | 4 |
| Victoria | N.A. | 22.40 | 17.97 | 18.19 | 5 |
| Abilene | 21.44 | 24.03 | 17.82 | 17.82 | 6 |
| Dallas | 15.18 | 17.21 | 15.84 | 17.56 | 7 |
| Irving | 14.50 | 13.83 | 16.04 | 17.27 | 8 |
| Odessa | 30.86 | 30.73 | 20.80 | 17.03 | 9 |
| Wichita Falls | 19.67 | 18.19 | 16.81 | 16.82 | 10 |
| Mesquite | 20.81 | 18.61 | 18.86 | 16.61 | 11 |
| Beaumont | 19.15 | 18.20 | 17.73 | 16.24 | 12 |
| Garland | 17.07 | 15.05 | 14.15 | 15.97 | 13 |
| Brownsville | 26.19 | 22.06 | 17.22 | 15.75 | 14 |
| Midland | 17.81 | 24.78 | 16.11 | 15.43 | 15 |
| Waco | 17.85 | 19.01 | 16.58 | 15.42 | 16 |
| Lubbock | 18.29 | 20.99 | 16.59 | 15.24 | 17 |
| Corpus Christi | 18.20 | 18.99 | 16.81 | 15.13 | 18 |
| San Antonio | 19.79 | 17.20 | 16.73 | 14.82 | 19 |
| Laredo | 33.00 | 24.30 | 15.50 | 14.75 | 20 |
| McAllen | N.A. | 25.33 | 15.16 | 14.54 | 21 |
| Pasadena | 18.86 | 14.77 | 14.11 | 14.11 | 22 |
| Houston | 18.40 | 16.29 | 15.01 | 14.03 | 23 |
| Fort Worth | 16.27 | 16.13 | 14.56 | 13.92 | 24 |
| Plano | N.A. | 12.78 | 13.86 | 13.86 | 25 |
| Baytown | N.A. | 13.11 | 12.44 | 12.17 | 26 |
| Arlington | 18.73 | 15.33 | 13.23 | 12.01 | 27 |
| Austin | 12.93 | 10.74 | 11.22 | 11.41 | 28 |
| El Paso | 15.40 | 11.83 | 10.7 | 10.53 | 29 |
| Grand Prairie | 13.39 | 12.13 | 20.77 | 9.80 | 30 |
| Amarillo | 19.08 | 9.81 | 8.84 | 8.93 | 31 |
| Port Arthur | 15.02 | 7.58 | 7.29 | 5.29 | 32 |
| Galveston | 7.54 | 6.68 | 5.15 | 4.42 | 33 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

[^41]"consumer" tax and not a "business" tax, it makes for a better "business climate." Moreover, the sales tax is perceived to shift at least a portion of the tax burden to nonresidents. Therefore, despite the fact that the sales tax is generally thought to be more regressive than the property tax, there are some benefits to be realized by city dwellers from tax restructuring.
Texas cities, as a whole, generally tend to have fairly balanced systems of revenues. But averag-
4. Campbell, p. 118.
ing these sources has blurred the significant distinction among individual cities. As seen earlier, the range for sales taxes was from a high of 25 percent in Longview to a low of 4.4 percent in Galveston. The property tax went from 46.1 percent in Port Arthur to 9.2 percent in Galveston. Similarly, current charges generally fell between 15 to 30 percent of total general revenue raised locally in the same time period.
The trend away from capitalintensive to service-oriented industries will have an impact on

TABLE 3. Property Tax Receipts as a Percent of Total Locally Produced Revenue for Selected Texas Cities

| City | 1976 | 1983 | 1984 | 1985 | Rank in 1985 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Port Arthur | 46.92\% | 53.85\% | 56.97\% | 46.11\% | 1 |
| San Angelo | 46.57 | 43.20 | 44.67 | 42.27 | 2 |
| Baytown | N.A. | 36.34 | 34.42 | 38.55 | 3 |
| Plano | N.A. | 37.06 | 38.37 | 38.37 | 4 |
| Wichita Falls | 42.43 | 35.90 | 36.77 | 38.12 | 5 |
| Dallas | 50.51 | 35.53 | 33.96 | 35.13 | 6 |
| Garland | 44.29 | 36.33 | 33.39 | 32.43 | 7 |
| Houston | 43.68 | 33.08 | 31.79 | 31.83 | 8 |
| Beaumont | 43.11 | 36.49 | 36.21 | 31.68 | 9 |
| Longview | N.A. | 32.29 | 31.25 | 31.32 | 10 |
| Irving | 42.84 | 30.54 | 33.44 | 31.15 | 11 |
| Fort Worth | 43.63 | 34.28 | 33.66 | 30.78 | 12 |
| Pasadena | 45.30 | 43.89 | 31.82 | 30.55 | 13 |
| Victoria | N.A. | 32.18 | 30.99 | 29.04 | 14 |
| Corpus Christi | 45.04 | 28.98 | 29.55 | 28.60 | 15 |
| Richardson | 48.42 | 32.46 | 33.08 | 28.37 | 16 |
| Brownsville | 37.74 | 22.66 | 24.95 | 28.05 | 17 |
| Abilene | 39.10 | 29.28 | 26.54 | 26.54 | 18 |
| Tyler | 34.85 | 25.49 | 28.67 | 25.84 | 19 |
| Grand Prairie | 41.79 | 31.07 | 27.26 | 23.84 | 20 |
| El Paso | 37.69 | 26.62 | 26.53 | 23.61 | 21 |
| Lubbock | 40.55 | 30.88 | 26.68 | 23.31 | 22 |
| Midland | 37.01 | 21.26 | 22.02 | 23.22 | 23 |
| Arlington | 34.45 | 30.51 | 29.01 | 23.14 | 24 |
| Mesquite | 47.32 | 29.52 | 29.33 | 22.93 | 25 |
| Odessa | 34.25 | 25.35 | 25.24 | 21.88 | 26 |
| Waco | 39.89 | 28.70 | 25.70 | 20.49 | 27 |
| Austin | 33.03 | 19.96 | 21.19 | 20.22 | 28 |
| San Antonio | 37.51 | 21.78 | 20.51 | 19.79 | 29 |
| Amarillo | 38.25 | 21.60 | 19.01 | 18.94 | 30 |
| Laredo | 22.74 | 13.81 | 17.68 | 18.50 | 31 |
| McAllen | N.A. | 9.20 | 17.26 | 16.62 | 32 |
| Galveston | 22.45 | 15.57 | 12.48 | 9.23 | 33 |

[^42]the property tax base. Moreover, should the issue of exempting business inventories from the tax be reconsidered and approved, the property tax base will contract further. Current charges are effectively limited by full cost recovery or the price elasticity of demand. For certain services, less revenue is earned at certain levels of higher fees. Interest income is another sector which probably will not be as significant as it was in 1984-85 due to recent federal arbitrage legislation.

It appears that the sales tax, along with the property tax, will continue to anchor municipal revenues. Of the two, the property tax provides much more local flexibility because it is subject to local administration.

## Interstate Comparisons

In 1974, the U.S. Advisory Commission on Intergovernmental Relations (ACIR) called upon state governments to diversify their local revenue bases by expanding the use of income and sales taxes and user charges. This diversification of local revenue systems was envisioned as a means of taking' some of the pressure off the property tax allowing local areas greater latitude in shaping their own revenue systems. ${ }^{4}$
State-imposed safeguards are necessary to ensure a coordinated system of local nonproperty taxes. Such a system minimizes administration and compliance costs and inefficiencies arising from distortion of locational choices.
The ACIR recommended the following safeguards as necessary components of a state program of local revenue diversification:
(1) states should provide a uniform local tax base that conforms to the state tax base;
(2) states should collect and
administer local income or sales taxes and specify permissible ranges for tax rates;
(3) a minimum levy should be mandated for local income and sales taxes, and the local government of widest jurisdiction should have first option in adopting the local tax; cities and counties with population over 25,000 should be given the authority to choose higher tax rates, up to a specified maximum;
(4) local sales taxes should be based on the point-of-sale rule, and local use taxes on in-state purchases should be prohibited;
(5) local fiscal disparities should be minimized by adopting an equalizing formula for distributing nonproperty tax revenues among units of governments within the wider jurisdictions; and
(6) states should specify arrangements for sharing taxes on nonresident earned income. ${ }^{5}$

Texas scores well in following a number of these safeguards. However, the state falls short with the third objective because local jurisdictions are not given the authority to choose a higher sales tax rate.
Table 6 compares certain characteristics of municipal sales taxes and can be used to judge other states according to ACIR's first three recommendations.

The majority of states do provide for a uniform local tax base that conforms to the state tax base with limited exceptions. Those which do not, or require a uniform base only for state-administered local taxes, include Alabama, Arizona, Colorado, Kansas and New York.
State-only administration occurs in all but six states: Alabama, Arizona, Colorado, Louisiana, Minnesota and New York. (Alaska
does not have a state sales tax, and the boroughs or counties administer the tax.) In some states, cities select state administration although it is not mandatory. Texas adopted the state administration approach over local administration based on the experience in the 15 states which had adopted local sales taxes at the time. Local administration is widely perceived as inefficient and an unnecessary burden on the taxpayers.

Of the five states without a state sales tax, only Alaska permits a local tax.

Among the states with state
sales taxes, 29 states allow a local sales tax. Twenty-four states allow a county tax, 23 have a municipal tax and nine have other local jurisdiction (e.g., transit) sales taxes.
A state administration fee is charged by 11 states, including Texas. Eighteen states permit more than one municipal sales tax rate. The use of this flexibility granted to cities by these states is
5. Robert J. Kleine and John Shannon, "The Property Tax in a Model State-Local Revenue System," in C. Lowell Harris (ed.), The Property Tax and Local Finance (New York, 1983), pp. 54-55.

TABLE 4. Federal Revenue Sharing as a Percent of Total Revenue for Selected Texas Cities

| City | 1976 | 1983 | 1984 | 1985 | Rank in 1985 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Brownsville | 14.50\% | 6.78\% | 7.05\% | 5.97\% | 1 |
| Laredo | 10.31 | 5.18 | 6.68 | 4.68 | 2 |
| El Paso | 8.79 | 4.13 | 4.04 | 2.28 | 3 |
| San Angelo | 9.37 | 3.81 | 4.13 | 4.18 | 4 |
| Waco | 6.77 | 4.36 | 4.52 | 3.61 | 5 |
| Wichita Falls | 7.92 | 3.48 | 3.82 | 3.59 | 6 |
| Longview | N.A. | 3.46 | 3.64 | 3.33 | 7 |
| Victoria | N.A. | 3.86 | 3.46 | 3.25 | 8 |
| Abilene | 10.51 | 4.55 | 3.19 | 3.19 | 9 |
| Pasadena | 6.52 | 16.10 | 2.26 | 3.17 | 10 |
| McAllen | N.A. | 3.72 | 3.47 | 3.13 | 11 |
| Corpus Christi | 8.38 | 3.33 | 3.39 | 2.95 | 12 |
| Lubbock | 5.78 | 4.64 | 3.67 | 2.94 | 13 |
| Tyler | 7.09 | 3.54 | 3.43 | 2.47 | 14 |
| Beaumont | 7.54 | 2.53 | 3.00 | 2.47 | 15 |
| Dallas | 5.13 | 2.78 | 2.22 | 2.41 | 16 |
| San Antonio | 7.05 | 3.67 | 3.72 | 2.34 | 17 |
| Mesquite | 6.74 | 3.47 | 3.12 | 2.25 | 18 |
| Port Arthur | 11.11 | 3.60 | 3.40 | 2.24 | 19 |
| Fort Worth | 5.16 | 3.04 | 2.80 | 2.19 | 20 |
| Irving | 4.10 | 2.64 | 2.65 | 2.12 | 21 |
| Garland | 3.18 | 2.98 | 2.55 | 2.11 | 22 |
| Grand Prairie | 4.75 | 2.81 | 2.85 | 2.09 | 23 |
| Odessa | 5.16 | 2.93 | 3.06 | 2.00 | 24 |
| Houston | 4.17 | 2.41 | 2.21 | 1.93 | 25 |
| Amarillo | 6.31 | 2.21 | 2.00 | 1.62 | 26 |
| Plano | N.A. | 1.84 | 1.57 | 1.57 | 27 |
| Baytown | N.A. | 1.98 | 2.08 | 1.54 | 28 |
| Austin | 3.98 | 1.98 | 1.91 | 1.43 | 29 |
| Richardson | 3.54 | 1.88 | 1.79 | 1.40 | 30 |
| Midland | 4.29 | 1.28 | 1.19 | 1.37 | 31 |
| Arlington | 4.21 | 2.03 | 1.59 | 1.28 | 32 |
| Galveston | 3.84 | 1.92 | 1.45 | 1.00 | 33 |

[^43]evidenced by the fact that, when allowed, a range of rates is employed, not just the highest permissible rate. Five states-North Dakota, Georgia (with a joint county/municipal tax), Virginia, Texas and California-have only one rate for cities. Qualified Texas cities may adopt an additional one-half percent to reduce property taxes.
A common feature among several states is for sales tax receipts collected by one taxing
entity to be redistributed to other entities. In New York, 21 counties share revenues with their cities, although this is not required. Kansas county taxes are split among the county and city: onehalf divided according to tangible personal property tax levies in the prior year and one-half by population. Missouri cities receive all sales tax revenue collected in their city, if their city sales tax was in place before the county tax; otherwise, cities receive a distribution
based on population.
Mississippi distributes 20.5 percent of its state sales tax revenues collected in cities to the cities based on the place of collection. In North Carolina, county commissioners annually choose between a per capita or per dollar of ad valorem tax levy split of tax revenues with other cities.
Tennessee counties distribute one-half of the sales tax revenue in the same manner as the county

TABLE 5. Responsiveness of Local Revenue Sources to Changes in Per Capita Income ${ }^{1}$

| Population | Own Source Revenue | $\begin{gathered} \text { All } \\ \text { Taxes } \end{gathered}$ | Property Tax | $\begin{aligned} & \text { Sales } \\ & \text { Tax } \end{aligned}$ | Income Tax | Other <br> Taxes | User Fees | Misc. ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For the period 1979-84: |  |  |  |  |  |  |  |  |
| Over 1,000,000 | 1.44 | 1.47 | 0.86 | 1.92 | 1.90 | 2.45 | 1.21 | 1.67 |
| 500,000-1,000,000 | 1.57. | 1.23 | 0.82 | 1.95 | 1.12 | 1.92 | 1.77 | 3.11 |
| 300,000-499,999 | 1.71 | 1.11 | 0.84 | 1.31 | 1.32 | 1.33 | 1.98 | 3.52 |
| 200,000-299,999 | 1.60 | 1.19 | 1.34 | 1.34 | 0.10 | 1.95 | 1.80 | 3.10 |
| 100,000-199,999 | 1.53 | 1.07 | 0.81 | 1.49 | 2.56 | 1.69 | 2.11 | 2.76 |
| 50,000-99,999 | 1.39 | 1.03 | 0.69 | 1.83 | 1.21 | 1.53 | 1.91 | 2.24 |
| Under 50,000 | 1.62 | 1.08 | 1.07 | 1.24 | 0.93 | 0.80 | 1.68 | 3.28 |
| Total | 1.51 | 1.18 | 0.90 | 1.56 | 1.43 | 1.52 | 1.68 | 2.81 |
| For the period 1979-81: |  |  |  |  |  |  |  |  |
| Over 1,000,000 | 0.67 | 0.65 | 0.32 | 0.89 | 0.95 | 0.94 | 0.60 | 0.96 |
| 500,000-1,000,000 | 0.89 | 0.73 | 0.61 | 0.90 | 0.69 | 1.07 | 1.06 | 1.47 |
| 300,000-499,999 | 0.64 | 0.28 | 0.43 | 0.02 | 0.40 | 0.40 | 0.89 | 1.62 |
| 200,000-299,999 | 0.74 | 0.50 | 0.46 | 0.73 | 0.17 | 052 | 0.87 | 1.57 |
| 100,000-199,999 | 0.78 | 0.48 | 0.44 | 0.52 | 0.28 | 0.81 | 1.04 | 1.73 |
| 50,000-99,999 | 0.74 | 0.50 | 0.55 | 0.44 | 0.24 | 0.28 | 0.88 | 1.64 |
| Under 50,000 | 0.71 | 0.54 | 0.70 | 0.31 | 0.48 | 0.17 | 0.78 | 1:19 |
| Total | 0.72 | 0.56 | 0.52 | 0.56 | 0.74 | 0.55 | 0.82 | 1.34 |
| For the period 1982-84: |  |  |  |  |  |  |  |  |
| Over 1,000,000 | 3.30 | 3.41 | 2.23 | 4.26 | 4.07 | 5.71 | 2.73 | 3.37 |
| 500,000-1,000,000 | 3.09 | 2.43 | 1.45 | 4.16 | 2.17 | 3.70 | 3.33 | 6.06 |
| 300,000-499,999 | 4.07 | 3.01 | 1.89 | 4.24 | 3.42 | 3.46 | 4.32 | 6.89 |
| 200,000-299,999 | 3.48 | 2.74 | 3.28 | 2.74 | 0.60 | 4.97 | 3.79 | 5.80 |
| 100,000-199,999 | 3.36 | 2.56 | 1.80 | 3.79 | 7.81 | 3.77 | 4.50 | 4.83 |
| 50,000-99,999 | 2.97 | 2.38 | 1.24 | 5.01 | 3.52 | 4.46 | 4.24 | 3.62 |
| Under 50,000 | 3.55 | 2.34 | 2.00 | 3.27 | 2.00 | 2.20 | 3.60 | 7.11 |
| Total | 3.26 | 2.62 | 1.86 | 3.74 | 3.00 | 3.62 | 3.53 | 5.56 |

[^44]property tax for schools with the other half distributed back to the location of collection (or by other agreement between the city and county). County sales tax revenues in Wyoming are distributed to cities. In California, the share of collections within a city received by the county is subject to city-county negotiations.

## Local Sales Tax Issues

A previous chapter enumerates the characteristics of a "good" tax system. ${ }^{6}$ Given that the state is responsible for the rules of the local sales tax, it appears reasonable to apply the concepts of a "good" tax system to the tax system as it applies to state and local relations. The following items relate specifically to cities.

Adequacy. The tax system permitted by the state for cities should supplement a city's other non tax revenue sources so that the total amount of revenue required to finance basic municipal services is adequately maintained. As cities are pressed to meet basic service delivery demands and balance their budgets with additional revenues, the rigidity of the local sales tax rate restrains the tax's usefulness to cities in adjusting their particular revenue needs and mix.
Fairness. Two common measures of the fairness of a tax system are horizontal and vertical equity. Horizontal equity is achieved when taxpayers in the same economic situation pay the same tax. Vertical equity results when differently situated people are treated in appropriately different ways.
These two concepts can be borrowed and modified to apply to the state and local tax system. A state and local tax system can be considered "horizontally equitable" if it recognizes the differences among municipal governments in their abilities to generate
sufficient revenues. The sales tax system should neither confer more benefits nor impose more burdens

## As cities are pressed to

 meet basic service delivery demands and balance their budgets with additional revenues, the rigidity of the local sales tax rate restrains the tax's usefulness to cities in adjusting their particular revenue needs and mix.on one city versus another based on the industry concentration in each economy.
As an example, the primary
components of the Dallas economy in 1986 were retail trade, comprising 31.4 percent of total gross sales, and wholesale trade with 30.6 percent. The estimated percentages subject to tax are 50.9 percent for retail trade and 6.6 percent for wholesale trade.
In the Beaumont-Port Arthur economy, by contrast, the two largest industry sectors were manufacturing, with a 36.8 percent share of the total in 1986, and retail trade with 32.8 percent. The estimated percentages are 1.1 percent for manufacturing and 54.2 percent for retail trade.

The implication of these examples is that as the sales tax base is expanded, the state and local tax system becomes more horizontally equitable.
A state and local tax system is
6. See Chapter One, "What is a 'Good'
Tax System?"

| State | Administration | Range of Rates | Taxable Base |
| :---: | :---: | :---: | :---: |
| New York | State and local | 1.0-4.0\% | Local |
| llinois | State | 0.5-1.0 | State |
| Kansas | State | 0.5-1.0 | Local |
| Minnesota | Local | - | - |
| Missouri | State | 0.5-1.0 | State |
| Nebraska | State | 0.5-1.5 | State |
| North Dakota | State | 1.0 | - |
| South Dakota | State | 1.0-3.0 | State |
| Alabama | State and local | 0.5-4.0 | State |
| Arkansas | State | 0.5-1.0 | State |
| Georgia | State | 1.0 | State |
| Louisiana | Local | 0.5-3.0 | State |
| Tennessee | State | 0.25-1.25 | State |
| Virginia | State | 1.0 | State |
| Arizona | State and local | 1.0-4.0 | State |
| New Mexico | State | 0.25-0.75 | State |
| Oklahoma | State | 1.0-4.0 | State |
| Texas | State | $1.0^{1}$ | State |
| Colorado | State and local | 1.0-4.0 | State |
| Utah | State | 0.75-0.91 | Slate |
| California | State | 1.0 | State |
| Washington | State | $0.5-1.0$ | State |
| Alaska | County | 1.0-6.0 | Local |
| Source: Commerce Clearing House, All States Tax Guide, 1988. <br> 1. Texas does permit certain qualified cities and counties to adopt an additional one-half percent to reduce property taxes or for transit purposes. This is a recent change. |  |  |  |

considered to be "vertically equitable" if the revenue needs of the state do not impair the ability of the local governments to meet their revenue needs and vice versa. In 1968, when the one percent local sales tax went into effect, it amounted to 50 percent of the state's sales tax rate. Today, the maximum percentage for all local jurisdictions is 33 percent of the state rate and 17 percent for cities.
Since revenue forecasting generally accounts for declines in "consumption". due to higher taxes or fees on products or services, it is plausible that as the state has increased its rate over time, yet held the municipal rate constant, the cities' yield has been adversely affected. The effect at the state level is somewhat masked since it gains in absolute terms with the increase to its rate.

Economic competitiveness. From the state's perspective, economic development by municipalities involved in a "robbing Peter to pay Paul" type rivalry is not beneficial. Cities should compete on their own comparative advantages, free from externally imposed distortions which are not explicit components of state policy goals. Municipalities which have local economies with a low proportion of taxable sales to gross sales relative to other: Texas cities are at a disadvantage in determining their own particular revenue mix.
Cities need strong and diversified revenue sources to afford the infrastructure maintenance and improvements and delivery of essential services necessary to: retain current businesses and promote economic growth. Without basic services such as water and sewer, efficient transportation networks for access to inputs and markets or police
and fire protection, businesses cannot expand, regardless of their current profitability or the attractiveness of state tax incentives.

> Given the unpopularity of the property tax, the single sales tax rate and limits to fees and charges, cities and other localities have little margin when adjusting their revenue mix to suit their local economies.

Balance. It is obvious that just as the state economy has evolved over the past $20-25$ years, local economies have as well. Moreover, even among themselves, local economies are different from one another. As economic change occurs, local revenue systems need to change, too. By not relying too heavily on any one revenue source, the local jurisdiction "diversifies" its risk of revenue volatility and does not impose unfair or unproductive burdens on any one group. Given the unpopularity of the property tax, the single sales tax rate and limits to fees and charges, cities and other localities have little margin when adjusting their revenue mix to suit their local economies.
Certain possible policy alternatives would help in arriving at a "good" state and local tax system relationship. Increasing the municipal sales tax rate would definitely enhance adequacy of revenues. Continued expansion of the tax base
would increase revenues but would also provide for a more "horizontally equitable" system since the importance of the sales tax would depend less on a city's particular industry mix.

The addition of a few incremental rates-up to a specified maximum-would allow cities to tailor their particular revenue mix to their particular circumstances, thus increasing the balance in their systems. The administrative costs of additional rates may be offset by the increased economic competitiveness of Texas cities. Although the possible combinations of rates would increase beyond those currently possible, for the taxpayer, only one combination would continue to apply to his place of business. For products delivered to a location with a Metropolitan Transit Authority tax, the taxpayer would be required to be aware of that fact and collect the tax accordingly as is the case now.

To be certain, no discussion of changes to the local sales tax is useful in isolation from the state sales tax, especially when it accounts for nearly 50 percent of the state's tax revenues. However, should the state decide to shift somewhat from this heavy reliance to other revenue options, then increasing the flexibility of the local sales tax may prove beneficial to the state.
Perhaps. Yogi Berra was correct when he said: "It's deja vu all over again." Twenty years ago, cities requested flexibility to meet the changing and growing demands placed upon them. Perhaps, as the state looks at the entire spectrum of its tax policy, the local sales tax will again be seen as a tool to assist not only local governments but also to help the state through healthier, stronger, more competitive and diversified local economies.

## Part III: Business Taxes

## T exas Business Tax Policy

Background and Issues

## Summary

Direct taxes on businesses are an important part of the tax system in most states, with most states mixing a variety of general and special business levies. A review of the policies among the states produces no clear or systematic pattern of business tax policy.

In Texas, the primary general business tax is the corporation franchise tax, essentially a tax based on a corporate taxpayer's capital in the state. This tax is to Texas business tax policy what the corporate income tax is in most states.

The tax has a long history in the Texas tax system. The first franchise tax was levied in Texas as a corporate charter fee in the late 1870s. In its basic form, the current franchise tax dates from 1907. Over the past eight decades, there have been a number of changes in the tax, primarily in the form of rate increases, but the basic structure of the tax remains largely unchanged.

That has proved to be a significant problem for the tax in recent years. As tax rates have increased, taxpayers have increasingly gone to court challenging certain aspects of the tax law and administrative practice in light of new corporate accounting practices. The state has lost substantial potential revenue through a series of lost court cases since 1985. Prior to these decisions,
the tax had been a relatively stable tax.
Other problems with the tax relate to its net worth basis. Because of its structure, the tax falls heavily on capital-intensive industries with signficant assets in Texas. It places a disproportionately smaller burden on industries without a heavy asset base or which rely on debt for their capital base.
The chapter also examines Texas business tax policy in relation to other states. At present, 30 states, including Texas, employ some form of capital tax, while the rest typically use some sort of annual corporate license fee. In addition to these levies, 46 states tax corporate or general business income. Texas, along with Nevada, Washington and Wyoming, has no business profits tax.

Most of the state's leaders have recognized the need for change in Texas's business tax policy because of the severe problems with the franchise tax. Efforts to repair these problems in recent legislative sessions have not been entirely successful, and new problems continue to arise. Major policy questions addressed by the Select Committee on Tax Equity-and issues likely to confront the Legislature in coming years-are how business should be taxed and how the burden of taxation should be distributed.

By Billy Hamilton
Executive Director, Select Committee on Tax Equity

## T

 axes must eventually be paid by people, and economists generally agree that taxes initially levied on business will ultimately find their way to individuals. Nonetheless, the question of how best to tax business has never been completely resolved by any level of government. In part, this is the result of the conflicting goals of most tax policies, with government's need to raise money expeditiously clashing with the desire of policymakers to maintain a healthy environment for economic growth. The result is a bewildering array of business tax laws in the 50 states.Governments mix a number of types of general business taxes with an assortment of special industry levies in pursuit of their unique policy goals. A quick survey of state and local business tax policies nationally suggests that the main constant is the inconsistency of policy.
It should come as no surprise, then, that Texas policymakers worry over the soundness of their state's business tax policies. In fact, given recent economic conditions in the state and the major tax bills passed over the past few years, such concerns are all but inevitable. However, Texas' concerns with business tax policy today go beyond the
relatively simple concerns of balancing revenue productivity and economic attractiveness. Texas state government relies on its general business tax-the corporation franchise tax-as a major source of state income, and the tax is under attack from several directions. The attacks involve both the inner workings of the tax which determine its reliability as a revenue source and how it affects various segments of the state economy.
In fiscal year 1988, the corporation franchise tax is expected to produce $\$ 853.9$ million, and yet, a large percentage of that income is in jeopardy because of a series of court cases challenging the 81year old structure of the tax.

At the same time, many business and state leaders are concerned about the fairness of how the tax is distributed among industries. Its initial burden falls heavily on capital-intensive industries, while imposing a comparatively smaller burden on less heavily capitalized segments of the economy. In many cases, these lightly taxed industries have equal, if not greater, business activity in the state than the heavily taxed sectors. Moreover, critics point to the fact that the tax does not tax unincorporated businesses at all.

How valid these criticisms ultimately are is subject to debate. Unquestionably, many of the problems with business taxation in Texas are directly related to poor economic times, which have made businesses intensely conscious of all costs, while simultaneously forcing state government

[^45]to push tax rates higher.
But are there fundamental problems with the tax and the web of policies that underlie it that should be addressed? If there are, what can be done to set them right? And most importantly, can this be accomplished while striking a balance between the legitimate needs of government to produce income to pay for its programs and the need to keep Texas attractive for business development?

As a beginning to answering these questions, this chapter examines the general theories of business taxation and then looks at the Texas franchise tax-how it has evolved, how it is performing today and how Texas general business tax policy compares with the approaches used in other states.

## The Taxation of Business

In modern society, businesses share a responsibility with individuals for paying for the goods and services provided by government. This is accomplished primarily through taxes which are applied to both businesses and individuals.

Businesses are subject to a number of taxes that also apply to individuals-the property tax and sales tax being the two most obvious examples in Texas. But through the years, governments have also developed a separate category of taxes under the broad label of "business taxes," which are designed to place a special burden on businesses in the support of government.
These business taxes assume a number of forms. They may apply to a specific type of business, as in the case of the insurance gross premiums tax or the various state utility taxes. They may apply to a particular type of activity or occupation, as in the case of the oil and gas severance
taxes. Or they may apply to more general business activities that cut across a range of industries. Nationally, the corporate income tax is the most common example of this form of business tax. In Texas, the general business tax is the corporation franchise tax.

The historical development of general business taxes, both in Texas and nationally, has focused on the taxation of corporations. In large measure, this results from the longstanding view of government policymakers that corporations enjoy certain privileges granted by government that other forms of business enterprise do not.

All businesses, of course, benefit from such public services as roads, public safety and the public education system. But corporations, by their very nature, are granted other benefits by the state. They are legal "persons" chartered by government with such special benefits as perpetual life and limited liability of shareholders. ${ }^{1}$ Moreover, early taxes on corporations also appear to have been devised to overcome the special characteristics of the corporate form and the inability of the property tax to reach the intangible worth of corporations. ${ }^{2}$ This is not to imply that business tax policy should focus on corporations apart from other business forms, only to recognize that traditionally this has been the focus, and the growth in importance of corporations in the American economy has made the policy an easy one for governments to adopt and maintain.

In this regard, the taxation of business nationally-and to some degree in Texas-has passed through four major periods. Up to the mid-1800s, business in whatever form was taxed in the same way as individuals, through property taxes. As the corporate form became more prevalent after
the Civil War, states increasingly imposed charges on corporations at the time of their organization or when they first started to do business in the state. ${ }^{3}$ These organization and entry fees subsequently were replaced by annual franchise fees or taxes measured by some aspect of capitalization. Finally, beginning with a Wisconsin tax in 1911, states began to follow the federal government into the taxation of corporate income, and today, 45 states impose some form of corporate income tax. ${ }^{4}$

Texas followed this path to a point. It originally taxed business primarily through the property tax and imposed its first organization and entry fees in 1879. This was followed by the forerunner of the current franchise tax in 1893. However, the state has never moved on to the taxation of corporate income, although such proposals have surfaced occasionally in the state's long, and often checkered, fiscal history.

## A Taxonomy of Business

## Taxes

Although the corporate income tax is the most common form of business taxation today, state and local governments have devised a seemingly endless variety of business tax forms. While these taxes differ sharply in their application, rates, exemptions and other features, they can be divided roughly into two major groupings in terms of the economic base they tax. Conceptually, taxes are imposed either on a specific economic flow or on a specific economic stock. ${ }^{5}$ These categories are summarized in Table 1.

Flow taxes can be further subdivided according to the type of bases they are levied on: gross receipts, value-added or income. The differences in these taxes lie primarily in the breadth of their coverage of a business' activities. Table 2 shows the states that use the various types of taxes.

Gross receipts taxes are based on income from all of a business' sources. It is essentially a sales tax but may be even broader since all receipts may be covered and is paid by the business rather than the customer. Only three states-Hawaii, Indiana and Washington-impose broad business gross receipts taxes. ${ }^{6}$

[^46]TABLE 1. A Taxonomy of Business Taxes

| Flow Taxes |  |  | Stock Taxes |
| :---: | :---: | :---: | :---: |
| Gross Receipts Base | Value-Added Base | Net Income Base | Capital Stock Base |
| Gross receipts from sales of goods and/or services. | Gross receipts from sales, services, rents and interest. | Gross receipts from sales, services, rents and interest. | One or more of the following factors: capital stock, surplus, earned and appreciated surplus, undivided long-term debt or asset values. |
| minus | MINUS | MINUS | MINUS |
| Some statutes allow deductions for returned sales, cash discounts, installation, and transportation charges. Also included in some cases are taxes not directly measured by income. | Purchases from other businesses, generally including capital asset purchases, interest payments, rent and services acquired. | Ordinary expenses incurred in the production of income, including both internal and external expenses-payroll, interest payments, purchases of goods and services, rent, depreciation and depletion. | Most states exempt certain types of business from these taxes-generally those taxed under separate special taxes, such as banks, other financial institutions, insurance companies and certain public utilities. |

[^47]Most states, including Texas, impose various forms of special gross receipts taxes, predominantly on insurance companies and public utilities.

Only one state uses any form of value added tax. That is Michigan, with its single business tax.
Forty-five states tax the net corporate income of at least some

TABLE 2. General Business Taxes by State

| State | $\begin{gathered} \text { Gross Receipts } \\ \text { Tax } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Value-Added } \\ \text { Tax } \end{gathered}$ | Business Income Tax | Franchise Tax |
| :---: | :---: | :---: | :---: | :---: |
| Alabama |  | . | X | X |
| Alaska |  |  | X |  |
| Arizona |  |  | X |  |
| Arkansas |  |  | x | X |
| California |  |  | X |  |
| Colorado |  |  | X |  |
| Connecticut |  |  | X | X |
| Delaware |  |  | X | X |
| Florida |  |  | X |  |
| Georgia |  |  | X | $x$ |
| Hawaii | $x$ |  | X |  |
| Idaho |  |  | X |  |
| Illinois |  |  | X | x |
| Indiana | $x$ |  | X |  |
| Jowa |  |  | x | X |
| Kansas |  |  | X | X |
| Kentucky |  |  | X | X |
| Louisiana |  |  | X | X |
| Maine |  |  | X |  |
| Maryland |  |  | X | X |
| Massachusetts |  |  | X | X |
| Michigan |  | $x$ |  |  |
| Minnesota |  |  | X |  |
| Mississippi |  |  | x | $x$ |
| Missouri |  |  | x | X |
| Montana |  |  | X |  |
| Nebraska |  |  | X | X |
| Nevada |  |  |  |  |
| New Hampshire |  |  | $x$ | X |
| New Jersey |  |  | $x$ | X |
| New Mexico |  |  | X |  |
| New York |  |  | X | x |
| North Carolina |  |  | X | X |
| North Dakota |  |  | X |  |
| Ohio |  |  | X | x |
| Oklahoma |  |  | X | X |
| Oregon |  |  | X |  |
| Pennsylvania |  |  | X | $x$ |
| Rhode Island |  |  | X | X |
| South Carolina |  |  | X | X |
| South Dakota |  |  | x |  |
| Tennessee |  |  | X | x |
| Texas |  |  |  | X |
| Utah |  |  | $x$ |  |
| Vermont |  |  | X |  |
| Virginia |  |  | X | X |
| Washington | $x$ |  |  | X |
| West Virginia |  |  | $x$ | X |
| Wisconsin |  |  | X |  |
| Wyoming |  |  |  | $x$ |
| Total | 3 | 1 | 45 | 30 |
| Source: Commerce Clearing House, All States Tax Guide, Vol. 1. |  |  |  |  |

types of businesses. Most of the states tax corporations generally. South Dakota taxes on the income of financial corporations, while New Hampshire imposes a business income tax on all firms, whether incorporated or not. The states that do not tax income include Michigan, with its valueadded tax, Texas, Nevada, Washington and Wyoming.

As in the case of the flow taxes, there are a number of different ways of subdividing the stock taxes, but essentially they relate to various measures of business wealth and are less clearly distinguishable than the flow taxes. In general, the taxes are similar to the Texas franchise tax in the sense that they are based on some portion of business net equity (capital and surplus) and-in some cases-long-term debt.

The important point in this area is that many states have retained some semblance of their stock taxes, even when they have moved on to tax corporate profits as well. Thirty states have capital stock-based taxes, including 26 states which also have corporate income taxes. Moreover, when annual franchise or license fees are included, every state retains some vestige of the old business privilege tax and license fee structure.

Among these various forms of general business taxes, the corporate income tax is the most significant, whether its significance is measured by the number of states using it, by the absolute dollar value of its revenue yield or by the prevalence of its use among the states.

## Development of the Texas

 Franchise TaxThe first franchise tax in Texas was imposed in 1893 (Table 3). The tax was levied at a flat rate of ten dollars annually on both foreign and domestically char-
tered corporations and was collected by the Secretary of State. It was enacted in a bundle with
three other special industry taxes on insurance, telephone companies and railroad car companies.

In effect, the franchise tax was a catchall afterthought-an annual fee on "other corporations" not

TABLE 3. Evolution of the Texas Franchise Tax

| Year | Event |
| :---: | :---: |
| 1879 | State adopted a fee of $\$ 100$ for charters and amendments by certain corporations and $\$ 25$ for others-the first special levy on corporations imposed by Texas. |
| 1893 | First annual corporate franchise tax of ten dollars a year levied in Texas. |
| 1897 | Franchise tax with graduated rate schedule enacted, ranging from \$10-50 based on amount of authorized capital stock of the corporation. First authorized exemption-for certain public transportation businesses already paying a gross receipts tax. |
| 1905 | Assessment of the tax changed to larger of the amount of authorized capital slock of the corporation or the amount of issued and outstanding capital stock, plus its surplus and undivided profits. |
| 1907 | Basic form of current franchise tax enacted. Tax assessment method retained from 1905. Domestic corporations taxed at 50 cents per $\$ 1,000$ with a minimum ten dollar tax, with significantly higher rates (up to two dollars) for foreign corporations. Collection of tax by the Secretary of State. |
| 1917 | In case of Looney v. Crane Company, U.S. Supreme Court finds portion of the Texas law relating to foreign corporations an invalid burden on interstate commerce. State enacts first apportionment provision, establishing an allocation formula to determine tax liability of foreign corporations. Allocation method was percent of gross receipts in Texas. (Apportionment extended to all corporations in 1919.) |
| 1930 | Major franchise tax overhaul. Long-term debt added to tax base. Basic rate: 60 cents per $\$ 1,000$ of tax base for amounts up to $\$ 1$ million with an additional tax of 30 cents for base amounts greater than $\$ 1$ million. Railroads and other corporations already paying a separate tax on their intangible assets were granted a special one-fifth rate. Public utilities were excluded from the taxation of long-term debt but required to pay a slightly higher rate than other corporations. |
| 1941 | Basic rate: one dollar per $\$ 1,000$ of tax base with no graduation. Also added to the law was a minimum tax base equal to the county assessed valuation of all of the corporation's property in Texas. |
| 1950 | Basic rate increased from $\$ 1.10$ to $\$ 1.25$ per $\$ 1,000$ of tax base. |
| 1951 | Several exemptions added, including mutual investment companies (insurance, fidelity, surety and guaranty companies), religious, charitable and nonprofit corporations. |
| 1954 | Basic rate increased from \$1.25 to \$2 per \$1,000 of tax base. |
| 1955 | Basic rate increased from $\$ 2$ to $\$ 2.25$ per $\$ 1,000$ of tax base. |
| 1959 | Surtax of $33.33 \%$ added to basic rate of $\$ 2.25$ (three dollar effective rate) for 1960 fiscal year; surtax of $22.22 \%$ ( $\$ 2.75$ effective rate) imposed for following two years. A short form for small taxpayers added; administration transferred to Comptroller of Public Accounts. |
| 1968 | Basic rate increased from $\$ 2.25$ to $\$ 2.75$ per 1,000 of tax base; minimum tax from $\$ 25$ to $\$ 35$-both effective in fiscal 1969. Phase-out of long-term debt from tax base authorized, to be completed by the end of fiscal 1973. |
| 1969 | Tax due date changed from May 1 to June 1. "Destination factor" added to statute, defining Texas gross receipts as those delivered or shipped to state, regardless of origin (previously defined as originating and shipped to destination in Texas). A surtax of $18.18 \%$ ( 50 cents) was added- $\$ 3.25$ per $\$ 1,000$ of tax base effective rate-for 1970-72 fiscal years. A surtax of $9.09 \%$ ( 25 cents) was imposed thereafter. |
| 1971 | Surtax of $45.45 \%$ ( $\$ 1.25$ ) added to existing rate structure (with previous surtax), making effective tax rate $\$ 4.50$ per $\$ 1,000$ of tax base for fiscal 1971 ; rate dropped back to $\$ 4.25$ thereafter based on a surtax of $54.54 \%$ on basic $\$ 2.75$ per $\$ 1,000$ rate. |
| 1975 | Basic rate set at $\$ 4.25$ per $\$ 1,000$ of tax base permanently; minimum tax increased from $\$ 35$ to $\$ 55$; surtaxes repealed. |
| 1984 | Rate increased to $\$ 5.25$ per $\$ 1,000$ of tax base. Minimum tax increased from $\$ 55$ to $\$ 68$. Banks made subject to franchise tax, revenue allocated to local governments. |
| 1985 | State loses case of Bullock v. Samedan Oil Co. Beginning of major problems with franchise tax base. |
| 1987 | State loses Bullock v. Sage Energy Co., Bullock v. Sun Refining and Marketing, and State v. Sun Oil Co. on appeal. All of these cases result in erosion of the franchise tax base. Legislature adopts S.B. 1170 requiring use of generally accepted accounting principles (GAAP) by most corporations in their tax reporting. Law is designed to reduce effects of litigation. In special session, Legislature adopts temporary rate increase from $\$ 5.25$ to $\$ 6.70$ per $\$ 1,000$ of tax base, effective through 1989 then reverts to $\$ 5.25$. |
| 1988 | State loses State v. Shell Oil Co. on appeal. Case allows exclusion of reasonable reserve accounts from tax base, among other effects, further eroding the base. |

Source: Tax Survey Committee, History of Texas Taxation (Austin, 1930); E.T. Miller, "Historical Development of the Texas State Tax System," The Southwestern Historical Quarterly, Vol. LV, No. 1 (July 1951); Texas Legislative Council, A Survey of Taxation in Texas: Part II-Analysis of Individual Taxes, No. 51-8 (Austin, 1951), pp. 209-226; Secretary of the Texas Senate, Franchise Taxes in Texas: One in a Series of Briefs (Austin, August 1, 1969); Texas Commission on State and Local Tax Policy, Our State Tax Policy: Its History and its Future (Austin, 1960); Comptroller of Public Accounts.
specifically singled out by the other taxes. In subsequent years, amendments to the tax law imposed different rates for foreign (chartered outside Texas) and domestic corporations, and in 1897, the rate was altered to apply for the first time to a capital stock base.

The tax assumed what essentially is its modern form in $1907{ }^{7}$ The initial tax was set at 50 cents per one thousand dollars of authorized capital stock for domestic corporations, with significantly higher and graduated rates applied to foreign corporations. A minimum tax of ten dollars on domestic corporations and $\$ 25$ on foreign corporations was also imposed.
The franchise tax underwent a major overhaul in $1930 .^{8} \mathrm{~A}$ higher, graduated tax rate was imposed, and long-term debt was added to the tax base for the first time. The idea behind its inclusion was to reach the broadest definition of capital by including borrowed capital as well as shareholder equity in the tax base.
In the 1930 amendments, the state also granted what amounted to the first truly significant exemptions under the tax, creating a special one-fifth rate for railroads and other corporations already subject to a separate tax on their intangible assets. Public utilities were excluded from the tax on long-term debt, which was a significant item in their financial make-up. However, to compensate for this exemption, they were required to pay a slightly higher basic rate than other corporations. Following the 1930 overhaul,
7. Adopted during the first called session, 30th Texas Legislature, 1907.
8. Texas Legislative Council, p. 221
9. Adopted during the first called session, 60th Texas Legislature, 1968.
the franchise tax evolved slowly, with the most notable changes over the next five decades being a series of nine rate increases that pushed the basic rate from 60 cents per one thousand dollars of taxable capital in 1930 to $\$ 4.25$ by 1975. In addition, a significant portion of the base was eliminated in the late 1960s when the Legislature approved the phase-out of long-term debt as part of the tax base. ${ }^{9}$
Throughout this period, the franchise tax was a frequent "balancing point" in major state tax bills. The history of the tax from the late 1950s to the early 1970s was marked by a series of temporary surtaxes added to the basic rate, most of which ultimately became permanent rate increases.
Since the state began to have fiscal troubles in 1982, the franchise tax rate has been increased twice. In 1984, the rate was increased for the first time in a decade from $\$ 4.25$ per one thousand dollars of taxable capital to $\$ 5.25$ as part of House Bill 122, which funded increases in education and highway programs. A temporary rate increase-to $\$ 6.70$ per one thousand dollars of tax base-was part of House Bill 61, the omnibus tax bill adopted to balance the budget in special session in the summer of 1987. The rate is scheduled to return to $\$ 5.25$ after fiscal 1989.

As will be discussed at length later, the last five years have also been marked by an unprecedented string of largely successful legal challenges to parts of the franchise tax which have eroded-or potentially could erode-a substantial percentage of the tax's revenue potential.

## The Franchise Tax Today

The current franchise tax is levied on every domestic and
foreign corporation chartered or authorized to do business in Texas or actually doing business in Texas (without charter or authorization). The tax is administered by the Comptroller of Public Accounts, who took over administration of the tax from the Secretary of State in 1959.

The franchise tax is due annually on March 15 and is viewed as covering the privilege of doing business in the state for the upcoming year (May 1 to April 31 following the March 15 due date). Essentially, the tax is based on the prior year's business condition but grants the business privilege for the coming year. Although fairly technical, this prospective nature could pose some hurdles if the state wanted to move to a nonprivilege tax like the income tax. Essentially, the state is collecting the tax in advance for "services" to be delivered.

As noted earlier, the current temporary tax rate is $\$ 6.70$ per one thousand dollars of the corporation's taxable capital, with a minimum tax of $\$ 150$. The rates are scheduled to return to $\$ 5.25$ per one thousand dollars of taxable capital and a minimum tax of $\$ 68$ in 1990.
With a few important exceptions, the flat percentage rate of the tax is applied to a portion of a corporation's stated capital and surplus allocated to Texas. Stated capital is the par value of all outstanding shares of a corporation's stock. Surplus is the excess of net assets (total assets minus total debt) over stated capital.
With some exceptions, the amount of capital and surplus is currently determined according to Generally Accepted Accounting Principles (GAAP), the accepted procedures of the accounting profession, which have been developed by several professional groups over a number of years. The reliance on GAAP has
important implications for the tax base and is a new feature of the tax added in 1987-effective with tax reports filed after January 1, 1988. Some of the major exceptions to GAAP reporting written into the tax law include:
(1) use of debts rather than liabilities;
(2) prohibition of consolidated (subsidiary merged with parent firm) reporting;
(3) requirement that firms use the cost method for reporting investment in subsidiaries;
(4) provision of special (simplified) reporting requirements for small corporations; and
(5) requirement that oil and gas exploration activities be reported for tax purposes in certain enumerated ways.

Multistate businesses allocate a share of their taxable capital to Texas based on how much of their business occurs in the state. Generally, the measure of business activity is based on the corporation's gross receipts from sales, rental and other activities in the state. Firms calculate their allocation factor from these gross receipt totals by multiplying total taxable capital by the percentage formed by dividing the firm's gross receipts from Texas business by its gross receipts from all of its business activities.

Thus, if a firm has $\$ 10$ million in total gross receipts with five million dollars originating in Texas, its allocation factor for Texas franchise tax purposes would be 50 percent ( $\$ 5$ million divided by $\$ 10$ million).

In addition to this basic allocation method, the law provides for certain alternative allocation and apportionment methods for corporations which feel that the gross receipts provision does not fairly represent their business. activity in the state. To receive
special treatment, taxpayers must petition the Comptroller, who can allow the use of one or two additional factors-payroll and property. Either or both of these factors can be used in addition to (but not instead of) receipts.

Franchise tax exemptions. The franchise tax statute provides for exemptions for a number of different classes of corporations, resulting in a fairly substantial reduction in the revenue "potential" of the tax, compared to what it would yield if imposed evenly on all corporations. Table 4 shows the major exemptions, deductions and special tax rates granted under the law and the
estimated fiscal impact of these provisions in 1987.

As the table shows, the state allowed an estimated $\$ 262$ million in exemptions in 1987, compared with total franchise tax collections of $\$ 808.4$ million. ${ }^{10}$ Thus, exemptions reduce the overall base of the tax by almost a quarter, with the largest percentage of that total coming from the exemption of open-ended investment companies-primarily money

[^48]| TABLE 4. Costs of Franchise Tax Exemptions and Other Special Factors, 1987 (Millions of Dollars) |  |
| :---: | :---: |
| Provision | Amount |
| Exemptions |  |
| Open-end investment companies | \$75.2 |
| Insurance companies | 47.2 |
| Savings and loan institutions | 9.8 |
| Solar energy businesses | 0.4 |
| Religious, charitable and educational organizations and foundations (Red Cross, private schools, universities, etc.) | 50.8 |
| Civic welfare organizations (public-interest groups, civic groups, lodges, conservation groups and agricultural fairs) | 2.6 |
| Economic development and promotion (chambers of commerce, boards of real estate and trade associations) | 6.5 |
| Economic cooperatives and mutual benefit organizations (farm co-ops, utility co-ops, credit unions, etc.) | 12.1 |
| Social and recreational organizations (country clubs, sporting clubs, sororities and fraternities) | 1.6 |
| Certain housing finance corporations ${ }^{1}$ | negligible |
| Certain trade show participants ${ }^{1}$ | negligible |
| Special Rates |  |
| One-fifth normal rate for railroads, pipeline and bridge companies and public utility holding companies | 23.6 |
| Two- and three-factor allocation rates | 25.5 |
| Deductions ${ }^{2}$ |  |
| Food and medicine sales | 5.8 |
| Purchases of solar energy devices | 0.9 |
| Total exemptions and other factors | \$262.0 |
| Source: Comptroller of Public Accounts, Sales and Franchise Tax Exemptions: A Report to the Texas Legislature (Austin, January 1987). |  |
| 1. Added by the 70th Texas Legislature during 1987. <br> 2. A prior deduction for enterprise-zone sales was eliminated by the Legislature in 1987. |  |

market funds and mutual funds ( $\$ 75.2$ million), various charitable organizations ( $\$ 50.8$ million) and insurance companies ( $\$ 47.2$ million).
Also important, though not as large as these exemptions, is the exclusion of savings and loan associations, which totalled an estimated $\$ 9.8$ million in foregone tax in 1987. Banks were also exempted under the original franchise tax law, along with savings and loans and other financial firms. However, they were added to the franchise tax base in 1984. The bank tax is allocated to local governments and is designed to replace an old, local tax on bank stock, which was declared unconstitutional.
Another important provision in this area is the continuation of the special one-fifth rate begun in 1930 for certain companies. Today the list of special rate taxpayers includes railroads, pipelines, international bridge companies and public utility holding companies. These companies pay the lower tax in recognition of other special taxes they pay-county intangible assets taxes in the case of railroad, bridge and pipeline companies and state gross receipts taxes in the case of the public utilities. In total, this special rate reduced franchise tax collections in 1987 by an estimated $\$ 23.6$ million. According to the Comptroller's office, 43 pipeline companies, 30 railroads and three international bridge companies paid a reduced rate because of the intangible assets tax (which is a county tax). Eight public utility holding companies also paid the reduced rate. ${ }^{11}$
In addition to these special rate companies, the base is also reduced by the use of allocation formulas
11. Comptroller of Public Accounts, pp. 9-10.
12. Ibid., p. 10.
other than gross receipts. Allowance of two- and threefactor allocation (payroll and/. or property in addition to receipts) costs the state an estimated $\$ 25.5$ million. About 1,200 taxpayers are affected by this provision. ${ }^{12}$

> A much more significant policy issue affecting the future outlook for the franchise tax is the growing list of successful court challenges to various parts of the tax base.

Finally, the state foregoes a relatively small amount of potential tax base by allowing certain deductions when the corporation figures its allocation formula. The most important of these are food and medicine sales, worth about $\$ 5.8$ million in 1987, and purchases of solar energy devices, worth just under $\$ 1$ million the same year.
An earlier exemption for sales in enterprise zones was eliminated in 1987. The exemption had never cost the state any money because there were no enterprise zones formed in the state, although there was some potential for future losses as enterprise zones are formed around the state.
Current franchise tax litigation. A much more significant policy issue affecting the future outlook for the franchise tax is the growing list of successful court challenges to various parts of the tax base. These cases have forced several significant changes in traditional state franchise tax policies. Table 5 summarizes the most important of these cases, the issues they involve and, to the degree that it is known, their impact on state tax
income during the current twoyear budget period.
The first major issue, raised in the Samedan case in 1985, and later in the Sage Energy case, was the question of which accounting records firms must use for tax purposes-in this case with regard to the treatment of intangible drilling costs (the costs incurred in the exploration and development of oil and gas reserves as opposed to their actual production).
Previous state policy required corporations to report these costs for tax purposes as they were treated in their principal set of books and records, generally the accounting records they maintained for public reporting. Samedan and Sage argued-and the court agreed-that this requirement was invalid since it could result in similarly situated taxpayers having different tax liabilities, depending on the method they had to use in writing drilling costs off their books.
Based on the Samedan and Sage decisions, the requirement today is that if any taxpayer is allowed to use a particular accounting method to write off intangible drilling costs, all other similarly situated taxpayers are able to do so as well. The result of this policy shift is to give taxpayers much greater leeway to structure their records in ways that reduce their tax liability. Taken together, resulting reductions in the tax base and refunds from the application of this provision to earlier tax years are expected to reduce franchise tax revenues by $\$ 200$ million in the current twoyear budget period.

A second area challenged in recent litigation is the tax treatment of reserve accounts. These are accounting devices used to reflect potential liabilities a company may owe in the future. For
example, a company may set up a reserve account to cover possible losses in a lawsuit that has not yet come to trial. Before the current litigation, franchise tax law was not explicit as to how these accounts should be treated, but longstanding state policy was to treat them as part of taxable surplus. On the basis of the two Sun cases and the Shell case summarized in Table 5, any of these accounts which are reasonably determined and authorized by GAAP may be excluded from surplus and therefore are not taxable.

The state has not appealed this
issue and will grant refunds to other taxpayers who make a timely claim for them or have paid under protest. Losses thus far because of this challenge are put at $\$ 100$ million for the current budget period and more in future years.

The final major issue raised in the recent litigation is the treatment of undistributed preacquisition earnings of newly acquired subsidiaries. This question, which arose in the Sun Refining case, concerns the issue of whether these earnings should be included in the surplus of the parent corporation, thereby
increasing its tax liability. State policy previously was that they should be. However, the state Court of Appeals ruled that treating these earnings as taxable for the parent firm risks double taxation of the earnings, once in the parent and again in the subsidiary. Because of this, the court held that the earnings should not be included in the parent's surplus for tax purposes. The state appealed the issue to the state Supreme Court, which refused to hear it, and thus, the Appeals Court ruling invalidating the old state practice is final.

While the state had anticipated

TABLE 5. Major Litigation Affecting the Franchise Tax (Millions of Dollars)

| Case | Issues Involved R | $\begin{gathered} \text { Revenue Loss } \\ 1988-89 \end{gathered}$ |
| :---: | :---: | :---: |
| Bullock v. Samedan Oil Co. (unreported, No. 14146, Tex. App.Austin, January 9 , 1985) | Samedan was a corporation subject to Securities and Exchange Commission (SEC) regulation. As such, it was required by the SEC to capitalize its intangible drilling costs on its books. Other corporations not subject to SEC regulation could use other methods. State rules required franchise tax to be based on the SEC-required "books and records." Under this approach, Samedan was liable for more tax than companies who could use other accounting approaches. The court held that the requirement that costs be reported based on the type of books a company keeps violated the equal and uniform taxation provision of the Texas Constitution. The court stated that the value of all property must be determined by the same standard. The case was unreported by the Court of Appeals and was not incorporated into state franchise tax policy. | d 200 |
| Bullock v. Sage Energy Co., 728 S.W.2d 465 (Tex. App.-Austin, 1987, writ ref'd.; n.r.e.) | This case is on the same issue as Samedan, with the same result. This case, however, was published and effectively required a change in state policy with regard to intangible drilling costs and effectively paved the way for other challenges to various franchise tax calculation requirements. | 100 |
| State of Texas v. Sun Refining and Marketing, Inc. (Tex. App.Austin, 1987, writ ref'd.) | This case dealt with reserve accounts (accounts set up to cover some expected contingency) and the treatment of preacquisition earnings of a subsidiary. The court found all to be properly excludable from a corporation's surplus and thus from its franchise tax base. In the case of preacquisition earnings, the court held that they were the same as post-acquisition earnings, and surplus should not include any such amounts. | Unknown |
| State of Texas v. Sun Oil Co. (Delaware), 740 S.W.2d 556 (Tex. App.-Austin, 1987, no writ) | This companion to Sun Refining dealt with estimated contingent reserve accounts. These accounts included several types of reserves where the expected liability was estimated, including, for example, a litigation reserve for a lawsuit the firm expected to lose and a reserve for additional franchise tax liability. The court found that the amounts estimated were reasonable and required by generally accepted accounting principles (GAAP) and should be excluded from the franchise tax base. | Unknown |
| State of Texas v. Shell Oil Co., No. 3-87-104CV (Tex. App.-Austin, | In this case, the court allowed the taxpayer to exclude from surplus a contra-asset account for amortization of nonproducing leaseholds. The amounts were again a reasonable estimate of the amounts of loss and could be excluded from the tax base. | Unknown |

Source: Findings of the courts; Comptroller of Public Accounts.
losing the reserve account and intangible drilling cost cases and had adjusted its revenue estimate accordingly, it did not anticipate the loss of the preacquisition earnings issue. As a result, the Comptroller issued a letter to the Governor, Lieutenant Governor and Speaker of the House on March 14, 1988, outlining the problem and stating that additional losses of franchise tax revenue could occur as a result of it. This would be primarily in the form of refunds on past years. No actual loss figure was set, but the Comptroller warned they could represent "a significant reduction in franchise tax revenues" (emphasis in the original).
In a subsequent revenue estimate revisions in June and October 1988, the Comptroller reduced expected franchise tax revenues significantly in 1990-91 to account for the effects of this issue.
Senate Bill 1170. The Legislature attempted to deal with the various challenges to the franchise tax base in Senate Bill 1170 (S.B. 1170) by Senator Cyndi Krier of San Antonio. The measure was adopted during the 70th regular legislative session. An important and currently unanswered question for the future of the franchise tax is how well the Krier bill actually has succeeded in fixing the problems with the tax. The bill's provisions will take effect with all franchise tax reports due to be filed on or after January 1,1988 . The first annual reports under the new rules were due on March 15, 1988. At this writing, the state still did not have a clear picture of what is happening as a result of the legislation-and what is not.
S.B. 1170 requires the use of GAAP, accounting for franchise tax returns for most corporations. Those with surplus of less than $\$ 1$ million can report by the method used for their federal returns. The
courts accepted the GAAP standard over the Comptroller's arguments to the contrary. Now the state has embodied it in the statute except for the specific exceptions in the bill. The exceptions are not minor nor have they been completely clarified to this point.

> The franchise tax has been Texas' most heavily litigated tax, and there is not an immediate reason to believe that the recent legislation will change that.

For instance, the treatment of reserve accounts, which were excluded from taxation in the Sun and Shell cases, was reversed in the statute and should now be taxable again. However, there are exceptions built into the law, notably allowance for a bad debt reserve, a deferred income tax account or for an amortization account. An amortization account is what the account in Shell Oil was called. Some legal experts believe all reserve accounts may be labeled amortization accounts to reduce tax liability.
Other specific provisions of the bill include:
(1) allowing the Comptroller to promulgate a reporting method if GAAP do not specify one;
(2) prohibiting consolidated reporting of surplus by related (parent and subsidiary) corporations;
(3) prohibiting changes in accounting methods for reporting more often than every four years without approval of the Comptroller;
(4) providing that dividends must be excluded from or included in a firm's books based on the date they are declared rather than paid;
(5) requiring that oil and gas exploration and production activities be reported according to specified methods of accounting (reversing the Sage Energy decision);
(6) requiring cost accounting for investments in subsidiaries; and
(7) providing that receipts for allocation purposes must be reported in accordance with GAAP, following most of the same rules as they apply to surplus.

One of the potential problems with the bill is that the parameters of generally accepted accounting principles are not as well defined as might be hoped. While the principles include formal statements and interpretations of four professional groups-the Financial Accounting Standards Board, the American Institute of Certified Public Accountants, the Accounting Standards Board and the Securities and Exchange Commis-sion-there still are many areas of accounting practice where nothing is specified. These may provide more opportunities for future litigation, and in the absence of action to deal with the basic problems of the tax, all the state can do is wait until they arise.

At this point, it appears that the ultimate effect of S.B. 1170 will be to reverse the prospective impact of the intangible drilling costs issue and the reserve accounts problem, although it will not reverse the revenue losses already experienced. However, it does not clear up the preacquisition earnings issue, and some experts believe it could create additional problems as it seeks to correct the current difficulties. The franchise tax has been Texas' most
heavily litigated tax, and there is not an immediate reason to believe that the recent legislation will change that.
Revenue performance. At least until recently, the Texas franchise tax has been a fairly stable source of revenue for the state. The tax has shown a consistent pattern of annual growth over the past two and a half decades. From 1960 through 1987, the tax registered year-over-year increases in every year except 1961, 1965, 1972 and 1987. Growth declines in 1961 and 1972 were related to reduction in rates following temporary tax increases. The drop in 1965 appears to have been related to the loss of major court cases, while the drop in 1987 was the combined result of weak tax growth and revenue lost through litigation.

Figure 1 charts the annual growth in the franchise tax from 1960 to 1987. Over this 28 -year period, the tax's average annual growth-including rate and base changes-was 9.4 percent. However, it must be recognized that there were five major rate increases that affected growth patterns. Still, given the range of economic conditions during this
period, the tax has performed relatively well as a revenue producer.
To some degree, this is to be expected. Since the tax is based on a corporation's net equity, which tends to accumulate over time, it fluctuates less than other types of taxes-and notably corporate income taxes-do. It should also be
noted that the tax suffered more negative growth years than the sales tax, which failed to grow year over year in only one year during this period-in 1983. (The underlying base of the sales tax is estimated to have declined in both 1986 and 1987, but overall collections were positive because of the tax increase enacted in 1984.)


TABLE 6. Sources of Growth in Franchise Tax Revenue, 1975-89 (Millions of Dollars)

| Fiscal Year | Base Revenue (1980 Base) | \% Change | Major Tax Legislation | Losses: Litigation and Other | Total | \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1975 | \$166.6 | - | \$0 | \$0 | \$166.6 | - |
| 1976 | 213.6 | 28.2\% | 0 | 0 | 213.6 | 28.2\% |
| 1977 | 236.6 | 10.8 | 0 | 0 | 236.6 | 10.8 |
| 1978 | 264.9 | 11.9 | 0 | 0 | 264.9 | 11.9 |
| 1979 | 293.8 | 10.9 | 0 | 0 | 293.8 | 10.9 |
| 1980 | 340.8 | 16.0 | 0 | 0 | 340.8 | 16.0 |
| 1981 | 417.4 | 22.5 | 0 | 0 | 417.4 | 22.5 |
| 1982 | 481.2 | 15.3 | 0 | 0 | 481.2 | 15.3 |
| 1983 | 555.3 | 15.4 | 0 | 0 | 555.3 | 15.4 |
| 1984 | 606.8 | 9.3 | 0 | 0 | 606.8 | 9.3 |
| 1985 | 640.5 | 5.6 | 149.6 | 0 | 790.1 | 30.2 |
| 1986 | 672.3 | 5.0 | 157.7 | 0 | 830.0 | 5.1 |
| 1987 | 675.5 | 0.5 | 158.9 | -26.1 | 808.4 | -2.6 |
| 1988 (est.) | 703.6 | 4.2 | 373.8 | -203.4 | 878.2 | 8.6 |
| 1989 (est.) | 750.4 | 6.7 | 401.6 | -674.9 | 483.8 | -44.9 |

Source: Comptroller of Public Accounts; House Ways and Means Committee; Select Committee on Tax Equity.

Taking a closer look at franchise tax growth in recent years, Table 6 charts the performance of the tax since 1975, showing major sources of the tax's growth from 1975 to 1987. During the late 1970s and early 1980s, the tax grew strongly, fueled partly by inflation and partly by the growth in value of corporate capital resulting from the strength of the state economy during that period. Between 1975 and 1983 (the last year clearly not affected by the state economic slowdown), the tax grew at an annual average rate of 16.2 percent, without a significant rate increase or base change.
This rate far outpaced general measures of growth in the broad economy. For example, Figure 2 charts growth in the tax against the combined growth in state population and inflation during the period. As the figure shows, franchise tax growth remained well above the combined growth in population and inflation until 1985, when the two trends converged at just over five percent. Both show the sharp downward trend characteristic of many Texas economic indicators for the period of the state's recession.

Despite the downward trend, the tax maintained a relatively strong growth rate through the first phase of the state's economic problems-from 1984 through 1986. However, the actual slow-

> Given the prospects of a slow recovery of the Texas economy, the outlook clearly is for no better than slow, steady growth in the franchise tax base.

ing of the tax's growth rate was much sharper than the overall growth rates indicate, because of the effects of new revenues from House Bill 122, enacted in 1984.
The tax declined between 1986 and 1987 , and without the sizable increase in tax rates approved in 1987, further declines are expected in 1988, according to available estimates. The decline in 1987 was a product of extremely weak growth in the tax base being overwhelmed by the estimated loss of revenue because of various external factors, primar-

FIGURE 2. Growth in Franchise Tax Collections Versus Growth in Inflation and Population, 1981-89


[^49]Note: Base growth does not reflect losses through litigation.
ily litigation reducing the tax's yield and requiring refunds. Similar events are expected to erode the base in 1988-89, although the base loss again is masked from cursory observation by a second tax increase, this one the 27.6 percent rate increase approved by the Legislature as part of House Bill 61 adopted in 1987.
Given the prospects of a slow recovery of the Texas economy, the outlook clearly is for no better than slow, steady growth in the franchise tax base. As Table 6 shows, the tax base is expected to increase by 4.2 and 6.7 percent annually this year and next, even without considering the effects of last year's tax bill. This growth is below the 9.4 percent long-term trend of the tax (which includes substantial rate changes and a period of very high inflation), but it is consistent with the growth rates that characterized the tax in the 1960s, another period of modest economic growth (and low inflation).
The major question mark looming for the tax, though, is not necessarily related to its economic characteristics. How the Texas franchise tax performs over the next five years will be determined as much by what happens in the courthouse as by what happens in the economy. As Table 6 shows, litigation and other noneconomic factors could substantially reduce the tax yield in both years.
Distributional issues. Another major concern in the review of the state's business tax policy is to gain some understanding of the distributional burden of the tax among taxpayers of different sizes and among the state's major industries.

Table 7 shows a breakdown of 1987 reported franchise tax payments based on seven size
classes for $1987{ }^{13}$ As the table shows, the bulk of the tax is paid by a relatively few very large corporations. In 1987, the largest 74 taxpayers (out of a total taxpayer population of almost 266,000 ) accounted for a third of all tax reported, and the 23,000 filers that make up the top nine percent of taxpayers accounted for more than 90 percent of reported taxes. These large taxpayers paid an average of about $\$ 32,594$ each ( $\$ 3.7$ million each for the largest 74 taxpayers alone), while the smaller taxpayers who make up the other 90 percent of corporations filing returns accounted for reported payments averaging just under $\$ 300$ each.

The distributional differences also extend to cross-industry comparisons (Table 8). The table shows the distribution of reported franchise tax payments by major industrial group for 1986. ${ }^{14}$ If distributional neutrality is a goal of business tax policy, the franchise tax clearly fails, as the various measures of cross-industry burden included in the table illustrate.
The first of these measures in the table is the average reported payment by industry. This is calculated simply by dividing the industry's total reported tax by its total taxpayers. This produces
widely varying results, depending on the industry. The largest average payment comes from the transportation, communications and public utilities, mainly reflecting the large franchise tax payments made by utility firms. Also making large average payments is the mining industry, which includes the oil and gas extraction industry as its major component. The manufacturing industry also recorded large average payments. In fact, taxpayers in these three industries together accounted for almost three of every five franchise tax dollars reported in 1986. Moreover, these firms had average reported payments three to five times higher than the all-industry average of about $\$ 2,857$ in reported tax per taxpayer.
The explanation for this effect relates partly to the fact that these are very large firms, including some of the largest industrial companies in the world. However, from a franchise tax standpoint, these firms also have large capital bases, which pushes their taxes up relative to less heavily capitalized firms.
The smallest average payments come from the catchall "all other" category, which is diluted by a large number of nonprofit firms. Among the clearly defined indus-
trial groups, the smallest average payment comes from the service industry. It is important to note that not counted in the data for the industry are many firms of substantial size which typically are not incorporated (e.g., legal firms). Moreover, the firms that are incorporated tend to be much smaller and much less capital intensive than the mining, manufacturing and utility industries.

Also showing small average reported payments was the construction industry. Here again, the explanation lies in the structure of the industry, which is substantially debt-financed, as opposed to having a large
13. These figures will not match up to regular collection totals reported in the state annual reports. They are based on information from tax records and are for reported tax-the amounts actually reported for the tax year by taxpayers submitting returns. All records were not complete for 1987 at the time these data were collected, meaning the figures are likely to change somewhat in later analyses. However, the information is substantially complete and any additions will not be significant enough to alter the basic trends found in the current data.
14. It should be noted that this is 1986 tax year data, while the preceding table was based on 1987 data. The higher figures for 1986 may partly reflect the actual collection trends in the tax, but it also reflects more complete reporting.

TABLE 7. Franchise Tax Payments by Size of Payment, 1987

| Tax Paid | Number of Taxpayers | $\%$ of Taxpayers | Cumulative \% of Taxpayers | Reported Tax (millions) | $\% \text { of Taxes }$ Paid | Cumulative \% of Taxes Paid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Up to \$100 | 128,518 | 48.3\% | 48.3\% | \$8.8 | 1.1\% | 1.1\% |
| 101-500 | 72,985 | 27.5 | 75.8 | 16.2 | 2.0 | 3.1 |
| 501-2,500 | 41,599 | 15.7 | 91.4 | 47.1 | 5.8 | 8.9 |
| 2,501-10,000 | 14,743 | 5.6 | 97.0 | 70.7 | 8.7 | 17.5 |
| 10,001-100,000 | 7,142 | 2.7 | 99.7 | 195.9 | 24.1 | 41.6 |
| 100,001-1,000,000 | 813 | 0.3 | 99.8 | 205.0 | 25.2 | 66.8 |
| Over 1,000,000 | 74 | Negligible | 100.0 | 270.0 | 33.2 | 100.0 |
| Total | 265,874 | 100.0\% | - | \$814.0 | 100.0\% | - |

Source: Comptroller of Public Accounts tax collection data.
capital base. This is another industry where many firms also may not be incorporated.
Finally, the trade industries and the financial industry had average reported payments of between $\$ 2,000$ and $\$ 3,000$ close to the all-industry average. However, while they are close to the overall average, like the other noncapital intensive industries, their burdens are significantly below the levels paid by the mining, manufacturing and utility industries.
Another comparison in Table 8 is made between individual industry's share of reported franchise tax payments andits share of gross state product (GSP), the value of all goods and services produced in the economy. As the table shows, there again are significant differences among the industries. For example, the mining industry accounted for 20.5 percent of reported tax payments but only 9.5 percent of gross state product. In sharp contrast, the service industry accounted for
only six percent of the franchise tax but 14.2 percent of state economic activity in 1986.

## It has been well known for some time that one of the main structural objections to the franchise tax is its heavy concentration on a handful of capital-intensive industries.

There were also disparities between tax and GSP shares in the transportation, communication and utilities industry and the finance, insurance and real estate industry. As a result of these differences, the industries' reported tax as a percentage of GSP varied widely, ranging from over one-half percent for the mining industry, down to only one-tenth percent for services. The all-industry average was 0.25 percent.

This difference can also be seen
in the GSP index in the table's final column. This index essentially relates the reported tax as a percent of an industry's share of gross state product to the allindustry average, which is set equal to 100 . Index values under this scheme vary dramatically, from 42.49 for the service industries to more than 216 for mining.

It has been well known for some time that one of the main objections to the franchise tax is its heavy concentration on a handful of capital-intensive industries. These figures illustrate well that the gap between those bearing the highest burden and those bearing the lowest is very large. In fact, the gap between the all-industry average and the highest and lowest burdens is remarkably large.

## Interstate Comparisons

 A summary of current corporation franchise tax bases and rates is shown in Table 9. The table also indicates which of the states have a corporate income tax in addition to whatever levy they make onTABLE 8. Franchise Tax Distribution by Major Industrial Group, 1986

| Industry | Number of <br> Taxpayers | Total Tax <br> (millions) | Average <br> Payment | Average \% of <br> Receipts | Industry Share of <br> Total Reported Tax |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Agriculture, Forestry, |  |  |  |  |  |
| Fishing | 5,513 | $\$ 6.4$ | $\$ 1,167$ | $15.6 \%$ | $0.8 \%$ |
| Mining | 11,782 | 159.1 | 13,509 | 20.5 | 20.5 |
| Construction | 20,545 | 23.4 | 1,140 | 38.0 | 3.0 |
| Manufacturing <br> Transportation, Communi- <br> cations and Public Utilities | 16,615 | 150.6 | 9,067 | 10.0 | 19.4 |
| Wholesale and Retail <br> Trade | 9,243 | 138.8 | 15,011 | 21.6 | 17.9 |
| Finance, Insurance, <br> Real Estate | 63,329 | 129.4 | 2,043 | 21.0 | 16.7 |
| Services | 30,823 | 90.4 | 2,932 | 19.6 | 11.6 |
| All Other | 54,033 | 46.7 | 865 | 23.6 | 6.0 |
| All Industries | 60,055 | 32.1 | 535 | 19.8 | 4.1 |

[^50]1. Indexed to an all-industry average that equals 100 .
capital stock. Presently, 30 states employ some form of capital tax, while the rest typically use some sort of annual corporate license fee. In all of the fee states except one-Nevada-the principal form of taxation is the corporate income tax.

The 30 states which do have capital taxes levy them on a number of different bases and at various rates. Twenty-four levy the taxes on a base which is defined in terms of one or more components of a corporation's capital structure. Six states have tax bases variously measured by the number of shares of capital stock, the value of shares, the value of corporate-owned property, "net worth" or a combination of property and assets.

The rate structures are just about as variable. Most states define their taxes in terms of fixed amounts per $\$ 1,000$ of tax base, as in Texas, but other states set their taxes at millage rates or use percentage rates. In Massachusetts, New Jersey and New York, the state assesses a corporation's
franchise tax liability in conjunction with or in lieu of its liability for the state corporate income tax.

> Despite its relatively widespread use, the franchise tax is not the significant source of revenue in most states that it is in Texas.

Collections. Despite its relatively widespread use, the franchise tax is not the significant source of revenue in most states that it is in Texas. This can be seen in Table 10, which shows corporate franchise and license tax revenues and state business income tax collections for the 50 states in 1986. Nationally, capitalbased taxes produced about $\$ 3.1$ billion, of which Texas alone accounted for more than 30 percent. Other states collecting

|  |  |  |
| :---: | :---: | :---: |
| Industry Share of Gross <br> State Product (GSP) | Tax as \% of <br> Industry Share of GSP | GSP Index |
|  |  |  |
| $1.8 \%$ | $0.12 \%$ | 45.5 |
| 9.5 | 0.55 | 216.0 |
| 5.7 | 0.13 | 53.0 |
| 15.8 | 0.31 | 123.0 |
| 9.6 | 0.47 | 185.6 |
| 17.0 | 0.25 | 97.9 |
| 15.7 | 0.19 | 74.3 |
| 14.2 | 0.11 | 42.5 |
| 10.8 | 0.10 | 38.3 |
| $100.0 \%$ | $0.25 \%$ | $\mathbf{1 0 0 . 0}$ |

relatively sizable amounts of franchise tax income were Pennsylvania, Ohio, Louisiana, Tennessee, Delaware and New Jersey.

Of course, it should be emphasized that the relative size of the tax systems-and therefore the importance of the tax-differs considerably in these states. The Delaware tax, which generated $\$ 118.5$ million, far below the Texas dollar level, nonetheless accounted for 13.4 percent of its state government tax collections, 60 percent higher than the share accounted for by the Texas tax. For all states, the tax accounted for only 1.3 percent of state government tax collections.

Table 10 also shows corporate income tax collections (including the Michigan single business tax in the category), demonstrating the much heavier reliance on that tax nationally. It accounted for about eight percent of all state tax collections in 1986, compared with the one percent for the franchise tax. Together, the two general business taxes produced 9.4 percent of state government tax collections.

Without a corporate income tax, Texas' reliance on its general business tax is somewhat lower than the national average and is well below the states which rely heavily on general business taxes, notably Delaware, New Hampshire and Michigan. (This percentage may change somewhat in coming years, depending on the interplay of recent rate increases and litigation, which has reduced the base of the tax.)
It is important to recognize, however, that the table does not summarize all business taxes, and Texas has many special industry taxes that are significant revenue sources, such as the oil and gas severance taxes, the insurance premiums tax and the utilities gross receipts tax. In one recent study, Robert Tannenwald of the

New England Federal Reserve Bank found that about half of all of Texas' state and local taxes have
15. Robert Tannenwald, "Rating Massachusetts' Tax Competitiveness," New England Economic Review (NovemberDecember 1987), p. 43.
16. See Chapter 3, "Who Pays Texas Taxes?"
their initial impact on business, third highest nationally after Alaska and Wyoming, two other states with important severance taxes. ${ }^{15}$
The Committee's own review of Tannenwald's estimating technique suggests that it probably underestimates the initial impact of the sales and property taxes on business in Texas and that the
actual percentage of state and local taxes initially falling on business in this state is about 63 percent. ${ }^{16}$

## Business Tax Policy Issues

Partly as a result of poor economic conditions in the state and partly because of inherent structural elements with the tax, the

TABLE 9. Corporation Franchise Tax Bases and Rates by State, 1988

| State | Tax Base | Tax Rate(s) | State | Tax Base | Tax Rate(s) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | Capital' | \$3-10 per \$1,000 | Montana | None (fee) | \$10 |
| Alaska | None (fee) | \$100-200 | Nebraska | Capital Stock | \$13-15,000 |
| Arizona | None (fee) | \$30 | Nevada ${ }^{12}$ | None (fee) | \$30 |
| Arkansas | Capital Stock ${ }^{2}$ | 0.27\% | New Hampshire | Capital Stock ${ }^{\text {b }}$ | \$60-2,000 |
| California | None (fee) | \$5 | New Jersey | Net Worth ${ }^{\text {7 }}$ | \$2.00-5.00 per \$1,000 |
| Colorado | None (fee) | \$30-130,000 | New Mexico | None (fee) | \$50 |
| Connecticut | Capital Stock | 3.1 mills per dollar | New York | Capital ${ }^{9}$ | \$1.78 per \$1,000 |
| Delaware | No. of Shares | \$30-130,000 | North Carolina | Capital ${ }^{4}$ | \$1.50 per \$1,000 |
| Florida | None (fee) | \$25 | North Dakota | None (fee) | \$20 |
| Georgia | Capital ${ }^{4}$ | \$10-5,000 | Ohio | Capital Stock ${ }^{2}$ | 5.82 mills |
| Hawaii | None (fee) | \$15-100 | Oklahoma | Capital ${ }^{1}$ | \$1.25 per \$1,000 |
| Idaho | None (fee) | \$20-300 | Oregon | None (fee) | \$15-200 |
| Illinois | Capital Stock ${ }^{3}$ | 0.10\% | Pennsylvania | Capital Stock ${ }^{2}$ | 9.5 mills |
| Indiana | None (fee) | \$10 | Rhode Island | Capital Stock ${ }^{8}$ | \$2.50 per \$10,000 |
| lowa | Capital ${ }^{\text {a }}$ | \$15-3,010 | South Carolina | Capital Stock | \$5 + \$1 per \$1,000 |
| Kansas | Capital ${ }^{4}$ | \$1 per \$1,000 | South Dakota ${ }^{13}$ | None (Fee) ${ }^{10}$ | \$10+ |
| Kentucky | Capital ${ }^{1}$ | \$2.10 per \$1,000 | Tennessee | Capital ${ }^{4}$ | \$.25 per \$100 |
| Louisiana | Capital ${ }^{1}$ | \$1.50-3.00 per \$1,000 | Texas ${ }^{\text {² }}$ | Capital ${ }^{\prime \prime}$ | \$6.70 per \$1,000 |
| Maine | None (fee) | \$40 | Utah | None (fee) | \$25 |
| Maryland | Value of Shares ${ }^{6}$ | 130/10,000 of 1\% | Vermont | None (fee) | \$100 |
| Massachusetts | Property ${ }^{7}$ | \$7 per \$1,000 | Virginia | Capital Stock ${ }^{8}$ | \$25-850 |
| Michigan ${ }^{12}$ | None (fee) | \$15 | Washington ${ }^{12}$ | Privilege | \$50 |
| Minnesota | None (fee) | \$20 | West Virginia | Capital Stock ${ }^{8}$ | \$20-2,500 |
| Mississippi | Capital ${ }^{4}$ | \$2.50 per \$1,000 | Wisconsin | None (fee) | \$50-30 |
| Missouri | Capital ${ }^{4}$ | 1/20 of $1 \%$ over 200,000 | Wyoming ${ }^{12}$ | Property/Assets | \$10-100 |

Source: Commerce Clearing House, State Tax Guide, (1988).

1. Domestic corporations pay on a base of capital stock alone. Foreign corporations pay on a base which includes outstanding capital stock, surplus and undivided profits, long-term debt, indebtedness between the foreign corporation and its parent or subsidiary and, in some cases, other accounting items.
2. Base includes only "outstanding" capital stock.
3. Base includes capital stock and paid-in surplus.
4. Base includes capital stock, paid-in and earned surplus and /or undivided profits.
5. Base inciudes only "stated" capital.
6. Maryland's franchise tax is levied on savings and loan, building and loan and homestead associations. The base includes the value of the association's free shares purchased in Maryland and its other deposits as of December 31 of each year.
7. Corporation pays either the sum of a franchise tax on corporate property plus a net income tax or a minimum tax, whichever is greater.
8. Base includes only "authorized" capital stock.
9. Corporation pays higher of either franchise tax or net income tax.
10. South Dakota's corporation fee consists of an annual $\$ 10$ filing fee and an incremental capital stock increase tax assessed at graduated rates from $\$ 5$ per $\$ 1,000$ of additional "authorized" capital stock to $\$ 40$ per additional $\$ 500,000$ of increased capital stock.
11. Texas tax base is the greater of: the corporation's stated capital, surplus and undivided profits; or assessed value for county ad valorem tax purposes of the corporation's real and personal property. Rate is scheduled to revert to $\$ 5.25$ in 1990.
12. Denotes a state without a corporate income tax.
13. Income tax on banks and financial institutions only.

| State | Franchise Tax (millions) | Income Tax ${ }^{1}$ (millions) | Total Tax Collections ${ }^{2}$ (millions) | Franchise Tax as \% of Total | Income Tax as \% of Total | Business Tax as \% of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | \$73.1 | \$156.8 | \$2,997.1 | 2.4\% | 5.2\% | 7.7\% |
| Alaska | 1.0 | 177.8 | 1,856.5 | 0.1 | 9.6 | 9.6 |
| Arizona | 3.7 | 170.8 | 3,195.7 | 0.1 | 5.3 | 5.5 |
| Arkansas | 3.8 | 113.2 | 1,826.7 | 0.2 | 6.2 | 6.4 |
| California | 7.9 | 3,833.3 | 30,878.4 | 0.0 | 12.4 | 12.4 |
| Colorado | 2.4 | 116.9 | 2,344.4 | 0.1 | 5.0 | 5.1 |
| Connecticut | 8.2 | 616.8 | 3,836.8 | 0.2 | 16.1 | 16.3 |
| Delaware | 118.5 | 88.9 | 882.7 | 13.4 | 10.1 | 23.5 |
| Florida | 19.4 | 486.9 | 9,120.2 | 0.2 | 5.3 | 5.6 |
| Georgia | 13.8 | 418.1 | 4,917.1 | 0.3 | 8.5 | 8.8 |
| Hawaii | 1.0 | 43.7 | 1,490.7 | 0.1 | 2.9 | 3.0 |
| Idaho | . 2 | 42.7 | 744.7 | 0.0 | 5.7 | 5.8 |
| Illinois | 60.7 | 859.7 | 9,800.8 | 0.6 | 8.8 | 9.4 |
| Indiana | 4.9 | 183.6 | 4,458.2 | 0.1 | 4.1 | 4.2 |
| lowa | 14.3 | 138.6 | 2,459.2 | 0.6 | 5.6 | 6.2 |
| Kansas | 8.3 | 156.3 | 1,911.5 | 0.4 | 8.2 | 8.6 |
| Kentucky | 41.5 | 233.5 | 3,216.3 | 1.3 | 7.3 | 8.6 |
| Louisiana | 231.6 | 263.8 | 3,629.5 | 6.4 | 7.3 | 13.6 |
| Maine | . 9 | 51.9 | 1,101.4 | 0.1 | 4.7 | 4.8 |
| Maryland | 5.9 | 250.3 | 4,669.6 | 0.1 | 5.4 | 5.5 |
| Massachusetts | 11.8 | 1,068.0 | 7,668.4 | 0.2 | 13.9 | 14.1 |
| Michigan | 87.9 | 1,449.6 | 9,314.2 | 0.9 | 15.6 | 16.5 |
| Minnesota | 2.1 | 367.3 | 4,898.5 | 0.0 | 7.5 | 7.5 |
| Mississippi | 48.7 | 97.3 | 1,917.3 | 2.5 | 5.1 | 7.6 |
| Missouri | 41.5 | 174.2 | 3,608.1 | 1.2 | 4.8 | 6.0 |
| Montana | . 8 | 58.6 | 617.1 | 0.1 | 9.5 | 9.6 |
| Nebraska | 4.5 | 54.6 | 1,119.4 | 0.4 | 4.9 | 5.3 |
| Nevada | 3.6 | 0.0 | 1,048.3 | 0.3 | 0.0 | 0.3 |
| New Hampshire | 4.2 | 99.1 | 484.5 | 0.9 | 20.5 | 21.3 |
| New Jersey | 110.8 | 954.9 | 8,360.2 | 1.3 | 11.4 | 12.7 |
| New Mexico | 5.5 | 72.1 | 1,462.1 | 0.4 | 4.9 | 5.3 |
| New York | 16.6 | 1,901.9 | 22,747.4 | 0.1 | 8.4 | 8.4 |
| North Carolina | 93.6 | 512.1 | 5,579.7 | 1.7 | 9.2 | 10.9 |
| North Dakota | . 6 | 56.3 | 616.1 | 0.1 | 9.1 | 9.2 |
| Ohio | 324.4 | 477.8 | 9,062.2 | 3.6 | 5.3 | 8.9 |
| Oklahoma | 31.1 | 107.1 | 2,959.6 | 1.1 | 3.6 | 4.7 |
| Oregon | 3.6 | 161.7 | 1,931.3 | 0.2 | 8.4 | 8.6 |
| Pennsylvania | 474.0 | 963.2 | 10,683.2 | 4.4 | 9.0 | 13.5 |
| Rhode Island | 1.6 | 67.7 | 885.6 | 0.2 | 7.6 | 7.8 |
| South Carolina | 21.1 | 149.5 | 2,887.1 | 0.7 | 5.2 | 5.9 |
| South Dakota ${ }^{3}$ | . 8 | 23.6 | 403.7 | 0.2 | 5.8 | 6.0 |
| Tennessee | 143.6 | 268.6 | 3,272.0 | 4.4 | 8.2 | 12.6 |
| Texas | 924.3 | 0.0 | 11,124.7 | 8.3 | 0.0 | 8.3 |
| Utah | 66.5 | 66.5 | 1,364.8 | 4.9 | 4.9 | 9.7 |
| Vermont | . 6 | 30.5 | 499.5 | 0.1 | 6.1 | 6.2 |
| Virginia | 11.5 | 280.8 | 4,846.6 | 0.2 | 5.8 | 6.0 |
| Washington | 6.1 | 0.0 | 5,219.3 | 0.1 | 0.0 | 0.1 |
| West Virginia | 4.6 | 88.9 | 1,848.6 | 0.2 | 4.8 | 5.1 |
| Wisconsin | 4.1 | 407.6 | 5,491.5 | 0.1 | 7.4 | 7.5 |
| Wyoming | 2.7 | 0.0 | 795.4 | 0.3 | 0.0 | 0.3 |
| All States | \$3,073.9 | \$18,363.1 | \$228,053.9 | 1.3\% | 8.1\% | 9.4\% |
| Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections in 1986 (Washington, D.C., 1987). |  |  |  |  |  |  |
| 1. Includes the Michigan single business tax, which is a value added style tax rather than an income tax. <br> 2. Federal definition of tax collection includes license fee income. <br> 3. Banks and financial institutions only. |  |  |  |  |  |  |

Texas franchise tax is beset by major problems which put the possibility of business tax changes near the top of the tax policy agenda. Indeed, in his March 14, 1988, letter outlining additional legal problems for the tax, the Comptroller concluded that "obviously some changes will need to be made in the franchise tax if the Legislature wants this tax to remain a dependable source of state revenue."

Based on the foregoing examination of the underlying philosophy of state business taxation and the evolution and performance of the Texas franchise tax, it is possible to identify several overriding issues whose resolution ultimately appears to be central to deciding whether and how to deal with the franchise tax problem.
The first of these is the question of what constitutes the appropriate base of taxation. The problems-and benefits-of the capital base have been discussed, and the other major altern-atives-gross receipts, valueadded and income-have been outlined. Each presents its own unique benefits and drawbacks. All can probably be designed to work well and equitably; all can probably even more easily be structured to cause more problems than they solve.
Of course, one step in answering the question of which base is most appropriate is making some decision about what the appropriate distribution of the general business tax burden among industries should be. As this chapter has shown, the current franchise tax is far from neutral, falling heavily on mining, manufacturing and utilities. Other industries-most notably including the service industry-pay a much smaller relative share of the tax. How
important is this disparity? How should it be resolved? The tax base finally chosen may depend in large measure on how these questions are resolved.

## This chapter demonstrates that, laying aside the recent problems with litigation, the franchise tax has been a relatively stable tax base.

In a similar vein is the issue of what types of business forms should be included in the state's general business tax. Historically, most states, including Texas, have sought to design business taxes primarily geared to corporations, in part because of the special benefits corporations receive and in part because corporations are a large, dominant business form that presents a relatively easy and visible source of tax income.
The question is whether business practices have evolved to the point-or other equity considerations have come to outweigh these traditional factorswhere it is a valid time to consider including noncorporate entities along with corporations in the business tax structure.
Also related to the question of the best base of taxation is the issue of how tax stability and the relative certainty of business tax policy should trade off against the desire to produce a tax system that grows with the general economy. This chapter demonstrates that, laying aside the recent problems with litigation, the franchise tax has been a relatively stable tax base. Other bases-whether corporate in-
come, value-added or gross receipts-may have the potential to produce more income, but it is not clear that they would do much for the overall stability of the tax system. On the other hand, a tax whose base is being eroded in the courts is hardly a reliable source.
A fifth major issue is how business capital investment should be treated. The Select Committee on Tax Equity heard considerable amounts of testimony about the need to encourage capital investment, and yet one of the state's largest taxes is directly on the assets that accrue from that investment. The question is whether the taxes have risen to the point where they are a significant impediment to investment. This, unfortunately, is largely a matter of individual judgment. The actual effects of taxes on business decisions are poorly understood, and there is a lack of conclusive evidence in this area.
Finally, there is the question of what overall level of tax burden the state feels is appropriate for business. It is true that businesses ultimately shift taxes and that all taxes are finally paid by individuals, but it is nonetheless true that businesses are highly conscious of the taxes they pay.
Evidence suggests that Texas' franchise tax is actually below the national average in its contribution to overall state tax collections, although again, that may change (up or down) in coming years as recent rate changes and litigation have their effect. However, the state's overall percentage of taxes with an initial impact on business is much higher than the national average. What the mix between business and direct personal taxes should be will have important implications for business tax policyand, of course, for all Texans.

# B usiness Tax Policy: Six Critical Issues 

A Systematic Approach to Evaluating Business Tax Policy

## Summary

Any business tax can be described in terms of six basic issues. These include its tax base, rate structure, apportionment and allocation, level of consolidation of affiliated businesses, exemptions and exclusions, credits and adjustments.
While the choice of tax base is usually given the most attention, the other factors are also important and can have equal impact on a taxpayer's liability.
The choice of tax base includes approaches such as the current Texas franchise tax, the business income tax, a gross receipts tax and a value added tax like the Michigan single business tax. Each base has different economic characteristics and industry impact.
The tax rate is a function of the base and revenue requirements. In addition to setting the rate, a determination must be made whether the rates will be flat or progressive. There are good arguments for using flat rates for business taxes.
The division of the tax base of multistate businesses is most often accomplished by using an apportionment formula. While most states use a three-factor formula consisting of receipts, property and payroll, Texas currently uses a single-factor receipts formula. However, additional factors may be used at the request of the taxpayer. This gives taxpayers doing business in Texas the advantage of choos-
ing the apportionment formula most favorable to them.

Some states require each business entity to report for tax purposes on its own business. Consolidation of affiliated businesses is usually prohibited. Other states take the opposite approach, requiring consolidation under certain circumstances. The most controversial practice in current state business tax policy nationally is the requirement of worldwide consolidation of unitary businesses used in some states. However, there is a trend away from this approach.
Exemptions from business taxes are justified by various economic, social and political reasons. Many of these are not controversial, but each time a group is exempted, the remaining taxpayers must bear a heavier load to produce the same amount of revenue. Unincorporated businesses are one group not subjected to a business tax in Texas. Some advocate their inclusion to remove their advantage over corporations.

Finally, all states use exclusions, credits and adjustments to shape their taxes to local circumstances. The variety of these provisions is enormous.
By examining the individual elements of a state's business tax, one can more easily evaluate the policy choices that determine the final impact of the tax.

By Joe H. Thrash
Counsel to the Select Committee on Tax Equity

Texas' current general business tax, the corporate franchise tax, has been in place, essentially unchanged, since 1907. It has been the subject of more litigation than any other tax used in Texas. Recently, it has been the subject of considerable criticism as well as damaging litigation. Some critrics suggest that it has outlived its usefulness and should be replaced.

The entire issue of taxation of business is surrounded by disagreement. Any discussion of it is likely to begin with the proposition that "businesses don't pay taxes, people do," and go downhill from there. However, ignoring the fairly well established fact that business taxes will be passed to individuals in one way or another, all states have chosen to tax business directly at some level. No two of these taxes are identical , and the range is broad. Given that, there are still common issues that each state has to decide in writing its tax into law. By determining these issues, each state establishes its business tax policy.

Any state business tax can be described in terms of several basic elements. To a great extent, these elements are independent and can be chosen in any combination. Each choice will have an effect on who pays the tax and how much is paid in relation to other busi-
nesses: These elements include:
(1) Tax base
(2) Rate structure
(3) Apportionment and allocation
(4) Level of consolidation of affiliated businesses
(5) Exemptions
(6) Exclusions, credits and adjustments

While most attention is usually paid to the choice of the tax base, the other elements can have as much effect on an individual business' liability and can provoke as much controversy. Each choice must be carefully considered to produce a result that does not unfairly burden any particular group of taxpayers.
Unfortunately, one person's equity may be another's unfair burden. Any change to the current tax that produces as much or more revenue will produce winners and losers. However,
there are still some objective standards for evaluating business tax options. As the factors that go into the description of a business tax are described, an effort will be made to evaluate them as evenhandedly as possible.

## Tax Base

The determination of what is subject to tax, the tax base, is the threshold question in any tax policy discussion. It is a complex question, as involved with the result-who pays and how much -as it is with any economic theory. While a tax base could be arbitrarily determined, most state legislatures have felt constrained to choose from the conventional, accepted bases such as gross receipts, net income, value added or net worth, with minor variations on these major themes.

Business tax bases usually measure one of two things: the flow of money or accumulated value or wealth. Gross receipts,

## FIGURE 1. Comparison of "Flow" Tax Bases

## GROSS RECEIPTS

A gross receipts tax covers all of the business.


A value added tax deletes the external inputs from the base.


A net income tax deletes all inputs from the tax base.
value added and net income taxes measure different portions of the flow of revenues into a business (Figure 1). A gross receipts tax measures all of the revenues coming in. A value added tax deducts the value of the goods and services purchased from outside the business from the total flow of revenue to find the difference between the items purchased and the items sold. This amount is considered to be value that was added by the business. A net income tax deducts both external and internal costs of producing the goods sold and measures only the profits, receipts over costs (Figure 1).

Gross receipts taxes are still a common form of business taxation. In recent years, however, they have been increasingly limited to industry-specific taxes, such as the insurance gross premiums and utility taxes used in Texas. Only three states still impose broad-based gross receipts taxes-Hawaii, Indiana and Washington.

There is only one value added tax currently in use in the United States. That is the Michigan singlebusiness tax. It is an additivetype, modified value added tax. To calculate the tax, a business adds its net profits, wages, salaries, employee benefits and other compensation, interest paid, dividends paid, taxes and depreciation to calculate the value added. Another method of arriving at the same figure is to subtract the cost of goods sold from the gross receipts of the business. Both methods arrive at the same number if the terms are defined appropriately. The Michigan tax is called a modified value added tax because it does not add rental payments to the tax base, and it provides a number of other exemptions and credits.

The predominant business tax among states nationally is the
income tax on either corporations or on all businesses. This tax is used in 44 states and the District of Columbia. The measurement of net income varies considerably among the states. This subject is discussed in Chapter 16 "The Business Income Tax."
There are four types of business wealth taxes. The first is the capital stock tax, which includes only the par value of the common stock of the corporation. Next is a stated capital tax. To the par value of the common stock, this tax adds any premium from the sale of common stock and the proceeds from the sale of preferred or any other class of stock. The third type is the net equity tax. To the stated capital base, appropriated and unappropriated earnings are added and treasury stock is subtracted. The fourth type of tax is the invested capital tax. It adds long-term debt to the net equity base.
Thirty-one states use business wealth taxes (some states use both income and business wealth taxes). The capital stock base is used in nine; the stated capital base, in four; the net equity base, in 15 , including Texas; and the invested capital base, in three. ${ }^{1}$

In states that raise most of their business tax revenue from a corporate income tax, capital stock and stated capital taxes are frequently used as corporate license taxes. They generally have nominal rates.

The Texas franchise tax is an example of a net equity wealth tax. It is based on the capital invested and the net assets of the taxpayer. The value of capital includes the value of the stock and any additional capital that the stockholders have paid into the corporation. Net assets are defined as total assets minus total debts. These are accounting values rather than actual or market values such as would be
used for the property, tax. The liabilities are deducted to derive a net value. Texas at one time used the invested capital base, but long-term debt was phased out of the tax base several years ago.

## The Texas franchise tax is an example of a net equity tax.

Economic Basis for Taxation. The choice of a tax base must inevitably confront the age-old economic (and sometimes philosophical) argument between the "ability to pay" and the "benefitsreceived" theories of taxation for business taxes. The ability-to-pay theory of taxation holds that only when all other costs of doing business are paid and the business is profitable does it have funds that it can afford to expend on taxes. If the tax burden is imposed on an unprofitable business, it causes damage to the business and may eventually help bankrupt it. This is harmful to the economy in general. The benefits-received theory of taxation holds that the business is using the services provided by government without a direct charge whether or not it is making a profit. The business should pay something for the use of the roads, courts, police and fire protection and other services whether or not it is profitable.

Advocates of the ability-to-pay theory would propose the net income tax as the only tax that is appropriate for the taxation of business. If a business is not profitable, it should not bear a burden of taxation to make it lose even more money.

Proponents of benefits received, however, would advocate a tax system that measures the level of
economic activity of the business as a measure of the benefit provided by government. Further, net income or profit is an elusive figure, subject to manipulation. In the case of professional or close corporations, most of the profits can be distributed and a highly profitable operation can avoid most of an income tax. Gross receipts, value added or business wealth might be a better measure of the benefit received from the government.
Fortunately, it is not necessary to resolve this dispute to design a tax system. However, it is useful to remember the philosophical underpinnings when making choices that do affect those who bear the burden of taxation. No tax system completely breaks down along either of these economic approaches. Most tax systems blend the two concepts to some degree.
Revenue stability. Different tax bases have different economic characteristics. One of the characteristics most important to state government is the stability of the revenue stream. This is directly related to the volatility of the particular tax base.
Of the conventional tax bases mentioned above, three tend to be relatively stable and one tends to fluctuate. Wealth taxes tend to be very stable because they are based on the cumulative value acquired over the life of a business. These taxes usually have low tax rates applied to a large base. For example, the Texas franchise tax has a rate of 0.67 percent of the capital and net assets allocated to Texas. The cumulative value of all the corporations doing business in Texas is a very large figure indeed, and even in a bad economy, it does not change much.

[^51]Gross receipts taxes also have a large base that does not change rapidly. These taxes measure the total receipts of the businesses during the tax year in the taxing state. Essentially, they are a measure of consumption in the state. This, too, tends to be a relatively stable figure. It is somewhat more subject to fluctuations in the economy than the wealth base since it measures an annual period rather than a cumulative total. However, even in a recession, there is a continuing base of consumption although there may be changes in the nature of the goods purchased (such as a shift from luxuries to necessities). Tax rates for gross receipts taxes also tend to be low because of the size of the base. The Washington business and occupation tax, one of the last general business gross receipts taxes, has variable rates from 0.001 percent to 30 percent. It must be noted that the higher rates are reserved for items that typically are excise tax items such as alcoholic beverages. Most rates are under 0.5 percent, with services taxed at 1.5 percent.
As previously mentioned, the value added tax differs from the gross receipts tax by deleting from the base the external cost of the goods or services produced by the
2. Comptroller of Public Accounts, Texas and Taxes: A National Survey or Alternatives and Comparisons (Austin, March 1987).
business. This reduces the size of the base and increases volatility slightly. It is still a relatively broad based tax with a low rate when used as a business tax. The Michigan single business tax has a rate of 2.35 percent. That rate produced about $\$ 1.5$ billion in 1986 in Michigan. That compares with about $\$ 900$ million from the Texas franchise tax at a rate of 0.525 percent.

## The most volatile of the business tax bases is the net income tax.

The most volatile of the business tax bases is the net income tax. Business profits tend to fluctuate with the state of the economy. In good times, they are relatively high, and in a recession, they sometimes drop drastically or disappear altogether. Net income is measured on an annual basis, although there may be losses carried forward or backward into other years. It is the smallest base, with relatively high rates. State corporate income tax rates have been as high as the 13 percent rate recently repealed in Minnesota.
The volatility of the corporate income tax base is clearly a drawback to its use. State legislatures have frequently been faced with the unpleasant task of raising

| TABLE 2. Texas Tax Bases for Major Types of Taxes, 1989 |  |
| :--- | :---: |
| Current Franchise Tax | $\$ 174$ billion |
| Gross Receipts Tax | $\$ 545$ billion |
| Value Added Tax (Michigan SBT) | $\$ 118$ billion |
| Corporate Net Income Tax | $\$ 35$ billion |
| Source: Select Committee on Tax Equity. |  |
| Note: These estimates are based on data from the Comptroller of Public Accounts. |  |

the rate of the tax in a recession due to declining revenues, increasing the burden on the remaining profitable businesses.
To put the base of these taxes in perspective, a comparison of the size of each base in Texas can be made. By taking the Comptroller's revenue estimate for 198889 and the tax alternative estimates from Texas and Taxes, it is possible to approximate the bases for the current franchise tax, a gross receipts tax, the singlebusiness tax and the net income tax. ${ }^{2}$ This is done by taking the estimated revenue and dividing by the rate to get the base. This is done for illustrative purposes only. Obviously, there are undercollection factors, base exemptions and other adjustments built into the Comptroller's estimates. However, for a rough base comparison, these approximations are adequate.
Table 2 illustrates the wide range in size of tax bases available to the state. Rates could be set to produce the same amount of revenue from each tax base.
Industry impact. The different tax bases have very different impacts on different industries. In fact, it is the different impact of the Texas franchise tax on various industries that started much of the current discussion about the other options (See Chapter 12 "Texas Business Tax Policy: Background and Issues.") It is possible to modify these characteristics through exemptions, credits and other modifications to neutralize the tendencies or, at least reduce them. This section will concentrate on the unmodified versions of the taxes.
A net income tax is the most neutral among different industries. It taxes the profitable businesses, whatever they do, and bypasses those that are not making money. A business may not be making money for any one
of a myriad of reasons, some of which may justify its escape from taxation and others of which may not. A new business just getting started might make a good candidate for tax relief. An old business that is inefficiently managed might not. Of course, the net income tax is indifferent to any such reasons for the failure of the business to make a profit.

A value added tax, such as the Michigan tax, has its heaviest impact on labor-intensive industries. Statistics from the Michigan Department of Treasury show that 76.7 percent of the unadjusted tax base would be composed of wages, compensation and other employee benefits. ${ }^{3}$ Because of this weighting, Michigan has chosen to limit the amount of compensation in the base to 63 percent through credits. Even with the modification, the tax tends to fall most heavily on certain types of manufacturing and service industries that rely on the skill and effort of their employees to make a profit. Industries that are less labor-intensive pay less tax.

A gross receipts tax, on the other hand, falls most heavily on businesses that rely on high turnover or sales volume. Such industries as wholesaling and retailing-and particularly lowmargin businesses like grocerspay more under gross receipts taxes than the other forms of business tax.

The wealth taxes vary in their impact, too. The stock and stated capital taxes tend to be minimal in impact and used more as license fees than serious revenue-raising mechanisms. To the extent they have impact, it is on heavily capitalized businesses. The net equity taxes, such as the Texas tax, do have a more significant impact on business. They tend to fall on the heavily capitalized industries such as oil and gas, refining,
utilities, transportation and heavy manufacturing. The invested capital tax would have a similar impact but would be neutral between borrowed capital and invested capital since long-term debt is included in the tax base.

## Establishing tax rates tends to be an imprecise art, subject to trial and error.

## Tax Rate Structure

This section addresses two questions concerning the rate at which a business tax might be imposed. One is the actual numerical rate of the tax. The other is whether the rate is a single proportional rate or a progressive series of rates.
In setting the rate of a tax, a legislature must consider and balance several factors. First are the revenue needs of the state. Most states, including Texas, operate under some form of balanced budget requirement. Given this, tax rates must be set with a goal of raising enough revenue to cover the obligations of the government. This seldom can be accomplished with a single tax, so each rate must be set in some rough balance.
Another of the factors to be balanced is the competitive advantage or disadvantage that might result from a low or high tax rate $v i s-a-v i s$ other states. If a high tax rate will cause businesses or purchasers to flee to neighboring states, a legislature might be wise to set the rate of the tax at a comfortable margin below that rate. Even in a situation where flight is not possible, tax policy can have negative effects on growth, and this must be considered.

Since establishing rates is a political process, legislators are also likely to consider how voters will react to high or low tax rates. This is a significant enough factor that some might have placed it at the beginning of the list rather than at the end.

Establishing tax rates tends to be an imprecise art, subject to trial and error. Until lately, the only truism about them seemed to be that they only go up. The federal Tax Reform Act of 1986 and actions of states following its adoption have disproved that.

The question of flat or progressive rates is another matter. There has been a recent trend toward flat or less progressive rates. Particularly in the field of business taxes, there may be considerable justification for this trend.

Progressive rates, or progressivity achieved through an exemption for the first several thousand dollars of profits, provide an incentive for businesses to subdivide into smaller units to avoid taxation. This may or may not impede business efficiency but is clearly a distortion of what might otherwise be the practice. This economic distortion causes wasted effort on the part of businesses, attempting to reduce tax liability without producing any real goods or services that would contribute to the state product. Progressive rates also favor small businesses over large and create disharmony that might otherwise have been avoided.
An argument in favor of progressive business tax rates is that there are economies of scale in business. Larger businesses have lower operating costs per unit of volume and can afford to pay taxes at a higher rate.

[^52]Another consideration on rates exists in states that have both a personal and a corporate income tax. If the highest rates of the two taxes are very far apart, it creates an incentive to incorporate or disincorporate to qualify for the tax with the lower rate.
Tax rates are not entirely independent variables. They are a function of the tax base and the need for revenue. Once the base is established, the goal for the rate is to set it as low as possible, whether it is a single, flat rate or a series of progressive rates.

## Apportionment and Allocation

If a company is doing business in more than one state, the U.S. Constitution will not allow one state to tax it on its entire tax base. This is a requirement of the Constitution's commerce and due process clauses. If more than one state taxed the same activities in interstate commerce, it would be an impermissible burden on the business.

Conversely, if a corporation is doing business in only one state, it has no right to apportion its tax base. It is fully taxable in the one state.

There have been several different methods developed by the states to deal with this requirement. When most states taxed the property of businesses and little else, the physical location was an adequate method for allocation of interstate business. As taxes evolved and businesses became more mobile, the division of the tax burden among the states allocating became a more elaborate process.

One of the early methods of allocation was the requirement that a business separately account for its operations in the various states in which it did business. This, too, became cumbersome as
interstate operations became more common and fully integrated multistate operations became the norm rather than the exception. Separate accounting still exists as an option in many states but is infrequently used.
> ... if a corporation is doing business in only one state, it has no right to apportion its tax base.

Another development was the allocation of specific items of income or receipts to a specific location with a bearing on the earning of the income. This led to such innovations as the "mobilia rule," which allocates items to the commercial domicile of the owner. This provided some certainty for allocation of highly mobile property, since there was always a domicile for allocation. However, it was considered unfair to states that did not have a high concentration of corporate headquarters. The concept is still used in some states for items such as dividends, interest income and the like. In Texas, of course, income is not the object of the allocation, so this type of division is not applicable. The net worth of a business could be divided by the location of physical assets, but in practice this is not done.

Unfortunately, the earning of income often takes place in continuous, undifferentiated ways. Manufacturing might take place in several locations to produce components taken to another location for assembly, leading to a sale in yet another place. This problem led to the development of the predominant method in use today, formula apportionment.

In formula apportionment, items such as gross receipts, real and tangible personal property owned or payroll are divided between the amount in the taxing state and the total amount in all states (or worldwide) to give a ratio. If more than one factor is used, they are averaged to give a final allocation percentage. That percentage is multiplied times the entire tax base to give the portion of the total that is taxable in the particular state. The allocated tax base is then multiplied times the tax rate to give the tax liability.

The three factors mentionedreceipts, property and payroll-are the ones most commonly used for tax-base apportionment. While all three are most often used together, there are several variations, with one or two factors or with weighting of one factor more heavily than the others.

The property and payroll factors are linked to the benefits theory of taxation. The presence of a business in a state is largely determined by the amount of its property and the number of its employees in the state. The services provided by the state are generally to protect the property and employees, educate the children of the workers and so on.

The receipts, or sales, factor is a measure of the business's ability to exploit a states's markets. Under current application of state law, receipts are measured on a destination basis. In other words, the receipts are attributed to the state to which the goods are shipped. This has not always been the case.

In earlier times, the receipts factor was determined by the "origin rule," attributing the receipts to the place from which the goods were shipped; the "sales office rule," attributing the receipts to the place where the personnel making the sale maintain their offices; or the "sales
activity rule," attributing receipts to the place where the sale solicitation took place. Each of these methods of handling the receipts factor had problems. The first tended merely to reinforce the payroll and property factors. The second and third were administratively difficult, since precise records had to be maintained for the sole purpose of allocation.

The destination rule finally evolved as the preferred method. Records showing the destination of sales were usually already maintained in the form of shipping documents. No extra effort was required to create a paper trail. In terms of policy, the destination basis for receipts made it possible for states that were more active consumers than producers to tap a share of the business tax base that had previously been denied to them. ${ }^{4}$

However, market states could not automatically take advantage of the receipts factor to tax out-ofstate corporations. Before a state has jurisdiction to tax a corporation, there must be nexus-or minimum contacts-between the state and the business. Merely shipping goods into a state does not give the state jurisdiction for tax purposes. Keeping an office in the state does. The question of whether a salesman entering the state to solicit orders is enough to give a state jurisdiction to tax is controlled by federal Public Law 86-272. ${ }^{5}$ This law applies to taxes measured by net income rather than capital stock. Texas attempts to collect tax from businesses with salesmen soliciting orders in Texas.

The fact that some receipts are not taxable in the state of destination led to the development of a rule to prevent corporations from having some receipts not subject to apportionment in some states. This is called the "throwback rule." If receipts are not taxable at
the point of destination of the goods, then the receipts revert to the state of origin for inclusion in that state's apportionment formula.

The application of apportionment factors is not always a simple matter. For example, a rule adopted by the Comptroller concerning the receipts factor for the Texas franchise tax was 14 pages long. The technical rules for the application of the laws are often the subject of litigation.

Apportionment formula options. The most frequently used apportionment option among all states is a three-factor formula of receipts, property and payroll, with equal weight applied to each factor. It is the most common formula used for both income and net worth taxes. It is used in 34 states, with some slight variations for specific businesses. This is the standard recommended in the major attempt to standardize the practices of the states, the Multistate Tax Compact. The Multistate Tax Compact is an agreement among several states to standardize the apportionment of business income. This is accomplished through each state's adoption of the Uniform Distribution of Income for Tax Purposes Act (UDITPA).

Texas, however, primarily uses a single-factor formula based on gross receipts, although the law allows taxpayers to request the use of either payroll or property or both. Taxpayers can also request the use of separate accounting, but that has not been used recently, according to the Comptroller's office. Separate accounting is the use of a system that divides the business of a corporation according to the location where the income is earned. There would be a separate set of books for each state where the business operates.

These options rest with the taxpayer, not the Comptroller. The

Comptroller has no authority to require the use of a specific formula by a taxpayer, no matter how much more accurately it might divide the corporation's capital. In practice, taxpayer requests for different factors are routinely granted, as long as they are made in a timely manner.

The optional use of different factors allows corporations doing business in Texas a distinct advantage. As the effects of the different formulas are examined, remember that a corporation in Texas may choose the formula that is most advantageous to it. Eliminating the Texas law allowing the use of additional factors would require some taxpayers to pay more tax, without offering a savings to anyone.

Texas is a member of the Multistate Tax Compact but has not made great use of its provisions. The compact has less application to Texas' franchise tax than it would to a corporate income tax. The three-factor formula is a part of the Texas Tax Code (Chapter 141) but coexists with the more specific provisions of the franchise tax (Chapter 171).

The use of a single factor, receipts, for tax apportionment has the effect of shifting the tax burden away from businesses located principally in the taxing state. This is due to the fact that the other factors, property and payroll, reflect the concentration of business assets within the state. Corporations selling their wares in many states will have their tax spread over many of them. A shift from receipts to a mandatory three-factor formula will increase the tax for domestic businesses. Iowa's use of a single-factor
4. Jerome Hellerstein, State Taxation, Vol. I (Boston: Warren, Gorham and Lamont, 1983).
5. 15 U.S.C. sec. 381 (1959).
receipts formula was upheld by the U.S. Supreme Court in the case of Moorman Manufacturing Co. $v$. Bair. ${ }^{6}$ In that case, an out-ofstate manufacturer complained that the formula favored Iowabased businesses and therefore violated the federal Commerce Clause. The Court acknowledged that there was a disparity in the tax that would have been paid if a three-factor formula had been used but did not find that it rose to the level of a constitutional violation. All such formulas are approximations, and some latitude in their effects is allowable. Texas, with its optional use of the additional factors, is in no jeopardy at all constitutionally.
Thus, the principal users of the optional factors under the Texas law clearly are corporations which have more of their facilities outside Texas and which sell more goods in Texas, proportionally. A change to a mandatory singlefactor formula would tend to generate additional revenue from companies located outside the state. There would not be a penalty on businesses locating in Texas, presuming that they would make sales to the same customers whether located in Texas or elsewhere.
Presumably, corporations would not pass up sales into Texas solely because they would increase the apportionment of the firm's business taxes to Texas. The profit from the sales should more than offset the additional tax. This effect exists to some extent whether one or three factors are employed.
However, it is unlikely Texas could change to a mandatory single-factor formula without a
6. Moorman Manufacturing Co. v. Bair, 437 U.S. 267, 98 S.Ct. 2340 (1978). The Court held lowa's single factor apportionment formula constitutional with Justices Brennan, Powell and Blackmun dissenting.
fight. The interests of foreign corporations doing business in Texas are well represented.
By the same token, a change to the predominant three-factor formula would penalize multistate businesses currently located in Texas and those contemplating locating here. This could be a detriment in the effort to attract new business to Texas.

Another formula option is the weighted three-factor formula. In this option, one factor, usually receipts, is given additional weight over the other factors. It is usually double-weighted. This means that it is 50 percent of the apportionment value and the property and payroll factors are 25 percent each. The effect of this is to shift the tax burden toward those companies that have more sales in the state than facilities located in the state. It is a less drastic shifting than occurs in the single-factor receipts formula. This formula is used in seven states.

The importance of the apportionment of the tax base cannot be overemphasized. If the factors are changed so that the allocation of a corporation's tax base is increased 50 percent, the actual tax paid will increase by that same 50 percent in a flat rate tax. This could cost a company much more than might ever be offset by investment credits or other such tax preferences.

## Consolidation of Affiliated Businesses

This is a category that is not entirely separable from the idea of apportionment of income. It includes the apportionment concept of unitary business and the question of whether each business entity must file a return on its own business or whether consolidated filing will be allowed or required.

Texas and most other states require that each corporation file a tax return on the business of the individual corporation. The other approach, used by the federal government and some states, allows, and sometimes requires, affiliated corporations to file one consolidated tax return. This works well for most businesses. It is the small minority of businesses that are part of an affiliated group. Unfortunately, the ones that are part of groups tend to be the largest taxpayers.
In the context of Texas' franchise tax, there are two areas in which separate filing creates problems. These are in the valuation of the ownership of affiliated companies and the receipts between them. Texas has dealt with the problem of pyramiding taxation of parent and subsidiary corporations, or double taxation, by using the historical cost of the subsidiary corporation. This prevents the taxation of the increasing value of the equity in the subsidiary as the value to the parent increases. It also prevents the parent from reducing its taxes if the subsidiary is losing rather than making money. The problem here is one of distortion of the actual value of the subsidiary to the parent. In a consolidated report, the value is deleted and the subsidiary is taxed directly. Of course, the subsidiary is taxed separately on its own value when there is separate reporting, but this is in addition to the taxation of its value to the parent.
Intercorporate receipts are another problem of separate reporting. In determining receipts for transactions among related companies, artificial values are sometimes assigned to represent the movement of goods in what is a continuing manufacturing or other business process. Income and net worth become dependent on artificial intercompany pricing
decisions. This can produce distortion of not only the tax base, but also the apportionment formula. In a consolidated report, these receipts are ignored for both purposes.
While many taxpayers object to what is in essence separate accounting for operations of related companies, the other side of this coin has its problems, too.
Federal income tax law requires that corporations with 80 percent or greater common ownership file their federal corporate income tax returns as a consolidated group. The states have chosen to develop their own standards for consolidated reporting. While most states do not allow consolidation, others have decided that consolidation more accurately represents the business of some companies. They require consolidated reporting of "unitary" business.
The proponents of unitary apportionment argue that if a business functions as one undifferentiated unit, it should be taxed as such. They look to three factors to see if a business should be considered unitary: unity of ownership, unity of operations and unity of management and control. ${ }^{7}$
Required consolidation of related businesses has been opposed most vociferously by taxpayers in cases where the consolidation includes foreign operations. This is known as the concept of "worldwide unitary apportionment" of business income. The alternative offered is the "water's edge" apportionment, excluding foreign operations from the calculation of the tax. This controversy has raged in the state tax policy arena for some years, and although the proponents of worldwide unitary apportionment have prevailed in the courts, the trend among states is to return to the water's edge approach if unitary apportionment is used at all.

Worldwide unitary apportionment served to bring into the taxing jurisdiction of states profitable foreign operations. The purpose of the method is revenue enhancement, not equity, and the tax administrators do not deny this.
The objections to the method are just as deeply rooted in the selfinterest of the taxpayers. It often costs them many dollars. There are other objections as well. The cost of administration of unitary accounts is often excessive. Foreign governments frequently require different accounting systems, and it is difficult to translate all of the businesses into the same system to determine a realistic worth or income figure.
Some states limit consolidation to those corporations that are actually doing business in the taxing state. This appears to be a reasonable compromise, but one that is not without problems. It essentially guarantees a consolidated group that will be different from that reported to any other state.
The net result of this controversy is that if any consolidation is to be allowed or required, businesses will greatly prefer the water's edge method. There is far less disagreement between separate reporting and a water's edge consolidation method. There are frequently additional taxes to be paid, but neither the administrative costs nor the size of deficiencies that occur in worldwide unitary consolidation.

## Exemptions

In every state, there are businesses that are taxed in different ways-or not taxed at all-for a variety of reasons. The reasons may have to do with social policy, economic policy or the peculiarities of the individual business. The use of the term "exemptions" in this section-as opposed to the
next section on exclusions, credits and adjustments-is intended to mean only those businesses that are entirely outside the business tax base.
Exemptions have been referred to by courts as the antithesis of equality. If one class of taxpayers is exempt from taxation, the burden falls more heavily on those that remain subject to the levy. For this reason, exemptions are not favored in the courts. Each taxpayer claiming an exemption must clearly come within the exemption as it is expressed in the law. Exemptions undermine the uniformity of a tax law. If overused they can lead to a perception that a tax is unfair or full of "loopholes."
Even with this bias against them, there are many exemptions that are traditionally granted, and many to which few people would object.

The largest group normally excluded from a business tax base is the nonprofit organizations, whether incorporated or not. These groups are generally excluded as a matter of social policy. They include churches, service organizations, social welfare organizations, educational and child care organizations and a myriad of others doing socially worthy things that should not be impeded by taxation.

In the case of a net income tax, the exclusion of these groups seems self-evident, since they are generally prohibited by law from having profits that could be taxed. They might have receipts or valueadded, though.

Another type of organization fitting into this category is the mutual betterment groups often organized for business purposes but still not for profit. This
7. Butler Bros. v. McColgan, 17 Cal. 2 d

644, 111 P.2d 334 (1941), affl'd 315
U.S. 501 (1942).
includes agricultural and utility cooperatives, credit unions and homeowners associations. Political organizations and labor unions also qualify. There is frequently a gray area on the fringe of these groups that many think display less "worthiness" than others, but that is not an issue here.

What frequently is at issue is the problem of unrelated business income that nonprofit groups sometimes generate. The federal government and, following that lead, the states, have generally decided that it is not in the government's interest to allow nonprofits to compete with taxpaying businesses. Such income is usually taxed as any other forprofit business would be.

Another group frequently excluded from general business taxation is regulated industries. The statutes regulating the businesses often determine what the profit of the business should be. In this circumstance, it is more logical to use a gross receipts tax that can be directly computed as a part of the rate base. This avoids arguments about pretax and after-tax profits in the regulatory process.
Insurance companies are often, but not always, excluded from the general business tax. The use of retaliatory taxes for out-of-state companies writing insurance in a state has generally resulted in the use of gross premiums taxes as the primary tax on this industry.
Financial institutions such as banks and savings and loans are often excluded from the general business tax. They may be subject to an intangible property tax or may be untaxed.
Finally, agriculture, either on the family farm level or in its entirety, may also receive an exemption.
Unincorporated businesses.
The question of whether a business tax should include only corpora-

[^53]tions or all unincorporated entities is not so much one of exemption but one of the scope of the tax base. However, the concept generally is the same. There is a historical difference in the treatment of corporations. They were and are-taxed for the privilege of the state authorizing the creation of an artificial "person." The cor-
> . . . only in New Hampshire and Michigan have unincorporated businesses been included in the business tax base in the same manner as corporations.

poration has many of the privileges of a natural person and the real owners of the business can be shielded from personal liability. Many states have a nominal corporate license fee that is compensation for this. The income tax is then a tax on the profits of the business and is less dependent on the form of the business.
If a state has both a corporate and personal income tax, unincorporated business income is taxed under the personal income tax. However, in a state such as Texas, with neither, unincorporated business income is not taxed. The states without both personal and corporate income taxes include Texas, Alaska, Michigan, Nevada, South Dakota, Washington, Wyoming and Florida. In addition, Connecticut, New Hampshire and Tennessee have limited personal income taxes on interest and dividends and, in Connecticut's case, capital gains. The states that have chosen to tax unincorporated businesses under a business tax include Michigan, under its single business tax, and

New Hampshire, under its business profits tax. In addition, the District of Columbia taxes unincorporated businesses separately even though it has an income tax. Presumably, these taxes are to prevent the disparity in taxation of corporate profits and dividends and profits of unincorporated businesses.
Most states capture unincorporated business income through broad-based personal income taxes ( 40 states). It appears that most of the other ten states are not greatly concerned over the exclusion of unincorporated businesses from their business tax base. Corporations pay a license fee or other tax even where they are not subject to an income tax (five states), but only in New Hampshire and Michigan have unincorporated businesses been included in the business tax base in the same manner as corporations.

There may be some justification for the lack of concern. Extrapolating from data from the Michigan Department of Treasury concerning the single business tax, the total of tax paid by unincorporated businesses and Subchapter S corporations was not more than eight percent of the total tax. These accounted for about 26 percent of the filers, including no-tax-due returns. This does not include another 52,000 taxpayers, about 25 percent of the total, not required to file. ${ }^{8}$

While the revenue consequences of omitting unincorporated businesses from the business tax base may not be large, there may be other reasons to include them. One is to increase the neutrality of a tax. If one form of business organization is favored over another in the tax laws, there may be an artificial shift toward the favored organization. Thus, businesses may disincorporate in order to gain favored tax treatment. This may have adverse
effects on other aspects of the business, such as the loss of protection from personal liability for the owners of the business. (Others might say this is an advantage rather than a disadvantage. In any event, it is a distortion of the decisionmaking process.)

## Exclusions, Credits and

 AdjustmentsIn addition to exemptions of certain types of businesses from the state business tax, most states have included other modifications of their taxes to encourage (or occasionally discourage) certain types of expenditures by the taxpayers. Other reasons for departing from the basic tax include requirements of federal law and attempts to create equity where disparities in the effect of the calculation of the tax base are perceived.

The Texas franchise tax has relatively few adjustments to the tax incorporated in the law. It appears likely that this is due to the fact that it is a net worth tax rather than an income tax. However, there is no reason why a long list of adjustments could not have been added during the years the tax has been in existence. Interestingly, the few adjustments illustrate the most common methods that legislatures use to alter a tax.

The first adjustment to the franchise tax is a deduction from gross receipts in the apportionment formula rather than an adjustment to the tax base. The tax law allows a taxpayer who sells food and medicine that has been shipped from outside the state to deduct those sales receipts from his Texas receipts when calculating his percentage of Texas business for tax purposes. The impact of an adjustment to the apportionment formula is highly variable, depending on the overall size of the tax base and the relationship of the exempt receipts to the
total receipts of the taxpayer. Under certain circumstances, it could provide a tax benefit in excess of the value of the receipts themselves.

A more common method of altering a tax is a direct deduction of an amount from the tax base. Under the Texas law, for example, a deduction from taxable capital is allowed for the amortized cost of certain qualified solar energy devices. The value of this direct deduction will be the cost of the item (the amount of the deduction) times the tax rate times the apportionment percentage.

A third method of altering a tax is to allow a credit against the amount of tax due. In this case, the state allows the surviving corporation following a merger to take a credit for taxes paid to the Comptroller by the nonsurviving corporation.
The value of a credit of this type is generally greater than the value of a deduction. It is a reduction of the amount of tax owed rather than the tax base. Frequently, credits are given as a percentage of the amount expended rather than a dollar-for-dollar reduction in tax.

Finally, certain corporations are allowed to pay tax at a reduced rate. Again, the Texas law provides that qualified utility holding companies may pay tax at one-fifth of the rate imposed on other corporations. The value of this adjustment, obviously, is substantial.

A common use for deductions, credits and adjustments in other states is to modify the federal corporate income tax base to the state's particular desires. Frequently this includes additions to the tax base as well as deductions. The items most often receiving special treatment include net operating loss carrybacks and carryforwards; intercorporate dividends; foreign-source income; preenactment gains and losses; charitable
contribution deductions; interest income from federal, state and local obligations; deductions for taxes paid to other governments; depreciation, depletion and amortization; bad debt reserves; capital gains and losses; and interest received from affiliated companies.

Since the enactment of the federal Tax Reform Act of 1986, states have had to review their individual policies toward tax credits to determine whether they wish to preserve any of the tax incentives that were deleted from the federal law. Principal among these is the investment tax credit. The investment tax credit has come and gone more than once and has received mixed reviews as to its worth in stimulating investment. However, some states have determined that it is in their interests to offer this tax break in the hope of luring new industry or stimulating the old.

There have been many similar credits in both state and federal law. They include credits for research and development, targeted jobs, enterprise zones, en-ergy-saving devices, van-pools and others. The efficacy of such tax expenditures in promoting whatever the object of the particular credit is for is open to question and many studies exist trying to provide the definitive answer to that question. The subject is beyond the scope of this chapter.

## Conclusions

A business tax is the sum of its parts. While most discussions of these taxes focus on the tax base, there are many more factors to be addressed. The revenue consequences of the other factors can be just as large. Similarly, the effect on individual taxpayers can be just as drastic. Equal care should be taken to insure that each factor is designed to promote, or at least not defeat, the same goals.

# T axes and the Economy 

State and Local Taxes and Their Impact on Economic Development

## Summary

Economic problems and growing national and international competition for jobs and industry have led state and local governments to focus more resources on economic development in recent years. Inevitably, tax policy has become involved in these development strategies. Most states offer some mix of incentives designed to increase their attractiveness to business.

In a sense, this is an ironic development because for many years most economic studies concluded that taxes had at best only a limited impact on business decisions. This perception appears to be evolving. Recent studies have shown that taxes do have an impact on many business decisions, and this role is becoming more prominent.

Examining the states in terms of their tax competitiveness can be instructive, and this chapter examines several approaches.

In general, Texas' tax system has a larger initial impact on business in percentage terms than the systems in most states, according to these studies, but its overall dollar burden falls generally near the middle of the 50 states. Analyses of individual hypothetical firms have found the Texas tax system to be favorable in its effect on aftertax return on investment.

Tax competition among state and local governments is likely to continue for the foreseeable future. This competition has led
many states to adopt a number of special incentives for economic development purposes. Texas generally has not enacted as many of these incentives as other major industrial states, probably because it has enjoyed a favorable business climate for many years without them. Economic research has questioned the effectiveness of these incentives when they are designed to attract specific businesses. For the most part, experts believe that if they are used, incentives should be generally available to avoid uncertainty over tax policy, which is itself harmful. The use of these incentives also must be balanced against state and local revenue needs.

Among the tax policies designed to stimulate development which Texas does not use are the exemption of inventories from local property taxes, the use of special credits for research and development investment and the exemption of production machinery from the sales tax. The state did approve the phase-out of the tax on production machinery, scheduled to begin in 1991.

States benefit most economically from moderate, balanced tax systems that provide necessary public services without unnecessary extravagance. Tax policy should be predictable, and the burden of taxes distributed as equally as possible among taxpayers.

By Billy Hamilton Executive Director of the Select Committee on Tax Equity<br>and Tom Linehan Planner at the Texas Department of Commerce

## Introduction

$\square$truggling state economies and the growing national and international competition for jobs and industry have led state and local governments to focus more resources on economic development in recent years. Almost without exception, government officials advocate the use of tax policy as an element in these development strategies. Nearly every state provides some combination of tax incentives designed to increase its economic attractiveness, and contentions about the potential impact on business activity are important in most debates over tax policy changes.

In a sense, these are ironic developments, because for many years virtually all economic research pointed to the conclusion that taxes had at best only a limited impact on business decisions, particularly in comparison with such factors as labor costs, the availability of raw materials, transportation and so on. Taxes normally were found well down the list of factors firms said were most critical to their economic well-being.

In recent years, though, there has been a shift in perceptions.

A "revisionist" case has emerged highlighting the role of taxes in business decisions and especially in business location choices. "Call it myth or call it symbolism," James and Leslie Papke have written, "but tax policy initiatives are being formulated because or 'as if' tax differentials exercise considerable leverage. . . ${ }^{11}$

## Do Taxes Matter?

One of the least well understood

1. James Papke and Leslie Papke, "Measuring Differential State-Local Tax Liabilities and Their Implications for Business Investment Location," National Tax Journal, Vol. XXXIX, Number 3 (September 1986), p. 357.
2. See University of Michigan Survey Research Center, Industrial Mobility in Michigan (Ann Arbor: The University of Michigan, 1950).
3. Bruce L. Benson, "Do Taxes Matter? The Impact of State and Local Taxes on Economic Development," Economic Development Commentary, Vol. 10, Number 4 (Winter 1986), p. 13.
4. U.S. Department of Commerce, Industrial Location Determinants (Washington, D.C., 1975).
5. C. C. Bloom, State and Local Tax Differentials (lowa City: University of lowa, 1955).
6. D. W. Carlton, "Why New Firms Locate Where They Do: An Econometric Model," in William C. Wheaton (ed.), Interregional Movements and Regional Growth (Washington, D.C.: The Urban Institute, 1979).
aspects of economic behavior is the investment decision. Various predictive models of investment behavior have been developed through the years, but they have yielded only limited success in explaining why companies or individuals allocate resources the way they do. This is not for lack of trying. Since the early 1950s, there has been a steady stream of studies analyzing the issue, with much of the research focusing on the process firms go through in locating new plants or expanding.

These studies use several different approaches. Some rely on surveys of businesses, others are based on statistical analysis and still others use hypothetical firms to compare rates of returns on investment in different geographic locations. Emerging from these studies is a laundry list of factors which figure in most business location decisions. Table 1 shows a fairly representative list of the major decision factors from one study.

Studies have shown that these and other factors play varying degrees of prominence in a business' decision making, frequently depenáing on situations unique to the individual firm or decision. However, some fac-tors-labor and market availability for example-are nearly

TABLE 1. Major Location Factors for New Firms

| Access to current customers | Personal taxes |
| :--- | :--- |
| Access to growing regions | Cost of unskilled labor |
| Personal reasons | Business taxes |
| Access to raw materials | Supply of unskilled labor |
| Availability of capital | Union activities |
| Familiarity with economy | Climate |
| Supply of skilled labor | Political climate |
| Transportation | Supply of fuel/electricity |
| Land costs | Cost of fuel/electricity |
| Cost of skilled labor | Air quality |
| Source: | Michael Kieschnick, Taxes and Growth: |
| Economic Development (Washington, D.C.: Council of State Planning |  |
| Agencies, 1981), p. 97. |  |

always important, while othersincluding taxes-are generally always a consideration but have typically been rated farther down the list in overall importance.

A substantial part of the research indicating that state and local taxes are not particularly critical in business decisions comes either from survey research or statistical studies. In one of the earliest surveys on this topic, the University of Michigan Survey Research Center in 1950 found that only nine percent of the 188 plants moving to Michigan had managers who felt that the state's tax benefits were an "important consideration" in the move. ${ }^{2}$ Similarly, one review of 24 survey and interview studies done prior to 1964 found only one survey where taxes were identified as a primary business location factor. ${ }^{3}$

There have been more recent survey-type studies, but for the most part, they have not greatly altered this basic perception. For example, a 1975 U.S. Department of Commerce survey of 2,900 high-growth firms found tax incentives or "holidays" to be "relevant" to 78 percent of those surveyed, but only eight percent rated such incentives as "critícal." 4

Until fairly recently, much the same conclusions could be found in statistical studies. One early study in 1955 correlated growth in manufacturing employment with per capita state and local tax collections among states for the periods from 1939-53 and 1947-53. In neither period was a statistically significant relationship found. ${ }^{5}$ In a 1979 study of the creation of single establishment firms in 1967 and 1975, wages and energy prices were found to be important factors statistically in explaining location decisions, but taxes were not a major factor, although the author concluded that they could not be ruled out as having some influence. ${ }^{6}$

Many economists continue to feel that taxes play at best a secondary role in business decisions, but recently a number of studies have given increased weight to their role. John Shannon, former executive director of the U.S. Advisory Commission on Intergovernmental Relations (ACIR), sees four developments which have helped lead to this reevaluation:

First, interjurisdictional tax competition is now winning over some supporters in acade-mia-a place that has traditionally been quite hostile to notions of tax competition and tax concessions. . . . Second, the growing vulnerability of domestic manufacturers to foreign competition (both at home and abroad) quickens the search for competitive (low cost) locations within the United States.... Third, the rise of "Fend-forYourself Fiscal Federalism" also promises to intensify interjurisdictional tax competition. . Fourth, the intensification of interjurisdictional tax competition is bound to underscore a major equity issue-not all states and localities enter the competitive arena on anything that even closely resembles equal terms.?

According to Shannon, an increasing number of studies now indicates that at the marginmeasured by profits after taxestax policies can and do make a difference in business decisions. One obvious factor in this conclusion is the fact that tax rates today are much higher than they were even a decade ago.
Examination of some recent research in this area reveals a number of examples of the trends Shannon has identified. In a 1983 study of business taxation, William Wheaton of the Massachu-
setts Institute of Technology found that state and local taxes amounted to just under eight percent of profits for firms in the "average" state, and that there was a fairly wide variation among the states in the impact of taxes on profits-from 4.8 percent to more than 20 percent. ${ }^{8}$ Texas had an average of 5.9 percent including severance taxes and 3.2 percent without them. Eleven states had tax systems with a smaller burden on profits than Texas if severance taxes were included; only one was lower if they were excluded.

A 1982 study of high-technology firms prepared for the Congressional Joint Economic Committee found that more than two-thirds of the firms viewed taxes as either "significant" or "very significant" in making regional choices on new plant locations. ${ }^{9}$ More than 85 percent felt taxes were important in choosing locations within regions. This study also underscored the role of local tax policies. It found that the taxes which vary most within a region-and so have the largest effect on tax differentials-are likely to be local property taxes on inventory and equipment.
In a 1985 study of geographic business tax differentials based on hypothetical manufacturing firms, Leslie Papke found significant differences among the states in the tax burden they imposed on indentically structured firms. The differences were significant enough to lead her to conclude that lowering tax burdens to increase after-tax rates of return on investment could stimulate new investment. ${ }^{10}$ She also argued that much of the controversy over the relationship between taxes and economic activity stems from the failure of analysts to take into account the effects of local tax differences on different industries. ${ }^{11}$
At least one statistical analysis
focusing on the relationship between tax burden and job growth has also found a measurable link between the level of taxes and economic growth. After studying economic growth trends in the 1970s, Richard Vedder concluded that "the evidence is striking that the states with high state and local taxes had a much lower rate of economic growth in the 1970s than states with comparatively low tax burdens." ${ }^{12}$ Vedder also observed that the economic revival in "high" tax states like New York and Massachusetts came only after muchpublicized tax reduction efforts. Some analysts would argue that these results had more to do with the cyclical nature of state economies, but Vedder clearly believes at least a significant share of the credit should go to the influence of tax policy.
Some analysts also believe that the form of tax burden imposed by a state and local tax system may be as important as the overall level
7. John Shannon, "Interstate Tax Compe-tition--The Need for a New Look," National Tax Journal, Vol. XXXIX, Number 3 (September 1986), p. 339.
8. William C. Wheaton, "Interstate Differences in the Level of Business Taxation," National Tax Journal, Vol. XXXVI, Number 1 (March 1983), pp. 83-94.
9. Robert Premus, Location of High Technology Firms and Regional Economic Development, U.S. Joint Economic Committee, Subcommittee on Monetary and Fiscal Policy (1982).
10. Leslie Papke, The Measurement and Effect of Interstate Business Tax Differentials on the Location of Capital Investment, Purdue University Center for Tax Policy Studies, CTPS Paper 5 (October 1985), p. 19.
11. Ibid., p. 17.
12. Richard Vedder, "Rich States, Poor States: How High Taxes Inhibit Growth," Journal of Contemporary Studies (Fall 1982), p. 20.
of taxes. Vedder found, for example, that high taxes on income or property were most damaging to a state's business climate. He concluded that "the optimal state and local fiscal policy would be one in which the overall tax burden is comparatively low, coupling high sales taxes with low income and property taxes." ${ }^{13}$ Similarly, researchers at the Boston Federal Reserve Bank found that heavy personal tax burdens could discourage high technology development. According to the authors: "This study suggests that the difference in personal tax burdens between the highest and lowest tax states could be a significant factor for firms attempting to recruit highly skilled professionals. ${ }^{14}$
Other analysts contend that the focus on plant location decisions in many earlier studies has led to improper evaluations of the role of taxes in investment decisions. A major problem is the concentration on plant locations to measure the effects of tax policy. In a 1981 study, the ACIR found that relocations did not constitute a particularly large share of business activity. Between 1969 and 1976, only 554 major manufacturing firms out of an estimated 140,093 establishments that existed in 1969 changed their primary location. ${ }^{15}$ The Commis-
13. Vedder, p. 22.
14. Deborah Ecker and Richard Syron, "Personal Taxes and Interstate Competition," New England Economic Review (September/October 1979), p. 25-32.
15. U.S. Advisory Commission on Intergovernmental Relations, Regional Growth: Interstate Tax Competition, Report A-76 (Washington, D.C., March 1981), p. 27.
16. Benson, p. 17.
17. Ibid., p. 14.
sion argues that analysis should focus on the broader-and much less easily assessed-issue of how taxes enter into general business investment decisions, of which plant locations are only one example.
> [B]usiness perceptions about a state's tax system may sometimes be as important as the actual burden imposed by the system.

Even in the case of location decisions, the effects of tax changes may show up only after a lag, representing the time needed for business to respond to the changes. "Not surprisingly," economist Bruce Benson has written, "businesses apparently cannot react immediately to a change in a state's tax policy, but given sufficient time they do react. ${ }^{16}$ Benson says the major portion of the long-run effect of relative tax changes occurs within three to four years after the change-not within months.

Finally, business perceptions about a state's tax system may sometimes be as important as the actual burden imposed by the system. This may help explain Vedder's observations about the economic revivals in New York and Massachusetts. Similarly, one study of manufacturing relocations found that much of the movement in the early 1970s was from states with relatively high growth in tax burden-rather than simply a high level of taxes-to states with relatively low growth in tax burden. ${ }^{17}$ Of course, the benefits of being perceived as a low tax state probably are limited. They are undoubtedly balanced to
some degree by whether the state is perceived as offering poor public services as well. Most studies show that issues like the quality of public and higher education and transportation systems are also important factors in business decision making and in the ability of states to stimulate development.
A reasonable conclusion from the research done to date is that taxes do have an effect on business decisions, but that effect can be outweighed by other factors, such as locational advantages or the availability of labor. Equally clear is the fact that regardless of the findings of economic research, many government officials and business people behave as if taxes are important. For that reason-if for no other-tax competition among the states continues, and because of economic conditions, it may in fact be intensifying.

## Comparing Tax Burdens

Over the years, several approaches have been developed to measure tax competitiveness among the states. At times, these measures have been developed as part of larger evaluations of state business climates, a familiar example being the Grant Thornton and INC. magazine studies. In these studies, relatively simple indicators of tax burden and growth are used to rate and compare business conditions in the states. Other analyses, however, have focused solely on the issue of tax competition. These vary greatly in complexity and in what they reveal about the attractiveness of a state's tax climate.
One of the most widely usedand simplest-indicators of tax competitiveness is the state's overall tax burden, generally measured in relation either to state population or personal income. In
some cases, the focus is on state taxes alone, but most experts agree a more meaningful indicator is state and local taxes.

Table 2 shows 1986 state and local taxes per capita for the 50 states. As the table shows, Texas ranked near the middle among the states with $\$ 1,292$ in state and local taxes per capita. Despite a major tax increase in 1984, Texas remained below the national average of $\$ 1,547$ per capita.

Although widely used, overall tax burden measures of this type are relatively poor indicators of business tax competitiveness. For one thing, they cover all state and local taxes without regard to the actual share of taxes businesses
must pay compared to individual citizens. They also do not reflect the distribution of taxes among taxpayers. It is clearly possible for a state to have a very low overall tax burden that is still noncompetitive because of the way the tax system is structured. This in fact is a common complaint about the Texas tax system and particularly about the corporation franchise tax, which critics charge burdens asset-heavy industries while imposing a relatively small burden on companies who, for whatever reason, have fewer capital resources in Texas.

Some analysts also believe these general tax burden meas-
ures miss the shifting nature of tax policies over time. As Boston Federal Reserve Bank economist Robert Tannenwald has written:
[A] favorable tax burden or revenue burden sometimes accompanies conditions conducive to fiscal behavior that can sow the seeds of future deterioration in a state's tax competitiveness. When growth in a state's personal income is strong, its revenue burden can be falling even while its inflation-adjusted ("real") own-source revenues are rising. Such conditions can tempt legislators to enact

TABLE 2. State and Local Government Taxes Per Capita, 1986

| State | Per Capita Tax Revenue | Rank | State Share of Total | State | Per Capita Tax Revenue | Rank | State Share of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alaska | \$4,489 | 1 | 74.5\% | Virginia | \$1,404 | 26 | 62.8\% |
| Wyoming | 2,628 | 2 | 64.9 | Kansas | 1,394 | 27 | 53.3 |
| New York* | 2,539 | 3 | 56.1 | Montana | 1,376 | 28 | 64.1 |
| Connecticut | 1,947 | 4 | 65.2 | Nebraska | 1,338 | 29 | 40.4 |
| Massachusetts | 1,933 | 5 | 64.6 | Texas* | 1,292 | 30 | 47.4 |
| New Jersey* | 1,868 | 6 | 66.5 | Utah | 1,292 | 31 | 55.9 |
| Hawaii | 1,785 | 7 | 76.0 | North Dakota | 1,285 | 32 | 76.8 |
| Maryland | 1,742 | 8 | 62.7 | Oklahoma | 1,284 | 33 | 65.2 |
| Wisconsin | 1,730 | 9 | 63.1 | Georgia | 1,280 | 34 | 52.6 |
| California* | 1,727 | 10 | 61.1 | Florida* | 1,274 | 35 | 46.7 |
| Minnesota | 1,715 | 11 | 58.3 | Louisiana | 1,253 | 36 | 64.9 |
| Michigan* | 1,703 | 12 | 60.6 | New Mexico | 1,241 | 37 | 75.5 |
| Delaware | 1,661 | 13 | 72.0 | Indiana | 1,227 | 38 | 61.3 |
| Washington | 1,589 | 14 | 61.4 | North Carolina* | 1,222 | 39 | 60.5 |
| Nevada | 1,559 | 15 | 62.8 | New Hampshire | 1,216 | 40 | 58.5 |
| Illinois* | 1,559 | 16 | 57.0 | West Virginia | 1,214 | 41 | 75.5 |
| Rhode Island | 1,532 | 17 | 74.3 | Missouri | 1,152 | 42 | 59.0 |
| Colorado | 1,485 | 18 | 49.6 | South Dakota | 1,142 | 43 | 62.0 |
| Vermont | 1,484 | 19 | 70.1 | South Carolina | 1,138 | 44 | 65.6 |
| Arizona | 1,476 | 20 | 49.3 | Kentucky | 1,103 | 45 | 71.1 |
| Pennsylvania* | 1,459 | 21 | 61.9 | Tennesse | 1,077 | 46 | 47.8 |
| Oregon | 1,436 | 22 | 57.9 | Idaho | 1,054 | 47 | 67.5 |
| lowa | 1,417 | 23 | 62.0 | Alabama | 1,022 | 48 | 72.4 |
| Maine | 1,414 | 24 | 71.7 | Arkansas | 1,011 | 49 | 67.8 |
| Ohio* | 1,412 | 25 | 64.5 | Mississippi | 965 | 50 | 65.9 |
|  |  |  |  | U.S. Average | \$1,547 | - | 61.1\% |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987).

* One of the 10 most populous states according to current Census Bureau projections.
new programs that commit the state to a higher spending path. ${ }^{18}$

Tannenwald further points out that if in future years, the state's economy slows, the state may be hard pressed to maintain this higher spending with available revenues. The result may be higher tax burdens or a struggle to find ways to reduce spending, a situation not unlike what has happened to Texas in recent years.

## Measuring the Business Tax Burden

Several indicators of tax climate focus directly on the burden state and local taxes impose on business. This is a more difficult set of calculations since it requires decisions about which of a state's taxes are business taxes and which are not. In the case of a corporate income or franchise tax, this is a fairly simple task, but many taxes-including the sales tax, fuels taxes and even the alcoholic beverage taxes-have a business side and an individual side that must be estimated. It is also difficult to find a reliable base for comparing burdens. Most business data simply is not readily available on a state-by-state basis. Even when it is, it typically is not in a consistent form or is not timely. This is particularly true of information on business profits.

In approaching this problem, researchers have developed measures of business tax burden using three separate approaches:

[^54](1) by comparing the relative share of each state's tax system having an initial impact on businesses compared to individuals;
(2) by developing estimates of profits or income by state to provide a common base of comparison; and
(3) by creating hypothetical firms located in specific sites around the nation. ${ }^{19}$

A recent analysis based on this first approach-estimating the business-individual split in each state-can be found in a study by the Boston Federal Reserve Bank. ${ }^{20}$ The study estimates the split using
U.S. Census Bureau data and other sources to calculate a business-individual split for both state and local taxes for each of the states. The analysis shows the share of taxes with an initial impact on business both with and without severance taxes.

Alaska, with its high reliance on oil and gas severance taxes, had the highest percentage burden on businesses- 84.4 percent when all taxes were included. Nationally, an average of 31.8 percent of state and local taxes were found to be borne at least initially by businesses. Using this approach, Texas' business tax burden is 49.9 percent, which ranks it third highest among the 50 states. Nebraska's business tax burden ranked the lowest in this study at 18.9 percent of total taxes.

One shortcoming of this approach is that it does not factor in the level of taxes states impose. For example, New Hampshire had the 12 th highest ratio of business taxes to state and local taxes; however, it also had the lowest overall tax burden as a percent of state income. Consequently, it does not necessarily follow that businesses in New Hampshire bear a higher tax burden than businesses in other states. Simi-
larly, Texas had a fairly heavy business tax burden based on the business-individual split, but its ranking in the middle of the pack in terms of overall burden suggests that this indicator may overstate the actual impact of the tax on at least some businesses.

Another problem raised by some analysts relates to the impact of severance taxes. States like Texas with rich natural re-sources-and large severance tax collections-will generally always have higher business tax burdens as a result. Without severance taxes, the percentage of taxes with an initial impact on business in Texas drops from 49.9 percent to 39.4 percent. However, this change does not affect Texas' ranking, which is third among all states with or without severance taxes. In either case, Texas is well above the national average of 31.8 percent including severance taxes and 29.7 percent without them.

In his 1983 study, William Wheaton attempted to take this type of analysis a step further by measuring not only business' share of each state's taxes but also the actual burden this share imposes. He did this by first estimating business' share of state taxes and business fees for the 48 continental states and then relating these estimates to business income. ${ }^{21}$ As in the case in the Boston Federal Reserve study, Wheaton distinguished between business taxes including and excluding severance taxes.

Under the Wheaton approach, Texas had an effective tax rate (taxes as a percentage of business income) of 5.9 percent when all taxes were considered. This was well below the 48 -state average of 7.7 percent. Texas ranked 37 th among the 48 states analyzed in terms of overall tax level. The lowest burden was in Wyoming, while the highest was in Delaware, where the burden equaled
over 20 percent of business income. (Business fees skew the Delaware figure.)

The tax burden changes somewhat when severance taxes are excluded. State taxes as a percentage of business income totaled only 3.2 percent in Texas, and the state fell to 47 th among the 48 states in business tax burden under this narrower definition.

Although the Wheaton study provides a much better understanding of how state and local taxes actually burden businesses, it also has limitations. The study suffers because of the poor data available on business income by state. In part because of this limitation, the study was based on fiscal data from 1977. Obviously, conditions in most states would have changed greatly by the time of Wheaton's study, much less today, more than a decade later. Of equal importance, business income is highly volatile, and it is uncertain just how accurate a "snap-shot" look at the burden on income in one year would be as a predictor of the burden in most years.

To deal with these problems, some economists have developed models based on a so-called "selective firm" approach under which hypothetical firms are created and their tax burdens are compared for different geographical sites.

One of the most extensive models of this kind has been developed by James Papke at Purdue University. The Papke model can simulate various types of manufacturing firms for a number of different locations. The model analyzes differences in after-tax rates of return on investment for the firms under different state and local tax mixes.

In 1986, Papke used his model to analyze the effect of tax differentials at various sites in terms of how they would affect General

Motors' proposed Saturn Corporation plant (Table 3). In this study, Texas had the most favorable tax burden among the states examined (although Texas was not among the reported finalists for the plant). The study showed that General Motors could expect an after-tax rate of return on an estimated five billion dollars investment of about 12.9 percent in Texas. ${ }^{22}$

The actual site selected for the plant, in Tennessee, ranked seventh in the tax burden comparison. An interesting point revealed in this comparison is that although there is a 2.3 percent spread in after-tax returns between the highest and the lowest states (a significant amount for that size investment), there is less than a one percent difference among the top nine states.

A similar study done for five types of manufacturing firms in 1986, which included El Paso, found that the after-tax rate of
return was most favorable in Texas for all of the firms. ${ }^{23}$ In this case, the comparison was made to sites in other major manufacturing states, including Massachusetts, North Carolina, California, Pennsylvania, Tennessee, Illinois and Connecticut.

This approach is useful in judging how a state's tax system affects one particular type of industry relative to other states. However, its most serious drawbacks are the difficulties involved in developing a range of hypothetical firms and in extending the analysis beyond a few sites in a few states. Obviously, it would be
22. Papke and Papke, p. 361.
23. Commonwealth of Massachusetts, The Eighth Interim Report of the Special Commission Relative to the Competitiveness of the Massachusetts Tax System in the Development of a Tax Reform Program for the Commonwealth, House Report No. 5148 (January 12, 1987), Table 5.

TABLE 3. Comparative After-Tax Rates of Return-Saturn Corporation (Selected States)

|  | State | Rate of Return |
| :--- | :--- | :---: |
| 1. | Texas | $12.9 \%$ |
| 2. | Florida | 12.6 |
| 3. | Oklahoma | 12.5 |
| 4. | Georgia | 12.5 |
| 5. Kentucky | 12.4 |  |
| 6. | Michigan | 12.3 |
| 7. | Tennessee | 12.3 |
| 8. | Missouri | 12.2 |
| 9. | Arkansas | 12.1 |
| 10. | Ilinois | 11.9 |
| 11. | New Mexico | 11.9 |
| 12. Kansas | 11.9 |  |
| 13. | Indiana | 11.8 |
| 14. | Ohio | 11.8 |
| 15. | California | 11.7 |
| 16. | Wisconsin | 11.4 |
| 17. | North Carolina | 10.6 |
|  |  |  |

TABLE 4. Selected Tax Climate Factors

| State | ACIR Business Tax Rating | Per Capita Tax Burden 1985 | Rank | Personal Income Tax? | Corporate Income Tax Rates | Unemployment Insurance Rate, $198{ }^{1}$ | Rank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 5 | \$990 | 48 | Yes | 5.0\% | 0.8\% | 35 |
| Alaska | 20 | 4,585 | 1 | Yes | 1.0-9.4 | 2.4 | 1 |
| Arizona | 11 | 1,376 | 23 | Yes | 2.5-10.5 | 0.5 | 46 |
| Arkansas | 13 | 967 | 49 | Yes | 1.0-6.0 | 1.2 | 18 |
| California | 50 | 1,645 | 9 | Yes | 9.6 | 0.9 | 29 |
| Colorado | 20 | 1,448 | 16 | Yes | 5.5-6.0 | 0.9 | 30 |
| Connecticut | 19 | 1,816 | 4 | Yes | 11.5 | 0.7 | 38 |
| Delaware | 16 | 1,558 | 13 | Yes | 8.7 | 1.1 | 21 |
| Florida | 12 | 1,181 | 38 | No | 5.5 | 0.4 | 49 |
| Georgia | 23 | 1,181 | 37 | Yes | 6.0 | 0.6 | 41 |
| Hawaii | 25 | 1,652 | 8 | Yes | 4.4-6.4 | 1.2 | 19 |
| Idaho | 29 | 1,022 | 46 | Yes | 8.0 | 2.1 | 4 |
| Illinois | 6 | 1,474 | 15 | Yes | 4.0 | 1.5 | 15 |
| Indiana | 13 | 1;181 | 39 | Yes | . 4 | 0.6 | 42 |
| lowa | 48 | 1,331 | 26 | Yes | 6.0-12.0 | 1.6 | 13 |
| Kansas | 25 | 1,357 | 25 | Yes | 4.5 | 1.1 | 22 |
| Kentucky | 9 | 1,033 | 45 | Yes | 3.0-7.25 | 1.0 | 26 |
| Louisiana | 40 | 1,298 | 30 | Yes | 4.0-8.0 | 1.7 | 11 |
| Maine | 39 | 1,328 | 28 | Yes | 3.5-8.93 | 1.1 | 23 |
| Maryland | 35 | 1,629 | 10 | Yes | 7.0 | 0.5 | 47 |
| Massachusetts | 32 | 1,715 | 7 | Yes | 8.33 | 0.8 | 36 |
| Michigan | 45 | 1,609 | 12 | Yes | 2.35 | 2.0 | 6 |
| Minnesota | 49 | 1,767 | 5 | Yes | 9.5 | 1.2 | 20 |
| Mississippi | 17 | 918 | 50 | Yes | 3.0-5.0 | 0.6 | 43 |
| Missouri | 1 | 1,091 | 42 | Yes | 5.0 | 0.6 | 44 |
| Montana | 43 | 1,383 | 22 | Yes | 6.75 | 1.4 | 16 |
| Nebraska | 20 | 1,251 | 34 | Yes | 4.75-6.65 | 0.7 | 39 |
| Nevada | 30 | 1,443 | 17 | No | None | 0.9 | 31 |
| New Hampshire | 10 | 1,126 | 41 | Yes | 8.0 | 0.3 | 50 |
| New Jersey | 4 | 1,749 | 6 | Yes | 9.0 | 1.1 | 24 |
| New Mexico | 32 | 1,249 | 35 | Yes | 4.8-7.6 | 1.0 | 27 |
| New York | 44 | 2,334 | 3 | Yes | 9.0 | 0.9 | 32 |
| North Carolina | 13 | 1,144 | 40 | Yes | 7.0 | 0.5 | 48 |
| North Dakota | 30 | 1,357 | 24 | Yes | 3.0-10.5 | 2.3 | 2 |
| Ohio | 17 | 1,331 | 27 | Yes | 5.1-8.9 | 1.3 | 17 |
| Oklahoma | 42 | 1,289 | 31 | Yes | 5.0 | 1.1 | 25 |
| Oregon | 37 | 1,420 | 19 | Yes | 6.6 | 1.9 | 8 |
| Pennsylvania | 34 | 1,385 | 21 | Yes | 8.5 | 1.7 | 12 |
| Rhode Island | 46 | 1,479 | 14 | Yes | 8.0 | 2.1 | 5 |
| South Carolina | 7 | 1,076 | 43 | Yes | 5.5 | 0.9 | 33 |
| South Dakota | 3 | 1,043 | 44 | No | None | 0.7 | 40 |
| Tennessee | 2 | 996 | 47 | Yes | 6.0 | 0.6 | 45 |
| Texas | 23 | 1,267 | 32 | No | None | 0.9 | 34 |
| Utah | 25 | 1,258 | 33 | Yes | 5.0 | 1.0 | 28 |
| Vermont | 37 | 1,392 | 20 | Yes | 5.5-8.5 | 1.8 | 10 |
| Virginia | 7 | 1,307 | 29 | Yes | 6.0 | 0.8 | 37 |
| Washington | 36 | 1,435 | 18 | No | None | 2.3 | 3 |
| West Virginia | 47 | 1,203 | 36 | Yes | 9.75 | 1.9 | 9 |
| Wisconsin | 41 | 1,611 | 11 | Yes | 7.9 | 2.0 | 7 |
| Wyoming | 28 | 2,580 | 2 | No | None | 1.6 | 14 |
| Totals |  | \$1,465 (avg.) |  | $\begin{gathered} \text { Yes }=44 \\ \text { No }=6 \end{gathered}$ | Tax=45 <br> None=5 | Avg. $=1.18 \%$ |  |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections in 1986 (Washington, D.C., 1987); Commerce Clearing House, State Tax Guide (1987); National Foundation for Unemployment Insurance and Worker's Compensation, Washington, D.C.; U.S. Advisory Commission on Intergovernmental Relations.

1. Rates are average rates on total payroll. U.S. average is simple average of rates for 50 states.
2. None $=$ no sales tax levied; LR=lower rate; $E=$ exempt; $N / E=$ exemption for new and expanded business only; $T=$ taxable.
3. $T$ =taxable; $E=$ exempt; $A V=$ taxed at average value; $N T=$ no tax on any personal property; Mixed=varying treatment.
4. Exemption will be phased in beginning in 1991.

| Sales Tax on Machinery ${ }^{2}$ | Property Tax on Inventories ${ }^{3}$ |
| :---: | :---: |
| LR | E |
| None | $T$ |
| E | E |
| E | AV |
| T | E |
| E | E |
| E | E |
| None | NT |
| N/E | T |
| N/E | T |
| T | NT |
| E | E |
| E | NT |
| E | AV |
| T | AV |
| E | AV |
| N/E | T |
| N/E | AV |
| E | E |
| E | AV |
| E | Mixed |
| E | E |
| LR | E |
| LR | E |
| N/E | E |
| None | E |
| N/E | E |
| T | E |
| None | E |
| E | E |
| T | E |
| E | NT |
| LR | AV |
| T | E |
| E | Mixed |
| E | AV |
| None | E |
| E | NT |
| E | Mixed |
| E | E |
| T | Mixed |
| E | E |
| T4 | $T$ |
| T | E |
| E | E |
| E | E |
| T | E |
| E | T |
| $\bar{E}$ |  |
| T | E |
| $\begin{gathered} \text { None=5; } T=11 \\ L R=4 ; N / E=6 \\ E=24 \end{gathered}$ | $\begin{gathered} E=27 ; T=6 \\ \text { AV }=8 ; N T=5 \\ \text { Mixed }=4 \end{gathered}$ |

most useful to be able to compare burdens for a number of industries in a variety of sites and states, but most analyses of this type have been hampered by the cost of extending the models.

## Overall Business Tax Climate

A final approach to comparing the tax climates in the states is to look at the various business tax policy options they have adopted. An analysis of this type has been developed by the U.S. Advisory Commission on Intergovernmental Relations. Periodically for a number of years, the Commission has developed comprehensive ratings of state and local tax system based on a number of factors including business tax climate attractiveness. ${ }^{24}$
A bad business climate, according to the study, is marked by the appearance of several features or "sore thumbs." These include a relatively heavy tax burden; highly progressive tax policies; the lack of provision for property tax exemptions for inventories, machinery and equipment; no sales tax exemption for industrial machinery; the use of worldwide apportionment; and aboveaverage rates for unemployment insurance and workers' compensation. As a result, the study rated the 50 state-local tax systems on the basis of the following eight indicators:
(1) overall tax burden,
(2) marginal personal income tax rates,
(3) property tax exemption for inventories, machinery and equipment,
(5) workers' compensation rates,
(6) unemployment insurance rates,
(7) sales tax on machinery and
(8) worldwide unitary appor-
tionment of corporate income.

Table 4 summarizes and updates some of the more important of these factors for the 50 states. Under this ranking system, Texas had the 23rd most attractive business tax climate among the states. While it scored favorably in the areas of overall tax burden and corporate and personal income taxes, it was penalized for taxing business personal property under the property tax and for imposing the sales tax on production machinery.

The state with the most attractive tax climate, according to this analysis, was Missouri; the worst was California. California's poor rating was due to high personal and corporate income tax rates, the absence of property tax exemptions, high workers' compensation rates and the presence of a sales tax on machinery.

The study's authors are quick to point out that success in the ranking does not guarantee the success of its economic development efforts-or vice versa. Clearly, California's economic base is much stronger than most states'. A poor rating in any of these factors, however, can work against states for all except those in the strongest competitive position.

## Structuring Tax Incentives

However states may interpret the various indicators of tax competitiveness, it is clear that they frequently craft portions of their tax codes as inducements to economic development. In a 1986 study of tax policies related to economic development, the

[^55]National Governors' Association (NGA) concluded that develop-ment-related changes fit into three broad categories, including:
(1) reductions in the overall level of taxation, both on businesses and individuals;
(2) shifts in tax burdens from business to individuals; and
(3) the use of tax credits and exemptions to encourage particular types of investment. ${ }^{25}$

Surveying tax changes by states in 1985, the Association found that 29
25. Marianne K. Clarke, Revitalizing State Economies, (Washington, D.C.: National Governors' Association, Center for Policy Research and Analysis, 1986), p. 18.
states had adopted new tax policies designed to encourage development (Table 5).
Although some states, including Texas, have faced economic problems and have faced tax increases since 1985, the data for 1987 suggest that this trend continues. For example, in that year, eight states reduced corporate income tax rates, while only one state-Minnesota-raised its rates.
Further evidence can be found in the important area of special incentives states adopt to encourage specific types of development. These can range from special exemptions, to tax credits for certain types of investment, to outright tax abatements in some cases. Table 6 shows the major
incentives and the number of states employing them in 1985 and 1987. As the table shows, the number of states using virtually every option went up during the period. The only exceptions are the number of states granting property tax exemptions or moratoria on land and capital improvements and the number of states exempting raw material used in manufacturing from sales tax. (This latter cannot change since it is employed by all states currently using the sales tax.)
Texas uses fewer of these special incentives than most other states, reflecting the fact that the state's strong economy and low-tax image have made it possible to remain attractive to development without making large-scale use of special

TABLE 5. States Reporting Changes in Tax Policy Related to Economic Development, 1985

|  |  | Iax_Reductions |
| :--- | :--- | :--- |
|  |  |  |
| Corporate Income_Tax |  |  |
| Delaware | Utah |  |
| lowa | Virginia | Personal Income Tax |
| New Jersey | Washington | Delaware |
| North Carolina | West Virginia | Minnesota |
| Ohio |  | New York |
| Oklahoma |  | Rhode Island |
| Pennsylvania |  | Wisconsin |
| Rhode Island |  | Proeerty Tax |
|  |  | Wisconsin |

## Changes In Tax Structure

General
Maine
West Virginia

Repeal of Unitary Tax
Florida
Oregon

Industry Specific
Alaska

Waters Edge Definition
Florida
Oregon
Colorado
Indiana
North Dakota

## Iax Credits

| Manufacturer's لnvestment Tax Credits | Jobs Tax Credit |
| :--- | :--- | :--- |
| Arkansas  South Carolina <br> Pennsylvania  West Virginia <br> Venture Capital Tax Credit Missouri Research \& Development <br> Louisiana Nevada Michigan <br> Mississippi  . |  |

[^56]concessions. Other states make more extensive use of incentives, including some of the states Texas routinely competes with for industry and jobs. Florida, Massachusetts, New York and California all make broad use of these specialized incentives, as do Minnesota, Michigan and Pennsylvania. Among the four states that border Texas, Louisiana and Arkansas offer a wide range of incentives, while New Mexico and Oklahoma offer fewer-although their totals are still above Texas in terms of the
types used.
Table 6 also highlights three particular areas where Texas' tax policies on businesses appear to be noncompetitive with other states. The state continues to tax business inventories at 100 percent of market value; it continues to apply the sales tax on machinery and equipment; and there continues to be no exemption on goods in transit (freeport exemption).

In the 1987 session of the Legislature, the state took action on two of these issues. An exemption for pro-
duction machinery under the sales tax was part of the omnibus tax bill adopted in the 1987 special session (House Bill 61). This exemption is scheduled to be phased in over a five-year period beginning in 1991.
The Legislature also passed a resolution during the regular session in 1987 providing for an exemption of goods in transit (essentially inventory in Texas for less than 175 days) from local property taxes. Although adopted by the Legislature (Senate Joint Resolution 12), this provision required voter

TABLE 6. Selected Tax Incentives to Benefit Business

| Incentive |  | Number of States |  | Available in Texas? |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1985 | 1987 |  |
| 1. | Corporate income tax exemptions ${ }^{1}$ | 31 | 33 | Yes (no tax) |
| 2. | Personal Income tax exemptions ${ }^{2}$ | 24 | 27 | Yes (no tax) |
| 3. | Excise tax exemptions | 16 | 19 | No |
| 4. | Tax exemption or moratorium on land and capital improvements | 34 | 34 | Yes (local) |
| 5. | Tax exemption or moratorium on equipment and machinery | 34 | 35 | Yes (local) |
| 6. | Inventory tax exemption on goods in transit (freeport) | 47 | 48 | No |
| 7. | Tax exemption on manufacturer's inventories | 43 | 44 | No |
| 8. | Sales and use tax exexemption on new equipment | 42 | 44 | $\mathrm{No}^{3}$ |
| 9. | Tax exemption on raw materials used in manufacturing | 45 | 45 | Yes |
| 10. | Tax incentives for job creation | 30 | 32 | No |
| 11. | Tax incentives for industrial investment | 29 | 30 | No |
| 12. | Tax exemption for research and development | 22 | 25 | No |
| 13. | Accelerated depreciation (income tax purposes) | 34 | 35 | No |

Source: Site Selection Handbook/85 and 87.

1. In addition to states like Texas which have no corporate income tax, this includes such incentives as tax credits for new hires, tax credits for pollution control equipment investment, tax moratoriums for new businesses, exemptions for businesses in approved enterprise zones, tax credits for research and development investment and similar tax abatements.
2. In addition to states like Texas which have no personal income tax, this includes exemptions from tax for business corporations, credits for income generated from new businesses by individual owners and similar tax abatements.
3. Texas will begin to phase in this exemption in 1991.
approval because it would have amended the Constitution. However, it was turned down by voters in November 1987, so Texas remains one of only two states not offering this provision.
Although they are widely used, the usefulness of these special incentives is one of the continuing debates in state and local tax policy. In general, research on the effectiveness of such incentives indicates that strategies designed to attract new firms-such as tax moratoriums-are best avoided or left to local governments. After surveying various tax incentives in a 1981 study, Michael Kieschnick concluded:

While the evidence is unclear about whether or not targeted incentives are good policy, it is unequivocal about whether or not they are significant policy. They are not. The evidence provides little support for those who believe that poor states, or stagnating states, can stimulate their economies in any significant way by a heavy reliance on targeted tax incentives. ${ }^{26}$

At the very least, a reasonable conclusion in this area would be that incentives of this type should be generally available to all qualifying firms, not just to firms the state is trying to convince to relocate. If not, the result may be uncertainty over what tax policy is, which can also damage state development efforts: "The business tax climate is impaired more than anything else by tax policies that seem to single out particular industries or activities for special treatment, either favorable or punitive, creating a situation in which everything seems up for grabs." ${ }^{27}$
Finally, it is important to note that from the standpoint of state and local government, special incentives reduce revenues which may lead to increases in other tax
rates or to the reduction of services. Some critics say the damage done by this loss can be more than the gains from the incentives themselves.

## Achieving Balance

Competition among states for jobs and industry is becoming more intense, and state and local policies to stimulate economic development are likely to become even more significant in coming years. This is likely to be true despite the fact that government does not have a large array of tools at its disposal to encourage development.

One tool it does have is the power to tax-and to exempt from taxation-and it seems equally likely that tax policy will continue to be altered to meet state and local development goals, particularly as the overall level of taxes has risen and become more prominent in the budgets of business and individuals.

It also seems apparent that there is more to the impact of taxes on business decisions than mere rhetoric. A number of studies in the last few years have shown that taxes do affect return on business investment, and tax competition among the states will continue. This may involve the use of some special incentives, although most research shows such incentives to be of limited value in most cases. Some experts suggest that the more important consideration is that the tax system be balanced and moderate and that it provide adequate funding for basic public services that businesses-like other taxpay-ers-rely upon. Kleine and Shannon suggest the major characteristics of such a system will move toward three goals:
(1) a fair and proportional distribution of the tax load;
(2) moderate levels of income, property and sales taxation; and
(3) an equilibrium between growth of tax revenue and the income of taxpayers. ${ }^{28}$

Thus, in developing tax policies to promote economic development, it is important to go beyond the notion that a low tax climate is the best tax climate. Maintaining a conservative fiscal approach is important, but there is an obvious tradeoff between maintaining a low tax climate and providing services, like education and transportation, which are also key elements in the economic development equation. The difficulty is in finding a set of fiscal policies that balances these various factors in a positive way.
"From businesses' standpoint," a 1987 study by the Texas Association of Taxpayers concluded, "tax policy should be geared to keeping rates low, policy predictable and the burden of taxation equitably distributed among types of businesses. It should be adequate to provide the revenues needed to provide essential services like education, transportation and assistance for the state's poorest citizens, but should not be extravagant in 'non-essential' areas, however defined. ${ }^{29}$
26. Michael Kieschnick, Taxes and Growth: Business incentives and Economic Development (Washington, D.C.: Council of State Planning Agencies, 1981), p. 87.
27. Ralph Widner, "Interstate Tax Competition," National Tax Association-Tax Institute of America, Proceedings (1978), p. 51.
28. Robert J. Kleine and John Shannon, "Characteristics of a Balanced and Moderate State-Local Revenue System" in Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), p. 33.
29. Texas Association of Taxpayers, "Taxes and Economic Growth," in Texas Speaker of the House, Texas Building for the Future: Alternatives for Revitalizing and Diversifying the Economy (Austin, January 1987), pp. 39-40.

# T ax Policy and Texas Economic Development 

## Summary

State tax policy can be an important determinant of Texas economic development. As part of a sound fiscal policy that balances state government expenditure against taxes on businesses and individuals, tax policy can help attract and retain the business investment and work force necessary for sustained economic growth. It is these mobile resources (capital and labor) that are the key to economic development.

This chapter presents 11 principles for assessing the effects of state and local fiscal policy in Texas based on the state's attractiveness to business investment and labor. Though fiscal policy in Texas compared favorably with that of the average state in 1984, changes in state fiscal policy brought about partly by lower energy prices have generally lessened the advantages evident in that year. The apparently irreversible decline in severance tax revenue hurts the state's ability to attract and retain capital and labor. Tax revenue from sources other than severance taxes is projected to grow by 45 percent from 1984 to 1989. In contrast, state spending for government services that attract capital and labor is projected to increase only ten percent over the same five-year period.

Reduced state reliance on narrow taxes, such as the corporate franchise tax, and increased
reliance on user fees, taxes like user fees and broad-based taxes like the sales tax could improve the state's attractiveness to capital and labor.
Substitution of a corporate income tax for the corporate franchise tax would broaden taxes only slightly. More broadly based taxes would be preferable. As a replacement for the sales tax, the personal income tax has both advantages and disadvantages.
Declining severance tax revenues and the fact that sales taxes are no longer deductible against the federal income tax mean that the effective price of state government services has increased in Texas. Nevertheless, growth in state government spending has exceeded that of personal income over the past five years. These developments suggest that future tax measures that allow the growth of state revenue to keep pace with that of personal income may lead to excessive growth of government, slowing the rate of economic growth in the state.

This chapter examines how state tax policy can contribute to achieving a balance between the provision of government services and the taxes required to finance those services. State and local fiscal policy can greatly affect future economic development in Texas and should be considered in this context.

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## Introduction

Until recently, Texans did not think much about tax policy or economic development issues. A strong energy sector made such thoughts unnecessary. From 1972 to 1982, expansion of the energy-extraction industries and associated effects accounted for 45 percent of the total growth in Texas employment. ${ }^{1}$ In 1982, oil and gas severance taxes accounted for 18 percent of state government revenue.
Since 1982, however, lower oil prices and a decline in energy industry employment have slowed economic expansion. The ten-dollar-per-barrel drop in oil prices from those prevailing in early November 1985 to the current levels will eventually mean 3.3 percent fewer jobs in Texas. ${ }^{2}$ To some extent, a smaller energy industry will free resources for other uses, promoting diversification and providing new sources for future economic

[^57]growth. ${ }^{3}$ Nevertheless, state and local government fiscal policy could greatly affect future economic development in Texas.
Though fiscal policy in Texas compared favorably with that of the average state in 1984, changes in state fiscal policy brought about, in part, by lower oil prices

3. Douglas E. Booth, "Long Waves and Uneven Regional Growth," Southern Economic Journal 53 (October 1986), pp. 448-460.

4. Stephen P. A. Brown, "The New Fiscal Environment in Texas: What It Means for State Economic Growth," Economic Review, Federal Reserve Bank of Dallas (January 1988), pp. 1-9.
5. Stephen P. A. Brown, "New Directions for Economic Growth: Redesigning Fiscal Policies in Louisiana, New Mexico, and Texas," Economic Review, Federal Reserve Bank of Dallas (July 1987), pp. 13-20.
6. L. Jay Helms, "The Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach," The
Review of Economics and Statistics 67 (November 1985), pp. 574-582; Thomas Romans and Ganti Subrahmanyam, "State and Local Taxes, Transfers and Regional Economic Growth," Southern Economic Journal 46 (October 1979), pp. 435-444; Robert J. Newman, "Industry Migration and Growth in the South," The Review of Economics and Statistics 65 (February 1983), pp. 76-86; Michael Wasylenko and Therese McGuire, "Jobs and Taxes: The Effect of Business Climate on States' Employment Growth Rates," National Tax Journal, Vol. XXXVIII, Number 4 (December 1985), pp. 497-511; Thomas R. Plaut and Joseph E. Pluta, "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States," Southern Economic Journal 50 (July 1983), pp. 99-119.
7. Mancur Olson, The Rise and Decline of Nations, Economic Growth, Stagflation, and Social Rigidities (New Haven: Yale University Press, 1982); Olson, "The South Will Fall Again: The South as Leader and Laggard in Economic Growth," Southern Economic Journal 49 (April 1983), pp. 917. 932; "Maintaining a Healthy Business Climate: A Broader Perspective on the Rates of Economic Growth and Unemployment in the Southern and Southwestern States," Energy and the Southwest Economy, Federal Reserve Bank of Dallas (1987), pp. 271-304.
have generally lessened the advantages evident in that year. Deficit spending, reduced severance tax revenues and a weak state economy in 1986 and 1987 led to increased tax rates. Tax revenues from sources other than the severance tax are projected to grow 45 percent from 1984 to 1989. On the other hand, state spending for government services that attract the business investment and work force necessary for

> The most attractive fiscal policies strike a balance between the provision of government services and the taxes required to finance those services.

economic growth is projected to increase only ten percent over the same five-year period. ${ }^{4}$
State tax policy can greatly influence future economic growth in Texas. The key to economic growth in Texas, or any state for that matter, is attracting new business investment and labor to the state while keeping the existing capital investment and work force in the state. States compete with each other to attract these mobile resources. And though climate, location, industry mix and natural resources generally are more important determinants of state economic performance, a good fiscal policy can give a state a competitive edge in attracting and keeping business investment and able workers. These mobile resources are more attracted to the states that provide highly valued government services. On the other hand, they are less attracted to the states in which they would incur higher taxes. The most attractive fiscal policies strike a balance between
the provision of government services and the taxes required to. finance those services. ${ }^{5}$

This chapter will examine how state tax policy can contribute to achieving that balance in Texas. After reviewing some economic principles that relate state and local fiscal policies to economic performance, the composition of state revenue and how it affects economic growth is analyzed. Finally, the chapter considers how tax policy influences the size of the state government and how its size affects economic development.

## How State and Local Fiscal Policies Affect State Economic Growth

In recent years, economists have conducted a number of studies to find the determinants of regional economic growth. ${ }^{6}$ This section draws upon that research and the broader economics literature to develop 11 principles that relate state and local fiscal policy to regional economic performance. Five of the principles ( $4,5,6,7$ and 11) are used directly in the subsequent analysis of tax policy and Texas economic development.
A common element links these 11 principles. Each principle can be used to assess the effects of state and local fiscal policy on a state's attractiveness to capital and labor. The attractiveness of a state to these mobile resources largely determines its economic growth.? Capital and labor are generally attracted to states where they can earn and retain the largest in-come-both pecuniary and nonpecuniary. State and local government expenditures and taxation greatly affect both the pecuniary and nonpecuniary income of mobile resources located within a state. In doing so, these policies. can help determine the attractiveness of a state to mobile resources.

Principle 1. In the absence of an offsetting expansion in public services, increased taxation of mobile resources within a state is harmful to the state's economic growth. Such taxation reduces the pecuniary income of mobile resources in the state.
Principle 2. If provided without increased taxes on mobile resources, enhanced provision of some public services within a state encourages economic growth in that state. Expenditures for some public services increase the nonpecuniary income accruing to mobile resources in a state.
Principle 3. When the additional revenue is used to finance enhanced public services within a state, the improvement in public services may more than offset the harmful effects of increased state and local taxation of mobile resources on economic growth in that state. However, the increased taxation of mobile resources retards economic growth when used to finance welfare or other transfers. ${ }^{8}$
Empirical research indicates that, at the margin, expenditures on educational services, health, hospitals, roads and highways enhance economic growth the most. The stimulus to economic growth arising from state and local government expenditures on these public services greatly outweighs the detrimental effects of any taxes required to finance them. On the other hand, additional expenditures on sewerage and sanitation, natural resources, parks and recreation, transportation other than roads and highways and public safety only moderately enhance economic growth. The stimulus to economic growth arising from state and local government expenditures on these public services outweighs the detrimental effects of any required taxes to a lesser degree. ${ }^{9}$ Expenditures on transfers may
further some social goals other than economic growth, but at the state and local level, these expenditures harm a state's overall economic performance.
Principle 4. When broad-based taxes are the alternative, state and local government reliance on taxes that are narrowly applied to mobile resources (such as the corporate franchise tax) is harmful to economic growth in the state where the narrow taxes are applied. This is true unless the revenue is used to finance public services that exclusively benefit the ownership of the mobile resources from which the revenues are obtained. Broad-based taxes (such as income and sales taxes) are less harmful to economic growth because they do not alter the relative prices of productive resources; that is, no one particular use of a given mobile resource is discouraged relative to other uses and other resources. ${ }^{10}$

Principle 5. When taxes on mobile resources are the alternative, state and local government reliance on user fees or narrow taxes that are like user fees (such as motor fuel taxes) to support government services for the benefit of the taxed individuals can foster economic growth in the state where such fees or taxes are used. Reliance on user fees to fund a government service both provides a method for monitoring the demand for the service and assures that individuals who do not use and value the service do not have to pay for its provision.

Principle 6. As the size of the government grows relative to the taxpayers' ability to pay, the value of additional government spending declines. This is the result of three factors. As is the case for all goods, the value of an additional unit of a given government service declines relative to other goods as more of the service is provided. ${ }^{11}$ In addition, the growth of govern-
ment may be associated with the provision of less desired goods. Finally, if increases in tax progressivity are required to fund additional state government spending, the cost to economic growth of additional taxation will rise as taxes are increased. ${ }^{12}$ Beyond a certain point, therefore, growth in the size of state government that is greater than growth in the taxpayers' ability to pay will retard economic growth by reducing the state's attractiveness to business
8. Empirical research contradicts the intuition that federal funding of state and local expenditure would foster state economic growth. Though federal funding would seem to permit greater provision of state and local government services and/ or lower taxes on mobile resources, most of the federal funds provided to state and local governments finance transfers and require matching state and/or local effort in financing. See Helms, "The Effect of State and Local Taxes on Economic Growth."
9. Much of the state and local government spending found to enhance economic growth provides services that economists would regard as private goods. That is, nonpayers can be excluded from using the services, and the cost of providing service to additional consumers is positive. Economic theory predicts that the private sector could provide these goods more efficiently. To date, however, empirical research has not addressed the issue of whether private provision of those private goods now provided by state and local governments would better promote economic growth. Instead, empirical research has taken a pragmatic approach and has addressed the issue of whether increased expenditure on publicly-provided private goods enhances or harms economic growth-given the reality that most state and local government expenditure provides private goods.
10. Arnold C . Harberger, Taxation and Welfare (Boston: Little, Brown and Company, 1974).
11. Armen A. Alchian and William R. Allen, University Economics: Elements of Inquiry, 3rd Edition (Belmont, California: Wadsworth Publishing Company, 1972), pp. 18-29.
12. Romans and Subrahmanyam, "State and Local Taxes, Transfers and Regional Economic Growth."
investment and labor.
Principle 7. It follows from the first two principles that increased tax revenue from immobile resources promotes economic growth, provided that the additional revenue is used to reduce taxation of mobile resources and/ or to fund enhanced public services that benefit the owners of mobile resources.
Severance taxes fall largely on immobile resources while property taxes fall largely on mobile resources. Although a small portion of severance taxation falls on the capital used to develop the immobile resources, most of the tax falls on the ownership of the immobile resources themselves. On the other hand, property taxes fall largely on the capital used to develop real property, not on the immobile factor-land.
13. Deficit financing as used here simply means that current expenditures exceed current revenues. Under this definition, the State of Texas engaged in deficit financing in fiscal years 1986 and 1987.
14. Empirical research verifies that it harms economic growth for state and local governments to finance current expenditures by borrowing; See Helms, "The Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach."
15. William A. Niskanen, "Bureaucrats and Politicians," Journal of Law and Economics 18 (December 1975), pp. 617-643.
16. These figures are derived from 1982 data from the U, S. Department of the Treasury, Office of Tax Analysis, Office of the Secretary, "Tabulations from the 1982 Statistics of Income File for the Fiscal Relations Study," December 14, 1984, as cited by Daphne A. Kenyon, "Federal Income Tax Deductibility of State and Local Taxes," Federal-State-Local Fiscal Relations: Technical Papers, Vol. 1 (Washington, D.C.: U.S. Department of the Treasury, Office of State and Local Finance, September 1986), p. 449.

[^58]Principle 8. Economic growth is discouraged in a state when its state or local governments engage in deficit financing of current expenditures. ${ }^{13}$ This type of financing probably discourages economic growth in a state because it represents potential tax liabilities for mobile resources in the future for which there will be no offsetting future benefits. State and local government borrowing to fund capital spending does not have the same implications, however. In that case, future tax liabilities may be offset by future benefits. ${ }^{14}$
Principle 9. Selected reductions in state and local government expenditures for administration could foster greater economic growth in a state. The low accountability of government agencies combined with economic incentives suggests that such bureaucracies tend to grow unnecessarily large. ${ }^{15}$ If cuts in administrative expenses are made without reducing the quality of state and local government services, these governments can offer lower taxation to mobile resources, a greater provision of public services or both.
Principle 10. Introducing market incentives into the production of some public services, while maintaining public funding, could foster greater economic growth in a state. Market incentives could be introduced by allowing private producers to compete with each other to supply the publicly funded services. In education, for example, state and local governments could issue vouchers redeemable at the school of the parents' choice. Competition between suppliers could lead to improved service, lower costs or both. In addition, competing suppliers could meet more readily the diverse tastes of individual consumers.
Principle 11. A greater reliance
on taxes that are deductible against the federal income tax, and a reduced reliance on those that are not, could improve economic growth in a state. State and local government reliance on deductible taxes permits the same level of public service at a lower effective cost for the average taxpayer or a greater level of public service at the same effective cost. Revenue raised through a deductible tax costs roughly ten percent less for the average taxpayer in Texas than the same amount of revenue raised through a nondeductible tax. The figure is about 30 percent for the average itemizer in the state. ${ }^{16}$

## The Composition of State Revenue and Texas Economic Development

Is there room to make state tax policy more conducive to Texas economic development? To answer this question this section will examine the composition of revenue and expenditures jointly in light of the economic principles presented in the preceding section. It will consider severance taxes, user fees (and taxes like user fees), broad-based taxes and narrowly applied taxes. In addition, it will look at the corporate franchise tax, the sales tax and the income tax.
Severance taxes. In the recent past, oil and gas severance tax revenues offered Texas a considerable advantage in maintaining a fiscal policy that was conducive to economic development. The severance taxes fall primarily on oil and gas resources that cannot move to avoid taxation. Very little of the tax burden seems to fall on the capital and labor used to develop and produce the oil and natural gas. ${ }^{17}$ As recently as 1982, the severance tax contributed nearly 18 percent of state government revenue in Texas, allowing
the state government to provide a higher level of government services than the relatively low level of taxes on mobile resources would suggest.
Unfortunately, declining severance tax revenue is eroding the advantage that Texas fiscal policy enjoys. In the 1988-89 budget, severance taxes are expected to contribute about five percent of state revenue. ${ }^{18}$ Further declines are to be expected after 1989. Apparently, little can be done to reverse or prevent falling severance tax revenue. Lower energy prices and reduced production of oil and natural gas account for the decline in this tax revenue.

User fees. User fees-or taxes like user fees-are among the best ways to raise a given dollar amount of government revenue. This method of funding assures that individuals who do not use and value a particular government service will not have to pay for it. In addition, user fees provide a method for monitoring public demand for the government service so that the government can better supply the most desired quantities of it.

Motor fuel and vehicle taxes are like user fees for roads and highways. As the data in Table 1 show, state and local governments in Texas have done a better job of covering expenditures for roads and highways with revenue from these taxes than is done in the average state. Federal highway funding closes the gap a little further. As the last column indicates, the state government does an excellent job of matching revenue from motor fuel and vehicle taxes to its expenditures for roads and highways.
As is true nationally, user fees collected by state and local government in Texas for education and for health and hospitals fall far short of government expenditures on these services. As
is the case with road and highway funding, the state does a somewhat better job than local governments of matching revenue to expenditures in these categories. Nevertheless, some room may remain for the state government to increase reliance on user fees for

## Local governments in

 Texas rely heavily on property taxes, yet few of their expenditures benefit property ownership.education, health and hospitals. There may also be room to increase reliance on user fees for state provision of natural resources services, parks and recreation.
Narrow and broad-based taxes. In many cases, it is impossible or undesirable to assess user fees or taxes like user fees to fund government expenditures. Other taxes must be imposed. These taxes may fall narrowly on a few resources or activities, as does the corporate franchise tax, or they may fall more broadly, as does the general sales tax. Either approach to taxation is likely to be less conducive to state economic growth than user fees because they can impose costs on some mobile resources that do not receive benefits from the corresponding expenditures. Nevertheless, a broad-based tax, such as the sales tax, is less harmful to economic growth than a narrow tax because a broad-based tax falls less heavily on any one resource or activity for a given amount of revenue raised. Therefore, a broad-based tax has less effect on private decisions and, thus, on economic growth. ${ }^{19}$

Nationally, state and local
governments rely quite heavily on narrow tax instruments that can not be construed as user fees. These tax instruments include the property tax, the corporate franchise tax and other narrow taxes. As Table 1 shows, per capita revenue from these taxes and other current charges greatly exceeds a very liberal interpretation of the tax-related benefits.
The situation is somewhat worse in Texas. The heavy reliance of state and local governments in Texas on narrowly applied taxes on mobile resources that are not like user fees probably discourages economic growth in the state. The problem is largely at the local level, however. Local governments in Texas rely heavily on property taxes to finance their expenditures, yet few of their expenditures benefit property ownership.
As the table shows, the state government also relies on narrow taxes for general financing to some extent. The corporate franchise tax (a tax that is assessed on the capital value of Texas businesses) is the largest single source of state revenue in this category-accounting for more than 20 percent of the revenue. Other taxes in this category include those for cigarettes, tobacco and alcohol. The state government likely would improve the fiscal environment in Texas by reducing reliance on some narrow taxes, like the corporate franchise, and increasing reliance on user fees and broad-based taxes.
A corporate income (profits) tax

[^59]might be considered as a substitute for the franchise tax. A corporate income tax likely would be less harmful to economic growth than is the corporate franchise tax. For a given amount of revenue, the corporate franchise tax discourages business investment in Texas more than would a corporate income tax. A corporate franchise tax is assessed directly
on the capital that business investment builds, regardless of the firm's profits. In contrast, the corporate income tax falls more broadly across the productive assets of the firm, with less discouraging effect on business investment. Although the corporate income tax is broader than the corporate franchise tax, it is not nearly as broad as either a general

TABLE 1. Per Capita Elements of State and Local Government Budgets: Texas and U.S. Total, 1985

| Selected <br> Budget Element | United States | Texas | Texas State Government |
| :---: | :---: | :---: | :---: |
| Revenue from: |  |  |  |
| Motor Fuel and Vehicle Taxes | \$89.65 | \$100.21 | \$94.36 |
| Expenditure on: |  |  |  |
| Roads and Highways | 190.37 | 164.89 | 101.82 |
| Revenue from: |  |  |  |
| Current Educational Charges | 92.75 | 93.39 | 58.75 |
| Expenditure on: |  |  |  |
| Educational Services | 826.17 | 885.13 | 231.75 |
| Revenue from: |  |  |  |
| Current Hospital Charges | 91.38 | 78.51 | 14.99 |
| Expenditure on: |  |  |  |
| Health and Hospitals | 210.20 | 192.02 | 85.50 |
| Revenue from: |  |  |  |
| Property Taxes, Corporate |  |  |  |
| Franchise Tax, Other |  |  |  |
| Narrow Taxes and Other |  |  |  |
| Current Charges | 756.67 | 850.62 | 230.09 |
| Expenditure on: |  |  |  |
| Fire Protection, |  |  |  |
| Transportation Other Than Roads and Highways, Sewerage, |  |  |  |
| Sanitation, Natural |  |  |  |
| Resources, Parks, |  |  |  |
| Revenue from: |  |  |  |
| Severance Taxes, Broad-Based |  |  |  |
| Taxes, Federal Government, |  |  |  |
| Other Sources | 1359.83 | 953.25 | 746.69 |
| Expenditure on: |  |  |  |
| Public Safety, Transfers, |  |  |  |
| Revenue from: |  |  |  |
| Severance Taxes | 29.82 | 134.49 | 134.49 |
| Revenue from: |  |  |  |
| Sales Taxes | 356.42 | 320.66 | 263.93 |
| Revenue from: |  |  |  |
| Income Taxes | 377.40 | 0.00 | 0.00 |

Source: U.S. Department of Commerce, Bureau of the Census.
sales tax or personal income tax however.
Which broad-based tax? The two broad-based tax instruments are the personal income tax and the general sales tax. Both tax instruments have advantages and disadvantages as sources for state government revenue.
The principal advantage of a state personal income tax over a general sales tax is that it currently remains deductible against the federal income tax. Because sales taxes are not currently deductible, revenue raised through a state income tax would cost the average taxpayer in Texas about ten percent less than the same amount of revenue raised through sales taxes. The figure would be about 30 percent less for the average itemizer in the state. The 30 percent figure may be more significant. Some economists have argued that high-income individuals, who are more likely to itemize tax deductions, make the decisions about business location. ${ }^{20}$
Texas also may be nearing the practical limits for sales taxation. As state sales tax rates climb, residents will find it increasingly worthwhile to buy goods outside Texas to avoid sales taxation. ${ }^{21} \mathrm{~A}$ state income tax is much more difficult to avoid.
A flat tax rate of 2.5 percent on total gross personal income would raise about the same revenue as does the current Texas general sales tax of six percent. ${ }^{22}$ A higher rate would be required if deductions, such as those on the federal income

[^60]tax return, were permitted in the calculation of personal income.

A state income tax is not without drawbacks, however. Nearly all high-tax states rely heavily on income taxation. Income taxes are easily made progressive, and progressivity seems to discourage economic growth by pushing taxable resources from the state. ${ }^{23}$ Furthermore, adoption of an income tax could lead to a growth-hindering tyranny of the majority, in which excessive growth in the size of the state government is funded by increasingly progressive income taxes. ${ }^{24}$

## Tax Policy, the Size of Government and Texas

 Economic DevelopmentState officials are naturally concerned that tax policy provide enough revenue to meet growth in the demand for government services. Taxpayers are naturally concerned that tax policy not allow the government to become bloated. A mistake in either direction, however, would make fiscal policy less conducive to economic development than it could be. If government services are too low or taxes are too high, Texas will not be as attractive to business investment and labor.

A rule of thumb that is often used is that the growth of state government expenditure and tax revenues ought to keep pace with the growth of the taxpayers' ability to pay as measured by personal income. Thus, declining severance tax revenue suggests a recurring problem in state funding. It appears that the state government must continually raise taxes or become too small.

This analysis may be wrong in fact and theory. The state government may already be growing too fast. Adjusted for inflation, state government expenditures are projected to grow at a 2.5 percent
annual rate over the five-year period from 1984 to 1989 while state personal income is projected to grow at only a 1.4 percent annual rate. Given recent tax hikes, state revenue is projected to grow at a 3.2 percent annual rate over the same five-year period. When the state's outstanding tax anticipation bonds are retired, the growth of state government expenditure could accelerate. ${ }^{25}$

## Declining severance tax

 revenues and the fact that sales taxes are no longer deductible against the federal income tax mean that the effective price of state government services has increased in Texas.At the same time, the reduction in the severance taxes revenue and elimination of the deduction for state sales taxes against the federal income tax have made state government services in Texas relatively more expensive than they were in 1984. Consumers normally seek to reduce their consumption of goods that have become relatively more expensive. Perhaps state government expenditures should be growing slower than Texas personal income, and future declines in severance tax revenues should be met with slower government growth-not increased taxes.

## Conclusion

State tax policy can be an important determinant of state economic development. As part of a sound fiscal policy that balances state government expenditures against taxes on businesses and individuals, tax policy can help attract and retain the business investment and
work force necessary for sustained economic growth. For it is these mobile resources that are the key to economic development.
The apparently irreversible decline in state severance tax revenue hurts Texas in that regard-as do local government tax policies. But reduced state reliance on narrow taxes, such as the corporate franchise tax, and increased reliance on user fees, taxes like user fees, and broadbased taxes, such as the sales tax, could improve the attractiveness of state fiscal policy from the perspective of capital and labor.
Substitution of a corporate income tax for the corporate franchise tax would broaden taxes only slightly. More broadly based taxes would be preferred. As a replacement for the sales tax, the personal income tax has advantages and disadvantages.
Declining severance tax revenues and the fact that sales taxes are no longer deductible against the federal income tax mean that the effective price of state government services has increased in Texas. Nevertheless, the growth of state government spending has exceeded that of personal income over the past five years. Together these developments suggest that tax measures that allow the growth of state revenue to keep pace with that of personal income may lead to excessive growth of the government, slowing the overall rate of economic growth in the state.
23. Romans and Subrahmanyam, "State and Local Taxes, Transfers and Regional Economic Growth."
24. Dennis C. Mueller, "The Growth of Government: A Public Choice Perspective," International Monetary Fund Staff Papers 34 (March 1987), pp. 115149.
25. Brown, "The New Fiscal Environment in Texas."

# T he State Business Income Tax 

Background and Analysis

## Summary

Business income taxes-which are levied on corporate net income in 43 of the 45 states using the tax-are the most common state business tax in the United States, accounting for over eight percent of total state tax collections in fiscal year 1986. Only New Hampshire levies the tax on noncorporate income.

Twenty-nine states apply a flat percentage rate to profits, while 16 states use progressively scaled marginal rates that range from one percent to 12 percent.

Most states use the Internal Revenue Code as the starting point for their corporate income taxes. As a result, changes in federal law are significant for state income tax structures. Since 1980, federal tax policy toward business has undergone a number of important modifications, including substantive changes in depreciation rules and investment incentives.

Adherence to federal statutes and rules simplifies the creation of a workable income tax structure, but it can also necessitate acceptance of certain aspects of federal policymaking that are undesirable in particular states. State lawmakers deal with this problem by adopting adjustments to the federal guidelines for reasons of social policy, revenue gains, tax cuts or promotion of economic development. Adjustments make it possible for states to take advantage of federal law while
fashioning a state tax code that more closely reflects their unique business and economic circumstances.
Corporate income taxes are inherently less stable than other business taxes because profits can be volatile during periods of fluctuating economic conditions. This fact has led states like New York and Ohio to use an approach that combines the stability of the capital-based franchise tax with the potentially greater revenue benefits of the corporate income tax.

Arguments in favor of a corporate income tax in Texas include: its lack of direct "impact" on individual or nonbusiness taxpayers; its suitability as a partial or complete substitute for the franchise tax; its broad-based targeting of profitable corporationsincluding those in the service industry-as opposed to the current targeting of capitalintensive corporations; taxpayer familiarity with its structure and its inherent link to a taxpayer's ability to pay.

Arguments against the tax in Texas include: possible inhibition of economic development or competitiveness; the inherent instability of a revenue source that is linked to changing economic circumstances; administrative costs; bureaucratic burdens and the perception that successful businesses are being unfairly penalized.

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While it is generally agreed that all tax burdens are ultimately borne by individuals, taxes on business have been-and continue to be-a widely used method for generating state government revenue. States generally use a combination of industry-specific taxes and one or two taxes that apply to economic measures that are common to a broad range of industries or business endeavors.

Forty-three states and the District of Columbia have corporate income taxes, which makes them the most widespread form of general business taxation among the states. New Hampshire levies an income tax on all forms of business activity, presumably because of the absence of a personal income tax which would otherwise capture the earnings from partnerships and proprietorships. South Dakota's business income tax affects only banks and other financial institutions. Michigan includes net income as one element in its single business tax. Texas, Nevada, Washington and Wyoming do not tax business profits in any form (Table 1).

In addition to the states, some cities also collect corporate income taxes. Examples include

New York City, Detroit, Cleveland, Toledo and Baltimore. Eighteen Michigan cities have corporate income taxes even though the state repealed its corporate income tax in favor of the single business tax in 1975.
Twenty-nine states apply a flat percentage rate to net profits, while 16 states use progressively scaled marginal rates. ${ }^{1}$ Connecticut has the highest flat-tax rate (11.5 percent), and Illinois has the lowest (four percent). The highest progressive marginal rate is 12

1. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987).
percent in Iowa, while the lowest marginal rate is one percent in Alaska and Arkansas.
Twenty-seven states, including Texas, impose franchise taxes on capital value or net worth rather than profits. Although this chapter is principally about the economic and administrative structure of the corporate income tax, comparative references are made to the Texas franchise tax where appropriate. Additionally, since 43 of the 45 state business income taxes are corporate income taxes, they will be referred to collectively as corporate income taxes.

A practical way of differentiating between these two major forms of business taxation is that
the corporate income tax is sensitive to profitability while the franchise tax is sensitive to capital investment.

## Recent Historical Perspective

The first state to adopt a corporate income tax was Wisconsin in 1911. Hawaii passed an income tax in 1901, although that was well before its statehood. Nine states, including New York, instituted the tax prior to 1920. Eight states adopted the tax during the 1920s, including California. During the 1930s, 15 states added the tax, including Pennsylvania. Between 1941 and 1960 , only four states

TABLE 1. State Business Income Tax Receipts, 1986

| State Busl | usiness Income Taxes (Thousands) | Percent of Total State Taxes | State Busin | ness Income Taxes (Thousands) | Percent of Total State Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | \$156,745 | 5.2\% | Montana | \$58,585 | 9.5\% |
| Alaska | 177,751 | 9.6 | Nebraska | 54,559 | 4.9 |
| Arizona | 170,821 | 5.3 | Nevada | - 0 | 0.0 |
| Arkansas | 113,205 | 6.2 | New Hampshire ${ }^{2}$ | 99,063 | 20.4 |
| California | 3,833,261 | 12.4 | New Jersey | 954,885 | 11.4 |
| Colorado | 116,937 | 5.0 | New Mexico | 72,130 | 4.9 |
| Connecticut | 616,824 | 16.1 | New York | 1,901,879 | 8.4 |
| Delaware | 88,923 | 10.1 | North Carolina | 512,095 | 9.2 |
| Florida | 486,925 | 5.3 | North Dakota | 56,312 | 9.1 |
| Georgia | 418,119 | 8.5 | Ohio | 477,794 | 5.3 |
| Hawaii | 43,661 | 2.9 | Oklahoma | 107,077 | 3.6 |
| Idaho | 42,652 | 5.7 | Oregon | 161,728 | 8.4 |
| llinois | 859,707 | 8.8 | Pennsylvania | 963,228 | 9.0 |
| Indiana | 183,565 | 4.1 | Rhode Island | 67,656 | 7.6 |
| lowa | 138,588 | 5.6 | South Carolina | 149,465 | 5.2 |
| Kansas | 156,344 | 8.2 | South Dakota ${ }^{3}$ | 23,617 | 5.8 |
| Kentucky | 233,524 | 7.3 | Tennessee | 268,618 | 8.2 |
| Louisiana | 263,815 | 7.3 | Texas | - 0 | 0.0 |
| Maine | 51,870 | 4.7 | Utah | 66,450 | 4.9 |
| Maryland | 250,331 | 5.4 | Vermont | 30,531 | 6.1 |
| Massachusetts | tts 1,067,987 | 13.9 | Virginia | 280,768 | 5.8 |
| Michigan ${ }^{1}$ | 1,449,598 | 15.6 | Washington | - 0 | 0.0 |
| Minnesota | 367,312 | 7.5 | West Virginia | 88,909 | 4.8 |
| Mississippi | 97,301 | 5.1 | Wisconsin | 407,590 | 7.4 |
| Missouri | 174,199 | 4.8 | Wyoming | 0 | 0.0 |
|  |  |  | U.S. Total | \$18,362,904 | 8.1\% |
| Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987). |  |  |  |  |  |
| 1. Value added tax. |  |  |  |  |  |
| 3. Financial institutions only. |  |  |  |  |  |

passed the tax, including New Jersey, and since 1961, nine states have instituted the tax, although Michigan replaced its tax in 1976 with its single business tax-a modified value-added tax.
State business taxes are growing in relative importance in the federal-state system of government. Twenty-five years ago, state corporate tax collections were one-eighteenth of their federal counterpart, while 15 years ago the collections grew to onetenth. Five years ago, state corporate income tax collections had increased to one-third of federal corporate income tax collections. ${ }^{2}$
Corporate income taxes accounted for 8.1 percent of total state tax collections in fiscal year 1986. Table 1 shows corporate income tax receipts for that year both in terms of dollars and proportion of total tax revenue.

Because most states base their income tax structures-either directly or indirectly-on the federal tax code, the history of the state income tax is closely linked to changes in federal tax law.
Since 1980, federal tax policy toward business has undergone several notable modifications. In 1981, Congress liberalized depreciation and other rules in response to President Reagan's call for reduction of federal taxes. As a result, federal business tax revenues were significantly reduced. In 1982 and 1984, Congress backed away from some of its 1981 policies and, among other things, lengthened the useful lives of certain assets for tax purposes. Lawmakers subsequently eliminated some of the tax breaks, including "Safe Harbor Leasing," which gave unprofitable businesses the right to sell their tax writeoffs. ${ }^{3}$
The Tax Reform Act of 1986 made far-reaching changes to federal corporate income tax law. One of the most important was the
elimination of the investment tax credit. Another was a change in the deductibility of business meals and entertainment. Others included revisions in the rules governing depreciation and accounting, foreign tax credits and the taxation of insurance products and companies.

> There are several advantages to adopting the Internal Revenue Code as a starting point for a state corporate income tax.

The most general way to describe the 1986 legislation is that it broadened the federal tax base while lowering the marginal rates. There was also a shift in burden from the personal to the corporate income tax, mainly accomplished through the broadening of the corporate tax base. As a result, most states would have reaped a windfall if they had taken advantage of the expanded base without making corresponding changes in their corporate income tax statutes.
State lawmakers reacted to this situation by reducing their marginal rates. Many of the states affected by the federal changes returned some or all of the potential windfall to their taxpayers.

## The Structure of the Corporate Income Tax

State lawmakers who pass a corporate income tax must initially choose whether to write their own unique income tax statute or structure it around federal tax law. Table 2 lists the 38 states, by far the majority, that currently use the Internal Revenue Code as the starting point for their
corporate income tax bases.
There are several advantages to adopting the Internal Revenue Code as a starting point for a state corporate income tax. First, there is the familiarity with the Code among taxpayers. Each corporation must already file a federal return on this basis. The less the state tax law deviates from the federal, the less there is for taxpayers and tax preparers to learn anew.

The federal starting point also tends to simplify administration. The state tax form can start with a line from the federal form rather than a lengthy calculation of income and deductions to get to the same total. The state can then make whatever adjustments it desires from that point.

Use of the Code also tends to incorporate an established body of law into the state law. All of the federal tax regulations and rulings are usually applicable to state tax questions when the underlying law is the same.

Of course, there are also disadvantages to the use of federal law. The Internal Revenue Code is forever changing. A state must determine whether it wishes to incorporate all changes in the Code as they occur or periodically review its own law to determine whether Congress' actions are appropriate for the state.
Calculating the tax. The corporate income tax is based on net earnings-specifically gross income minus internal costs and allowable "deductions" or "adjustments." ${ }^{4}$ Gross income includes, but is not limited to,

[^61]TABLE 2. State Corporate Income Tax Structures, 1987

| State | Rate(s) | Highest Bracket | Federal Income Tax Deducted? | Federal Law Used For State Base? | Apportionment Factors |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Property | Receipts | Payroll | Other* |
| Alabama | 5.0\% | - | No | No | - | - | - | - |
| Alaska | 1.0-9.4 | > \$90,000 | No | Yes | - | - | - | . |
| Arizona | 2.5-10.5 | > 6,000 | Yes | Yes | - | - | - |  |
| Arkansas | 1.0-6.0 | > 25,000 | No | No | - | - | - |  |
| California | 9.3 | - | No | No | - | - | - | - |
| Colorado | 5.25-6.0 | >200,000 | No | Yes | - | - |  | - |
| Connecticut | 11.5 | - | No | Yes | - | $x x^{2}$ | - | - |
| Delaware | 8.7 | - | No | Yes | - | - | - | - |
| Florida | 5.5 | - | No | Yes | -1 | . ${ }$ | -1 | - |
| Georgia | 6.0 | - | No | Yes | - | - | - | - |
| Hawaii | $\begin{aligned} & 4.4-6.4 \\ & 4.0 \\ & 11.7 \end{aligned}$ | $\begin{aligned} & >100,000 \\ & \text { Capital Gains } \\ & \text { Financial Instit. } \end{aligned}$ | No | Yes | - | - | - | - |
| Idaho | 8.0 | - | No | Yes | - | - | - | - |
| Illinois | 4.0 | - | No | Yes | - | xx | - | - |
| Indiana | $\begin{aligned} & 3.4 \\ & 4.5 \end{aligned}$ | Corp. Income Supplemental Net Income | No | Yes | - | - | - |  |
| lowa | 6.0-12 | > 250,000 | Yes | Yes |  | - |  | - |
| Kansas | 4.5 | - | No | Yes | - | - | - | - |
| Kentucky | 3.0-12.5 | >250,000 | No | Yes | - | xx | - | - |
| Louisiana | 4.0-8.0 | > 200,000 | Yes | Yes | - | - | - | - |
| Maine | 3.5-8.93 | > 250,000 | No | Yes | - | - | - |  |
| Maryland | 7.0 | - | No | Yes | - | - | - | - |
| Massachusetts 9 | 9.5 | - / | No | Yes | - | xx | - | - |
| Michigan | Value Add | ded Tax |  |  |  |  |  |  |
| Minnesota 9 | 9.5 | - | No | No | - | , 4 | - | - |
| Mississippi | 3.0-5.0 | > 10,000 | No | No | - | . 5 | - | - |
| Missouri 5 | 5.0 | - | Yes | Yes |  | - |  | - |
| Montana 6 | 6.75 | - | No | Yes | - | - | - |  |
| Nebraska 4 | 4.75-6.65 | > 50,000 | No | Yes | - | . 6 | - |  |
| Nevada | No Tax |  |  |  |  |  |  |  |
| New Hampshire |  | - | No | Yes | - | - | - | - |

TABLE 2. State Corporate Income Tax Structures (Continued)

| State | Rate(s) | Highest Bracket | Federal Income Tax Deducted? | Federal Law Used For State Base? | Apportionment Factors |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Property | Receipts | Payroll | Other* |
| New Jersey | 9.0\% | - | No | Yes | - | - | - | - |
| New Mexico | 4.8-7.6 | > \$100,000 | No | Yes | - | - | - | - |
| New York | $\begin{aligned} & 9.0 \text { or } \\ & 0.178 \% \text { of } \end{aligned}$ | f net worth, if | No | Yes | - | xx | - | - |
| North Carolina | 7.0 | - | No | Yes | - | - | - | - |
| North Dakota | 3.0-10.5 | > 50,000 | Yes | Yes | - | - | - | - |
| Ohio | $\begin{aligned} & 5.1-9.2 \\ & \text { or 0.582\% } \end{aligned}$ | $\begin{aligned} & >25,000 \\ & 6 \text { of net worth, } \end{aligned}$ | if higher | Yes | - | - | - | - |
| Oklahoma | 5.0 | - | No | Yes | - | - | . 7 | - |
| Oregon | 6.6 | - | No | Yes | - | - | - | - |
| Pennsylvania | 8.5 | - | No | Yes | - | - | - | - |
| Rhode Island | $\begin{aligned} & 8.0 \text { or } \\ & 0.4 \% \text { of } n \end{aligned}$ | et worth, if hig | No | Yes | - | - | - | - |
| South Carolina | 6.0 | - | No | Yes | - | - | - | - |
| South Dakota | (Tax appli | les only to fina | cial institutions.) |  |  |  |  |  |
| Tennessee | 6.0 | - | No | Yes | - | - | -9 | - |
| Texas | No tax |  |  |  |  |  |  |  |
| Utah | 5.0 | - | No | No | - | - | - |  |
| Vermont | 6.0-9.0 | > 250,000 | No | Yes | - | - | - | - |
| Virginia | 6.0 | - | No | Yes | - | - | - | - |
| Washington | No tax |  |  |  |  |  |  |  |
| West Virginia | 9.75 | - | No | Yes | - | xx | - | - |
| Wisconsin | 7.9 | - | No | No | $\cdot{ }^{\prime}$ | . 3 | -1,9 | - |
| Wyoming | No tax |  |  |  |  |  |  |  |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987; All States Tax Handbook (Paramus, N.J.: Prentice Hall, 1988).

* Special provisions for selected industries, separate accounting or other factors.
xx - Double weighted factor.

1. Factor represents 25 percent of formula.
2. Sole factor for businesses other than manufacturing or sale of intangibles.
3. Factor is 50 percent of formula.
4. Sole factor only for retailing goods or services in response to phone or mail orders and entire property-payroll in Minnesota.
5. Sole factor only for retailing, renting, servicing and merchandising.
6. Sole factor in Nebraska for unitary businesses (effective for tax years starting after December 31, 1991).
7. Includes services related to unitary business but excludes compensation as general or administrative expense.
8. Uniform Division of Income for Tax Purposes Act (UDITPA) is substantially adopted.
9. Cost factor replaces payroll factor.
compensation for services, income from business activity, interest, rents, royalties, dividends and gains from the sale of property. Some of the items that are specifically excluded from gross income include gifts, interest on state and local debt and contributions to the capital of a corporation.

The Code allows deductions for ordinary and necessary businessrelated expenses, as well as taxes and depreciation. The deductions are subtracted from total income to yield "line 28 taxable income," referring to the line on the U.S. Corporation Income Tax Return, Form 1120. "Taxable income" is finally figured by adjusting for net operating losses and dividends and special deductions and entered as "line 30 taxable income."
The tax that is owed may be partially offset by tax credits. Two tax credits that were originally created to spur economic development were the investment tax credit and the jobs credit. Both were subsequently repealed. A credit that is currently available is the foreign tax credit, which is intended to avoid or reduce multiple national taxation of multinational corporate and individual income.

An extensive body of law has developed around the administration of the federal income tax through legislation, rulemaking and court decisions. Congress oversees the workings of the Code through the House Ways and Means Committee, Senate Finance Committee and Joint Committee on Taxation. States that start with a particular federal income figure-total, line 28 taxable or line 30 taxable-generally follow federal statutes and rulings unless they are in direct conflict with state law.
One of the advantages of state adherence to the Code is the use of federal income tax audits, even to
the point that taxpayers are frequently required to report federal audit changes when they become final. On the other hand, incorporation of federal provisions into state law can imply acceptance of certain aspects of federal policymaking that may be undesirable in particular states.

> One of the advantages of state adherence to the Code is the use of federal income tax audits . . . .

States often deal with this dilemma by adopting adjustments to the federal figures. The use of adjustments makes it possible for states not only to take advantage of the federal tax code but also to deviate from it for reasons of social policy, revenue gains, tax cuts or promotion of economic development. Through these adjustments, states fashion taxes that are reflective of their unique business and economic climates. The following are brief descriptions of the most commonly used state adjustments.
Exemption of preenactment gains and losses. When a state considers enactment of an income tax, a frequent concern is the treatment of gains that have accrued prior to enactment. An example would be a business that owns appreciated property that is sold sometime after the state approves an income tax. The gain, which would otherwise be taxable, mainly occurred over a period when the tax was not in effect. It is common for newly adopted income tax statutes to allow some proration of previously accrued gains to avoid the possibility of a retroactive tax.
Addition of tax-exempt interest. States lawmakers frequently
decide to tax state and local government interest income that is otherwise exempt from federal taxation. This is presumably done to enlarge their tax bases. Some states explicitly exempt interest from their own obligations to make it easier and cheaper to finance their borrowing requirements with in-state money.
Deductions for income taxes. The federal tax code permits deductions for foreign, state and local income taxes paid. It does not allow a deduction for the federal tax itself. A state might grant a deduction for federal income tax paid based on a notion of reciprocity, since the federal government allows one for state taxes. It might also be a recognition of taxes as a category of expense that should be exempt as a matter of fairness.
Additions and subtractions of dividends. States generally exclude intercorporate dividends from the income tax base to avoid double taxation. If the dividends are taxed in the parent and the income that allowed the payment of the dividends taxed in the subsidiary, the result would be double-although legal-taxation. Some states allow the dividends to be excluded only to the extent that the payor's income was taxable in the taxing state.
Net operating losses. States frequently do not treat net operating loss "carryovers" or "carrybacks" in the same way as the Code, which allows losses to be carried back three years and forward 15. The states that deviate from federal policy generally do not permit losses experienced in one year to offset the tax liability of another year or reduce the periods for which they may be carried forward or back.
This is an issue that puts the objectives of stability and fairness at odds with one another. If a state follows federal law, it might
have to refund taxes collected for a prior year-even after the revenue has been spent-because of losses carried back to that year. For example, suppose a business paid tax on $\$ 1$ million of income in 1984, but experienced a loss of $\$ 1$ million in 1987. If state policy allowed the 1987 loss to be carried back to 1984, all the tax remitted in 1984 would have to be refunded. On the other hand, it is somewhat unfair to formulate a corporate income tax base without taking into account the inevitable cycles of profit and loss.

Depreciation rules. One policy area where states have regularly departed from federal rules is deductions or write-offs for depreciable or depletable properties. This is particularly evident in the area of oil, gas and other minerals, with mineral-producing states generally favoring more generous rules than the federal government. Some states have also passed preferential rules for deductions related to the development of mines or wells. States move away from the Code's treatment of deductions for two basic reasons: maximization of revenues (granting narrower write-offs than the Code); or encouraging a class of economic development (permitting more generous write-offs).

Subtractions of foreign income. Corporations are usually organized so that business is done solely inside the United States (implying little or no foreign source income) or solely outside the United States. Unless a state decides to pursue a unitary tax policy, the treatment of foreign source income is normally an irrelevant issue. But if a state requires affiliated corporations to file consolidated returns, the taxation of foreign source income becomes an issue.

Accuracy is one reason states may exclude foreign source income from allocable or appor-
tionable income. Applying apportionment factors to a mixture of domestic and foreign income may result in a distorted picture of the actual business condition of a corporation or corporate group.

Avoiding audit problems is another reason for confining apportionable income to domestic sources. It can be difficult and burdensome to both the taxpayer and taxing entity to determine how U.S. or state laws should be applied to foreign income if it was initially calculated using an entirely different set of laws or accounting principles.

Fairness is a third argument against taxation of foreign source income. It is hard to argue against the contention that such a tax policy necessarily involves taxing income-producing activities that occur outside the taxing state.

Conversely, there are two policy reasons for including foreign source income. Most basic, of course, is the maximization of revenue. Second, including foreign source income in a worldwide apportionment scheme has the effect of minimizing controversies over the calculation of income with respect to transactions that cross national boundaries.

Recognition of Subchapter S election. Seven income tax states do not recognize the Subchapter $S$ election in the federal Code that allows small corporations to be taxed as unincorporated entities. This is presumably done to enlarge the tax base and increase revenues.

Economic incentives. The final area where states vary the structure of their corporate income taxes is through various credits for certain types of activities or expenditures considered beneficial to the taxing state. The most popular of these are investment credits (29 states), credits for investing in an enterprise zone (25
states) and job creation credits (24 states). Other credits used include offsets for fuels taxes paid, weatherization, alternate energy devices, restoration of historic structures, donations to schools and other charitable causes, ridesharing, handicapped access, various litter and waste disposal credits and many others.

The state investment tax credit may or may not have been linked to the federal investment tax credit that was repealed in the Tax Reform Act of 1986. Obviously, states that linked their investment credits to the federal credit have been faced with a decision on whether to continue these credits on their own. It appears that many have. There is a great diversity in the type of property qualifying for a credit, the percentage of the price allowed as a credit and the period to which the credit may be applied. There is similar diversity in the other more frequently allowed credits, enterprise zones and job creation.

## Other Tax Structure Choices

Rate structure. How to fashion a rate structure is another basic corporate income tax choice. Lawmakers must decide in favor of either a flat-rate tax (the same rate regardless of profitability) or a progressive-rate scale (marginal rates rise with net income). Table 2 lists tax rates and top income brackets for those states with progressive rate structures.

The primary benefit of a progressive rate structure is that it provides a straightforward economic link between a business' tax burden and ability to pay. Conversely, one of the built-in advantages of a flat-tax rate structure is that it lessens the incentive for businesses to subdivide into units with smaller tax bases that fall into lower marginal rate brackets.

Similarly, states with personal and corporate income taxes have good reason to set the top personal and business tax rates at roughly the same level, especially if both are levied on comparable measures of income. ${ }^{5}$ A top personal tax rate of four percent and a top business tax rate of seven percent would give small firms an incentive to become sole proprietorships rather than corporations.

Apportionment. The apportionment factors determine the amount of a business' taxable base that is subject to tax in a particular state. For instance, one common factor is property owned. A ratio is determined based on the amount of property owned by the business in the taxing state in relation to the value of all its property everywhere. The average fraction of all apportionment factors used is multiplied times the tax base to give the fraction of the tax base taxable in the particular state. Table 2 also indicates the apportionment factors used to calculate the tax liability of businesses that function in more than one state.
Net worth franchise and corporate income taxes use similarly broad measures of business activity to apportion the tax burdens of multistate businesses. However, the allowable factors used in the calculation often vary

[^62]from state to state. For example, 12 states place an additional emphasis on gross receipts such as sales, services or rentals. Other states use an equal combination of property, receipts and payroll. Thirty-nine states also permit the use of separate accounting or other apportionment factors for selected industries.

Legal basis of taxation. There are two legal approaches to the state taxation of corporate income. One is the direct taxation of net income; the other is a franchise tax measured by net income. The franchise tax measured by net income is a tax on the privilege of doing business, similar to the Texas franchise tax on net worth. There are some important differences between the two taxes.

A direct tax on net income would be a tax on income earned in some previous period, either the preceding calendar or fiscal year. A franchise tax is levied for a "privilege period" that might not be the same as the period during which the income was earned. In fact, it is often paid in advance.
This has direct implications for Texas. Since Texas has a franchise tax on net worth, paid in advance, if it were to adopt a direct income tax, there could be an unacceptable lag in revenue until the earnings period and the privilege period matched. If Texas were to adopt a franchise tax on net income, only the tax base would have to change. The advance payment and the privilege period could remain unchanged.

There are some other differences of note. First, a tax like the New Hampshire tax, which includes business organizations other than corporations, is a direct tax. Franchise taxes are on the privilege of doing business as a corporation. There are also differences in the treatment of the taxation of federal obligations, such as Treasury bonds and notes. A
direct income tax may not include income from obligations of the federal government in the tax base due to the U.S. Constitution. A franchise tax may include this income. ${ }^{6}$

## Taxation of Interstate Business

The taxation of businesses engaged in interstate commerce has been a continously evolving aspect of state corporate taxation. The limits of state taxation of interstate commerce have been variously defined by the Commerce Clause and the Due Process Clause of the U.S. Constitution. ${ }^{7}$ These standards determine the amount of contact that a corporation doing interstate business must have with a state before it is subject to tax in the state. This minimum contact is called "nexus."
The earliest interpretations held that the states could not directly tax interstate commerce at all. There has been steady retreat from that position, to the point that the Commerce Clause is a limitation on state taxation of interstate commerce mainly because Congress hàs adopted legislation under the authority of that clause. That law is Public Law 86-272: ${ }^{8}$ Its effect will be addressed later in this section.

The Supreme Court has stated the requirements of the Commerce Clause for state taxation:
[The tax will be upheld] when the tax is applied to an activity with a substantial nexus with the taxing State, is fairly apportioned, does not discriminate against interstate commerce, and is fairly related to the services provided by the State. ${ }^{9}$

These standards are identical to the requirements of the Due Process Clause except for the prohibition of discrimination
against interstate commerce. Thus, the standard for taxing interstate commerce is essentially a due process standard. Not all states have extended the scope of their corporate income taxes to include all corporations taxable under the due process standard (or the narrower standard of P.L. 86-272).
There are four broad definitions of taxable interstate corporate income: income from instate property, income from instate business, income from instate sources and income from doing business instate. ${ }^{10}$ Some states also have statutes that specifically tax corporations engaged in interstate commerce. At one time, these definitions specified the income that had to be reported to the state for income tax purposes. Essentially, there was a separate accounting for the income derived in the taxing state. As separate accounting has fallen from favor as a method of apportionment of the income of corporations, the definitions have merely established nexus for the corporations, with income divided through apportionment formulas.
Income from instate property. This tax-base classification claims income from property with an instate site, even if the companies are not active in ordinary business operations in the state. For example, income from patents, copyrights, licenses or royalties would ostensibly be taxable, even though the corporate owner has no other contact with the taxing state.
Income from instate business. In principle, this category implies broad taxing potential. But, in reality, a tax limited to "business" can be less far-reaching than a statute not restricted by a specific definition of "business." For instance, pure investment income or income not produced by direct labor employed in the state might not be taxable if the statute
specifically refers to instate "business." These matters are frequently clarified by state courts. Income from instate sources. This is probably the broadest classification currently in use. In theory, any type of income derived within the borders of the taxing state could be taxable under this

> The performance of business income taxes can be unpredictable or unsatisfactory because of the volatility of corporate profits during periods of fluctuating economic. conditions.

type of language, including mail or phone orders placed by residents of the taxing state (although no other contact would exist between the taxing state and the marketing corporation). This is the classification restricted by P.L. 86-272.
Income from doing business instate. This is the narrowest corporate income tax base, limiting taxable income to solidly established commercial activities functioning within the taxing state.
Public Law 86-272. P.L. 86-272 limits the extent to which states may tax businesses engaged in interstate commerce having only minimal contacts with the taxing state. That law applies specifically to taxes measured by net income. It does not apply to franchise taxes measured by net worth, such as the Texas corporate franchise tax.
The law was adopted in response to attempts by states to extend the reach of their income taxes to businesses whose only
contact with a state was sales into the state, either through the mail or through salesmen entering the state for short periods of time. The act is remarkable in that it was the first action by Congress to use the unexercised power to regulate interstate commerce to limit the right of states to tax that commerce.
The law establishes certain activities that can be performed in a state without subjecting the corporation performing the activities to taxation in the state. The protected activities include employees soliciting orders on a usual or frequent basis so long as the orders are not accepted in the state, displaying goods or other promotional activity by employees not taking orders, solicitation of orders by nonemployee representatives through an office in the state or delivery of orders in the state in company-operated vehicles, regardless of frequency. ${ }^{11}$
There have been numerous attempts to enlarge the scope of this law, either to make it apply to taxes other than those on income or to allow more activities in a state without being subject to state taxation. However, all have failed. While several states do maintain their own measures of activity that will subject a foreign corporation to taxation, this law has become the predominant test.

## Stability and Economic Performance

The stability of a business tax (i.e., its ability to generate a predictable, adequate supply of revenue) is closely related to its base. The performance of business income taxes can be unpredictable or unsatisfactory because of the
10. 73 Stat. 555,15 U.S.C. § 381 (1959).
11. Hellerstein, p. 237.
volatility of corporate profits during periods of fluctuating economic conditions. This is because a corporate income tax is inherently only as stable as the economy within which it operates. Forecasting the behavior of corporate income taxes is even more difficult in those states that permit businesses to carry back or carry forward operating losses.
Conversely, because the franchise tax is based on a corporation's net equity-which tends to accumulate over time-its performance is likely to be steadier and more predictable than a levy on corporate earnings.
In practical terms, this means that during economic expansions, business income tax growth is likely to exceed franchise tax growth. But during economic downturns, a franchise tax will almost certainly outperform an income tax because of the negligible impact of a weak economy on taxable corporate capital.
This relationship is depicted in Figure 1, which compares the size
12. Comptroller of Public Accounts, "Fiscal Estimates on Selected Tax Policy Options" (Austin, July 1988).
13. U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections in 1986 (Washington, D.C., 1987).
of the Texas franchise tax base (taxable capital) to the size of corporate profits nationally between 1974 and 1986. The bases are calculated to reflect change from a base value of 100 in 1974.
Figure 1 shows that over a 12year period, corporate taxable capital grew every year, while corporate profits followed a cycle of growth, contraction and growth. It is not surprising that corporate profits peaked in 1979 (a year of high inflation and price increases), while bottoming out in the recession year of 1982 .
The economic behavior of the corporate income tax has led states like New York and Ohio to use an alternative approach. Those states impose an income tax on a business taxpayer only if doing so results in a greater tax collection than a levy on the business' taxable capital. As a result, if a taxpayer has a net operating loss, the state is still owed money from its franchise tax. This state policy makes it possible to simultaneously take advantage of the benefits of the corporate income tax and the franchise tax (greater potential growth and revenue stability respectively) by collecting the greater of two tax liabilities from individual businesses.
Taxpayers tend to see this

FIGURE 1. Comparison of Business Tax Base Behavior, 1974-86


Source: Comptroller of Public Accounts and Data Resources, Inc.
combination tax from a different perspective. A tax that does not recognize losses as well as profits is something other than an income tax. The burden on each business is maximized: its income is taxed in good years and its net worth is taxed in bad.

## Revenue Potential for Texas

A corporate income tax would have limited potential for raising additional revenue in Texas. If it were used as a replacement for the franchise tax, it could be a revenue neutral replacement or used to raise a small additional amount. The Comptroller's office estimates that a corporate income tax at a rate of five percent would raise about $\$ 400$ million over the current franchise tax after it was fully implemented and reasonable compliance achieved. This would take about five years after adoption of the tax. ${ }^{12}$
This limited potential is due in part to the amount of revenue currently being raised with the corporate franchise tax. Table 1 shows that the average state corporate income tax raises about 8.1 percent of total state tax revenues. Texas, in the same year, received 8.3 percent of its revenue from the franchise tax. ${ }^{13}$ It would not be likely that Texas could add a corporate income tax on top of the franchise tax. More likely, it would be a partial or complete replacement.

## Arguments Concerning Adoption of a Corporate Income Tax

There have been numerous studies of the corporate income tax. While analysts frequently reach differing conclusions, certain arguments-both pro and con-tend to emerge consistently. The following is a brief summary of those arguments with some
considerations for Texas.
Perhaps the most basic argument in favor of a corporate income tax is that it is linked to a taxpayer's "ability to pay" (i.e., tax obligations are generally commensurate with business success and no tax is due unless a business is profitable).

The corporate income tax enjoys a certain amount of popular acceptance in the sense that it is "invisible" tơ nonbusiness taxpayers. Individuals who are not corporate shareholders generally do not think of the tax as imposing a burden on them, although tax incidence studies suggest that their perceptions are incorrect.

The corporate income tax can be viewed as a partial or complete substitute for the corporate franchise tax. The tax can be an especially workable substitute if state lawmakers rely on the preexisting body of statutory, regulatory and judicial law in designing their own income tax system. An additional advantage to an income tax system designed around federal law is general taxpayer familiarity with its structure.

There are a number of economic arguments favoring the replacement of the Texas franchise taxwhich currently has a relatively high rate of $\$ 6.70$ per $\$ 1,000$ of taxable capital-with a corporate income tax. ${ }^{14}$ A tax on capital discourages the needed investment that frequently is a prerequisite to business expansion and job creation. This is an important consideration in light of the state's recent economic trouble.

The franchise tax grants the equivalent of tax-free status to many businesses in the lowcapital "service industry." This is particularly ironic since serviceoriented businesses are among the fastest-growing and most profitable enterprises in Texas at the present time.

A business income tax that
included both incorporated and unincorporated businesses could restore some neutrality to the tax system by not implicitly favoring one type of organizational structure over another. A response to this is that a tax on only businesses is partly a corporate income tax and partly a personal income tax. It would create a disparity between the treatment of wage and salary income and earnings from selfemployment.

Finally, in the context of debate over the relationship between taxes and economic development, some analysts have argued that states with corporate income taxes suffer from a competitive disadvantage in attracting new industry. Supporters of a moderate corporate income tax say that the tax would have little impact on Texas' ability to attract new industry because it is so commonly accepted in other states. They say that it is only the states with unreasonably high rates for their taxes who are at a disadvantage.

Opponents, on the other hand, strongly believe that the lack of an income tax is one of the state's strongest selling points, and any attempt to change that would seriously inhibit economic development efforts. In a similar vein, opponents of the corporate income tax also view it as the likely first step to the passage of a personal income tax.

One of the most effective arguments against a corporate income tax is revenue instability. The instability of the corporate income tax would be a serious liability, particularly if Texas legislators adopted the tax as a complete substitute for the considerably more reliable franchise tax. Texas could be even more vulnerable to changing economic conditions.

Some income tax opponents argue that it is unfair to successful
businesses to make them shoulder the responsibility of funding state services that are used by all businesses, even those that are unprofitable. Implicit in this argument is the notion that all persons or businesses who benefit from state services should be expected to participate in their funding, regardless of profitability or "ability to pay."
There are two potential administrative problems with a corporate income tax in Texas. The first would be disruption in the state's flow of revenue caused by taxpayer confusion or noncompliance. The second would be administrative burdens and costs, although it is possible that a corporate income tax bureaucracy would not be significantly larger than that which is necessary to administer the franchise tax.

## Conclusion

To the extent that a corporate income tax is seriously considered in Texas, the focus is likely to be on the preceding arguments, particularly as they relate to the advantages and disadvantages of the franchise tax, the state's principal business tax. The current problems with the franchise tax increase the appeal of alternative taxes. Further, any discussion on the adoption of a personal income tax is likely to include an assumption that it should be paired with the corporate income tax.

While discussion of a corporate income tax in Texas has traditionally been volatile and emotional, its widespread use and acceptance in other states probably means that the tax will continue to attract attention in this state.
14. This is a temporary rate that will revert to $\$ 5.25$ per $\$ 1,000$ of taxable capital on January 1, 1990.

## T he Value Added Tax

## A Background Analysis

## Summary

The value added tax (VAT) is levied on a taxpayer's gross receipts less interfirm purchases at each stage of production.

This chapter finds the VAT conceptually superior to the corporate income tax as well as Texas' current retail sales and corporate franchise taxes because of its stability and neutrality. Since its base is so large, encompassing most for-profit economic activity, the VAT is neither vulnerable to economic fluctuations nor dependent on a single industry sector. Moreover, it taxes all factors of production equally, does not discriminate between debt or equity, does not penalize forms of business organization and may promote capital investment.

Opponents of a VAT observe that it is not truly a "business tax," but a consumption tax (it can be passed forward to consumers in higher prices). Also, unlike a corporate income tax, a VAT offers neither relief when a business suffers losses nor countercyclical effects during recession. Because labor generally accounts for a large portion of value added, a VAT is often characterized as an artfully drawn payroll tax.

Europe's VAT system, with rates averaging 16 percent, has worked as intended. The only major problems have arisen from the use of a multiple rate structure. Michigan, which
adopted a form of VAT--the single business tax (SBT)-in 1976, has also had a generally favorable experience. The 2.35 percent SBT, which generates about $\$ 1.5$ billion a year, has proven far more stable relative to the state's previous business tax structure. Since its inception, there have been no rate hikes or drastic changes in the base.
Applying Michigan's SBT experience to the State of Texas, after taking into account pertinent differences between the states, allows the estimation of potential SBT revenue. A 2.35 percent SBT in Texas would raise $\$ 1.7$ billion-four times existing corporate franchise tax revenues. Similarly, a broaderbased "pure" VAT with a one percent rate would raise $\$ 1.1$ billion.
If the corporate franchise tax had been replaced in 1982 by a 0.67 percent SBT, the tax liabilities of the oil and gas sector and other capital-intensive industries would have fallen by twothirds, while construction and the retail and service sectors would have had a three-fold increase in taxability.
The Texas corporate franchise tax is based on capital-intensive corporations. Equalizing the base, therefore, implies that those firms and sectors heretofore untaxed would necessarily experience dramatic business tax increases.

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In the chain of production, from raw material through finished product to ultimate sale, "value added" is the measurement of each firm's contribution to the product's economic value. Thus, a good's final retail price equals the sum of the value added at each stage of production. In the simplest terms, it can be thought of as each firm's "sales less purchases"-i.e., total receipts minus the costs of raw materials and goods used up in production. To the tax collector, no value is created until the goods are sold,

## Why Tax Value Added?

The theory of value added taxation relies on the concept that business taxes should in some way correspond to the "benefits received" by business. That is, all businesses, whether profitable or unprofitable, benefit from government services and should expect to pay for them. In this sense, a value added $\operatorname{tax}$ (VAT) is like the corporate franchise tax. Assuming that benefits received correlate with production, the value added concept provides a reasonable means of distributing the tax burden. ${ }^{1}$
In contrast to a gross receipts or

[^63]"turnover" tax, a VAT does not "cascade" or compound itself through the production chain. When a good is sold, only the incremental increase in price (i.e., value)-not the full price-is subject to the VAT. Figure 1 demonstrates how a VAT works. Assuming a ten percent rate on a shotgun retailing for $\$ 400$, a ten percent tax is collected at each production stage on the difference between the selling price and the cost of goods and materials used in production. Thus, a ten cent VAT is collected upon the one dollar sale of ore to the mill; another ten cents is collected on the two dollar sale of steel to the manufacturer (ten percent times the difference between the $\$ 200$ sale price and the one dollar cost of ore); $\$ 19.80$ is collected on the $\$ 200$ sale (ten percent times the difference between two hundred dollars and two dollars); and finally, $\$ 20$ is collected on the dif-
2. Richard W. Lindholm, The Economics of VAT (Lexington, Mass.: D.C. Heath and Company, 1980).
3. U.S. Advisory Commission on Intergovernmental Relations, Strengthening the Federal Revenue System: Implications for State and Local Taxing and Borrowing. A Commission Report (A-97) (Washington, D.C., October 1984).
ference between the final sale price of four hundred dollars and the dealer's cost of two hundred dollars. By contrast, a ten percent gross receipts tax would generate $\$ 60.30$, even assuming that it was not passed on to customers in the form of higher prices.
Figure 1 also shows that by the end of the tax collection process, a ten percent VAT generates in theory exactly the same revenue as a ten percent sales tax levied at retail-implying no practical difference between the two. The similarities end in application and administration. First, the tax base for a VAT is generally considerably larger than a retail sales tax base. For example, professional services and new housing construction are rarely covered under a sales tax. Also, a VAT, rather than exempting necessities, usually applies a lower rate or exempts only one element in the production chain (e.g., the farmer). The broader base allows the tax to produce more revenue with the same rate.
Second, a VAT can be hidden or embedded in a good's cost, or the tax can stop before the retail level and show up in final sales only indirectly in higher prices. With a sales tax the rate and the amount collected are always known,
making it harder to expand the base or increase the rate without generating voter backlash or tax avoidance.
Third, unless the sales tax fully relieves businesses of their tax burden for all interfirm purchases, it will introduce economic distortions; i.e., encouraging vertical integration and/or the substitution of labor for capital. Typically, sales taxes are only 7580 percent effective in exempting interfirm purchases. ${ }^{2}$ A VAT is usually configured to allow producers to deduct any capital expenses from their tax basetreating capital investments no differently than raw materials.
One reason often given for allowing producers the immediate expensing of the full cost of capital equipment is to encourage business investment and expansion. Sales taxes offer no such option; rather, if they are applied to manufacturing plant and equipment, as they are in Texas, they penalize capital investment. Moreover, a VAT can be constructed to encourage small businesses without giving up all of the tax revenue associated with the goods or services provided by those businesses; this would be difficult with a sales tax. ${ }^{3}$
Even assuming no investment

effects, relatively low, equal rates and equal bases, a VAT might be considered preferable to a sales tax on conceptual grounds. Unlike the value added tax, the sales tax falls on the destination of the goods sold, the current out-ofstate sales and use tax dilemma notwithstanding. Consistency with the benefits received principle, then, would imply the use of an origin-based tax. Compared to a VAT, such other traditional revenue sources as gross receipts, income or profits and payrolls provide remarkably poor measures of the value of government services received by a firm.

Moreover, a pure VAT treats all factors of production equitably and does not discriminate against labor (as does a payroll tax) or capital (as does a franchise tax). A VAT is neutral with respect to business organization (in contrast to the franchise and corporate income taxes) and with respect to the method of financing. Dividend and interest expenses are payments to factors that contribute to value added and thus are taxed under a VAT. Typically, the franchise tax base is built on equity but excludes debt.

Finally, a VAT, because of its large base, is inherently more stable and predictable than income- or profits-based taxes, which fluctuate with the business cycle. This attribute can be a twoedged sword: what is gained in stability is given up in the loss of countercyclical effects. That is, with an income-based tax, the negative effects of an economic downturn are muted for each firm because of the reduction in tax liability.

As opposed to the aforementioned attributes, the VAT has several drawbacks, some real, some imagined. Many people consider it regressive; small and marginal businesses dislike its lack of "ability to pay" features-
not to mention being brought into the tax base to begin with. Labor-and labor-intensive in-dustries-may consider the VAT to be little more than a glorified payroll tax.

## Three Forms of VAT

Although the value added concept treats all factors of production equally, in practice the equitable treatment of capital investment poses a dilemma. Value added can be calculated three ways, depending upon how capital investment is treated in the tax base.

Consumption method. This is almost universally considered as the easiest method to administer and to compute-and as providing the most neutral treatment to capital. The consumption method is used in Europe and Michigan and would likely be used in the U.S. if a national VAT were adopted. ${ }^{4}$ Returning to the basic definition of value added-total receipts less the cost of materials and other goods-the consumption method allows firms to deduct the total cost of any capital equipment in the year of purchase. In other words, capital outlay is treated as a cost just like non-durable purchases and raw materials or any other interfirm purchase. One of the great administrative and compliance benefits of the consumption method is that it eliminates the need for depreciation schedules to account for the portion of capital that is "used up" in the production process each year.

Income method. The opposite of the consumption method, the income method handles capital investment by annual deductions for capital depreciation, with no initial deduction for the capital's cost. The basic differences between the consumption and income methods are the time
period for expensing capital outlay and the income method's added complexity.

Gross product method. This method is basically an intellectual curiosity and is only discussed for the sake of theoretical completeness. The value added concept came to life with the creation of national income and gross national product accounting. The method makes no allowance whatsoever for investment in capital equipment. As such, use of this method would impose a double tax on capital goods, because a tax would be collected on the good itself as well as on its output.

Or, looking at it from the other perspective, the method fails to account for the value subtracted as the capital equipment is used up during the production process. The only way the producer could cover capital acquisition costs would be to increase prices-which would not necessarily be possible in a competitive industry. The gross product method finds little support among business, economists or governments and is not used by any country with a VAT. ${ }^{5}$
Overall, the consumption method enjoys considerable advantages over the income method: it avoids setting up artificial depreciation schedules and their associated enforcement headaches. It also encourages investment, perhaps tilting the playing field a little in favor of
4. U.S. Department of the Treasury, Office of the Secretary, Tax Reform for Fairness, Simplicity, and Economic Growth. Treasury Department Report to the President, Vol. 3, Value-Added Tax (Washington, D.C., 1984).

[^64]new and expanding firms, which are more likely to have large capital expenditures relative to their bases. To the extent that investment in capital goods is encouraged, production of capital goods is encouraged. Moreover, removing capital expenditure immediately from the tax base has the side effect of eliminating one of its more volatile components.

## Calculation of the VAT

After the type of value added tax is decided, the method of calculation must be considered. Once again, three options are possible-the additive, subtractive and invoice (credit) methods. For administrative purposes, the optimal choice is less clear-at least for subnational VATs. Fortunately, as Table 1 demonstrates, the choice should make little difference in the amount of taxes raised.

Additive. The additive method calculates the tax base as the sum of business income, labor compensation and expenses, rent paid and interest and dividend payments. If capital acquisitions are expensed in the first year, any depreciation taken in the calculation of business income (i.e., for federal income tax purposes) must be added back into the base. The
same amount would be collected by adding up all costs on which a VAT had not been paid; netting out inventory changes, capital acquisitions and nontaxable sales; and applying the VAT rate to the difference.
No country uses the additive method because compliance and administration are too difficult. For subnational entities, this method offers an advantage because it can be constructed using existing Internal Revenue Service data-i.e., starting with Adjusted Gross Income (AGI) and building up. This feature appealed to the creators of Michigan's Single Business Tax, which is additive.

On the downside, as Michigan's tax administrators were quick to learn (for good or bad, the people who write tax laws are rarely the ones who have to collect the taxes), the additive method is counterintuitive to taxpayers who have grown accustomed to taking deductions off AGI.

Although expanding the tax base beyond AGI (e.g., adding unemployment insurance, FICA contributions, health insurance, workers' compensation and other costs) may be helpful to the extent that it identifies the incremental tax liability ássociated with each
change in inputs, it may also strike many taxpayers as inherently "unfair." Moreover, by focusing on labor compensation and net income as major portions of the base, the additive method lays the tax open to criticism as a tax on labor or profits.

Subtractive. This method achieves the same result as the additive method, but instead of starting with AGI and building up, it starts with gross receipts or federal sales and works down, subtracting interfirm purchasesi.e., the cost of materials and supplies-to arrive at the base. This method was used by Michigan in an earlier VAT-type business tax, discussed later.
Invoice. The invoice or credit method is a variant of the subtractive method. This is the method currently used throughout Europe. A firm's total tax liability is calculated by multiplying the tax rate times the amount of taxable goods purchased. The method is considered self-enforcing because even though each seller has a vested interest in underreporting sales, each buyer has an equally strong interest in making sure that all sales are recorded, so as to ensure full credit for VAT paid. In application, the VAT paid can be line-itemed on each invoice,

TABLE 1. Comparison of Additive and Subtractive Calculation Methods ${ }^{1}$

| Additive |  | Subtractive |  | Subtractive (Credit/Invoice Method) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Profit | \$13,000 | Total Receipts (Sales) | \$100,000 | Total Receipts (Sales) | \$100,000 |
| Less: Capital Equipment | -5.000 | Less: Cost of Raw Materials | -50,000 | Tax on Sales @ 5\% | 5,000 |
| Net Profit | 8,000 | Cost of Capital Equip. | -5,000 | Credit for VAT paid on: |  |
| Add: Labor Compensation | 25,000 | Tax Base | \$45,000 | Raw Materials \& Goods |  |
| Capital Depreciation | 7,000 | VAT Liability (5\%) | \$2,250 | (\$50,000 @ 5\%) | -2,500 |
| Interest \& Dividends Paid | 1,000 |  |  | Capital Equipment |  |
| Rent | 4.000 |  |  | (\$5,000@ 5\%) | -250 |
| Tax Base | \$45,000 |  |  | VAT Liability (5\%) | \$2,250 |
| VAT Liability (5\%) | \$2,250 |  |  |  |  |

Source: Select Committee on Tax Equity.

1. Table 1 is based on the following assumptions: (1) Gross sales of $\$ 100,000$; (2) $\$ 50,000$ of raw materials and goods used in production; (3) $\$ 5,000$ in capital equipment expenditures.
making it highly visible and easily rebated on exports. In Europe exports are "zero-rated," and the exporter is allowed a full credit for all VAT paid. In this respect a "pure" subtractive method (which does not involve itemizing the VAT on each sale) would be much more cumbersome, especially with a multiple rate system, as it would be impossible to "unscramble the eggs" and back out the exemptions and rates applied to each sale.

## The European Experience with VAT

The VAT enjoys considerable popularity in Western Europe, where it was introduced to replace existing turnover and gross receipt-type taxes. These taxes had become capriciously uneven across different goods and services and had the added effect of encouraging vertical integration.

The value added concept was born in Germany in 1918, when the industrialist F. von Siemens introduced it in a proposal to replace that country's turnover tax. Germany failed to take up von Siemens' proposal, and no European nation adopted a VAT until 1954, when France established a taxe sur la valeur ajoutee (TVA)—a limited multirate VAT that ended at the wholesale stage. The TVA applied only to commodities and some building construction, but it was supplemented by a two-rate (9.29 and 13.64 percent) service tax, or taxe sur les prestations de services. The TVA was not extended to the retail level until 1966.

Value added taxation got its real boost with the economic integration of Europe, which necessitated the harmonization of tax laws and the elimination of turnover taxes to facilitate trade. Impressed with France's success with the TVA, the European Economic Community
(EEC) issued a directive on April 1,1967 , requiring all members to implement a VAT by January 1, 1970 (later extended to January 2, 1971). To keep things as simple as possible (and thereby facilitate trade), a consumption-type tax was required. Although member countries were left room to tailor their rates and the items and business activities that could be exempted, the basic understanding was that exemptions would be limited and rates simple.

With the exceptions of Denmark, Norway and Sweden, European nations use multiple rate schedules, with standard rates averaging about 16 percent. Education, health, finance, insurance and real estate services are most often either exempted or zero-rated. The understanding is that eventually a common rate structure will evolve. For example, the original goal was that by 1978 the common standard rate would be 15 percent, with a common reduced rate of 7.5 percent. This has not come to pass. Since enactment, as shown in Table 2, rates have generally increased and become more complex. Denmark remains the exception. It is the only EEC member that requires VAT itemization at the retail level, and its VAT form, a simple postcard, is a paradigm of simplicity.

The EEC requires that certain items be taxed: e.g., the transportation of goods, the services of engineers and consultants (but not of barbers, travel agents or doctors). Taxation of legal services is optional; some countries tax legal fees, others do not. Some services are exempted not for political reasons but because it is so difficult to tax them equitably. These sectors, which include banks, insurance and stock brokers, are reached by other taxes.

Farmers generally pay VAT on
seeds, fertilizer and farm machinery, but no VAT is levied on the sales of farm produce. Given that the prices collected by farmers have to cover the cost of the VAT paid on the inputs, the buyers of farm produce are allowed to deduct a fixed percentage of their purchase price as an approximation of the VAT when they compute their VAT liability. In this way farmers are effectively exempted from the VAT, an enforcement headache is eliminated, and the government still gains revenue because the goods can be taxed at the next stage. Government services are taxed only when they compete with private sector services. With the exception of Belgium and Luxembourg, very small traders are exempted; they pay VAT on purchases but not on sales.

The lessons from Europe apply mostly at the national level, but several are equally relevant for subnational entities. First, the original European VATs were introduced as revenue neutral, but with time their tremendous revenue generating capabilities proved irresistable; rates increased and the tax assumed relatively larger shares of the tax burden. The tax's multistage coverage, combined with the invoice method, appear to make enforcement of higher rates much more possible than with a sales tax. ${ }^{6}$ Second, and a lesson that applies equally whatever the level of government, is that a multiple rate structure should be avoided if at all possible.

The use of multiple rates in Europe is a holdover from previous tax schedules. It is also often cited as a means of reducing the regressive characteristics of the VAT. Any broad-based con-

[^65]sumption tax is regressive because consumption takes up a larger proportion of income at the lower income levels. Hence, there is the prevalence of lower or zero ratings for food and necessities and higher rates for luxury goods.
The cost of decreasing regressivity or of introducing progressivity into the rate structure lies in increased administrative burdens where increased compliance costs, greater administrative overhead and distortions in consumption choices are generally considered to outweigh the benefits.
Here it may be worthwhile to explain why the European credit or invoice method of VAT would be inapplicable at the state or subnational level. The invoice method is a variant of the subtraction method. For states, it would
require the collection of VAT on all out-of-state "imports" into the state-a policy that would be susceptible to constitutional challenge. Barring that, a firm's receipts for interfirm purchases would bear no relationship to value added unless all purchases were made in state. Whatever a firm bought from out of state would bear no VAT, hence it would not be possible to deduct an amount appropriate to reflect that firm's value added. The invoice method is clearly the preferred choice for a closed economy and would most likely be used in the U.S. if Congress ever adopted a VAT. It has no applicability in open economies.
In 1949, a blue-ribbon U.S. study group headed by economist Carl S. Shoup recom-
mended that Japan adopt a VAT and scrap its existing business tax, which was in effect a "potential" or estimated net business profits tax. In doing so, the study concluded, Japan would simplify its tax structure and encourage business expansion.
Japan embraced the Shoup Mission proposal-with one arm. The Diet adopted the tax in 1950 but repeatedly postponed its implementation.

By 1954, amid confusion over the degree to which the tax would shift forward, whether the additive or subtractive method should be used (the legislation would have allowed either) and resistance from those business elements not accustomed to the idea of paying taxes, the tax was repealed.

TABLE 2. The Value Added Tax in Europe

| Country | Year of Introduction | VAT Receipts as Percent of Total Revenues the Year After Introduction | General Rate |  |  | 1987 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rate | 1987 | \% Increase | Reduced Rate | Luxury Rate |
| Members of the |  |  |  |  |  |  |  |
| European Economic |  |  |  |  |  |  |  |
| Community: |  |  |  |  |  |  |  |
| Denmark | 1967 | 18.7\% | 10.0\% | 22.0\% | 120.0\% | 22.0\% | 22.0\% |
| France | 1968 | 26.8 | 16.7 | 18.6 | 11.0 | 5.5-7.0 | 33.3 |
| Germany | 1968 | 16.6 | 10.0 | 14.0 | 40.0 | 7.0 | 14.0 |
| Netherlands | 1969 | 14.6 | 12.0 | 19.0 | 58.0 | 0-5.0 | 19.0 |
| Luxembourg | 1970 | 11.9 | 8.0 | 12.0 | 50.0 | 3-6.0 | 12.0 |
| Belgium | 1971 | 19.4 | 16.0 | 19.0 | 19.0 | 6.0 | 25-32.0 |
| Ireland ${ }^{1}$ | 1972 | 16.3 | 16.4 | 23.0 | 40.0 | NA | NA |
| Italy | 1973 | 17.3 | 12.0 | 18.0 | 50.0 | 2.0 | 38.0 |
| United Kingdom | 1973 | 8.9 | 10.0 | 15.0 | 50.0 | 0.0 | 15.0 |
| Nonmembers of the European Economic Community: |  |  |  |  |  |  |  |
| Sweden | 1969 | 14.1 | 11.1 | 19.0 | 71.0 | 19.0 | 19.0 |
| Norway | 1970 | 22.7 | 20.0 | 20.0 | 0.0 | 20.0 | 20.0 |
| Austria | 1973 | 19.0 | 16.0 | 20.0 | 25.0 | 10.0 | 32.0 |
| Source: Henry Aaron, The Value-Added Tax: Lessons from Europe; Charls E. Walker and Mark A. Bloomfield, The Consumption Tax: A Better Alternative? (Washington, D.C.: The Brookings Institute, 1981). |  |  |  |  |  |  |  |
| 1. Ireland taxes goods at 35 percent, services at 23 percent. |  |  |  |  |  |  |  |

## A U.S. VAT?

In 1979, House Ways and Means Committee Chairman Al Ullman (D-Ore.) held hearings on H.R. 5665, titled The Tax Restructuring Act of 1979. The bill was designed to raise $\$ 130$ billion by creating a ten percent value added tax, with a five percent rate for food, housing and medical care. In the face of considerable opposition, Rep. Ullman rewrote the bill in the spring. The major difference between H.R. 7015, The Tax Restructuring Act of 1980, and its predecessor was that the former provided zero rates for the abovementioned necessities.

The newer bill would have raised $\$ 115$ billion in revenue annually, replacing portions of the Social Security tax (\$43 billion), federal income taxes (individual, $\$ 40$ billion; corporate, $\$ 22$ billion) and liberalizing capital recovery and investment tax credits (\$10 billion).

Other exemptions or exclusions included non-retail sales by farmers, urban mass transit, exports, interest, sales to government, federal income tax payments and non-profit activities. The bill also exempted small businesses with total annual taxable transactions below $\$ 20,000$. Ullman's bill never got out of committee-in fact only one member, Bill Frenzel (R-Minn.), supported it. Ullman's efforts did not go unnoticed by Oregon's voters; that fall he was defeated in a bid for reelection.
U.S. involvement with the VAT traces almost as far back as that of Europe. Passage of a national VAT has been an item of speculation in Washington ever since the end of World War I, when Congress was searching for suitable replacements for emergency excise and excess profits taxes. Economist T. S. Adams first proposed its use within the federal tax structure in $1921 .{ }^{7}$ Since then

Congress has held hearings on the merits of a VAT in virtually every decade. Prior to the Ullman bill, only one other bill for a national VAT got as far as introductionby Senator C. Joseph Mahoney in 1940.

The VAT's appeal as a revenue generator is obvious. The Treasury estimates that every one percentage point of a national VAT-with the politically prerequisite exemptions for food, housing, medical care, insurance and local travel-would generate annual revenues upwards of $\$ 17$ billion. (See Table 3.) For the same reason, most fiscal conservatives oppose a VAT, fearing a Congressional shopping spree.

A national VAT has also been touted as being more stable than a corporate profits tax as a means of increasing U.S. exports (under current trade agreements, VAT payments are deducted from export prices, but corporate profits taxes are not) and as promoting efficiency (as the tax is a fixed proportion of price, producers can reduce their tax burdens by cutting costs so as to lower prices; with a profits tax, expenses are deductible).

Those who have endorsed a national VAT include former Senate Finance Committee Chairman Senator Russell Long (D-La.), former presidential candidate Bruce Babbit and former President Richard Nixon, who in 1972 proposed replacing the property tax with a national VAT to finance public schools.

In November 1984, the Treasury Department presented a report to the President calling for a massive overhaul of the nation's tax system. The plan included a study of the possibility of implementing a national VAT, but the VAT never made it into President Reagan's May 1985 tax reform proposal (Treasury II) or, for that matter, into any of the subsequent

House or Senate proposals.

## VAT Experiments at the State Level

In 1932-33, the Brookings Institution recommended a VAT for Alabama and Iowa. Neither state followed up on the advice.

The Territory of Hawaii introduced the VAT concept in its business excise tax (BET) in 1932, but within three years, the legislature repealed the tax for not generating enough revenue. The BET was similar to a VAT in that it taxed total business income less interfirm purchases for goods and materials. Unlike a VAT, it excluded rent and interest. Hawaii now has a very broad general excise tax, but in 1973, it did briefly revisit the concept, commissioning a feasibility study. ${ }^{8}$

Other than Hawaii, only one other state has adopted a VAT, although several have flirted with the concept. West Virginia's legislature passed an additive VAT (called the "value added income tax") in 1970, but the governor vetoed it. Oregon saw bills for a subtractive VAT introduced in 1969 and 1979; they got nowhere. Similarly, in the California Senate, a subtractive VAT bill (S.B. 700) was introduced in 1969. More recently, Louisiana has begun looking into a VAT. ${ }^{9}$

In 1953, Michigan became the first and so far only state to adopt
7. Thomas S. Adams, "Fundamental Problems of Federal Income Taxation," Quarterly Journal of Economics Vol. XXV (August 1921), pp. 527-556.
8. Robert D. Ebel, An Evaluation of a Value Added Tax for the State of Hawair (Honolulu: Economic Research Center, University of Hawaii, 1973).
9. See Earl M. Ryan, Business Taxes Based on Value Added, Louisiana Tax Study sponsored by Louisiana State University and Council for a Better Louisiana (Baton Rouge: Public Affairs Research Council, 1987).
a business tax based on VAT principles. The state's legislators called their new tax a "BAT"-for business activities tax. Michigan's experience with the BAT and the events that lead up to its adoption may be instructive for Texas.

Throughout the late 1940s, Michigan had been facing a series of General Fund deficits, largely due to constant legislative earmarking of the state's sales tax. By 1953, the state was desperate for immediate revenue. Following up on a proposal first offered by Governor G. Mennen Williams in 1948, the House passed a one percent personal and corporate income tax-which the Senate promptly rejected.

The Senate Taxation Committee dropped the personal income tax provision and transformed the corporate profits tax into the BAT. The package was presented as temporary, emergency legislation, intended only as a bridge until the entire tax structure could be thoroughly
10. Robert D. Ebel, The Michigan

Business Activities Tax (East Lansing: Michigan State University, 1972).
evaluated and overhauled. The bill sailed through during the last days of the legislative session with less than full deliberation or thought. ${ }^{10}$ With the "quick fix" in place, tax reform lost some of its impetus, to the point where the legislature made the BAT permanent in 1955.

The BAT was applicable to all businesses regardless of organizational form. For calculation purposes, the BAT required the subtractive method-gross receipts less purchases. The original rate was 0.4 percent (except for utilities, which enjoyed a 0.1 percent rate). By the time of repeal, the rates had risen to 0.775 percent and 0.2 percent. Even at the tax's low rates, the BAT generated considerable revenue- $\$ 78$ million in the 1962-63 fiscal year, making it second only to the sales tax as a revenue source for the state.

As originally promulgated, the Michigan BAT could be more accurately characterized as a bastardized VAT, displaying several features more commonly associated with income and gross receipts taxes. Initially, the tax was calculated on a gross product base, with no allowance

TABLE 3. U.S. Treasury Estimate of National VAT Base (Billions of Dollars)

| Expenditure Category | 1988 Value |
| :---: | :---: |
| Total personal consumption expenditures | \$3,127 |
| Less: Rental value of owner- and tenant-occupied housing | +360 |
| Medical care (including health insurance) | -232 |
| Insurance (other than health) and finance | -74 |
| Education | -48 |
| Religious and welfare | -47 |
| Foreign travel | -13 |
| Local transportation | -8 |
| Other (farm-consumed foods, domestic services, etc.) | -7 |
| Add: Sales of new housing | 170 |
| Comprehensive Value Added Tax Base | \$2,408 |
| Less: Food consumed at home | -349 |
| Prescription drugs, new housing, residential utilities | -346 |
| Compromised Value Added Tax Base | \$1,713 |

for capital expenditures or depreciation. (Amendments in 1955 changed the BAT to a variant of the income type, allowing annual depreciation deductions.)

The BAT varied from a true VAT in several ways. It allowed a credit of 25 percent of a firm's tax liability for those firms with operating losses or a low ratio of profit to value added. This feature basically transformed the BAT into an income tax. It also allowed deductions for taxes, contributions and interest-but not for dividends.

All firms could deduct 50 percent of their gross receipts as a minimum deduction, assuming that the value added tax base exceeded that amount. Laborintensive industries, generously defined as those whose payroll exceeded 50 percent of gross receipts, were allowed an additional deduction in proportion to their labor intensity.

Although subject to frequent amendments, the BAT generated relatively little opposition and few administrative problems (there was, however, a constant fear that the apportionment formula would be found unconstitutional). Even so, the legislature repealed the BAT in 1967. The impetus for repeal appears to have come not from the BAT's deficiencies so much as from constant lobbying pressure by two groups-die-hard income tax advocates and small businesses that resented inclusion in the tax base. The former promoted their cause on the twin theory that taxes should be structured on the "ability to pay" principle and that any business tax not based on profits would deter industrial growth. This group found a friend in Governor George Romney, former head of American Motors-a perennially low-income, negative profit firm.

## The Single Business Tax

Michigan's experience with a corporate profits tax proved far from satisfactory. The Michigan economy is tilted (to a far greater extent than the Texas economy) to one sector-manufacturing of transportation equipment-the health of which fluctuates with the business cycle. Whenever corporate profits turned volatile, Michigan's tax collections followed suit.
The quest for revenue stability and a better business climate. Each national recession in the early 1970s was magnified in Michigan. The state's economic downturns forced tax increases, During business expansions, however, the legislature found it difficult to resist spending the surpluses. This had the effect of raising the expenditure base, thereby exacerbating the state's fiscal problems during the next recession. As shown in Table 4, corporate income tax revenues grew unevenly and were prone to wild fluctuations. In 1969, the state collected $\$ 344$ million; in 1971 , only $\$ 176$ million. The next year the state collected $\$ 332$ million. To make matters worse, the state's business climate and tax structure had gained a widespread reputation as "antibusiness."
By 1975, Michigan's corporate profit tax rate was 7.8 percentcomparatively high relative to other states-and corporate taxpayers were feeling additionally burdened by the the state's corporate franchise tax. Normally a stable and predictable revenue source, Michigan's franchise tax (which had a net worth/capital surplus base) had become the constant target of litigation. Returning to a VAT began to look better and better. (The VAT idea resurfaced briefly in 1972 in a constitutional amendment to replace the school portion of the
business property tax. It failed at the polls.)
Despite its reputation for high taxes, Michigan faced the prospect of a serious deficit in 1975. Conceivably, any means of fiscal salvation might have been entertained under such circum-stances-let alone one that promised to expand the base, generate stable revenues and eliminate a host of burdensome business taxes. Such was the promise of the single business tax (SBT). Supporters of the plan included high-profit manufacturers; retailers; finance, insurance and real estate firms; multinationals; and those saddled with the personal property tax on business inventories.
Although the SBT was promoted as raising no more money than the taxes it would replace, it had the added allure of generating a $\$ 200$ million "windfall" by way of artfully drawn phase-in rules that resulted in a temporary overlap in corporate income and SBT collections.
Michigan's single business tax is so called because it replaced several previous business taxes, including:
(1) corporate profits tax;
(2) corporation franchise tax;
(3) business intangibles tax;
(4) personal property tax on inventory;
(5) financial institutions tax;
(6) insurance company privilege fee; and
(7) savings and loan company privilege fee.

At the time, these seven taxes raised $\$ 800$ million in state and local tax revenue.
To some extent, "single business tax" is a misnomer because the state still levies taxes on horse racing, insurance company premiums, oil and gas severance, utility property, telegraph and
telephone, various transportation and, of course, sales and use taxes, unemployment insurance and workers' compensation.
The SBT as a modified consumption VAT. Michigan's SBT is a consumption value added tax, calculated by the additive method. This means that it allows the immediate expensing of capital acquisitions. As discussed earlier, the additive method was chosen to enhance administration through cross-referencing with federal income tax returns.

It starts with adjusted gross income on the federal corporate, partnership, sole proprietorship and individual income tax forms and builds up the base through the addition of labor compensation and payments to other factors of production (e.g., interest and dividends).
The SBT's major departure from the VAT concept involves its treatment of rent. Technically, rent payments and the imputed rental value of owned property represent factor payments that should be accounted for in computing value added. Given the administrative (not to mention political) impracticality of calculating and taxing imputed rental values, the designers of the SBT found themselves in a dilemma: putting rent payments into the tax base would unfairly discriminate in favor of those firms that chose

TABLE 4. Michigan Corporate
Income Tax Revenue, 1969-74

| Year | Tax Collections <br> (millions) | \% Change |
| :---: | :---: | :---: |
| 1969 | $\$ 344.3$ | - |
| 1970 | 312.0 | $-9.38 \%$ |
| 1971 | 176.4 | -43.46 |
| 1972 | 331.6 | 87.98 |
| 1973 | 368.9 | 11.25 |
| 1974 | 366.1 | -0.76 |

Source: U.S. Advisory Commission on Intergovernmental Relations.
to (or could afford to) purchase their property. As a solution, legislative tax writers inverted the treatment of rent: for the payer it became an interfirm payment not unlike the cost of raw materials; for the payee it was added to the tax base.
The net result of Michigan's treatment of rent is close to a wash, because what the state loses in one base is picked up in another. Similarly, financial institutions can elect to reverse the normal treatment of interest payments-making interest received part of the base and deducting interest paid out.
The calculation of the SBT. Rate. The SBT was originally designed to be revenue neutral with a flat two percent rate. Inevitably, the political horsetrading necessary to secure the bill's passage generated exemptions, exclusions, preferences and "transition rules" that eroded the original base. Each nick in the base forced the revenue-neutral rate upward. By the end of the process, the rate was 2.35 per-cent-a 17.5 percent increase over the original proposal. The rate has remained constant since enactment, even though the base has been modified several times. The rate's stability is attributable to the fact that any increase would be felt by all elements in the business community, providing a rare commonality of interest that would cut across sectors.
Base. The base's major components are:
(1) federal taxable income;
(2) total labor compensation (wages and salaries, FICA, UI, employer contributions to fringe benefits);
(3) dividends, interest and royalties paid; and
(4) allowable federal tax deductions (depreciation, state/ local/foreign income taxes,
capital loss carry-overs or carry-backs).

Apportionment. For Michigan firms doing business in multiple states, the SBT base is calculated by applying a three-factor apportionment formula, giving equal weights to the percentage of instate property, payrolls and sales.
After calculating the apportioned base, firms may take a deduction for their capital business expenses during the tax year. For personal property, firms doing business out of state apportion their deduction by a two-factor formula giving equal weight to in-state payroll and property. For depreciable real property, multistate firms can take a 100 percent deduction on property in Michigan.
Exemptions. Once the base is apportioned, several exemptions are available. These are aimed at lowering the tax burden of small firms and those with "laborintensive" tax bases.
First, the base can be reduced by a $\$ 40,000$ statutory exemption plus an additional $\$ 12,000$ for each qualified partner (or shareholder in a Subchapter " S " corporation); the additional deduction cannot exceed $\$ 48,000$. The statutory exemption is reduced by two dollars for every dollar the firm's income exceeds the exemption amount. Thus, for most taxpayers, the exemption phases out as total business income reaches $\$ 60,000$. For example, if business income is $\$ 50,000$, the exemption is $\$ 20,000$ [ $\$ 40,000$ less the phaseout, calculated as ( $\$ 50,000-40,000$ ) $\times 2$ ].

Second, if a firm's total labor compensation (before apportionment) exceeds 63 percent of its tax base, the firm can reduce its "adjusted base" (defined as the base after apportionment, the statutory exemption and any capital acquisition deductions or
negative carry-forwards) by the percentage by which its labor compensation exceeds 63 percent. For example, if the firm's total labor compensation equals 65 percent of the firm's unadjusted base, the adjusted base can be reduced by two percent ( 65 to 63 percent).

In lieu of taking the excess labor deduction, a firm can elect to calculate its base as 50 percent of its gross receipts (apportioned to Michigan) after the capital acquisition deduction. This implies that no firm's tax liability can exceed 1.175 percent of its gross receipts.

Credits. In addition to the aforementioned deductions, Michigan firms can reduce their tax liability even further by taking, where applicable, credits for the following: small business, unincorporated/ Subchapter "status," qualified contributions and the unemployment compensation insolvency tax.

Firms with gross receipts up to six million dollars, adjusted business income less than $\$ 475,000$ and shareholder/officer compensation not exceeding $\$ 95,000$ are eligible to receive a small business tax credit based on the ratio of adjusted business income to 45 percent of the base up to a maximum of 90 percent of the tax owed.

Thus, if adjusted business income exceeds 4.5 percent and is less than 45 percent of value added, the SBT becomes, in effect, an income tax. Those that receive less than the maximum credit pay a maximum of 5.22 percent of AGI in tax.
These taxpayers liabilities can be reduced further to the extent that they use the statutory exemption, excess labor/gross receipts and capital acquisition deductions. The credit phases out linearly for firms with gross receipts exceeding five million dollars. Defining Adjusted Business Income (ABI)
as business income plus negative base carry-over plus compensation plus director fees, the credit is calculated as [1- (ABI / 0.45 x Base)] x Tax Liability. Since Tax Liability is $0.0235 \times$ Base, the total tax liability for a firm meeting the income requirements is ( 0.0235 / $0.45) \times \mathrm{ABI}$, which equals $0.0522 \times$ ABI.
Unincorporated and Subchapter " S " businesses are allowed a credit that varies with ABI in the following manner:
(1) 20 percent SBT liability if $A B I$ is less than or equal to \$20,000;
(2) 15 percent SBT liability if ABI is greater than $\$ 20,000$ but less than or equal to $\$ 40,000$; and
(3) 10 percent SBT liability if ABI is greater than $\$ 40,000$.

Any firm may take a credit for 50 percent of qualifying contributions to Michigan colleges and universities, public libraries or public broadcasting. The credit cannot exceed $\$ 5,000$ or five percent of tax liability after the Small Business credit, whichever is less.

Firms may also credit five percent of the tax imposed on certain public utility property.

Transition rules. To facilitate passage of the act and to ensure a smooth and orderly adjustment for certain politically-persuasive sectors, the Michigan legislature incorporated a number of special, temporary transition rules. Most were phased out by 1984.

Real estate builders and developers were allowed to limit their tax base to 35 percent of gross receipts if their interest and depreciation exceeded 70 percent of their tax base. Food retailers and security guards were allowed a much lower labor intensity threshold of 35 percent.
Regulated transportation com-
panies were allowed to reduce their tax base to 30 percent of the computed base, subject to a minimum tax of their average tax liability over 1971-75. This rule was granted in recognition that "regulatory lag" would prevent these firms from passing forward the new tax for several years. It was phased out in 1983.
Construction and engineering firms were allowed to deduct 50 percent of their compensation on work bid prior to enactment of the SBT. This provision was granted in recognition that the firms could not readjust contracts bid under the previous tax system.
Insurance companies were allowed to exclude from compensation any amounts attributable to claims adjusters.
All firms with sizable prior capital investments were given a substantial break by being allowed to take a partial deduction on assets acquired before January 1, 1976.
Performance of the SBT. Since 1977, the first year the SBT was fully applied, the tax has carried roughly 15 percent of Michigan's tax burden. The SBT is the state's third largest revenue generator,
lagging only the personal income tax and the retail sales tax. Table 5 , which tracks SBT revenues over a ten-year period beginning in 1977, shows that the tax as a percentage of the state's personal income has remained fairly constant, averaging about 1.14 percent. The only significant decline occurred in 1980, with the onset of a severe recession in the state's economy. After the recession, tax proceeds increased moderately, in absolute terms, and as a percentage of state personal income. Revenues picked up again with the 1983-84 boom and appear to have grown steadily since then.
The modest cyclical variability in the SBT is attributable to its ability-to-pay features-especially the gross receipts/labor intensity deduction. Compared to the corporate income tax that it replaced, the SBT has proven almost rock stable in the face of recession, growing modestly in booms.
Coverage. Of the 219,000 businesses registered for the SBT in 1982-83, 26 percent ( 56,700 ) had no liability and did not file a return. Approximately 13 percent
$\left.\begin{array}{|lcccc|}\hline \text { TABLE 5. } & \text { Michigan Single Business Tax Revenues, 1977-87 }\end{array}\right]$
$(29,000)$ also had no liability and were only required to file a brief informational return. In all, as shown in Table 6, 61 percent133,098 firms-escaped any SBT liability in 1982-83; and 35,592 (41 percent of those firms that actually had to pay SBT individually) paid less than $\$ 1,000$.
Thus, 77 percent of the firms registered under the SBT (payers and nonpayers) contributed only 1.5 percent of total taxes. At the
other extreme, 1.2 percent $(2,068)$ of the firms accounted for twothirds of the total SBT burden, with a mere 66 firms carrying 35 percent of the tax load.
Political stability. Remarkably, the original 2.35 percent rate has remained constant, with no serious attempt by the legislature to raise it-largely attributable to what would certainly be unanimous business community opposition. The most serious

TABLE 6. SBT Liability by Filing Classification, Tax Years 1982-83

| Tax Liability Class | No. of <br> Firms | Percent <br> of Firms | Tax Payments <br> (millions) | \% of Tax <br> Payments |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  | $\$ 0$ | $0.00 \%$ |
| Did Not File Form (No Liability) | 56,700 | $25.90 \%$ | $\$ 0$ | 0.00 |
| Short Form (No Liability) | 29,000 | 13.24 | 0 | 0.00 |
| Completed Form (No Liability) | 47,389 | 21.64 | 0 | 0.03 |
| $\$ 0-100$ | 6,312 | 2.88 | 310 | 1.50 |
| $100-1,000$ | 29,280 | 13.37 | 13,920 | 8.25 |
| $1,000-5,000$ | 32,230 | 14.72 | 76,487 | 5.95 |
| $5,000-10,000$ | 7,836 | 3.58 | 55,180 | 18.54 |
| $10,000-50,000$ | 8,146 | 3.72 | 171,965 | 8.39 |
| $50,000-100,000$ | 1,121 | 0.51 | 77,767 | 17.08 |
| $100,000-500,000$ | 805 | 0.37 | 158,398 | 5.61 |
| $500,000-1,000,000$ | 76 | 0.03 | 5,347 | 34.61 |
| Greater than 1,000,000 | 66 | 0.03 | 320,953 |  |
| Total |  |  |  |  |
|  |  |  |  |  |

[^66]changes in the base occurred in 1984, with an expansion of the Small Business Credits and in 1977, with a series of amendments (described in Table 7), the net effect of which was to reduce collections by about $\$ 16$ million (less than two percent).
Economic effects of SBT deductions. In 1982-83, total SBT liabilities came to $\$ 927.3$ million. The magnitudes of the various deductions and credits are estimated in Table 8. The table shows that the capital acquisition deduction accounts for the greatest base reduction-approximately 20 percent.

Note, however, that if the deduction for depreciation were used instead, the net effect over time would be close to a wash, and the possible business expansion benefits-and their subsequent revenue growth ef-fects-would be lost. Beyond the capital acquisition deduction, the adjustments that produce the greatest losses include the labor intensity deduction ( -11.8 percent of base) and the statutory and gross receipts reductions ( -3.3 and -3.2 percent of base, respectively).

TABLE 7. Revenue Effects of 1977 SBT Amendments (Millions of Dollars)

| Amendment | Revenue Effect |
| :---: | :---: |
| All depreciation is included in the tax base. Previously, 50 percent of depreciation on capital for which a capital acquisition deduction had not been taken was exempt. | +\$60 |
| A new tax credit of up to 50 percent of tax liability for qualifying small businesses. | -37 |
| Reduction in the labor intensity factor from 65 percent to 63 percent and hence an increase in the corresponding labor intensity deduction from 35 percent to 37 percent. | -20 |
| An increase in the exclusion for small, low-profit businesses from $\$ 36,000$ to $\$ 40,000$ and from $\$ 10,000$ to $\$ 12,000$ for partners and stockholders of " $S$ " corporations. | -11 |
| A shift of the unincorporated business credit from the income tax to the SBT and extension of the credit to all unincorporated business filers. | -4 |
| Exemption of the tax base attributable to agricultural production. | -4 |

Source: U.S. Advisory Commission on Intergovernmental Relations.

The labor intensity deduction is particularly inappropriate on conceptual grounds. Moreover, it has long been an accepted economic principle that labor accounts for approximately 75 percent of value added, and, in national income accounts, labor has consistently accounted for over 70 percent of national income. ${ }^{11}$
Table 9 indicates that compensation accounts for 78 percent of the tax base, although the proportion varies widely across industries and across time. The deduction would be more defensible if it became effective at 70 or 75 percent.

The deduction not only distorts the SBT's neutrality by favoring labor relative to capital, it also works to distort the allocation of resources by subsidizing unprofitable firms. This is because lower profits means that labor compensation increases relative to the rest of the base, generating a greater deduction.

Overall, the SBT taxes on
average 0.3 percent of sales for instate businesses and 0.6 percent of sales for multistate businesses. As a percent of compensation, the tax is fairly even across in state and multistate firms, with ratios of 1.97 and 1.92 percent, respectively (see Table 10).

Effective tax rates. As shown in

Table 11, the average overall effective rates of 0.4 percent on sales and 1.9 percent on compensation are counterbalanced by an overall effective rate of 1.44
11. Michigan Department of Revenue, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Lansing, January 1985).

TABLE 8. SBT Deductions and Credits, Tax Years 1982-83

|  | No. of <br> Firms | \% of Firms ${ }^{\text {1 }}$ | Reduction <br> in Tax Base | Tax <br> Reature <br> (millions) |
| :--- | :---: | :---: | :---: | :---: |
| Capital Acquisition Deduction | 78,186 | $58.7 \%$ | $19.9 \%$ | $\$ 286.5$ |
| Statutory Exemption | 65,190 | 48.9 | 3.3 | $47.5^{2}$ |
| Business Loss Deduction | 13,036 | 9.8 | 2.4 | 33.8 |
| Labor Intensity Reduction | 47,169 | 35.4 | 11.8 | 169.9 |
| Gross Receipts Reduction | 15,119 | 11.4 | 3.2 | 46.1 |
| Small Business Credit | 30,334 | 22.8 | 1.8 | 25.9 |
| Unincorporated | 31,710 | 23.8 | N A | 8.8 |
| Contribution Credit | 3,053 | 2.3 | N A | 1.8 |
| Public Utility Credit | 123 | 0.1 | N A | 5.4 |

Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).

1. Percent of all businesses that filed full SBT returns, including those with zero tax liability.
2. Minimum; does not include businesses that are not required to file (i.e., those with gross receipts under $\$ 40,000$ ).

TABLE 9. Labor Costs as a Component of the SBT Base

| Industry | Compensation | Tax Base | Compensation/Tax Base |  |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture, Forestry, Fishing | \$179,517,930 | \$254,539,558 | 72.1\% | 70.5\% |
| Mining | 191,307,145 | 231,703,345 | 54.6 | 82.6 |
| Construction | 1,814,434,080 | 2,152,158,545 | 82.5 | 84.3 |
| Manufacturing | 22,652,669,697 | 27,907,147,026 | 83.2 | 81.2 |
| Nondurable | 3,479,531, 184 | 4,987,805,713 | 66.1 | 69.8 |
| Primary Metals | 1,317,348,605 | 1,377,667,305 | 81.7 | 95.6 |
| Fabricated Metals | 1,466,571,677 | 1,792,659,523 | 80.0 | 81.8 |
| Machinery-Except Electrical | 2,220,073,915 | 2,552,057,758 | 77.7 | 87.0 |
| Transportation Equipment | 10,790,821,154 | 12,982,093,794 | 94.8 | 83.1 |
| Other Durable Manufacturing | 3,378,323, 162 | 4,214,862,933 | 77.7 | 80.2 |
| Transportation | 1,160,742,286 | 1,335,323,134 | 85.8 | 86.9 |
| Communication and Utilities | 1,720,269,037 | 3,617,537,372 | 51.4 | 47.6 |
| Wholesale Trade | 1,562,642,777 | 2,189,137,400 | 68.6 | 71.4 |
| Retail Trade | 9,428,454,584 | 11,795,400,638 | 79.2 | 79.9 |
| Finance, Insurance, Real Estate | 1,942,243,184 | 2,192,520,352 | 59.6 | 88.6 |
| Services and Other | 7,048,993,715 | 9,503,535,486 | 67.6 | 74.2 |
| Total | \$47,701,274,435 | \$61,179,002,856 | 76.7\% | 78.0\% |

Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).

| TABLE 10. SBT Liability by Industry |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Multistate Businesses |  | 100\% Michigan Businesses |  |
| Industry $\quad \begin{gathered}\text { Tax } \\ \text { Comp }\end{gathered}$ | as \% of pensation | Tax as \% of Receipts | Tax as \% of Compensation | Tax as \% of Receipts |
| Agriculture, Forestry, Fishing | 2.18\% | 0.91\% | 1.66\% | 0.41\% |
| Mining | 1.73 | 0.17 | 2.33 | 0.49 |
| Construction | 1.79 | 0.72 | 1.52 | 0.43 |
| Manufacturing | 1.87 | 0.61 | 2.00 | 0.64 |
| Nondurable | 2.61 | 0.53 | 2.05 | 0.56 |
| Durable | 1.75 | 0.64 | 1.99 | 0.66 |
| Primary Metals | 1.68 | 0.61 | 2.03 | 0.58 |
| Fabricated Metals | 2.06 | 0.92 | 2.04 | 0.70 |
| Machinery-Except Electric | 1.86 | 0.96 | 1.87 | 0.73 |
| Transportation Equipment | 1.64 | 0.55 | 2.26 | 0.61 |
| Other Durable | 2.18 | 0.99 | 2.00 | 0.63 |
| Transportation | 1.44 | 0.53 | 1.67 | 0.26 |
| Communication and Utilities | 2.60 | 0.65 | 3.71 | 0.51 |
| Wholesale Trade | 2.85 | 0.49 | 2.16 | 0.27 |
| Retail Trade | 2.02 | 0.69 | 1.78 | 0.11 |
| Finance, Insurance and Real Estate | 2.06 | 0.56 | 1.47 | 0.28 |
| Service and Other | 2.14 | 0.76 | 1.91 | 0.70 |
| Total | 1.92 | 0.62 | 1.97 | 0.26 |

Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).
percent-as opposed to the nominal rate of 2.35 percent. Table 11 also makes it apparent that the tax is particularly preferential to small firms (effective rates vary from -0.12 percent to 1.81 percent).

## An SBT in Texas: Revenues and Sectoral Effects

Table 12 compares historical corporate franchise tax revenues and estimated SBT revenues in Texas over the period 1976-86. The SBT estimates were produced using a simple personal incomebased estimating algorithm that was tested against Michigan's SBT collection history and adjusted to take into account differences between Michigan's and Texas' economy, industrial orientation and establishment characteristics.
The table's deductions and credits are assumed to be the same as Michigan's. The line

TABLE 11. SBT Effective Tax Rates, Tax Years 1982-83

| Industry | All Firms ${ }^{1}$ | Adjusted Tax Base |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | More than $\$ 5,000,000$ | $\begin{gathered} \$ 2,000,000- \\ 4,999,999 \end{gathered}$ | $\begin{gathered} \$ 1,000,000- \\ 1,999,999 \end{gathered}$ | $\begin{gathered} \$ 500,000- \\ 999,999 \end{gathered}$ | $\begin{array}{r} \$ 100,000- \\ 499,999 \end{array}$ | $\begin{gathered} \$ 40,000- \\ 99,999 \end{gathered}$ | $\begin{aligned} & \$ 1- \\ & 39,999 \end{aligned}$ |
| Agriculture, Forestry, Fishing | 1.20\% | 1.72\% | 1.67\% | 1.47\% | 1.43\% | 1.17\% | 0.68\% | 0.08\% |
| Mining | 1.92 | 1.70 | 1.30 | 1.46 | 1.30 | 1.09 | 0.71 | -0.02 |
| Construction | 1.33 | 1.58 | 1.66 | 1.50 | 1.40 | 1.15 | 0.62 | 0.09 |
| Manufacturing | 1.50 | 1.49 | 1.74 | 1.67 | 1.51 | 1.24 | 1.39 | 0.04 |
| Nondurable | 1.64 | 1.72 | 1.70 | 1.70 | 1.60 | 1.29 | 0.67 | 0.01 |
| Primary Metals | 1.67 | 1.58 | 1.70 | 1.56 | 1.54 | 1.25 | -0.04 | 0.01 |
| Fabricated Metals | 1.65 | 1.81 | 1.78 | 1.63 | 1.50 | 1.16 | 0.65 | 0.10 |
| Machinery-Except Electric | 1.55 | 1.59 | 1.73 | 1.63 | 1.35 | 1.20 | 0.66 | 0.10 |
| Transportation Equipment | 1.36 | 1.36 | 1.77 | 1.74 | 1.68 | 1.18 | 0.68 | -0.12 |
| Other Durable | 1.65 | 1.72 | 1.76 | 1.71 | 1.53 | 1.26 | 0.69 | 0.25 |
| Transportation | 1.14 | 0.98 | 1.70 | 1.61 | 1.52 | 1.18 | 0.59 | 0.07 |
| Communication and Utilities | 1.06 | 1.04 | 1.28 | 1.43 | 1.38 | 1.11 | 0.60 | 0.04 |
| Wholesale Trade | 1.65 | 1.76 | 1.81 | 1.76 | 1.67 | 1.43 | 0.87 | 0.16 |
| Retail Trade | 1.46 | 1.65 | 1.77 | 1.70 | 1.59 | 1.25 | 0.61 | 0.05 |
| Finance, Insurance, Real Estate | e 1.54 | 1.42 | 1.34 | 1.29 | 1.04 | 0.94 | 0.63 | -0.02 |
| Services and Other | 1.29 | 1.54 | 1.52 | 1.46 | 1.38 | 1.27 | 0.81 | 0.07 |
| Total | 1.44\% | 1.49\% | 1.67\% | 1.60\% | 1.47\% | 1.23\% | 0.72\% | 0.10\% |

Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).

1. For firms with negative adjusted tax base, base evaluated at zero.
listing "exclusions" is an attempt to capture the broad range of economic activity that theoretically should be captured in a VAT base but for political or practical purposes is not. This includes government, agriculture, education, charities, health services, rent and imputed rental values, foreign insurance (taxed separately), evasion, apportionment anomalies and small firms not required to file or register, among other items.

Although the numbers used are preliminary, the model's runs against the Michigan experience suggest plus or minus 3.5 percent accuracy for the 1976-84 period and plus or minus seven percent accuracy for 1985-86.

In 1982, the Texas corporate franchise tax produced $\$ 481.2$ million. As shown in Table 12, a
2.35 percent SBT similar to Michigan's tax would have generated four times as much$\$ 1.7$ billion. In the same year, a relatively "pure" one percent value added tax with no exemptions or credits would have produced $\$ 1.1$ billion-more than twice as much revenue as the franchise tax. Clearly, broadening the base beyond the corporateand capital-intensive sectors that have been the franchise tax's bread and butter for so long would appear to generate considerable new revenue-even at relatively low tax rates.

Despite the SBT's huge revenuegenerating capabilities, it is not the panacea that some might think. Although a VAT is inherently more stable than a corporate income tax, it is less stable than a corporate franchise tax. The
reason is simple: Texas' franchise tax is based on capital; the SBT base includes labor and capitalgenerally in a three-to-one ratio. This means that down cycles have a greater negative effect on the SBT base as well as revenues.
Figure 2 illustrates the relative stability of the Texas franchise tax and estimated SBT collections over time. For comparative purposes, the 1985-86 franchise tax revenues were normalized to evaluate the two taxes: the SBT was set at a rate- 0.67 percentthat would bring in the same revenue as the franchise tax. With both rates constant over time, Figure 2 shows that an SBT would have performed only slightly better than the franchise tax over the period 1976-1981. Thereafter, the franchise tax revenues gradually diverge, with the gap widen-

TABLE 12. Estimate of Base and Liability for a Texas Single Business Tax, 1976-86

| SBT Base or Llability | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Base (billions) |  |  |  |  |  |  |  |  |  |  |  |
| Apportioned value added | \$89.7 | \$101.1 | \$117.0 | \$135.0 | \$154.6 | \$180.6 | \$197.7 | \$207.7 | \$226.2 | \$243.2 | \$247.4 |
| Exclusions | -30.6 | -34.5 | -39.6 | -45.4 | -52.0 | -60.8 | -66.9 | -70.9 | -76.8 | -86.8 | -88.3 |
| Capital acqui. deduction | -9.1 | -10.3 | -12.8 | -15.4 | -17.8 | -20.6 | -21.7 | -21.0 | -24.0 | -26.3 | -26.7 |
| Deductions | -14.2 | -16.0 | -18.6 | -21.5 | -24.6 | -28.8 | -31.4 | -32.8 | -35.8 | -43.8 | -44.6 |
| Net Taxable Base | 35.8 | 40.3 | 46.1 | 52.7 | 60.2 | 70.5 | 77.7 | 82.9 | 89.5 | 86.4 | 87.7 |
| Liabilities (millions) |  |  |  |  |  |  |  |  |  |  |  |
| Liability of net taxable base at: |  |  |  |  |  |  |  |  |  |  |  |
| One percent | 357.8 | 403.0 | 460.8 | 526.5 | 601.8 | 704.6 | 776.8 | 829.4 | 895.2 | 863.6 | 878.5 |
| 2.35 percent | 840.9 | 947.1 | 1,082.8 | 1,237.4 | 1,414.3 | 1,655.9 | 1,825.4 | 1,949.1 | 2,103.7 | 2,029.6 | 2,064.5 |
| Five percent | 1,789.2 | 2,015.0 | 2,303.8 | 2,632.7 | 3,009.2 | 3,523.2 | 3,883.9 | 4,147.0 | 4,475.9 | 4,318.2 | 4,392.5 |
| Credits | -55.0 | -61.9 | -71.1 | -81.6 | -93.3 | -109.1 | -120.0 | -127.3 | -137.9 | -149.7 | -152.3 |
| Liability of net taxable base less credits at: |  |  |  |  |  |  |  |  |  |  |  |
| One percent | 321.2 | 361.7 | 413.3 | 472.2 | 539.6 | 631.8 | 696.8 | 744.5 | 803.2 | 763.8 | 776.9 |
| 2.35 percent | 786.0 | 885.1 | 1011.7 | 1,155.8 | 1,321.0 | 1,546.8 | 1,705.5 | 1,821.8 | 1,965.8 | 1,879.9 | 1,912.2 |
| Five percent | 1,706.8 | 1,922.1 | 2,197.1 | 2,510.4 | 2,869.3 | 3,359.5 | 3,703.9 | 3,956.0 | 4,269.0 | 4,093.7 | 4,164.1 |
| Liability of base with no deductions or credits at: |  |  |  |  |  |  |  |  |  |  |  |
| One percent | . 499.6 | 562.8 | 646.6 | 741.4 | 848.0 | 992.2 | 1,090.7 | 1,157.6 | 1,253.6 | 1,301.7 | 1,324.0 |
| 2.35 percent | 1,174.0 | 1,322.6 | 1,519.4 | 1,742.3 | 1,992.8 | 2,331.6 | 2,563.2 | 2,720.3 | 2,945.9 | 3,058.9 | 3,111.5 |
| Five percent | 2,497.9 | 2,814.1 | 3,232.8 | 3,707.1 | 4,240.1 | 4,960.9 | 5,453.7 | 5,787.8 | 6,267.8 | 6,508.3 | 6,620.2 |
| Texas Franchise Tax Collections (millions) | \$213.6 | \$236.6 | \$264.9 | \$293.8 | \$340.8 | \$417.4 | \$481.2 | \$555.3 | \$606.8 | \$855.5 | \$901.0 |

[^67]ing considerably in 1985, as the state headed into deep recession.
The SBT was compared to the franchise tax because it is Texas' only major general business tax. As Comptroller Bob Bullock has noted, the franchise tax is, in a perverse sense, Texas' corporate profits tax. To be fair, the SBT should really be compared to the corporate profits or gross receipts taxes. Viewed against either of those far more customary general business taxes, the SBT would appear much more stable.
Industry characteristics. Knowing that a new tax has tremendous revenue potential or can be revenue neutral at relatively low rates is only part of the story. If a VAT or SBT has a raison d'etre in Texas, it would be to broaden the base, for reasons of equity as well as revenue growth and stability. Broadening the base implies a shifting of tax burdens, with the consequence in the extreme that firms or sectors that had previously missed the opportunity to contribute to the public coffers could wake up in a genuine eleemosynary posture. This
section discusses how different types of firms might be affected by a state VAT. In so doing, it attempts to lay a foundation for the following section, which discusses a hypothetical SBT's effects by broad industrial category and the shifts in tax burdens that could be expected if the corporate franchise tax were replaced by a VAT.
Incorporated versus unincorporated industries. One of the major problems with the state's corporate franchise tax is that it discriminates between forms of business organization: unincorporated businesses escape cover-age-a situation that cannot be justified by either the benefits received or ability-to-pay principles. (This same problem also occurs, of course, with the corporate income tax, but most states with this form of tax also tax unincorporated businesses under their personal income tax.)
A VAT without special exemptions or credits would be completely neutral across different forms of business organization, thereby spreading the tax burden

FIGURE 2. Texas Franchise Tax Versus Value Added Tax, 1976-86 (Millions of Dollars)


Source: Select Committee on Tax Equity.
more equitably across a broader base. Moreover, because some business sectors-particularly those providing services-include a large proportion of unincorporated firms, they escape the corporate franchise tax as well as the retail sales tax. A VAT would succeed in bringing these businesses into the state's tax base for the first time.
Capital-intensive versus laborintensive firms. Given that the corporate franchise tax is levied on the value of capital stock or surplus, it disproportionately burdens capital-intensive firms and industries relative to the more labor-intensive. To make matters worse, the more capital-intensive industries are also more likely to be hit harder by business property taxes.
The VAT in theory remains neutral between capital and laborintensive firms; deductions for capital acquisition or depreciation only eliminate the possibility of double taxing capital investment. Ironically, the consumption VAT is often touted as providing an incentive to investment-through its immediate expensing proví sions-but this appearance of favoritism makes it more susceptible to the criticism that it discriminates against labor and labor-intensive industries.

To the extent that firms are able to pass through a VAT in the form of higher prices, however, workers will demand higher wages, making the VAT relatively more adverse to labor-intensive industries. In the more highly unionized states, the adverse effects would be more evenly distributed because the more capital-intensive firms are more likely to be unionized.
Land or building-intensive firms and industries. The treatment of buildings and rentals of business and rental property under a VAT would be largely dependent upon
how persuasive representatives for those industries are in the political process. In theory, building construction activity should be subject to VAT, as should the rental of all property business or residential. Owners of business property would be taxed on the imputed rental value of their property.
In practice, taxation of imputed rental values is difficult-not to mention politically risky. (It was tried in pre-Thatcher England.) If building owners escape taxation, equity would demand that renters be allowed to deduct rental payments. This means that the rental portion of VAT would have to be picked up where the rents are collected. Here, the major problem is not between owners and renters, but in transition. Builders of new residences would be charged VAT on construction, meaning that they would have to pass it forward in the form of higher rents. If the VAT were imposed only on new construction sales, the construction industry would be adversely affected for two reasons.
First, the existing, pre-VAT building stock would not have any VAT costs to recover, affording it a cost advantage relative to new stock. Second, to the extent that the building industry is relatively labor-intensive, VATinduced wage hikes would also have to be covered by the sale/ rental of new construction. In the short term, then, a VAT would differentially advantage renters of old stock (whose rents would not have to cover VAT costs); in the longer run, it would benefit the owners of old stock-whose value would be pushed up by the market to equilibrate with the higher level set by new construction. Land owners would be unaffected because land transactions are not covered under a VAT.

Debt-financed versus equityfinanced firms. As the corporate franchise tax does not include debt in its base, it discriminates in favor of firms with high debt/equity ratios. In other words, the corporate franchise tax encourages debt creation. A corporate income tax

## [T]he corporate franchise tax encourages debt creation.

compounds the favoritism towards firms with high debt/ equity ratios because interest is deductible, while capital gains and profits earned on equity are taxed.
A purely constructed VAT is neutral between debt and equity: both are taxed equally. Thus, a VAT would not introduce the investment distortions that encumber the corporate franchise and income taxes.
Profitable versus marginal firms. Like the corporate franchise tax, the VAT is neutral with respect to a firm's profitability: whether a firm is suffering a loss on profit makes no difference on its tax liability, all other things remaining the same.
A VAT, then, would adversely affect struggling firms or those that perennially operate "close to the edge." Assuming that such firms' costs are already higher than their competitors, they would be less able to either pass the tax forward or to absorb iteither in the form of lower profits or lower wages. In this sense, the VAT is no different than the corporate franchise tax. However, to the extent that unincorporated firms may be, as a whole, less profitable than incorporated firms, bringing them into any tax base other than one based on ability to
pay will adversely affect their more marginal members.

Competitive versus noncompetitive industries. The more competitive the firm or industry, the less freedom it will have to shift the VAT forward in the way of higher consumer prices, and the more likely the firm would have to absorb the tax in the form of lower profits or wages. It should be noted, however, that this disadvantage may be more apparent than real. With few exceptions, competitors pay either a corporate franchise tax, a corporate profits tax or both. The issue is not so much the type of tax-assuming that all competitors pay some form of business tax-but the tax burden imposed by the tax, whatever its form.

Thus, the only firms in competitive industries that would be disadvantaged by a VAT per se would be those marginal producers that could only survive under the price umbrella afforded by a corporate income tax. Even for those firms in labor-intensive sectors where a VAT might in theory impose a higher tax burden than a corporate income tax, the situation is indeterminant without specifying the rates.

Finally, highly competitive producers of capital goods and raw materials might benefit if the VAT replaced the current sales tax on manufacturing plant and equipment-because interfirm purchases are completely excluded from the VAT tax base.

Multistate firms. Firms exporting a considerable portion of their output would benefit from the use of a three-factor apportionment formula, such as used in Michigan. In theory, the use of unweighted three-factor and twofactor formulas is inconsistent with the theory of value added taxation, which is origin-based.

In a "pure" VAT, sales have no place in the apportionment
formula. Moreover, there is no justification for weighting payroll and plant equally. The theoretically correct procedure in such a case would be to apportion the two factors by their actual proportions as inputs.

The net effect of an equally weighted three-factor formula is to confer a differential advantage on firms with a high percentage of sales-shifting the tax burden to firms with a higher percentage of sales within the state. This may or may not be desirable from a public policy perspective. That is, firms selling predominantly in state may or may not have less competition from outside firms. For example, dentists would be ideally situated to shift the tax forward to consumers-implying higher dental care prices for all Texans.
By contrast, if firms with a high percentage of sales out-of-state cannot shift the tax forward in higher prices because of competition, the VAT could work to decrease employment in Texas, leaving fewer people to buy the
services offered by in state sellers.
Estimated tax incidence by industry sector. As shown in Table 13, Michigan's SBT base and tax revenues are heavily dependent upon manufacturingparticularly transportation equipment manufacturing. The former accounts for half of the SBT base and revenues; the latter, a fifth. For most industrial sectors in Michigan, an industry's tax liabilities tie closely with its tax base. That relatively labor-intensive industries show a slight reduction in liabilities relative to their base is probably attributable to the excess labor deduction.
Using Michigan's SBT incidence data as a starting point, it is possible to derive estimates of SBT incidence-and total tax col-lections-by sector in Texas. This is accomplished by drawing a correspondence between each sector's SBT liability and its share of economic activity in the state, normalizing, and then applying

TABLE 13. Michigan SBT Incidence by Industry, Tax Years 1982-83

| Industry | Number of Firms | \% of Total | $\% \text { of }$ Base | Tax Liability (millions) | $\%$ of Tax <br> Liability |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture, Forestry, Fishing | 1,823 | 1.4\% | 0.4\% | \$3.2 | 0.4\% |
| Mining | 904 | 0.7 | 0.4 | 4.6 | 0.5 |
| Construction | 9,955 | 7.5 | 3.5 | 29.6 | 3.2 |
| Manufacturing | 12,239 | 9.2 | 45.6 | 429.0 | 46.3 |
| Nondurable | 2,891 | 2.2 | 8.2 | 84.9 | 9.2 |
| Primary Metals | 525 | 0.4 | 2.3 | 23.3 | 2.5 |
| Fabricated Metals | 1,888 | 1.4 | 2.9 | 30.0 | 2.5 |
| Machinery-Except Electric | 2,298 | 1.7 | 4.2 | 41.4 | 4.5 |
| Transportation Equipment | 460 | 0.3 | 21.2 | 178.2 | 19.2 |
| Other Durable Manufacturing | 4,177 | 3.1 | 6.9 | 71.2 | 7.7 |
| Transportation | 3,009 | 2.3 | 2.2 | 17.5 | 1.9 |
| Communication and Utilities | 909 | 0.7 | 5.9 | 60.1 | 6.5 |
| Wholesale Trade | 4,509 | 3.4 | 3.6 | 37.5 | 4.0 |
| Retail Trade | 40,567 | 30.4 | 19.3 | 175.7 | 18.9 |
| Finance, Insurance, Real Estate | 15,533 | 11.7 | 3.6 | 31.7 | 3.4 |
| Services and Other | 43,261 | 32.9 | 15.5 | 138.3 | 14.9 |
| Total | 133,261 | 100.0\% | 100.0\% | \$927.3 | 100.0\% |

[^68]the normalized ratio to that sector's measures of economic activity in Texas.
At very aggregate levels this process has the disadvantage in ignoring intra-sectoral differences between the two states (e.g., Texas' mining sector is fundamentally different from Michigan's and might be expected to report different tax liabilities). On the plus side, the process has the advantage of large numbers (differences cancel out). Also, it may be superior to methods that start with "representative" firms and attempt to build up industry incidence estimates from the bottom, because it is insensitive to the assumptions about the characteristics and tax response behavior of the representative firms used in the estimating base.
Table 14 presents 1982 tax burden shares by broad industry category for Michigan's SBT, the estimated Texas SBT, and the Texas corporate franchise tax. As shown, while the SBT burden in Michigan falls heavily on one sector, it is more evenly distributed in Texas. This occurs in part because the oil and gas industry transcends the mining sector and flows over into manufacturing (petrochemicals) and communications, transportation and utilities (pipelines).
The more interesting comparison is not between the Texas and Michigan SBTs, but between the Texas franchise tax and Texas SBT. Mining mainly oil and gas exploration and production) and construction, each account for roughly equal shares of the state's personal income- 9.7 and 9.2 percent, respectively. Yet the mining sector alone bears fully one quarter of the state's franchise tax burden, while construction accounts for less than three percent.
Similarly, while communica-
tions, transportation and utilities together account for 9.6 percent of the state's personal income, the communications and utilities group contributed 12.4 percent of Texas' franchise tax revenues. This may be contrasted with the service sector, which, while accounting for 19.8 percent of personal income, contributed only 5.6 percent of franchise tax revenues.

The less than one-to-one correspondence between economic activity as measured by personal income and franchise tax revenues can be attributed to several factors, foremost among them the franchise tax's capital- and corporate-loaded base. Table 15 presents IRS data showing that, within the service sector in 1981, only 16 percent of the firms were incorporated. That 16 percent accounted for two-thirds of the total receipts in that sector. In contrast, twice as large a proportion of the firms in the communications and utilities sector were incorporated- 37.6 percent. These firms accounted for 99 percent of the sector's total revenues.
The corporate- and capital-bias in the franchise tax explains the shift in tax burden that would come about with an SBT. Table 16 shows that replacing the 1982 franchise tax with a 0.66 percent SBT would generate the same amount of total tax revenue, but from distinctly different sources.
Oil and gas producers would see their general business tax liabilities fall to a third of their prechange liabilities, while the retail and service sectors would see a threefold increase. The tax liabilities for the communications and financing, insurance and real estate sectors would be cut in half, while taxes for the construction and transportation sectors would double.
To a large extent, the potential
changes in tax liabilities appear inflammatory because the sectors that would see the largest increases under a VAT tomorrow go
virtually untouched by the franchise tax today. In interpreting these prospective tax liability changes, it may be helpful to

TABLE 14. Comparative Tax Burden Estimates: Franchise Tax and SBT, 1982

|  | Michigan <br> SBT | Texas <br> SBT | Texas <br> CFT |
| :--- | :---: | :---: | :---: |
| Industry | $0.35 \%$ | $0.66 \%$ | $0.84 \%$ |
| Agriculture, Forestry, Fishing | 0.50 | 9.01 | 25.41 |
| Mining | 3.19 | 7.12 | 2.93 |
| Construction | 46.26 | 23.94 | 23.55 |
| Manufacturing | 3.10 | 13.40 | 12.85 |
| Durables | 9.16 | 10.54 | 10.70 |
| Nondurables | 1.89 | 3.40 | 1.80 |
| Transportation | 6.48 | 7.35 | 12.42 |
| Communications | 4.05 | 6.31 | 9.37 |
| Wholesale | 18.94 | 22.49 | 7.85 |
| Retail | 3.42 | 4.89 | 10.25 |
| Financing, Insurance, Real Estate | 14.92 | 14.84 | 5.60 |
| Service |  |  |  |
|  | $100.00 \%$ | $100.00 \%$ | $\mathbf{1 0 0 . 0 0 \%}$ |
| Total |  |  |  |

Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985); Comptroller of Public Accounts.

1. Corporation franchise tax.

TABLE 15. Organizational Makeup of All Business Firms, 1981

| Industry | Corporations As a <br> \% of All Firms | \% of Total Business <br> Receipts Accounted <br> for by Corporations |
| :--- | :---: | :---: |
| Agriculture, Forestry, Fishing | $18.3 \%$ |  |
| Mining | 16.0 | $83.6 \%$ |
| Construction | 19.1 | 88.0 |
| Manufacturing | 46.6 | 80.8 |
| Transportation | 17.2 | 98.9 |
| Communications and Utilities | 37.6 | 89.7 |
| Wholesale | 54.8 | 99.1 |
| Retail | 19.6 | 95.0 |
| Finance | 24.4 | 81.5 |
| Insurance | 3.9 | 63.0 |
| Real Estate | 20.9 | 95.8 |
| Services (Total) | 16.0 | 54.0 |
| Hotel/Lodging | 20.0 | 67.2 |
| Personal | 6.2 | 61.9 |
| Business | 17.0 | 52.7 |
| Auto Repair | 23.2 | 80.9 |
| Miscellaneous Repair | 10.9 | 69.4 |
| Amusement | 16.0 | 62.2 |
| Medicine and Health | 27.9 | 77.9 |
| Legal | 11.0 | 67.5 |
| Engineering and Architecture | 25.3 | 26.9 |
| Accounting and Audit | 6.5 | 77.1 |
| Average | $20.7 \%$ | 19.9 |

Source: Internal Revenue Service.
consider that substantial portions of the construction, service and retail sectors also contribute little in the way of sales tax revenues, while the oil and gas industry bears a disproportionately large sales tax burden (on equipment, for example) in addition to severance taxes.

## Conclusion

The imposition of a VAT or SBT in Texas could only come about with the realization that certain sectors and certain types of firms would see changes in their tax burdens-in some cases dramatic changes-even if the tax raised no more money than the current corporate franchise tax. Those that would be particularly adversely affected would include labor-intensive manufacturers in competitive industries; the construction, transportation, retail and service sectors; and unincorporated firms in general. Clearly, whatever the theoretical and economic merits a VAT may have, if the choice is only between the present tax structure and a VAT,
the VAT proponents should prepare to face considerable opposition.
To be fair to the VAT, any foreseeable revision in the state's business tax structure-including a revamp of the franchise taxwould likely induce substantial tax liability dislocations for some industries and firms. But, other than a pure payroll tax, a VAT would probably bring about the most change.

One final issue that is bound to come up in future discussions about adopting a state VAT is regressivity-the idea that a tax should not disproportionately burden the state's lower income groups.

Regressivity is an issue that continues to plague the state's retail sales tax and which is often used as an argument against the adoption of a national VAT.

European nations and Michigan have attempted to deal with the regressivity argument by excluding sensitive forms of business activity (e.g., health care) from the base, or by exempting certain items (e.g., food).

TAble 16. Tax Obligations by Business Sector for Texas Single Business Tax and Corporate Franchise Tax, 1982 (Millions of Dollars)

| Industry | $\begin{aligned} & \text { 2.35\% } \\ & \text { SBT } \end{aligned}$ | $\begin{aligned} & 1.0 \% \\ & \text { SBT } \end{aligned}$ | $\begin{aligned} & .66 \% \\ & \text { SBT } \end{aligned}$ | $\begin{aligned} & .425 \% \\ & \text { CFT' } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture, Forestry, Fishing, | \$11.2 | \$4.8 | \$3.2 | \$4.0 |
| Mining | 154.4 | 65.7 | 43.4 | 122.3 |
| Construction | 122.0 | 52.0 | 34.3 | 14.1 |
| Manufacturing | 410.4 | 174.6 | 115.2 | 113.3 |
| Durables | 229.7 | 97.7 | 64.5 | 61.8 |
| Nondurables | 180.7 | 76.9 | 50.8 | 51.5 |
| Transportation | 58.3 | 24.8 | 16.4 | 8.7 |
| Communications \& Utilities | 126.0 | 53.7 | 35.4 | 59.8 |
| Wholesale | 108.1 | 46.0 | 30.3 | 45.1 |
| Retail | 385.5 | 164.0 | 108.2 | 37.8 |
| Finance, Insurance, Real Estate | 83.9 | 35.7 | 23.5 | 49.3 |
| Service | 254.5 | 108.3 | 71.4 | 27.0 |
| Total | \$1,714.2 | \$729.5 | \$481.2 | \$481.2 |

Source: Select Committee on Tax Equity; Comptroller of Public Accounts.

1. Corporate franchise tax.

Most European nations have gone one step further, adopting multiple-rate structures with relatively high rates for luxuries and lower rates for necessities. Michigan, on the other hand, has maintained a single rate structure but implemented a series of "ability-to-pay" exemptions and credits designed to reduce the tax burden on smaller and less profitable firms.
Whatever the tactic used, the end result is a narrower base, higher rates, administrative headaches and a loss in the tax's economic neutrality. Moreover, once the precedent of granting exemptions, exclusions and differential rates has been set, "horizontal equity" arguments are more likely to be used by less favored sectors to extract similar tax concessions or preferences.
It might be noted that, in and of itself, regressivity per se is not necessarily a fatal flaw. Virtually all states and nations impose excise taxes on alcohol and tobacco products, yet no one suggests that they be eliminated or reduced to relieve the burden on the poor.
The regressivity problem, then, should not be looked at in terms of individual taxes-but in terms of the state's entire tax structure and spending programs. That is, far more important than any single tax is the state tax structure's mix of taxes and how that mix as a whole affects different income classes.
Perhaps even more impor-tant-and far less frequently taken into account-is the relation between the state's tax structure and its expenditures. Thus, it may be possible that imposition of a "regressive" tax, such as a VAT, if used to support social or human service programs, could on balance be highly progressive.

# T exas Oil and Gas Severance Taxes 

## Background and Issues

## Summary

Oil and gas severance taxes have played an important role in funding state government in Texas for decades. Until 1961, when the sales tax was enacted, oil and gas taxes (along with the fuels taxes) had been the mainstay of Texas state government finances for decades. Since that time, severance tax revenues have contributed significantlyalbeit erratically-to state financing, at one time producing more than a quarter of the state's tax revenues but producing less than nine percent by 1988-89.
While severance taxes are the main way the state has tapped into the oil and gas wellspring, the state has benefited greatly from related tax sources, primarily the sales and the franchise taxes. As a heavily capitalized industry, the oil and gas industry pays a large share of the sales tax on production machinery and equipment. While the industry makes up approximately 9.5 percent of the state's economic base, it pays nearly 20.5 percent of the state's franchise tax.
In addition to the impact on the financing of state government, oil and gas resources represent a significant funding source for local units of government because of their contribution to the property tax base. In 1987, the state's oil and gas mineral wealth equaled approximately $\$ 47.4$ billion, or 7.1
percent, of the state's total taxable property value.

The severance taxes are among the most narrowly applied taxes in the state. The taxes are fixed at the market value of production and are levied on the owners of the underlying mineral interest.

Because of their narrow base, their economic preeminence and the large amounts of revenue generated even at low rates of taxation, oil and gas severance tax rates have not risen since 1951 and 1969 , respectively.

While the tax rates have not changed recently, the relative importance of the oil and gas industry-both as a component of the state's economic base and as a funding source for state and local government-has declined. Decades of growth in revenues and budgetary dependence have been replaced in recent years by declining revenues. The insulated, stand-alone posture of the Texas oil and gas industry has given way to a more global energy market - one in which supply and demand on distant shores have as much to do with the price of oil and vitality of the industry and the tax base as do the Texas rig count or other local factors.

The Texas economy, although still significantly tied to its energy industry, is no longer strictly a natural resource-based economy. The flow and storage of oil is being replaced slowly by other types of industry.

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Severance taxes-taxes on the production of natural resources-have had a long history in the United States. Since the 1800s, these taxes have played a role in the funding of state operations and services in states with significant natural resources. Texas particularly has been fortunate. While Texas has a variety of mineral resources, oil and natural gas are far and away the most important.

Texas is the nation's largest producer of oil and gas. If it were a separate country, it would rank in the top ten producing countries in the world. Oil and gas reserves and production have helped make Texas a major industrial center. Today, oil and gas severance taxes are the state's third largest source of tax collections, behind sales and motor fuels taxes. (See Table 1 for a summary of the taxes' major features.)

While oil and gas production is synonymous with the Texas mystique, the related severance taxes have generally received only limited popular attention until recently. As economist Bernard Weinstein noted, "No one paid much attention to [them] when energy prices were low. ${ }^{11}$ Even

[^69]when prices rose significantly in the 1970s and 1980s, no special attention was directed toward them since they were helping to fund state government and producing large budget surpluses. However, with the fiscal crises of the mid-1980s, they have emerged into the fiscal spotlight. The budget and tax special sessions of 1986, the long and difficult sessions of the 70th Legislature in 1987 and, arguably, the very creation of the Select Committee on Tax Equity itself were, in large part, the result of falling energy prices. The connection is both direct and dramatic. According to one past estimate by the Comptroller's office, at the height of their importance, for every one dollar drop in per barrel oil prices, the state lost $\$ 40$ million in severance taxes, $\$ 30$ million in sales taxes on equipment and $\$ 30$
2. "Texas Runs Short of Oil Revenues as Recession Continues," New York Times, May 22, 1985.
3. Comptroller of Public Accounts, The Geography of Texas Taxes, A Special Report (Austin, 1984).
million in franchise and other indirect taxes-for a total of $\$ 100$ million per one dollar drop in price. ${ }^{2}$ As a measure of how the situation has changed, the effect today would be almost $\$ 50$ million for each dollar change in the price of a barrel of oil.

Initial Texas oil and gas production was centered in East Texas and the Gulf Coast regions. The first oil-producing well was drilled in Nacogdoches County in 1866 , and by 1902 , the famed Spindletop Field near Beaumont was accounting for 94 percent of the state's oil production. However, by the time of the Electra Field discovery in Wichita County (in 1911), the attention of the industry was directed westward. The "Plains" region of the state (consisting of the Panhandle and parts of central West Texas) came to the forefront as the state's preeminent producing region with discoveries around Borger (in the early 1920s), Midland-Odessa (in the 1930s and 1940s) and Dawson and Scurry Counties (around 1950). Today, a majority of the state's production ( 53.8 percent) is found in the Plains economic

TABLE 1. Texas Oil and Gas Severance Taxes: Summary Features

| Legal Basis: | Oil - Texas Tax Code, Section 202 <br> Gas - Texas Tax Code, Section 201 |
| :--- | :--- |
| Tax Rates: | Oil/Condensate - 4.6\% <br> Casinghead/Natural Gas - $7.5 \%$ |
| Tax Base: | Market Value of Gross Production |
| Allocation of Revenue: | $1 / 2$ of 1\% - Comptroller's Operating Fund <br> $25 \%$ of Balance - Foundation School Fund <br> $75 \%$ of Balance - General Revenue Fund |
| Administration: | Producers or purchasers calculate tax based <br> on gross market value and remit the tax <br> monthly to the Comptroller of Public Accounts. |
| Taxpayers: | 1986: 17,119 <br> $1987: 17,193$ |

Source: Comptroller of Public Accounts.
region, although substantial production also occurs in East Texas and along the Gulf Coast. ${ }^{3}$

This chapter looks at the severance taxes and their role in state finances today. It also looks at other states' severance tax policies and examines various proposals for changes in Texas severance tax policy.

## What is a Severance Tax?

A severance tax is a tax on the privilege of removing or "severing" a natural resource. Michigan was the first state to enact a severance tax (1846), whereas Texas was the first state to enact an oil severance tax (1905). Severance taxes are often based on production volume, whereas a production tax is based on gross or net production market value, gross or net production British Thermal Unit (BTU) content or some combination thereof. In Texas, the tax is legally defined as an occupation tax for reasons discussed later. In practice, the Texas tax operates essentially like a gross receipts tax on the value of mineral production, making it a production tax and not a true severance tax. However, for convenience, the terms "severance tax" and "production tax" will be used interchangeably throughout this report.

There are several arguments underlying the concept of severance taxation. One view holds that the state as a whole and individual communities incur unique social, environmental and governmental costs associated with extractive activities. Hence, in this context, a tax to offset those costs is appropriate. Depletable resources can also be viewed as belonging to all of the state's citizens, and, as such, the state has a right to be compensated for their removal. From an insular standpoint, severance taxes offer a
practical opportunity to maximize revenues on a fixed tax base and a theoretical opportunity to "export" the taxes' economic impact and incidence.

The Texas tax was probably not as theoretically purposeful as envisioned above. The oil tax was originally enacted as part of a larger revenue package designed to reduce a deficit in the state budget. Since then, enactment of the natural gas and nearly all tax rate increases have been used to fund state services and other needs, ranging from hospitals to education to employee pay raises. For Texas, the severance tax provided an opportunity to avoid creating and/or increasing other taxes.

## Tax Rates, Bases and Surplus Exemptions

Texas first imposed a crude oil production tax in 1905 at the rate of one percent of market value and a natural gas production tax in 1931 at the rate of two percent of market value. Since their inception, the taxes' rates have increased several times, although reductions in rates have occurred occasionally. The oil production tax was last changed in 1951 and the gas production tax in 1969. Table 2 chronicles the major changes in the tax rate as well as other changes in related taxes.
The current tax rate on crude oil and condensate (liquids recovered from gas and reported in barrels) is 4.6 percent or $\$ 0.046$ for each standard barrel of 42 gallons, whichever results in the greater tax. Natural and liquid hydrocarbons recovered from gas are taxed at the rate of 7.5 percent, with a minimum tax of $121 / 1,500$ of one cent for each 1,000 cubic feet (mcf).
The taxes are levied on the market value of the gross production. In the case of oil, market value- expressed on a per-barrel
basis-is determined by the posted or offering price at the wellhead. For gas, market valueexpressed on a per-mcf basis-is generally equal to the proceeds actually received since most gas is sold under contract. Proceeds are defined as the cash price if sold at or near the well. For production not sold at the well, but rather sold for a portion of the considera-

## An issue sometimes raised is the possibility of equalizing the oil and gas tax rates.

tion received from subsequent refining or processing, proceeds are defined as the value of all assets received in consideration for the sale (including bonuses and premiums).
In general, the taxes are levied on gross production, and production costs are not deductible from gross production. Costs incurred by a producer in marketing natural gas are deductible from gross receipts in determining taxable value. These costs include the costs of compressing, dehydrating and "sweetening" gas and the costs of delivery. All natural gas produced is taxable except:
(1) gas injected into the ground, unless sold for that purpose;
(2) gas produced from oil wells that are lawfully vented or flared; and
(3) gas used for lifting oil, unless sold for that purpose.

In the past, the complexities of natural gas presented producers, purchasers and the state with difficult definitional, measurement and other problems.
Various interest owners within Texas are exempt from production
taxes. These include:
(1) cities, towns and villages;
(2) counties;
(3) public school districts;
(4) public colleges and universities; and
(5) political subdivisions of the federal government.

Also exempt from severance taxation is production in the federal offshore region outside the state's territorial limit (i.e., the Outer Continental Shelf).
The rate equalization issue. An issue sometimes raised is the possibility of equalizing the oil and gas tax rates. This issue is raised mainly by gas producers, who feel their severance tax is significantly higher than the one on oil. One possible method for achieving apparent equity is the development of equivalent stated rates based on market production value. Using U.S. Bureau of Mines BTU equivalents, a barrel of oil is equal to about 5.604 mcf of dry gas. Based on fiscal year 1986 data, a revenue neutral equivalent tax rate would be approximately 6.1 percent per barrel for oil and per mcf for gas.
Although it provides a reasonable assessment of the oil-natural gas tax gap, it admittedly ignores a number of relevant factors. First, the two minerals are used for different and frequently noncompeting purposes. Thus, differential rates may not be inappropriate. Second, the analysis does not account for market price and production cost differentials between oil and gas on a perbarrel, BTU or other equivalent basis. A more thorough analysisand one beyond the scope of this chapter-would look at relative market value and relative exploration, development and production costs on a per-BTU basis, the point being that a "true" fair and equitable tax rate (i.e., one that
provides effective after-tax economic parity between and within the different types of producers) is an elusive goal. It would vary depending on relative market price and costs, which are constantly changing, making determination of an equivalent tax rate a continual process and administratively unwieldy.

Other issues. Since the drop in
oil prices, there have been a number of tax policy issues designed to help segments of the oil and gas industry. During the regular session of the 70th Legislature, a number of bills were introduced to provide relief to the oil and gas industry and to encourage additional exploration and production. Three of these bills are presented below for

TABLE 2. Texas Oil and Gas Related Taxes-Major Changes

| 1905 | Oil production tax first enacted at rate of one percent of value. |
| :--- | :--- |
| 1907 | Oil production tax rate reduced to 0.5 percent of value. |
| 1917 | Oil regulation tax first enacted at rate of $1 / 20$ of one percent of value. |
| 1919 | Oil production tax rate increased to 1.5 percent of value. |
| 1923 | Oil production tax rate increased to two percent of value. |
| 1931 | Natural gas production tax first enacted at rate of two percent of value, less |
| two percent loss allowance. |  |
|  | Condensate tax first enacted at rate of two percent of value. |
|  | Oil regulation tax rate changed to $1 / 10$ of $\$ 0.01$ per barrel. |
| 1933 | Oil production tax rate changed to $\$ 0.02$ per barrel when value is one dollar |
|  | per barrel or less; two percent of value when more than one dollar per |
|  | barrel. |
|  | Condensate tax rate increased to $\$ 0.02$ per barrel when value is |
|  | one dollar per barrel or less; 2.75 percent of value when more than one <br>  <br> dollar. |
| 1934 | Oil regulation tax rate increased to $1 / 8$ of $\$ 0.01$ per barrel. |
| 1935 | Oil regulation tax rate increased to $3 / 16$ of $\$ 0.01$ per barrel. |
| 1936 | Oil production tax rate increased to $\$ 0.0275$ per barrel when value is one |
| dollar per barrel or less; 2.75 percent of value when more than one dollar. |  |
|  | Natural gas production tax rate increased to three percent of value. |
|  | Condensate production tax rate increased to $\$ 0.0275$ per barrel when value |
| 1969 | is one dollar per barrel or less; 2.75 percent of value when more than one |

[^70]reference. None of them passed into law. H.B. 443 (Hackney) would have temporarily exempted new oil and gas production from severance taxation. The exemption would have applied to the first three years of production from a well in an existing pool and to the first five years of production from a well in a new pool. The Comptroller's office estimated a loss in severance tax revenues amounting to $\$ 618.3$ million through 1992 under the bill. S.B. 328 (Montford), among other provisions, would have exempted stripper well production (i.e., production less than 10 barrels per day) and new well production from severance taxes. The exemptions would have expired in September 1990, or if and when the average value of oil and gas exceeded $\$ 25$ per barrel and/or \$2 per mcf for three consecutive months. The Comptroller estimated a four-year loss in severance tax revenues amounting to $\$ 559.8$ million and a $\$ 8.4$ million gain in revenues in 1992, resulting from continued production from wells that would have been shut-in had exemptions not been granted.
The economic benefit to the state of additional production due to the bills' provisions is harder to gauge than the loss in severance tax income. The Texas Railroad Commission estimated the incremental production value to be $\$ 1.5$ billion and $\$ 1.05$ billion over the life of H.B. 443 and S.B. 328, respectively.
H.B. 1530 (Henderson) would have exempted marginally economic wells and oil leases from severance taxation. In that case, the Comptroller estimated a fiveyear severance tax loss amounting to $\$ 165.9$ million.

## Tax Administration

The Comptroller of Public Accounts is responsible for collecting state severance taxes and
auditing taxpayer accounts, although the taxes themselves are self-assessed. Producers are primarily liable for the tax, whereas first and subsequent purchasers are secondarily liable. Purchasers customarily withhold the tax from payments to producers and remit it to the Comptroller. Producers themselves normally pay the tax on certain gas delivered off-premise and on oil not sold at the wellhead. Producers and purchasers alike are required to file periodic reports regardless of whether they are responsible for paying the tax to the state. This dual reporting requirement aids the Comptroller in cross-checking production value and volume figures and, consequently, helps ensure adequate compliance and efficient collection. Purchasers with an average monthly liability of less than $\$ 200$ may file annually, whereas those with an average monthly liability of $\$ 200$ or greater must file monthly. Producers file annual reports, except for production on which they are authorized to remit the tax, in which case a monthly filing is required. In fiscal 1987, there were 17,193 oil and gas taxpayers and report filers.

## Allocation of Revenues

Oil and gas production tax revenues are allocated on a split basis. There is a statutory allocation of one-half of one percent of the proceeds to the Comptroller of Public Accounts for tax administration and enforcement. Twentyfive percent of the remaining balance is constitutionally dedicated to the Foundation School Fund for public school education. The remainder is deposited to the General Revenue Fund.

The genesis of this dedication formula dates back to the earmarking provisions in the state constitution, which allocate one-fourth of all "occupation tax" revenues to fund public education. Oil and gas
production taxes, along with a number of other taxes, were identified as occupation taxes from their inception in the early part of the century. That designation was the result of a concern lawmakers had as to the validity of the taxes. At the time the taxes were enacted, the constitution had long been interpreted as limiting

> The conventional wisdom regarding the exportability of severance taxes, while valid in the past, is today probably more myth than reality.

the taxing power of the state to those types of taxes specifically mentioned (i.e., income, property, poll and occupation taxes). ${ }^{4}$ And while there existed a blanket clause that seemed to allow other forms of taxation, legislators did not want to risk having the taxes declared unconstitutional. ${ }^{5}$ They, therefore, designated the oil and gas production taxes not as severance taxes but rather as occupation taxes. While the tax system has broadened over the years, oil and gas production taxes retain their occupation tax designation, and consequently, the dedication to the Foundation School Fund remains intact. Other "severance-type" taxes such as the sulphur and cement production taxes also follow this allocation structure.

## Tax Impact and Incidence

Under Texas law, severance taxes are due from those who receive the economic benefits of mineral production. This includes the royalty interest owners (i.e., landowners) and the working interest owners (i.e., producers).

Given the stable tax rates of recent years and the current world energy market, both groups share the impact and incidence of taxation, making the incidence of the severance tax on them one of the most identifiable among all the state's taxes. ${ }^{6}$ And since energy resources are immobile, producers (and owners for that matter) cannot seek a more favorable tax status in other states by relocating. Nationwide, federal income taxpayers share somewhat in the burden of the tax as well due to the deductibility of severance taxes for federal income tax purposes.

There has long been a perception that Texas is able to export a large part of its severance tax burden. In the past, that undoubtedly was the case, at least to some degree. During the 30 -year period ending in the 1970s, Texas did have some "price migration" advantage. This advantage was primarily the result of three factors. First, out-of-state recipients of oil and gas income paid the severance tax and received little in the way of state services in return. Second, decentralized world supplies and import quotas increased Texas' share of domestic production and provided the state a bargaining advantage with respect to energy purchase prices. The severance tax was therefore exported to consuming states. Third, the federal price controls of the 1970s encouraged exportation since severance taxes could typically be passed on to consumers under federal rules.

As the energy markets began to change in the early 1980s and more of the state's energy production came to be consumed in the

[^71]states, whatever price migration advantage there might have been began to fade. The conventional wisdom regarding the exportability of severance taxes, while valid in the past, is today probably more myth than reality.

Given the current state of world energy production and supplies, Texas is no longer in a dominant market position. There are no import quotas, import fees or oil price controls in place. Texas is a "price-taker." The price of oil is determined independent of domestic cost structures and marginal tax rates. So, while the aggregate worldwide demand for energy is fairly inelastic, the demand elasticity for Texans' products is substantially elastic. That is, cost increases, whether they be comprised of operating costs or severance taxes, cannot be passed on to consumers. Even if they could, Texas, as a major energy consumer, could not escape absorbing a major portion of such increases.

The importance of the two main forms of exportability opportuni-ties-out-of-state oil and gas income recipients and long-term interstate natural gas contracts with severance tax pass-through provisions-are difficult to estimate and, in all likelihood, are becoming less significant as natural gas deregulation advances and as gas contracts are renegotiated. Hence, the incidence of Texas' severance tax appears today to fall almost exclusively on producers and owners.

## Other Severance and Related Taxes

Crude oil regulation tax. In addition to the oil production tax, the state also levies a tax of $3 / 16$ of $\$ 0.01$ per barrel produced. The tax was enacted in 1917 and is administered by the Comptroller in the same manner as the oil pro-
duction tax. The tax does not apply to condensate or gas production. Tax proceeds are deposited in the General Revenue Fund but were originally designed to finance the Texas Railroad Commission's administration of the state's oil and gas conservation laws. Tax collections in fiscal year 1987 totaled $\$ 1.3$ million.

Oil and gas well servicing. The tax code also includes an occupation tax on firms that perform certain services associated with oil and gas wells. These services include:
(1) cementing the casing seat;
(2) shooting, fracturing and acidizing formations; and
(3) surveying and testing formations and their contents with instruments located within the well bore.

The tax is 2.42 percent of the gross charge for the service. The tax was enacted in 1941 and is administered by the Comptroller. The tax is normally paid by the provider company and is reported and remitted monthly. Twentyfive percent of the tax proceeds are allocated to educational purposes, with the remainder going to general revenue uses. In fiscal year 1987, 140 taxpayers paid three million dollars in servicing taxes.

Sulphur Production Tax. The state also levies a tax on sulphur producers in the state at the rate of $\$ 1.03$ per long ton produced. The tax was enacted in 1923 and is also administered by the Comptroller. The tax is reported and remitted quarterly, with proceeds allocated 25 percent to public education and the remainder to the General Revenue Fund. In fiscal year 1987, 45 taxpayers paid $\$ 3.6$ million in sulphur taxes.

Cement production tax. Finally, the state also levies an occupation tax on the manufacturer, producer
and/or importer of cement who distributes, sells or uses cement in intrastate commerce. The tax applies to the first distribution, sale or use in the state. The tax is 2.75 cents for each 100 pounds of taxable cement. The tax was enacted in 1931 and is administered by the Comptroller. It is reported and remitted monthly, and like the other severance taxes, its proceeds are allocated 25 percent to education and the remainder to general revenue. In fiscal year 1987, 34 taxpayers paid $\$ 4.6$ million in taxes.

Although it is structured like the other production taxes, the cement tax is conceptually different in that cement is neither severed nor produced directly from the ground but is, rather, a result of a combining process using severed minerals.

Other nonfuel minerals. In addition to the minerals it currently taxes, Texas produces a variety of other minerals, including uranium, granite, salt, clay, sand, gravel, crushed stone, limestone, gypsum and a host of others. The value of production of these minerals amounted to approximately two billion dollars in 1986, ranking Texas in the top three states nationally. Despite this ranking, most of the production of individual minerals is minimal or declining. The major minerals like crushed stone, sand, gravel, limestone and gypsum are taxed indirectly via the cement tax.

Coal. Although it does not tax coal production, Texas is the sixth largest producer of coal in the country. Bituminous coal production in Texas is not significant now, nor is it expected to be in the foreseeable future.

Ninety-nine percent of coal production in the state consists of lignite. Lignite is a lower form of coal, varying considerably in quality and heat value. Lignite
reserves within 200 feet of the surface are estimated to be more than 20 billion tons in Texas, equal to 70 percent of the state's proven oil reserves. ${ }^{7}$ Up to half of the reserves can be economically recovered from strip mining under current prices and technology.
In 1986, production of lignite reached 48.5 million short tons. Because of its relatively low energy value and the high capital and operating costs related to energy production, most of the lignite mined in the state is consumed by mine-mouth electrical generating plants, which account for approximately 20 percent of the state's electrical energy production. ${ }^{8}$ About eight to nine percent of the permitted acreage belongs to the Lower Colorado River Authority (LCRA). Of the remainder, the vast majority belongs to publicly owned utilities.

## Revenue Performance

Oil and gas severance tax revenues have played an important role in funding state government for many years. The history of oil and gas production and severance tax revenues can be divided into four distinct periods.

The first period stretches from the inception of the oil tax in 1905 to the end of World War II. In 1905, with oil at five cents per barrel, the tax produced only $\$ 80,000$, which was about two percent of total state revenues. ${ }^{9}$ The importance of the tax increased as rates, prices and production increased. Wartime demand brought oil tax revenues to a level where they were accounting for 24 percent of total state revenue.

The second period extends from the end of World War II to the Arab oil embargo and the emergence of the Organization of Petroleum Export Countries (OPEC) as a dominant producing block in 1973. This period was marked by steady increases as the industry grew and matured. Production, transportation and refinery capacity expanded during this period. Until 1961, when the state introduced a sales tax, the oil tax-along with the fuels tax-was the state's most important tax source, accounting for 18 percent of state tax collections in 1960. Combined oil and natural gas tax revenues accounted for more than 25 percent of tax collections in 1960 and 1961 (Table 5).
The third period is a nine-year
period following the embargo. This period was marked by rising prices and revenues and falling production. During this period, natural gas-long the stepchild of oil production-began to increase in importance. For many years, low demand and low federally regulated prices produced minimal gas tax revenues. However, increasing prices during this period changed that, and by 1977, gas tax revenues exceeded oil tax revenues. As Table 6 indicates, oil and gas production peaked in Texas in 1972 at 1.26 billion barrels for oil and 9.6 billion mcf for gas. The declining production that followed 1972 was masked by increases in price as Table 6 illustrates. Thus despite falling production and federal price controls enacted during the period, total oil and gas tax revenues increased 700 percent from 1973 to 1982. The Texas economy and state government financing during this period were driven largely by energy
7. Texas Almanac, 1988-89, p. 452.
8. Ibid., p. 100.
9. Texas Legislative Council, A Survey of Taxation in Texas: Part I-Analysis of Individual Taxes, Report Number 51-8 (1951), p. 142.

TABLE 4. Equivalent Tax Rates on Oil, Gas and Lignite ${ }^{1}$

| Mineral | Equivalent Tax Rates |  | Effective Tax Rates (BTUBased Rates) ${ }^{4}$ | BTU Content |
| :---: | :---: | :---: | :---: | :---: |
|  | BTU-Based Rate | Production Value ${ }^{2}$ and Production Cost ${ }^{3}$-Based Rate |  |  |
| Oil | \$.139/million BTUs | 5.9\% | 4.16\% | 5,800,000/barre |
| Gas | \$.139/million BTUs | 5.9 | 8.14 | 1,035,000/mcf |
| Lignite | \$.139/million BTUs | 5.9 | 14.24 | 13,000,000/ton |

Source: Select Committee on Tax Equity.

1. These estimates use 1986 data, assume a revenue neutral outcome and assume all Texas lignite production would be taxed.
2. Production market value used for oil and gas.
3. Production cost and value used for lignite.
4. Effective tax rate: Iotal industr-wide tax paid on each mineral

Total industry-wide value of annual production for each mineral
prices. According to the Texas Joint Select Committee on Fiscal Policy in 1983, the tax system's low income elasticity was concealed by this decade of booming severance taxes. ${ }^{10}$ Rising energy prices were a major factor allowing Texas to avoid having to raise taxes from 1972 through the early 1980s.

The fourth and final period is from 1982 to the present. By 1981, oil and gas revenues were in
10. As reported in Steven D. Gold (ed.), Reforming State Tax Systems ( Denver: National Conference of State Legislatures, 1986).
excess of $\$ 2.1$ billion and accounted for a'record high of 28.4 percent of state tax collections. Active drilling rigs peaked at 1,300 . The price of oil topped $\$ 37$ a barrel. State tax revenue in 1982 reached $\$ 2.4$ billion, a record high. However, since 1982, oil prices and, consequently, the Texas economy and state government tax collections have experienced two major declines. The first decline occurred in late 1982 and early 1983, corresponding to a down-' turn in oil prices. The impact was concentrated in a few sectors and was short-lived.

World production had been increasing since 1981, with North Sea producers taking the lead. The scarcity and high prices that were endemic in the mid-to-late 1970s and early 1980 s rapidly evaporated. Price competition and oversupply were the result. While there was already a decline in price levels underway from the 1981 highs, the steep drop did not occur until late 1985 and early 1986. And even though prices in the first part of 1985 were still high relative to the forecasts of many experts, the Comptroller warned that ". . . conditions can change dramatically in a matter of

TABLE 5. Texas Oil and Gas Production Tax Revenues, 1960-1989

| Fiscal Year | Oil Production Tax Revenues ${ }^{1}$ (millions) | Oil Revenues as a Percent of Total Taxes | Natural Gas Production Tax Revenues (millions) | Natural Gas Revenues as a Percent of Total Taxes | Total Oil and Gas Revenues (millions) | Oil and Gas Revenues as a Percent of Total Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | \$124.5 | 18.0\% | \$52.0 | 7.5\% | \$176.5 | 25.5\% |
| 1961 | 122.4 | 17.4 | 57.9 | 8.2 | 180.3 | 25.6 |
| 1962 | 122.6 | 14.0 | 60.2 | 6.9 | 182.8 | 20.9 |
| 1963 | 123.8 | 13.3 | 64.1 | 6.9 | 187.9 | 20.2 |
| 1964 | 126.7 | 12.7 | 66.5 | 6.7 | 193.2 | 19.4 |
| 1965 | 126.6 | 12.0 | 72.5 | 6.9 | 199.1 | 18.9 |
| 1966 | 133.0 | 11.8 | 74.2 | 6.6 | 207.2 | 18.4 |
| 1967 | 142.5 | 11.9 | 78.3 | 6.5 | 220.8 | 18.4 |
| 1968 | 158.0 | 12.4 | 81.9 | 6.4 | 239.9 | 18.8 |
| 1969 | 156.2 | 10.3 | 84.4 | 5.5 | 240.6 | 15.8 |
| 1970 | 172.6 | 9.7 | 96.4 | 5.4 | 269.0 | 15.1 |
| 1971 | 194.8 | 9.8 | 108.8 | 5.5 | 303.6 | 15.3 |
| 1972 | 193.0 | 8.2 | 114.4 | 4.9 | 307.4 | 13.1 |
| 1973 | 209.9 | 8.1 | 124.9 | 4.8 | 334.8 | 12.9 |
| 1974 | 347.2 | 11.5 | 171.1 | 5.7 | 518.3 | 17.2 |
| 1975 | 404.8 | 12.0 | 259.6 | 7.7 | 664.4 | 19.7 |
| 1976 | 431.3 | 11.0 | 364.6 | 9.3 | 795.9 | 20.3 |
| 1977 | 428.5 | 9.7 | 474.3 | 10.7 | 902.8 | 20.4 |
| 1978 | 437.2 | 8.7 | 517.8 | 10.3 | 955.0 | 19.0 |
| 1979 | 466.7 | 8.7 | 554.4 | 10.3 | 1,021.1 | 19.0 |
| 1980 | 785.7 | 12.4 | 734.2 | 11.6 | 1,519.9 | 24.0 |
| 1981 | 1,291.0 | 16.7 | 901.9 | 11.7 | 2,192.9 | 28.4 |
| 1982 | 1,316.8 | 15.2 | 1,057.1 | 12.2 | 2,373.9 | 27.4 |
| 1983 | 1,190.1 | 14.0 | 1,061.2 | 12.5 | 2,251.3 | 26.5 |
| 1984 | 1,120.2 | 12.0 | 1,095.5 | 11.8 | 2,215.7 | 23.8 |
| 1985 | 1,040.2 | 9.7 | 1,122.8 | 10.5 | 2,163.0 | 20.2 |
| 1986 | 769.2 | 7.5 | 778.7 | 7.6 | 1,547.9 | 15.1 |
| 1987 | 533.2 | 5.2 | 644.9 | 6.3 | 1,178.1 | 11.5 |
| 1988 | 499.9 | 4.1 | 555.6 | 4.5 | 1,055.5 | 8.6 |
| 1989 (est.) | 444.5 | 3.6 | 575.0 | 4.7 | 1,019.5 | 8.3 |

Source: Comptroiler of Public Accounts, Revenue and Expenditure History (1987); Biennial Revenue Estimate, November 1988.

1. Includes oil regulation tax revenue.
days, if not hours." ${ }^{11}$
In the early 1980s, OPEC (and primarily Saudi Arabia-the "swing producer") enforced a price structure that required reduced production. However, as non-OPEC production (i.e., the Soviet Union, Norway, Mexico and Great Britain) and production by OPEC members above established quotas continued to escalate, Saudi Arabia abandoned its production ceilings and increased production dramatically to hold its market share. The result was increased supplies and falling prices-first in spot market prices and then in posted market prices when it was clear that the spot market was not going to recover.
The final "trigger" was Mexico's decision to lower its price per barrel to $\$ 20$ to maintain its market share and support its debt obligations. The immediate effect was a reduction in contract prices under which most Texas oil is sold. Adding to the problem was a reduction in gas prices in a newly competitive gas market resulting from a Federal Energy Regulatory Commission (FERC) proposed and partially implemented loosening of the rules governing the transportation of natural gas in interstate markets.
These price reductions and the economic upheaval they created in Texas were the primary cause of the overall billion dollar revenue shortfall in the state's 1986-87 budget. Oil prices predicted to be in the range of $\$ 24-\$ 25$ per barrel had to be revised downward to $\$ 21.08$ in 1986 and $\$ 15.18$ in 1987. The resulting severance tax revenue shortfall of $\$ 765$ million accounted for 60 percent of the total state revenue shortfall, with the balance being made up in relocated reductions in sales, franchise and other taxes.
Since the oil and gas industry is a heavily capitalized and incorporated industry, its impact on these
other collections is obvious. By 1987, severance tax collections of just under $\$ 1.2$ billion were half of what they were in 1982.
The volatile nature of oil and
gas revenues has lead the state to
2. Comptroller of Public Accounts, Revenue Estimate Revision, March 8, 1985.

TABLE 6. Texas Oil and Gas Production and Average Price, 1947-871

| Year | Oil |  | Natural Gas |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Production Volume (Thousands of Barrels) ${ }^{2}$ | Average Price Per Barrel ${ }^{3}$ | Production Volume ${ }^{4}$ (MCF) | Average Price Per MCFs |
| 1947 | 816,188 | \$1.95 | 2,937,501 | \$0.04 |
| 1948 | 898,314 | 2.61 | 3,248,221 | 0.05 |
| 1949 | 736,627 | 2.59 | 3,510,523 | 0.05 |
| 1950 | 817.842 | 2.59 | 4,024,177 | 0.05 |
| 1951 | 991,983 | 2.58 | 4,673,535 | 0.05 |
| 1952 | 1,009,793 | 2.58 | 5,089,377 | 0.06 |
| 1953 | 1,000,545 | 2.73 | 5,314,771 | 0.08 |
| 1954 | 954,434 | 2.84 | 5,510,662 | 0.09 |
| 1955 | 1,002,480 | 2.84 | 5,740,458 | 0.08 |
| 1956 | 1,078,886 | 2.83 | 6,004,734 | 0.09 |
| 1957 | 1,057,997 | 3.11 | 6,036,864 | 0.10 |
| 1958 | 909,958 | 3.06 | 6,050,127 | 0.10 |
| 1959 | 944,410 | 2.98 | 6,421,910 | 0.11 |
| 1960 | 892,084 | 2.96 | 6,675,170 | 0.11 |
| 1961 | 894,765 | 2.97 | 6,794,017 | 0.12 |
| 1962 | 894,023 | 2.99 | 6,905,640 | 0.12 |
| 1963 | 915,420 | 2.97 | 7,213,675 | 0.13 |
| 1964 | 928,606 | 2.96 | 7,554,168 | 0.13 |
| 1965 | 932,810 | 2.96 | 7,854,545 | 0.13 |
| 1966 | 997,370 | 2.96 | 8,097,965 | 0.13 |
| 1967 | 1,068,509 | 3.02 | 8,336,794 | 0.13 |
| 1968 | 1,082,269 | 3.06 | 8,612,873 | 0.14 |
| 1969 | 1,099,515 | 3.21 | 8,963,484 | 0.14 |
| 1970 | 1,203,490 | 3.26 | 9,449,858 | 0.14 |
| 1971 | 1,174,128 | 3.48 | 9,570,632 | 0.16 |
| 1972 | 1,255,414 | 3.48 | 9,602,630 | 0.16 |
| 1973 | 1,250,042 | 4.10 | 9,340,683 | 0.20 |
| 1974 | 1,217,365 | 6.91 | 8,907,429 | 0.31 |
| 1975 | 1,173,991 | 7.81 | 8,052,112 | 0.52 |
| 1976 | 1,145,835 | 8.18 | 7,470,890 | 0.70 |
| 1977 | 1,093,098 | 8.48 | 7,421,938 | 0.87 |
| 1978 | 1,032,460 | 9.26 | 7,029,673 | 0.95 |
| 1979 | 971,043 | 12.59 | 7,216,438 | 1.15 |
| 1980 | 926,336 | 22.06 | 7,035,309 | 1.45 |
| 1981 | 891,089 | 34.61 | 6,786,227 | 1.82 |
| 1982 | 866,188 | 31.58 | 6,239,712 | 2.11 |
| 1983 | 841,758 | 29.24 | 5,586,719 | 2.32 |
| 1984 | 837,741 | 28.81 | 5,738,294 | 2.36 |
| 1985 | 823,256 | 26.76 | 5,569,081 | 2.22 |
| 1986 | 772,453 | 14.73 | 5,334,739 | 1.56 |
| 1987 | 716,938 | 17.54 | 4,965,268 | 1.36 |

Source: U.S. Department of Energy, Energy Information Administration; U.S. Bureau of Mines, Annual Petroleum Statement, Minerals Yearbook and Natural Gas Annual, various years.

1. Excluding condensate.
2. Total production for 1947-65; taxable production for 1966-87.
3. Average market price for 1947-65; average taxable price for 1966-87.
4. Total production for 1947-75; taxable production for 1976-87.
5. Average market price for 1947-75; average taxable price for 1976-87.
seek ways of avoiding the trap of rising and falling prices. One approach being considered is creation of a budget stabilization or "rainy day" fund. Such a fund would accumulate revenues in good economic times to use to smooth over economic problems.
On November 8, 1988, voters gave their approval to a constitutional amendment (House Joint Resolution 2 by Representative Stan Schlueter) that establishes a "rainy day" fund (or economic stabilization fund). One part of the fund would accumulate 75 percent of oil and gas severance tax revenues collected in excess of the amounts that were collected in fiscal year 1987-about $\$ 1.2$ milliion. The Comptroller estimates that the fund would accumulate oil and gas tax revenues of $\$ 16.5$ million in 1989, $\$ 8.0$ million in 1990, $\$ 19.0$ million in 1991 and \$62.3 million in 1992.

## Interstate Comparisons

Thirty-seven states provide for some form of severance tax on a variety of minerals and forest products (Table 7). The most commonly taxed items are oil and gas, coal, timber and other minerals. Timber and fish resources are different from the others in that they are renewable.
As the table shows, 14 states tax coal production. Three statesTexas, Montana and North Da-kota-produce lignite. Among these states, only Texas does not provide for its taxation, although it does charge a $\$ 120$ per acre reclamation fee. Montana taxes by value or volume, whichever is higher, with rates set by BTU

[^72]content and method of mining. North Dakota taxes lignite based on volume.
Nationally, as in Texas, oil and gas severance taxes are the most significant severance taxes. Oil and gas production occurs in 33 states, of which 27 have some form of oil and gas severance tax.

> Nationally, as in Texas, oil and gas severance taxes are the most significant severance taxes.

Oil and gas tax collections in the U.S. in 1986 totaled more than $\$ 5.2$ billion. ${ }^{12}$ Even though states have benefited from increases in mineral prices, most enacted severance taxes prior to the energy shocks of the 1970s. While the distribution of oil and gas production is dispersed geographically, the concentration of oil and gas deposits in just a few states narrows the focus. Four states (Texas, Louisiana, Alaska and California) are responsible for 75 percent of the entire U.S. oil production, and four states, (Texas, Louisiana, Oklahoma and New Mexico) account for 85 percent of gas production.
Table 8 details oil and gas production in 1986 for the top producing states. Texas' and Louisiana's production includes federal offshore production on the OCS, which, as noted earlier, is not subject to severance taxation. OCS production makes up a significant portion of Louisiana's share.
Oil and gas tax rates in the top ten producing states vary considerably, ranging from a low of two percent in Colorado to a high of 15 percent in Alaska. Texas' rates rank it in the middle third with respect to oil and near the top for gas. Most states tax on the basis of
gross production value, but a few states (like Louisiana and New Mexico) tax on the basis of production volume. North Dakota, Wyoming, Louisiana and Oklahoma adjust rates and provide tax holidays to encourage secondary and tertiary production and to keep marginal wells producing. A small number of states provide some tax relief for small producers and new wells. With the exception of Louisiana, which recently enacted legislation lowering or eliminating the tax on certain production, severance taxes throughout the states have remained stable in recent years.
Nationwide, severance taxes are not a major source of revenue for state governments. However, the top ten producing oil and gas states do rely to varying degrees on severance taxes. This reliance has produced mixed results over the years. When prices were high, producing states prospered; but when they were low, they suffered. Nonetheless, severance taxes have helped states forestall other taxes. Alaska and Montana have no sales tax. Texas and Wyoming have no corporate or personal income taxes. North Dakota, Louisiana, Oklahoma and New Mexico all have income and sales tax rates lower than the national average.
Texas is the only state that has severance and property taxes based on the full market value of production and reserves. It is one of only two states (the other being California) that taxes property using an income method, which is based on the present value of future sales of reserves. In 1987, this value was estimated by the State Property Tax Board to be approximately $\$ 47.4$ billion, or 7.1 percent of the state's total taxable property value. ${ }^{13}$ In addition to property taxes, Texas government, unlike some other states, benefits greatly from mineral production

TABLE 7. State Severance Taxes ${ }^{1}$

| State | Tax | Rate |
| :---: | :---: | :---: |
| Alabama | Iron Ore Mining | Three cents per ton. |
|  | Forest Products Severance | Varies by species and ultimate use. |
|  | Oil and Gas Regulation and Conservation | Two percent of gross value at point of production. |
|  | Oil and Gas Production | Eight percent of gross. <br> Four percent for wells producing 25 barrels or less per day or 200,000 cubic feet or less of gas per day. |
|  | Coal Severance | 13.5 cents per ton. |
|  | Coal Lignite Severance | 20 cents per ton in addition to coal severance tax. |
| Alaska | Fisheries Business | Three percent to five percent of fish value based on type of fish. |
|  | Oil and Gas Production | Percentage of gross value determined annually (current rate: 15 percent of value). |
|  | Oil and Gas Regulation Conservation | 1/8 cent per barrel of oil sold or from lease. |
| Arizona | Severance | Mining: 2.5 percent of net severance base; timber: 1.5 percent of value. |
| Arkansas | Natural Resources Severance | Separate rate for each of more than 30 substances (oil: five percent of value on wells producing more than ten barrels per day; gas: $3 / 10$ cent per 1,000 cubic feet; coal and lignite: ten cents per ton). |
|  | Oil and Gas Conservation | Up to 25 mills $^{2}$ per barrel of oil and five mills per 1,000 cubic feet of gas. |
| California | Oil and Gas Production | Rate determined annually by Department of Conservation. |
| Colorado | Oil and Gas Conservation | Up to one mill per one dollar market value at the wellhead. |
|  | Severance | Separate rate for each substance (oil and gas: tax rates vary from two percent to five percent, depending on gross income; coal: 60 cents a ton). |
| Florida | Oil and Gas Production | Eight percent of gross value for oil and five percent for gas. |
|  | Solid Minerals | Five percent of market value at point of severance for most minerals. |
| Georgia | Phosphates | One dollar per ton. |
|  | Oil and Gas Production | Up to five mills per barrel of oil and up to five mills per 50,000 cubic feet of gas. |
| Idaho | Additional Oil and Gas Production | Two percent of market value at site of production. |
|  | Ore Severance | Two percent of net value. |
| Illinois | Timber Fee | Four percent of purchase price. |
| Indiana | Petroleum Production | One percent of value (includes oil, gas and other hydrocarbons). |
| Kansas | Oil and Gas Conservation | 12.5 mills per barrel of oil and 3.3 mills per 1,000 cubic feet of gas, plus an added $\$ 0.008$ per barrel of oil and $\$ 0.00024$ per 1,000 cubic feet of gas. |
|  | Severance | Oil and gas: eight percent of gross value; coal: one dollar per ton; salt: four cents per ton. |
|  | Mined-Land Conservation and Reclamation | Basic fee of $\$ 50$, plus three cents to ten cents per ton extracted each calendar year; the per ton fee is fixed by the MinedLand Conservation and Reclamation Board. |
| Kentucky | Oil Production <br> Coal Severance <br> Natural Resources Severance | 4.5 percent of market value. 4.5 percent of gross value. <br> 4.5 percent of gross value. |
| Louisiana | Natural Resources Severance | Rate varies according to substance [oil: 12.5 percent of value (lower rates for marginal production); gas: seven cents per 1,000 cubic feet (lower rates for marginal production); coal: ten cents per ton; timber: 4.5 percent to ten percent of the current average stumpage market value] 6.6 percent of gross cash market value of oil; five percent for gas; additional fee cash market value on all oil and gas produced the previous year. |

TABLE 7. State Severance Taxes (Continued)

| State | Tax | Rate |
| :---: | :---: | :---: |
| Michigan | Oil and Gas Severance | 6.6 percent of gross cash market value of oil; five percent for gas; additional fee cash market value on all oil and gas produced the previous year. |
| Minnesota | Iron Severance | 15 percent ( 14.5 percent on ore produced after 1985 and before 1987; 14 percent on ore produced after 1986) of the value of all ores, minus credits. |
|  | Ore Royalty | 15 percent ( 14.5 percent during 1986; 14 percent after 1986) of all royalty, minus credits. |
|  | Taconite, Iron Sulphides and Agglomerate | $\$ 1.25$ per ton, plus a surcharge based on iron content. |
|  | Semi-Taconite | Ten cents per ton, plus a surcharge based on iron content. |
|  | Copper-Nickel | One percent of value of ores mined or produced, plus additional miscellaneous mining and royalty taxes. |
| Mississippi | Oil and Gas Severance | Six percent of value at point of production per barrel of oil and six percent at point of production or two mills per 1,000 cubic feet of gas. |
|  | Timber Severance | 22.5 cents to one dollar per 1,000 board feet or standard cord, depending on type of wood. |
|  | Salt Severance | Three percent of value. |
| Montana | Coal Severance | Varies by quality of coal and type of mine from three percent to 30 percent of value. |
|  | Metalliferous Mines License | Progressive gross value tax for 0.15 percent to 1.438 percent of value (For tax years beginning after 1984, exempts the first $\$ 250,000$ of gross value and imposes a tax of 0.5 percent of gross value over $\$ 250,000$ up to one million, and 1.5 percent of gross value over one million). |
|  | Oil and Gas Producers Severance | Five percent of gross value on oil, 2.65 percent of gross value on gas and an added conservation tax of up to $2 / 10$ percent of market value (Incremental oil production is taxed at 2.5 percent). |
|  | Micaceous Minerals License | Five cents per ton produced. |
|  | Cement License | 22 cents per ton of cement, five cents per ton of cement, gypsum or plaster products. |
|  | Mineral Mining | \$25 plus 0.5 percent of gross value over $\$ 5,000$. |
| Nebraska | Oil and Gas Severance Oil and Gas Conservation Uranium | Three percent of value of nonstripper oil and natural gas. Up to four mills per one dollar of oil or gas produced. Two percent of the value of uranium produced each year in excess of five million dollars gross value. |
| Nevada | Net Proceeds of Mines Oil and Gas Conservation | Property tax rate of place where mine is located 50 mills per barrel of oil and 50 mills per 50,000 cubic feet of gas. |
| New Mexico | Refined Petroleum Products | 0.1 percent of value. |
|  | Resources Excise | 1/8 percent to $3 / 4$ percent, depending on substance. |
|  | Severance | Varies according to substance. |
|  | Oil and Gas Severance | 15.7 cents per 1,000 cubic feet of gas (July 1, 1985, to January 30,1986 ) and 3.75 percent of value of oil or liquid hydrocarbon. |
|  | Oil and Gas Privilege | 3.15 percent of value. |
|  | Natural Gas Processors | 0.45 percent of value. |
|  | Oil and Gas Ad Valorem Production Oil and Gas Conservation | Variable-set by state annually. <br> Variable percentage. |
| North Carolina | Oil and Gas Conservation | Up to five mills per barrel of oil and $1 / 2$ mill per 1,000 cubic feet of gas. |
|  | Primary Forest Assessment | 40 cents to 50 cents per board foot; 12 cents to 20 cents per cord. |
| North Dakota | Oil and Gas Gross Production | Five percent of gross value at well. |
|  | Coal Severance | 85 cents per ton and one cent per ton for each four point increase in wholesale price index. Tax is reduced 50 percent if coal is used in a cogeneration facility. |
|  | Oil Extraction | 6.5 percent of gross value at well. |

## TABLE 7. State Severance Taxes (Continued)

State
Tax
Rate

| Ohio | Resource Severance | Separate rate for each substance (oil: ten cents per barrel; gas: 2.5 percent per 1,000 cubic feet; coal: eight cents per ton). |
| :---: | :---: | :---: |
| Oklahoma | Oil, Gas and Mineral Gross Production Natural Gas and Casinghead Gas Conservation Excise | Separate rate for each substance (oil and gas: seven percent of value, plus 0.085 of one percent of value). Seven per 1,000 cubic feet, less seven percent of the gross value of each 1,000 cubic feet of gas. |
| Oregon | Oil and Gas Production Forest Products Severance Severance Tax on Eastern Oregon Timber Severance Tax on Western Oregon Timber | Six percent of gross value at well. <br> 21 cents per 1,000 board foot. <br> Five percent of value ( 38 percent after July 1, 1986). <br> 6.5 percent of value (five percent after July 1, 1986). |
| South Dakota | Conservation <br> Precious Metais Severance <br> Energy Minerals Severance | 2.4 mills of taxable value of energy minerals. Two percent of gross yield, plus eight percent on net profits. <br> 4.5 percent of taxable value of any energy mineral. |
| Tennessee | Oil and Gas Severance Coal Severance | Three percent of sales price. 20 cents per ton. |
| Texas | Natural Gas Production Oil Production Sulphur Production Cement Regulation | 7.5 percent of market value. 4.6 percent of market value. $\$ 1.03$ per long ton. <br> 2.75 cents per 100 pounds. 3/16 cent per barrel of oil. |
| Utah | Mining Occupation <br> Oil and Gas Conservation | One percent of gross value of ore or metals sold and four percent of value for oil and gas. <br> Two mills per one dollar of well head value. |
| Virginia | Forest Products Coal Surface Mining Reclamation | Varies by species and ultimate use: Varies. |
| Washington | Uranium and Thorium Milling <br> Enhanced Food Fish | Five cents per pound. <br> 0.07 percent to five percent of price paid by first purchasers. |
| West Virginia | Severance | Effective July 1, 1987, the tax rates on oil 4.34 percent; natural gas is 6.5 percent (separate rates for other natural resources). |
| Wisconsin | Metalliferous Minerals Occupation | Progressive net proceeds tax from three percent to 15 percent. |
| Wyoming | Oil and Gas Production Mining and Excise Severance Coal Severance | Up to $4 / 5$ mill per dollar. <br> Varies by substance from 1.5 percent to three percent of value. <br> 7.25 percent of value of gross product of the coal extracted. |

## Source: Commerce Clearing House, State Tax Guide (1988); Comptroller of Public Accounts.

1. Severance taxes in this table are broadly defined to include all taxes on the privilege of severing natural resources from the soil or water of the state. The table includes a number of taxes which fit this description, but which go by other names. The Texas oil and natural gas taxes, for example, are severance taxes under this definition, but are defined in state law as taxes on the occupation of oil and gas production.
2. A mill is $1 / 10$ cent.
on state-owned lands. In fiscal year 1987, the General Land Office collected $\$ 175$ million in income from such sources, although this money is not available for appropriation. ${ }^{14}$

While oil and gas severance tax revenues play an important part in funding Texas government, some states rely even more
14. General Land Office, Un-Audited Annual Report, Fiscal Year 1987 (Austin, 1987), p. 89.
heavily on them. Table 9 shows the severance tax revenues collected and revenues collected as a percent of total tax collections for the top ten producing states in 1986. Alaska had the greatest dependence with some 77 percent of its tax collections coming from severance taxes.
Severance tax collections alone do not convey the whole picture in making interstate comparisons. Some states have a relatively simple tax structure. Others, like

TABLE 8. Oil and Gas Production in Top Ten Producing States, 1986

|  | Oil <br> (Thousands <br> of Barrels) | Natural <br> Gas <br> (MMCF) |
| :--- | ---: | ---: |
| State | 486,310 | 306,468 |
| Alaska | 417,165 | 469,444 |
| California | 36,809 | 158,456 |
| Colorado | 82,049 | 448,334 |
| Kansas | 622,108 | $4,888,512$ |
| Louisiana | 108,212 | 709,883 |
| New Mexico | 50,668 | 59,605 |
| North Dakota | 215,105 | $1,917,490$ |
| Oklahoma | $\mathbf{1 , 0 8 2 , 6 0 6}$ | $\mathbf{6 , 0 9 2 , 1 0 5}$ |
| Texas | 154,337 | 495,459 |
| Wyoming |  |  |

Source: Independent Petroleum Association of America.

TABLE 9. Oil and Gas Severance Taxes for Top Ten Producing States, 1986

|  | Severance <br> Tax <br> Collections <br> (millions) | Total <br> Collections <br> Cmillions) | Severance <br> Tax as a $\%$ <br> of Total |
| :--- | :---: | :---: | :---: |
| Alaska | $\$ 1,433$ | $\$ 1,856$ | $77 \%$ |
| California | 7 | 30,878 | Less than one |
| Colorado | 13 | 2,344 | 1 |
| Kansas | 101 | 1,912 | 5 |
| Louisiana | 609 | 3,630 | 17 |
| New Mexico | 367 | 1,462 | 25 |
| North Dakota | 120 | 616 | 19 |
| Oklahoma | 571 | 2,960 | 19 |
| Texas | $\mathbf{1 , 5 4 8}$ | $\mathbf{1 1 , 1 2 5}$ | $\mathbf{1 4}$ |
| Wyoming | 255 | 795 | 32 |
|  |  |  |  |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections in 1986 (Washington, D.C., 1987).

New Mexico, have a multitude of energy-related taxes. Some states have various occupation taxes and license fees. Eleven states tax sales of production machinery and equipment, and a number of states impose a franchise tax. Almost all of the major producing states levy some form of property tax, the one exception being North Dakota, which completely excludes the oil and gas industry from ad valorem taxation. Due to the capital-intensive nature of oil and gas production, many of these taxes fall heavily on the industry.

Alaska imposes a separate property and corporate income tax on the oil and gas industry and prohibits local units of government from taxing the same, although local property taxes on tangible personal property (which is substantial, given the Alaskan pipeline) are permissible. Louisiana excludes oil and gas reserves in the ground from property taxation altogether, but does provide its parishes with the ability to tax tangible property. Oklahoma exempts oil and gas property and equipment used in production (if the severance tax has been paid). Some nonproducing equipment items are subject to taxation.

To determine the total tax burden on the oil and gas extractive industry on the standard per unit basis that accounts for the numerous differences in types and applications of taxes, the Comptroller, in a 1985 study, developed a measure that indicates total taxation per barrel produced for the top ten producing states for 1983. The Comptroller's study focused on direct taxes (i.e., severance taxes, excise, production, conservation, regulation and drilling/servicing fees taxes) and indirect taxes (i.e., franchise, property, income, sales and other taxes). Table 10 indicates the results. As the table shows, Colorado had the highest indirect and
total tax per barrel. This may be due, in part, to the large value associated with nonproducing alternative fuel projects. Texas ranks fifth in total tax per barrel. It should be noted that the main purpose for presenting such a measure of total relative tax burden is primarily illustrative. It is intended merely to highlight the types of taxes that impact the industry and to provide a very rough method of interstate comparisons.

## The Outlook

Historically, energy prices have been replete with uncertainty. Predicting oil and gas prices next year, much less next decade, is risky business. However, the consensus points to continued price weakness in the short run with slow, steady increases in the long run. Production, on the other hand, faces a different fate. Texas production will soon be less than one-half of its 1972 peak volumes. Production, while more stable and predictable than price, will probably continue to decline. Most of the state's major finds have been made and reserves are well established. There are few, if any, large undiscovered fields, and, barring unexpected price spikes and/or radical new recovery technologies, production will continue its downward trend. The large amount of stripper and marginal well production is an indication of this trend. Most additional new reserves will come from the OCS region which is free from severance taxation.

Precipitous oil price increases are unlikely in the short run, except in the cases of a cut-off or threatened cut-off of oil stocks. Natural gas prices look a little better due to increasing demand and the potential for short-term limits on the supplies available. Many experts are forecasting that
prices will remain relatively stable given large OPEC producers' (like Saudi Arabia) desires to provide production/price stability and given other nonOPEC producers' (like United Kingdom and Mexico) desires to maintain market share and provide much needed foreign currency earnings. As a result of these prevailing market supply and demand conditions, no real increases in prices are likely before the early 1990s. Long-run price estimates vary according to source.
Energy prices and, therefore, severance tax revenues are now (and probably will be into the foreseeable future) determined outside the borders of the state. Severance taxes, while continuing to be a substantial source of revenue for the state, will not be a source of new revenue and may never play the fiscal role they once did. Of course, oilproducing states hope for higher prices since oil and gas taxes are good revenue producers only when prices are high. And, high prices make it more economical to drill for and produce expensive, hard-to-recover oil. However, the continued softness in market prices is not without offsetting benefits to the state.

Texas industries requiring large inputs of energy benefit from lower prices. Consumers benefit directly from low transportation and heating costs and indirectly from lower inflation in general. Additionally, low prices produce a downward pressure on interest rates which increases sales and, consequently, sales taxes (especially motor vehicle sales taxes).
The outlook with respect to federal legislation also is unclear. The complete effects on the oil and gas industry of the Tax Reform Act of 1986, especially those provisions eliminating the investment tax credit and reducing the benefits of accelerated depreciation, have yet to be determined. The proposed oil import fee faces an uncertain future. The current administration and an apparent majority in Congress oppose it. If it could not pass when prices were in the low teens, it is even more unlikely now. Except for these still uncertain actions, and because of federal decontrol of oil and continuing decontrol of natural gas, the federal role in determining market prices and production will probably remain secondary to market forces.

TABLE 10. Top Ten Oil and Gas Producing States, 1983

| State | Direct Tax <br> Per Barrel | Indirect Tax <br> Per Barrel | Total Tax <br> Per Barrel |
| :--- | ---: | :---: | :---: |
| Alaska | $\$ 2.22$ | $\$ .84$ | $\$ 3.06$ |
| California | .01 | 1.76 | 1.77 |
| Colorado | .40 | 3.32 | 3.72 |
| Kansas | .01 | 1.14 | 1.15 |
| Louisiana | .58 | .42 | 1.00 |
| New Mexico | 1.32 | .83 | 2.15 |
| North Dakota | 2.63 | .29 | 2.92 |
| Oklahoma | 1.65 | .44 | 2.09 |
| Texas | 1.16 | 1.19 | 2.35 |
| Wyoming | 1.30 | 1.85 | 3.15 |

Source: Comptroller of Public Accounts, Fiscal Notes (October 1985).

## T exas Utility Taxes

## Revenue and Regulation

## Summary

Investor-owned public utilities pay many of the same taxes as other businesses. However, they are also subject to certain unique state and local taxes which are assessed to provide general support for government and to defray the costs associated with regulating utility rates and services. This chapter discusses the special taxes levied on utilities in Texas and the issues associated with the current utility tax structure.
A principal motivation for special taxation of public utilities lies in the fact that utilities are very effective tax collectors. This is true because utilities are allowed to include taxes in the cost of service determined for ratemaking purposes. While the initial impact of taxation is on the utilities, the incidence of the actual tax burden rests with consumers in rates they pay to utilities.
Currently, public utilities pay three special taxes. A fourth tax, the telephone companies gross receipts tax, was repealed effective October 1, 1988. The gas, water and electric utility tax produces over $\$ 150$ million in revenues and is levied on certain privately owned gas, electric and water utilities serving a city with populations of more than 1,000 . The existing tax base excludes municipally owned
systems, cooperatives and water supply corporations. These exemptions raise the issue of equity, particularly in circumstances where competition exists. Furthermore, the exemptions result in some consumers paying the tax while others do not.
The public utility regulatory assessment was originally levied on the gross receipts of certain electric, telephone and water utilities, as a means of defraying costs of regulatory activities of the Public Utility Commission. However, the current rate produces nearly three times more revenue than the cost of state regulatory activities. Equity questions arise due to the exemptions for municipal systems and water supply corporations.
The gas utility administration tax is levied on certain gathering and transmission companies. Originally assessed to defray the cost of gas utility regulatory activities of the Texas Railroad Commission, the tax base has been reduced significantly by litigation. Until recently, the revenue collected far exceeded the costs of regulatory activity. However, as a result of a district court decision, revenues are projected to decline to less than $\$ 3$ million, raising questions about the viability of the tax.

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## Introduction

Utility taxes in Texas generally fall into two major categories: those which are levied to provide general support for government and those which finance part of the costs of the state agencies charged with regulating utility rates and services. Both types are assessed against the gross receipts from business activity conducted by public utility companies.
Public utilities in Texas represent a large and diverse array of corporations, cooperatives and municipalities with capital investments exceeding $\$ 50$ billion. It is estimated that 650 public utilities paid state utility taxes in Texas in 1987. Revenue from customers of these utilities exceeds $\$ 15$ billion annually.
Responsibility for regulating these utilities varies, as do the methods of taxation. Electric and telephone utilities are currently regulated by the Public Utility Commission, gas utilities by the Railroad Commission and water
utilities by the Texas Water Commission.

The annual amount of federal, state and local revenue obtained from utilities operating in Texas exceeds $\$ 2$ billion. In fact, the large capital-intensive utilities are among the largest payers of state franchise and sales taxes and local ad valorem taxes. While public utilities pay many of the same taxes as other businesses, they are also subject to certain unique state and local taxes or assessments as well. Public utilities currently pay the following special taxes:
(1) miscellaneous gross receipts tax (often referred to as the gas, electric and water utility tax);
(2) telephone companies gross receipts tax (repealed effective October 1, 1988);
(3) public utility regulatory assessment (sometimes referred to as the public utility gross receipts tax); and
(4) gas utility administration tax (also known as the gas utilities gross receipts tax).

> The annual amount of federal, state and local revenue obtained from utilities operating in Texas exceeds $\$ 2$ billion.

Table 1 shows the payment of special utility taxes and assessments in 1987.
Until recently, these taxes produced a very dependable revenue stream, averaging over $\$ 300$ million annually during the period of fiscal year 1983 through 1985. However, recent economic conditions, changes in the utility industry and legal challenges and adjustments to the tax base have raised questions about their future

TABLE 1. Payment of Utility Taxes and Assessments, Fiscal Year 1987 (Millions of Dollars)

|  | Electric | Telephone | Gas | Water | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Utility Gross Recelpts Taxes |  |  |  |  |  |
| Miscellaneous Gross Receipts Tax (Gas, Electric and Water) | \$120.6 |  | \$29.9 | \$. 02 | \$150.5 |
| Telephone Tax ${ }^{\text {' }}$ |  | 24.4 |  |  | 24.4 |
| Regulatory Assessments |  |  |  |  |  |
| Public Utility <br> Regulatory Assessment | 17.4 | 7.3 |  | . 05 | 24.7 |
| Gas Administration Tax |  |  | 10.4 |  | 10.4 |
| Total | \$138.0 | \$31.7 | \$40.3 | \$. 07 | \$210.1 |

Source: Public Utility Commission and Comptroller of Public Accounts.

1. Repealed October 1, 1988.
performance, purpose and proper basis.

## History of Utility Taxes in Texas

Taxes on utilities began as occupation taxes in Texas. Occupation taxes originated with a tax first levied during the Civil War which was extended during the period of Reconstruction to include a special tax on the receipts of telegraph companies and railroads. Later, the Constitution of 1876 authorized the imposition of occupation taxes on a broad range of persons and corporations. In 1882, a state tax of $\$ 50$ and a county tax of ten dollars were imposed on telephone companies. A similar tax on gas companies was also levied. Telegraph companies were charged a tax of one cent on each intrastate message.

The current gross receipts tax on utilities originated in 1905. At that time, gas, electric and water companies were assessed a tax of one-fourth of one percent of their gross receipts. Reenacted in 1907, this tax serves as the basic act for all of the gross receipts taxes.
Under the tax, gas, electric and water companies were assessed a graduated tax rate based on the population of cities served. Utilities serving larger cities paid a higher rate as a way of encouraging service development in rural areas. These tax rates were amended in 1936, 1941, 1951 and most recently in 1959, when the present rates were imposed. The 1941 amendments prohibited cities from levying utility taxes other than ad valorem taxes, but it did allow them to assess a charge not to exceed two percent of gross receipts for the use of streets and other rights-of-way as a part of specific franchise agreements.

The 1907 law also levied gross receipts taxes of 2.75 percent on telegraph companies and 1.5 percent on telephone companies. In 1936, the telephone companies tax was changed to a graduated tax based on the population of cities served and was assessed on the gross receipts of all telephone business conducted in the state, including long distance toll calls.
In 1985 and 1987, the Legislature reformed the structure of taxes imposed on telecommunications utilities because of rapid changes taking place in the industry. House Bill 1949 (H.B. 1949) in 1985 removed toll and access services from the gross receipts tax base and repealed the gross receipts tax on telegraph service. Also, H.B. 1949 subjected certain telephone services (excluding basic local exchange service) to the state sales tax for the first time.

Further reform was accomplished in House Bill 61 (H.B. 61) in 1987, when the gross receipts tax on the telephone industry was repealed, effective October 1, 1988. House Bill 61 also extended the state sales tax to include basic local exchange telephone service, as well as to interstate telecommunications which originate in and are billed to an account in this state.

The gas utility administration tax originated in 1920 with the enactment of the Natural Gas Utilities Act and the establishment of the "Gas Utilities Fund."

This tax was levied on the gross receipts of a broad range of companies transporting and distributing gas. The revenues from the tax were dedicated to the Texas Railroad Commission for administration of the act.

The current statute was enacted in 1931, and the tax base was narrowed to certain pipeline companies engaged in the trans-
portation of gas. Amendments in 1979 further reduced the tax base. The law was further amended in 1981 to apply the proceeds of the tax to the general fund, thus ending the dedication to the Texas Railroad Commission.

> In 1985 and 1987, the Legislature substantially reformed the structure of taxes imposed on telecommunications utilities because of rapid changes taking place in the industry.

The Public Utility Regulatory Act, passed in 1975, established the Public Utility Commission of Texas. As part of act, the public utility regulatory assessment was imposed on electric, telephone and water utilities. The assessment provision of the act was amended by the Legislature in

1987 expressly to include telecommunications carriers providing interexchange services.
In 1985, regulatory jurisdiction over water utilities was transferred to the Texas Water Commission. The regulatory assessment for water utilities was included in revisions to the state statutes.

## Special Utility Taxes Nationwide

The structures and components of special taxes on public utilities vary substantially nationwide. Consequently, concise descriptions are not possible, and valid interstate comparisons are difficult at best. Nonetheless, the principal features of these taxes are identified in Table 2.
Information regarding utility taxation was obtained through a survey of selected states and is presented in Table 3. Three of the states polled use a twofold tax structure similar to that used in Texas-a utility gross receipts tax for general revenue, and a specific assessment used to support a regulatory agency. Two of the states-New York and

TABLE 2. Overview of Special Utility Taxes Nationwide

Tax Rates Fixed percentage imposed on gross receipts, capital stock or net profits or income. Graduated rates are occasionally found.

Tax Base Generally levied on gross receipts, usually meaning a tax upon the entire receipts of a public utility company. Sometimes levied in lieu of ad valorem or income taxes. Deductions are typically not allowed.

There are a few exceptions to the types of public utilities required to pay the tax. Most common is that exception allowed for municipallyowned electric, gas and water systems.

Structure
Generally twofold: a tax levied for general revenue support of state government and an assessment to cover operations of state regulatory agencies.

[^73]Pennsylvania-apply the utility gross receipts tax in lieu of the state corporate income tax, and one state-Florida-collects a gross receipts tax in addition to the state income tax. The miscellaneous gross receipts tax rate in Texas is lower than the gross receipts tax rate found in the other states surveyed.
Three states polled-California, Michigan and Missouri-
employ a single utility tax, which is developed as a regulatory assessment.
The only state contacted which had neither a regulatory assessment nor a general revenue tax on public utilities was Oklahoma. In a recent survey, the Oklahoma Corporation Commission found only four other states nationwide which did not have utility regulatory assessments.

In all of the states polled, except Oklahoma, the utility regulatory assessment is based on the allocated cost of governmental regulation of public utilities. Generally, the regulatory agency's actual expenditures are divided by the gross utility revenues available to arrive at a factor or tax rate to be applied to the utilities. In some of the states, a separate tax rate is used

TABLE 3. State Utility Taxation (Selected States)

| State | Public Utility Gross Receipts Taxes | Public Utility Regulatory Assessments |
| :---: | :---: | :---: |
| California | None (Utilities pay income tax, franchise taxes.) | Electric: 0.012 cents $/ \mathrm{kwh}^{1}$ <br> Telephone: $0.1 \%$ gross receipts <br> Gas: 0.068 cents $/$ therm ${ }^{2}$ <br> Water: $1.5 \%$ gross receipts |
| Florida | 2.5\% of gross receipts in addition to corporate income tax. | $\begin{aligned} & \text { Electric, Telephone and Gas: } \\ & \text { Water: } \quad 1.125 \% \text { gross receipts } \\ & \text { Wross receipts } \end{aligned}$ |
| Michigan | None | All Utilities: $2.35 \%$ applied to $50 \%$ of gross receipts base |
| Missouri | None | Electric: $\quad 0.13 \%$ gross receipts Telephone: $0.19 \%$ gross receipts Gas: $\quad 0.14 \%$ gross receipts Water: $\quad 0.36 \%$ gross receipts Sewer: $\quad 2.14 \%$ gross receipts |
| New York | Tax on gross receipts in lieu of income tax; $3.75 \%$ for gas, electric and water; 3.3\% telephone | All Utilities: $0.23 \%$ gross receipts (Legislative maximum 0.33\%) |
| Oklahoma | None (Sales tax applies to many utility services.) | None |
| Pennsylvania | Tax on gross receipts in lieu of income tax; $4.4 \%$ on all utilities. | Electric: $0.141 \%$ gross receipts <br> Telephone: $0.165 \%$ gross receipts  <br> Gas: $\quad 0.222 \%$ gross receipts  <br> Water: $\quad 0.658 \%$ gross receipts  |
| Texas | $\begin{array}{ll} \text { Rate by population: } \\ \text { 1,000-2,500: } & 0.581 \% \\ 2,500-10,000: & 1.070 \% \\ \text { over 10,000: } & 1.997 \% \end{array}$ | $\left.\begin{array}{ll}\text { Electric, Telephone and Water: } \\ 0.166 \% \text { gross receipts }\end{array}\right\}$  <br> Gas: $0.250 \%$ gross recelpts |

Source: Public Utility Commission and Comptroller of Public Accounts.

1. $\mathrm{Kwh}=$ kilowatt hour.
2. Therm $=100,000$ British Thermal Units.
for each utility type. In many cases, the revenue from the assessment is used for regulatory activities. In others, the state legislature appears to have delegated authority for development of the assessment rate to the regulatory agency or the state legislature must meet to set the applicable tax rate.
Table 4 presents a comparison of state and local taxes for selected states for 1979, 1981 and 1984. States are listed in the order of their 1981 effective tax rates.

## Gross Receipts-Based Taxes

Texas electric, gas, telephone and water utilities-as defined in state statutes and substantive rules-generally pay two types of taxes or assessments. The first type is the gross receipts taxes used for general support of state government. Two specific taxes have historically been levied for this purpose and will be discussed in this section.

Gas, water and electric utilities tax. The gas, water and electric utilities tax produces the most revenue of any of the four specific utility taxes, over $\$ 150$ million annually, but has the fewest taxpayers. Its characteristics are summarized in Table 5. The small base is the result of the narrow focus of the tax; i.e., the utility must be privately owned and must serve a city of more than 1,000 population. The tax base excludes the municipally owned electric, gas and water systems, cooperatives, small water companies and water supply corporations.
Table 6 shows the reported fiscal 1987 payment of the gas, water and electric utility tax (miscellaneous gross receipts tax) by the utilities to the Comptroller of Public Accounts. (There is a small percent variation between

TABLE 4. State and Local Taxes as a Percentage of Gross Operating Revenue for Investor-Owned Electric Utilities

| State | Rank | $\mathbf{1 9 8 1}$ | 1979 | 1984 |
| :--- | :---: | :---: | :---: | :---: |
| New York | 1 | $12.8 \%$ | $15.2 \%$ | $12.7 \%$ |
| Missouri | 15 | 10.2 | 10.9 | 9.5 |
| Pennsylvania | 7 | 9.3 | 9.1 | 5.1 |
| Florida | 17 | 6.7 | 6.9 | 7.7 |
| Michigan | 23 | 5.6 | 5.2 | 7.1 |
| Oklahoma | 30 | 5.1 | 5.7 | 9.8 |
| Texas | 37 | 4.5 | 5.2 | 8.4 |
| California | 48 | 2.4 | 3.1 | 5.3 |

Source: Donald J. Reeb and Edward T. Howe, "State and Local Taxation of Electric Utilities: A Study of the Record," in Michael A. Crew (ed.), Analyzing the Impact of Regulatory Change in Public Utilities (Lexington: D.C. Heath Company, 1985).

TABLE 5. Major Features of the Texas Gas, Water and Electric Utility Tax

| Authority | Tax Code Chapter 182, originally adopted in 1907. |
| :---: | :---: |
| Tax Rate | A tax on the gross receipts of any utility operation in cities, based on population as follows: |
|  | Population Tax Rate |
|  | 1,000 to 2,500 0.581\% |
|  | 2,500 to 10,000 1.070\% |
|  | Above 10,000 1.997\% |
| Tax Base | Applies to gross receipts of all gas, electric light, electric power, water works or water and light plant used for local sale and distribution, which is located in an incorporated city or town in the state with a population of 1,000 or more. Cooperatives and utilities owned and operated by a city, town, county, water improvement district or conservation district are exempt from this tax. Telecommunications utilities do not pay this tax. |
| Administration | Comptroller of Public Accounts. |
| Allocation | $75 \%$ to the General Revenue Fund; $25 \%$ to the Foundation School Fund. |
| Taxpayers | 29 Gas Utilities |
|  | 10 Electric Utilities |

Source: Public Utility Commission and Comptroller of Public Accounts.
this data, compiled by the Public Utility Commission, and the data in Table 7 compiled from the state's Annual Financial Report because of the difference between the reporting periods and the tax payment date.)
Revenue from the tax increased by an average of 16 percent annually from 1977 through 1985 (Table 7). There was a general decline in the amount of tax paid by electric and gas utilities during fiscal year 1986 and 1987. For gas utilities, the decline can be attributed to the reduction in gas revenues because of the general slowdown in the Texas economy, as well as restructuring in the gas utility industry. The decline in electric gross receipts also resulted from the sagging
economy and its effect on commercial and industrial sales. In addition, fuel costs were down, and in many instances, the electric utilities provided

> There was a general decline in the amount of tax paid by electric and gas utilities during fiscal year 1986 and 1987.

refunds during this period for fuel over-recoveries in earlier months.
Telephone tax. The telephone utilities have historically paid a telephone companies gross receipts tax as part of the miscellaneous taxes of Chapter 182 of the

TABLE 6. Distribution of Gas, Water and Electric Utility Tax, 1987

| Utility | Number | Collections | $\%$ of <br> Total |
| :--- | :---: | ---: | :---: |
|  |  |  |  |
| Electric | 10 | $\$ 120,627,701$ | $80.0 \%$ |
| Gas | 29 | $29,907,173$ | 19.9 |
| Water | 12 | 18,945 | 0.1 |

Source: Public Utility Commission and Comptroller of Public Accounts.

Tax Code. With the restructuring of the telephone industry in 1983-84, there was a difference in taxation of local exchange carriers and long distance carriers. In 1987, this tax was repealed, effective in October 1988. To maintain the revenue from taxes on this industry, the Legislature in 1985 and 1987 expanded the sales tax base to include telephone services, including toll and access services.

The telephone companies gross receipts tax was growing from 1977 to 1984 at about 16 percent per year (Table 7). The precipitous decline from 1985 to 1986 was caused by the change in the tax base which excluded toll and access receipts and taxed them under the sales tax. Revenue from this tax will continue to decline and ultimately cease as a result of the repeal of the tax.

## Utility Regulatory Assessments

The second major category of Texas utility taxes includes two regulatory assessments, originally levied on public utilities for the purpose of defraying the cost of regulatory activities of the Public Utility Commission, the

TABLE 7. Historical Utility Tax Collections in Texas, 1977-87

| Fiscal Year | Public Utillty <br> Regulatory/Assessment | Gas Utility <br> Administration | Gas, Electric and <br> Water Utility Tax | Telephone <br> Companies Tax |
| :---: | :---: | :---: | :---: | :---: |
| 1977 | $\$ 9,546.8$ | $\$ 13,939.7$ | $\$ 58,483.8$ | $\$ 39,671.9$ |
| 1978 | $10,587.4$ | $14,650.6$ | $67,717.4$ | $44,769.6$ |
| 1979 | $11,368.9$ | $15,766.7$ | $76,590.3$ | $52,422.5$ |
| 1980 | $8,245.3$ | $20,368.2$ | $82,912.6$ | $59,789.8$ |
| 1981 | $16,612.5$ | $27,993.7$ | $110,028.8$ | $68,605.1$ |
| 1982 | $20,433.1$ | $34,670.2$ | $133,026.6$ | $79,875.8$ |
| 1983 | $36,390.4$ | $32,098.2$ | $156,017.0$ | $84,905.8$ |
| 1984 | $27,509.4$ | $20,246.7$ | 163.216 .7 | $84,756.6$ |
| 1985 | $25,858.7$ | $17,051.4$ | $167,309.7$ | $110,648.4$ |
| 1986 | $27,809.5$ | $15,873.1$ | $154,000.9$ | $36,613.4$ |
| 1987 | $24,660.5$ | $10,418.4$ | $150,791.7$ | $24,441.7$ |

Source: State of Texas, Annual Financial Reports, various years.

Office of Public Utility Counsel, the Texas Water Commission and the Railroad Commission.
Public utility regulatory assessment. Table 8 summarizes the major features of the public utility regulatory assessment and Table 9 shows the reported fiscal year 1987 collections. Also shown are the number of utilities paying the tax. (Again, there is slight variation between this data and the Annual Financial Report data in Table 7 because of the difference between the reporting period dates and the tax payment date.)
The public utility regulatory assessment was originally intended to defray the costs of utility regulatory activities of the Public Utility Commission, the Office of Public Utility Counsel and the Texas Water Commission. However, the current regulatory assessment rate (onesixth of one percent of gross revenue) produces revenue that exceeds the combined cost of state regulatory activities. The fiscal year 1987 appropriations to those agencies was approximately $\$ 9.3$ million. The regulatory assessment paid by telephone, electric and water utilities in 1987 totalled $\$ 24.6$ million. While the law allows the Public Utility Commission and the Water Commission to adjust the rate of the public utility regulatory assessment to reflect the cost of regulation, any change must be approved by the Legislature, and no such change in the rate has ever been made.

Figure 1 shows the historical relationship between the regulatory assessments paid by electric, telephone and water utilities and the approximate combined cost of regulatory activities for the Public Utility Commission, Texas Water Commission and the Office of Public Utility Counsel.

Despite the fact that a large number of water utilities pay the regulatory assessment, only about half pay more than $\$ 50$ per year. Most of the water utilities which pay this assessment are small in terms of gross receipts. For ex-
ample, a Texas resident who owns a water well and sells water to a neighbor is classified as a public utility and must pay the assessment. One utility was found which had a total regulatory assessment liability in 1987 of only 67 cents.

TABLE 8. Major Features of the Utility Regulatory Assessment
\(\left.$$
\begin{array}{ll}\text { Authority } & \begin{array}{l}\text { Public Utility Regulatory Act (PURA), Section 1446c, RCS, } \\
\text { established 1975. } \\
\text { Water Code, Section 13.451, revised 1985. }\end{array} \\
\text { Tax Rate } & \begin{array}{l}1 / 6 \text { of 1\% of the gross receipts from rates charged by each } \\
\text { utility. May be adjusted with approval of the Legislature. }\end{array} \\
\text { Tax Base } & \begin{array}{l}\text { Assessment applies to all rates and charges collected by a } \\
\text { public utility as defined in the PURA or the Water Code for } \\
\text { any service or product sold to an ultimate consumer. Does } \\
\text { not include sales for resale, connetion or disconnection } \\
\text { fees, or sales from one division of a company to another. }\end{array} \\
& \begin{array}{l}\text { Assessment is collected from: } \\
\text { Investor-owned and cooperative electric and telephone }\end{array}
$$ <br>
utilities under Public Utility Commission jurisdiction and <br>
from certain water and sewer utilities under Texas Water <br>

Commission jurisdiction.\end{array}\right\}\)| Exemptions include: |
| :--- |
| Utilities owned and operated by municipalities. |
| Water and sewer supply corporations. |
| Utiities under Railroad Commission jurisdiction. |

Source: Public Utility Commission and Comptroller of Public Accounts.

| TABLE 9. Public Utility Regulatory Assessment, 1987 |  |  |  |
| :---: | :---: | :---: | :---: |
| Utility | Number Paying | Collections | Percent of Total |
| Electric Telephone Water | $\begin{array}{r} 91 \\ 69 \\ 241 \end{array}$ | $\begin{array}{r} \$ 17,426,554 \\ 7,331,635 \\ 54,520 \end{array}$ | $\begin{gathered} 70.3 \% \\ 29.5 \\ 0.2 \end{gathered}$ |
| Source: Public Utility Commission and Comptroller of Public Accounts. |  |  |  |

The Texas Water Commission estimates that the 241 water companies currently paying the assessment represent only 30
percent of the total number of water companies subject to the tax. An initiative is now under way to identify the additional

FIGURE 1. Public Utility Regulatory Assessment, 1983-87


Source: Public Utility Commission and Comptroller of Public Accounts.

TABLE 10. Major Features of the Gas Utility Administration Tax

| Authority | Natural Gas Utilities Act; Article 6060, RCS; <br> established 1921. |
| :--- | :--- |
| Tax Rate | $1 / 4$ of $1 \%$ of the gross receipts of gas utilities. |
| Tax Base | Limited to utilities owning, managing, operating, <br> leasing or controlling, within the state, any wells, <br> pipelines, plant, property, equipment, facility, <br> franchise, license or permit, for the business of <br> owning or operating or managing a pipeline for the <br> transportation or carriage of natural gas, if any part <br> of the right of way for line has been acquired, or may <br> be acquired by the exercise of the right of eminent <br> domain. |
| Administration | Texas Railroad Commission |
| Allocation | General Revenue Fund |
| Taxpayers | 250 (est.) |

Source: Public Utility Commission and Comptroller of Public Accounts.
companies. However, it appears that the administrative costs associated with the collection of the assessment on water companies are substantial relative to the potential revenue.
City-owned systems, water supply corporations and municipal utility districts are exempt from this fee. To the extent that such utilities are also exempt from state rate regulation, tax exemption appears reasonable. However, there are many instances in which a utility does not pay the assessment, but the regulating state agency is required to spend extensive resources on regulation of the utility. For instance, the Texas Water Commission devotes a significant amount of time to the regulation of water supply corporations (WSCs), while the WSCs are not required to pay the regulatory assessment.
In many cases, the benefits of regulation accrue to the customers of a utility, and the assessment of regulatory fees (or lack thereof) should be evaluated from that perspective. Several of the regulatory agencies have appellate regulatory jurisdiction over municipal utilities, although neither those utilities nor their customers are assessed the tax for regulation.

Gas utility administration tax. The gas utility administration tax is levied on applicable gas utilities. Table 10 summarizes the major features of the tax. Historically, the tax was assessed to defray the costs of certain gas utility regulatory activities of the Texas Railroad Commission. In 1981, the act was amended to apply the proceeds to the General Revenue Fund, ending the dedication of revenue to the Commission. Generally, this assessment is applicable to gathering and transmission companies and
does not apply to companies which only distribute gas.
The tax base has been reduced over time as the result of legislative action and changes in the industry. Increasing competitive pressure in the natural gas industry has resulted in a trend toward restructuring within gas utilities, in many cases resulting in the creation of subsidiaries of a parent company to perform various aspects of the transmission and distribution of natural gas. Some companies have established marketing subsidiaries which own no transmission facilities but instead pay a transport fee to a transmission company to deliver the product to its destination. In that instance, the tax is levied only on the transport fee and not on the total cost of gas being transported. Thus, the tax base and the revenues are lower than they would be otherwise.
Table 7 includes the revenue performance of the gas utility administration tax. The tax revenue generally increased from 1977 to 1982 but has declined
since. This decline in revenue can be attributed to both the reduction of natural gas prices and the industry restructuring already mentioned.
The earlier discussion regarding the mismatch between
regulatory assessment revenue and regulatory agency expenditures is germane to the discussion of the gas utility administration tax. The fiscal year 1987 appropriation for the Gas Utilities Division of the Railroad

FIGURE 2. Gas Utility Administration Tax, Revenue and Regulatory Appropriations, 1983-87


Source: Public Utility Commission and Comptroller of Public Accounts.

TABLE 11. Franchise Fees for Texas' Larger Cities, 1987

| City | Total Fees <br> (millions) | Electric | Telephone | Gas | Water |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Houston | $\$ 73$ | $4 \%$ | $4.5 \%$ | $4 \%$ | 1 |
| Dallas | 48 | 4 | 4 | 4 | 1 |
| San Antonio | 106 | $14^{2}$ | 3 | $14^{2}$ | 1 |
| Fort Worth | 15 | 3 | 4 | 3 | $4^{2}$ |
| Austin | 7 | 1 | 5 | 5 | 1 |
| El Paso | $n / a$ | 2 | $n / a$ | $10^{2}$ |  |

Source: Public Utility Commission and Comptroller of Public Accounts.

1. Utility owned by city, no direct fee paid (revenue fund transfers may exist).
2. Utility owned by city, fee is percentage shown.
n/a = not available

Commission was approximately $\$ 2.4$ million. The cost of support activities allocated to the Gas Utilities Division is estimated at an additional $\$ 0.4$ million. When compared to the $\$ 10.4$ million collected through the gas administration tax, it is clear that the tax revenue far exceeds the regulatory activity appropriation, although the decline in revenue has narrowed the mismatch. Figure 2 shows the historical trend.
A current and critical event related to natural gas taxation is a challenge in district court which relates to the tax base on the gas administration tax. Article 6060, Texas Revised Civil Statutes, states that the assessment is "one-fourth of one percent of gross income received" from certain gas utilities. Historically, the Railroad Commission has considered gross receipts to be synonymous with gross income as used in this section. In Channel Industries Gas Co.v. Texas Railroad Commission, No. 357630 (District Court of Travis County, 331st Judicial District of Texas), the Court ruled that income should be used as the tax base, wherein the cost of gas is subtracted from gross revenue to yield income. Gross receipts constitute a much larger tax base than gross income, and the two measures of financial productivity require much different tax rate treatment to arrive at equivalent tax revenues. The Texas Railroad Commission estimates that the revenues from this tax could decline to approximately $\$ 2.5$ million a year as a result of this decision.

## Local Taxes and Fees

Texas cities and other political subdivisions are prohibited by law from imposing a charge of
any sort on a utility subject to state gross receipts taxes, other than a reasonable charge by the local government for the use of streets and alleys, etc. The local gross receipts charge, also known as a local franchise fee, may not exceed two percent of gross receipts. However, the state law restricting the level of charges to two percent cannot

> Across the state, it is estimated that telephone utilities paid $\$ 66$ million in local franchise fees in 1987. Electric utilities paid 1987 franchise fees of over $\$ 216$ million.

impair or alter a freely negotiated contractual agreement between a public utility and a city. Consequently, many cities currently have local franchise fees of more than two percent. Some utilities are permitted to pass through local franchise fees to customers in the affected area in order to reflect a more accurate cost of service.
Fees obviously vary widely among Texas cities. Table 12 shows the franchise fees in effect for Texas' larger cities, along with the most recent estimated annual revenue produced by the fees.
Across the state, it is estimated that telephone utilities paid $\$ 66$ million in local franchise fees in 1987. Electric utilities paid 1987 franchise fees of over $\$ 216$ million.
In addition to local franchise fees and local sales taxes, utilities are subject to ad valorem taxes.

While there is no longer a state property tax, local taxing authorities such as county governments and school districts continue to use ad valorem taxes for much of their operating revenue. In 1987, telephone and electric utilities paid over $\$ 380$ million in property taxes.

## Impact of Utility Taxes

Unlike other businesses, utility companies within the jurisdiction of the Public Utility Commission, the Texas Water Commission and the Texas Railroad Commission must request and obtain the approval of the appropriate regulatory agency before changing their rates. That process often involves public hearings and several months of study prior to reaching agreement on the rates to be charged.
Taxes paid by a regulated utility are viewed as operating expenses of the utility when evaluated by the regulatory agency in the rate case. The federal income tax and other state and local taxes and assessments are included in the overall cost of service of the utility. Because of the regulatory approval process, changes in a utility's cost of service are not translated into rate changes for customers until a rate case is filed and approved by the regulator. If tax expenses increase, then the utility's earnings will decline (all other things remaining constant) until the utility can request and receive approval for rate increases. Conversely, if taxes are reduced, there is often a time lag before it can be determined if those reductions can appropriately be passed along to ratepayers.
In some instances, a utility may have been given authority by the Legislature, either explicitly or through delegated authority of the regulatory agency, to
charge customers directly by itemized billing of certain taxes. Almost half of the taxes collected, for example, by a typical investor-owned telephone utility result from an itemized billing "pass-through" to the customer (e.g., state sales tax, local franchise fee), and the remaining half of the tax liability is considered an operating expense, embedded in the utility's service rates. Water utilities, on the other hand, include all taxes in rates and do not itemize any specific taxes on the customer's bill. This is due in part to the fact that water is not subject to the state sales tax. None of the special utility taxes (the regulatory assessment or the gross receipts tax) are itemized separately on customer bills.

The impact of state utility taxes and assessments varies by utility type. Table 12 shows the approximate relationship between a utility customer's bill and the utility taxes paid to the state. The figures are based on surveys of major utilities.

For comparative purposes, Table 13 has been compiled for gas, electric and telephone utilities which reflects the approximate percentage of gross revenue collected from residential ratepayers and from business/commercial ratepayers. For taxes embedded in the expenses of the utility, this would approximate the distribution of tax burden between the basic classes of service.

## Conclusion

The foregoing discussion illustrates the variety of special gross receipts taxes levied on public utilities in Texas. This background can form the basis for modification or reform of these taxes. Certainly a number of options exist. However,
as policy options are considered it is important to keep in mind that the "incidence" of these taxes rests primarily with the consumers of essential utility
services. Care should be taken to balance the revenue consequences of such options with the effect on ratepayers, both individuals and businesses.

TABLE 12. Relationship Between Utility Customer's Bill and Utility Taxes Paid to the State

## Electric Utilities:

| Residential monthly electric bill | $\$ 62.68$ |
| :--- | ---: |
| (12-87 statewide average rates, 1000 kwh ) | 0.72 |
| Portion resulting from gross receipts tax | 0.09 |
| Portion resulting from regulatory assessment | 7.07 |
| Portion resulting from other taxes | $\$ 800.00$ |
|  |  |
| Commercial monthly electric bill | 9.18 |
| (estimated statewide rates, $10,000 \mathrm{kwh})$ | 1.15 |
| Portion resulting from gross receipts tax | 90.24 |
| Portion resulting from regulatory assessment |  |
| Portion resulting from other taxes |  |

Industrial monthly electric bill
$\$ 12,000.00$
(estimated statewide rates, $200,000 \mathrm{kwh}$ )
Portion resulting from gross receipts tax
137.84

Portion resulting from regulatory assessment 17.23
Portion resulting from other taxes $\quad 1,353.54$
Telephone Utillties:
Average monthly statewide telephone bill ${ }^{\prime} \quad \$ 56.59$
Portion resulting from regulatory assessment 0.06
$\begin{array}{ll}\text { Portion resulting from other taxes }{ }^{1} & 7.45\end{array}$

Source: Public Utility Commission and Comptroller of Public Accounts.

1. Does not include "add-on" taxes such as state sales tax, federal excise tax and local franchise fees. Total average "add-on" to bill is approximately $\$ 5.50$

TABLE 13. Percentage of Gross Revenue from Residential and Business/ Commercial Ratepayers

| Utility | Residential | Business/Commercial |
| :--- | :--- | :---: |
| Electric | $40.6 \%$ | $59.4 \%$ |
| Telephone | 49.8 | 50.2 |
| Gas | 42.4 | 57.6 |

Source: Public Utility Commission and Comptroller of Public Accounts.

# I nsurance Taxation in Texas 

## Background and Analysis

## Summary

Insurance taxation in Texas presents a tangled web of legal and policy issues, many of which have been the subject of hotly contested litigation. Over 30 percent of insurance tax revenues are subject to legal challenges annually. Virtually all of those suits are filed by out-ofstate insurance companies claiming the laws and administrative rules governing Texas' insurance taxes discriminate in favor of Texas-based companies.
Insurance taxes are assessed on the gross premiums of insurance companies that do business in Texas. Gross premiums are the gross receipts of insurance companies. The tax rate paid by an insurance company is based on "investments in Texas" criteria. In general, the higher the level of qualified investment in Texas, the lower the tax rate. In addition, there are maintenance taxes that support the regulatory activities of the State Board of Insurance.
Complicating the insurance tax area is retaliatory taxation. As the name implies, this provision in its statutes enables Texas to levy an additional tax on a foreign-based company doing business in Texas. The tax is triggered if a company's home state has higher taxes on Texasbased companies doing business in the aforementioned state than the out-of-state company pays in Texas. The threat of retaliatory
tax levies has been a big factor in keeping insurance tax rates low and consistent nationwide.
Forty-eight states use retaliatory taxes.
Three important insurance tax issues discussed in the chapter are:
(1) Whether the "investment in Texas" criterion discriminates against foreign-based insurance companies. That is, should the current system of graduated tax rates be changed so that the same flat tax rate applies to all companies regardless of investments?
(2) What should the retaliatory tax be based on? Should the state-to-state comparison that triggers retaliation be based on a state's maximum tax rate or an effective tax rate?
(3) Does the state's new selfinsurance tax violate federal law? Are the administrative rules too broad, and do they accomplish what the Legislature intended?

A special government panel studied the first two issues in 1986. The panel recommended reversing the existing tax policy in both cases: change graduated tax rates to a flat rate for life insurance companies and use a base-to-base comparison for retaliatory tax purposes. Neither proposal was adopted by the Texas Legislature in 1987.

Litigation involving these and other issues has created a significant liability for Texas and marred what would otherwise be a growing revenue source.

By Doug Brookman

Assistant to the Executive Director, Texas Railroad Commission*

The most striking feature about insurance taxation in Texas is the level of dispute and controversy that surrounds it. Over 30 percent of insurance tax revenues are subject to legal challenges annually. The great majority of those suits are filed by out-of-state insurance companies claiming the laws and administrative rules governing insurance taxes discriminate in favor of Texas-based companies. The controversy surrounding the various insurance taxes has a long and convoluted history. Insurance taxation in Texas presents a tangled web of legal and policy issues.
Texas has levied special taxes on insurance companies for over 100 years. The first tax on insurance companies in Texas was a $\$ 50$ annual fee that was levied in 1862. In 1893, the annual fee was changed to a tax based on a fixed percentage of gross premium receipts. Gross premiums have been the basis for insurance taxation ever since.
Conceptually, insurance taxation is fairly simple. However, in practice, insurance taxes are quite complex. The premium tax on insurance carriers is based on

[^74]their "gross direct written premiums" in Texas. Gross direct written premiums are essentially the gross receipts of an insurance carrier. In addition to a general tax on their premiums, insurance companies are assessed an annual maintenance tax, also based on gross premiums, to pay for the regulatory and administrative functions of the State Board of Insurance.

In addition to the major tax statutes and the separate maintenance tax statutes, there are unique "retaliatory" tax provisions that make tax assessments still more complex. Challenges over both Texas insurance law and administrative rules have resulted in lengthy litigation and hundreds of millions of tax dollars being paid under protest.

This chapter examines the specialized taxes levied on insurance providers, aspects of insurance tax law nationally and in Texas and current issues surrounding the taxes.

## Characteristics of the Insurance Industry

The insurance industry can be divided into two basic groups: property and casualty firms and life, accident and health firms. Historically, there have been significant structural differences between the two sectors, although recently those differences have become less pronounced. Life insurance is frequently sold through long-term contracts. Benefits are based on actuarial

[^75]data and are somewhat predictable. As a result, the investments life insurance firms make can be more long-term in nature. Life insurance companies tend to price their product offerings nationally, with the exception of large group policies, whose rates are more frequently based on the collective experience of that group.

## Challenges over both Texas insurance law and administrative rules have resulted in lengthy litigation and hundreds of millions of tax dollars being paid under protest.

In contrast, property and casualty insurers generally write policies with shorter-terms. The nature of benefits paid is less predictable, so their investments must be more liquid. In pricing their products, property and casualty companies rely more on the experience of a particular service area than national trends. ${ }^{1}$

Because of these differences in orientation, investment choices are an important factor in the insurance industry. One reason is that investments can make a significant contribution to an insurance company's income. Another reason is that many states offer a lower tax rate or other benefit as an incentive to invest in their state. Investment strategies will vary with the nature of the risk a company insures. In addition, most companies have specific investment objectives. These criteria are listed to emphasize that the investment choices that an insurance company makes are multi-dimensional. They are influenced by many factors including taxes.

While the importance of investments has not diminished, the historical differences in the structure or composition of the two industry sectors are growing less pronounced. Life companies are selling more short-term contracts. Property and casualty companies are finding that litigation can extend their liabilities further into the future than believed previously. ${ }^{2}$

## Historical Development of Insurance Taxation

The Robertson Law, enacted in 1907, probably had more influence on insurance taxes in Texas than any other legislation. It required all companies to place 75 percent of their legal reserves from Texas business in Texas investments. The law set a precedent by offering companies that achieved the investment requirement a lower tax rate. The concept is still in use today. Three of the major insurance premium tax statutes enable a company, whether foreign-based or domestic, to obtain a lower tax rate if that company invests a significant portion of qualifying investments in Texas securities. ${ }^{3}$
This method of determining the tax rate-based on investments in Texas-is one of the most hotly contested insurance tax issues. Some foreign-based insurance companies maintain that Texas' graduated rate tax system discriminates against foreign-based insurance companies. They have pressed to eliminate the investment criteria as the means of determining the tax rate and replace it with a flat rate tax, arguing that the scheme is fundamentally unfair because it gives a built-in advantage to Texas-based who have a head start in investing in Texas.
Central in much of the premium tax litigation are differing views
about the implications and application of a 1985 U.S. Supreme Court decision on the legality of state premium tax laws that treat domestic and foreign companies in a dissimilar manner.
That case, Metropolitan Life Insurance Company et. al. v. W.G. Ward, Jr. et. al., tested the legality of an Alabama statute that taxed out-of-state insurance at a rate higher than it taxed domestic companies. Out-of-state companies were encouraged to invest in Alabama and, through these investments, were able to achieve a lower tax rate. However, no amount of investment by the foreign company enabled it to achieve the same low rate enjoyed by domestic companies. Foreign companies challenged the constitutionality of the law in federal court. ${ }^{4}$

Because Congress had limited the applicability of the Commerce Clause when it left regulation of the business of insurance to the states (McCarran-Ferguson Act of 1945), the key issue in the case was whether the "domestic preference" in the Alabama law was a violation of the Equal Protection Clause of the U.S. Constitution. ${ }^{5}$
The test under the Equal Protection Clause is whether the differentiation in state law is "legitimate." If the state's purpose is found to be legitimate, the state law stands so long as the burden it imposes is found to be "rationally related to that purpose." ${ }^{\prime 6}$
As a result, in testing the Alabama tax law, the court was testing the legitimacy of the two "purposes" advanced by the State of Alabama: promotion of domestic business through discrimination and encouragement of investments in the state through discrimination.
The Supreme Court ruled that in both instances, the act of discrimination was not legitimate. It did not address the question of
whether either promotion of domestic industries or encouragement of investments in the state are legitimate state purposes.

## The retaliatory statute attempts to assure that Texas-based insurers achieve tax parity in other states.

Settlement of suits under old Texas statutes. Prior to 1985, domestic life, accident and health companies in Texas paid premium taxes at a fixed rate of 1.1 percent. Foreign companies paid tax at a 3.3 percent rate, with the opportunity to reduce the tax rate to as low as 1.75 percent by making certain Texas investments. Sixteen out-of-state life companies brought suit against the state, claiming the statute was unconstitutional because foreign companies could not achieve the same low rate of tax that domestics could.
While the Texas life, accident and health premium tax law in existence prior to 1985 was similar in many respects to the Alabama statute, that Texas statute was never tested in court.

In the second called legislative session in 1984, the Legislature, responding to the issues raised by the Alabama case, revised the tax rates and investment criteria so that domestic and foreign life insurers had exactly the same rate schedule. These changes were only part of a significant statutory revision, and recodification of the existing law. ${ }^{7}$
A settlement agreement between the State of Texas and the insurance companies which had brought suit over the tax rate disparity was executed in May 1985. The tax rate restructuring
was one element that helped to make a settlement possible. As a part of the settlement, the state retained $\$ 44.5$ million in taxes, penalties and interest paid under protest and returned $\$ 58$ million to 23 insurance companies. It is important to note that the state settled with the plaintiffs without conceding any of the points in the pending litigation. ${ }^{8}$
Retaliatory provisions. Another important issue in the historical development of insurance taxes is the retaliatory provisions. It is the most pressing dispute in the propertyandcasualtyinsurancearea. Themoststaightforwarddescription of how retaliatory taxes work is given in the following statement: "The moment our companies are not treated in your state with the same favor with which we treat your companies, we will retaliate by treating your companies the same as you treat ours." ${ }^{\prime \prime}$
The retaliatory statute attempts to assure that Texas-based insurers achieve tax parity in other states. Forty-eight other states have retaliatory provisions. Retaliatory taxes may seem odd by normal tax standards, but the U.S. Supreme Court held in 1981 that states have a legitimate purpose in promoting the interstate business of domestic insurers by deterring other states from

[^76]enacting discriminatory or excessive taxes. ${ }^{10}$
The retaliatory provisions compare all financial obligations imposed on Texas insurers conducting business in another state with similar obligations imposed by Texas on insurers from the second state operating in Texas. If the aggregate obligations imposed on the Texas carrier by the foreign state exceeds the tax imposed on the foreign company by the State of Texas, the difference in the obligations is owed to Texas as retaliation.
For example, suppose State A imposes a three percent tax rate on the premiums collected in State A by foreign insurance companies. State B imposes a two percent tax rate on foreign insurers. Since State A has taxed State B insurance companies doing business in State A at three percent, State B retaliates by taxing companies domiciled in State A and doing business in State B at three percent on their receipts in State B.
In 1969, for example, Massachusetts enacted a 14 percent surtax on both domestic and foreign premium tax liabilities. The surtax was designed to raise an additional $\$ 5$ million from domestic insurers and an additional \$3 million from foreign firms. After study, it was determined that the $\$ 3$ million tax increase on foreign companies in Massachusetts would result in Massachusetts' domiciled companies paying $\$ 18$ million in retaliatory taxes in other states.
Massachusetts is an unusual case because several large insurance companies are domiciled there. Nevertheless, the Massa-
10. Western and Southern Life Insurance

Company, v. State Board of Equalization of California, 451 U.S. 648 (1981).
11. Doyce R. Lee, p. 28.
chusetts domestic companies agreed to pay the entire $\$ 8$ million in needed revenues to avoid paying the retaliatory taxes in other states. In this case, the effect of the retaliatory provisions, which were designed to protect domestic firms from high taxes in other states, was to cause the domestics to pay a higher tax rate than the foreign-based companies.

> In 1986, the Joint Task Force on Premium Tax was appointed to study the major issues in insurance tax policy and make recommendations to the 70th Legislature.

Another interpretation of this case is that retaliatory considerations achieved their function-they assured tax parity. ${ }^{11}$
Critics of retaliatory taxes maintain that they diminish a state's ability to set its own premium tax policy. In addition, concerns are raised about whether the aggregate level of revenues from the insurance industry is high enough compared to other sectors. Critics maintain that the threat of retaliation has stopped states from raising tax rates. The key issue is not how much retaliatory tax would be paid by domestics to other states. Rather, it is how much revenue has been foregone historically because of low tax rates due to the threat of retaliation. Both the National Association of Insurance Commissioners (NAIC) and the Federation of Tax Administrators (FTA) have advocated the elimination of retaliatory taxes.
Background on retaliatory taxes. To understand the current issue, a short history of the retali-
atory provisions and their interpretation by the courts and the State Board of Insurance (SBI) is necessary. The laws that preceded the current statute stated clearly that the comparison was to consider taxes, licenses, fees, fines, etc., in assessing retaliatory tax. However, the revised law did not contain any language which specifically mandated how the comparison was to be made. The courts interpreted the statute to mean that Texas would impose no retaliatory tax burden until the base rate in the other state exceeded the base rate in Texas. Like Texas, several other states provide investment incentives and credits that can reduce the maximum or base tax rate.
In 1984, the Legislature passed House Bill 122 (H.B. 122), which removed key language from the statute that was the basis for the court's "base-to-base" interpretation of the law. The State Board of Insurance has interpreted that removing that key language means that the Legislature intended that retaliatory taxes be calculated differently. The new standard compares the imputed rate of taxes actually paid in Texas by a foreign insurer with an imputed rate of taxes actually paid by a Texas company in the foreign company's home state.
Since Texas has one of the highest property and casualty base rates in the country, this actual-to-actual interpretation increased foreign retaliatory payments in Texas. The statutory revision and subsequent interpretation cost foreign property and casualty companies about $\$ 30$ million a year.

## Joint Task Force on Premium Tax

In 1986, the Joint Task Force on Premium Tax was appointed to study the major issues in insur-
ance tax policy and make recommendations to the 70th Legislature. One of the prominent issues the task force considered was graduated versus flat tax rates. The Task Force recommended that the Legislature change the current statute to a flat tax.
Shortly after the settlement of the suits under the old life, accident and health statute (Articles 4769 and 70.64a), 40 foreign life insurance companies filed suit again, alleging that the revised insurance tax code Article 4.11 still discriminated against foreign-based companies. The current suit maintains that the formula which sets the investment incentives almost assures that foreign insurers will pay the maximum rate.

Domestic insurers, however, are committed to retaining the current system. They maintain that it is possible for foreign-based companies to attain the lowest tax rate. Since some have, the present system is not inherently unfair. Further, it provides an appropriate incentive to invest in Texas.

Advocates of the Texas investment criteria also argue that demand for securities issued by Texas governmental units would decline if the investment criteria were removed.

Over $\$ 185$ million of tax payments are being contested for 198586 alone because of this litigation. If these protest payment trends continue as expected, as much as $\$ 700$ million of state revenues will be contested before the end of the 1990-91 budget period. ${ }^{12}$

Unlike many other contested tax revenues, these revenues have not been held in what are known as "suspense accounts." In an action that reflected the revenue needs of the time (and maybe some misplaced optimism that the discrimination issue had been settled), the Legislature authorized the expenditure of these contested revenues. ${ }^{13}$

Calculations by the Task Force indicated that a two percent flat rate would be essentially revenue neutral. However, since most domestic companies pay at a lower rate and most foreign-based companies pay at a higher rate, a flat rate of two percent would almost double the rate most domestics are paying, while reducing the rate foreign companies pay by about 20 percent.

> If these protest payment trends continue as expected, as much as $\$ 700$ million of state revenues will be contested before the end of the 1990-91 budget period.

In 1987, the Legislature considered a bill similar to the Task Force's recommendation. It would have imposed a two percent flat rate on all life, accident and health companies. ${ }^{14}$ The bill never made it out of the House Insurance Committee. Veteran observers speculated that the bill also had little prospect of passing the Senate.
The Joint Task Force on Premium Tax also considered the retaliatory tax issue. Currently, 131 foreign companies are suing Texas to recover $\$ 75$ million in retaliatory tax payments made under the revised statute for premiums written during calendar years 1985 and 1986. The core of the issue is what should be the standard for comparison, the maximum or base tax rate of the two states or the actual imputed rate paid by each company once all investments have been considered.
The Joint Task Force recom-
mended that the language removed by H.B. 122 be reinstated. House Bill 122 was the impetus for changing the state comparison method to an "actual-toactual" method. One of the Task Force's findings was that reverting to the "base-to-base" comparison method would result in reduced collections.

One of the consequences of the change would be that foreign companies would then pay less retaliatory tax because the comparison base rate in Texas would be higher. The Task Force recommended that any loss in revenue be made up through an increase in property and casualty premium tax rates. The Legislature considered changing the statute back to the "base-to-base" method in 1987, but the effort failed. In 1986, retaliatory taxes were the third largest source of insurance tax collections, generating over $\$ 53$ million.

There are several alternatives with respect to retaliatory taxes:
(1) make no change;
(2) eliminate the retaliatory statute;
(3) enact reciprocal nonretaliatory legislation; or
(4) consider some substitute form of taxation.

Each of these alternatives has its own problems, since any change is likely to require a coordinated effort by many states. Changing the retaliatory statutes is regarded as a difficult

[^77]task because retaliatory taxes have largely accomplished what they were supposed to do; they have helped to achieve tax rate parity, as well as kept tax rates fairly consistent and low.
Another recommendation by the Joint Task Force related to the phenomenon of self-insurance in accident and health insurance. The Task Force found that selfinsurance had the strong potential to erode the premium tax base. They recommended that the "legislature investigate the desirability of imposing" a tax on these benefits.

## The Insurance Premium Sales Tax Proposal

The most controversial tax proposal of the 1987 session of the Legislature was to impose a sales tax on all insurance premiums written to insure Texas risk. House Bill 61, as passed by the House of Representatives in the 70th Legislature, contained the provision.
The primary impetus behind the
proposal was to tap a large source of new revenue. The Comptroller's initial revenue

## The most controversial tax proposal of the 1987 session of the Legislature was to impose a sales tax on all insurance premiums written to insure Texas risk.

estimate was that the new tax would raise $\$ 1.8$ billion. However, shortly after the estimate was issued the Comptroller reduced the estimate of expected revenues because:
(1) the bill as written imposed the burden of tax collection on the buyer and not on both the buyer and seller, as typically occurs in sales tax;
(2) there were questions about whether all of the money
would be paid under protest;
(3) additional exemptions; and
(4) other significant enforcement problems.

Many observers considered the proposal imaginative, but not practical as written. Part of the reason that a sales tax was not imposed on both sides of the transaction was so domestic insurers would escape retaliatory taxes. Another potential administrative problem was that no such tax had ever been levied successfully by another state. Florida and Pennsylvania considered taxing insurance services, but discarded the idea. No one knew exactly what problems to anticipate.
The proposal as passed by the House, was deleted from the Senate version of the bill. Several factors contributed to the proposal's defeat. One was the prospect of retaliatory taxes in other states, even though the bill was designed to avoid that consequence. Another was the burden that extending sales tax to such a

TABLE 1. Summary of Major Premium Taxes and Rates, 1988

| Investment Criteria and Tax Type | Variable Rates Based on Investment in Texas |  |  |
| :--- | :---: | :---: | :---: |
|  |  |  |  |

Source: State Board of Insurance.

1. Three special tax rates at one-half the normal rate apply to companies whose premiums volume is $\$ 450,000$ or less.
2. Title companies were separated from the property and casualty tax structure as of January 1, 1988.
broad sector would impose. There was a very vocal constituency opposing it.

## Texas Insurance Taxes Today

Texas has emerged from this policy evolution with five major insurance-related tax laws. A different set of graduated tax rates applies to different segments of the industry (Table 1). The actual tax rate paid by insurance companies is determined by the amount of Texas investments made by that insurance company, compared with the amount of similar investments held in a comparison state. The comparison state is the state where the insurance company has the greatest percentage of investments that are similar in nature to its Texas investments. The higher the percentage of Texas investments compared to the other state, the lower the tax rate.
The major categories of insur-ance-related taxes are:
(1) life, accident and health premiums;
(2) property and casualty premiums;
(3) administrative and services fees and premiums for self insurance plans;
(4) title insurance premiums; and
(5) premiums for independently procured and surplus lines.

As detailed above, retaliatory taxes may also be assessed on foreign companies doing business in Texas. Retaliatory taxes have had two important effects:
(1) they have created tax parity for Texas based companies doing business in other states, and
(2) they have generally kept tax rates low and consistent.

Annual maintenance taxes are both collected by and support the regulatory activities of the State Board of Insurance. The maximum tax rate is prescribed by
statute, but the actual rate levied is set annually by the SBI. There are nine separate maintenance tax statutes, with maximum rates varying from one-fifth of one percent to one and one-quarter percent, based most frequently on gross premiums. Table 2 details the nine maintenance taxes with their maximum rate and the rate actually assessed in fiscal year 1988. As the table indicates, the maintenance tax rates are usually well below the authorized maximum. The one exception is the new tax on third party administrators, who are taxed at the maximum rate in their first year.
Characteristics of Texas insurance taxpayers. In fiscal year 1987, 2,140 companies paid over $\$ 386$ million in premium taxes in Texas. Of these firms, 685 were based in Texas (domestics). The other 1,455 were based in other states (Figure 1).
The property and casualty sector accounted for the largest share of the Texas market with 55 percent of the total insurance

TABLE 2. Maintenance Tax Rates, 1988

| Description | Maximum <br> Rate Permitted | Rate Actually <br> Assessed | Estimated Income <br> Fiscal Year 1988 |
| :--- | :---: | :---: | :---: |
| Motor Vehicle Insurance | $0.20 \%$ | $0.058 \%$ | $\$ 3,459,282$ |
| Casualty Insurance | 0.40 | 0.207 | $5,191,439$ |
| Fire Insurance/Catastrophe Pool | 1.25 | 0.406 | $12,593,186$ |
| Workers' Compensation Insurance | 0.60 | 0.180 | $5,286,351$ |
| Title Insurance | 1.00 | 0.122 | 488,000 |
| Life Insurance/Burial Associations ${ }^{2}$ | 0.04 | 0.032 | $3,840,867$ |
| Health Maintenance Organizations | $\$ 2 / E n r o l l e e$ | $\$ 1.10 / E n r o l l e e$ | $1,399,863$ |
| Third Party Administrators | 1.00 | 1.00 | 360,000 |

Source: State Board of Insurance.

1. Based on projected 1987 premiums.
2. Prior to fiscal year 1988, the burial tax (Article 14.42, Insurance Code) was calculated separately, but for ease of account ing, it is now combined with the life tax. Fiscal year 1987 collections under Article 14.42 were $\$ 123.67$.

FIGURE 1. Domestic/Foreign Insurance Companies as a Percentage of Total Companies Paying Premium taxes in Texas, 1986


Source: State Board of Insurance.

FIGURE 2. Major Segments of Texas Insurance Industry as a Percentage of the Total Premium Volume, 1986


Source: State Board of Insurance.

FIGURE 3. All Lines of Insurance Total Premiums, 1986


Source: State Board of Insurance.
premium volume in 1986. Life, accident and health companies had 36 percent of the premium volume. Annuities, which are not taxed in Texas, account for nine percent of the market (Figure 2).

Better than one-half of the total premium volume was devoted to personal coverage, at 56 percent. The remaining 46 percent was devoted to commercial coverage. (Figure 3.)

Using the investments-in-Texas criteria to determine the premium tax rate means that foreign-based companies frequently pay at a higher tax rate than domestic companies. In 1986, 506 , or 94.4 percent, of Texas companies paid premium taxes at the lowest rate, averaging about 1.2 percent. That same year, only 247 -or 20.5 percent-of the foreign companies paid premium taxes at the lowest tax rate (Figure 4). ${ }^{15}$

The maximum tax rate for property and casualty companies has been essentially the same since 1981, 3.5 percent. For the 40 years that preceded the change, the maximum rate was higher, between 3.85 and 4.05 percent. The average rate for all property/ casualty taxpayers in 1986 was about 1.5 percent.
The maximum rate for life, accident and health companies was changed to 2.5 percent in 1984. From 1951 until the change, domestic life companies paid a flat rate of 1.1 percent. Foreign-based companies paid a maximum rate of 3.3 percent, with the lowest possible rate based on Texas investments at 1.75 percent. In 1986, the average tax rate paid by all taxpayers was 1.6 percent.

Life, accident and health taxes. Life, accident and health insurance companies paid over $\$ 140$ million

[^78]in 1986 revenues. That represented a three percent decline in revenues over 1985. Revenues are forecast to grow at two percent per year for the next two-year budget period.

Tax rates depend on the amount of a company's investments in Texas compared to similar investments in a comparison state. There are three possible premium tax rates. In addition, a special set of rates-at half the normal rate-is provided for those companies with annual premium volume below $\$ 450$ thousand. Table 3 details the tax rates and investment criteria.
In 1986, 580 companies paid at the highest rate. Ninety-eight percent of those paying at the highest rate were foreign-based companies. Nine companies paid at the middle full rate and 241 companies paid at the lowest full rate. Eighty-five percent of the companies paying at the lowest full rate were based in Texas. In addition, 112 companies qualified
for the special reduced rates. Two hundred companies paid no tax, either because they had no reported written premium volume, were exempt or had tax offsets that exceeded the amount of tax due (Figure 5). ${ }^{16}$
Property and casualty taxes. In 1986, property and casualty companies paid $\$ 152$ million in taxes. That is a 6.8 percent increase over 1985 revenues. Revenues from these companies are forecast to increase four percent per year over the next biennium.
The tax rate, again, is built on the criteria of qualified investments in Texas. The maximum and minimum tax rates are different than those applied to life, accident and health companies, and no special rate applies to smaller companies.
As Table 4 shows, 283 companies paid 1986 premium taxes at the highest rate. Ninety-eight percent of those were foreignbased companies. Three compa-
nies paid at the middle rate, and 415 companies qualified for the lowest rate. Forty-nine percent of the companies paying at the lowest rate were Texas-based companies (Figure 6).

Exemptions, exclusions and credits. Not all insurance premiums are subject to tax. Major exemptions in the law include:
(1) uniform group insurance for state employees;
(2) public school retired employees group insurance;
(3) premiums received from insurance carriers for reinsurance;
(4) annuities ( optional retirement programs for teachers); and
16. These figures do not include those companies that pay at the special set of lower rates or those companies that paid no taxes due to exemptions or guaranty fund assessments.

FIGURE 4. Percent of Foreign and Domestic Companies Paying Premium Tax at Highest and Lowest Tax Rate, 1986


[^79](5) municipal or county group health, accident and life policies.
17. State Board of Insurance.

Most of the exemptions involve other governmental and quasigovernmental uses. The revenue loss due to the exemptions and exclusions is substantial.

In addition, some types of

TABLE 3. Premium Tax Rates Paid by Life, Accident and Health Companies, 1986

| Investment Ratio | Full Rate | Taxpayers | Half Rate | Taxpayers |
| :--- | :--- | :---: | :--- | :---: |
| Less than $90 \%$ | $2.5 \%$ | 580 | $1.25 \%$ | 14 |
| $90 \%$ to $100 \%$ | 1.8 | 9 | 0.9 | 1 |
| More than $100 \%$ | 1.1 | 241 | 0.55 | 97 |

Source: State Board of Insurance.

TABLE 4. Premium Tax Rates Paid by Property and Casualty Companies, 1986

| Investment Ratio | Rate | Taxpayers |
| :--- | :--- | :---: |
| Less than $85 \%$ | $3.5 \%$ | 283 |
| $85 \%$ to $90 \%$ | 2.4 | 3 |
| More than $90 \%$ | 1.2 | 415 |
| Source: State Board of Insurance. |  |  |

FIGURE 5. Percentage of Domestic/Foreign Life, Accident and Health Companies Paying at Each Tax Rate, $1986^{1}$


Source: State Board of Insurance.

1. These percentages do not include companies paying at the special one-half tax rate or companies paying at the zero rate.
insurance companies are exempted by law. These include:
(1) nonprofit cooperative and mutual fire insurance companies;
(2) farm mutual companies; and
(3) fraternal organizations.

Premium tax collections can also be substantially reduced as a result of tax credits or offsets allowed by the Texas insurance law. While trends are hard to establish or predict, insurance company failures have increased significantly in recent years. Guaranty fund assessments are offset against a company's premium tax liability. The credits can be used over a five-year period.

Administrative services taxes. Taxation of administrative services is the newest-and perhaps most controversial-of the major issues in insurance-related taxes. The impetus to tax this sector came from a rather dramatic change in the composition of the health insurance business. In recent years, many employers have moved away from traditional, fully insured health plans and have switched their health coverage to untaxed, self-funded plans. It has been estimated that between 25 and 50 percent of health insurance premium volume in Texas is now being carried by these self-funded plans. ${ }^{17}$

The 70th Legislature assessed a new 2.5 percent tax on fees, claims and benefits paid by self-funded plans. The new tax was included in the omnibus tax bill, H.B. 61, passed in the second special session of 1987. The justification for the new fees and tax was that a significant segment of insurancerelated transactions were both unregulated and untaxed. Advocates of the tax saw this absence of regulation as detrimental to both consumers and the competitive insurance business.

Detractors say the new tax is an attempt to tax plans authorized by the federal Employee Retirement Income Security Act (ERISA), which are exempted from state regulation by federal law. The application of the new tax as prescribed by rules written by the State Board of Insurance is broad. Under the SBI's interpretation, the tax applies when the employer segregates funds to be used for a self-funded plan, whether it would later qualify as an ERISA plan or not. The SBI's rules are constructed to apply the law without violating existing Federal preemptions. This approach attaches the liability of the tax to the person who sets aside the money, prior to, and regardless of, the establishment of the plan. In this respect, the "person not the plan" is taxed. The administrative services tax is being challenged in federal court.

While many large employers may find it more cost effective to substitute a self-funded plan for traditional health coverage, few companies have the necessary expertise to administer the program in-house. To fill this need, insurance companies and other independent management specialists have begun to sell "administrative service only"-or ASOcontracts to these employers.
These independent service providers are called "Third Party Administrators" (TPAs). As of September 1, 1987, TPAs are both regulated and licensed by the State Board of Insurance. Under the provisions of H.B. 170, TPAs will be required to pay a licensing fee of $\$ 1,500$ as well as a maintenance tax of up to one percent on the gross amount of administrative or service fees. The maintenance tax is to support State Board of Insurance regulatory activities. House Bill 170, which established both the one percent maintenance tax, as well as the regulatory
authority of the SBI, has already been challenged in state court.
Persons subject to the new tax also complain that the tax rate of

## Administrative services

 taxes should not be subject to retaliatory taxes in other states since TPAs and selffunded plans are not insurance companies.2.5 percent on administrative services is too steep. Most plans have third party administrators who will likely pass their one percent maintenance tax on as a fee to the employer. The combination of the two taxes creates an effective tax burden of 3.5 percent. The maximum tax rate for conventional life and health insurance is 2.5 percent.

Administrative services taxes
should not be subject to retaliatory taxes in other states since TPAs and self-funded plans are not insurance companies. However, both legal and emotional issues are considered when retaliatory tax issues are discussed. For example, Texas' licensing fee is significantly higher than most other states that charge a similar fee. If the licensing fee is considered an insurance related service, then a retaliatory consequence is likely.
Title taxes. Taxes on title insurance premiums were separated from the conventional property and casualty tax structure on January 1,1988 . The Legislature enacted this change at the urging of the domestic title industry. The change moves title companies from the graduated three-tier property and casualty tax system to a separate two-tier tax system of its own. The new rates (Table 5) were created so that the average tax rate and revenues will stay essentially the same. Once again,

FIGURE 6. Percentage of Domestic/Foreign Property and Casualty Companies Paying at Each Tax Rate, $1986^{1}$


Source: State Board of Insurance.

1. These percentages do not include companies that paid no tax due to offsets or exemptions.

Texas investment criteria determine the actual premium tax rate paid.

One benefit to domestics was that the new language clarified the definition of "premium" and separated it into a specialized title statute. The resulting change in language, coupled with the rate change, was supposed to save domestics considerable retaliatory tax payments in other states.

Texas taxes title premiums based on the entire title transaction cost. Many other states tax the risk premium portion of the transaction only, which is a fraction of the
18. Senate Bill 987, 68th Texas Legislature, Regular Session, 1983.
19. Dale K. Craymer, Texas House Ways and Means Committee.

TABLE 5. Premium Tax Rates Paid by Title Companies, 1988

|  |  |
| :--- | :--- |
| Investment Ratlo | Rate |
| Greater than $90 \%$ | $1.3 \%$ |
| $90 \%$ or less | 2.0 |

Source: State Board of Insurance.
larger transaction cost. Prior to the statutory changes listed above, Texas-based insurers could be assessed heavy retaliatory taxes on out-of-state business because of the lack of base comparability.

Independently procured and surplus lines insurance. Independently procured and surplus lines insurance are purchased from insurance carriers that are not directly authorized to do business in Texas. Typically, the services or coverage being sought is not available in the Texas market place. The coverage is either procured independently by a corporation or purchased through a surplus lines agent licensed by the Insurance Board.

A tax of 3.85 percent is levied on the gross premiums of all independently procured and surplus lines policies. When a Texas corporation purchases insurance outside the Texas market, it pays the premium tax directly along with its franchise tax payment. A surplus lines agent collects and remits the gross premiums tax. The 20 percent surtax levied in 1987 by the Legislature for the 1988-89 biennium, applies to inde-

FIGURE 7. Historical Revenues of Independently Procured and Surplus Lines Insurance Taxes, 1974-86


Source: State Board of Insurance, 1987 Annual Report.
pendently procured and surplus lines insurance.

The "liability crisis" is the major reason for the revenue trends seen in Figure 7. The extraordinary revenue growth in 1984 and 1985 is attributed to the unavailability of certain types of liability coverage, primarily property and casualty, in Texas. When Texas licensed insurers curtail or limit certain types of liability coverage, consumers may turn to other sources.
The retaliation concept does not apply to independently procured and surplus lines insurance.

## Revenue Trends

Premium tax revenues grew steadily from the late 1970 s until the mid-1980s. Iin recent years, though, the growth rates have tapered markedly. Premium tax collections actually declined slightly in fiscal year 1987-to \$358 million down from $\$ 361$ million in 1986 (Figure 8). The bulge in collections in 1983 was due to legislation accelerating the tax due date and causing a one-time cash flow gain to the state. The new collections scheme required taxpayers to file quarterly. As a result, one annual payment and three quarterly payments were collected in $1984 .{ }^{18}$
Revenues generated by insurance taxes increased by 232 percent from fiscal years 1977 to 1987. That compares with the sales tax, which grew at 173 percent. When rate increases and other legislative changes are accounted for, the underlying base of these three taxes grew at 182 percent, 115 percent and 127 percent, respectively. ${ }^{19}$

In the case of the life, accident and health carriers, an erosion of the premium tax base has occurred. This resulted partly from the growth of self-insurance and other insurance-related programs that have been untaxed until recently.

The flattening of collections in
recent years is also partly attributable to slow growth in overall premium volume in some lines and, to the impact of insurance company insolvencies. Insurance
company insolvencies are met by guaranty fund assessments, which are allowed as an offset or credit against premium tax collections (Figure 9).

Maintenance taxes amounted to over $\$ 23.6$ million in 1986 and are statutorily dedicated to the State Board of Insurance Fund.

The 70th Legislature in 1987

FIGURE 8. Premium Tax Collections, 1978-87


Source: State Board of Insurance, 1987 Annual Report.

FIGURE 9. Number of Receiverships and Insurance Companies in Texas, 1987


[^80]placed a temporary 20 percent surtax on all life, property and casualty insurance premiums for 1988 and 1989. Health insurance premiums and HMOs are exempt from the surtax. It is estimated that the surtax will generate an additional $\$ 114$ million during the twoyear period.
For the 1988-89 biennium, insurance taxes are forecast to grow at about four percent per year for property and casualty companies and about two percent per year for life companies.

## Insurance Taxes in Other States

Gross premiums are taxed by every state because they are the most convenient unit to determine a tax base. They make insurance taxes simpler to administer and easier to verify than other bases, particularly, income. Gross premiums will generally yield revenues that are more consistent and predictable than income-based measures. ${ }^{20}$
The most common premium tax rate is two percent. The range varies from zero to four percent. In 1987, ten states offered a lower tax rate to those companies that had significant investments in that state. About 21 states and the District of Columbia had flat rates-the same rates for both domestic and foreign insurers, with no investment incentives or differential treatment.
Investment criteria is only one of several ways to encourage insurance companies and their capital to locate in a state. Three states offer a lower rate for companies that maintain a home or regional home office in that state. Eight states have different standards for what tax base elements are included for tax purposes. Still other states offer domestics tax credits or the opportunity to choose among different forms of taxation.
The diversity of tax rates and
qualifying elements in the tax base, investment and other criteria make comparative assessments of effective tax rate quite difficult. One trade group, the American Council of Life Insurance (ACLI), makes an effective tax burden comparison. The comparison is based on the simple calculation of total premiums divided by total taxes. Their results for 1986 are shown in Table 6.

As the table shows, the average tax burden on companies in Texas is slightly above the national average. As noted above, these figures are after tax offsets and do not reflect retaliatory taxes paid in, each state.

## Conclusion

Since the early 1900 s, insurance taxes have always encouraged investment in Texas. These special incentives probably would not be possible without the specific autonomy granted to the states by the federal government to regulate the insurance industry. Both the legal and the policy precedents of the insurance industry in Texas, however, have led to legal problems on several fronts. If Texas loses these disputes, the total liability could easily exceed $\$ 700$ million through the end of the 199091 biennium. The refunds would have to be taken from the current revenue stream.
Unfortunately, the prospects for a 20. Fox, p. 257.

TABLE 6. Effective Tax Burden on Life, Accident and Health Coverages, Texas Versus U.S. Average, $1986^{1}$

| TABLE 6. Effective Tax Burden on Life, Accident and Health Coverages, <br> Texas Versus U.S. Average, $1986^{1}$ | Life | Accident <br> and Health |
| :--- | :--- | :--- |
| Texas | $2.14 \%$ | $2.40 \%$ |
| United States | $1.84 \%$ | $1.97 \%$ |

clean settlement of these lawsuits is not good. Both of the major disputes essentially pit the domestic insurance industry, defending the status quo, against foreign-based companies. Some observers have maintained that, given the history of litigation in these issues, almost any solution would cause the side that "lost" to file suit.
Regarding the issue with the most money at stake, a shift from the present system of graduated rates would be costly to domestics insurers. Advocates of the graduated tax rates seem adequately established legally and well entrenched politically. The courts may ultimately decide this issue.
The retaliatory tax dispute is similar. Almost any solution to the current litigation could result in a new round of lawsuits.

From a revenue perspective, the amounts in dispute are getting so large that a "split-the-difference" kind of settlement would create a heavy draw on the State Treasury at a time when new revenue is scarce. This prospect becomes more remote the longer the suits persist.

Overhanging these and other policy alternatives are the retaliatory provisions, which can present major obstacles. The prospect for change is unlikely since many states would need to act in concert to make a difference.

## Part IV: The Property Tax and Related Local Issues

## T he Property Tax in Texas

## A Background Analysis

## Summary

The property tax has been a component of government fiscal structures for most of recorded history. It has been used, with varying degrees of success, by governments since the time of the ancient Greeks. The first property tax in Texas was enacted in 1837 by the old Republic. The property tax has been a mainstay of Texas' state and local finances ever since. While the state no longer levies a property tax, more than 3,400 local taxing jurisdictions depend upon the property tax for much of their revenue. Totaling just under $\$ 10$ billion in 1987, the tax is the largest single governmental revenue source in Texas.
Until 1979, the Texas Constitution required the taxation of all property, yet in reality most personal property held by individuals escaped taxation. Property was assessed at a fraction of its value. The assessment ratios used varied widely among different jurisdictions, and more than 2,000 taxing offices administered the tax. Minimum standards for assessors and appraisers did not exist, and most lacked formal training and certification.
Calls for reform of the property tax system date back to 1899. Soaring property taxes during the 1970s increased pressure for reform of the system. In 1978, the voters approved a "tax relief" amend-
ment which set the stage for the passage of a revised property tax code in 1979.
As a result, only real property and business personalty are taxable today. Central appraisal districts in each county provide a single appraisal of property for use by all jurisdictions. An improved system of administrative appeals was created, professional standards for assessors and appraisers were mandated and state supervision of local tax offices was instituted.
By every measure of appraisal accuracy and uniformity, the current system is fairer than the old one. The creation of appraisal review boards gives taxpayers a measure of protection from unfair assessments. While the property tax will probably always be the least popular of taxes, it is just as likely to continue to be a primary source of government revenue into the future.

Several issues remain unsettled with regard to the property tax. First, the Edgewood v. Kirby school finance lawsuit may force changes in the use of the property tax to pay local educational costs. Second, Texas remains in the minority in its taxation of all business personal property. Finally, there is the issue of providing low-cost taxpayer appeals of locally determined values beyond the local level.

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## Overview

Property taxation in Texas has a long history, dating back to the formation of the $\mathrm{Re}-$ public of Texas in 1836. During the 19th century, the property tax was a major source of revenue for state and local governments in Texas and the United States. Today, the tax remains the single largest source of tax revenue for local governments. However, the development of new revenue sources for both state and local governments has dramatically reduced dependence on property taxes. The State of Texas no longer imposes a property tax. Nationally, state-imposed property taxes account for less than one percent of total state government revenue. ${ }^{1}$
A distinguishing feature of the property tax is the need to discover and value the property subject to taxation. Other taxes, such as sales and income taxes, are levied against base values that are relatively easy to obtain. Property taxation requires an appraisal of

[^81]each property subject to taxation. The amount of tax a taxpayer pays depends on the appraised value of the property, which in turn depends on the quality of the appraisal. Because appraisal requires an estimate of market value, there always will be properties that are over- or under-valued in relation to their "true" market value. For this and other reasons, the property tax has long been criticized as an unfair tax.
State law determines the property tax base but the values attached to the base are the responsibility of local appraisal districts. The Texas Constitution and property tax statutes always have been very specific as to what property is taxable. However, until very recently, local customs and traditions played a greater role in determining the local tax base than did state law because of locally set values.
The history of property taxation in Texas is really the history of two very different taxes-the property tax before 1979 and the property tax as it is constituted today. They are as different as day and night. The tax system before 1979 penalized the honest taxpayer and rewarded those who sought to evade the tax. Its administration was characterized by inefficiency and a lack of professional standards. In contrast, the Texas property tax today is considered a model for other states. There is no longer a wide gap between the property tax code and local practice. The Texas property tax today is closer to being "equal and uniform" (as required by every Texas Constitution since 1845) than at any time in the past.
This chapter examines the history of property taxation in Texas and describes the administration of the tax as it exists today. Basic issues relating to the tax are discussed, as are the many
problems which led to the sweeping property tax reforms in 1979. These reforms have resulted in a property tax system that, while not perfect, is vastly improved over the pre-1979 system. While property tax reform was at the top of the agenda ten years ago, today only minor "fine-tuning" may be required to make the tax more equitable.

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## Theory of the Property Tax

A tax is defined as a compulsory contribution, or payment, for the support of government or other public purposes. Taxes may be employed to raise revenues, to regulate certain activities or promote social objectives, or for both revenue and regulation. Taxes may be based upon either a taxpayer's ability to pay or the benefits which accrue to the taxpayer from government services.
The property tax combines both the ability to pay theory and the benefits theory of taxation.
The property tax is a tax on wealth. The mere possession and control of wealth indicates an ability to make tax contributions. While some types of property are not easily converted into money or may not produce current income, their economic value is a measure of taxpaying ability. A person with property having economic value is normally better able to pay taxes than those without property.
In the valuation of property, it is not the original price paid but the fair exchange value that is the criterion used for setting value. A property's value in exchange is
based on its ability to earn income, either in the future in rents or in amenities. The future use of the property to earn income of any type requires certain public services for which it is only proper that the owner pay. A high value property needs more protection, normally needs more public services and the owner generally has a greater ability to pay than the owner of a small property.
The property tax also fits into the category of taxes based upon benefits received. Inasmuch as property tax revenue is used to finance local government services, such as police protection, fire protection, flood control and similar services, the property owner is a direct beneficiary of the services rendered. Moreover, as the government guarantees and protects the private ownership of property, the property owner receives benefits in this way as well. This protection does not apply solely to property; the protection also insures the right of citizens to earn income and the right to carry on business ventures.

## Development of the

## Property Tax

The property tax has been a feature of governmental fiscal programs throughout most of recorded history. The ancient Greeks were among the first to impose the tax. In 596 B.C., a land tax on gross agricultural produce was levied in Athens. By 378 B.C., the tax had become a general property tax imposed on slaves, cattle, furniture and money, as well as land and houses.
Throughout the following centuries the property tax was prominent in many taxation systems. The early Romans imposed a tax on land as early as 500 B.C. Later the tax was extended to personal property but was ultimately scrapped in favor of a
variety of direct and indirect taxes rather than a general property tax. In medieval times, land was the primary form of wealth and bore the major part of the tax burden. ${ }^{2}$
Throughout much of Europe and in England, property taxes followed a relatively predictable cycle. Early taxes were imposed on land, then on buildings, cattle and other property until they became general property taxes. All this property was taxed uniformly, at least in theory, without much distinction. But as new kinds of property emergedmany of them intangible and movable-it became more difficult to assess property other than land and buildings. Evasion became more prevalent, and the principal of the general property tax gradually broke down. ${ }^{3}$

Colonial America. During the colonial era in America, land was usually held under the British Crown with payments for its use taking the form of quasi-feudal quitrents. These were assessments ranging from one shilling per 100 acres to one penny per acre payable to the Crown, or vassal of the Crown, as token of inferior tenure of the land. These taxes were generally evaded, especially in New England, since the colonists thought the money should be spent at home.

It was in New England, where quitrents were practically nonexistent, that property taxes first developed in the United States. Colonial property taxes developed as levies on real property but were extended eventually to include selected other properties on an enumerated basis. These taxes were frequently and essentially personal in character and often were specific rather than ad valorem. ${ }^{4}$

The colonial tax system used a combination of property, poll and faculty taxes. ${ }^{5}$ The goal of this
system was to use ability, as it was then conceived, as a tax base. This overlapping tax triad constituted a colonial equivalent of the 19th century general property tax and is the fiscal institution out of which that levy evolved.
Development of the general property tax. In the first half of the 19th century, the general property tax became the norm for state and local tax patterns. A chief feature of the tax was the taxation of all property, movable and immovable, real or personal, at a uniform rate. At this time, the property tax began to assume its mature character with the following developments:
(1) a shift from assessment based upon probable income to a market value assessment standard;
(2) adoption of an all-inclusive statement of taxable property and the specification of broad exemption categories;
(3) development of improved administration and equalization; and
(4) initial development of special supplemental taxes for newly developed institutions and unique types of property. ${ }^{6}$

The administration of the property tax in the early 19 th century was simplified by the fact that wealth was primarily tangible and visible. This created few administrative problems and made it easier to attain a high degree of uniformity. Tax rates generally were low; property taxes took about two percent of gross national product as compared to 3.4 percent in $1962 .{ }^{7}$

As the 19th century wore on, the property tax base was expanded to include additional types of property. The growth of corporations created moneyed capital and intangibles which were made
subject to the tax. States (including Texas) began adopting the principle-usually by a constitutional provision-that all property not specifically exempted must be included in the tax base and taxed uniformly within each taxing jurisdiction. The property tax was now a general property tax, at least in theory.
As the tax base was expanded, assessing the tax required more property appraisal to determine value, rather than just a listing of the property on the tax rolls. A procedure for the administrative review of assessments developed in most states. These included creation of local boards of review to hear protests from taxpayers and to check the work of assessors. In many states, tax commissions were set up to cope with the issues of the sufficiency of the tax system and to find a means of improving its form and administration.
Breakdown of the general property tax. As early as the 17th century, complaints concerning unequal property assessment and undervaluation were leveled against the colonial property tax system. However, as long as tax burdens were light, the system's inequities did not appear serious. As time passed, larger govern-

[^82]ment expenditures resulted in higher taxes. At the same time, new forms of property developed and were added to the tax rolls. These developments helped to expose the fundamental weaknesses associated with the general property tax.
The most difficult aspect of administering any property tax is the task of discovering and valuing property subject to the tax. This task is less difficult when property wealth consists largely of land and buildings, as it was in the early 19th century. Land and buildings are not easily movable, making them easy to discover and list on the tax rolls.

During the course of the 19th century, the U.S. economy grew and newer forms of wealth developed including stocks, bonds and other types of intangible property. The growth of manufacturing and railroads added more complex tangible business property, making the valuation process more complicated. At the same time, states attempted to extend the general property tax to these new forms of wealth.

Unlike land and buildings, the newer types of property were more difficult to value. Local assessors were not experienced in the valuation of such items as machinery and equipment in factories or the widely extended properties of railroads. Furthermore, intangible wealth could be easily hidden in deposit boxes or elsewhere. Tax assessors had the greatest difficulty in discovering this property, and evasion of the tax became more prevalent.
Tangible personal property also increased from year to year, but it was possible to conceal this property as well. Furniture, clothing, jewelry and other household
8. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987).
objects might be concealed or declared for taxation at only a fraction of their value.
As general property tax limitations became more apparent in the latter half of the 19th century, the states began to respond in several ways:
(1) increased centralization of property tax administration;
(2) central assessment of railroad property or special taxation of railroad property; and
(3) creation or revival of state equalization agencies.

During the first two decades of the 20th century, very little change occurred in the role of the property tax in financing government. This changed with the advent of the Great Depression. State and local governments found themselves deprived of revenue because of the inability to collect delinquent property tax payments. Out of necessity, alternate means of raising revenue, such as sales and income taxes, were used. State and local governments became less dependent upon property tax revenue.
As states eliminated or restricted their property taxes, substantial changes were made in the administration of the tax. The uniform-rule provisions and classification of property for tax purposes were modified or repealed by most jurisdictions. Exemptions of particular types and categories of property, such as household personalty, were created or expanded. More often than not, these statutory changes made the law conform to reality. The breakdown of the general property tax was such that by the time these reforms were made, most personal property and intangibles had long ago slipped out of the tax base.
Other developments also caused
the property tax to lose its "general" character. These included the use of in lieu taxation as a substitute for the property tax levied on certain properties, such as business personalty (personal property). New administrative patterns evolved that included either increased state administrative responsibility or additional state supervision of local property tax administration. Perhaps the most important and continuing development was the supplementation or replacement of property tax revenue by other forms of taxation and revenue, especially federal and state aid to local governments.
Over time, most states have dropped or severely restricted their state-imposed property tax, making the tax primarily a local levy. Among local governments, school districts are far more dependent on the property tax than other entities. According to the U.S. Bureau of the Census, in fiscal year 1986, property taxes accounted for 36.2 percent of the general revenue of school districts (41 percent in Texas). The comparable figure for states was 1.1 percent (no tax in Texas); 20.5 percent for cities ( 25.3 percent in Texas) and 10.4 percent for school districts ( 9.8 percent in Texas). ${ }^{8}$
Unpopularity of the property tax. For the past 16 years, the U.S. Advisory Commission on Intergovernmental Relations (ACIR) has conducted annual surveys of public attitudes towards taxes and government. Throughout the 1970s, the ACIR found the property tax was considered the least fair tax by the largest number of respondents. In 1972, 45 percent of respondents ranked the local property tax as the "worst" tax, with the federal income tax a distant second.
Since 1981, the federal income tax has surpassed the local property tax in its unpopularity. It is
reasonable to credit some of this shift to declining effective property tax rates early in the 1980s, as the impact of property tax restrictions, such as California's Proposition 13, were felt. In the most recent (1987) survey, 30 percent of the respondents called the federal income tax the worst, 24 percent ranked the property tax as the least favored and 21 percent pointed to the state sales tax as the worst.
Public attitudes toward the property tax in Texas mirror those of the nation. The Texas Poll, conducted by the Public Policy Resources Laboratory at Texas A\&M University, surveyed 1,002 Texans in 1987 and asked them which tax they considered to be the fairest. Only 11 percent of the respondents named the property tax as the fairest tax. Only the oil production tax, named by six percent as the fairest, scored lower than the property tax. The sales tax was described as the fairest tax by 41 percent of those responding.
Furthermore, in a similar poll conducted in 1986, only three percent of respondents favored raising the property tax to raise additional revenue for government. A state lottery or parimutuel betting was the most popular revenue instrument, endorsed by 50 percent of those responding.
The property tax cycle. Students of the property tax have identified a cycle in the history of the property tax, both ancient and modern. The tax begins as a specific tax on land and property, which is not levied according to value. The tax then moves from a specific to an ad valorem rate and from taxation of land to coverage of most property. As property becomes more diversified in character and ownership is distributed less equally, other taxes are substituted in relation to some categories of property. Eventu-
ally, the property tax reverts to a levy essentially on realty.
The modern property tax is different from the ancient levy in one critical aspect. The process of discovering, appraising and

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assessing property involves complex information-handling tasks. The lack of these capabilities in the past contributed to the breakdown of the tax; the tasks were beyond the technical capacity of the times. Today, modern data processing capabilities remove this bar to effective ad valorem taxation. Combined with changes in tax administration, especially the professionalization of the appraisal process, this change has eliminated many of the problems which plagued the property tax in times past.

## Development of the Texas Property Tax

At the time Texas was being settled, property taxes, along with poll and occupation taxes, were central to the tax structures of the states and territories comprising the United States. Since the early Texas settlers came from these states, it was natural that the property tax would be incorporated into the tax structure after independence from Mexico was achieved.
The first property tax in Texas was levied in 1837, when Texas was an independent republic. The Act of 1837 provided for the taxation of all real, personal and mixed property. Taxation under
the act was based on the value of the property, and a tax rate of onehalf to one percent of value was levied.
In 1838, an act limited taxable property to land, slaves, horses, watches, clocks and pleasure carriages. These properties were viewed as indicators of wealth. In 1840 , the base was extended to buildings in town and money loaned. The latter legislation exempted buildings on agricultural lands and livestock below a certain number. Furniture, clothing and other necessities were made exempt from the tax.

The sheer size of Texas and the frontier nature of the Republic made the tax policy difficult to administer. Lacking the administrative machinery to discover and list property, the assessment process depended on renditions from property owners. These were made under oath and falsifying was an indictable offense, carrying heavy penalties. Renditions were reviewed by an assessor, who was a county officer, appointed by the county court.
Assessment and collection of the property tax were two separate functions. Tax collection was the county sheriff's responsibility. In those frontier times, sheriffs had many duties. Tax collection was not at the top of the list. Because of the reliance on self-assessment, many properties escaped taxation or were undervalued. To correct for this, specific tax amounts were set for certain items. For example, pleasure carriages were taxed at a rate of one dollar per wheel; the tax on slaves varied according to the slave's age.

The early property tax system reflected the views of Texas' frontier settlers. Tax laws discriminated against the property of nonresidents and the property held by agents or attorneys. These people were viewed with disdain as absentee capitalists. Frontier set-
tlers felt that land should be used for settlement and agriculture instead of speculation. Popular sentiment was against big landowners as well. There was much discussion of a tax rate which would increase as the amount of land owned increased, a sort of progressive property tax. However, this proposal was never enacted.
Statehood. The 1845 Constitution of the State of Texas set up a general property tax system for the new state. This constitution was used as the model for the state's present constitution, enacted in 1876. The decentralized system of property tax administration it set up survived, essentially, for 134 years.
The major taxation provision of this and subsequent constitutions was the statement that all property was to be taxed, unless specifically exempted, and that "taxation shall be equal and uniform." This type of general property tax was prevalent in the United States at the time despite earlier failures elsewhere.
The constitution consolidated
9. Isabel Nart, "Property Tax Reform in Texas," Professional Report (Austin: The University of Texas at Austin, 1984), p. 15.
10. Ibid., p. 16.
the assessment and collection functions in the office of an elected county assessor-collector. Property owners or their agents were required to render the value of property they owned or controlled. The task of assessing unrendered land was given to the state Comptroller's office, and failure to render resulted in a fine.
During the early days of statehood, much land escaped proper valuation and assessment. Land records were in poor condition. In addition, because of the amount of time and trouble involved, assessors were reluctant to use the records when they were available. Maps and other data sources were not maintained. For these reasons there was little change in the number of acres assessed after 1855, although land was constantly being patented.
Tax collection laws were also a problem. Tax evasion was exacerbated by a loss of confidence in tax titles. The laws relating to the sale of property for taxes were minutely drawn. Unless every detail was carried out, courts would not sustain the title. This problem remained uncorrected for many years.

Civil War and Reconstruction. The Civil War brought an end to a prosperous era in Texas, disrupting both government and trade.

TABLE 1. Texas State Property Tax Rates, 1865-74

| Year | Rate per <br> $\$ 100$ valuation |
| :--- | :---: |
| 1865 | $\$ 0.125$ |
| $1866-67$ | 0.20 |
| $1868-70$ | 0.351 |
| $1871-74$ | 0.50 |

> Source: Isabel Nart, "Property Tax Reform in Texas," Professional Report (Austin: The University of Texas at Austin, 1984).

1. Includes a special lew of $\$ 0.20$ per $\$ 100$ to pay for a constitutional convention.

State expenditures were diverted from other uses and applied to the war effort. During the war the state spent more than $\$ 4.8$ million, with over $\$ 3$ million used to fund the military. ${ }^{9}$
During the war, the assessment and collection of property, poll and occupational taxes were continued and these taxes were increased. The state's first corporation and income taxes were levied at this time.
In addition to taxes for state government, Texas was assessed a tax by the Confederacy. During the war, the state paid $\$ 37.5$ million to the Confederacy as its share of the war's cost. By the end of the war, Texas was heavily in debt.
Reconstruction after the war was a difficult period for Texas. The government installed by the radical Republicans was extravagant and sustained in power under martial law by an overbearing state police force. The property tax was the main revenue source for the state, and the taxation level was high.
Compounding the high tax rates was the fact that the Civil War had drastically altered the state's tax base. With the emancipation of slaves, assessed in 1865 at $\$ 137$ million, 38 percent of the taxable property of the state was wiped out. ${ }^{10}$ Consequently, taxes on that property which remained on the rolls were increased. The war had also disorganized the administrative machinery of most of the state's local governments. As a result, taxes and tax delinquencies were a continuing problem in this period.
Taxpayer revolt. The Reconstruction government was characterized by profligate spending and a lack of accountability. When tax delinquencies soared, the government responded with higher and higher taxes to fuel an extravagant state budget. Consider the growth of tax burdens as shown in Table 1.

In 1868, a taxpayer in Bexar County would pay a combined state and local rate of $\$ 1.10$ on a $\$ 100$ valuation. Besides these taxes, there were additional state and county income, salary, poll and occupation taxes, as well as city taxes. Not surprisingly, the high tax burdens spawned a taxpayer revolt beginning in 1871. This revolt would profoundly influence the debates of the Constitutional Convention in 1875 and shape the state's property tax system for the next 100 years.

Reconstruction ends, recovery begins. Texans' experiences with Reconstruction led to a mistrust for centralized governmental authority, directed at both federal and state government. With the end of Reconstruction, Texans regained control of state and local government. The Texas Constitution of 1876 made local control the basis for the state's government. The powers of the three branches of state government were limited by the new constitution.

The new constitution's taxation articles were profoundly influenced by the reckless policies of the prior government. The constitution placed ceilings on tax rates, the types of expenditures that government could make were limited, and the incurrence of debt was restricted. With regard to the property tax, the new constitution incorporated the principles of equity and uniformity found in the Constitution of 1845.

A series of constitutional amendments after 1876 altered the structure of local governments in Texas and expanded the authority to levy taxes. An amendment in 1883 gave the Legislature the authority to create independent school districts (prior to this time education had been a municipal responsibility). These districts could levy taxes with the approval of two-thirds of the qualified
property owners in the district.
In 1904, an amendment authorized the creation of specialpurpose districts. These districts were given the authority to incur debt through the issuance of bonds, and property taxes were authorized to retire the bonded indebtedness.

Although the 1876 constitution was enacted to guard against abusive taxation, it did little to solve some basic problems with the state's property tax system. Failure to render property, undervaluation and poor tax administration continued. A lack of property tax records and inaccuracies in existing records made tax collections difficult, if not impossible.

Because of the many problems with the property tax system, a special tax commission was formed and issued a report in 1899. The report outlined some of the serious problems associated with property tax administration. According to the commission:
. . . inequality is the rule, and equality the exception. The wealthy and influential property owner pays least in proportion to what he possesses, and the small holder of property pays the most. ${ }^{11}$

The tax commission called for common control or supervision insofar as state taxation was concerned in order to secure uniformity of manner and efficiency of its administration. This did not occur, however. Despite enormous changes in the state's economic and social climate, no major revision of the Texas property tax laws was made until many decades later.

The 20th century. At the beginning of this century, Texas relied on the property tax and the poll tax for virtually all state revenue. These two taxes were supple-
mented by a variety of occupation taxes, which were usually levied as a flat annual dollar amount and produced very little revenue.
During this century, the tax structure of state government has been greatly diversified. In 1905, the state placed a severance tax on crude oil production. The corporation franchise tax, first enacted in 1893, underwent a major revision in 1907. That same year saw the imposition of an inheritance tax. A gasoline tax and a severance tax on sulphur production were adopted in 1923. By the 1950s, severance taxes had replaced the property tax as the major sources of state revenue.
During the 1930 s , the state's general revenue fund operated at a deficit each year, and state taxation was a major topic in every legislative session. Pressure for property tax relief led to the adoption of a $\$ 3,000$ residence homestead exemption for state ad valorem tax purposes. This became effective in 1933 at a time when assessed values were declining. The combination of these factors reduced the state property tax base by 19 percent between 1932 and 1933, with three-fourths of this decline attributed to the homestead exemption.

In many states facing the same bleak fiscal picture as Texas, sales and income taxes were enacted to provide an additional revenue source. While the Legislature commissioned a number of tax studies at this time, and there was some talk of imposing a sales or income tax, in the end the Legislature rejected these tax sources in favor of a number of new taxes. Included among these were taxes on cigarettes; natural gas and cement (1931); alcoholic beverages

[^83](beer in 1933 and liquors and wines in 1935); and finally, taxes on chain stores, carbon black, admissions and secured notes and obligations (1936). In 1941, the Legislature imposed new taxes on motor vehicle sales, the sale of radios and cosmetics, the gross receipts of oil and gas well servicing companies and bus companies. A new tax on stock transfers was substituted for the 1936 tax on notes and obligations. In addition, tax rates on most existing taxes were also increased.
State property tax abolished. In 1948, a constitutional amendment was approved prohibiting the state from levying a property tax for general revenue purposes after January 1, 1951. Prior to this date, in both 1946 and 1948, the Automatic Tax Board had set the property tax rate for general revenue purposes at zero. However, the state tax was collected in 1949 and 1950, as the state faced a serious revenue shortfall.
After 1951, the state still levied ad valorem taxes for public schools ( $\$ 0.35$ on $\$ 100$ valuation), for university and college buildings ( $\$ 0.05$, first levied in 1947 and increased to $\$ 0.10$ in 1965) and for confederate pensions (\$0.02). In 1968, a constitutional amendment eliminated the remaining state property taxes, except the levy for some university and college buildings. The amendment provided for the phase-out of these property taxes between 1968 and 1976.
In 1978, a suit was filed in a state district court challenging the constitutionality of the remaining state property tax. Essentially, the plaintiff's argument was that the amount of state property taxes paid depended on the vagaries of county assessment practices, which meant that the tax did not meet the equal and uniform requirement of the state constitution. Two taxpayers owning
identical properties would pay differing amounts of state tax because they lived in different counties.
In 1979, property tax reform legislation provided that the assessment ratio for calculating taxes for state purposes would be .0001 percent. That resulted in a tax levy, beginning in 1981, of one dollar for each $\$ 1$ billion in property values on county rolls, cutting the annual revenue to a miniscule $\$ 200$. However, the problem of how to finance buildings at state colleges and universities remained unsolved, as the Legislature could not agree on bills which would have: (1) added all component institutions of the University of Texas and A\&M systems to the list of those eligible to receive Permanent University Fund (PUF) money; and (2) created a new fund to finance construction at all other colleges and universities.
Because the Legislature did not act on bills dealing with funding college and university construction, several of the schools which had received funds from the state ad valorem tax were preparing to file suit to contest the action of the legislature which wiped out the state property tax. If successful, the action would have reinstated the state property tax for the future and could have resulted in taxpayers having to pay substantial sums in back taxes. To avoid such an action, Governor William P. Clements called the Legislature into special session and a constitutional amendment repealing the state property tax was passed and sent to the voters, who approved it in November 1982. In 1983, a constitutional amendment created a special fund for construction at colleges and universities not receiving PUF money.
Special districts proliferate. Another development of the 20th century has been the proliferation of special district governments,
many with powers to levy property taxes. Special districts in Texas include water districts, river authorities, hospital districts and rural fire prevention districts, to name a few. According to the U.S. Census Bureau, in 1982, there were more than 1,600 special districts, exclusive of junior college districts.
Many of the special districts were created because of property tax rate limits set in the constitution, back when these limits had some real meaning. Although the district may be a creation of the state or a local government, the property tax rate set by the district is not included in the maximum tax rate a jurisdiction may levy. For example, a city or county government that was near the maximum tax rate allowed by the constitution could create a hospital district with property tax authority. This would shift that portion of the local tax levy for the hospital to the district, allowing the city or county to avoid reaching the maximum tax rate.
Counties (as well as other local governments) uniformly assessed property at only a fraction of its value. Tax revenue could have been increased by raising the assessment level, but this would have meant that the county taxpayers would have paid a higher state property tax.

## Characteristics of Texas

## Property Tax Before 1979

The property tax base under Texas law consists of all property which is legally subject to taxation. As discussed earlier, one of the most vexing problems with the general property tax is the attempt to place all property in the tax base. Throughout history, attempts to make the property tax base all-inclusive have met with defeat. In most instances, the tax
eventually became a levy largely against real property. The Texas experience is no different.

Before discussing the tax base, it is necessary to define the categories of property in the tax base:
(1) tangible personal property comprises such things as furniture, machinery, business inventories, motor vehicles, etc.;
(2) intangible personal property is a broad category, including cash, stocks, bonds, mortgages and similar "paper" evidences of wealth; and
(3) real property includes all land, improvements (buildings and other structures) and mineral reserves.

Until 1979, the Texas Constitution (Art. VIII, Sec. 1) required that "All property in this State . . . shall be taxed in proportion to its value. . ." The statutes were even more explicit: "All property, real, personal, or mixed, except such as may be hereinafter expressly exempted, is subject to taxation." This all-inclusive property tax proved impossible to administer.

Personal property. There were many problems with the pre-1979 property tax, but the inclusion of personal property in the tax base caused the greatest divergence between legal requirements and actual practice. Taxing personal property is a problem because it is easily concealed and highly mobile. For example, inventories can be moved about to keep values at a minimum on assessment date; similarly, bank balances can be transferred before the assessment date to avoid taxation.
Because of the many problems with discovering and valuing personal property, most states acted long ago to exempt certain categories of personalty from the general property tax. In Texas, the
only legal exemption before 1979 was the first $\$ 250$ in household goods. However, most personal property other than the tangible personal property of business was not on the tax rolls. They were exempt de facto from property taxation. Assessors had neither the time, resources nor inclination to include this property on the tax rolls.
What personal property did make it onto the rolls was determined locally. An example is the property tax on individually owned automobiles. Some local governments made a conscientious effort to assess and tax individual vehicles; others merely went through the motions of assessing vehicles but made no attempt to collect the tax; still others openly refused to even make the gesture of assessing individually owned automobiles. On the other hand, businessowned automobiles were assessed along with other business tangible property and were usually on the tax roll.

Intangible personal property. While certain tangible property, largely business personalty, was taxed, intangible property was almost completely absent from the property tax rolls. The tax on intangible property was never collected, at least as part of a locally administered general property tax. This type of property simply proved too difficult to discover.
Even if intangible property could be discovered, valuation would pose a problem. In the case of bank deposits or stocks and bonds which are traded in exchanges, valuation would be easy. But it would be much more difficult to value unlisted and closely held stocks. Difficult or not, the question is moot, since no state has ever solved the problem of discovery in a locally administered tax.

This does not mean that all intangible property escaped taxation. The intangible values of certain transportation compa-nies-railroads, oil pipelines and motor carriers-were assessed by the state and were on the tax rolls. The intangible values were subject only to state and county taxes; they were not a part of the tax base of cities, school districts or special districts. In 1972, the total of the intangible values of these companies was established at $\$ 122.3$ million, and the estimated state and county tax paid was $\$ 2.2$ million. ${ }^{12}$ Because this was a special tax not paid by other types of businesses, the corporation franchise tax rate applying to railroads and oil pipeline companies (but not motor carriers) was reduced to one-fifth the usual rate.

One other business taxpayer paid a tax on intangibles, and a substantial one at that. Texas imposed the general property tax on the capital stock of banks. While the tax applied to other financial institutions as well, the statutory formula made them exempt from the tax in practice. Legally, the tax was levied against the stockholders of the bank in proportion to the number of shares of stock they owned. But this was a ruse. In reality the tax was on banks and the payments were allowed as deductions from bank income in determining federal income taxes.

The tax on bank intangibles was a significant tax. A comprehensive 1969 survey indicated that whereas business taxes generally in Texas were ten percent below the national average, the statelocal taxes on banks were from 18 percent to 23 percent above the

[^84]national average (depending upon whether such taxes were related to net income before taxes or to equity capital). Texas ranked among the highest ten states in terms of the burden on banks as compared to its rank among the lowest three states in terms of taxes per capita or as a percentage of personal income. ${ }^{13}$

In 1984, the Legislature repealed the property tax on bank stock. In lieu thereof, banks were made subject to the corporation franchise tax. Revenues from the bank franchise tax are distributed back to local taxing jurisdictions based on the relative property tax rates of the taxing units in which the bank is located.

Selectivity of the Texas property tax. In reality, the Texas property tax before 1979 was a selective property tax. While some tangible and intangible property was included on the tax rolls, much more escaped taxation-just how much is unknown. In the case of tangible property, there are some rough estimates available. According to one study, the estimated market value of all taxed property in 1970 was $\$ 130$

[^85]billion. ${ }^{14}$ These estimates indicated taxable tangibles totaling about $\$ 43$ billion for that year. This does not mean that the $\$ 43$ billion in taxable tangible personal property is included in the $\$ 130$ billion of taxed property. Researchers estimated at the time that not more than half of the taxable value of tangible personal property was on the tax rolls. This meant that about 15 percent ( $\$ 20-$ $\$ 21$ billion) of the $\$ 130$ billion total market value estimate consisted of taxed tangible personal property. ${ }^{15}$

With regard to intangible property, it is impossible to estimate the amount of intangible personal property that went untaxed. However, the amount was certainly substantial. A number of studies in the early 1970s put the total value of intangible personal property in Texas in a range from a low figure of $\$ 123.2$ billion to a high of $\$ 219.8$ billion. ${ }^{16}$

The inclusion of real property in the tax base does not present the same problems that personal property does, especially with regard to discovery of property. Land and buildings cannot be hidden from view and records of ownership of property are generally well maintained. Here the problems relate not to the tax base, but to the defining and determining of value.

Property tax administrative issues. Before 1979, property tax administration was the responsibility of each taxing jurisdiction. A 1966 study for the Texas Committee on State and Local Tax Policy estimated that there were at least 1,500, and perhaps even 2,000, separate property tax offices in the state. Large urban counties had an average of 19 separate tax offices, and rural counties averaged five or six offices. ${ }^{17}$ The reasons given for this proliferation of offices were:
(1) low assessments by the county as a means of reducing the state property tax on local residents, since it was tied to county assessments;
(2) differences in policy as to what property should be taxed or excluded;
(3) control of land use;
(4) collection policies;
(5) overlapping boundaries; and
(6) economy.

Quality of appraisals. Effective property tax administration requires the use of professional appraisers for the valuation process. However, before 1979, there were no professional standards set for tax assessors. As a result, the quality of appraisals differed greatly between taxing jurisdictions.

The 1966 tax policy report noted that "in far too many cases the tax assessor is a housewife supplementing the family income, a former grocery clerk who lost his job or a former English teacher pulled out of the classroom to run the school tax office. ${ }^{18}$ The report noted that Texas had several nationally recognized tax assessors and many more who had been certified by the Texas Association of Assessing Officers. But there were at least ten tax offices for every certified assessor in Texas.

The vast majority of tax assessors had little or no training in valuing property. It was common practice for local governments to use professional appraisers when buying property, but when taxing property, anyone would do. Only the larger tax offices employed appraisers on the staff. In 1966, only 5.3 percent of assessors in school district tax offices held some form of professional designation. ${ }^{19}$
Those tax offices with professional staff were often hindered by
a lack of modern assessment tools and procedures. According to the 1966 study, 51 percent of school district tax offices lacked an adequate set of maps, which are critical to locating and valuing real estate. Also frequently absent were building cost schedules ( 61.9 percent went without) needed for the appraisal of improvements to the land. Only about 40 percent of the tax offices had appraisal record cards for dwellings and buildings and essential cost schedules for valuing certain classes of personal property such as automobiles, mobile homes, pipelines and power transmission lines. In about eight percent of the districts, the tax rolls were written in longhand.

Fractional assessments. The poor quality of assessment practices was hidden, at least to a certain extent, by the practice of fractional assessing. Nearly all taxing jurisdictions assessed property at a fraction of market value. This helped to prevent over-assessments which might be easily recognized by the taxpayers or by the courts. By assessing at a fraction of value, few, if any, individual parcels of property would be assessed for more than full market value.

At first blush, it might seem that fractional assessments would have violated the state constitution's requirement of equal and uniform taxation. But the courts held that fractional assessments were legal, provided that all properties and types of property are assessed at the same fraction of full value.

Fractional assessment, by itself, does not create inequities in taxation. If appraisals are equitable to begin with, it does not matter what ratio is used. The one requirement for equity is that the same assessment ratio be applied to appraisals of all property.

The 1966 state and local tax policy study found that many
districts used different ratios for different classes of property. In one urban county, the printed rendition form required rendition of business machinery and equipment at 25 percent of original cost but required inventories to be rendered at 42 percent of cost. The U.S. Census Bureau found that single-family homes in that district were assessed at an average of 22 percent. The Bureau also found that the average deviation of ratios on these singlefamily homes was 30 percent away from the average of 22 percent. This meant that most of these homes were assessed at less than 22 percent of full value, but that a significant number of homes were assessed above 52 percent of full value. ${ }^{20}$
A major problem with fractional assessment relates to basic taxpayer equity. Taxpayers who were told that a jurisdiction assessed at 40 percent of value might be pleased to receive a tax bill placing their value at 30 percent. But if the true average is only 20 percent, these taxpayers were being discriminated against.
If taxpayers recognized that they were paying more than their fair share, they had a difficult time appealing their assessment. If the taxpayers went to court they found themselves in a quandary. Admittedly, they were paying on less than full market value as required by the law. Therefore, to establish discriminatory treatment, they would have had to undertake what amounted to a major assessment ratio study of their own. Even if they had the time, resources and energy for such a study, the burden of proof required by the courts was formidable. The courts have held that the burden of proof was on the taxpayer to establish that assessed value was so far above market value that it would "shock a correct mind and raise a pre-
sumption that valuation is fraudulent or does not represent a fair and conscientious effort to arrive at the fair cash market value. ${ }^{21}$
Inequitable assessments. Given the fact that the property tax laws were unenforceable and that the administration of the tax was characterized by inefficiency and a lack of professional standards, it should come as no surprise that the assessments resulting from this system were inequitable. The best evidence of these inequities can be found in a study conducted for the Governor's Committee on Public School Education in 1966.
An appraiser, Charles R. Bartlett, was employed by the Committee to examine the level of assessments and determine the market value of a sample of 190 school districts in Texas. The Committee later expanded the scope of Bartlett's study to include all school districts in the state. The work was begun in 1967 and was completed in 1968.
Bartlett's study created quite a stir when it was released, and rightly so. Bartlett reported that in most districts, assessments were not equalized, and there was no semblance of uniformity as required by the constitution. This was not entirely the fault of tax assessors. Often the specific assessment policies established by the governing bodies were to blame.

The Texas Constitution states that all taxation is to be equal and uniform, but this was hardly the case. An analysis of assessments by class or category of property revealed that there was no uniform or standard method used in the state. For example, farm and

[^86]ranch land was assessed in some areas at 50 cents to one dollar per acre. This was the assessed value, not the tax. In other areas the assessment ranged from three dollars to $\$ 50$ per acre, regardless of actual value. When land was assessed at 50 cents to three dollars per acre it was essentially exempt.

Bartlett also found that the procedure for valuing banks varied greatly among districts. Ratios ranged from 2.26 percent to 80.86 percent, even though the state law on the assessment of banks was clear and the information necessary for a proper assessment was easily obtainable. Likewise, business personal property fell in the same class as banks. Some jurisdictions did not assess this property at all; others gave it preferential treatment.
Bartlett also noted that in many cases there was a substantial difference between the claimed ratio and the actual ratio used by a district. The true ratios varied from a low of 2.1 percent to a high of 89 percent. The difference in ratios among districts was not alarming, but the difference
22. Texas Research League, The Texas Property Tax: Background for Revision, p. 66.
between claimed and actual ratios within a district raised some important equity questions. If a district claimed a ratio of 40 percent and actually assessed at 20 percent, the honest taxpayers who rendered their property at the claimed ratio would be severely penalized.

Of the 190 districts that Bartlett first checked, only 32 had less than a five percent dispersion between the claimed and true ratio. In the expanded study of 1,281 districts, Bartlett found that only 51 districts (less than four percent) had less than a 10 percent dispersion between the claimed and true ratio. ${ }^{22}$ Bartlett also found a wide variance of ratios among classes of property within a district.

Bartlett went on to note that these assessment practices resulted in an unstable tax base which caused jurisdictions to be vulnerable to attack in the courts for deliberately excluding certain classes of property from taxation. In many instances, these practices reduced the tax base and helped to limit a district's bonded indebtedness, which caused the tax rate to increase, as well as the interest rate paid on bonds.
The Bartlett study also determined the total value of property

TABLE 2. Average Assessment Levels by Class of Property in Texas School Districts, 1966

| Class of Property | Assessment <br> Ratio |
| :--- | :---: |
| Undeveloped Land | $14 \%$ |
| Commercial and Industrial |  |
| $\quad$ Real Property | 32 |
| Business Personalty | 27 |
| Utilities and Railroads | 33 |
| Banks | 41 |
| Minerals (Oil and Gas) | 26 |
| Remainder (including Private Houses) | 41 |
| Average, all property | $\mathbf{3 0 \%}$ |
| Source: Charles Bartett, Governor's Committee on Public School |  |
| Education, 1968. |  |

subject to taxation by school districts to be approximately $\$ 111$ billion, compared to a total assessed value of about $\$ 34$ billion. On the average, school districts were assessing property at less than a third of its value (about 30 percent). School districts had a great deal of latitude for increasing their assessment levels.
While the average assessment level in school districts was 30 percent, there was a great variance among classes of property within school districts. Table 2 shows assessment levels by class of property in Texas school districts.

## The Long Road to Property Tax Reform

Property tax reform has been an issue in Texas throughout this century. Numerous property tax studies, beginning with the Tax Commission of 1899 , have developed proposals to improve property tax administration. Two property tax reports mentioned earlier, the Bartlett report of market values and the report of the Texas Committee on State and Local Tax Policy, helped to raise considerable interest in property tax reform during the 1960s. The Tax Policy Committee recommended the creation of a property tax study commission to study property tax administration and formulate recommendations for constitutional and statutory improvements. However, there was no immediate response to the recommendation, and property tax reform seemed dead as an issue.

Developments in the 1970s helped intensify pressure for property tax reform, however. Population growth led to a considerable rise in real estate prices; increases in real estate prices led to higher tax assessments. In the five-year period between 1971 and 1976, total property taxes jumped 67 percent. Local governments
could have acted to lower tax rates to hold down the increase in tax revenue. But this was seldom the case, both in Texas and nationally. Government officials did little to reduce tax rates. The end result was a large tax increase for property owners.

Reform efforts. In addition to the rapid increase in property taxes, a number of other developments also stimulated interest in property tax reform. One was the report of the Texas Urban Development Commission in 1971. This commission, created two years earlier, recommended some sweeping property tax reforms in its final report. A second body, the Delinquent Ad Valorem Tax Commission, created to study the issue of delinquent property taxes, recommended that the state undertake an in-depth survey of the whole ad valorem tax process in Texas and the procedures used in other states. This recommendation led to the creation of the Legislative Property Tax Committee (LPTC) in 1971.

The LPTC was given considerable resources to use in its study, but the Committee's output was disappointing. An internal controversy led to legislative investigations of the LPTC. As a result, the Committee was reorganized and given another two years to study property taxation. A number of significant materials were produced, including an analysis of the legal basis of the property tax (1973), a report on the taxation of intangible personal property (1973) and the Market Value Study Pilot Project (1975), which demonstrated the internal inequities that existed in property tax administration.

Constitutional revision. In 1973 and 1974, efforts to revise the Texas Constitution included an attempt to change the constitutional provisions relating to the property tax. The Constitutional

Revision Commission included a finance article which would have allowed the Legislature to prescribe for the taxation of certain classes of property and not others and to authorize the use of different methods of valuing various classes of property.

The Constitutional Convention assembled in 1974. The finance committee of the Convention proposed language allowing the exemption of intangible property, providing for the outright exemption of household goods and personal effects not used in the production of income, mandating unitary appraisals (to eliminate the confusion created by overlapping assessment jurisdictions) and providing a mechanism for property owners to appeal to the courts for relief from what the owner believed to be an inequitable assessment.

The Convention was unable to agree on a constitution to submit to the voters. However, the work of the Convention was revived by the Legislature in 1975 and submitted to the voters that November. Along with all other proposed revisions, the finance article was defeated at the polls.

The 1977 school finance bill. In 1977, the Legislature, meeting in special session, adopted a new school finance bill, which included changes in the property tax provisions. This culminated a session which was dominated by property tax reform issues. The bill imposed new standards for local school tax administration and established the School Tax Assessment Practices Board (STAPB) to oversee local administration and estimate the taxable value of property in each district for state aid purposes.

The STAPB was empowered to set minimum standards for staffing and operation of school district tax offices. The board was charged with training and educat-
ing local tax appraisers and assessors, and it prescribed tax forms and records systems and provided professional and technical assistance to local school tax offices and equalization boards.

Other provisions of the 1977 bill required the STAPB to conduct a biennial study to determine the market value of all property and the productive value of agricultural property in every school district as of January 1 of each odd-numbered year. The bill also contained the first "truth-intaxation" provisions designed to inhibit tax increases brought about by revaluation and increases in assessment ratios.

Legal challenges to the property tax. Two legal challenges to the property tax helped push the Legislature towards property tax reform. One lawsuit was centered on the constitutionality of the state property tax and was described earlier. In the other suit, the plaintiffs, two school districts, sought to have the state's school finance system declared unconstitutional. The plaintiffs argued the system was unconstitutional because it based the local school district's share of state public school funding on taxable wealth as measured by the value of real estate and automobiles within the district, without taking into account other tangible personal property and all intangible property, which was also taxable under Texas law. While the federal judge hearing the case refused to enjoin the state from paying state aid under the 1975 school finance law, he also made clear his belief that the plaintiffs might eventually prevail on the merits of their case.

The 1978 "tax relief" amendment. In the waning hours of a 1978 special session, the Legislature agreed to submit to the voters a complicated amendment dealing with several aspects of property
taxation. Included in the proposal were:
(1) A mandatory $\$ 5,000$ exemption from local school district taxes. The exemption is expressed in terms of market value, rather than assessed value which is the basis of the residence homestead exemption enacted in 1932.
(2) Additional tax relief for elderly and disabled homeowners; a local option residential homestead exemption was added in 1973. The amendment restated the calculation of the exemption so that it applies to market and not assessed values. The amendment also gives local taxing units the power to grant optional exemptions to disabled homeowners. These exemptions apply only to school district taxes.
(3) A provision requiring that land devoted to agricultural uses be assessed only on the basis of its "productivity." The amendment gives the Legislature the power to extend similar treatment to land devoted to growing timber.
(4) A requirement that the Legislature exempt individually owned household goods and personal effects; permit the exemption of individually owned automobiles not to exceed two per family; and permit the Legislature to deal with the taxation of intangible property in any of several ways-full or partial exemption, classification, special taxation or (by not acting at all) continuation of the present law which makes such property taxable.

The voters approved the "tax

[^87]relief" amendment in November 1978.

## Results of Property Tax Reform

The property tax measures enacted between 1977 and 1979 contained a number of major improvements in the Texas tax including development of an enforceable tax base, elimination of overlapping assessing jurisdictions, upgrading of property tax administrative practices statewide and greater protection of taxpayers from administrative inequities in the property tax system.
An enforceable tax base. The 1978 constitutional amendment restated the provisions relating to the composition of the tax base. Formerly, all property was taxable unless specifically exempt. Now, all real and tangible personal property is taxable, unless specifically exempt. Intangibles, except those of certain transportation companies, banks, savings and loans and insurance companies, were removed from the tax base. Of course, this was not a radical change in practice, since intangibles were almost never on the tax rolls anyway.

In the case of exemptions from the tax, the constitution and the property tax code provide for two types of exemptions-partial and absolute. Partial exemptions exclude only a part of either the assessed or market value for purposes of ad valorem taxation. Absolute exemptions exclude the total value of the property.

Two partial exemptions were included for residential homesteads:
(1) A $\$ 5,000$ exemption from market value for purposes of school taxes. In addition to the $\$ 5,000$, there is a mandatory $\$ 10,000$ exemption from market value for purposes of school taxes
for persons over age 65 or persons who are disabled.
(2) A local option homestead exemption of not less than $\$ 5,000$ nor more than 20 percent of market value. This exemption can be adopted by any political subdivision by action of the governing body or by petition and referendum of the voters in that subdivision. ${ }^{23}$

In counties that assess a special tax for flood control or farm-tomarket roads, there is a $\$ 3,000$ homestead exemption for this tax in addition to the two listed above. Another partial exemption applies to property owned by a disabled veteran or by the surviving spouse and surviving minor children of a disabled veteran. The exemption is granted from assessed value in an amount varying from $\$ 1,500$ to $\$ 3,000$, depending on the percentage of disability.

The remaining exemptions are total or absolute. These include all household goods and personal effects not used to produce income; farm products in the hands of the producer and farm supplies for home and farm use; public property owned by a political subdivision of the state and a number of exemptions for the property of charitable, cultural, religious and educational organizations.

The code retained all existing exemptions, except those declared unconstitutional by the courts or by the Attorney General. Many statutory exemptions were modified, however, to add restrictions to their availability that the courts had found to be required by the constitution. For example, charities, schools and churches must dedicate their property to charitable, educational or religious use on their dissolution. The tax exemption of individually owned automobiles was authorized on a local option basis.

The taxation of agricultural land was also altered by property tax reform. Prior to 1979, most agricultural land was supposed to be appraised at the land's market value. A few farmers had been able to qualify under a 1966 constitutional amendment for valuing their land based only on those factors relating to its agricultural use. But the restrictions placed on eligibility for this type of treatment were stringent. In 1977-78, only about onefourth of the school districts in Texas reported receiving applications for valuation under the 1966 provision. Approximately 12,000 were approved, but these accounted for only about four percent of all land devoted to agriculture in Texas. ${ }^{24}$

The new property tax code made it easier for farmers to qualify for valuations based on productive value, rather than market value, and established a procedure for determining the value of eligible land. The value is determined by capitalizing the average net income the land would have yielded during the preceding five years. The statutes specify that the capitalization rate be set at ten percent or the interest rate specified by the Federal Land Bank of Houston on December 31 of the preceding year plus 2.5 percent, whichever percentage is greater. It also set a number of eligibility requirements for the valuation.
Eligible landowners must apply annually for agricultural valuation. When appraising land in this manner, the chief appraiser must also appraise the land at its market value and record both the market and productivity values. If the land is subsequently sold or diverted to a nonagricultural use, the total amount of taxes deferred in the preceding three years plus interest at the delinquent tax rate become due. These amounts must be included as back taxes on the next tax bill.

The Legislature also provided for the valuation of open-space land devoted to farm and ranch purposes on the basis of its productive capacity, as authorized by the constitution. The constitution also authorizes the taxation of land devoted to timber production on the basis of its productive capacity.
Reduce the number of overlapping assessing jurisdictions. Effective January 1, 1980, appraisal districts in each county were established with responsibility for (1) listing and appraising taxable property in the district, and (2) providing local remedies for dissatisfied property owners. After January 1, 1982, state and local property taxes were based on the district's appraisal.

State agency to assist local administration. The new property tax code created the State Property Tax Board, effective January 1, 1980. The board replaced the School Tax Assessment Practices Board, and personnel, books, records, property and powers and duties relating to school property taxes were transferred to the new agency. The board consists of six gubernatorial appointees serving six-year staggered terms.
Its duties cover a broad range of responsibilities including the adoption of minimum standards for operation of appraisal districts, offering instruction on appraisal and tax administration, providing technical assistance to local tax administrators and estimating the market value of property in each of the state's school districts.
The board also took over the responsibilities formerly exercised by the State Tax Board and the Comptroller regarding administration of property taxation. The Comptroller's duties with regard to state property taxation would have been virtually abolished anyway, since the assessment ratio on such taxes was reduced to
0.0001 percent after January 1, 1980.

The State Tax Board's responsibilities also include central appraisal of certain intangibles. The intangibles of railroads, pipeline companies and toll roads are taxed in each county in which the business operates on the basis of value determined and apportioned by the state. This is the same procedure used before 1979, but the responsibility for determining and apportioning value was transferred from the Tax Board to the State Property Tax Board. Motor carriers and bus companies were taxed in this manner until 1987, when legislation exempting them was adopted.

Railroad rolling stock is taxed in each county in which the railroad operates on the basis of values determined by the county in which the railroad's state headquarters is located and is apportioned by the state, as under previous law. Responsibility.for the apportioning of value was transferred from the Comptroller's office to the State Property Tax Board.

The constitution specifically prohibits the central appraisal of real property, to allay fears that a statewide central appraisal system would develop over time. A disclaimer allows the school district market value studies and the distribution of state education aid based on these values.
Professionalize the assessing function. The property tax code contains provisions requiring the professional certification of tax assessors and appraisers. The code created the Board of Tax Assessor Examiners (now the Board of Tax Professional Examiners). Each member of the Board is required

[^88]to be a registered professional appraiser or a registered Texas assessor. The Board is empowered to establish standards of professional practice, conduct, education and ethics for appraisers, assessors and collectors. In the case of a violation of the law or its rules, the Board has the power to refuse, revoke or suspend a registration after holding hearings.

According to the law, all assessors, appraisers, collectors and other personnel engaged in appraisals of real or personal property must register annually with the Board. The law requires that any person registered as an appraiser, assessor or assessorcollector must attain professional certification within five years after an initial registration. The Board has the power to adopt rules regarding recertification to assure that all persons certified continue to be duly registered and professionally competent so long as they are active in appraisals, assessment or collections.

Taxpayer protection. The property tax code revision established appraisal review boards in each appraisal district. The members of an appraisal review board are appointed by the appraisal district board of directors. An appraisal review board has at least three members; in districts of 25,000 inhabitants or more, the number may be increased to as many as nine. Property owners may protest to the appraisal review board any of the following:
(1) the appraised value of the taxpayer's property or its agricultural or market value;
(2) unequal appraisal of the taxpayer's property as exceeding the aggregate mean level of appraisals of other property in the appraisal district;
(3) inclusion of the property on the appraisal records;
(4) a denial in whole or in part of a partial exemption;
(5) a denial of an agricultural or timber use designation;
(6) a determination of the property's taxable situs;
(7) a determination that the taxpayer is the owner of property; or
(8) any other action that adversely affects the taxpayer.

A property owner must file a petition with the appraisal review board in order to initiate a protest. The review board must schedule a hearing, at which the property owner may present evidence or argument either in person or by affidavit. The review board must decide the protest by written order. If the board finds the appraisal records are incorrect, then its order must make the necessary correction. The order must include the findings of fact and conclusions of law on which it is based.
If relief is not granted by the appraisal review board, the taxpayer may take the case to a state district court. However, the appeal is on a trial de novo basis. This means that the district court in effect starts from scratch and tries all issues of fact and law in the same manner as all civil suits generally. The court may not admit in evidence the fact of prior action by the appraisal review board. The taxpayer appeal process is an improvement over the old procedure, but it places a substantial and expensive burden on taxpayers to obtain relief beyond the appraisal review board.

Other provisions. On January 1, 1981, the use of assessment ratios was eliminated for local tax purposes. All property must now be assessed at 100 percent of its appraised value. Existing assessors and collectors at the time were retained, regardless of whether the duties were separated
or performed by one officer.
The new code also contains certain "truth-in-taxation" requirements that apply to all taxing jurisdictions. These provisions are designed to ensure that all taxpayers are aware of proposed tax increases and are given the opportunity to voice their objections.

Each jurisdiction must calculate and publicize an "effective" tax rate. This is a rate which, when applied to properties carried over from the previous year's tax roll, would produce a tax levy equivalent to the previous year's levy. If the proposed increased tax rate exceeds the effective rate by more than three percent, a series of notices must be published and public hearings must be held. This requirement prevents taxing jurisdictions from realizing automatic increases in property taxes from reappraisals without informing taxpayers.

If a taxing jurisdiction adopts a tax rate which exceeds the calculated effective tax rate by more than eight percent, voters may petition within 90 days for an election to reduce or "rollback" the tax increase to eight percent. A petition for such an election requires the signatures of ten percent of the qualified voters within the taxing jurisdiction. If a rollback election is successful, the tax rate increase is reduced to eight percent for the current year, unless the taxing unit is a school district. In that case the rollback applies to the following year.

Conclusions. Property tax reform did not come easily to Texas, even though evidence of the unfairness of the tax had been around for a long time. Numerous studies over the course of this century detailed the many problems with the administration of the tax in Texas. Nearly all tax experts agreed that two fundamental changes needed to be made; first, enactment of a prop-
erty tax code which is enforceable, and second, modernization and professionalization of the administrative machinery which is responsible for administering the tax laws. Both of these fundamental changes were accomplished with the enactment of the new property tax code in 1979.
Despite the many changes made since 1979, the property tax is far from a perfect tax. Although in theory a tax on wealth, the property tax is not based on ability to pay. Although there are important exemptions to the tax for certain taxpayers, these are not based on need. This is not an efficient way to provide tax relief to those in need of such relief. Finally, no matter how modern an appraisal district is or how professional the appraiser, appraisal remains an inexact science. A certain amount of controversy seems to be built into the property tax. Nevertheless, the inequities of the property tax today pale in significance when compared to those before tax reform.

## The Texas Property Tax System Today

The property tax in Texas is the single most important source of revenue for Texas local governments. It has exhibited remarkable
stability over the years with total property tax revenues rising each year, through good and bad economic times. It is also among the most flexible of the revenue instruments available to local governments. As a result, the property tax has become a sort of "shock absorber" for local governments. Tax rates are adjusted regularly to make up the difference between expected revenues other than property taxes, over which localities have less control, and the spending needs of the local government.

As discussed earlier, the administration of the property tax underwent some drastic changes with the enactment of the new property tax code in 1979. These changes did not alter the stability or the flexibility of the tax as a revenue source. What the reforms did accomplish was to improve its administration.
Property tax levies. The local property tax is the largest governmental revenue source in Texas; in 1986-87, it raised more than twice the amount raised by the state sales tax. The nearly $\$ 9.7$ billion in

| TABLE 3. Property Taxes Levied by Texas Governments, 1977-87 (Millions of Dollars) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Total | State | Counties | Cities | School Districts | Special Districts |
| 1976-77 | \$3,158 | \$45 | \$439 | \$734 | \$1,619 | \$321 |
| 1977-78 | 3,505 | 47 | 522 | 794 | 1,767 | 375 |
| 1978-79 | 3,846 | 53 | 578 | 856 | 1,939 | 420 |
| 1979-80 | 4,212 | 60 | 650 | 944 | 2,088 | 470 |
| 1980-81 | 4,948 | 0 | 821 | 1,052 | 2,481 | 95 |
| 1981-82 | 5,753 | 0 | 1,008 | 1,204 | 2,864 | 677 |
| 1982-83 | 6,543 | 0 | 1,161 | 1,359 | 3,282 | 741 |
| 1983-84 | 7,244 | 0 | 1,291 | 1,454 | 3,627 | 872 |
| 1984-85 | 8,171 | 0 | 1,409 | 1,628 | 4,143 | 991 |
| 1985-861 | 9,017 | 0 | 1,437 | 1,834 | 4,659 | 1,087 |
| 1986-871 | 9,670 | 0 | 1,492 | 1,989 | 5,040 | 1,149 |
| Source: Texas Research League. <br> 1. Includes bank franchise tax reimbursements. |  |  |  |  |  |  |


| TABLE 4. Property Taxes Levied by Texas Special Districts, Selected Years, 1976-87 (Millions of Dollars) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Total | Hospital | Junior College | Water | Navigation Port Drainage | Road | School Equalization | Other |
| 1975-76 | \$285.8 | \$133.3 | \$60.6 | \$43.9 | \$34.9 | \$6.4 | \$3.9 | \$2.8 |
| 1980-81 | 594.5 | 282.8 | 96.0 | 114.8 | 78.9 | 8.2 | 8.5 | 5.3 |
| 1983-84 | 871.9 | 390.6 | 131.9 | 202.0 | 122.7 | 3.8 | 9.9 | 10.9 |
| 1984-85 | 991.3 | 416.2 | 162.7 | 241.5 | 136.8 | 5.4 | 11.8 | 17.0 |
| 1985-86 | 1,081.0 | 454.7 | 190.4 | 258.5 | 139.2 | 5.3 | 12.3 | 20.7 |
| 1986-87 | 1,142.4 | 472.8 | 213.0 | 266.5 | 147.7 | 6.2 | 11.6 | 24.6 |
| Source: Texas Research League. <br> Note: Excludes reimbursement for bank franchise tax. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

property tax revenues was only $\$ 600$ million short of total state tax revenue in 1987. Property tax levies have consistently increased each year; the 1986-87 property tax levies were more than triple those in 1976-77. Table 3 shows the breakdown of property tax levies by type of government from 1977-87.

A breakdown of property taxes levied by special districts is presented in Table 4. These districts include 115 hospital districts and 62 junior colleges, which levied $\$ 473$ million and $\$ 213$ million in property taxes, respectively. Water districts levied \$266 million, and districts providing navigation, port or drainage services levied $\$ 148$ million in 1986-87. Special districts to service road bonds levied $\$ 6.2$ million, up from $\$ 3.8$ million four years ago but about the same as that imposed in 1975-76.

Additional special districts taxes include countywide taxes for school districts in five counties; countywide taxes in Dallas and Harris counties for school
25. State Property Tax Board, Annual Report for Tax Year 1986 (September 1987), p. 1.
26. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987), p. 46.
27. Ibid., p. 90.
services; a tax for vocational education services in Duval County; and a tax in Cameron, Hidalgo and part of Willacy counties to supplement the educational services of local school districts in those counties. A total of $\$ 11.6$ million was imposed for these school equalization services.
Property taxes for other special districts totaled $\$ 24.6$ million. Taxes for other districts have risen rapidly in recent years. This reflects the proliferation of rural fire control districts; 105 fire districts accounted for \$13.9 million in 1986-87.

Distribution among types of local governments. The distribution of levies among local governments has been relatively stable in recent years. In 1986, school district taxes accounted for 52 percent of all property taxes. Cities took in 20.5 percent of the total, counties took 15.5 percent and special districts accounted for the remaining 12 percent. This breakdown of statewide property taxes has remained relatively constant since 1984. ${ }^{25}$
Table 5 shows the distribution of local property tax revenues by type of government for selected years beginning with 1957. Census Bureau figures are used because until recently the only breakdown of property tax collections by type of government was that estimated by the Bureau in its Census of Governments, conducted every

TABLE 5. Percent Distribution of Local Property Tax Revenues in Texas by Type of Government in 1957, 1967, 1977 and 1982

| Type of Government | 1957 | 1967 | 1977 | 1982 |
| :--- | :---: | :---: | :---: | :---: |
| County | $22.2 \%$ | $17.3 \%$ | $18.0 \%$ | $21.4 \%$ |
| City | 31.0 | 28.7 | 23.5 | 20.4 |
| School | 43.4 | 50.3 | 55.8 | 55.6 |
| Special District | 3.4 | 3.7 | 2.7 | 2.6 |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

[^89]five years.
As shown in Table 5, city governments today account for significantly less of total local property taxes than in the past. This is largely because cities have been able to supplement property tax revenue with user charges and sales tax revenue. The proportion of property tax revenues raised by school districts has remained fairly stable over the past 20 years. It must be noted, however, that the school district figures in the table below reflect the Census Bureau's definition of school districts, which includes junior college districts. The State Property Tax Board classifies these as special districts.
Compared to the distribution of property tax revenues in the United States as a whole, the tax in Texas is more of a school tax. Nationally, school district property tax revenues in 1986, including junior colleges, accounted for 43.6 percent of total property tax revenues. ${ }^{26}$ In Texas, the figure is 52 percent for school districts exclusive of junior colleges.
Nationally, the distribution of property tax revenues in 1986 among other types of local governments was as follows: county governments, 23.6 percent; cities and townships, 29.6 percent; and special districts, 3.2 percent. These proportions do not differ radically from those in Texas, although cities and townships account for a larger share of property tax revenues nationally than in Texas.

Role in local government finance. The property tax is central to the financing of local governments in Texas. In 1986, the tax provided 35 percent of the total general revenue of Texas local governments. ${ }^{27}$ That proportion was up from a 33 percent level that had prevailed during the early 1980s. Since 1957, when property taxes accounted for onehalf of local revenue, the tendency
has been for property taxes to decline in relation to total general revenue. But last year the trend was reversed.
Counties relied most heavily on property tax revenues; 47.6 percent of their total general revenue in 1986 came from property taxes. School districts weighed in second, with 41 percent of general revenue from property taxes. They were followed by cities, 25.3 percent, and special districts, 9.8 percent.

The dominance of property taxes in the fiscal programs of local governments is further illustrated by considering the sources of all general revenue for local governments. Table 6 presents a breakdown of local general revenue by source for Texas and the United States.

Among Texas local governments, property tax revenue easily exceeds the sum total of all other local tax revenue combined. The second largest source of tax revenue is the sales tax, but this accounts for less than five percent of total revenue. The second largest source of total revenue is state aid, and more than 90 percent of this amount consists of state aid to school districts. This reflects the fact that in Texas state aid to local governments other than school districts has not been as significant as in many other states.

Nationally, state aid to local governments is their largest source of revenue, with the property tax second. Sales and other taxes account for nearly ten percent of revenue nationally, while in Texas the share is 7.3 percent. The difference in these figures is largely the result of local income taxes ( 2.2 percent of the national total). Federal aid is a larger share of the national total than in Texas, while current charges and miscellaneous revenue are more important to

Texas local governments.
Over the next few years, sales taxes should account for a slightly larger share of local government revenue in Texas. This is because the Legislature in 1986 approved legislation which allows some cities and counties to replace local property taxes with an additional local-option sales tax. The legislation allows an additional half-cent to one-cent sales tax for cities and counties that are not within a metropolitan transit authority (MTA). Cities that already levy a sales tax and counties with incorporated cities may levy an additional half-cent tax. Counties with no incorporated cities may levy a one-cent tax. Cities may choose between the half-cent tax or a special mass transit sales tax of a quarter-cent to half-cent.
Both cities and counties must reduce their effective tax rate each year that they collect the additional sales tax to account for this additional revenue. For the mass transit tax, a city adjusts its effective rate only in the first year after adopting the tax.
During 1987, 166 cities and counties held elections to impose a one-half percent sales tax. The
proposal was successful in 148 of
these cities and counties, a
passing rate of 89 percent. All of these cities and counties must reduce their 1988 property tax levy by the projected amount of revenue from the tax. Only one city, El Paso, has passed a mass transit sales tax apart from the existing MTAs.

Comparing tax burdens. The State Property Tax Board estimates that the market value of all taxable property in Texas was about $\$ 731$ billion in 1986-87. (This figure includes the productive value of open-space agricultural land that qualified for agricultural use taxation rather than the market value.) Dividing the total property tax levy by the market value gives an average tax rate of $\$ 1.323$ per $\$ 100$ of market value. ${ }^{28}$ Table 7 shows statewide average property tax rates since 1975-76.

As shown in Table 7, the average effective tax rate dropped
28. Texas tax rates are quoted as an amount per $\$ 100$ of value. That provides the same figure as a percentage so that a rate of two dollars per $\$ 100$ is the same as two percent of value.

TABLE 6. Local Government Revenue by Source, Texas and the United States, 1986 (Millions of Dollars)

| Source | Texas |  | United States |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | Percent of Total | Amount | Percent of Total |
| Federal Funds | \$955 | 3.9\% | \$20,433 | 5.4\% |
| State Funds | 6,347 | 25.7 | 126,824 | 33.3 |
| Property Tax | 8,619 | 35.0 | 107,356 | 28.2 |
| Sales Tax | 1,066 | 4.3 | 15,889 | 4.2 |
| Other Taxes | 737 | 3.0 | 21,752 | 5.7 |
| Current Charges | 3,578 | 14.5 | 50,413 | 13.2 |
| Miscellaneous Revenue ${ }^{1}$ | 3,349 | 13.6 | 37,996 | 10.0 |
| Total | \$24,651 | 100.0\% | \$380,663 | 100.0\% |

Source: U.S. Department of Commerce, Bureau of the Census, Government
Finances in 1985-86 (Washington, D.C., 1987).

1. Includes interest earnings and amounts for categories not shown separately.
from \$1.209 in 1975-76 to just over a dollar in 1981-82. Rapid inflation of real estate values produced
2. For a complete comparison of property tax burdens in Texas local areas, see Texas Research League, Appraisal Practices and Tax Burdens Texas Local Governments 1986-87 (Austin, 1988).
substantíal additional tax revenue each year with a lower effective tax rate. However, since 1981-82, the average property tax rate in Texas has increased by one-third, rising from $\$ 1.007$ to $\$ 1.323$ per $\$ 100$ in 1986-87. Local governments have raised tax levies by 68 percent since 1981-82, while the

TABLE 7. Average Local Property Tax Rates, 1975 to 1987

| Year | Property <br> Tax Levy <br> (mlllions) | Market Value <br> of Property <br> (millions) | "True" <br> Tax Rate <br> Per $\$ 100$ |
| :---: | :---: | :---: | :---: |
| $1975-76$ | $\$ 2,812$ | $\$ 232,585$ | $\$ 1.209$ |
| $1977-78$ | 3,505 | 297,573 | 1.178 |
| $1979-80$ | 4,212 | 407,129 | 1.035 |
| $1981-82$ | 5,753 | 571,198 | 1.007 |
| $1983-84$ | 7,244 | 661,168 | 1.096 |
| $1984-85$ | 8,171 | 719,820 | 1.135 |
| $1985-86$ | 9,016 | 738,035 | 1.222 |
| $1986-87$ | 9,670 | 730,756 | 1.323 |

Source: Texas Research League.
tax base grew by 28 percent. In 1986-87, the tax base decreased from the previous year.

Statewide average tax rates do not tell the whole story, however. Among local taxing jurisdictions the tax burden varies widely. ${ }^{29}$ For example, in Crystal City, taxes imposed by all local governments averaged 2.75 percent of market value. At the other extreme, taxes in Highland Park averaged 0.85 percent, less than one-third the tax burden imposed by local governments in Crystal City.

To compare tax rates among jurisdictions, it is necessary to calculate the "true" tax rate. The true tax rate corrects for differences in the ratio of appraisal to market value. Although state law requires a ratio of 100 percent, in practice this is rarely the case; appraisal is not an exact science. Recognizing this fact, the State

TABLE 8. Property Tax per $\$ 100$ of Market Value ("True" Tax Rate) Levied in 21 Largest Cities, 1986-87

| City | Ratio | City | School | College | Hospital | County | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abilene | 95.6\% | \$0.4654 | \$0.8034 | 0 | 0 | \$0.2665 | \$0.0191 |  |
| Amarillo | 74.7 | 0.3662 | 0.7325 | 0.1024 | 0.2382 | \$0.2727 | \$0.0191 | $\$ 1.5543$ 17120 |
| Arlington | 88.6 | 0.4118 | 0.6580 | 0.0281 | 0.0854 | 0.0934 | 0.0060 | 1.728 |
| Austin | 93.9 | 0.3826 | 0.7036 | 0.0446 | 0 | 0.1797 | 0.0060 | 1.2827 |
| Beaumont | 93.3 | 0.6440 | 0.7746 | 0 | 0 | 0.1797 0.2240 | 0.2290 | 1.3105 1.8716 |
| Brownsville | 73.5 | 0.5514 | 0.7205 | 0.0440 | 0 | 0.2037 | 0.0670 | 1.8865 |
| Corpus Christi | 96.4 | 0.5449 | 0.7454 | 0.1250 | 0.1464 | 0.2268 | 0 | 1.5865 1.7885 |
| Dallas | 87.4 | 0.4394 | 0.5584 | 0.0337 | 0.1101 | 0.1122 | 0.0024 | 1.2563 |
| El Paso | 90.3 | 0.4150 | 0.6092 | 0.0611 | 0.1305 | 0.2042 | 0.0024 | 1.4200 |
| Fort Worth | 87.1 | 0.6438 | 0.5744 | 0.0276 | 0.0840 | 0.0919 | 0.0059 | 1.42076 |
| Garland | 90.7 | 0.3998 | 0.7615 | 0.0350 | 0.1142 | 0.1165 | 0.0025 | 1.4276 |
| Houston | 97.2 | 0.5149 | 0.6639 | 0.0205 | 0.1314 | 0.2602 | 0.0649 | 1.4296 |
| Irving | 91.8 | 0.3401 | 0.6984 | 0.0354 | 0.1156 | 0.1179 | 0.0026 | 1.6559 1.3101 |
| Laredo | 92.1 | 0.3544 | 0.4235 | 0.0901 | 0 | 0.2955 | 0 | 1.1635 |
| Lubbock | 95.3 | 0.5623 | 0.8673 | 0 | 0.1035 | 0.1501 | 0.0067 | 1.6899 |
| Odessa | 95.8 | 0.4660 | 0.8027 | 0.1383 | 0 | 0.3161 | 0.006 | 1.6893 |
| Pasadena | 97.9 | 0.5875 | 0.9694 | 0.0783 | 0.1325 | 0.2623 | 0.0654 | 2.0955 |
| San Angelo | 91.6 | 0.6369 | 0.6323 | 0 | 0 | 0.2675 | 0 | 1.5367 |
| San Antonio | 81.8 | 0.3353 | 0.6689 | 0.0392 | 0.1487 | 0.1468 | 0.0079 | 1.3469 |
| Waco | 87.3 | 0.4896 | 0.6755 | 0.0509 | 0 | 0.2515 | 0 | 1.4676 |
| Wichita Falls | 97.0 | 0.6030 | 0.7989 | 0 | 0 | 0.2327 | 0 | 1.6346 |
| Minimum | 73.5\% | \$0.3353 | \$0.4235 | 0 | 0 |  | 0 |  |
| Maximum | 97.9\% | \$0.6440 | \$0.9694 | \$0.1383 | \$0.2382 | \$0.3161 | \$0.2290 | $\begin{aligned} & \$ 1.1635 \\ & \$ 2.0954 \end{aligned}$ |

Source: Texas Research League.
Note: Data for taxing jurisdictions in major school districts.

Property Tax Board determines a weighted average appraisal ratio for each appraisal district. Applying this appraisal ratio to the stated tax rate yields a true tax rate, which can be used to compare tax burdens among different taxing jurisdictions. Table 8 shows true tax rates for the state's 21 largest cities in 1986-87.

Another way of comparing tax burdens is to calculate the taxes that would be paid on an average home in different jurisdictions. Considering a single-family home selling for $\$ 80,000$, the highest tax burden in 1986-87 was again in Crystal City with a total of $\$ 2,083$. imposed by all overlapping jurisdictions. The lowest tax bill for such a house was $\$ 659$ in Crane.

If homestead exemptions were available to the taxpayer, the tax on the $\$ 80,000$ home was reduced to $\$ 2,014$ in Crystal City and $\$ 581$ in White Oak. If owned by a person 65 or over, the tax was reduced to $\$ 1,418$ in Crystal City and to $\$ 222$ in that part of Irving in the Coppell Independent School District. A comparison of local taxes on an $\$ 80,000$ home is presented in Table 9.

Still another measure of property tax burdens has been calculated for business personal property (inventories, machinery, furniture, fixtures, etc.). Tax bills on commercial and industrial personal property depend upon the ratio of the appraised value determined by the appraisal district, as well as by the tax rates set by the governing body of local taxing jurisdictions. This measure of property tax burdens requires that both appraisal practices and tax rates be included in the calculations.

Using these calculations, the tax bill on $\$ 80,000$ of industrial personal property ranged from $\$ 532$ in Del Rio to $\$ 2,071$ in that part of the City of Orange located

TABLE 9. Local Property Taxes on an \$80,000 Single-Family House, 1986-87

| City | Single-Family House |  |  |
| :---: | :---: | :---: | :---: |
|  | Not <br> Homestead | Homestead | Elderly Over 65 |
| Abilene | \$1,253 | \$1,086 | \$ 870 |
| Amarillo | 1,292 | 1,243 | 1,027 |
| Arlington | 1,060 | 921 | 489 |
| Austin | 1,064 | 979 | 414 |
| Beaumont | 1,452 | 1,340 | 901 |
| Brownsville | 1,379 | 1,330 | 1,108 |
| Corpus Christi | 1,430 | 1,301 | 847 |
| Dallas | 1,095 | 869 | 243 |
| El Paso | 1,177 | 1,144 | 958 |
| Fort Worth | 1,172 | 1,033 | 547 |
| Garland | 1,123 | 1,053 | 722 |
| Houston | 1,344 | 933 | 418 |
| Irving | 1,064 | 823 | 567 |
| Laredo | 960 | 936 | 782 |
| Lubbock | 1,353 | 1,307 | 1.028 |
| Odessa | 1,377 | 1,008 | 764 |
| Pasadena | 1,731 | 1,438 | 661 |
| San Angelo | 1,256 | 900 | 504 |
| San Antonio | 1,085 | 1,044 | 618 |
| Waco | 1,187 | 1,073 | 861 |
| Wichita Falls | 1,312 | 1,271 | 1,034 |
| Minimum | \$960 | \$823 | \$243 |
| Maximum | \$1,731 | \$1,438 | \$1,108 |

Source: Texas Research League.

TABLE 10. Property Tax on $\$ 80,000$ of Business Personal Property, 1986-87

| City | Average Property | Business Personal |  |
| :---: | :---: | :---: | :---: |
|  |  | Industrial | Commercial |
| Abilene | \$1,243 | \$1,225 | \$1,145 |
| Amarillo | 1,370 | 1,198 | 1,475 |
| Arlington | 1,026 | 1,030 | 934 |
| Austin | 1,049 | 1,108 | 1,007 |
| Beaumont | 1,497 | 1,604 | 1,434 |
| Brownsville | 1,269 | 1,726 | 970 |
| Corpus Christi | 1,431 | 1,481 | 1,439 |
| Dallas | 1,005 | 1,132 | 1,116 |
| El Paso | 1,136 | 728 | 1,088 |
| Fort Worth | 1,142 | 1,166 | 1,011 |
| Garland | 1,144 | 1,242 | 1,109 |
| Houston | 1,325 | 1,337 | 1,186 |
| Irving | 1,048 | 1,124 | 1,066 |
| Laredo | 931 | 996 | 980 |
| Lubbock | 1,352 | 1,405 | 1,305 |
| Odessa | 1,379 | 1,439 | 1,034 |
| Pasadena | 1,676 | 1,653 | 1,488 |
| San Angelo | 1,229 | 1,177 | 950 |
| San Antonio | 1,078 | 1,177 | 950 |
| Waco | 1,174 | 1,122 | 1,184 |
| Wichita Falls | 1,308 | 1,318 | 1,333 |

[^90]in the Little Cypress school district. For commercial personal property, the bill for property valued at $\$ 80,000$ ranged from $\$ 417$ in Fort Worth within the Lake Worth school district to $\$ 1,844$ in Crystal City. Table 10 presents such data for selected Texas cities in 1986-87.

Recent trends. Data collected on tax burdens reveal that true tax rates have risen in recent years. Among the 332 city locations for which true tax rates are available over the past three years, tax rate increases occurred in 259 areas. ${ }^{30}$ In 98 areas, the three-year increase was less than ten percent, but 12 areas recorded true tax rate increases of more than 50 percent. Increases of ten to 20 percent were recorded in 71 cities and 20 to 30 percent increases in 54 areas. On the other hand, tax burdens went
30. Texas Research League, Appraisal Practices and Tax Burdens Texas Local Governments, 1986-87, p. 5.
down in 71 areas.
Considering selected cities, tax burdens increased by 20.5 percent in Lubbock, 13 percent in Fort Worth and 7.3 percent in Houston over the past three years. True tax rates declined by 3.9 percent in Dallas, 2.4 percent in San Antonio and dropped 7.6 percent in Austin. It should be remembered that these are average figures. Because of variations in appraisal levels and because of homestead exemptions, the change in tax burden for homeowners and other types of taxpayers may differ from these averages.

Distribution of the property tax levy. The SPTB produces estimates of the distribution of the school property tax levy. These estimates are based on information reported by school districts and show how the school tax burden is spread among the various property categories. Table 11 presents these estimates for the years 1981 to 1986.

There has been a fairly significant shift in property tax burdens based on these figures. Since 1981, the portion of the property tax levy paid by owners of singlefamily residences has grown by nearly 18 percent, rising from just over one-fourth of the levy in 1981 to nearly one-third in 1986. Urban real estate (categories A, B, C and F) accounted for nearly two-thirds of the levy in 1986; in 1981, the figure was 54 percent.
While urban real estate is estimated to account for a larger share of tax levies, business propertiessuch as inventories, equipment, oil and gas reserves and utilitiesnow pay a smaller share of the property tax burden. These properties paid 56 percent of school taxes in 1981; they now pay slightly less than half.

A number of factors have contributed to the larger share of tax burdens paid by urban real estate. Real estate prices rose during the early 1980s, when a growing

TABLE 11. Distribution of School Tax Levy Among Property Categories, 1981-86

| Property Category | $\begin{gathered} 1981 \\ \% \text { of Levy } \end{gathered}$ | $\begin{gathered} 1982 \\ \text { \% of Levy } \end{gathered}$ | $\begin{gathered} 1983 \\ \text { \% of Levy } \end{gathered}$ | $\begin{gathered} 1984 \\ \text { \% of Levy } \end{gathered}$ | $\begin{gathered} 1985 \\ \text { \% of Levy } \end{gathered}$ | $\begin{gathered} 1986 \\ \% \text { of Levy } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Single-family Residential | 27.36\% | 28.01\% | 29.97\% | 30.53\% | 31.61\% | 32.19\% |
| B. Multifamily Residential | 4.13 | 4.41 | 4.57 | 4.93 | 5.18 | 5.37 |
| C. Vacant Lots \& Tracts | 3.05 | 3.81 | 4.01 | 4.43 | 4.62 | 5.11 |
| D. Acreage (land only) | 6.59 | 6.44 | 6.16 | 6.09 | 6.20 | 6.05 |
| E. Farm \& Ranch Improvements | 1.03 | 1.47 | 1.47 | 1.36 | 1.44 | 1.53 |
| F. Commercial/Industrial Real | 19.39 | 21.10 | 21.25 | 22.06 | 22.33 | 23.20 |
| G. Oil, Gas \& Minerals | 15.29 | 13.57 | 12.51 | 11.90 | 11.26 | 9.08 |
| H. Vehicles | . 94 | . 42 | . 39 | . 42 | . 12 | . 11 |
| I. Banks | 2.04 | 2.04 | . 98 | . 97 | . 12 | . 1 |
| J. Utilities | 6.44 | 5.67 | 5.96 | 5.62 | 5.57 | 5.79 |
| K. Farm \& Ranch Personal | . 45 | . 11 | -- | - | 5.--- | 5.7--- |
| L. Business Personal | 12.89 | 12.30 | 12.03 | 11.02 | 11.01 | 11.01 |
| M.Other Personal | . 40 | . 65 | . 70 | . 67 | . 66 | . 56 |
| Urban Real Estate (Categories A, B, C \& F) | 53.93 | 57.33 | 59.80 | 61.95 | 63.74 | 65.87 |
| Residential Property (Categories A, B, E \& M) | 32.92 | 34.54 | 36.71 | 37.49 | 38.89 | 39.65 |
| Business Property (Categories F, G, I, J \& L) | 56.05 | 54.68 | 52.73 | 51.57 | 50.17 | 49.08 |

Source: State Property Tax Board.
population stimulated the Texas economy and raised the demand for housing. But perhaps a bigger factor in this increase is the improvement of tax appraisals during this decade.

Prior to the 1979 reforms, residential properties were routinely appraised at a fraction of market value. These properties were also reappraised less frequently than other types of property. As the quality of appraisals improved, the appraised values have come closer to true market value.
Because commercial and industrial properties were appraised at a level closer to market value to begin with, their share of the tax burden has declined relative to other properties.

Another factor in this equation is declining values for industrial, mineral and agricultural properties. The drop in oil and gas values has been especially pronounced, with oil and gas prices falling throughout much of this decade. According to the 1986 market value study, the taxable value of Texas mineral reserves fell $\$ 21.8$ billion, or 26 percent, in 1985. Preliminary figures from the 1987 study indicate that an additional decline of $\$ 14.8$ billion, or nearly 24 percent, occurred in 1986.

The collapse of oil prices and declining reserves mean that these properties shoulder much less of the property tax burden. The percentage of the levy imposed on these properties has decreased by more than one-third, dropping from 15 percent in 1981 to less than 10 percent in 1986. This drop has hurt many districts that traditionally have depended on property taxes from oil and gas properties for a major part of their revenue.

Among other types of property, the SPTB's study showed a decline in the taxable value of industrial real estate and equipment during 1985. This reflects both the decline
in the oil business as well as the economic slump in the state as a whole. Finally, agricultural land has contributed a little more than six percent of school taxes in each year since 1981. According to the SPTB, more than 93 percent of such land qualified for valuation at productive, rather than market value.

## Prior to the 1979 reforms, residential properties were routinely appraised at a fraction of market value.

## Property Tax Burdens in Other States

The Federal Housing Administration (FHA) publishes annual tax and valuation data for FHAinsured houses for states and selected metropolitan areas. This data makes it possible to compare effective tax rates, defined as the rate derived from dividing the market value of the property into the total taxes levied on that property by all taxing units in which it is taxable. Property taxes are therefore expressed as a percentage of market value. This is the best (although not ideal) method for comparing residential tax burdens among the 50 states.
Table 12 presents data from the FHA on average effective tax rates on existing single-family homes by state and by region. Caution must be used in interpreting this data because: (1) effective rates are average rates-they may (and usually do) vary significantly between locations in the same state; and (2) the sample from which these rates were derived does not include new homes because the tax payments listed for them are only estimates. Nevertheless, the FHA data is one of the few
sources upon which interstate comparisons of property tax burdens can be made.

As shown in Table 12, Texas ranked 13th in 1986, with an effective tax rate of 1.44 percent. Among all states, the effective tax rate for this type of residential property was 1.16 percent. This means that on this type of property, local property tax rates in Texas were nearly 25 percent higher than the national average.

The effective rate in Texas grew slightly closer to the national average during the early 1980s. In 1981, a similar comparison showed that the average effective rate on this property in Texas was 1.68 percent. Texas ranked ninth among the states in 1981, with effective property tax rates that were about one-third higher than the national average of 1.26 percent. By 1983, the gap between the national average effective rate and that in Texas was only 0.05 percent. Since 1983, however, the national effective rate has dropped while the rate in Texas has risen.

Property taxes per capita. Another method for comparing property tax burdens is to calculate the amount of property taxes paid on a per capita basis. According to the rankings for 1986, Texas ranked 20th among all the states in property taxes per capita. Among the 12 major industrial states, Texas ranked seventh. ${ }^{31}$ Texas ranked first among the 18 so-called "sunbelt" states. ${ }^{32}$

Since 1984, property taxes per

[^91]TABLE 12. Average Effective Property Tax Rates, Existing Single-Family Homes with FHA Insured Mortgages by State and Region, Selected Years, 1958-86

|  |  |  | Percentage of Full Market Value |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State and Region | Effective Property Tax Rate, 1986 | Rank ${ }^{1}$ | 1985 | 1984 | 1983 | 1982 | 1981 | 1977 | 1971 | 1966 | 1958 |

New England
Connecticut

| Connecticut | $1.46 \%$ |
| :--- | :--- |
| Maine | 1.21 |
| Massachusetts | 1.08 |
| New Hampshire | 1.55 |
| Rhode Island | 1.49 |
| Vermont | n.a. |


| 12 | 1.64\% | 1.68\% | 1.60\% | n.a. | 1.53\% | 2.17\% | 2.38\% | 2.01\% | 1.44\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 1.28 | 1.31 | 1.52 | 1.52 | 1.42 | 1.65 | 2.43 | 2.17 | 1.50 |
| 27 | 1.33 | 1.57 | 1.85 | n.a. | 2.43 | 3.50 | 3.13 | 2.76 | 2.21 |
| 10 | 1.87 | 2.02 | 2.23 | 2.39 | n.a. | n.a. | 3.14 | 2.38 | 1.81 |
| 11 | 2.08 | n.a. | 2.01 | n.a. | n.a. | n.a. | 2.21 | 1.96 | 1.67 |
| n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 2.53 | 2.27 | 1.63 |
| 43 | 0.65 | 0.71 | 0.76 | 0.75 | 0.79 | 0.88 | 1.26 | 1.14 | 0.71 |
| 21 | 1.19 | 1.14 | 1.17 | 1.15 | 1.22 | n.a. | 1.80 | 1.37 | 1.08 |
| 18 | 1.30 | 1.26 | 1.38 | 1.37 | 1.25 | 1.69 | 2.24 | 2.05 | 1.47 |
| 1 | 2.47 | 2.62 | 2.54 | 2.55 | 2.53 | 3.31 | 3.01 | 2.57 | 1.77 |
| 6 | 2.38 | 2.80 | 2.66 | 2.57 | 2.75 | 2.89 | 2.72 | 2.40 | 2.09 |
| 16 | 1.41 | 1.53 | 1.71 | 1.63 | 1.50 | 1.85 | 2.16 | 1.88 | 1.50 |
| 9 | 1.57 | 1.63 | 1.72 | 1.59 | 1.47 | 1.90 | 2.15 | 1.96 | 1.35 |
| 19 | 1.27 | 1.22 | 1.23 | 1.19 | 1.13 | 1.66 | 1.96 | 1.64 | 0.84 |
| 5 | 2.27 | 2.78 | 2.68 | 2.68 | 2.74 | 2.63 | 2.02 | 1.81 | 1.45 |
| 26 | 1.11 | 1.03 | 1.15 | 1.15 | 1.07 | 1.26 | 1.47 | 1.44 | 1.07 |
| 3 | 1.99 | 2.00 | 1.90 | 2.01 | 1.75 | 2.22 | 3.01 | 2.31 | 1.82 |
| 8 | 1.96 | 1.63 | 1.67 | 1.64 | 1.75 | 1.76 | 2.63 | 2.12 | 1.34 |
| 29 | 1.16 | 1.11 | 1.00 | 0.97 | 0.93 | 1.37 | 2.17 | 1.96 | 1.65 |
| 31 | 1.04 | 0.99 | 0.85 | 0.77 | 0.79 | 1.39 | 2.05 | 2.14 | 1.57 |
| 38 | 0.98 | 1.02 | 1.09 | 1.17 | 0.95 | 1.59 | 1.79 | 1.64 | 1.12 |
| 7 | 2.29 | 2.11 | 2.12 | $2: 23$ | 2.31 | 2.48 | 3.15 | 2.67 | 1.90 |
| 15 | 1.26 | 1.25 | 1.26 | 1.10 | 1.01 | 1.26 | 2.08 | 1.81 | 1.54 |
| 2 | 1.96 | 1.63 | 1.75 | 1.77 | 1.69 | 1.79 | 2.71 | 2.64 | 2.01 |
| 49 | 0.37 | 0.41 | 0.42 | 0.41 | 0.38 | 0.74 | 0.85 | 0.66 | 0,56 |
| 25 | 1.29 | 1.35 | 1.29 | 1.42 | 1.42 | 1.49 | 1.14 | 1.09 | 0.86 |
| 39 | 0.81 . | 0.79 | 0.92 | 1.03 | 0.92 | 1.13 | 1.41 | 1.09 | 0.76 |
| 36 | 1.00 | 1.08 | 1.16 | 1.21 | 1.21 | 1.27 | 1.44 | 1.30 | 0.84 |
| 22 | п.a. | 0.95 | 1.02 | 1.11 | 1.14 | 1.25 | 1.27 | 1.03 | 0.93 |
| 50 | 0.22 | 0.16 | 0.14 | 0.15 | 0.28 | 0.61 | 0.56 | 0.43 | 0.52 |
| 42 | 0.81 | 0.77 | 0.82 | 0.76 | 0.86 | 1.10 | 0.96 | 0.93 | 0.66 |
| 33 | n.a. | 1.01 | 0.96 | 0.97 | 1.07 | 1.35 | 1.58 | 1.31 | 0.90 |
| 44 | 0.77 | 0.81 | 0.85 | 0.92 | 0.84 | 0.82 | 0.94 | 0.60 | 0.48 |
| 30 | 1.14 | 0.97 | 1.17 | 1.24 | 1.42 | 1.40 | 1.53 | 1.37 | 0.97 |
| 14 | 1.07 | 1.00 | 1.28 | 1.44 | 1.39 | 1.21 | 1.32 | 1.13 | 0.90 |
| 40 | n.a. | n.a, | 0.68 | n.a. | 0.37 | n.a. | 0.69 | 0.71 | 0.56 |
| 45 | 0.65 | 0.71 | 0.71 | 0.56 | 0.74 | 1.72 | 1.65 | 2.41 | 2.14 |
| 32 | 0.76 | 0.76 | 0.90 | 0.93 | 1.14 | 1.65 | 1.70 | 1.30 | 0.93 |
| 37 | 0.95 | 0.95 | 0.89 | 0.74 | 0.82 | 0.95 | 1.35 | 1.11 | 0.86 |
| 13 | 1.36 | 1.32 | 1.36 | 1.40 | 1.68 | 1.84 | 1.91 | 1.62 | 1.36 |
| 24 | 0.97 | 0.98 | 0.95 | 1.01 | 1.01 | 1.80 | 2.45 | 2.20 | 1.72 |
| 35 | 0.81 | 1.01 | 1.02 | 1.04 | 0.94 | 1.46 | 1.72 | 1.23 | 1.14 |
| 17 | 1.28 | 1.14 | 1.17 | 1.14 | 1.08 | 1.31 | 2.19 | 1.70 | 1.32 |
| 34 | 0.96 | 0.87 | 0.97 | 0.92 | 1.03 | 1.03 | 1.49 | 1.52 | 1.05 |
| 47 | n.a. | n.a. | 0.45 | 0.48 | 0.47 | 0.87 | 1.38 | 1.34 | 1.17 |

TABLE 12. Average Effective Property Tax Rates, Existing Single-Family Homes with FHA Insured Mortgages by State and Region, Selected Years, 1958-86 (Continued)

| State and Region | Effective Property Tax Rate, 1986 | Rank ${ }^{1}$ | Percentage of Full Market Value |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1985 | 1984 | 1983 | 1982 | 1981 | 1977 | 1971 | 1966 | 1958 |
| Far West |  |  |  |  |  |  |  |  |  |  |  |
| California | 1.06\% | 28 | 1.08\% | 1.02\% | 1.05\% | 1.03\% | 1.04\% | 2.21\% | 2.48\% | 2.03\% | 1.50\% |
| Nevada | 0.61 | 46 | 0.60 | 0.63 | 0.68 | 0.77 | 1.13 | 1.71 | 1.48 | 1.47 | 1.06 |
| Oregon | 2.26 | 4 | n.a. | 2.22 | 2.27 | 2.06 | 1.56 | 2.25 | 2.33 | 1.98 | 1.55 |
| Washington | 1.10 | 23 | 1.14 | 1.01 | 1.03 | 1.01 | 0.95 | 1.75 | 1.62 | 1.14 | 0.92 |
| Alaska | 0.82 | 41 | 0.75 | n.a. | n.a. | n.a. | n.a. | n.a. | 1.61 | 1.42 | 1.12 |
| Hawaii | 0.51 | 48 | 0.51 | 0.51 | 0.60 | n.a. | 0.36 | n.a. | 0.92 | 0.81 | 0.62 |
| U.S. Totals | 1.16\% |  | 1.21\% | 1.23\% | 1.16\% | 1.31\% | 1.26\% | 1.67\% | 1.98\% | 1.70\% | 1.34\% |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism 1988 Edition (Washington, D.C., 1987). Computed by ACIR stalf from data contained in U.S. Department of Housing and Urban Development, Housing-FHA, Management Information Systems Division, Single Family Insured Branch, Data for States and Selected Areas on Characteristics of FHA Operations Under Section 203(b), various years.

1. In cases where 1986 data were not available for a particular state, rankings were based on data for the most recent year for which data were available. n.a. = Data not available.
capita in Texas have exceeded the national average. Table 13 presents data on Texas' per capita property tax ranking.

Property taxes as a percent of personal income. Still another method of comparing property tax burdens looks at taxes as a percentage of personal income. Because personal income varies from state to state and region to region, this measure gives a better picture of how large a "bite" this tax takes from taxpayers. Table 14 presents data on property taxes as a percent of personal income in Texas and the nation as a whole.

As shown in Table 14, this measure of property tax burdens also shows an increase in the property tax burden in Texas relative to the rest of the nation. By this measure, Texas ranks first (again) among the sunbelt states and fifth among the 12 industrial states. Using this measure, Texas property taxes have exceeded the national aver-age since 1983. By any measure, then, property taxes in Texas are higher than the
national average and have been increasing at a faster rate in recent years.

## The Property Tax Base After Reform

As discussed in the previous section, the comprehensive property tax reforms enacted in 1979 changed the tax base, at least in theory. Intangible property, with some minor exceptions, was removed from the tax base. While personal property remains taxable, the exemption for household goods (except that used to produce income) has effectively eliminated the property tax on the personal property of most individuals. For all practical purposes, the property tax today is a tax on all real property and business personalty.

While the tax base in theory has been altered, the changes in actual practice have not been great. The 1979 reforms essentially changed the laws to conform to the reality that nearly all intangible property and most personal property held by individuals was not on the tax
rolls. In other words, while property tax reform made significant changes in the administration of the tax, the base itself changed very little in practice.

Property value estimates. Prior to 1975, there were few credible estimates of the size of the property tax base in Texas. In that year, the 64th Legislature enacted a new state school aid plan. The plan based the local district contribution to the statewide public school program (the Foundation School Program) on the amount that could be raised in local taxes at a specified rate if the district levied on the full market value of taxable property. The plan required market value estimates to work, and the governor allocated funds from his budget to develop these estimates.

The Governor's Office of Education Resources published its first market value estimates in 1975. In 1977, the School Tax Assessment Practices Board produced market value estimates. In 1979, the task of developing these biennial estimates was given to the State

Property Tax Board (SPTB). Since 1985, the SPTB has made annual estimates of taxable values for each of the state's school districts. These estimates are used by the Texas Education Agency to allocate state education aid to local districts.

The SPTB property value studies give the state government a standard of taxable value to use in distributing state aid. School district property values must be adjusted to reflect the appraisal ratio in each district. If the school district values were used without
adjustment, it would result in an inequitable distribution of state aid; those districts appraising at a lower level would receive more state aid at the expense of districts that appraise at or near market value. This is because the state aid formula, in general, distributes more state educational aid to those districts with less taxable wealth per student.

Table 15 presents market value estimates by property category for selected years since 1975. Market value estimates are not estimates of taxable property. To arrive at an

TABLE 13. Per Capita State and Local Property Taxes, Selected Years, 1970-86

| Year | Texas | U.S. Average | Texas Rank |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 50 \\ \text { States } \end{gathered}$ | $\begin{gathered} 12 \\ \text { Industrial } \\ \text { States } \end{gathered}$ |  |
| 1970 | \$127.71 | \$167.23 | 31 | 10 | 4 |
| 1976 | 206.30 | 262.01 | 30 | 10 | 4 |
| 1980 | 277.89 | 301.54 | 26 | 8 | 2 |
| 1982 | 341.12 | 353.80 | 21 | 7 | 1 |
| 1983 | 379.26 | 381.39 | 22 | 7 | 1 |
| 1984 | 415.41 | 407.85 | 21 | 7 | 1 |
| 1985 | 465.87 | 434.60 | 21 | 7 | 1 |
| 1986 | 516.66 | 463.38 | 20 | 7 | 1 |

Source: Texas Research League, based on U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987).

TABLE 14. Property Taxes as a Percent of Personal Income, Selected Years, 1970-86

| Year | Texas | U.S. Average | Texas Rank |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 50 \\ \text { States } \end{gathered}$ | 12 Industrial States | $\begin{gathered} 18 \\ \text { Sunbelt } \\ \text { States } \end{gathered}$ |
| 1970 | 3.61\% | 4.24\% | 31 | 10 | 4 |
| 1976 | 3.27 | 3.94 | 28 | 10 | 4 |
| 1980 | 2.83 | 3.04 | 26 | 8 | 2 |
| 1982 | 2.90 | 3.08 | 25 | 9 | 2 |
| 1983 | 3.17 | 3.15 | 21 | 7 | 1 |
| 1984 | 3.25 | 3.11 | 21 | 7 | 1 |
| 1985 | 3.45 | 3.13 | 21 | 7 | 1 |
| 1986 | 3.83 | 3.17 | 15 | 5 | 1 |
| Source: Texas Research League, based on U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987). |  |  |  |  |  |

estimate of taxable values, it is necessary to subtract property tax exemptions and the value lost because of the valuation of agricultural land at productive, rather than market value. In 1987, the SPTB estimated that the value lost to productive valuation was $\$ 89.9$ billion, while the estimated cost of exemptions was $\$ 33.4$ billion.

Recent changes in the tax base. As shown in Table 15, the market value of the school district tax base increased dramatically during the 1970s and early 1980s. This was a time of rapid inflation, especially in real estate values. The rise in the price of energy contributed to the rise of values as well.
For the past two years, the total market value of the school district tax base has decreased. The drop in market values has been led by a sharp fall in the value of oil and gas reserves, as well as by declining property values for industrial property and rural land. According to the 1986 property value study, the taxable wealth of Texas school districts fell by 1.5 percent in 1985. Preliminary figures from the 1987 study show a further drop in taxable values of 1.87 percent took place in 1986.
According to the 1986 property value study, taxable values declined in 604 of the state's 1,062 school districts. Value losses exceeded five percent in 420 districts. The substantial decline in many districts reflects the decline of oil and gas property values. The value of mineral reserves, mainly oil and gas, declined 26 percent between 1985 and 1986. Most of the districts affected by this decline are concentrated in Southeast Texas, the upper Panhandle and in the oil fields of East Texas, South Texas and the Permian Basin.

Uncertainties in the oil and gas markets contributed to an anemic Texas economy during the past two years. Agriculture and manufacturing were weak sectors of the
economy as well; both faced declining prices and smaller markets for their products. Residential real estate, the largest component of the tax base, grew by only three percent from 1985 to 1986. On the other hand, the value of commercial real estate grew by eight percent during this same time period.
In 457 districts taxable values increased. Of these districts, 281 districts had increases of five percent or more; 148 of these were located along the "I-35 corridor" (from Grayson County to south of Bexar County). Among the other districts with significant increases were many located adjacent to the I-35 corridor counties. ${ }^{33}$
Only preliminary figures were available from the 1987 property value study at the time this chapter was prepared. The preliminary estimate of the total market value of the school district tax base for 1987 is $\$ 802.2$ billion. To arrive at a figure for the taxable base, it is necessary to subtract $\$ 89.9$ billion to account for the valuation of agricultural and open-space land at productive values, rather than market values.

Another $\$ 33.4$ billion is subtracted for homestead and other exemptions. The remainder, $\$ 678.9$ billion, represents the taxable value of property statewide. This represents a decline of 1.87 percent from 1986 taxable value estimates of $\$ 691.9$ billion.

## Property Tax Relief Provisions

State law contains a number of important exemptions from the property tax. These exemptions are significant because they lower property taxes for certain classes of taxpayers and on certain types of property. This has not lowered total property tax levies, however. Instead, the taxes that would have been paid on certain favored property have been shifted to other types of property. Alternatively, state aid or other revenue sources have been used to make up for the foregone revenue.
There are a number of partial exemptions to the property tax. The partial exemptions include the following:
(1) state-mandated $\$ 5,000$
homestead exemptions for purposes of school taxation ( $\$ 15,000$ for taxpayers who are disabled or over the age of 65);
(2) an optional homestead exemption of not less than $\$ 5,000$ (not to exceed 20 percent of market value);
(3) a local-option homestead exemption of not less than $\$ 3,000$ of assessed value for the elderly or disabled, or both;
(4) a $\$ 3,000$ homestead exemption for special farm-tomarket and flood control taxes in counties that levy the same;
(5) a freeze on increases of school taxes on homesteads of the elderly; and
(6) an exemption of up to $\$ 3,000$ for disabled veterans or the surviving spouse and minor children of a disabled veteran.
33. State Property Tax Board, Annual Report for Tax Year 1986 (Austin, September 1987), p. 5.

TABLE 15. Market Value Estimates of Property Subject to School District Taxation, Selected Years, 1975-87 (Millions of Dollars)

| Property Category | 1975 GOER ${ }^{1}$ estimate | 1979 SPTB estimate | 1985 SPTB estimate | 1986 SPTB estimate | 1987 SPTB estimate ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. Single-family Residential | \$54,790.88 | \$111,676.85 | \$252,348.60 | \$259,950.40 | \$258,021.93 |
| B. Multifamily Residential | 7,266.77 | 12,297.92 | 35,107.77 | 36,475.92 | 35,020.23 |
| C. Vacant Lots \& Tracts | 7,193.70 | 13,097.58 | 38,094.48 | 39,179.10 | 39,265.86 |
| D. Acreage (market value) | 47,319.80 | 75,752.64 | 140,118.13 | 136,091.96 | 128,102.56 |
| E. Farm \& Ranch Improvements | 3,690.84 | 7,014.28 | 12,830.36 | 13,540.81 | 13,714.44 |
| F. Commercial/Industrial Real | 34,158.83 | 57,013.46 | 152,681.63 | 157,277.87 | 160,391.04 |
| G. Oil, Gas \& Minerals | 31,888.32 | 47,091.84 | 83,913.13 | 62,164.53 | 47,365.02 |
| H. Utilities | 11,294.55 | 21,151.16 | 34,784.86 | 37,304.19 | 39,727.16 |
| I. Commercial/Industrial Personal | 17,878.24 | 33,158.96 | 75,099.10 | 75,734.64 | 74,814.40 |
| J. Other Personal | 13,489.92 | 23,044.84 | 5,767.45 | 6,327.21 | 5,772.07 |
| K. Intangible Personal | 0.00 | 0.00 | 0.06 | 0.01 | 0.00 |
| Total Market Value | \$228,971.85 | \$401,299.53 | \$830,745.57 | \$824,046.64 | \$802,194.71 |
| Source: State Property Tax Board. <br> 1. Governor's Office of Education Resources. <br> 2. Preliminary figures. |  |  |  |  |  |
|  |  |  |  |  |  |

Three other tax relief provisions provide for the special treatment of certain property. These are:
(1) local option exemption of all nonbusiness automobiles;
(2) productivity valuation of open-space land devoted to ranch, farm or timber production purposes; and
(3) tax abatement for property located in a reinvestment zone as authorized by cities.

The remaining exemptions are total or absolute exemptions. These include:
(1) all household goods and personal effects not used to produce income;
(2) farm products in the hands of the producer and family supplies for home and farm use;
(3) public property owned by a political subdivision of the state;
(4) church-owned property which is used as either an actual place of worship or used exclusively as a minister's residence;
(5) places of burial not held for profits
(6) all real and personal property owned by persons and used exclusively for school purposes;
(7) property used exclusively and owned by associations engaged in the promotion of the trifold purposes of physical, religious and educational development of young men and women operating under a state or national organization of like character;
(8) institutions of a purely public charity;
(9) historical, cultural or natural resources which have been so designated by any political subdivision; and
(10) solar- and wind-powered devices.

Based upon the preliminary findings of the 1987 Property Value Study, exemptions shelter at least $\$ 123$ billion of property. This estimate is only for the value lost to partial exemptions; no estimates are produced for the value of property which is totally exempt.

TABLE 16. Revenue Loss by School Districts From Property Tax Exemptions (Millions of Dollars)

| Exemption | $1985-86$ | $1986-87$ |
| :--- | ---: | ---: |
| State-Mandated $\$ 5,000$ and $\$ 10,000$ |  |  |
| Homestead Exemptions | $\$ 161.3$ | $\$ 173.4$ |
| Less: Levy for Debt Service | -0.5 | -0.4 |
| Optional Percentage Homestead | 111.7 | 118.4 |
| Exemption | 18.4 | 21.4 |
| Local Option Exemption for Elderly | 69.6 | 85.6 |
| Tax Freeze for Over Age 65 | 2.0 | 1.9 |
| Disabled and Deceased | 562.2 | 664.5 |
| $\quad$ Veterans Exemption | -12.9 | -4.5 |
| Reduction for Productivity | 2.9 | 4.1 |
| Valuation of Open-Space Land | $\$ 914.7$ | $\$ 1,064.4$ |
| Less: Rollback Tax Collected |  |  |
| Other |  |  |
| Total |  |  |

Source: Texas Research League.

The revenue loss to school districts alone exceeded $\$ 1$ billion in 1986.

Table 16 presents estimates of the revenue loss to school districts from property tax exemptions in 1985-86 and 1986-87. By far the largest revenue loss, $\$ 664$ million, was attributable to the productivity valuation of open-space land. The second largest was the statemandated homestead exemptions which reduced revenue by $\$ 173$ million.

The loss of revenue from the productive valuation of openspace land has grown dramatically during the 1980s. In 1979-80, the loss was $\$ 33.7$ million; in 198182 , it was $\$ 127$ million; and by 1986-87, the total, $\$ 664.5$ million, representing an increase of more than 1,871 percent over the 197980 level. The property tax levy on acreage land represented more than ten percent of the school tax levy in 1976; by 1986, it amounted to slightly more than six percent. This represents a significant shift in the property tax burden away from acreage land to other categories of property.
Productivity valuation of agricultural or open-space land. The shift to the valuation of agricultural and open-space land at productive rather than market value has come to represent the largest property tax relief mechanism. This exemption was created to provide property tax relief to farmers and ranchers. Prior to the institution of this program, agricultural land (with some minor exceptions) was supposed to be valued like all other propertythat is, it was to be listed at market value, defined as the amount the land could be sold for at its "highest and best use."
Among tax experts, there has been considerable debate concerning the proper method for valuing agricultural land. Essentially, the debate is between those who
would value agricultural land on the basis of its income-producing capability and those who would value the land on the basis of actual sales of comparable land.

The income-producing approach to valuation consists of deducting management expense from gross income to obtain net income and then dividing this by a capitalization rate. For farmland, gross income is based on the average per-acre yield of efficiently managed land and the average price paid for the farm crops best suited for that land. Ranchland is valued using the same technique, except that the crop is the number and type of animals that can be supported per acre. For forest land, the technique is the same except that average annual growth is expressed in terms of a common unit of measure, such as a standard cord.

The alternative to productive valuation is valuation based on comparable sales. Historically, tax theorists have tended to support this method of valuation, to the dismay of agriculturalists. Part of the reason for taking this position is a fear that under productive valuation land speculators will get an unwarranted tax break. Recognizing this, the Texas Property Tax Code requires that assessors record both the market and productivity valuations for this type of land. If the land is sold or diverted to a nonagricultural use, the total amount of taxes deferred over the preceding three years plus interest at the delinquent tax rate become due. These amounts must be included as back taxes on the next tax bill.

## Appraisal District Operations

As discussed earlier, the overhaul of the state's property tax laws in 1979 produced a system of centralized tax appraisal. An
appraisal district was created in each county, with the district responsible for appraising the value of all property subject to taxation in the county. ${ }^{34}$ The operations of these appraisal districts are paid for by the taxing jurisdictions within the county. These taxing units then use the appraised values determined by the district for assessment of the property tax.

District boundaries. Appraisal district boundaries generally follow those of the county. If a school district, an incorporated city or town, water district or junior college district overlaps two or more counties, it may choose to have all of its taxable property appraised by only one district. In this case, the boundaries of the appraisal district chosen would extend outside the county to the extent of that taxing jurisdiction's boundaries. Otherwise, the taxing unit would participate in each appraisal district in which it has taxable property. The multicounty taxing units were required to make this choice by October 3, 1981. The choice was binding and cannot be repealed or modified while the unit's boundaries extend into the county in which the appraisal district it joins is located.

Appraisal district elections. Each appraisal district is governed by a board of five directors, elected under a system of cumulative voting. The governing boards of school districts and incorporated cities and towns in the district cast votes for candidates for the board. Although they participate in the appraisal district in all other respects, the other taxing units (e.g., water districts, junior college districts, etc.) are not entitled to vote in selecting directors.

In the election, the governing body may cast its total number of votes for one candidate or distribute it among candidates for any number of directorships. The number of votes a taxing unit gets
is determined by dividing the amount of property taxes imposed by that unit (tax levy, not tax collections) for the preceding year by the total amount of property taxes imposed that year by all voting tax entities. This quotient is multiplied by 1,000 and rounded to the nearest whole number. This product is then multiplied by five since five directorships are to be filled.
Financing appraisal districts. The appraisal district's operations are financed by the taxing units participating in the district. Each unit's portion of the total cost is determined by the proportion its total property tax levy bears to the total amount of property taxes imposed in the district by all participating units. Each unit pays its allocation quarterly in four equal payments, unless its governing body and the chief appraiser agree to a different method.
Annual property tax cycle. The property tax system runs on an annual cycle which consists of three separate functions: appraisal, assessment and collection. The job of the appraisal district is to discover and list all taxable property, appraise the property as required by law, process taxpayer applications for exemptions and special-use valuation and submit the appraised values and exemptions to an appraisal review board. The appraisal review boards resolve disagreements among the appraisal district and the taxing jurisdictions and taxpayers over the appraised values.
Taxpayer appeals. Taxpayers who disagree with the appraised value assigned to their property may appeal to the appraisal review board in that county. Further appeal lies with the district court. The district court by

[^92]TABLE 17. Comparison of Statewide Results of Property Value Studies and Appraisal Accuracy of Appraisal Districts, 1985 and 1986

| Property Category | Median Level |  | Coefficient of Dispersion |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1985 | 1986 | 1985 | 1986 |
| A. Single-family Residence | . 90 | . 94 | 14.14 | 11.60 |
| B. Multifamily Residence | . 90 | . 94 | 13.93 | 12.26 |
| C. Vacant Lots | . 85 | . 90 | 23.89 | 19.71 |
| D. Acreage (market) | . 83 | . 90 | 23.71 | 18.29 |
| E. Farm/Ranch Improvements | . 86 | . 90 | 15.45 | 13.26 |
| F1. Commercial Real | . 87 | . 90 | 18.59 | 17.09 |
| F2. Industrial Real | 1.00 | 1.00 | 4.13 | 3.16 |
| G. Oil, Gas \& Minerals | 1.04 | 1.09 | 22.68 | 25.54 |
| J. Utilities | 1.00 | . 97 | 26.97 | 23.45 |
| L1. Commercial Personal | . 87 | . 91 | 19.88 | 16.79 |
| L2. Industrial Personal | 1.00 | 1.00 | 3.11 | 3.54 |
| M. Other Personal | . 95 | . 94 | 15.37 | 12.65 |
| Overall | . 90 | . 93 | 18.49 | 15.50 |

Source: State Property Tax Board.

TABLE 18. School District Distribution by Ratio of Appraised Values to Market Value by Type of Property, 1986

| Ratio | Average Ratio | Single Family | Multifamily | Vacant Lots | Agricultural Improvements | Real |  | Oill, Gas \& Minerals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Commercial | Industrial |  |
| Under 10\% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-19.9\% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20-29.9\% | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 |
| 30-39.9\% | 0 | 0 | 0 | 17 | 3 | 5 | 0 | 0 |
| 40-49.9\% | 0 | 10 | 5 | 19 | 5 | 11 | 1 | 0 |
| 50-59.9\% | 0 | 8 | 6 | 42 | 17 | 21 | 7 | 0 |
| 60-69.9\% | 11 | 25 | 14 | 64 | 33 | 61 | 35 | 1 |
| 70-79.9\% | 40 | 102 | 47 | 153 | 117 | 163 | 59 | 1 |
| 80-89.9\% | 215 | 303 | 180 | 284 | 316 | 317 | 142 | 17 |
| 90-99.9\% | 547 | 520 | 363 | 373 | 455 | 367 | 346 | 127 |
| $100 \%$ and over | 249 | 87 | 153 | 97 | 107 | 112 | 270 | 780 |
| Total | 1,062 | 1,055 | 768 | 1,053 | 1,053 | 1,058 | 860 | 926 |

Source: State Property Tax Board.
Note: Count by type of property excludes districts without any property of that type.
statute may not grant relief unless the value of the property varies at least ten percent from the median average ratio for other taxable properties in the jurisdiction.

After the chief appraiser has certified the list of appraised values, they are submitted to the taxing units in the county. The assessment of property taxes takes place as each taxing unit adopts a tax rate and calculates the tax liability of each property owner. Finally, the collection of the property tax due completes the cycle.

Appraisal accuracy. The Texas Constitution requires that appraisals be at market value (with exceptions for certain agricultural land), equal and uniform. However, while it is unlawful to levy taxes on an assessed value that is a fraction of the appraised value,
there remains a difference between appraised values and market values. This is because there is always some variation in the accuracy of appraisals. In addition, buyers and sellers make "good" and "bad" deals; in theory these average out, but in practice they may affect the accuracy of appraisals.

Table 17 presents a comparison of appraisal district accuracy based on the results of the SPTB's property value studies. According to the 1986 property value study, appraisal levels in 117 of the state's 253 appraisal districts were equal to or better than the statewide level of 93 percent. On the other hand, in 24 districts appraisal levels were below 80 percent of market value, and in one district the level was only 56 percent. Overall, the average variation for

| Utility | Personal Property |  |  | Land Ratio |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commerclal | Industrial | Other | Market | Combin. |
| 0 | 0 | 0 | 13 | 0 | 0 |
| 0 | 0 | 0 | 43 | 0 | 0 |
| 0 | 3 | 1 | 83 | 1 | $1{ }^{-}$ |
| 0 | 6 | 0 | 155 | 11 | 1 |
| 1 | 17 | 9 | 175 | 7 | 8 |
| 4 | 30 | 17 | 207 | 33 | 14 |
| 7 | 55 | 14 | 147 | 77 | 25 |
| 22 | 131 | 52 | 106 | 147 | 77 |
| 156 | 281 | 108 | 48 | 254 | 160 |
| 570 | 440 | 326 | 25 | 390 | 279 |
| 302 | 97 | 348 | 52 | 140 | 496 |
| 1,062 | 1,060 | 875 | 1,054 | 1,060 | 1,061 |

an individual appraisal was 15.5 percent, meaning that an average property was appraised at a level which was 15.5 percent above or below the median level.
In addition to being closer to market values, the appraisals were more uniform on average. In 1985, the study indicated an average variation of 18.5 percent from the median level of appraisal, in 1986 the average statewide variation was only 15.5 percent. On an individual basis, however, appraisals in nearly two-thirds of the appraisal districts were less uniform than in the state as a whole. ${ }^{35}$ Table 18 presents the distribution of Texas school districts by ratio of 1986 appraised values to market value by type of property.

As shown in the table, local tax appraisals were less than 70 percent of true market value in 11 school district areas in 1986. At the other extreme tax appraisals on the average were 100 percent or more of market value in 249 school district areas. The lowest ratio was 60.8 percent in the Schertz-Cibolo ISD in Guadalupe County, while the highest ratio was 192.6 percent in the Santa Gertrudis ISD in Kleberg County. Of course, the average can mask wide variations among the different types of property. In McMullen ISD, single-family houses were appraised at an average of 67 percent of market value, open-space land at 41 percent, minerals at an average of 92 percent, industrial property at 100 percent, commercial realty at 66 percent and commercial personal property at 50 percent. ${ }^{36}$

Overall, appraisals of most types of properties improved between 1985 and 1986, according to

[^93]the property value study. For example, a typical single-family residence was appraised at 94 percent of its market value in 1986 compared to a 1985 median level of 90 percent. The average variation also dropped indicating that appraisals were more uniform as well.
Reappraisals. The Property Tax Code requires appraisal districts to reappraise their counties at least once every four years. The SPTB's survey of appraisal districts in 1986 showed that 104 districts conducted reappraisals in 1986. This was the largest number since 1981, when a record 118 reappraisals took place.
According to the SPTB's survey, 80 districts indicated that they planned to conduct their next reappraisal within three years or less, including 29 that planned reappraisals in both 1986 and 1987. The sharp decline in real estate values prompted districts to conduct more frequent appraisals.

## Assessment and Collection

The assessment phase of the property tax cycle occurs when a taxing unit adopts a tax rate and prepares tax bills for property owners. The appraisal district sends the taxing unit an appraisal roll listing the taxable values of the properties within the taxing unit's boundaries. These property values are used by the assessor to calculate an "effective tax rate," which must be published in the local newspapers.
The effective tax rate is the rate that, when applied to the previous year's tax roll, generates approximately the same amount of revenue for operations as the previous year's tax rate generated. It must also raise enough revenue to pay certain debts. Since it is based

[^94]on the previous year $s$ tax roll, the effective rate will vary from the previous year's rate depending on what has happened to the taxable values in that jurisdiction.
If property values have risen, then the effective rate will be less than the previous year's rate because a lower rate will generate the same amount of revenue. The purpose for calculating this rate is to prevent value increases from automatically causing tax increases. If a taxing unit adopts a tax rate that is more than three percent higher than the effective rate, it must publish notices of the increase and hold public hearings on the proposed rate before formally adopting it. Once the tax rate is formally adopted, the taxing unit's assessor applies the tax rate to the taxable value of each property. A tax bill is produced and mailed to each property owner.

Assessment services by appraisal districts. Many taxing units contract with outside agencies for some or all of their assessment function. Often this same agency will collect the tax as well. In 1986, the SPTB found that 39 percent of the state's taxing units contracted with their county appraisal district for at least part of their assessment function. This represents an increase from previous years. In 1982, 818 taxing units received some of their assessment services from the appraisal district; by 1986, the number doing so had increased to 1,290 . In addition to the appraisal district, counties, cities, school districts and a few private firms provide assessment services to taxing units.
Rollback elections. As described in the previous section, if a taxing unit adopts an effective tax rate that is eight percent or more above the previous year's rate, voters may petition to hold a rollback election to limit the rate
increase to eight percent. In 1986, voters in ten taxing units were successful in petitioning for a rollback election. The tax increases in these taxing units ranged from a low of 19.9 percent to a high of 102.3 percent. In six of the ten elections, voters won rollbacks. Perhaps surprisingly, in the two taxing units which had rate increases of 100 percent or higher, both rollback attempts failed. Table 19 shows the success rate for rollback elections since 1982.
Tax rate limits. Texas law, including the constitution, places limits on property tax rates. However, these rate limits are not very effective in limiting property taxes. Tax rate limits applicable to local governments are shown in Table 20.

Because local governments overlap each other, so do the tax rate limits. This reduces their impact, especially since fractional assessing was banned in 1981.
Of the 50 largest school districts in Texas, the highest nominal tax rate in 1987 was in the Klein ISD, with a rate of $\$ 1.23$ per $\$ 100$ valuation. Only eight other districts in this group had rates in excess of one dollar. Since the maximum rate is $\$ 1.50$, it is safe to assume that these rate limitations have little effect on the tax rates of school districts.
To cite another example, a resident of Dallas who lives in the Dallas ISD paid a school tax in 1987 at the rate of $\$ 0.49$, a city tax at $\$ 0.38$, a junior college tax at $\$ 0.03$, a hospital tax at $\$ 0.10$ and a county tax at the rate of $\$ 0.10 .{ }^{37}$ All of these tax rates fall so far short of the maximum rates that even if they were doubled, it would remain well within the tax rate limits.

Tax collections. The final step in the property tax cycle is the collection of the tax. Like assessment, tax collections are not part of a centralized system; each
taxing unit may operate its own tax collection office. However, the trend has been for greater consolidation of the collection process in recent years. In 1986, three out of five taxing units had their taxes collected by a consolidated collections office.

At present, more units receive collection services from central appraisal districts than from any other type of collection agency. In 1986, 122 appraisal districts collected taxes for 732 taxing units, and 36 of these districts collected for all their units. Counties were the next largest group performing collections services for other taxing units; 134 counties collected for 720 units. In all, three-fourths of the taxing units receiving collection services received them from either an appraisal district or from the county. Other collection services were provided by 47 school districts, 22 cities, one special district and nine private firms in Harris County.

The reason for consolidating collections is usually to save money. With many taxing units operating in the same area, it is expensive for every unit to maintain its own collections office. Central appraisal districts can usually perform this service at a much lower cost if the taxing units contract for this service. The districts have the advantage of having tax records on every property in the county.

Economy of consolidated collections. The SPTB collects information on collection costs which demonstrates the economy of consolidated collections. The average cost per taxing unit for collection services from an appraisal district has dropped by seven percent between 1982 and 1986. If weighted average cost per unit is calculated (giving more weight to more typically sized collection budgets), the cost
per unit for collection services has dropped by 25 percent since 1982.

Voters may petition for an election to force consolidated tax collection in a county area. However, as of 1986, only one appraisal district was providing collection services as the result of such an election. Given the potential savings from consolidating collections, there is a strong argument for mandating consolidated collections through state law.

## Some Remaining Property Tax Issues

Although the reforms in the late 1970s dramatically improved property tax administration in Texas, there are several important issues which have not been wholly resolved. These include the property tax and its role in public school finance, the taxation of business personal property, the scope and extent of property tax relief and the further development of the tax appeals process.

Public school finance. The rela-

TABLE 19. Property Tax Rollback Elections, 1982-86

| Type of Unit | Successful Rollback Elections |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1982 | 1983 | 1984 | 1985 | 1986 |
| School Districts | 11 of 24 | 2 of 4 | 0 of 3 | 1 of 1 | 2 of 4 |
| Counties | 6 of 6 | 4 of 4 | 1 of 1 | 4 of 4 | 1 of 1 |
| Cities | 2 of 3 | 0 of 1 | 4 of 4 | 3 of 5 | 2 of 3 |
| Special Districts | 2 of 2 | 0 | 0 of 1 | 0 | 1 of 2 |
| Totals | 21 of 35 | 6 of 9 | 5 of 9 | 8 of 10 | 6 of 10 |

Source: State Property Tax Board.

TABLE 20. Tax Rate Limits Applicable to Local Governments

| Jurisdiction | Limit per <br> V100 Valuation |
| :--- | :---: |
| Cities |  |
| Home Rule | $\$ 2.50$ |
| General Law | 1.50 |
| Counties | .80 |
| General Levy | .15 |
| Special Road Levy | .30 |
| Optional Road/Flood Control | 1.50 |
| School Districts | .751 |
| Special Districts | .75 |
| Hospital (Generally) | .03 |
| Airport Authorities | 1.00 |
| Rural Fire Prevention | ---2 |
| Junior Colleges |  |
| Other |  |

Source: State Property Tax Board.

1. Lower for some districts.
2. Various as set by specific statute.
tionship between the property tax system and public school finance is a complex issue and is one which is not explored in depth in this chapter. However, the issue is of great importance, and the resolution of certain public school finance issues may have a minor impact on the Texas property tax system. Therefore, a brief discussion of some of these issues is in order.
As previously noted, the property tax provides almost half of the revenues which support Texas public schools. The state provides aid through the Foundation School Program, and this aid is supplemented by property tax revenues in each school district. Because some districts have more taxable wealth than others, they are able to provide greater local support to public schools than districts that are less affluent.
In some cases, the variation in taxable wealth between districts is great, and Texas, like other states, has sought to reduce this variation through school finance formulas for state aid which are designed to give more aid to poor school districts than to those which are more affluent. However, in many cases, wealthy districts have increased their local share in support of schools, and the differences in expenditures per student remain large.
The Rodriguez Case. In 1972, a suit was filed in the U.S. District Court challenging the constitutionality of the Texas public school finance system. The plaintiffs, parents whose children attended elementary and secondary school in the Edgewood Independent
3. San Antonio Independent School District, et al. v. Rodriguez, et al. (No. 711332, Argued October 12, 1972-Decided March 21, 1973).
4. Edgewood Independent School District, et al. v. William N. Kirby, et al. (No. 362,516, 250th Judicial District).

School District in San Antonio, argued that the Texas system's reliance on local property taxation favors the more affluent and violates equal protection requirements because of substantial interdistrict disparities in per-pupil expenditures. These differences result largely from differences in the value of assessable property among the districts.
The district court, sitting as a three judge panel, found for the plaintiffs, holding that wealth is a "suspect" classification and that education is a "fundamental" right. The court held that the system could be upheld only upon a showing that there was a compelling state interest for the system, which the appellants failed to make. The court also found that the appellants failed even to demonstrate a reasonable or rational basis for the system. The case was appealed directly to the U.S. Supreme Court.

Upon appeal, the U.S. Supreme Court overturned the lower court's findings. The court held that:
(1) The Texas system did not discriminate against any suspect class. It was not shown to discriminate against any definable class of "poor" people or to occasion discrimination depending on the relative wealth of the families in any district. Insofar as the financing system disadvantaged those who, disregarding their individual income characteristics, resided in comparatively poor districts, the resulting class could not be said to be suspect.
(2) The system did not "impermissibly interfere" with the exercise of a fundamental right or liberty. Although education is one of the most important services provided by the state, it is not within the limited category of rights recognized by the court as guaranteed by the Constitution.
(3) The case was an inappropriate one in which to invoke strict scrutiny, since it involved the most delicate and difficult questions of local taxation, fiscal planning, educational policy and federalism.
(4) The Texas system did not violate the equal protection clause of the fourteenth amendment. Although imperfect, the system bore a rational relationship to a legitimate state purpose: that of assuring basic education for every child while permitting and encouraging local control of schools. ${ }^{38}$

The Edgewood v. Kirby Case. Unsuccessful in their attempt to have the federal courts declare the Texas school finance system unconstitutional, a number of poor school districts filed suit in state district court seeking to have the system declared unconstitutional under the provisions of the Texas Constitution. On June 1, 1987, a state district judge found the system of state and local financing of public schools to be in violation of the Texas Constitution.
In the court's judgment the school finance system is:
> ... UNCONSTITUTIONAL AND UNENFORCEABLE IN LAW because it fails to insure that each district in this state has the same ability as every other district to obtain, by state legislative appropriation or by local taxation, or both, funds for educational expenditures, including facilities and equipment, such that each student, ... would have the same opportunity to education funds as every other student in the state, limited only by discretion given local districts to set tax rates. . . ${ }^{39}$

This latest challenge to the constitutionality of the Texas school finance system is being appealed. At the same time, a

Select Committee on Education, appointed by the Governor, Lieutenant Governor and the Speaker of the House of Representatives, is considering a number of proposals for legislative action should the state lose the case on appeal. A number of the suggested alternatives would have a great impact on property tax administration. Among these are:
(1) Consolidating school districts, perhaps on a countywide basis. This would certainly generate significant opposition because it would be seen as weakening local control of schools.
(2) Creating regional taxing authorities. These authorities would levy a tax within the region and distribute the revenues to the school districts. This alternative would probably be opposed for the same reason as the first, although a provision allowing a small local tax for enrichment purposes could be included. (See Chapter 23.)
(3) Reinstating the state property tax and using the revenues for school finance equalization. This would require a constitutional amendment since the constitution prohibits the levy of state property taxes upon any property within the state.
(4) Separate high-value properties, such as mineral reserves and major utility and/or industrial plants, from the tax base of local school districts and make the state responsible for the taxation of these prop-erties. This would substantially reduce existing wealth disparities because of the uneven distribution of these properties statewide. Like the previous alternative, a constitutional amendment would be needed to implement such a system.

As can be seen from the above
list, which is certainly not exhaustive, the resolution of the public school finance issue may or may not have a profound effect on the property tax system in Texas.

## Texas is in the minority in its treatment of business personal property.

The treatment of tangible business personalty. Another recurring issue with regard to the property tax is the treatment of the tangible personal property of business. Among tax "experts," there are few defenders of the continued taxation of this type of property. According to one group of experts: "Not only is the tax difficult to administer because much of its base is mobile, but it bears no identifiable relationship to either the taxpaying ability of a business or to the benefit the business receives from governmental services." ${ }^{10}$

Table 21 summarizes the treatment of business personal property in the states.
The taxation of business inventories creates a number of problems. Inventories are moveable and can be controlled so as to minimize the tax bill. Recognizing this fact, as of 1987, 35 states and the District of Columbia had exempted all inventories. ${ }^{41}$ At least 15 of these exemptions became effective during the 1980s. In addition, four states allow local governments the option of exempting inventories. For example, in Georgia, at least 60 cities or counties exempt inventories. Still other states exempt a portion of all inventories.
Fourteen states had legal provisions for partial exemptions either as to specified types or specified value levels of commercial-indus-
trial personal property. An example is Rhode Island, where certain types of manufacturing machinery and equipment are exempt along with manufacturer's inventories.

Eleven states completely exempt the personal property of commer-cial-industrial businesses. A few of these states tax specialized types of personal property, particularly that belonging to certain kinds of public utilities, but those taxes affect relatively few businesses. In addition to these ten states, two others grant local governments the option of exempting personal property. Texas is in the minority in its treatment of business personal property. Numerous proposals have been offered to exempt at least some business personalty, namely business inventories and goods in transit, but none have been successful. A constitutional amendment which would have allowed a "freeport" exemption for goods in transit was defeated by the voters in November 1987.
Providing property tax relief. Because the property tax places a heavy burden on taxpayers without regard to the ability to pay, most states have provided tax relief to certain classes of taxpayers. States use a variety of programs for property tax relief. Some cover all taxpayers while others are targeted at the poor or near-poor. Many single out senior citizens for extra benefits, but most states also have programs which do not have age restrictions. Property tax relief programs can be divided into four categories: circuit breakers, renter credits
40. Texas Research League, The Texas Property Tax: Background for Revision, p. 19.
41. Steven D. Gold, "How the Taxation of Business Property Varies Among the States," Assessment Digest (January/ February 1987), p. 17.

| TABLE 21. Taxation of Business Personal Property, 1988 |  |  |  |
| :---: | :---: | :---: | :---: |
| State | Personality Not Taxed | Inventorles | Other Business Personalty |
| Alabama |  | Exempt | Taxable* |
| Alaska |  | Local Option | Local Option |
| Arizona |  | Exempt | Taxable* |
| Arkansas |  | Taxable | Taxable |
| California |  | Exempt | Taxable* |
| Colorado |  | Exempt | Taxable* |
| Connecticut |  | Exempt | Taxable* |
| Delaware | Not Taxed |  |  |
| Florida |  | Exempt | Taxable |
| Georgia |  | Local Option | Taxable |
| Hawaii | Not Taxed |  |  |
| Idaho |  | Exempt | Taxable* |
| Illinois | Not Taxed |  |  |
| Indiana |  | Taxable | Taxable |
| lowa | Not Taxed |  |  |
| Kansas |  | Taxable | Taxable |
| Kentucky |  | Taxable | Taxable |
| Louisiana |  | Taxable | Taxable |
| Maine |  | Exempt | Taxable |
| Maryland |  | Local Option | Local Option |
| Massachussetts |  | Exempt | Taxable* |
| Michigan |  | Exempt | Taxable |
| Minnesota | Not Taxed |  |  |
| Mississippi |  | Taxable* | Taxable |
| Missouri |  | Exempt | Taxable |
| Montana |  | Exempt | Taxable |
| Nebraska |  | Exempt | Taxable |
| Nevada |  | Exempt | Taxable |
| New Hampshire | Not Taxed |  |  |
| New Jersey | Not Taxed |  |  |
| New Mexico |  | Exempt | Taxable* |
| New York | Not Taxed |  |  |
| North Carolina |  | Exempt | Taxable |
| North Dakota | Not Taxed |  |  |
| Ohio |  | Taxable | Taxable |
| Oklahoma |  | Taxable | Taxable |
| Oregon |  | Exempt | Taxable* |
| Pennsylvania | Not Taxed |  |  |
| Rhode Island |  | Taxable* | Taxable* |
| South Carolina |  | Exempt | Taxable |
| South Dakota | Not Taxed |  |  |
| Tennessee |  | Exempt | Taxable* |
| Texas |  | Texable | Taxable |
| Utah |  | Exempt | Taxable* |
| Vermont |  | Local Option | Taxable* |
| Virginia |  | Exempt | Taxable |
| Washington |  | Exempt | Taxable |
| West Virginia |  | Taxable | Taxable |
| Wisconsin |  | Exempt | Taxable* |
| Wyoming |  | Exempt | Taxable |
| Totals | 11 Not Taxed | 35 Exempt <br> 11 Taxable <br> 4 Local Option | 11 Exempt 23 Taxable 2 Local Option 14 Some Exemptions or Partially Exempt |

[^95][^96]and deductions, homestead programs and deferral programs. In Texas, only the latter two are used.

Circuitbreakers. A circuitbreaker is a state-financed property tax credit for which benefits are phased out as income increases. Its name is derived from an analogy with an electric circuit breaker, which shuts off the flow of electricity when a system is overloaded. Likewise, when the ratio of property tax to income is too high, the circuitbreaker provides relief. The circuitbreaker has an advantage over some other types of property tax relief in that it targets benefits at those who need relief the most.

The income used to compute the circuitbreaker is broader than that used for income taxes. For example, transfer payments, such as social security and welfare payments, are usually included in the computation of the circuitbreaker, although they are not subject to income taxation. A proposal has been made to add a percentage of the value of a household's home to its income to reflect the benefit it receives from home ownership. ${ }^{42}$

Circuitbreakers are used by 30 states and the District of Columbia. Nine of the programs are open to all age groups, but most are for senior citizens. Twenty-five programs cover renters as well as homeowners, with a certain proportion of rent being treated as a property tax payment.

Most circuitbreakers limit eligibility to households with relatively low income. Even where there is no income ceiling, the benefits tend to go to people with low incomes. This is because the formulas used to compute the circuit breaker favor those with low incomes and the ratio of prop-

[^97]erty tax payments to income tends to decrease as income rises. ${ }^{43}$

Circuitbreakers can be divided into several categories: eight states have programs that cover all ages, homeowners and renters; one covers all ages, homeowners, and only elderly renters; 16 cover only elderly homeowners and renters; and six cover only elderly homeowners. Some programs are part of a general tax relief program and are expensive; the Michigan program cost the state $\$ 602.8$ million in 1984 at a per capita cost of more than $\$ 65$ (the average benefit was $\$ 397$ ). Others provide tax relief at a relatively modest cost to the state. In fact, in 1984, most of the programs cost less than five dollars per capita.

Nearly all circuitbreaker programs are tied to a state's property or income tax system. In 14 states (including the District of Columbia), it is part of the income tax, while in 17 states, it is part of the property tax system. Where it is part of an income tax system it is nearly always refundable if its value exceeds income tax liability. This is important for providing relief to the poor; without refundability of credits property tax relief is limited to income tax liability, even though property tax payments may far exceed income tax payments.

Without an income tax, a circuitbreaker is difficult to administer. Three states without an income tax-Connecticut, South Dakota and Wyoming-have property tax circuitbreakers, sales tax credits for low income households or both. All are limited to seniors and perhaps also the disabled. ${ }^{44}$ Applications are taken by local officials using forms provided by the state tax departments. The state processes and audits the applications. Applicants must submit copies of their federal income tax return (if any), proof of amount of social security received
and other available documentation of income.
Homestead Exemptions. The various homestead exemptions in Texas have been discussed earlier.

> Homestead programs without income ceilings (as in Texas) do not target benefits to low-income households.

All taxpayers receive at least a $\$ 5,000$ homestead exemption for school tax purposes. There are also additional local option homestead exemptions. Finally, there are homestead exemptions for certain classes of taxpayers: the elderly, the disabled and the surviving spouse or dependent children of the disabled.

Homestead exemptions and credits are different from circuitbreakers in that they generally exclude renters and there is no formula making benefits depend on the income level of the recipient. These programs may be either state-financed or locally financed. Those that are state-financed provide reimbursement to local governments for property tax revenue lost as a result of the program.

In 1985, 37 states and the District of Columbia had at least one homestead program. Eleven treated all age groups equally, 13 gave senior citizens extra benefits and 13 were restricted to senior citizens. Numerous states also have special homestead exemptions or credits for veterans. Sixteen states had income eligibility restrictions. This group includes seven states that also have a program for all homeowners regardless of income. Most of those with income restrictions tended to be for senior citizens and were locally funded.

Only four states provided state funding for a homestead program at least partially targeted at lowincome persons. ${ }^{45}$
Homestead programs without income ceilings (as in Texas) do not target benefits to low-income households. They fail to include renters, who account for a large proportion of the poor. As a result, property tax relief from homestead programs frequently goes to taxpayers who are not in need of such relief, while many poor people, who pay property taxes in the form of rents, are excluded from the program's benefits.
Renter Credits and Deductions. Nine states have programs for credits or deductions for renters in addition to circuitbreaker programs. Only two states, Hawaii and Oregon, have an income limit for their renter programs. However, these programs tend to favor those with low incomes because they are less able to afford the cost of a home purchase. Most of the programs are for a flat tax credit or deduction from income taxes regardless of the amount of rent paid. Some place a maximum on the deduction or credit that may be claimed. Like the circuitbreaker, renter credits and deductions are usually part of an income tax system.

Renter deductions appear to be less valuable for the poor than credits. This is because a deduction can be claimed only when the renter has an income tax liability. A study of the Massachussetts renter deduction program found that only one-third of all tenants received the deduction. Poor

[^98]persons living in tax-exempt households received no benefit. No one with income under $\$ 5,000$ benefited, and only 15 percent of tenants with income between $\$ 10,000$ and $\$ 15,000$ received any benefit. By contrast, more than 95 percent of tenants with income over $\$ 25,000$ took advantage of the renter deduction. ${ }^{46}$

Deferral Programs. A deferral program allows qualified homeowners to postpone paying all or a portion of their property taxes until they sell their property or die. Sixteen states (including Texas) and the District of Columbia have this program, all but three of which are limited to senior citizens. In Texas, deferral is limited to homeowners over age 65 , with no maximum income level set. All of the tax may be deferred; when the property is sold or the owner dies, the tax becomes due, along with six percent annual interest and a onetime penalty of eight percent.

Deferral programs help deal with a major problem with the property tax; that is, the cash flow problem the tax causes. A person with considerable wealth may have a low income, making it difficult to pay the property tax bill. This program handles such a problem without forgiving the property tax liability. Another advantage of the program is its low cost. Few people participate in these programs, so the amount of tax deferred does not create a burden for the government. This is a disadvantage as well; the intended beneficiaries may not be aware of the program because of insufficient publicity.
Evaluating Property Tax Relief
46. Andrew Reschovsky, "Who Pays

Massachussetts' Taxes? The Residential Property Tax" (report submitted to the Special Commission on Tax Reform, Commonwealth of Massachussetts, November 1986), cited in Gold, State Tax Relief for the Poor, p. 67.

Mechanisms. Each tax exemption has been enacted to provide tax relief to taxpayers who are perceived, rightly or wrongly, as being adversely affected by the property tax system. And a significant amount of tax relief is provided, as witnessed by the estimated revenue loss of one billion dollars in school tax revenues in 1986 because of the various property tax exemptions.
In terms of providing property tax relief to the poor, the Texas system of homestead exemptions is not the ideal method. Circuitbreakers are clearly superior for providing property tax relief to the poor. Because they target lowincome taxpayers, they have relatively low cost. In contrast, homestead exemptions are a very inefficient means of helping lowincome citizens. Not only are renters excluded, but the bulk of their benefits go to homeowners whose income is well above the poverty level.
In evaluating property tax exemptions, it is necessary to determine the goal of the exemptions. If the goal of the homestead exemption is to provide some measure of property tax relief to all homeowners, then the Texas system is probably successful in that it shifts some of the property tax burden away from homeowners to other classes of taxpayers. Similarly, the provisions for valuing acreage land at productive value rather than market value have succeeded in lowering the percentage of the property tax levy borne by farmers and ranchers.
If the goal of property tax exemptions is to lower the tax liability of those who are least able to pay, the Texas system of exemptions performs dismally. A considerable amount of tax revenue is lost to exemptions which do not differentiate between the wealthy and the poor
taxpayer. Conceivably, a system of exemptions which targets lowincome taxpayers for relief, such as a circuitbreaker or renter-credit program, could accomplish its goal at a lower cost to local governments. However, lacking an income tax such a program would be difficult, although not impossible, to establish.
Providing a low-cost taxpayer appeal mechanism. The establishment of appraisal review boards in 1982 gave taxpayers the ability to appeal property tax assessments without going through the court system. This represented a substantial improvement over the old system. However, for those taxpayers seeking relief beyond the ARB, there is a burden of proof required to challenge the assessment in the courts. Appeals of ARB decisions to the district court are on a trial de novo basis, which means that the court essentially starts from scratch and tries all of the issues of fact and law in the same manner as all civil suits. The court may not admit in evidence the fact of prior action by the ARB.
In cases involving relatively small amounts of disputed taxes, appeals to district court may not be worth the time and expense involved. Establishing a system of administrative appeals might have several positive results. These include the expansion of appellate access for taxpayers, the resolution of tax disputes by qualified experts in property taxation and the establishment of a check on the quality of local appraisals.
A number of proposals to establish an appeals mechanism have been introduced in the Legislature; none have succeeded. One argument against such a system is that it would be too costly. But the cost could be limited if appeals are restricted to those cases in which the amount in controversy did not exceed some small amount as designated by statute.

# L ocal Tax Abatement 

## Recommendations for More Effective Economic Development

## Summary

This chapter examines issues which confronted Harris County in the development of its first local tax abatement program. It reviews recent improvements in state law and suggests additional statutory revisions to promote the uniform and sensible statewide application of tax abatements.
Results from a nationwide survey by the Tax Research Association of Harris County yield no conclusive evidence on whether tax abatements are effective. Basic economics dictate plant location in most cases. However, abatements can help promote one site choice over another.

In 1987, several areas of the state were experiencing problems with tax abatement, and emergency statutory changes were approved (Senate Bill 1225) to guide previously unregulated local abatement programs. These changes included: (1) granting a local option to schools and counties where abatements had previously been forced; (2) restricting tax breaks to new investments only; (3) clarification of the rights of cities to abate for economic development purposes; (4) requiring that localities develop guidelines before granting abatements.
In the long term, a comprehensive recodification of Texas tax abatement law (Property Tax Code, Chapter 312) is needed. Some of the areas which need
statewide attention are addressed in the Harris County program:
(1) Modernization-The state should provide that any unit granting abatement for new plants give equal incentives for modernization in order to promote job retention and protect existing business.
(2) Reduce maximum termThe current maximum tax holiday of 100 percent for 15 years is too long and should be reduced.
(3) Eligibility criteria-Uniform state guidelines are appropriate in areas such as investment useful life, required minimum investment and defining a "primary job" situation.
(4) Sunset provision-Abatement may help attract new industry during recovery, but it has no place in a healthy economy. State officials should schedule abatement for sunset review in the early 1990s.
By early 1988, nearly all school districts and major taxing entities in Harris County had joined the county abatement program. Applications are being received at a rate of about two per month. Abatement has proven decisive in some situations, but not in others. Practical experience has shown some things that might have been done differently, but generally the community appears to be satisfied with the initatives taken.

By John D. Privett
President of the Tax Research Association, Houston

For more than a year, the Tax Research Association (TRA) and Harris County officials worked to formulate a tax abatement program for economic development. As a result, some suggested revisions to state laws governing abatements were identified. These include:
(1) mandating eligibility for modernization projects;
(2) reducing the maximum 15year abatement period;
(3) establishing statewide criteria for granting abatements;
4) delineating between abatements for development and redevelopment; and
(5) sunsetting abatements when the economy improves.

## Should Texas Grant

## Abatements?

By the time Harris County and the TRA began working together on the abatement issue, tax concessions had already been offered. The question of whether to offer abatements for economic development was moot; local officials were already in the business.
Tax abatement is a selling toola promotion device. It is therefore not surprising to find that arguments about abatement are similar to disputes within corporations that frequently occur with respect
to promotions. The company marketer, in this case the economic development professional, says that other states are giving abatements, and it is a competitive necessity. The finance person counters that abatement is too costly. The salesman says new companies are attracted by abatements. The finance person retorts that companies are attracted by more basic location factors, such as the quality of community services, which tax abatements may undermine. The marketer responds that community revenue and services will benefit if abatement helps to expand the tax base.

Other parts of the country have been offering tax abatements for more than 20 years. Yet debate continues as to whether it is an effective sales tool for attracting industry.
Thirty-two states now offer or have offered property tax abatement. Most of these programs are aimed at blighted area redevelopment, but a good number of states employ property tax holidays in their general economic development efforts. The TRA canvassed all 50 states and found only three or four instances where efforts had been made to evaluate the effectiveness of abatements. In each case, the evidence was inconclusive.

There is a general consensus that property tax abatement is a relatively small cost factor that will not offset major location variables such as labor rates, transportation costs and access to markets. In Michigan, for example, which allowed a very liberal 13-year holiday, a study by the Michigan Taxpayers Association found that there was no relationship between tax abatements and investment. Offering abatements did not attract new auto industry investment into communities that were perceived
to have other major negatives. Instead, substantial new investment was going to nearby communities not offering abatements that were thought to be "probusiness."

There is also a general consensus that tax abatements are an "inefficient" incentive. In other words, several abatements may be

## There is a general consen-

 sus that property tax abatement is a relatively small cost factor that will not offset major location variables such as labor rates, transportation costs and access to markets.granted for every one that actually influences a relocation. Unfortunately, the same may be said about tax credits, equity participation, subsidized loans, incubators, job training and the myriad of other business location incentives states and localities are offering.

Forces for and against tax abatement would agree that the concept has been misapplied in many cases. A City of Philadelphia study found that nearly all city abatements went to office buildings. Clearly, if new payroll and economic activity can be created, office space will be built to satisfy demand. The Philadelphia program missed the target.

Critics also charge that tax abatements may have a negative impact on existing employers. This concern need not be a problem with a fair abatement program. Well-designed tax abatement policy does not encourage additional capacity or more
modern production that will put existing business at a disadvantage. By the time abatement is considered, the company has usually already made a decision to build. Tax abatement policy attempts to influence not whether the investment occurs, but where it occurs. The new business may actually help existing employers by sharing the tax burden and expanding the available pool of labor and suppliers.

## Important Reforms-70th Legislature

In late 1986, at the request of economic development agencies who had received demands for tax abatement from businesses considering local plants, TRA and Harris County officials began formulating tax abatement guidelines.

It quickly became apparent that state tax abatement law had some major problems. In an effort to address some of these problems, Senate Bill 1225 was adopted by the 70th Texas Legislature in 1987. These changes included:
(1) Local option provisionPrior to S.B. 1225, cities and counties had unlimited authority to abate the taxes of other jurisdictions. For example, school districts were forced to abate, which was not a problem with small tax abatements targeted at blighted areas but could become a problem when tax abatements for large industrial plants are considered. The law was amended to give schools and counties a local option with regard to tax abatements.
(2) New investment only-S.B. 1225 restricted tax abatements to new investments. Tax abatements for existing property already on the tax rolls could adversely affect the tax base and hamper economic development efforts.
(3) Legalizing abatement for economic development-Cities had been granting numerous economic development abatements under blighted area criteria, but the legality of these abatements was questionable. S.B. 1225 brought the law into conformance with practice by allowing cities to abate for economic development purposes.
(4) Required guidelinesLanguage was added requiring localities to approve guidelines and criteria before granting abatements. In the absence of state laws that delineate eligibility criteria, requirements for local guidelines can encourage jurisdictions to more thoroughly consider abatement proposals and manage the issue in a more rational, equitable manner.

## Harris County Abatement Guidelines

In 1987, Harris County school, city and county officials, together with business representatives, worked to formulate a consensus on tax abatement policy. Harris County became the first taxing unit to adopt the guidelines and other jurisdictions followed suit.

The basic elements of the Harris County abatement program are as follows:
(1) Terms-Eligible facilities can receive 100 percent abatement for five years on certain new investments, plus abatement during construction.
(2) Eligible facilities-Eligibility is restricted to those industries creating or retaining primary employment in manufacturing, research, regional entertainment, regional distribution and services.
(3) Abated investments-Abatements are available for moderni-
zation and expansion as well as for new plants.

The five-year abatement period is based on an analysis of competing programs. The objective was to offer the minimum abatement terms necessary. Nationally, tax

> In the absence of state laws that delineate eligibility criteria, requirements for local guidelines can encourage jurisdictions to more thoroughly consider abatement proposals and manage the issue in a more rational, equitable manner.

abatements range from three to 20 years. A five-year program is similar to abatements previously adopted in Beaumont. It is substantially less than the ten-year tax holiday offered in Louisiana and the new Oklahoma tax abatement program.
In determining the types of facilities that would be eligible, Houston officials tried to make the policy as efficient as possible by distinguishing between the service economy and those businesses that create a substantial new payroll for the region. Consider the example of a bakery. It would not be sensible to abate taxes for a local bakery serving the Houston market. That business will locate in Houston anyway, and abating merely puts other local bakeries at a competitive disadvantage. On the other hand, a baking facility that serves the national market might be a good candidate for tax abatements since that business has many location options.

Drawing a distinction between local market businesses and national or regional facilities led to a necessary but somewhat arbitrary rule: in order to be eligible, the facility must have the majority of its customers within at least 100 miles of Harris County.

Harris County guidelines also require that the investment pass several economic tests. These include:
(1) The investment must be expected to increase the tax roll by at least five million dollars after the abatement expires. This investment threshold is intended to limit applications to a workable number.
(2) The project must involve at least 30 jobs, either creating 30 new permanent jobs in the case of a new plant or adding or retaining that many jobs where a modernization is involved. One often hears that most jobs are created in firms with fewer than 30 employees. Though true, this applies mainly to the secondary service economy in areas such as the retail industry, not to the primary job economy which actually creates new wealth for a community.
(3) The guidelines stipulate that the investment must not be solely or primarily for the purpose of transferring jobs within the county.
(4) Applicants are rejected if existing local capacity is available. In Harris County, where there is substantial overcapacity in a number of areas, it does not make sense to encourage unnecessary construction.
(5) Abatement may be rejected if the plant creates health problems or will have an adverse effect on the jurisdiction's finances. School officials in Harris County
were initially concerned about school overcrowding as a result of a new plant. However, most new plants rely extensively on local labor because of the high cost of relocating employees. In most cases there should be no additional students in the schools, only more jobs for the unemployed and under employed.
(6) The facility must have an expected life of at least 15 years. This will help to assure that a plant will be on the tax rolls for a lengthy period of time after the abatement expires.

## Addressing Several

## Concerns

The Houston guidelines present a challenge not unlike that faced by the Select Committee on Tax Equity. Like overall tax policy, tax abatement guidelines should: (1) support economic growth, (2) be fair to existing taxpayers and (3) protect government revenue.

Although aspects of the Harris County guidelines were tailored to fit the local situation and may not apply elsewhere, there are ingredients that merit consideration in any statewide policy.
Among them is the "economic life" concept. There is no reason to provide tax abatement for properties that might be moved to another location or have no value on the tax roll after abatement expires.

Another concept worthy of statewide consideration pertaining to modernization was raised by local school officials. It is possible that an old facility may be torn down, taken off the tax roll and tax abatement granted on the new facility leaving the taxing jurisdiction with no taxable value on that property. School officials suggested that the value of the older plant be included in the tax base
during the abatement period. In addition, modernization was restricted to exclude reconditioning and repair projects.
Texas cities are desperately attempting to attract industry. Texas abatement law—Article 1066(f)-

> It would be inequitable to offer tax abatement to a new plant making product $X$ and not offer abatement to the existing producer of product $X$ when the older business decides to modernize its plant in order to compete.

remains a confusing patchwork built on a statute originally intended only for blighted area development. The need exists for recodification and clarification of rules governing local application.
Some controls are needed to prevent what could become an abatement bidding contest. It serves no one's interest when Texas cities compete with one another for plants when the bidding chips are property tax revenues. Nor does it serve the common interest to ignore the long-term issues of job retention and a strong economic base while government officials are competing for new plants.

## Possible Policy Directions

Modernization. State law should provide that any jurisdiction granting property tax abatement for new plants should be required to grant comparable abatements for major modernizations. The issue of job retention
and plant modernization is paramount.
Modernization is both an economic and an equity issue. Although new jobs grab the political spotlight, retaining existing jobs is more important to the economic health of a community. From a plant investment standpoint, the most important thing that can be done to preserve jobs is to assure that plants are modern; plants with low operating costs tend to survive. One reason the Gulf Coast has remained economically sound during the recent economic downturn is that major plant modernization took place during the 1970s. When plant shutdowns were common, these plants were among the more efficient and remained open. Petrochemical plants have been closed elsewhere but most of Texas' refining capacity is still in operation and the jobs still in place. Unfortunately, this has not been the case in all Texas industry.

There is a tendency to resist abatements for modernization because new plants are more appealing and on the assumption that a company undertaking modernization is already committed to reinvestment. This is true in the short run but certainly not true in the long run. Companies will stop modernizing in a specific area and depreciate the asset unless there is an economic benefit.

The suggestion for requiring modernization abatement where any abatement is offered also gives fair treatment to existing employers who have supported the local economy. It shows that a community is supportive in the long term. It would be inequitable to offer tax abatement to a new plant making product $X$ and not offer abatement to the existing producer of product $X$
when the older business decides to modernize its plant in order to compete.
When modernization-related abatement is granted, it is necessary to shift the focus from creating jobs to retaining jobs, which is why guidelines should stipulate job creation or retention. In some situations, modernization may result in fewer overall jobs, but at least abatement will encourage the employer to keep the remaining jobs in the area. Abatement should not be provided at all unless modernization projects are eligible.

Reducing maximum term. From the beginning, Houston officials have been receiving requests for 15 -year abatements from companies that know that state law authorizes up to 15 years. Fifteen years is too long, and state law should be changed to set the maximum somewhere in the range of five toten years. Otherwise, local officials under pressure for new jobs may give damaging abatements and promote competition among Texas cities.

Under a 15-year abatement, it is possible that the plant will never be taxed. Moreover, a 15year term is too generous compared to abatements being offered elsewhere. The impact on taxing units is obvious. Less obvious is the fact that abatements are most important in the early years when the plant is recovering its investment.

The few ten- to 15 -year abatements that exist have been fractional abatements abating 25 percent or 50 percent of plant value. The same financial benefit can be obtained by granting 100 percent abatement for the first five or six years.
Ideally, all Texas cities should be offering essentially the same terms so that no "whipsawing" occurs where Texas cities bid
against one another. In the same vein, although business interests may disagree, it might be appropriate to limit companies by providing that on specific projects they can only apply for abatement in one area at a time.

> A legitimate concern of city officials is that the requirement for local guidelines may stop the smaller redevelopment programs in blighted areas.

Developing state eligibility criteria. Unlike Texas, most states have specific qualifying criteria governing local tax abatement policies for economic development. Although each local governement entity represents a unique situation, there are common criteria that could be applied statewide. Requirements for minimum investment, economic benefit tests and minimum economic life are examples of guidelines the state could provide.

Statutory provisions setting forth qualifying criteria could help remove local officials from pressure to grant ill-advised abatements, help present a united front with respect to location incentives available in Texas and minimize competition between Texas local governments. Moreover, since the state is partially funding these abatements (by excluding taxable wealth on which state education funds are based) the state has a right and responsibility to be involved.

Separating blighted area/ economic development abatements. A legitimate concern of
city officials is that the requirement for local guidelines may stop the smaller redevelopment programs in blighted areas. Counties and school districts often have little knowledge of or interest in redevelopment programs.
The two programs, now part of the same law, should be addressed separately. It might be appropriate to allow cities to unilaterally grant blighted area abatements up to a certain percent of the tax roll of other jurisdictions, for example, onetenth of one percent of taxable value. Another option would be to remove blighted area abatements from the local guidelines requirement and simply require majority approval from each affected jurisdiction.

Sunset. Finally, tax abatements should be "sunset" at some point. Exemptions have no place in the tax structure of a healthy economy.

Economic development abatement is like exempting farming and homesteads except that it is directed toward creating rather than redistributing wealth. But like other exemptions it is what Jimmy Carter called a "tax expenditure" and should periodically be reconsidered like any other expenditure.

In Harris County, tax abatement is "on trial" for two years, at which time the program will be reassessed. By that time the economy may be strong and investment momentum will make abatement incentives unnecessary. If not, tax abatements may continue.

The state should follow a similar course, possibly requiring reenactment of tax abatement law in the early 1990s and undertaking a performance review at that time. Abatement is a promotional tool-promotions should not run forever.

# R egional Taxing Units and Texas Public School Finance 

## Summary

The Texas public school finance system was declared unconstitutional by a state district court on June 1, 1987. This ruling is currently being appealed, with final resolution of the case not expected before the spring of 1989.
Much of the testimony in the case and the court's decision emphasized the disparities in property wealth that exist among Texas' 1,057 school districts. The court argued that school district boundaries in Texas lack an "underlying rationale . . . and there are many districts that are pure tax havens."

The Texas Education Code currently authorizes school districts to levy a countywide equalization tax. Few counties have chosen to enact this tax since it was authorized in 1969, with only five counties currently imposing an equalization tax.
These counties account for less than one percent of the total public school enrollment in Texas.

A review of the school finance laws in other states shows limited use of multidistrict taxes or property values for the calculation of state aid. Only six states collect a county or regional tax or use regional property values in the calculation of state aid.
This chapter includes an analysis of the impact of various regional groupings on Texas
public school finance. The regions examined include the following: the 254 Texas counties; the Comptroller's six economic regions; the 20 education service centers (ESCs); and six "super regions" based on combinations of ESCs.

The use of regional property values substantially narrows the wealth disparities among Texas school districts. The ratio of the poorest to wealthiest Texas school districts is $1: 270.4$, based on property wealth per student. When school districts are organized along county lines, their ratio decreases to 1:96.5. The ratio continues to decrease as the size of the regions is increased, with the six super regions showing a ratio of 1:1.6.

While the virtue of the larger regional groupings is the narrowing of property tax differences among districts; a major drawback is their size. Two of the six super regions would account for nearly one million each of the three million students enrolled in Texas public schools.

In addition to the problems of size, there are a number of constitutional and other legal issues which are impediments to the creation of multidistrict taxing authorities and the use of regional values in the calculation of state aid. These range from problems of organization to compliance with the Voting Rights Act.

By Dan Casey
Staff Director of the Senate Finance Committee

## Introduction

In a landmark decision issued on June 1, 1987, Judge Harley Clark of the 250th Judicial District in Travis County, Texas, ruled that ". . . the Texas School Financing System (. . . implemented in conjunction with local school district boundaries that contain unequal taxable property wealth for the financing of public education) is . . . unlawful . . . and prohibited by the constitution and the laws of Texas." ${ }^{1}$ The State of Texas is currently appealing the court's ruling in Edgewood v. Kirby, with final resolution of the case not expected before the spring of 1989.

In the court's decision, Judge Clark emphasized the disparities in property wealth among Texas school districts and the impact of school district organization on these disparities. He argued that:
... Texas, in its creation and development of school district boundaries, did not follow any rational or articulated policy. Neither in their creation nor in their perpetuation has an effort

1. Edgewood Independent School District et al. v. William N. Kirby et al. Cause No. 362,516 (250th District Court, Travis County, Texas, June 1, 1987). Final Judgment, pp. 4-5.
been made to equalize local tax bases. There is no underlying rationale in the district boundaries of many school districts in Texas and there are many districts that are pure tax havens. ${ }^{2}$

In remarks reported in the press, Clark stated, "I wouldn't be surprised, if the Legislature were to conduct studies, that it might find that by redistricting lines and putting everyone in equal tax base districts, it very well could save the state some money. That could dawn on them. ${ }^{\prime 3}$
This chapter explores the concept of regional taxing units and its possible impact on public school finance in Texas. A summary of current regional taxing efforts is provided, followed by an analysis of impact of regional property values on the calculation of state aid under the Foundation School Program. The chapter concludes with a discussion of issues that must be addressed before any type of regional taxing units could be established in Texas.

## Current Legal Provisions

The concept of regional taxes for school puposes is not a new one in Texas. In 1969, the Legislature authorized taxation on a countywide basis for both equalization
2. Edgewood Independent School District et. al. v. William N. Kirby, et. al. Findings of Fact and Conclusions of Law, p. 38.
3. Jorjanna Price, "Redistricting Seen as Remedy to School Financing Problem," Houston Post, May 23, 1987.
4. Texas Education Code, Chapters 18 and 28.
5. Ibid., Sec. 17.94.
6. Ibid., Sec. 17.98.
7. Interview with Alan Barnes, Texas Research League, May 16, 1988.
purposes and the financing of vocational education programs. ${ }^{4}$ In addition, county or multicounty tax levies are currently being imposed to provide other services including special education and transportation in several areas of the state.
Under the current Education Code, the voters in a county may petition for an election to determine whether their county should adopt a county-unit system of education for the purposes of levying a school equalization tax. In counties with fewer than 100,000 residents, the maximum tax rate that can be levied is one dollar per $\$ 100$ of assessed valuation, while counties with populations of 100,000 or more are limited to a 50 -cent tax rate. The funds collected under a countywide equalization tax are to be distributed to school districts on a per student basis, based on the prior-year average daily attendance (ADA) count. These funds are available only to districts which levy at least a 75 -cent tax rate and may be expended only for maintenance and operations. A district which extends into another county may receive funds only for those students who reside in the county levying the equalization tax.
At the same time that the equalization tax was approved, the Legislature also authorized a countywide tax for vocational education. The law permits the voters of a county to petition for an election to create a countywide vocational education district. A tax of up to 20 cents per $\$ 100$ of assessed valuation is permitted for vocational programs, with the distribution made to school districts in the county on the basis of average daily membership in vocational education programs during the preceding school year.
While state funds are no longer provided for the operation of
county departments of education, state law authorizes funding for these offices through the localoption equalization property tax. ${ }^{5}$ School districts may also contract for services with county departments on a voluntary basis. ${ }^{6}$
The extent to which countywide taxes are used for educational purposes in Texas is illustrated in Table 1. Based on information compiled by the Texas Research League, five counties levied an equalization tax during the 198687 school year: Chambers, Cochran, Gaines, Hockley and Rusk. ${ }^{7}$ The tax rates imposed range from 1.03 cents per $\$ 100$ of assessed valuation in Hockley County to eight cents in Gaines County, well below the statutory ceiling.

The counts of students in ADA for each county indicate that there are relatively few students in the counties levying equalization taxes. Rusk County has the largest count of students in ADA at 7,376 , in the 1986-87 school year. Overall, the five counties which imposed an equalization tax in fiscal year 1987 accounted for less than one percent of the public school enrollment statewide. (These counts are compiled for school districts which have their administrative headquarters located in the county. No counts were available for students who resided within the boundaries of each county, although this distinction probably would not alter the conclusion that equalization taxes are levied at present only in areas with limited school enrollments.)
A rationale for levying an equalization tax is the presence of substantial disparities in wealth among the school districts in a county. The data in Table 1 indicate that this is the case in all of the counties which impose an equalization levy. The widest range is in Cochran County, where the poorest district had
property wealth of $\$ 88,455$ per student during the $1986-87$ school year, while the wealthiest district had property wealth of more than $\$ 2.4$ million per student.

Duval County is the only county which currently levies a countywide tax for vocational education. Based on the Texas Research League data, the tax rate for the 1986-87 school year was 1.50 cents per $\$ 100$ of assessed valuation. ${ }^{8}$ The student counts for the 1986-87 school year show that there were 34 full-time equivalent vocational education students in the county.
Several other regional arrangements are identified in Table 1. The South Texas School District offers programs for special student populations-special education, gifted and talented, and a health professions pro-gram-for students in Cameron, Hildalgo and Willacy counties. A tax rate of 3.55 cents is imposed to support these activities. ${ }^{9}$

Both Dallas and Harris counties maintain county departments of education, which provide trans-
portation services for school districts. The two counties impose taxes of less than one-half cent per $\$ 100$ of assessed valuation to support these programs. ${ }^{10}$
Overall, the local-option countywide equalization tax has not been a major factor in addressing the issue of school finance equity in Texas. It has been adopted by only a handful of sparsely populated counties. While the relief it provides is certain to be welcomed by the less wealthy districts in these counties, the relatively low tax rates for equalization purposes and the unequalized per capita method of distribution limit the impact of the tax.

## Experience in Other States

A review of the school finance programs in other states suggests very limited use of multidistrict or other types of regional taxing units or property values. ${ }^{11}$ In addition to the minimal program in Texas, only six states have county or regional taxing units for
public schools. Three statesOhio, Oklahoma and Wyom-ing-levy countywide taxes at a relatively low rate which are distributed on a per capita or class-room-unit basis. ${ }^{12}$ In Arizona, a tax rate of 50 cents per $\$ 100$ of assessed value is collected countywide for distribution through the state's equalized funding system. ${ }^{13}$ Oregon has 30 counties which operate educational service districts that may levy taxes to be
8. Barnes, May 16, 1988.
9. Ibid.
10. Ibid.
11. For the most recent survey of school finance systems, see Richard G. Salmon, Public School Finance Programs, 1986-87 (American Education Finance Association, 1988, in press), no page numbers.
12. Ibid. California has a uniform tax rate for all counties, but it is classified as a state-funded system. Washington has a state property tax which is distributed to districts on an equalized basis.
13. Ibid.

TABLE 1. Counties Imposing Countywide Taxes for Equalization and Other Purposes, 1987

redistributed on a per capita basis, with four county regions currently doing so. ${ }^{14}$ Tennessee uses county values to determine the local share of its foundation program for local school districts. ${ }^{15}$

Although it is certainly a variation from the approaches discussed so far, there is one longstanding experiment in tax base sharing which has been in effect for more than a decade. The Minnesota Fiscal Disparities Program was approved by that state's legislature in 1971 and implemented four years later. ${ }^{16}$
The Minnesota program is targeted toward commercial and industrial properties in the Minneapolis-St. Paul area. Forty percent of the growth in assessed value for these types of properties since 1971 is contributed to an areawide tax base "pool." The value of the pool is distributed on a formula basis, using each city's population and its relative fiscal capacity. Properties affected by the program now account for nearly one-tenth of the total taxable value in the Twin Cities metropolitan region.
A recent study by the Minnesota House of Representatives reached several conclusions concerning the disparities program:
(1) the redistribution that occurs tends to be from "wealthier suburban areas to poorer ones;"
(2) Minneapolis-the largest of the two central cities in the program-has actually con-
14. Salmon, Public School Finance

Programs, 1986-87.
15. Ibid.
16. Karen Baker, Steve Hinze and LungFai Wong, "Tax Base Sharing in the Real World," The Fiscal Perspective (Denver: National Conference of State Legislatures, 1987).
17. Ibid., pp.10-11.
tributed more to the pool than it has gained; and
(3) small communities tend to be the major recipients under the program.

The study concluded that the fiscal disparities program is a key

> The average wealth for the 300,000 students in the top range of wealth is more than eleven times as much as the average wealth for the 300,000 students in bottom range of wealth.

element in the substantial equalization of tax rates that has occurred throughout the region, particularly for flattening those on the high end of the rates in the area. It also concludes, however, that the impact of the program is overstated in terms of tax impact, since tax base changes are taken into account in Minnesota's formulas for school aid and state aid to local governments. The gross tax impact is estimated to be less than five percent in most of the local jurisdictions covered by the program. ${ }^{17}$
While the Minnesota program applies both to public school education and the provision of municipal services and is not directly analogous to the Texas situation, the fact that it has been in operation for more than a decade indicates that some type of regional tax base sharing may be feasible. In Texas, any discussion of tax base sharing usually focuses on oil and natural gas properties and utilities. While this is a topic worthy of further investigation, it
is an approach which is beyond the scope of this analysis.

## Property Wealth Disparities in Texas

Based on 1985-86 school year data used in the Edgewood v. Kirby case, the court identified substantial disparities in property tax wealth among Texas school districts. The following excerpts are taken from the court's findings of fact:
... the 300,000 students in the lowest-wealth schools have less than $3 \%$ of the State property wealth to support their education, while the 300,000 students in the highest property wealth schools have over $25 \%$ of the State's total property wealth to support their education [p. 14].

North Forest, a black (90\%) district in Harris County has $\$ 67,630$ of property value per student while the adjoining Houston I.S.D. has $\$ 348,180$; the largely Mexican-American (95\%) Edgewood District has $\$ 38,854$ per student, Alamo Heights in the same county has $\$ 570,109$ per student; Wilmer-Hutchins, a predominantly black (82\%) district in Dallas County, has \$97,681 per student while Carrollton-Farmers Branch has $\$ 512,259$ per student [pp. 14-15].

The average wealth for the 300,000 students in the top range of wealth is more than eleven times as much as the average wealth for the 300,000 students in bottom range of wealth [ p . 15].

The disparities in property wealth per student among Texas' 1,057 school districts (excluding special districts) are highlighted in Table 2. The ten wealthiest and the ten poorest districts are shown.

State average property wealth
per student in fiscal year 1988the 1987-88 school year-is $\$ 223,530$. The poorest school district in the state is EdcouchElsa in the Rio Grande Valley, with property wealth of $\$ 21,979$ per student. This accounts for only 9.8 percent of state average wealth. The Edgewood Independent School District (ISD), a principal plaintiff in the court case, is the tenth poorest school district in the state with property wealth of \$42,089 per student, representing 18.8 percent of the statewide average.

The ten wealthiest districts have property values ranging from $\$ 2.4$ to $\$ 5.9$ million in taxable value per student. Laureles ISD is the wealthiest school district in the state, with property wealth of $\$ 5.9$ million per student providing the tax base for educating the 26 students enrolled in the district. It is interesting to note that Glen Rose is the largest of the ten wealthiest with an ADA count of 1,210 , while Allamoore has a total enrollment of eight students. Nearly all of the districts listed have substantial mineral components in their tax bases. (Allamoore is the exception, with a significant part of its tax base attributable to utilities and industrial personal property.)

The ratio of the poorest to wealthiest school districts in property wealth per student is 1:270.4, with Laureles having 270 times the taxable value of Ed-couch-Elsa. Disparities in property values of this magnitude illustrate the difficulty of equalizing funding under the Texas school finance system.

In recognition of this problem, members of the Select Committee on Education raised in discussions at its July and August meetings the possibility of establishing a standard which would be the basis for "substantial" progress in the direction of equalized funding.

For the purposes of discussion, the target for substantial progress would be an equalized funding system which includes 95 percent of the students in the state, with the remaining five percent of students from the wealthiest school districts receiving a minimum level of state aid.

Property wealth disparities narrow significantly at the 95th percentile, with the ratio of poorest to wealthiest reduced to 1:19.7. Dallas represents the 95 th percentile of students with
property wealth of $\$ 432,906$ per student, slightly less than twice the statewide average.

## Property Wealth By County

The first level of analysis for a regional taxing authority or property value concept is the organization of property wealth for school purposes along county lines. There are 254 counties in Texas, compared with the current 1,057 school districts.

An immediate problem is that county and school district lines are

| TABLE 2. School District Property Wealth for Poorest and Wealthiest School Districts, 1988 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | District $\quad$ S | FY 1988 Students In ADA | Property Wealth Per ADA | Percent of State Average Wealth Per ADA |
| Poorest |  |  |  |  |
|  | Edcouch-Elsa | 3,696 | \$21,979 | 9.8\% |
|  | San Elizario | 1,129 | 28,202 | 12.6 |
|  | Progreso | 1,212 | 28,365 | 12.7 |
|  | Valley View | 1,049 | 29,466 | 13.2 |
|  | Boles Home | 178 | 30,478 | 13.6 |
|  | Mercedes | 4,460 | 30,952 | 13.8 |
|  | Santa Rosa | 1,035 | 33,088 | 14.8 |
|  | Fabens | 1,881 | 37,749 | 16.9 |
|  | Roma | 4,339 | 38,092 | 17.0 |
|  | Edgewood | 14,400 | 42,089 | 18.8 |
| Wealthiest |  |  |  |  |
| 1048. | Glen Rose | 1,210 | 2,424,431 | 1,084.6 |
| 1049. | Webb Consolidated | 237 | 2,468,995 | 1,104.5 |
| 1050. | Guthrie | 102 | 2,494,168 | 1,115.8 |
| 1051. | Allamoore | 8 | 2,532,669 | 1,133.0 |
| 1052. | Jayton-Girard | 194 | 2,990,061 | 1,337.7 |
| 1053. | Santa Gertrudis | 73 | 3,116,064 | 1,394.0 |
| 1054. | Grandview-Hopkins | 23 | 3,398,020 | 1,520.2 |
| 1055. | Iraan-Sheffield | 623 | 4,594,327 | 2,055.4 |
| 1056. | Kenedy County Wide | - 57 | 5,404,050 | 2,417.6 |
| 1057. | Laureles | 26 | 5,943,268 | 2,658.8 |
|  | State Total 2,991 | 991,505 | \$223,530 | 100.0\% |
| Ratio: P | oorest to Wealthiest |  | 1:270.4 |  |
| 95th Percentile of Students |  |  |  |  |
| Ratio: P | oorest to 95th Percentil | tile | 1:19.7 |  |
| Source: Legislative Budget Office, May 1988. Based on State Property Tax Board final values for 1-1-87 and Texas Education Agency final ADA counts for the 1987-88 school year. |  |  |  |  |

not contiguous. Of the state's 1,957 districts, 393 districts or more than one-third of the total cross county boundaries. For the purposes of this analysis, school districts were assigned to a county in their entirety based on the location of districts' administrative headquarters. A separate analysis which assigned districts to counties on the basis of pre-
18. Tom Pollard, "The Economic Regions of Texas," Fiscal Notes (March 1983), p. 6.
dominant geographic area showed little difference, with only 17 districts being reassigned to other counties.
Tax bases organized along county lines would narrow the differences in property wealth from that encountered under the current organization of school districts. The ten poorest and ten wealthiest counties are shown in Table 3. Maverick County is the poorest with property wealth of $\$ 56,007$ per student. Kenedy is the wealthiest county, with its 57

TABLE 3. Poorest and Wealthiest Counties in Texas Based on School District Property Wealth Per Student, 1988

|  | County | FY 1988 Students in ADA | Property Wealth Per ADA | Percent of State Average Wealth per ADA |
| :---: | :---: | :---: | :---: | :---: |
| Poorest |  |  |  |  |
| 1. | Maverick | 9,057 | \$56,007 | 25.1\% |
| 2. | Starr | 10,519 | 57,166 | 25.6 |
| 3. | Zavala | 2,689 | 58,732 | 26.3 |
| 4. | Hidalgo | 96,841 | 66,157 | 29.6 |
| 5. | Val Verde | 8,975 | 71,794 | 32.1 |
| 6. | Cameron | 64,221 | 73,832 | 33.0 |
| 7. | Frio | 3,233 | 87,056 | 39.0 |
| 8. | Willacy | 4,961 | 88,505 | 39.6 |
| 9. | Presidio | 1,358 | 88,695 | 39.7 |
|  | Coryell | 7,910 | 90,211 | 40.4 |
| Wealthiest |  |  |  |  |
| 245. | Yoakum | 2,302 | 1,115,963 | 499.3 |
| 246. | Crane | 1,141 | 1,146,407 | 512.9 |
| 247. | Sterling | 324 | 1,224,247 | 547.7 |
| 248. | Gaines | 2,809 | 1,273,502 | 569.7 |
| 249. | Borden | 210 | 1,651,686 | 738.9 |
| 250. | McMullen | 161 | 2,058,553 | 920.9 |
| 251. | Somervell | 1,210 | 2,424,431 | 1,084.6 |
| 252. | King | 102 | 2,494,168 | 1,115.8 |
| 253. | Kent | 194 | 2,990,061 | 1,337.7 |
| 254. | Kénedy | 57 | 5,404,050 | 2,417.7 |
|  | State Total | 2,991,505 | \$223,530 | 100.0\% |
| Ratio: Poorest to Wealthiest |  |  | 1:96.5 |  |
| 95th Percentile of Students |  |  |  |  |
|  | Dallas | 284,670 | \$368,731 | 165.0\% |
| Ratio: Poorest to 95th Percentile |  |  | 1:6.6 |  |
| Source: Legislative Budget Office, May 1988. Based on State Property Tax Board final values for 1-1-87, and Texas Education Agency final ADA counts for the 1987-88 school year, excluding special districts. |  |  |  |  |

students enjoying a tax base valued at $\$ 5.4$ million per student.

The range from poorest to wealthiest counties is 1:96.5, significantly narrower than the 1:270.4 ratio for current districts. At the 95th percentile of students, significant improvements are also seen with a ratio from the poorest county to that at the 95th percentile of wealth being 1:6.6. Under current district boundaries, this ratio is $1: 19.7$. Dallas County accounts for the 95th percentile of students in terms of property wealth, with taxable values of $\$ 368,731$ per student. The impact of property values by county and the other regional groupings upon the distribution of state aid is addressed in a separate part of this chapter.

## Comptroller's Economic Regions

In an analysis of regional economic activity in Texas, the Comptroller of Public Accounts identified six major regions: Border, East Texas, Central Corridor, Plains, Gulf Coast and Metroplex. ${ }^{18}$ This analysis was based upon standard metropoli$\tan$ areas and counties with shared economic characteristics such as types of industrial activity, employment and income.

Based upon their county identification, school districts were grouped according to the appropriate Comptroller's economic region. The results are shown in Table 4.

The Border is the poorest region with property wealth of \$91,585 per student, representing 40.9 percent of the statewide average. The wealthiest region is the Metroplex with property wealth of $\$ 300,922$ per student. The ratio of wealthiest to poorest is $1: 3.3$, the smallest observed so far. The 95th percentile standard
is not applicable with the economic regions, since the Metroplex region is both the wealthiest and contains the 95th percentile of students.

## Education Services <br> Centers

Another possible regional grouping is along the boundary lines established by the State Board of Education (SBOE) for regional education service centers (ESCs). There are 20 ESCs in Texas, which were established to provide services to school districts and coordinate planning for educational purposes. ${ }^{19}$ ESCs are intended to serve areas with at least 50,000 students in ADA, although the SBOE may permit exceptions for sparsely populated areas of the state. One of the advantages of ESCs as regional groupings is that every school district is assigned to a particular ESC, eliminating the overlapping boundary problem present with counties and the Comptroller's economic regions.
The counts of students by ESC and their property wealth per ADA is shown in Table 5. Edinburg is the poorest ESC, with property wealth of $\$ 78,920$ per student representing 35.3 percent of the statewide average. Richardson is the wealthiest ESC, with property wealth of $\$ 329,444$ per student at 147.4 percent of the state average.
The disparities are narrowed under an ESC organizational scheme, with the ratio of poorest to wealthiest at 1:4.2. While this is not as narrow as the 1:3.3 ratio under the Comptroller's economic region, it does represent a significant improvement in narrowing the wealth disparities present in the current organization of school districts or a county-based system. The 95th percentile standard does not narrow the differences in property wealth because

Richardson is both the wealthiest ESC and contains the 95th percentile of students.

## Combinations of ESCs

In an effort to explore regional groupings which have the narrowest differences in property values per student, ESCs were combined to form six superregions. These combinations are highlighted in Table 6. The poorest superregion is the combination of the Edinburg, Austin and San Antonio ESCs with nearly 640,000 students in ADA and property wealth of $\$ 171,181$ per student. The wealthiest superregion is composed of the ESCs based in Mount Pleasant, Wichita Falls, Richardson, Fort Worth and Waco. It contains 849,542 students in ADA and property wealth of $\$ 268,462$ per student.
Under the ESC superregions,
the wealth disparities are the narrowest that have been observed for any of the regional groupings, with the ratio of poorest to wealthiest at $1: 1.6$. The major drawback to the superregions illustrated here is their size: the superregions in North Texas and along the Gulf Coast contain just under one million students each.

## Impact of Regions on State Aid

To assess the impact of regional property values on the calculation of state aid under the Foundation School Program, simulations were run for each regional grouping to estimate the impact on state aid in the 1988-89 school year. ${ }^{20}$ (The
19. Texas Education Code, Sec. 11.32.
20. These simulations were run by Gail Nelson on the Legislative Budget Office's state aid impact model, May 1988.

TABLE 4. School District Property Wealth Per Student for the Comptroller's Economic Regions, 1988

| Economic Region | FY 1988 Students in ADA | Property Wealth Per ADA | Percent of State Average Wealth Per ADA |
| :---: | :---: | :---: | :---: |
| Border | 389,155 | \$91,585 | 40.9\% |
| East Texas | 218,875 | 177,637 | 79.5 |
| Central Corridor | 527,093 | 208,098 | 93.1 |
| Plains | 330,348 | 235,163 | 105.2 |
| Gulf Coast | 857,131 | 239,764 | 107.3 |
| Metroplex | 668,904 | 300,922 | 134.6 |
| State Total | 2,991,505 | \$223,530 | 100.0\% |
| Ratio: Wealthiest | to Poorest | 1:3.3 |  |
| 95th Percentile of Students |  |  |  |
| Metroplex | 668,904 | \$300,922 | 134.6\% |

Ratio: Wealthiest to 95th Percentile 1:3.3

Source: Legislative Budget Office, May 1988. Based on the State Comptroller's economic regions, State PropertyTax Board final values for 1-1-87 and Texas Education Agency final ADA counts for the 1987-88 school year, excluding special districts.

State Property Tax Board values as of January 1, 1987, are the basis for calculating state aid during the 1988-89 school year.) The property values for each school district used in the calculation of state aid were recomputed on the basis of the average wealth per student for the regional grouping under study.

The approach used here for each of the regional groupings is similar to that employed in Tennessee on a county basis, which was described
21. Texas Education Code, Sec. 15.01.
earlier. Since local tax rates are a factor in the calculation of equalization aid under the Foundation School Program, the tax rate for each school district was recomputed, based on the average local tax levy within the regional grouping under examination. This assumes that the sum of the total local tax levies in a region approximates the collective tax preferences of the voters and elected school boards in that region.

The results of these simulations are shown in Table 7. Under the county groupings, current-law

TABLE 5. School District Property Wealth Per Student by Education
Service Center Region, 1988 Service Center Region, 1988

| Region | Education Service Center Headquarters | FY 1988 Students in ADA | Property Wealth Per ADA | Percent of State Average Wealth Per ADA |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Edinburg | 210,345 | \$78,920 | 35.3\% |
| 19 | El Paso | 119,866 | 97,170 | 43.5 |
| 12 | Waco | 102,015 | 136,723 | 61.2 |
| 8 | Mount Pleasant | 50,629 | 149,184 | 66.7 |
| 15 | San Angelo | 45,649 | 159,657 | 71.4 |
| 20 | San Antonio | 259,660 | 168,968 | 75.6 |
| 2 | Corpus Christi | 101,891 | 173,971 | 77.8 |
| 14 | Abilene | 45,134 | 174,679 | 78.2 |
| 9 | Wichita Falls | 37,886 | 177,481 | 79.4 |
| 7 | Kilgore | 141,583 | 190,283 | 85.1 |
| 6 | Huntsville | 93,271 | 196,445 | 87.9 |
| 5 | Beaumont | 79,491 | 198,509 | 88.8 |
| 16 | Amarillo | 71,124 | 215,106 | 96.2 |
| 4 | Houston | 602,778 | 255,222 | 114.2 |
| 3 | Victoria | 52,206 | 256,511 | 114.8 |
| 11 | Fort Worth | 264,599 | 264,204 | 118.2 |
| 17 | Lubbock | 76,722 | 265,987 | 119.0 |
| 13 | Austin | 169,661 | 289,329 | 129.4 |
| 18 | Midland | 72,583 | 310,493 | 138.9 |
| 10 | Richardson | 394,413 | 329,444 | 147.4 |
|  | State Total | 2,991,505 | \$223,530 | 100.0\% |
| Ratio: Poor | st to Wealthiest |  | 1:4.2 |  |
| 95th Perce | tile of Students Richardson | 394,413 | 329,444 | 147.4\% |
| Ratio: Poo | st to 95th Percen |  | 1:4.2 |  |
| Source: Legislative Budget Office, May 1988. Based on Texas Education Agency's Education Service Center Regions, State Property Tax Board final values for 1-1-87 and TEA's final ADA counts for the 1987-88 school year, excluding special districts. |  |  |  |  |

estimates of state aid are reduced by $\$ 126.8$ million when county property values are substituted for district values in the calculation of state aid for the 1988-89 school year. Most of this decrease results from a reduction in equalization aid that occurs because of the narrowing of differences in property wealth. Under the countylevel simulation, the current-law estimate of $\$ 520.5$ million for equalization aid is reduced by $\$ 92.8$ million.

Under the current 1988-89 school year estimates, 68 school districts are expected to receive only the constitutional per capita payments from the Available School Fund due to their substantial property wealth per student. ${ }^{21}$ The difference in the local share calculation for these out-of-formula or "budget-balanced" districts is a cost borne by the state. The current estimate for the loss to budgetbalanced districts is $\$ 69.8$ million. Using the county property values, only 23 districts are expected to be budget-balanced, with the loss to these districts reduced by $\$ 36.8$ million.
Other formula-funded items include the experienced teacher allotment and a prekindergarten program. The county-level values result in slightly higher state costs for these programs, which are reflected in the "Other" category.

As the regional groupings increase in size, the amount of state aid required to equalize the current funding system under the existing formulas is reduced. Values based on the ESCs reduce state aid costs by $\$ 253.7$ million. Those based on the Comptroller's economic regions reduce state aid requirements by $\$ 313.1$ million, while the ESC superregions generate the greatest reduction in state aid costs at \$362.1 million. It is interesting to note that no budget-balanced districts exist for regional groupings larger than the county level.

This analysis suggests that using regional property values for the calculation of state aid reduces the demands on the state under the current equalization formulas and would provide funds of up to $\$ 362.1$ million that could be targeted for other forms of equalization aid or educational spending. While these results suggest some merit to this concept, the problems of governance discussed below pose a major obstacle to the implementation of any type of regional system in Texas.

## Governance Issues

There are a number of legal and governance issues which would have to be addressed before regional values could be used for calculating state aid or regional taxing units could be establised for levying local levies beyond those presently permitted for equaliza-
tion and vocational education. The discussion below highlights these issues. ${ }^{22}$
The Texas Constitution reserves for school districts the exclusive authority to levy school taxes. ${ }^{23}$ Thus, any type of regional taxing authority that would be imposed in Texas "must have the characteristics of a school district. ${ }^{24}$ These characteristics include an elected board of trustees and voter approval for a tax increase. ${ }^{25}$
In 1978, Texas voters approved a constitutional amendment which prohibited a state property tax. ${ }^{26}$ For any type of regional tax to be imposed, local discretion would be necessary to avoid the characteristics of a statewide levy on property. A mandated, uniform regional tax would likely be in conflict with this prohibition. Another constitutional provision forbids statewide appraisals for
taxation of property, although some type of regional appraisals might be permitted. ${ }^{27}$

Article III, Section 56 of the Texas Constitution prohibits the enactment of special laws affecting the affairs of local school districts. As a result, legislation enacting regional taxing units could not
22. This discussion is based on the work of Steve Collins, Susan Hunter and Jeff Archer, "Constitutional Framework for Legislative Responses to Edgewood v. Kirby," Texas Legislative Council, April 1988.
23. Texas Constitution, Article VI; Sec. 3.
24. Collins, et. al., p. 9.
25. Ibid.
26. Texas Constitution, Article VII, Sections 1-a, 1-e.
27. Collins, et. al., p. 9.

TABLE 6. School District Property Wealth per Student for Six Combinations of Education Service Center Regions, 1988

| Reglons | Education Service Center Headquarters | FY 1988 Students in ADA | Property Wealth Per ADA | Percent of State Average Wealth Per ADA |
| :---: | :---: | :---: | :---: | :---: |
| 1,13,20 | Edinburg, Austin, San Antonio | 639,666 | \$171,281 | 76.6\% |
| 18,19 | Midland, El Paso | 192,449 | 177,626 | 79.5 |
| 2,3 | Corpus Christi, Victoria | 154,096 | 201,934 | 90.3 |
| 14,15,16,17 | Abilene, San Angelo, Amarillo, Lubbock | 238,629 | 213,211 | 95.4 |
| 4,5,6,7 | Houston, Beaumont, Huntsville, Kilgore | 917,123 | 234,296 | 104.8 |
| 8,9,10,11,12 | Mount Pleasant, Wichita Falls, Richardson, Fort Worth, Waco | 849,542 | 268,462 | 120:1 |
|  | State Total | 2,991,505 | \$223,530 | 100.0\% |
| Ratio: Poore | to Wealthiest |  | 1:1.6 |  |
| 95th Percentile of Students 8-12 Richardson, et al. |  | 849,542 | \$268,462 | 120.1\% |
| Ratio: Poorest to 95th Percentile |  | 1:1.6 |  |  |

Source: Legislative Budget Office, May 1988. Based on a combination of ESC regions, State Property Tax Board final values for 1-1-87 and Texas Education Agency final ADA counts for the 1987-88 school year, excluding special districts.
specifically create units by combining particular school districts. These changes could only be made by general law. ${ }^{28}$
Another issue is the Voting Rights Act. Any type of newly created regional unit would be subject to review by the U.S. Department of Justice or a federal court to determine its impact on minority voters. ${ }^{29}$

## Conclusion

School district property values grouped along regional lines clearly narrow the differences among school districts, addressing a major issue cited in the Edgewood $v$. Kirby court ruling which declared the current Texas school financing system unconstitutional. The use of regional values also reduces state aid costs under the
28. Collins, et. al., p. 10.
29. Ibid., p. 12.
30. Select Committee on Education, Minutes, August 15 and 16, 1988, p. 9.

Foundation School Program, with the amount of the reduction increasing as the disparities are narrowed by larger regional groupings.

## The ability of wealthy school districts to "enrich" is a major source of the unequal ability of school districts to raise revenue.

While it might be possible to enact legislation which would provide for the use of regional property values for the calculation of state aid and leave local taxing authority unaffected, it is unlikely that this would entirely eliminate the disparities cited in Edgewood v. Kirby. The ability of wealthy school districts to "enrich" is a major source of the unequal ability of
school districts to raise revenue.

The alternative is to also establish regional taxing units for the purpose of local school district taxation. There are a number of legal obstacles to this approach, ranging from problems of organization to compliance with the Voting Rights Act. A more pragmatic problem is that the regions which would most significantly narrow differences in property values are also enormous in size, accentuating the governance problems.
Finally, any type of regional taxing unit is likely to meet with substantial public opposition. At its August 16, 1988 meeting, the Select Committee on Education ruled out regional taxing units as an option for further consideration. ${ }^{30}$ Despite the merits to this approach that the data might suggest, the Committee's actions are probably consistent with public perceptions on this issue.

TABLE 7. Impact of Alternative Regional Groupings on Current Law Estimates of State Aid, 1989

| Region | State Ald <br> Difference <br> (Millions) | EqualIzation Ald | Loss to Budget Balanced Districts | Other | No. of Budget Balanced Districts | Ratio of Poorest to Wealthiest | Ration of Poorest to 95th Region Percentile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Existing Districts | N/A | N/A | N/A | N/A | 68 | 1:270.4 | 1:19.7 |
| Counties | \$-126.8 | \$-92.8 | \$-36.8 | \$2.8 | 23 | 1:96.5 | 1:6.6 |
| Education Service Centers | -253.7 | -188.6 | -69.8 | 4.7 | 0 | 1:4.2 | 1:4.2 |
| Comptroller's Economic Regions | -313.1 | -248.1 | -69.8 | 4.8 | 0 | 1:3.3 | 1:3.3 |
| Combinations of ESC's | -362.1 | -298.2 | -69.8 | 5.9 | 0 | 1:1.6 | 1:1.6 |
| Current Law State Aid Estim | nate for fiscal | ear $1989=$ | .96 Billion |  |  |  |  |

[^99]
# L ocal Revenue Diversification 

# Alternatives for Achieving a More Efficient and Equitable Structure 

## Summary

This chapter examines strategies for reducing dependence on the property tax by Texas local governments. Cities already have access to a number of taxes, including the property tax, general sales tax, hotel-motel occupancy tax, gross receipts tax on utility companies and the mixed drinks tax. Counties have access to some of these taxes, as well. School districts rely primarily on the property tax and state aid. The per capita tax burden of cities and counties is significantly below that of their counterparts in other states, but because of the below average level of state aid to school districts, the per capita property tax burden for public schools is 49 percent above the national average.
One problem with the general sales tax is that cities with greater concentrations of commercial activity receive a relatively greater share of the revenue. One option is to have only counties levy the tax, then share the revenue with cities on a per capita basis or a pro rata share of property tax levied. This would mean a more equitable distribution of sales tax revenue and a reduction of the property tax burden in largely residential cities.
One goal of an efficient revenue structure is to recover more of the cost of services from those who benefit from
them. One proposal for achieving this is to give cities and counties in Texas the option of taxing motor fuels. The revenue from the tax would be dedicated to constructing and maintaining city and county streets and roads. Those using the streets would be the ones who pay the tax. Based on 1987 data, just a one cent per gallon tax would have yielded $\$ 98$ million locally. Another option is to allow cities to retain some of the revenue from the hotel-motel tax for general operations. The peak periods of demand by visitors require that cities expand such basic services as police and fire protection, emergency service and highway capacity. Visitors who benefit from these services are bearing the additional cost of providing the needed capacity.

Only one state (Louisiana) grants school districts access to a general sales tax, and only three states grant districts access to an income tax. The sales tax does not appear to be a reasonable alternative for school districts in Texas. Given the fact that state aid to districts in Texas is below average, one way of achieving above-average quality in public schools will be for the state to provide an above-average level of aid for public education. The Legislature should also consider giving districts greater incentives for improving their cash management practices.

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## Introduction

This chapter focuses on revenue diversification by cities, counties and school districts in Texas. Of these three levels of local government, cities have the greatest diversity in revenue sources with access to the following taxes: the property tax, general sales tax, hotel-motel occupancy tax, gross receipts tax (or street rental fee) on utility companies, bank franchise tax, mixed drinks gross receipts tax and the bingo tax.
Counties have access to some of these taxes, too, including the following: the property tax, general sales tax (in counties not served by a transit authority), bank franchise tax, mixed drinks gross receipts tax and the bingo tax. School districts have access to the property tax and a portion of the revenue from the bank franchise tax, which is levied in lieu of the property tax on bank shares.
Cities and counties in Texas also make use of several nontax revenue sources, including service charges (or user fees), capital recovery fees, special assessments, license and permit fees and interest income on cash investments. School districts derive some revenue from service charges and interest on cash investments.

## The Revenue Burden of Cities, Counties and School Districts

Table 1 compares the per capita revenue burden for the three levels of local government with that prevailing at the national level. Based on this table, how does the revenue burden of cities, counties and school districts in Texas compare with the national average?
First, the overall burden of cities and especially counties is significantly less than the national average. In 1986, the total revenue burden of cities was about 25 percent below the national average and that of counties was more than 47 percent below the average.
By contrast, school districts in
Texas received the equivalent of
more than $\$ 704$ per capita in revenue, placing them about seven percent above the national average of $\$ 657$ per capita. The tax burden of cities and counties

> Since 1968, cities in Texas have had the option of adopting, with voter approval, a one percent sales tax

in Texas is markedly less than the national average. In particular, cities in the state depend much less on the property tax than do their counterparts nationally. County use of the property tax roughly approximates the national average.
Texas school districts depend

TABLE 1. Per Capita Revenue Burden by Levels of Local Government, 1986

|  | Texas | U.S. Average | Percent Difference |
| :---: | :---: | :---: | :---: |
| All Revenue ${ }^{1}$ |  |  |  |
| Cities | \$798.02 | \$1,059.68 | -24.7\% |
| Counties | 234.54 | 445.21 | -47.3 |
| School Districts ${ }^{2}$ | 704.28 | 657.47 | 7.1 |
| Revenue From Own Sources |  |  |  |
| Cities | 469.88 | 566.62 | -17.1 |
| Counties | 211.13 | 267.00 | -20.9 |
| School Districts | 348.34 | 298.85 | 16.6 |
| All Taxes |  |  |  |
| Cities | 250.33 | 339.40 | -26.2 |
| Counties | 122.62 | 156.62 | -21.7 |
| School Districts | 288.92 | 199.11 | 45:1 |
| Property Tax |  |  |  |
| Cities | 134.98 | 167.20 | -19.3 |
| Counties | 111.73 | 116.20 | -4.2 |
| School Districts | 288.92 | 193.88 | 49.0 |

[^100]more heavily on own-source revenue, especially the property tax, when compared to the national average. In 1986, school districts in the state received about $\$ 289$ per capita in tax revenue (all in property taxes) compared to a national average of approximately $\$ 200$ (\$194 of which was in property taxes).

## Recommendations for Improving the Local General Sales Tax

Since 1968, cities in Texas have had the option of adopting, with voter approval, a one percent sales tax, with administration of the tax by the Comptroller of Public Accounts. Virtually all cities in the state now levy the tax. As a result of legislation passed in 1987, cities and counties not served by a transit authority may each adopt an additional one-half percent tax. In 1986, cities derived just under $\$ 71$ per person in sales tax revenue or approximately 52 cents for every dollar they received in property taxes.

Problem 1. Under Texas law, revenue from the general sales tax is returned to the city in which the sale occurred. Because the sales tax base is highly concentrated in metropolitan areas with major retail centers, cities with greater concentrations of residential property receive significantly less in revenue. For example, in Dallas County, the City of Addison received $\$ 574$ per capita in sales tax revenue in 1986 compared to \$59 for the City of Garland and $\$ 14$ for the City of Wilmer. In Harris County, the City of Webster received $\$ 544$ per capita in sales tax revenue in 1986 compared to $\$ 43$ for the City of Katy.
Recommendation. Rather than allocating revenue to the city where the sale occurred, it is recommended that revenue from the sales tax be levied at the county level with revenue then
apportioned among the cities and the county on a per capita or pro rata share of the property taxes levied. For example, each county would levy a two percent sales tax (one percent in the 14 counties served by a public transit authority), but revenue would be allocated to each city according to its share of the total population in the county or its share of the city and county property taxes levied. The residual revenue would be retained by the county, which would equal the county's portion of the population or share of property taxes levied. This approach has been successfully used by North Carolina since 1972.

Without further research, it is impossible to know what effect a more equitable distribution of sales tax revenue would have on local property taxes, but it is reasonable to expect that it would reduce the property tax rate in largely residential cities, thereby making more of the property tax base available to school districts. Whether this will help relieve the inequitable distribution of the property tax burden among school districts cannot be determined without further analysis.
Problem 2. In recent years, the Texas Legislature has been inclined to give cities (and now counties) increased discretion in the types of transactions included in the local sales tax base. For example, H.B. 1949 (1985) gave cities the option of adding certain telecommunication services to their sales tax base. Experts on the sales tax unanimously recommend that both the state and local tax base be the same. Whenever the local base deviates from the state's, two problems are created:
(1) Consumers have an incentive to seek out jurisdictions where the transaction is exempt, creating a "dead-weight" loss to
the state's economy. No economic benefits come to the state when consumers alter their behavior to avoid local taxes.

## Currently, 15 states authorize local taxes on gasoline and other petroleum products. . .

(2) Administration of the tax is complicated as a result of additional record keeping by vendors who must comply with varying definitions of the tax base and by the State Comptroller who must collect and remit the appropriate amount of revenue to local governments.
Recommendation. The Legislature should standardize the state and local sales tax bases so that no deviations exist between the two. Defining the tax base should rest solely with the Legislature and not local governments.
Problem 3. Recently, the City of Dallas had to remit more than $\$ 4$ million in misallocated sales tax revenue to a suburban city because vendors had incorrectly identified Dallas as the location of their retail activity on their application for a sales tax permit. As a result, the sales tax revenue was allocated by the Comptroller to Dallas rather than the suburban community. Additional claims are pending by other suburban communities.
Recommendation. As part of the application process for a sales tax permit, vendors should be required to obtain the signature and seal of the appropriate city secretary verifying the location of the business. This step is already used by the Texas Alcoholic Beverage Commission as part of its application process for an alcoholic beverage permit.

## Recommendations for Revenue Diversification in Cities and Counties

Recommendation 1. One goal of an efficient revenue structure is to recover the cost of a service from those who benefit from it. That is, as much as possible, those who benefit from public services should bear the cost of those services. Since cities and counties use a portion of their general revenues for constructing and maintaining streets, highways, roads and bridges, those who use them should bear their full cost of construction and maintenance. It is recommended that cities and counties in Texas be given limited access to a local option motor fuels tax, the revenue from which would be dedicated to streets and other publicly maintained rights-of-way.

Currently, 15 states authorize local taxes on gasoline and other petroleum products, with the greatest use being made by local governments in Alabama, Florida and Nevada. A few states permit public transit authorities to levy the tax. Three issues must be considered in designing such a tax for Texas' local governments.
First, will a local option tax adversely affect motor fuel sales in a jurisdiction? A motor fuels tax creates the potential for a border city effect. That is, consumers have an incentive to purchase gasoline in lower tax areas. The smaller the geographic size of the jurisdiction levying the tax, the greater the opportunity for tax avoidance. Furthermore, the wider the range of optional tax rates, the greater the effect of the tax on where drivers purchase gasoline. For these reasons, a local fuels tax should be levied at least at the county level.
Second, if levied at the county level, how can the revenue be allocated equitably to cities and the county? The preferred solu-
tion, as with the general sales tax, is for the county to levy the tax and share the revenue with cities and towns on a pro rata basis, perhaps according to the number of locally maintained miles in each jurisdiction. The allocation formula might include a factor to provide additional compensation to communities with more bridges or higher street maintenance costs due to their terrain.
The tax should be collected by the Comptroller's office with allocation to counties based on an annual estimate of its motor fuel sales. The tax should be levied as a result of a majority vote by the county commissioners court or on petition to the county commissioners by a majority of the city councils in the county. Voter approval should not be required for adoption, which is currently the case for the hotel-motel occupancy tax.
A third issue is the revenue potential from a local-option motor fuels tax in Texas. In 1987, a one cent per gallon tax levied in all counties in the state would have yielded about $\$ 98$ million or about 2.8 cents in revenue for every one dollar in property taxes levied by cities and counties in the state. A one cent per gallon tax by the 16 counties in the Dallas-Fort Worth region would have yielded about $\$ 22.3$ million in revenue. It is recommended counties be given a range in tax rates to choose from, for example, one cent to five cents per gallon, so that the governments can choose a rate that will provide sufficient revenues to cover their maintenance costs.
Recommendation 2. Currently, 270 cities in Texas levy the local option occupancy tax on hotels and motels at rates generally clustering in the four to seven percent range. In 1987, cities collected $\$ 89$ million in revenue from the tax, all of which is committed by state law to "en-
hancing and promoting tourism and the convention and hotel industry." A portion of the revenue can be used for historical preservation and promotion of the arts.
In fact, cities must expand their services to meet peak levels of demand brought on by an influx of tourists or conventioneers. For example, they must provide additional police and fire protection and provide additional highway and public transit capacity to meet peak demand periods. Tourists and other visitors to a city also impose such indirect costs as additional pollution and congestion on city streets. As such, the hotel-motel occupancy tax law should be amended giving cities the authority to retain a portion (for example 25 percent) of the hotel-motel tax revenue for general operating purposes as compensation for these peak period costs. In this way, visitors who benefit from these services bear the cost of providing the added capacity in public services.

## Recommendations for Revenue Diversification by School Districts

Given the comparatively heavy use of the property tax by school districts in Texas described in Table 1, further increases in the use of the tax by school districts has limited appeal. Two basic choices then remain: (1) increase state aid to school districts; (2) give school districts access to a broad-based nonproperty tax, such as the general sales tax. The merits of the second alternative are discussed in this section.
Among the states, only Louisiana authorizes an optional sales tax for its school districts, with all but one district now levying a tax. The rates of these taxes are usually in the one to two percent range.

In 1986, these districts received more in general sales tax revenue ( $\$ 422$ million) than they took in from the property tax ( $\$ 300$ million). The school sales tax burden was equal to about $\$ 94$ per person in Louisiana.

Three states-Iowa, Ohio and Pennsylvania-authorize eitheran income or payroll tax for school districts, although Ohio rescinded the authority but continues to allow the six districts that adopted the tax to continue it. In Iowa, 57 districts levy an income tax that is piggybacked onto the state tax. The school district tax is a percentage of a taxpayer's state liability. Districts have some discretion in the percentages levied, with rates ranging from 4.25 percent to ten percent. Virtually all of Pennsylvania's school districts levy an earned income (or payroll) tax. The tax is locally administered with rates set at a flat percentage of gross earned income.
What are the pros and cons of a local option general sales tax for school districts? It will produce a significant amount of revenue that can be used to reduce the property tax burden. Moreover, revenue yield is responsive to economic growth, meaning revenue from the tax grows at a rate commensurate with growth in the local economy. This reduces the need to constantly adjust rates upward simply to keep revenue yield current with economic growth or inflation. Finally, a general sales tax shifts the cost of public education from local property owners to consumers, some of whom live outside the local area. As such, the tax provides a broader base from which to finance public education.

On the other hand, the general sales tax has been largely preempted by the state, cities and counties in Texas. The combined maximum state and local rate of
eight percent places Texas very close to the top among states, making it politically difficult to give school districts access.

In addition, giving school districts access to the tax will increase further interjurisdictional fiscal inequities. A study by John Mikesell of the sales tax in Louisiana school districts found that "districts with a high property tax base tend to have a high sales tax base."

Revenue from the general sales tax also is procyclical, greatly increasing the risk of mid-year revenue shortfalls for school districts whenever the business cycle turns downward. The more dependent a school district becomes on the sales tax, the more vulnerable its budget is to the ups and downs of the business cycle.

Finally, the general sales tax is regressive, meaning lower income households pay a greater percentage of their income in sales taxes than higher income households. As such, increasing the use of the general sales tax in Texas increases the overall vertical inequity of our state's revenue structure.

What other revenue-raising alternatives are available to school districts? Based on U.S. Census Bureau information, considerable potential exists for school districts to earn more interest income on cash investments through improved cash management techniques. In 1986, school districts earned \$202.7 million on own-source revenue of $\$ 5.81$ billion, which is about 3.5 percent of the revenue from their own sources. By contrast, cities in Texas earned $\$ 681.7$ million in interest income from $\$ 5.8$ billion in own-source revenue, or about 11.7 percent return on revenues.

The Legislature should give school districts greater incentives
to improve their cash management practices. Although the revenue potential is quite limited, school districts should also be given incentives to produce more revenue from service charges, such as rental charges for the use of buildings.
> [S]ervice charges reduce wasteful consumption of public services by making users more aware of the amount of service they use and its cost.

## Conclusion

One goal of a revenue structure should be to increase efficiency in the production of government services by shifting more of the cost of those services to those who benefit from them. For example, service charges (or user fees) reduce wasteful consumption of public services and increase efficiency by making users more aware of the amount of service they use and its cost. Users are less inclined to waste water when they must pay for the amount of water used. One recommendation for promoting efficiency was to give cities and counties access to a motor fuels tax with the revenue earmarked for street maintenance and improvement. Such a tax places a greater burden for funding this service on those who benefit from it, namely vehicle owners. It also reduces the tax burden on property owners who otherwise bear the cost of this service.

A revenue structure should also be equitable. One problem with the local option sales tax in Texas
is that revenue from the tax is unevenly distributed among local jurisdictions, with pockets of wealth developing in jurisdictions with concentrations of commercial activity. A more equitable approach, and one used by North Carolina, is to have only counties in the state levy a two percent tax with revenue then distributed to each city and the county on a per capita basis or pro rata share of the property taxes levied. This would shift more sales tax revenue to primarily residential cities.
Finally, cities should be given authority to retain a portion of the hotel-motel tax revenue as compensation for the additional capacity they must provide to meet peak periods of demand by visitors and conventioneers. This would promote efficiency by shifting the cost of providing additional capacity to those creating the demand for government services, and it would increase equity by reducing the subsidy permanent residents otherwise would provide to visitors.
As for school districts, only one state permits access to the sales tax, and three states authorize a local option income tax. Both alternatives are inappropriate to Texas. Ultimately, achieving a more balanced level of funding among districts depends on the state assuming a greater role in financing public schools. Texas is below the national average in state funding for schools, which places pressure on school districts to rely more heavily on the property tax. In 1986, the per capita property tax burden for school districts in Texas (\$289) was 45 percent higher than the national average. Reducing overdependence on the property tax by local governments ultimately means reducing school districts' use of the tax by increasing state aid.

# A lternatives for Local Government Finance 

## Summary

Local governments have traditionally relied on the property tax as their largest single source of revenue. Increasing pressure to provide services has virtually exhausted this source for many local governments.
They have been forced to look at other tax and nontax resources to balance their budgets.
Local income taxes are an alternative tax used in 11 states. The first local income tax was adopted by the City of Philadelphia in 1939. Now, more than 3,500 local governments, including cities, counties, townships and school districts use this tax to raise about six percent of all local tax revenue.
The earliest local income taxes were wage taxes, relying heavily on withholding by employers to collect the tax. They were administered at the local level and had no relationship to the state income tax. More recently, local income taxes have been linked to the state tax base and, in some cases, collected and administered by the state.
The rates of these taxes are typically in the range of one to two percent. The highest current tax is Philadelphia's with a rate of 4.96 percent.
Local sales taxes are a local tax alternative more familiar to Texans. Thirty-one states have local sales taxes in place. Overall, they produce more revenue for local governments than the local income taxes,
about 11 percent of all local tax collections. Local sales taxes are used by cities, counties, school districts, transportation authorities and a variety of other special districts.
Most of these taxes are administered by the state tax administrator and closely parallel the state sales tax base. There are, however, several states that allow or require local administration of the tax. This can create problems for taxpayers and tax administrators as well.

Many local governments use excise taxes on specific products such as fuel, alcoholic beverages or tobacco products as well as general sales taxes.
Intergovernmental aid is another source of revenue for local governments. Three common types of state aid to local governments are shared taxes, grants or revenue sharing and state assumption of local responsibilities. Because of the diversity of methods used by the states to aid local governments, it is difficult to accurately account for this aid.
Nationally, most state assistance to local government is given to school districts to aid education. Cities and counties are the next largest recipients, each receiving about half as much as school districts.
In Texas, over 90 percent of state aid goes to school districts. Unrestricted aid to local governments is prohibited.

By Joe H. Thrash<br>Counsel to the Select Committee on Tax Equity

Local governments have traditionally relied on the property tax as their single largest revenue source. As the size of local goverments and the diversity of services provided by them have increased, property tax rates have spiraled upward. In some states, this led to property tax limitations forced upon governments by citizens in the "tax revolt" of the late 1970s and early 1980s. Such limitations on property tax rates did not solve the problems of the local governments in their attempts to provide additional services and still balance budgets. They merely forced them to look for alternatives to the property tax for methods of finance.
There are three principle alternatives that are available to local governments to provide additional revenue. The first is the use of alternative tax or fee sources for funding at the local level. Local income and sales taxes have grown in use for several years and are generally more popular with taxpayers than increases in property tax rates. ${ }^{1}$ User fees on everything from utilities to parks and other recreation facilities also

[^101]have provided an increasing share of local government revenue. ${ }^{2}$

The first alternative is the only
area over which local governments have control. Even the decisions about own-source

| TABLE 1. The Local Government Tax Mix, 1986 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| State | Income Taxes | Property Taxes | General Sales Taxes | Other Taxes |
| Alabama | 23.1\% | 11.6\% | 30.6\% | 34.7\% |
| Alaska | 0.0 | 86.1 | 10.1 | 3.8 |
| Arizona | 0.0 | 75.5 | 17.1 | 7.4 |
| Arkansas | 0.0 | 74.7 | 14.1 | 11.2 |
| California | 0.0 | 67.7 | 16.6 | 15.7 |
| Colorado | 0.0 | 67.5 | 26.3 | 6.2 |
| Connecticut | 0.0 | 98.2 | 0.0 | 1.8 |
| Delaware | 10.8 | 83.4 | 0.0 | 5.7 |
| Florida | 0.0 | 79.8 | 0.9 | 19.3 |
| Georgia | 0.0 | 68.8 | 18.3 | 12.8 |
| Hawaii | 0.0 | 82.3 | 0.0 | 17.7 |
| Idaho | 0.0 | 96.2 | 0.0 | 3.8 |
| Illinois | 0.0 | 74.6 | 14.0 | 11.4 |
| Indiana | 5.0 | 93.2 | 0.0 | 1.8 |
| lowa | 0.0 | 98.1 | 0.0 | 1.9 |
| Kansas | 0.0 | 84.5 | 9.8 | 5.6 |
| Kentucky | 24.0 | 52.5 | 0.0 | 23.5 |
| Louisiana | 0.0 | 42.2 | 49.5 | 8.3 |
| Maine | 0.0 | 99.0 | 0.0 | 1.0 |
| Maryland | 28.8 | 59.3 | 0.0 | 11.9 |
| Massachusetts | 0.0 | 97.2 | 0.0 | 2.8 |
| Michigan | 5.6 | 91.9 | 0.0 | 2.5 |
| Minnesota | 0.0 | 95.5 | 0.5 | 4.1 |
| Mississippi | 0.0 | 94.1 | 0.0 | 5.8 |
| Missouri | 7.4 | 55.0 | 22.1 | 15.6 |
| Montana | 0.0 | 95.7 | 0.0 | 4.3 |
| Nebraska | 0.0 | 90.4 | 5.6 | 3.9 |
| Nevada | 0.0 | 64.8 | 1.2 | 34.0 |
| New Hampshire | 0.0 | 97.9 | 0.0 | 2.1 |
| New Jersey | 0.0 | 97.6 | 0.0 | 2.4 |
| New Mexico | 0.0 | 55.7 | 31.2 | 13.0 |
| New York | 14.6 | 59.4 | 18.0 | 7.9 |
| North Carolina | 0.0 | 74.4 | 22.1 | 3.5 |
| North Dakota | 0.0 | 95.9 | 0.7 | 3.4 |
| Ohio | 22.4 | 69.0 | 5.4 | 3.2 |
| Oklahoma | 0.0 | 60.2 | 34.0 | 5.8 |
| Oregon | 0.0 | 90.3 | 0.0 | 9.7 |
| Pennsylvania | 22.4 | 67.2 | 0.0 | 10.4 |
| Rhode Island | 0.0 | 98.8 | 0.0 | 1.2 |
| South Carolina | 0.0 | 23.0 | 0.1 | 8.6 |
| South Dakota | 0.0 | 83.6 | 12.3 | 4.2 |
| Tennessee | 0.0 | 59.5 | 29.7 | 10.7 |
| Texas | 0.0 | 82.7 | 10.2 | 7.1 |
| Utah | 0.0 | 77.6 | 15.3 | 7.0 |
| Vermont | 0.0 | 99.0 | 0.0 | 1.0 |
| Virginia | 0.0 | 69.3 | 10.7 | 20.1 |
| Washington | 0.0 | 61.4 | 20.5 | 18.1 |
| West Virginia | 0.0 | 80.5 | 0.0 | 19.5 |
| Wisconsin | 0.0 | 98.4 | 0.0 | 1.6 |
| Wyoming | 0.0 | 91.0 | 7.6 | 1.4 |
| U. S. Average | 5.9\% | 74.0\% | 11.0\% | 9.1\% |
| Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987). |  |  |  |  |

revenue are frequently limited by the states. State constitutions or statutes frequently specify the taxes that may be adopted by local governments. Local governments have only the power of persuasion to help them in obtaining the other two forms of financial assistance. State and federal policy determine the levels of intergovernmental assistance available to local governments.
The second alternative is federal revenue sharing and grants-in-aid. Federal grants have been either categorical, earmarked for a specific purpose, or general revenue sharing or block grants. These may have gone directly to local entities or may have been funnelled through state governments. This has been a significant source of revenue since its initiation in 1972 but is currently a diminishing resource.

The third alternative is state intergovernmental financial assistance. States sometimes share taxes with local governments rather than merely authorizing the imposition of taxes at the local level. Many states provide direct grant assistance to local governments for general revenue purposes. More frequently, state assistance is given for a specific purpose or with detailed requirements for its use. State assumption of responsibility for specific governmental functions that previously had been funded and administered at the local level is another method by which states assist local governments.
This chapter will first focus on the history and characteristics of local income taxes, their effects on the finances of the cities that adopt them and the problems that have been encountered in their use.

[^102]Local sales taxes, their use and impact, are also covered. Finally, this chapter will examine direct assistance of local government by states, or state-local revenue sharing. It will not consider federal revenue sharing. State and local user fees are discussed in Chapter 28.

## Local Income Taxes

Next year will mark the fiftieth anniversary of Philadelphia's municipal income tax, the oldest such tax currently in force. While the City of Brotherly Love will probably not celebrate this anniversary with quite the fanfare that accompanied the celebration of the anniversary of 1776,1939 does represent a milestone in the history of local finance in the United States. Today, over 3,500 cities, counties and school districts impose a wage, earnings, payroll or income tax. These taxes produced over $\$ 8.5$ billion in revenue, 5.9 percent of total local government tax collections, in 1986. Table 1 shows the relative size of tax collections for property, sales and income taxes by local government.

Texas, of course, has no local income tax, and while there has been some discussion of the tax locally in the past, the history is brief. The Constitution appears to allow home-rule cities in the state to adopt the tax by charter amendment. Home-rule cities generally have power to adopt any ordinance not precluded by state law, and the tax has been seriously considered in at least two Texas cities, although ultimately rejected. In 1958, the City of Fort Worth proposed the tax as a charter amendment. The voters rejected it by a three-to-one margin. The idea surfaced again in Fort Worth in 1972 but did not make it as far as the ballot. It appears that the work of this Committee and related events
may be stirring the ashes again in that city. The city council has been requested to lobby for a state income tax so that the city can "piggyback" a local tax onto it. ${ }^{3}$ At one point in the 1950s, Dallas, too, considered the idea. ${ }^{4}$ That appears to be about as much consideration as the idea has received in this state.

The history of the tax outside Texas has been a little more extensive. The first use of a local income tax in the United States was in Charleston, South Carolina, in the early Nineteenth Century. Although initially successful, after several years of ineffective enforcement of the tax, it was abandoned. Canadian cities were the next group to use the local income tax. This began in the early 20th century and continued until World War II. These taxes served as the model for Philadelphia, and it is somewhat ironic that the Dominion government forced Canadian cities to relinquish the income taxing power just as the United States began its use of the tax.

Pennsylvania granted the City of Philadelphia permission to adopt any source of revenue not being used by the state in 1932. The city did not take advantage of this power until 1938, when it attempted to adopt a wage and income tax and a city sales tax. The original ordinance was held unconstitutional because it contained exemptions not authorized by the constitution. ${ }^{5}$ The ordinance was quickly amended and the exemptions removed. The revised tax was upheld and the tax first collected in 1939. ${ }^{6}$

No more local income taxes were adopted until 1946, when Toledo, Ohio, opted to reduce property taxes and help solve its revenue needs by adopting an income tax. The serious expansion of the use of the tax began in 1947, when the Pennsylvania
legislature passed legislation allowing local governments to adopt any tax not used by the state or prohibited outright. This law has resulted in Pennsylvania having 2,782 local income tax jurisdic-tions-so many, in fact, that the number of districts always seems to be accompanied by a note that it is an estimate rather than an exact figure. This number does not include Pennsylvania townships that have adopted the tax. Apparently there are another 2,000 or so of them with local income taxes. As can be seen in Table 2, the number of jurisdictions with this tax has steadily grown and continues to do so today.

While these taxes are usually called income taxes, most of them are more accurately described as wage taxes or earned income taxes. Philadelphia established a precedent for the tax base that was followed for years. The tax was based on wages, salaries, commissions and other compensation, plus net profits of unincorporated businesses and professions.
Pennsylvania jurisdictions were not allowed to tax corporations, but other states frequently had no such restriction. This simple tax base was taxed at a low, flat rate to produce a steady stream of revenue that is not hard to collect or calculate, according to officials. Withholding of taxes from wages was, and still is, the key to successful collection.

The first major departure from
3. Cecil Johnson, "Heed that rapping, rapping at our door," Fort Worth StarTelegram, March 11, 1988.
4. Robert Sigafoos, The Municipal Income Tax: Its History and Problems (Chicago:
Public Administration Service, 1955).
5. Butcher v. City of Philadelphia, 333 Pa . 497, 6 A.2d 298 (1939).
6. Dole v. City of Philadelphia, 337 Pa . 375, 11 A.2d 163 (1940).
this type of tax base occurred in 1962, when Detroit adopted its tax. The tax allowed a $\$ 600$ personal exemption but added unearned income, interest, dividends and capital gains to the tax base. Two years later, the Michigan Uniform City Income Tax Act
adopted the general form of the Detroit tax for all Michigan cities. ${ }^{7}$

In 1966, two cities broke from the previous pattern by adopting graduated rates for their taxes. These were Baltimore and New York. New York departed even more from previous practices by

| TABLE 2. Local Government Units with Income Taxes, Selected Years |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State | 1987 | 1984 | 1976 | 1966 | 1955 |
| Alabama |  |  |  |  |  |
| Cities | 10 | 8 | 6 | 1 | 0 |
| Delaware |  |  |  |  |  |
| Cities (Wilmington) | 1 | 1 | 1 | 0 | 0 |
| Indiana |  |  |  |  |  |
| Counties | 51 | 43 | 38 | 0 | 0 |
| lowa |  |  |  |  |  |
| School Districts | 57 | 57 | 3 | 0 | 0 |
| Kentucky |  |  |  |  |  |
| Cities | 85 | 61 | 59 | 12 | 4 |
| Counties | 25 | 9 | 0 | 0 | 0 |
| Maryland |  |  |  |  |  |
| Cities | 1 | 1 | 1 | 1 | 0 |
| Counties | 24 | 24 | 24 | 0 | 0 |
| Michigan |  |  |  |  |  |
| Cities | 18 | 16 | 16 | 7 | 0 |
| Missouri |  |  |  |  |  |
| Cities (Kansas City and St. Louis) | 2 | 2 | 2 | 2 | 1 |
| New York Cities (New York and Yonkers) | 2 | 2 | 1 | 1 | 0 |
| Ohio |  |  |  |  |  |
| Cities | 482 | 460 | 385 | 95 | 16 |
| School Districts | 6 | 6 | 0 | 0 | 0 |
| Pennsylvania <br> Cities, Boroughs, <br> Towns, Townships <br> and School Districts $2,782 e \quad 2,644 e \quad 2,553 e \quad 1,782^{1}$ |  |  |  |  |  |
| Total | 3,545e | 3,332e | 3,088e | 1,900 | 434 |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987); Robert A. Sigafoos, The Municipal Income Tax: Its History and Problems (Chicago: Public Administration Service, 1955).

1. Select Committee on Tax Equity staff estimate. $\mathrm{e}=\mathrm{ACIR}$ estimate.
linking much of the calculation of its tax to the federal income tax. More recently, New York City has conformed its tax to the state income tax and turned over administration to the state. ${ }^{8}$

Maryland and Indiana use their state income taxes as their local tax base. While many of the newer taxes have adopted federal or state tax bases, there does not seem to be any movement among the cities that adopted the tax in the early days to alter their tax bases.

Philadelphia has found a unique way to finesse the problem of its limited tax base. The Philadelphia School District, which is contiguous with the city, taxes unearned income at the same rate that the city taxes earned income. This scheme manages to tax everything except corporate income, still the exclusive province of the state.

The most recent development of a new approach to this type of taxation is the use of payroll taxes on employers. These are widely assumed to be passed on to employees through lower wages and so are a variety of wage tax. These are currently in use in Los Angeles and San Francisco, California, Newark, New Jersey and three counties near Portland, Oregon.
Rates. Currently, the highest local tax rate is that of Philadelphia at 4.96 percent. Pittsburgh School District trails it at 4 percent. Other rates range from a fraction of one percent in many areas to three percent in Detroit.

[^103]Maryland local tax rates are expressed as a percentage of the state tax rate. Currently, rates are from 20 to 50 percent of the state tax liability, which is based on graduated rates from two to five percent. The graduated rates in New York City range from 1.5 percent of the first $\$ 2,500$ of taxable income to 4.1 percent of the income over $\$ 60,000$. ${ }^{9}$

Another tax rate issue is differential rates for nonresidents. Many cities allow-and some states require-lower tax rates for nonresidents of the taxing cities or other jurisdictions. This is, to some extent, in recognition of the proposition that nonresidents are not receiving a full share of the services provided to residents and should not pay as much toward providing those services. Other jurisdictions avail themselves of the law that allows cities to levy taxes on all income earned in the jurisdiction. However, cities have problems similar to those of states determining where income is earned. Most of the legal precedents concerning state taxation of nonresidents apply to local taxation of nonresidents. ${ }^{10}$

Administration and enforcement. The administration of a personal income tax by a city, particularly a small one, might seem to be a very ambitious undertaking. In fact, the administration has proven to be fairly simple and effective. There is undoubtedly some slippage and outright evasion, but the same can be said of the federal income tax. Initially, the administration of the tax depended upon the use of wage withholding for almost all of the revenue. Major employers were converted into the tax administrators for local government, even to the point of filing mass returns for all of their employees. The wage base was a convenient choice for cities without the resources of the federal
government to invest in an elaborate enforcement procedure. The Pennsylvania Department of Community Affairs even published a guidebook for the collection of the tax by local governments. ${ }^{11}$

While the simple wage base has survived in many cities using the local tax, the use of state tax bases and even state collection has provided some local governments with a low-cost method of collecting and enforcing the tax while avoiding many of the problems inherent in the Pennsylvania approach. This offers the cities a broader tax base, the chance to use progressive tax rates, if desired, and the greater resources for enforcement available at the state level. Indiana, Maryland and New York use the state tax base and administration.

The degree to which the state determines what the local tax base, rate and application should be varies a great deal. The states mentioned that piggyback on their state taxes obviously have their base determined by the state. Michigan has a statute that determines the parameters of the tax that local governments can adopt. ${ }^{12}$ Other states allow the local governments to make this determination largely on their own. This can have serious consequences.

Unfortunately, the absence of any uniformity in approach to the tax in Pennsylvania has resulted in a "Balkanization" of the tax in that state. Tax competition between central cities and suburbs has continued. While Philadelphia has the preferential authority from the state to tax earnings in the city whether or not the place of residence imposes the tax, other cities in Pennsylvania do not. Since the city of residence has the legal right to tax all the income of its residents, a suburb can deprive the central city of revenue from commuters. Some suburbs appear
to have adopted this tax to keep their residents' taxes "at home," whether they need the revenue or not. In many other states, only the larger cities are authorized to adopt the tax, preventing the tax "Balkanization" but leaving the cities at an economic disadvantage.

The tax rates adopted in the suburbs are often lower than the rates in the central cities and consequently still offer competitive advantages to the suburbs. The central city loses the entire amount of its tax even if the suburban city taxes at a lower rate. There is no right for the central city to tax the differential unless state law establishes such a system. Pennsylvania has not done this, although other states have, generally through credits for tax paid to the other jurisdiction.

There are other negative impacts from the patchwork approach to local income taxation. Because of the small size of the jurisdictions involved, their economies are truly open, and minor tax differentials can result in migration effects among businesses and individuals. Since commuters are generally taxed under these taxes, they would have to change places of employment to avoid the tax entirely. It appears that has happened to a small extent. More important for central cities is the migration of businesses to the surrounding
9. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), pp. 48-49.
10. See Chapter 32, "Legal Issues Concerning a Texas Personal Income Tax."
11. John Cook, The Administration of the Earned Income Tax (Harrisburg, Pa.: Department of Community Affairs, 1964).
12. Michigan Uniform Local Income Tax Ordinance.
suburbs, exacerbating the problems that probably resulted in the adoption of the tax in the first place. Business and industry end up in the suburbs surrounding a deteriorating central city with a declining tax base. ${ }^{13}$
Experts argue that there are several ways to avoid the interjurisdictional tax problems that plague many Pennsylvania cities. Many other states and cities have taken advantage of them. Frequently, these solutions are imposed by the states but not always.
In some jurisdictions in Pennsylvania and Ohio, intercity agreements have resulted in a more manageable administration and allocation of the tax. Cleveland and some of its suburbs have agreed to a central administration of their taxes and allocation of the tax between cities of employment and residency on a $75-25$ percent basis. This was accomplished in the absence of a state law encouraging or requiring it. ${ }^{14}$
Maryland has avoided these problems by adopting a local tax at the county level, so the entire state is subject to it. There are rate disparities, but these appear to have had less impact than in other areas. The tax rate is based on the county of residence rather than employment, so there are no commuter problems.
Indiana deals with the problem
13. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification, p. 56.
14. John Cook, "Effects, Problems, and Solutions of Central Collection of Municipal Income Taxes," 19 Case Western Reserve
L. Rev. 900 (1968).
15. Deran, p. 23.
16. Sigafoos, p. 45.
17. John Cook, "Effects, Problems, and Solutions of Central Collection of Municipal Income Taxes," 19 Case Western Reserve L. Rev. 900 (1968).
through state law establishing priorities for allocation of the tax. Other states, such as Michigan, use credits for tax paid to divide the tax among jurisdictions. These methods offer improvements over the problems inherent in the Pennsylvania approach but still may not solve all of the revenue needs of the local governments involved. Some critics advocate a uniform state tax allocated to the local governments on a basis more reflective of the needs of the jurisdiction. This type of solution will be discussed in a later section of this chapter.
Estimates of the cost of collection of these taxes have been relatively low in comparison to the revenue collected, although higher than state income taxes and many other taxes. In Pennsylvania, estimates of cost range from about six percent for the smallest jurisdictions to around four percent in the larger cities. Ohio estimates ran from two to five percent. ${ }^{15}$
Enforcement of local income taxes has been very uneven. Frequently, the effort involved in bringing a tax evader to justice does not seem to be justified to collect a tax that might have a rate of half of one percent. More attention has been paid to employers who fail or refuse to withhold taxes or pay them over to the city. Individual taxpayers have been difficult to police. One commentator does emphasize the value of making a few examples of prosecutions to increase the visibility of enforcement efforts, even if the prosecution costs many times the amount of the tax evaded. ${ }^{16}$
A problem for cities like Philadelphia is the fact that many of its residents work in nearby New Jersey. New Jersey employers have generally been reluctant to withhold the Philadelphia tax from the salaries of their workers. Another longstanding problem
that has been resolved was the refusal of the federal government to withhold wages from the salaries of federal workers.
Other enforcement problems remain. Itinerant workers, businesses doing temporary jobs in a jurisdiction, the self-employed and others continue to be problematic taxpayers. This is complicated by the relatively low level of audit and enforcement that most local governments can afford. Even use of federal resources, such as individual master file lists, can be more effort than some local governments can muster. One of the possible solutions to these problems is the greater coordination of local collection, either through state administration or through the use of collection agreements among the local governments in a geographic region. ${ }^{17}$ Such efforts can not only enhance tax enforcement, they can resolve disputes between contiguous districts over allocation of taxes, such as between the place of residency and the place of employment. They can also reduce the burden on employers to report tax to a multiplicity of local jurisdictions where employees reside.

## Revenue potential and tax

impact. The revenue potential of local income taxes is considerable. Cities such as Toledo and Columbus, Ohio, receive over 70 percent of their total tax revenue from their income taxes. Further, this is possible at rates of two to three percent. In 1966, cities using the income tax collected an average of 32.1 percent of their tax revenue from this tax. While no more recent calculation of this ratio has been found, the number of individual cities that have increased their reliance on this tax over the years implies a conclusion that the overall percentage has increased. Further, as shown in Table 3, municipal income tax revenue as a
percentage of total city tax revenue has been steadily increasing for the last 13 years. Table 4 shows the per capita income tax burden in states with local income taxes.
The impact of this tax on the overall city budget and other taxes has been the subject of some debate. A relevant study involved "Tax Structure in Cities Using the Income Tax." ${ }^{18}$ It is based on 1966 data. The study involved a comparison between cities with a municipal income tax and cities of similar size without the tax. The author attempted to evaluate the reliance on the income tax, the extent to which it was a replacement of the property tax, the rates of tax increase in the two kinds of cities and the overall tax burden of the cities.
The study concludes first that once a city adopts an income tax, its reliance on the tax is likely to increase over time. For all major cities (cities with population over $300,000)$ using the income tax, the tax produced 27.1, 30.7 and 32.1 percent of total tax collections in 1956, 1963 and 1966, respectively. Property tax collections were significantly lower in income tax cities, both as a percent of revenues and per capita. The differences increased as the size of the cities decreased. Increases in property tax rates were also slower in the income tax cities.
Next, the author compared the overall burden of taxes and found a surprising result. In 1966, the total per capita taxes in the cities with income taxes were slightly lower than in the cities without the tax. Further, for the period from 1956-66, the rate of increase in taxes in the income tax cities was lower than in the other cities. In conclusion, the author states that the income tax, although generally introduced in a time of financial stress, has been a replacement for other taxes, principally
the property tax, rather than an additional tax.

Merits of the tax. Of course, there is no tax that does not have some objectionable features. These go beyond the additional administrative burden the tax imposes where it is used.

The first problem is that these taxes tend to be regressive. Most of them have flat rates rather than progressive. This is compounded by the fact that unearned income is excluded from the tax base. Since the wealthy have a greater share of unearned income, they are taxed at lower effective rates. Next, the use of a gross income figure rather than allowing deductions and exemptions fails to recognize legitimate differences between individuals who may have the same earnings.

Nonresidents who are required to pay tax to cities where they do not reside have no vote to select the representatives of the government that will assess the tax and spend the revenue to which they contribute. If nonresidents are taxed at the same rate as residents, they will not benefit proportionally from their taxes compared to the resident. Further, if the
income of a taxpayer is taxed in the city of employment, and the city of residence also has this tax, the place of residence must choose between taxing the income a second time or allowing a credit for the tax already paid. If the income is taxed twice, it is unfair to the taxpayer. If a credit is given, the city of residence may place itself in fiscal jeopardy. ${ }^{19}$
As might be expected, there are some responses to these objections. The simplicity of the local income tax is largely justified by administrative considerations and the low rates typical of the tax. The adjustments necessary to make the tax less regressive, such as progressive rates, deductions and exemptions and the inclusion of unearned income, would make the tax much more expensive to administer and unnecessarily complex for the taxpayers. The
18. Elizabeth Deran, "Tax Structure in Cities Using the Income Tax," National Tax Journal, Vol. XXI, Number 2 (June 1968) p. 147.
19. Note, "The Limits of Municipal Income Taxation: The Response in Ohio," 7 Harvard J. Legis. 271 (1970).

TABLE 3. Municipal Income Tax Revenue, 1974-86

| Year | Number of <br> Cities with Tax | Tax <br> Collections <br> (millions) | Total City <br> Tax Revenue <br> (millions) | \% from <br> Income Tax |
| :---: | :---: | :---: | :---: | :---: |
| 1974 | 1,976 | $\$ 2,112$ | $\$ 19,434$ | $10.9 \%$ |
| 1975 | 2,000 | 2,264 | 21,135 | 10.7 |
| 1976 | 2,024 | 2,720 | 23,336 | 11.7 |
| 1977 | 2,045 | 3,100 | 26,067 | 11.9 |
| 1978 | 2,066 | 3,345 | 27,830 | 12.0 |
| 1979 | 2,086 | 3,496 | 28,762 | 12.2 |
| 1980 | 2,109 | 4,042 | 31,256 | 12.9 |
| 1981 | 2,129 | 4,530 | 34,104 | 13.3 |
| 1982 | 2,151 | 4,975 | 37,077 | 13.4 |
| 1983 | 2,173 | 5,268 | 39,969 | 13.2 |
| 1984 | 2,195 | 5,970 | 43,719 | 13.7 |
| 1985 | 2,023 | 6,227 | 47,647 | 13.1 |
| 1986 | 2,367 | 7,074 | 50,873 | 13.9 |
| Source: U.S. Department of Commerce, Bureau of the Census, Government |  |  |  |  |
| Finances, various years. |  |  |  |  |

low rates of the taxes make the effect of any regression minimal, and the regressivity should be reversed by progressivity in the state or federal income tax.
Disputes over the taxation of nonresidents have been resolved in several ways. States have sometimes stepped in to determine an allocation. In other cases, cities have worked out these problems themselves. Real world situations have seldom resulted in taxpayers being taxed twice or cities losing all of their tax bases.
Finally, the impact of municipal income taxes on economic development needs to be considered. There are three areas of concern here. One is the dollar cost of the tax itself. Another is the adminis-

[^104]trative burden that can accompany these taxes. The third is the possible migration of individuals and businesses from the taxing jurisdiction.
Many of these taxes include corporations and unincorporated businesses in their taxpayer population. At rates of one or two percent of net earnings, the cost may not be too great. If this cost is offset by a significant reduction in property taxes, there may be a net benefit to the businesses in a city with this tax. There is some evidence, already discussed above, that the reductions in property taxes are significant. Of course, the investment of the businesses in taxable property and the size of the profits will ultimately determine whether there is a cost or benefit to the individual business. In cases where the overall tax burden is too great, there is potential for injury to the business climate with resultant loss of jobs and income.
One study attempted to calculate the impact of a one percent increase in the rate of the Philadelphia earnings tax. ${ }^{20}$ It concluded that the increase in the tax rate had cost the city as much as 11 percent of its manufacturing jobs, doing serious damage to the economy.

This study has been criticized as exaggerating the effect of the tax. ${ }^{21}$ Another study contended that the effect of a tax increase could not be determined without considering the use of the additional revenue. If the revenue were used for items such as education or health care, there would be an overall gain in the economy. If it were used for items such as transfer payments (welfare), the effect would be harmful to the economy. ${ }^{22}$

The administrative cost of compliance can be of real significance, too. In an area where there is little or no coordination of collection of local taxes and most jurisdictions have adopted the tax, costs of compliance can be high. Employers can be faced with requirements for withholding for 20 or 30 jurisdictions. The opposite of this problematic situation would be the case where a state has set rules for local jurisdictions, limited choices of rates and set priorities for the claim to taxes with respect to the place of residence versus place of employment. This approach can keep compliance costs to businesses and individuals low.
Individual and business

| TABLE 4. Per Capita Income Taxes by State, 1986 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| State | Per Capita Total | 50-State Rank | State Income Tax Per Capita | Local Income Tax Per Capita |
| Alabama | \$236 | 38 | \$225 | \$11 |
| Delaware | 791 | 3 | 763 | 28 |
| Indiana | 295 | 30 | 274 | 21 |
| Kentucky | 340 | 20 | 283 | 58 |
| Maryland | 689 | 4 | 488 | 201 |
| Michigan | 552 | 7 | 514 | 38 |
| Missouri | 287 | 32 | 255 | 32 |
| New York | 943 | 1 | 759 | 184 |
| Ohio | 430 | 12 | 303 | 127 |
| Pennsylvania | 430 | 11 | 304 | 126 |
| U.S. | \$391 |  | \$356 | \$35 |
| Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987). |  |  |  |  |

migration is another problem of local income taxes. The greater the differential and the smaller the area subject to the tax, the more migration will occur. These factors seem to exacerbate central city finance problems. The more taxes are raised in an attempt to keep up with the need for services, the more migration out of the city, further eroding the tax base. If the tax is based on where it is earned rather than the place of residence, that effect can be reduced. It appears to be easier for most people to change their place of residence than their place of employment.
In sum, the local income tax has proven to be a reliable source of revenue for local governments. Its administration has been simplified by making the tax itself simple. This simplicity can also be achieved through "piggybacking" on the state tax. While the tax has never been tried in Texas, it is popular in the Northeast U.S. and continues to be adopted in new jurisdictions every year. As local governments feel greater pressure on their property tax bases, this option may look increasingly attractive.

## The Local Sales Tax

An alternative revenue source for local government that is more familiar in Texas is the local sales tax. This tax is of two types. There are general sales taxes on most retail sales and selective excise taxes on particular products such as motor fuel, alcoholic beverages or tobacco. There are currently 29 states that have general local sales taxes, not including states that rebate a portion of the state sales tax to local governments and two more (Florida and Idaho) where the taxes are authorized but not in use. These taxes may be imposed by municipalities, coun-
ties, transit authorities or school districts. Currently, over 6,800 local jurisdictions use the tax. It is the second largest source of local tax revenue, trailing the property tax and leading the income tax. The highest local rates include five percent in Alaska and four percent in Colorado. General and selective sales taxes represented 15.9 percent of local tax revenue in 1986. ${ }^{23}$ Table 1 shows the relative size of tax collections for property, sales and income taxes by local government.
The degree of reliance on the local sales tax varies greatly. In 1981, the extreme case was Tulsa, Oklahoma, which derived 77 percent of its tax revenue from the tax at a rate of four percent. In the same year, the 24 largest cities using the tax averaged 21 percent of their tax revenue from the sales tax. ${ }^{24}$

The first local sales tax was adopted by New York City in 1934. This was followed by New Orleans in 1938. Real growth in the use of the tax did not occur until after World War II. The key development that allowed the growth in its use was the development of the state-administered local tax by Mississippi in 1950. By 1963, 12 states had authorized the use of local sales taxes. By 1973, the total had more than doubled to 26 . Since that time, the growth in the use of the tax has been slow, with only three additional states using the tax by $1988 .{ }^{25}$
Administration. These taxes are generally linked to state sales taxes, although the degree of linkage varies. The majority of states administer the local sales taxes and rebate the funds to the local governments. However, there are still areas where local governments are fully or partially responsible for the administration of the tax, including Ala-
bama, Alaska (which does not have a state sales tax), Arizona, Colorado, Louisiana and Minnesota.

There are numerous problems associated with local administration of local sales taxes. There are also some problems for local government from state administration that keep some local governments from giving up control even when they have the option. However, to the state and taxpayers, these objections seem minor in comparison to the problems of local administration and invite state action. ${ }^{26}$
Problems with local administration affect businesses, both as collectors of the taxes (vendors) and as taxpayers, and individuals, both as consumers and as taxpayers. First, tax administration is duplicated. If both governments enforce the tax vigorously, administrative costs are doubled and the time and trouble for vendors is increased. If the local governments do not vigorously enforce the law, they may lose revenue that they might obtain through state enforcement. Tax bases may vary between the state and localities and among different localities. Tax rates can vary among local governments of the same type. This is a nuisance for administrator and taxpayer alike. Without state coordination, there
23. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, Vol. 1, p. 57 and Vol. 2, p. 79 .
24. U.S. Advisory Commission on Intergovernmental Relations, Sales Taxation (Washington, D.C., 1984), p. 4.
25. U.S. Advisory Commission on Intergovernmental Relations, Significant Features, Vol. 1, p. 57.
26. John L. Mikesell, "Local Government Sales Taxes" in John Due, State and Local Sales Taxation (Chicago: Public Administration Service, 1971), p. 289.
may be overlapping local rates that create higher total rates and a greater chance of migration of sales to other jurisdictions. Purchases can be taxed twice at the local level, once for the sales tax and again for the local use tax. The chance for coordination of the taxes to allocate needed revenue to different local government entities is reduced.
On the other hand, the reason that local governments continue to administer their own taxes comes down principally to a local control issue. They want to have control over the base, structure and rate of their tax. They want control of the jobs provided by the enforcement and administration of the tax. They want complete control of the revenue without having to wait for a state allocation. In some cases, it is claimed that the local administration is cheaper and more efficient than the state's, although this is doubtful.
State administration of local sales taxes is generally accepted to be the preferred method, except to some local government officials. It is used in 23 of the 29 states where local taxes are imposed. California provided a good example of the need for state administration. Cities in California began adopting the local sales tax in 1945, immediately following the end of the war. The expansion of the use of the tax continued, and the governments began adopting local use taxes to protect their local merchants. There was no coordination of the tax base, rates, administration or the means of regulation, reporting or enforcement. This caused excessive vendor compliance costs, significant distortions in consumer
27. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification, p. 46.
28. Ibid.
shopping habits and general confusion. It was also expensive for the local governments to administer. Finally, after several years of trying to overcome local objections, the California Legislature passed the Bradley-Burns Uniform Local Sales and Use Tax Law of 1956. It took until 1962 for all local governments to enter the system, and Los Angeles adopted a temporary additional tax in 1968 that was repealed in 1970 when the city was faced with the threat of being thrown out of the state system.
The uniform system has not been without problems, but it is an improvement over the previous one. Complaints about state administration include disparities in the amount of revenue received in the local jurisdictions compared to their needs, failure to verify the location of new outlets, a lack of complete uniformity between the local and state tax bases and inattentiveness to local problems on the part of the state.
State administration has proven cheaper in almost every instance than local administration. Even when the state charges a fee, it is frequently less than the cost of local administration. State fees for administration vary considerably, but the Texas fee of two percent of revenue collected seems to be about average. Local satisfaction with state administration also varies. It depends on the perceived diligence of the state in collecting and rebating the revenue to the local governments, the cost and the flexibility of the state statute for local government (what types of governments can adopt the tax, choice of rates).
State administration is also helpful for vendors. It allows a single return to be filed for both taxes, generally guarantees greater uniformity in the tax base and simplifies collection of the local use tax, if any.

Revenue allocation. In Texas, local sales tax revenue is generally allocated to the location where the sale took place. Sometimes the place of business of the vendor is considered the point of sale even when the actual transaction was elsewhere, and the point of delivery is generally used in use tax transactions, even though the actual incidence of the tax is to the place the item is first used or stored. The key is that some event relating to the transaction is the basis for allocating the revenue. Areas with a high concentration of retail activity generally receive much of the sales tax revenue. This need not be the case. In some states, it is not.
Some states have chosen to deal with the disparities in yield of local sales taxes by allocating the revenue on some basis other than the location of the sale. Kansas, Nevada, New York, North Carolina, Tennessee, Wisconsin and Wyoming use a variety of factors to allocate revenue from local sales taxes. The factors used include population, school average daily attendance, property tax collections and taxable property values. In practice, these allocations are made only within the county of origin of the revenue, so there is not a massive statewide redistribution of taxes. The counties receive the revenue on the basis of place of sale. ${ }^{27}$
The U.S. Advisory Commission on Intergovernmental Relations suggests an alternative approach that would, in its view, be preferable. The revenue should be redistributed on a statewide level based on tax effort. The Commission argued that this would be more equalizing and would tend to cancel fiscal disparities rather than magnify them as allocation based on origin tends to do. ${ }^{28}$ Other redistribution systems, such as an evaluation of need, might also be used.

One problem with the use of a statewide redistribution of the revenue from a sales tax is the impact it would have on various areas of local government. Areas with high levels of retail activity have come to rely on the sales tax from that activity. It could cause serious budget problems to merely take it away to give to another area. Obtaining agreement from the affected local governments to any one method of redistribution of local sales tax revenue would be difficult. Perhaps if the revenue to be redistributed were in addition to the existing level of revenue, there would be less resistance than to redistribution of current revenue streams. Or if the tax were newly imposed, there would not be an established distribution of revenue to disturb.

There are legal impediments to the use of the ACIR suggestion in many states, including Texas. A truly local tax, such as the Texas local sales tax, is legally imposed at the local level and could not be redistributed on a statewide basis. The alternative would be to have a state tax that would be dedicated to local governments and distributed as the state determined. In Téxas, such an approach would require a constitutional amendment. This type of assistance to local government is discussed in the section on statelocal revenue sharing.

Variations in tax base. The degree of adherence to the state tax base is another area of variation among local sales taxes. While most of the taxes are the same as their state's tax, there are some areas of variation. In Texas, for instance, local governments were not allowed to tax telephone service for the first four years that it was subject to state tax and now may do so on a local option basis. Previously, when the state tax on residential utilities was
repealed, local jurisdictions were given the option of retaining their tax. At least nine states have such minor variations in the local tax base.

In the states that allow local administration of the local tax, the variation in the tax base can be much more pronounced. As previously mentioned, this can cause problems for vendors and tax administrators in handling the taxes.

The border problem. One of the problems with sales taxes is the distortion caused where an area with the tax adjoins an area without the tax or an area with a much lower tax rate. The natural tendency for consumers is to change their shopping patterns to shop where the tax is lower. The distortion increases as the difference in the tax burden increases and the price of the merchandise involved increases. This is a problem in the efficiency of the tax structure and has been called the "border problem." While it has been considered principally in a state context, it is also a problem for local sales tax jurisdictions.

The problem manifests itself in two kinds of altered behavior. There is a tendency for the consumer, all else being equal, to shop where the tax rate is lower when it does not involve a great deal of additional travel. With local taxes, rates can vary significantly within a single urban area. Central city, suburban and unincorporated areas can be a short ride on a freeway apart, offering easy access to retailers with significantly different tax rates. The second distortion is the retailers' reaction to the behavior of the consumers. Business location decisions are subject to consumer preference. A city in need of additional revenue can lose its business activity as it raises its tax rates. Taken to extremes, this can result in an exacerbation of the central city's
deterioration through shifting of the retail activity to a ring of suburban shopping malls.

There have been several empirical studies that support the idea that consumers are aware of the tax differential and do alter their shopping habits accordingly. The worst case occurs where a single urban area falls in two states with a significant tax differential or at the border of a state without a sales tax. ${ }^{29}$ Texarkana would be a significant example for Texas. The sales tax rate in Texarkana, Arkansas, is 2.5 percent lower than the Texas side of the city.
The problems are minimized where the state moves to bring the local tax rates into uniformity or limits the differential to a percent or less. The problems are worse in states like Colorado where local rates are as high as four percent and cities with that level of tax may be adjacent to areas with no local tax.

The Texas local sales tax. Texas first authorized cities to adopt a local sales tax in 1967. The rate was one percent and the tax base was identical to the state's. Since that time the use of the tax has been expanded to transit authorities and counties, and cities that are not in a transit authority have the option of adopting an additional one-half percent tax. Counties are limited to a one-half percent tax unless there is no incorporated city in the county. The county and additional city tax are dedicated to property tax relief. Transit authorities can adopt a tax of one-quarter, onehalf, three-quarters or one percent. A separate statute limits the tax in any area to a maximum of two percent. Adoption of the tax at all levels requires a vote of the people in the affected area.
The local sales tax has proven to
29. Mikesell, p. 296.

| State | Eligible Governments | Rates | Administration | Parallels State Tax Base? |
| :---: | :---: | :---: | :---: | :---: |
| Alabama ${ }^{1}$ | Counties and cities | 0.5-3\% | Local and state | Generally parallels state provisions. |
| Alaska | Cities and School districts | .06-1\% | Local (no state tax) | Most provisions are specified in state law granting local sales tax authority. |
| Arizona | Counties, cities and recreation center districts | 0.5-3\% | Local (Phoenix and Tucson) and state | Generally parallels state provisions except for Phoenix and Tucson. |
| Arkansas | Counties and cities | 1-2\% | State | Generally parallels state provisions. |
| California | Counties, cities, rapid transit districts, local transportation authorities and redevelopment agencies | 0.5-1.25\% | State | Local sales taxes parallel state provisions. |
| Colorado | Counties, cities and regional transportation districts | 0.25-4\% | Local (city) and state | Most taxes parallel state law; Denver's tax is locally-administered. |
| Florida | Counties | 1-2\% | State and local | Some taxes parallel state law while others are considerably more narrow. |
| Georgia | Counties and cities | 1\% | State | Largely parallels state law. |
| Idaho | A 1984 law authorizes a $60 \%$ m tax, but to date, no Idaho resort | ajority of voters city has passed | any resort city to approve local sales tax. | adopt, implement and collect a sales |
| Illinois | Counties, cities, transit districts and transportation authorities | 0.25-1\% | State (except Chicago) | All local sales taxes parallel state law except for the locally written Chicago sales tax. |
| Indiana ${ }^{\text {a }}$ | Counties and cities | 1\% | State | Local tax on food and beverages. |
| lowa | Counties | 1\% | State | Generally parallels state provisions. |
| Kansas | Counties and cities | 0.5-1\% | State | Generally parallels state provisions. |
| Louisiana | Parishes, cities and school boards | 0.5-5\% | Local except for motor vehicles | Substantial variation between state and locals and among locals. |
| Minnesota | Cities | 0.5-3\% | Local | Significant variation between state and locals. |
| Missouri | Counties and cities | 0.5-1.38\% | State | Generally parallels state provisions. |
| Nebraska | Cities | 0.5-1.5\% | State | Generally parallels state provisions. |
| Nevada | Counties | 0.25\% | State | Exactly parallels state provisions. |
| New Mexico | Counties and cities | 0.12-1.25\% | State | Generally parallels state provisions. |
| New York | Counties, cities, school districts and transportation districts | 0.5-4\% | State | Generally parallels state provisions with exceptions for New York City. |
| North Carolina | Counties | 1.5-2\% | State (counties may administer) | Generally parallels state provisions. |
| North Dakota | Cities | 1\% | State | Generally parallels state provisions. |
| Ohio | Counties, island tax districts and transit authorities | 0.25-1.5\% | State | Generally parallels state provisions. |
| Oklahoma | Counties and cities | 0.5-4\% | State (cities may administer) | Generally parallels state provisions. |


| State | Eligible Governments | Rates | Administration | Parallels State Tax Base? |
| :---: | :---: | :---: | :---: | :---: |
| South Dakota | Cities | 0.75-3\% | State | Generally parallels state provisions. |
| Tennessee | Counties and cities | 1-2.75\% | State (law allows local) | Largely parallels state provisions. |
| Texas | Counties, cities and transportation authorities | 0.25-2\% | State | Largely parallels state provisions. |
| Utah | Counties, cities and transit districts | 0.25-1.12\% | State | Generally parallels state provisions. |
| Virginia | Counties and cities | 1\% | State | Generally parallels state provisions. |
| Washington | Counties, cities and public transportation systems | 0.5\%-1\% | State | Generally parallels state provisions. |
| Wisconsin | Counties | 0.5\% | State | Generally parallels state provisions. |
| Wyoming | Counties | 1\% | State | Generally parallels state provisions. |
| Source: Commerce Clearing House, All-State Sales Tax Reports, Volume 1A (1988). <br> 1. Alabama local governments impose lower rates on automotive and manufacturing equipment sales. <br> 2. Indiana's tax is not a general sales tax, applies to food and beverages only. |  |  |  |  |

be a very popular tax in Texas. It has been adopted in 1,050 cities, with another 84 cities adopting the additional one-half percent tax, in 91 counties, and by six independent transit authorities and one city transit department. Revenue for 1987 was $\$ 850.8$ million for cities and $\$ 390.2$ million for transit authorities. The county tax and additional city tax were first effective January 1, 1988. Revenue for the first six months of 1988 for counties was $\$ 24.2$ million, as opposed to $\$ 465.9$ million for cities and $\$ 212.5$ million for the transit authorities in the same period. The additional city tax has not been separated from the basic one percent tax, so it is difficult to determine the amount of money that has been raised from it. ${ }^{30}$
The tax has increased in complexity as it has been adopted by different types of local governments and as the tax base has expanded to include services. The incidence of the tax is based on the point of sale for the city and
county taxes but on the point of delivery for the transit authority taxes. For services, the point of sale for local sales tax purposes has been retained as the place of business of the provider of the service. Use tax must be reported based on the location where the goods are first placed in service or the service is performed.
Multioutlet retailers have a particular problem with the tax. The Comptroller has calculated that there are now 31 different combinations of local tax types and rates possible in the state. Accurate reporting of this tax is rendered considerably more difficult by use of this arrangement. Large-use taxpayers have even more difficulty with the arrangement. While a retailer will always be able to keep up with the local jurisdictions that a retail outlet is within, it can be considerably more difficult to keep up with the location where property was placed in use.
As previously mentioned, an
alternative to this would be a tax imposed at the state level and allocated to the local jurisdictions based on a formula. Most such formulas do, however, include the place of the sale as one of the factors in the determination of the allocation. Businesses will almost invariably be required to track location of sale to some degree.
However, the situation could be considerably worse. If the incidence of local tax were at the place of delivery of goods or place of performance of services, accounting for the local tax could border on the impossible. Every plumber or electrician in a major metropolitan area would practically have to add to their staffs to keep up with the local taxing jurisdictions for each time a truck went out to perform a job.
Merits of the alternative. Local sales and use taxes are subject to many of the same accolades and
30. Comptroller of Public Accounts.
criticisms as state sales and use taxes are. Because of their generally lower rates and the fact that they usually piggyback onto state taxes, they often serve to magnify the effects of the state taxes. Regressivity, for instance, is increased by the additional rate. Any border problems due to rate disparities are increased. The temptation to use mail-order sources to avoid the tax is increased.

On the other hand, the sales tax is much more popular with the public than either the property tax or the income tax. In Texas, 91 of 104 counties and 78 of 83 cities voting on the measures approved a one-half percent sales tax dedicated to property tax relief. The fact that the taxpayers pay the tax in tiny increments throughout the year seems to increase the acceptability.

It is a relatively stable source of income, even at the local level, depending on the size of the retail base. Administrative costs to local governments are minimal except where there is local administration.

The increase in use of local sales. taxes can be expected to continue at its present slow pace as the pressure for services and the dislike of the property tax increase. Only a serious disruption of the current balance of taxation, such as a national sales tax or value-added tax, would be likely to alter this trend.

## Local Excise Taxes

In many states, local governments have augmented their fiscal bases through the use of local excise taxes on such items as alcoholic beverages, tobacco products and motor fuel. These taxes may be administered by the local

[^105]government or piggybacked on a similar state tax. Selective excise taxes of local governments raised $\$ 6.74$ billion dollars for local governments in 1986, 4.6 percent of all local government tax revenue. ${ }^{31}$

Excise taxes currently play a minor role in Texas local government finances. Local hotel occupancy taxes may be adopted at rates of up to seven percent of the price of a room. Local governments also receive a portion of some state taxes, either for their services in collecting the tax or as a shared revenue source. For instance, Texas currently rebates 12.5 percent of the mixed beverage gross receipts tax to cities and counties. Counties also receive five percent of motor vehicle sales tax and a portion of motor vehicle registration fees.

An excise tax option not currently in use in Texas is the local motor fuels tax. Sixteen states authorize local governments to impose a tax on motor fuels measured in cents per gallon. The majority of the taxes are levied at the retail level, collected by the state and rebated back to the local governments based on the point of sale. Rates vary from one to eight cents per gallon.

A proposal for a county local option fuels tax was introduced, but not passed, in the Texas Legislature during the 69th Session in 1985. The bill, Senate Bill 815 by Senator John Traeger, would have allowed counties with population over 150,000 to adopt a tax at a rate of from one to five cents per gallon on fuel sold at the retail level or used by a bulk user in the taxing county. The Comptroller would have collected the tax and rebated it to the counties. The tax would have been adopted through an election held in the county called either by the county commissioners or through a petition signed by ten percent of the voters.

The bill allocated one-fourth of
the revenue from the tax to the state's Foundation School Fund and required the other threefourths to be used for road, street and highway purposes in the taxing county. This allocation of funds is in accordance with the provisions of Article VIII of the Texas Constitution, which arguably requires all tax money derived from highway motor fuels taxes to be so used. While it is not crystal clear that the provision applies to a local tax, it is likely that it would be construed that way.
Administrative problems with the bill included the variable rate and the collection at the retail level. This tax had no relationship to the state fuels tax because the state tax is collected at the wholesale level. It would have required an entirely different collection and administrative system for the fuel retailers. The state would, however, have been compensated for both the startup costs and continuing operation of the system from the tax revenue. The startup costs were to be shared equally by all counties adopting the tax. The continuing collection costs were paid with an allocation of two percent of the revenue from the tax to the state.

Florida local fuels tax. Contact with the Department of Revenue in Florida yielded some additional information concerning administration of local fuels taxes. That state has had a county tax in effect for several years. Currently, 62 of their 67 counties have adopted the tax. It has a rate that varies from one to seven cents per gallon. The tax is administered by the state for the counties. It was collected at the distributor level for several years, but this was recently changed. The tax incidence was based on where the retail sale was made, and the distributors complained that they should not be held responsible for insuring that the tax was reported correctly.

Collection is now at the retail level. Florida had 9,468 retailers licensed to collect and remit the tax on January 1, 1988. The retailers tend to turn over with some rapidity, and collections are not as good as state and local officials had expected. The state also has problems with counties questioning their entire operation, from collection and enforcement to the amounts remitted.

There are some inherent problems with local excise taxes, such as the one on motor fuels. It is difficult, if not impossible, to piggyback their collection directly on the state tax. State taxes are most efficiently handled as taxes on the distributors. For a local tax to be handled on that basis, either distributors must be responsible for tracing the sales of fuel to the point of retail sale, a generally unacceptable burden for the dealers, or the sales are assigned to the location of the distributor and the local jurisdictions without distributors lose all access to this revenue source. The other option is to collect it at the retail level, preferable but not an option without problems. As Florida's experience illustrates, fuel retailers tend to be smaller and less reliable taxpayers than the general sales taxpayers. Then there is the question of state or local administration. State administration would probably be preferable to local, especially if more than a handful of counties adopted the tax. It would not require setting up a new tax administration system in each local area, probably with varying results in different areas.

As mentioned in the discussion of local sales taxes, significant variations in tax rates in adjacent local areas can cause distortions in consumer purchasing practices. Motor fuels taxes are very likely to suffer from this problem. When the consumer is already in his or
her car driving, it does not require a great deal of additional effort to go another mile or two to save several cents per gallon on gas. This can be overcome by keeping rates low or imposing the tax on a statewide basis.
Texas would not have to follow either Florida or the Traeger bill in administering a local fuels tax. The limitation on population in the Traeger bill was probably motivated by the fact that the major metropolitan areas of the state are the ones suffering the greatest fiscal strain. However, a recent federal report on the condition of many rural roads and bridges shows that the need may indeed be statewide. Dedication of the tax revenue to the repair of these substandard structures might be considered. An option that would ease administration of the tax would be a state tax dedicated to the local repair requirements. Since Texas law narrowly limits the expenditure of state funds for local purposes, this might require a constitutional amendment unless the repair could be construed to be a state purpose.

A local fuels tax offers some advantages for Texas. It could provide funds for an essential need from a new source. The revenue diversification aspect also should not be overlooked. New revenue without resort to the property tax should be welcome. Further, fuels taxes are considered close to user fees. The revenue would be used predominantly to fund road construction and repair rather than for general revenue purposes.

The fuels tax option for additional local revenue in Texas appears to have some limitations, both practical and legal. The use of the revenue is narrowly prescribed, although there is a need for money for both schools and roads. The administration of the
tax is likely to be difficult, although it would probably not cost more than a few percent of the total revenue.

Alcohol and tobacco taxes. The other common state excise tax options are on alcohol and tobacco, usually cigarettes. Six states have local cigarette taxes. The taxes range from one to 15 cents per pack. The number of states authorizing these taxes has decreased, but the total number of cities using them has increased. ${ }^{32}$ Twenty states have local taxes on alcoholic beverages. ${ }^{33}$ They had widely varying rates generally based on gallonage or other measure of quantity. These taxes are subject to many of the same problems found with the local fuels taxes.

Overall, excise taxes offer the possibility of giving local governments a small boost of revenue without resort to the property tax. They are not a major source of new revenue.

## State Aid to Local Governments

An alternative to the use of local taxes to provide additional revenue to local governments is the use of some form of direct aid from the state to the local governments within it.

All states make some transfers to local governments. In some cases, there are direct dedications of state revenue from specific taxes to local governments. These are usually called "shared taxes." Another category of aid is direct grants of state money to local government, either for specific purposes, such as education or

[^106]welfare, or for the general revenue of the local government. A third method of state assistance to local government is for the state to assume responsibility for a service that had previously been funded and administered at the local level. Such a transfer may involve complete assumption of the responsibility for the task at the state level, including funding, administration and control.
States provide aid to local governments for two principle reasons. The first is to advance programs that are of more than local concern. The state may provide funding when it cannot be assured that the services would be provided if left to of the local governments. The state may fund these programs in whole or in part but allow local governments to administer the operation of the programs. This may be from a desire or necessity to maintain local control, from a perception that local governments are better equipped to deal with local problems and issues or from an unwillingness to establish a state bureaucracy to handle administration.
The second reason states provide aid is to promote equity in the delivery or funding of services within the state. The financial resources of local governments vary greatly, and frequently, the need for public services varies inversely with the ability of the local government to provide those services. By redirecting resources from throughout the state, the services can be directed to the areas where they are needed.

[^107]35. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1986-87 (Washington, D.C., 1988).

State aid to local governments has grown rapidly in the Twentieth Century. One study of state aid to local governments found that it grew from $\$ 52$ million in 1902 to $\$ 52$ billion in 1975. Over that same period, aid as a percentage of all local revenue grew from 6.1 percent to 33.9 percent. Even when adjusted for inflation and population growth, state aid has shown steady growth over this period ${ }^{34}$ More recently, aid has continued to grow in actual dollars, to $\$ 129.8$ billion in 1986, but has decreased as a percentage of total local revenue. Using a slightly different method of calculation, the percentage decreased from 37.6 percent of local general revenue in 1975 to 35.7 percent in 1986. This percentage peaked in 1979 at 38.8 percent. ${ }^{35}$

## Tracking state-local assis-

 tance. Due to the varied methods that different states use to assist their local governments, it is extremely difficult to make accurate interstate comparisons of such aid. Sources such as the Census Bureau are susceptible to such misinterpretations. To be counted by the Bureau, there must be a transfer of funds that flows to the local government. A brief discussion will not only illustrate the problem but also will help illustrate the many aid mechanisms that are possible.First, in the area of taxes, the same end can be achieved, as far as the local government's treasury is concerned, by the state either authorizing or mandating a local income or sales tax or by increasing the state tax by the same amount and allocating the revenue back to the states. In one case, there is an intergovernmental transfer of funds and in the other, the local governments have increased their own-source revenues.
Another example of the same
result appearing very different in the data sources is the case of state assumption of formerly local functions. For instance, consider two states that had been providing $\$ 1$ billion in educational assistance to local schools, and that amount covered 50 percent of educational funding. The first state increases its contribution to $\$ 1.5$ billion, assuming 75 percent of the cost of education. It will show a 50 percent increase in funding for local government. The second state decides that it will assume 100 percent responsibility for education and spends $\$ 2$ billion in state funds. Since there is no longer a transfer to local government, it will show a decrease of $\$ 1$ billion in assistance to local government. The reality, of course, is that the local governments will have had $\$ 1$ billion freed from the former obligation and will be much better off than the local governments in the first state. The statistics are unlikely to accurately reflect this fact. As a result, any comprehensive comparison of different states' efforts to aid local governments should start with a determination of the distribution of the responsibility for certain key governmental functions between the state and the local governments within it.

## Forms of Aid

The methods state governments use to aid local governments are as diverse as the states providing the aid. While most aid fits into the categories of shared taxes, grants or assumption of local responsibilities, other forms defy easy classification. First, the more usual forms of aid will be reviewed.
Shared taxes. The first, and most extensive, form of state aid to local government is shared
taxes. In most studies, local sales and income taxes, as previously described in this chapter, are considered shared taxes. There may be state law authorizing the use of the taxes and state collection and administration of them. Local governments may have no choice about their participation in the tax. However, in Texas and in many other states, the adoption of local taxes is to some extent a matter of local policy. The state government can prohibit the adoption of local taxes but cannot mandate them without a constitutional amendment. In these states, the taxes are shared only in the sense that they share the same tax base.

In other states, and for other taxes, there is a direct allocation of a state tax back to local governments, based either on origin of the revenue or on some other measure, with or without equalization. A good example of this kind of shared tax is the dedication of onequarter of the revenue from all occupation taxes in Texas to the financing of public education. Education is administered almost entirely at the local level, with the state establishing minimum standards and general parameters to guide the local districts. Shared taxes and other state aid provide about half of the total spending on education in Texas.

State-local revenue sharing or grants. While not the most common method of providing aid to local governments, this is probably the one that comes most quickly to mind when the subject is mentioned, undoubtedly due to federal revenue sharing. Grants to local governments may be dedicated to a specific use or unrestricted assistance for use as the local government deems more ap-
propriate. There is some resistance to unrestricted grants to local governments based on the idea that if the state is going to incur the pain of taxation, they should also get the credit for providing the service. Grant aid may be conditioned on the local

> The first, and most extensive, form of state aid to local government is shared taxes.

government satisfying some requirement, such as matching the amount of the grant with local funds or meeting a specific performance objective through use of the funds.
State assumption of local responsibilities. When a state assumes total responsibility for a program formerly administered at the local level, this is a form of aid to local government. Removing the burden from the locals can be of more benefit than merely providing the funds, since it removes possible administrative and political problems as well as the costs. Welfare and Medicaid are two categories of aid that are most frequently assumed by states. ${ }^{36}$

Other forms of aid. While most aid falls into the three categories listed above, some forms of aid are not so easily classified and, as a result, not so easily counted. When there is not a flow of money to trace from one entity to the next, the lines of responsibility can blur.

One such form of aid is reimbursement for the costs of property tax relief. Several states fund circuitbreaker property tax relief through credits taken on the
recipient's state income tax return. This is handled in different ways. Sometimes the state pays through the reduction in the income tax revenue, reducing the income tax liability or refunding any credit due directly to the taxpayer without a transaction involving the local government. In other cases, funds are transferred to the local governments to be distributed to the property owners. If there is not a transfer of funds to the local governments, this is seldom counted as aid.

State contributions to retirement funds for local employees are seldom counted as aid. Advisory or other in-kind services are seldom counted as aid. Local governments may be reimbursed for expenses in providing certain state programs for the state government. This is generally counted as aid, although it is used to achieve a state goal rather than a local one. Finally, loans to local governments may be counted as direct aid if payback is conditional. If the amounts are ultimately paid back, the earlier statistics might not be corrected to reflect this. ${ }^{37}$

Purposes, recipients and allocation of aid. The vast majority of aid to local governments is for education. In 1986, 63.1 percent of aid to local government was for this purpose. This percentage has been increasing over time, rising from 57.7 percent in 1972 and 51.6 percent in 1954. ${ }^{38}$ The second largest purpose of aid is public
36. Steven Gold, State Aid to Local Government: National Trends and their Relation to New York State (Denver: National Conference of State Legislatures, 1982), p. 4.
37. Ibid, p. 5.
38. U.S. Advisory Commission on Intergovernmental Relations, Significant Features, Vol. 2., p. 87.

TABLE 6. State Transfers to Local Governments, 1986

| State | Per Capita Ald,1985 ${ }^{1}$ | County (Millions) | \% of aid | City/Town (Millions) | \% of aid | School Districts (Millions) | \% of aid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | \$376 | \$180 | 11.8\% | \$58 | 3.8\% | \$1,260 | 82.6\% |
| Alaska | 1,666 | 326 | 38.4 | 519 | 61.3 | +1,200 | -0. |
| Arizona | 642 | 372 | 18.7 | 424 | 21.3 | 1,198 | 60.1 |
| Arkansas | 376 | 92 | 10.2 | 72 | 8.0 | 731 | 81.4 |
| California | 924 | 9,296 | 38.6 | 2,137 | 8.9 | 12,528 | 52.0 |
| Colorado | 301 | 307 | 21.0 | 179 | 12.2 | 974 | 66.5 |
| Connecticut | 307 | -0. | -0- | 956 | 97.2 | 13 | 1.3 |
| Delaware | 492 | 5 | 1.6 | 7 | 2.3 | 295 | 96.1 |
| Florida | 468 | 752 | 14.4 | 436 | 8.3 | 4,010 | 76.7 |
| Georgia | 399 | 224 | 9.5 | 57 | 2.4 | 2,031 | 85.8 |
| Hawaii | 45 | 26 | 53.1 | 23 | 47.0 | 0 | -0- |
| Idaho | 404 | 41 | 10.0 | 31 | 7.6 | 323 | 78.6 |
| Illinois | 387 | 407 | 9.0 | 775 | 17.1 | 3,142 | 69.4 |
| Indiana | 465 | 404 | 15.6 | 365 | 14.1 | 1,807 | 69.6 |
| lowa | 472 | 243 | 17.4 | 181 | 13.0 | 973 | 69.6 |
| Kansas | 359 | 67 | 7.5 | 70 | 7.9 | 752 | 84.4 |
| Kentucky | 350 | 162 | 12.2 | 48 | 3.6 | 1,113 | 83.9 |
| Louisiana | 396 | 181 | 10.1 | 122 | 6.8 | 1,484 | 82.5 |
| Maine | 324 | 2 | 0.5 | 193 | 50.7 | 184 | 48.3 |
| Maryland | 414 | 1,198 | 65.4 | 621 | 34.0 | -0- | -0- |
| Massachusetts | 541 | 37 | 1.2 | 2,479 | 77.8 | 242 | 7.6 |
| Michigan | 495 | 1,080 | 23.7 | 1,104 | 24.2 | 2,312 | 50.7 |
| Minnesota | 766 | 968 | 29.9 | 513 | 15.3 | 1,684 | 52.0 |
| Mississippi | 471 | 143 | 11.5 | 169 | 13.8 | 918 | 73.7 |
| Missouri | 282 | 91 | 6.4 | 114 | 8.0 | 1,197 | 83.5 |
| Montana | 340 | 22 | 7.7 | 20 | 7.0 | 241 | 84.6 |
| Nebraska | 575 | 90 | 20.1 | 72 | 16.1 | 275 | 61.4 |
| Nevada | 725 | 134 | 21.5 | 95 | 15.3 | 387 | 62.1 |
| New Hampshire | 137 | 28 | 20.6 | 69 | 50.7 | 38 | 28.0 |
| New Jersey | 855 | 977 | 22.2 | 1,594 | 36.3 | 1,803 | 41.0 |
| New Mexico | 475 | 35 | 3.3 | 207 | 19.7 | , 808 | 77.0 |
| New York | 495 | 2,344 | 15.2 | 9,093 | 59.0 | 3,945 | 25.6 |
| North Carolina | 274 | 2,741 | 92.1 | 232 | 7.8 | -0- | -0- |
| North Dakota | 672 | 64 | 18.6 | 40 | 11.6 | 239 | 69.3 |
| Ohio | 472 | 1,365 | 26.4 | 483 | 9.4 | 3,287 | 63.6 |
| Oklahoma | 416 | 150 | 10.8 | 43 | 3.1 | 1,200 | 86.1 |
| Oregon | 370 | 280 | 27.8 | 77 | 7.6 | 641 | 63.7 |
| Pennsylvania | 413 | 870 | 17.4 | 548 | 11.0 | 3,344 | 66.8 |
| Rhode Island | 291 | -0- | -0- | 277 | 97.2 | 8 | 2.9 |
| South Carolina | 351 | 144 | 12.2 | 38 | 3.2 | 991 | 84.1 |
| South Dakota | 244 | 20 | 11.4 | 13 | 7.4 | 141 | 80.6 |
| Tennessee | 290 | 816 | 58.6 | 550 | 39.5 | 23 | 1.7 |
| Texas | 390 | 191 | 3.0 | 151 | 2.4 | 5,826 | 91.8 |
| Utah | 455 | 68 | 8.9 | 22 | 2.9 | 670 | 87.7 |
| Vermont | 232 | -0- | -0- | 20 | 16.0 | 105 | 84.0 |
| Virginia | 414 | 1,389 | 58.6 | 974 | 41.1 | -0- | -0- |
| Washington | 610 | 310 | 11.5 | 221 | 8.2 | 2,111 | 78.2 |
| West Virginia | 435 | 30 | 3.5 | 6 | 0.7 | 826 | 95.6 |
| Wisconsin | 684 | 776 | 23.4 | 901 | 27.2 | 1,607 | 48.5 |
| Wyoming | 893 | 45 | 9.7 | 120 | 25.9 | 297 | 64.0 |
| United States | \$528 | \$29,490 | 23.3 \% | \$27,520 | 21.7 \% | \$67,989 | 53.6 \% |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C. 1987), and 1985 State Government Finances (Washington, D.C., 1986).

Note: Most states also send a proportionally small amount of aid to special districts.

1. Fiscal year 1985 is the most recent year for state aid per capita figures.
welfare. Its percentages have been declining, mainly due to the assumption of this responsibility at the state and federal levels. It dropped from 18.9 to 10.9 percent of aid between 1972 and 1986. The only other category over ten percent was general assistance to local governments. Other categories, in descending order of size, include highways and other roads, housing and urban renewal, libraries, corrections, hospitals, public transit and airports.
As might be expected from the percentage of aid to education, school districts are the largest recipients of aid. Table 6 shows that, in 1986, school districts received 53.6 percent of aid nationally, while cities and counties received 21.7 and 23.3 percent, respectively. The remaining 1.4 percent, not reflected on the table, went to townships and special districts. ${ }^{39}$
The method of allocation of aid to local governments can be as controversial as the amounts to be given. The methods used are generally formulas, which may or may not have an equalizing component. Other methods include return to the source of the revenue, used primarily for shared taxes and some objective or subjective determination of need.

Nonequalizing formulas are usually based on population or area or a combination of factors. Equalizing formulas, on the other hand, use such criteria as tax capacity, tax effort, property
39. Steven Gold, State and Local Fiscal Relations in the Early 1980s (Washington, D.C.: The Urban Institute Press, 1983), p. 5.
40. Tex. Const. Art. III, § 51.
41. Jefferson County v. Board of County and District Road Indebtedness, 143 Tex. 99, 182 S.W.2d 908 (1944).
42. City of Aransas Pass v. Keeling, 112 Tex. 339, 247 S.W. 818 (1923).
values and property tax rates as well as population. Need criteria can be as varied as the allocation of highway construction money, where individual projects are evaluated on their comparative merits, or emergency funds for local governments with short term revenue shortfalls.
State aid to local government in Texas. In Texas, virtually all transfers from the state to local governments are to school districts. Indeed, the state constitution has a prohibition against donation of state funds to municipal corporations. ${ }^{40}$ This prohibition has been interpreted to apply to counties as well. ${ }^{41}$ There has been a broad exception to this prohibition, however, to allow the transfer of state funds to local government to accomplish state governmental purposes. ${ }^{42}$ This differs considerably from the pattern in most other states. Table 6 shows the amounts and percentages of transfers to types of local governments in the 50 states. While most states made their largest transfers of state funds to school districts, Texas was third highest overall at 91.8 percent, compared to a national average of 53.6 percent. The transfers for education are $\$ 358$ per capita for Texas compared to $\$ 283$ per capita nationally. The per capita aid to all local government in Texas of $\$ 390$ was significantly below the national average of $\$ 528$.
One of the results of this pattern is a larger share of total state and local taxes in Texas being raised by local governments in the form of property taxes. Local governments accounted for 52.6 percent of all state and local tax revenue in Texas compared to a national average of 38.9 percent. Property taxes, reserved entirely to local governments in Texas, comprised 40 percent of total state and local taxes compared to a national average of 29.9 percent.

## Conclusion

The property tax has long been the workhorse of local government. Increasing rates and decreasing popularity of that tax are forcing local governments to seek alternatives for funding their operations. Additionally, the role of the federal government is shrinking, both in its aid to local government and in the services that it provides. The responsibility to raise revenue and to provide the services is being left to state and local governments.

Local governments are being asked to determine which services are really essential to their citizens. Once that is determined, they must next decide where the revenue is to be found. Numerous local governments are deciding that they must look beyond the property tax to other revenue alternatives.
Finally, states must decide to what extent they will insure the financial health of the local jurisdictions within their borders. They have great control over local finances and can assist the local governments in providing essential services to their citizens. State aid can be an equalizing factor, moving funds into areas that do not have the local tax capacity to provide all needed services.

Texas provides a great deal of aid to school districts on a comparative basis. It provides virtually no aid to cities and counties. An argument frequently raised in support of a Texas income tax is that it can provide additional funds to local government either to provide property tax relief or to allow additional services to be provided. The state must determine if the pain of taxation should be incurred to provide services at not only the state, but also the local level.

## Part V: Other Taxes and Revenue Issues

# M otor Fuel Taxes in Texas 

## A Background Analysis

## Summary

Fuel taxes are an important source of state revenue. In the 1988-89 budget period, taxes levied on highway use of gasoline, diesel and liquefied petroleum gas will produce about $\$ 2.96$ billion, equal to about 12 percent of all state tax revenue.
The basic tax rate is 15 cents per gallon on all three types of motor fuel. This rate places Texas in the mid range of state fuel tax rates.

The gasoline and diesel taxes are efficient to administerlarge amounts of revenue are collected and remitted by a small number of taxpayers, mostly major oil companies, independent oil marketers and large convenience store chains. The liquefied petroleum gas tax is collected directly from consumers through an annual decal system.

Texas state fuel taxes are constitutionally dedicated- 25 percent of net motor fuel tax revenue is allocated to the Available School Fund for distribution to local school districts on a per student basis, and 75 percent is dedicated to the state highway program.
Because fuel taxes are based on volume, collections from fuel tax revenue do not respond to inflation. Therefore, as inflation increases the cost of highways and public schools, fuel taxes do not automatically provide related increases in funding.

Households account for approximately 66 percent of fuel consumption in the state, while businesses account for 34 percent. The household portion of the fuel taxes is regressive, although slightly less regressive than the Texas tax structure as a whole. Highway diesel is consumed primarily by business, with the largest portion of highway diesel consumption by the forhire transportation companies.
The most controversial issue of fuel tax equity centers on the relationship between highwayuser taxes paid by various classes of vehicles and the highway costs caused by each vehicle class. Studies conducted by the federal government and other state governments have concluded that heavy combination trucks are responsible for a proportion of highway costs far in excess of their portion of the user fee burden.
Alternatives to the current volume-based taxes include several variations of a pricebased tax, a tax indexed to highway cost inflation, a tax based on the inverse of oil prices and a weight-distance tax.
Peripheral issues in fuel taxation include the treatment of gasohol, aviation fuels and fuel consumed by local governments and local government access to fuels tax revenue.

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## A Brief History

The first gasoline tax in Texas was imposed in 1923 at a rate of one cent per gallon. As the state assumed primary responsibility for construction and maintenance of the state highway system from the counties, the tax rate was increased to three cents per gallon in 1927 and four cents per gallon in 1929.

Taxes were imposed on highway use of liquefied gases (LPG) at four cents per gallon and diesel at eight cents per gallon in 1941.

The diesel tax rate was lowered to six cents per gallon in 1951. In 1955, the gasoline and liquefied gas tax rates were increased to five cents per gallon and the diesel tax rate to 6.5 cents per gallon. The tax rates remained unchanged from 1956 to 1984.

On August 1, 1984, the tax rate on all fuels was increased to ten cents per gallon. The 1984 tax increase was part of a revenue package designed to provide added funding for Texas highways and schools.

On January 1, 1987, the tax rates were increased again to the current rate of 15 cents per gallon.

The 1987 tax increase was not primarily a highway finance measure, rather it was a deficit reduction measure. The tax increase was coupled with the elimination of general revenue transfers to the highway fund. The highway fund revenue generated by the tax bill replaced the highway fund revenue loss through the elimination of the general revenue transfers. The savings to the General Revenue Fund from the elimination of the transfers in turn reduced the General Revenue Fund deficit. Both the 1987 tax increase and the transfer suspension were originally scheduled to expire in August 1987. However, the tax increase and transfer repeal were made permanent during the legislative session.
Fuel taxes have long been an important source of state revenue.

1. Comptroller of Public Accounts, Revenue Estimate, October, 1987.

From 1930-the first full year of the four cent gasoline tax rate-to 1967, fuel taxes were the most important source of state tax revenue. Fuel taxes were the leading source of state tax revenue in every year during that period except the years 1953 through 1955, when the oil production tax was briefly the most important tax source. The fuel tax increases in 1955 restored the fuel taxes to the top rank among state taxes. Not until 1967 did the sales tax overtake fuel taxes to become the state's largest tax source. After 1967, fuel taxes gradually decreased in relative importance, until by 1984, they accounted for only 5.7 percent of state tax revenue and ranked as the sixth largest source of state tax revenue. The two recent tax increases have elevated fuels taxes to the number two rank among state taxes. In 1987, fuel taxes accounted for 12.4 percent of all state tax revenue.

FIGURE 1. Estimated Fuel Taxes 1988-89 Biennium (Millions of Dollars)


Source: Comptroller of Public Accounts.

## Basics of the Current Tax

In the 1988-89 budget period, fuel taxes are expected to produce $\$ 2.96$ billion, approximately 12 percent of all state tax revenue. The gasoline tax is expected to account for 85.1 percent of fuel tax collections during the biennium, the diesel tax 14.6 percent and the LPG tax less than one-half of one percent (see Figure 1). ${ }^{1}$

The basic tax rate is 15 cents per gallon on all three types of motor fuel. The rate charged to transit companies is 14 cents per gallon.

The Comptroller of Public Accounts administers the motor fuels taxes through a system of permits. Although the permit structure may seem complex, the goal is simple: to tax all fuel used on highways and only that fuel (Table 1).

Considering that there are over 12 million registered motor vehicles and 113,000 gasoline and diesel fuel pumps in the state, gasoline and diesel tax administration is quite efficient. The vast majority of fuel tax is collected from gasoline distributors or diesel suppliers. Distributors and suppliers hold fuel tax-free. They collect the fuel tax on the first taxable sale, which may be to a jobber, wholesaler or directly to the public. The system allows for the collection of a large portion of fuel taxes from a small number of large taxpayers, such as major oil companies and large convenience store chains.

Interstate truckers are taxed on the amount of fuel consumed in the state, not on the fuel they purchase in the state. Interstate truckers are required to $\log$ miles traveled in Texas, total miles traveled, overall fuel consumption and taxes paid on fuel purchased in the state. Fuel consumed in Texas is calculated by dividing miles traveled in Texas by overall miles per gallon. Interstate truckers may claim refunds if the tax paid
on fuel purchased in the state exceeds the tax owed on fuel consumed in the state. If the interstate trucker owes additional tax to the state, the tax must be remitted quarterly.
The majority of the liquefied gas tax is collected through annual LPG vehicle permit fees paid directly by the consumer. In contrast to diesel and gasoline taxes, where large amounts of revenue are collected from a small number of taxpayers, the LPG tax represents a small amount of revenue collected from a large number
of taxpayers. Currently, there are approximately 18,000 liquefied gas taxpayers.

The following items or usages of fuels are either exempted from taxation or qualify for refunds of taxes paid: exported fuel; sales to the U.S. government; fuel lost by fire or accident; motorboat fuel; aviation fuel; railroad diesel; diesel used in power take-off equipment (cement mixers, garbage trucks, dump trucks) and other off-road use.

The rationale for most of the exemptions relates to the percep-
tion of the fuel taxes as user fees. Off-road fuel uses are not responsible for highway costs; therefore, they are not subject to the fuel taxes. However, the significance of the motor fuel tax exemptions spills over into the state sales tax. Motor fuels are granted an exemption from the state sales tax. An important aspect of the sales tax exemption for motor fuels is that it applies not only to fuels taxed under the motor fuel statutes but also to the fuels exempted from motor fuel taxes. As a result, offroad fuel use is exempt from the

TAbLE 1. Fuel Tax Permits

| Permits | Description | Permits as of March 1988 | Report |
| :---: | :---: | :---: | :---: |
| Gasoline Distributor | Holds gasoline tax-free, collects and remits tax to the state on taxable sales of gasoline. | 1,217 | Monthly |
| Diesel Supplier | Holds diesel tax-free, collects and remits tax to the state on taxable sale of diesel. | 2,199 | Monthly |
| Aviation Fuel Dealer | Purchases fuel tax-free for use in aircraft only. | 1,504 | None |
| Diesel Fuel User | Predominant use of diesel is nonhighway, purchases diesel tax-free, pays tax directly on highway use of diesel from tax-free stocks. | 2,066 | Quarterly |
| Diesel Prepaid User | Prepays annually on diesel used from tax-free storage in vehicles weighing up to $10,000 \mathrm{lbs}$. Payment is based on vehicle weight. | 1,986 | None |
| Liquefied Gas Dealer | Holds LPG tax-free, collects and remits taxes on sale of LPG to out-of-state vehicles and vehicles with LPG vehicle dealer permits. | 235 | Annual |
| Liquefied Gas Tax Decal | Prepays annually based on vehicle weight and miles traveled in the previous year. | 17,529 | None |
| Liquefied Gas Tax Decal -Motor Vehicle Dealer | Pays tax to LPG dealer on fuel used in vehicles held in inventory. | -- ${ }^{1}$ | None |
| Interstate Trucker Permit | Pays tax on fuel consumed in the state and receives refunds on fuel purchased in the state but consumed outside of the state. | 20,261 | Quarterly |
| Exempt Interstate Trucker | Substantially all fuel purchases made tax-paid in Texas. | 248 | No reporting required |
| Trip Permit | Interstate trucker making five or less trips into the state, pays one-time fee based on capacity of fuel tank. |  | None |
| Source: Comptroller of Public Accounts. |  |  |  |

sales tax. The major beneficiaries of this sales tax exemption are airlines, railroads and marine fuel users.

## Dedication of Taxes

Fuel taxes are dedicated by Article 8, Section 7a of the Texas Constitution, which provides:
... all net revenues remaining after payment of all refunds allowed by law and expenses of collection derived from motor vehicle registration fees, and all taxes, except gross production

## 2. Texas Constitution, Article VIII, Section 7 a.

and ad valorem taxes, on motor fuels and lubricants used to propel motor vehicles over public roadways, shall be used for the sole purpose of acquiring rights-of-way, constructing, maintaining and policing such public roadways, and for the administration of such laws as may be prescribed by the Legislature pertaining to the supervision of traffic and safety on such roads; and for the payment of the principal and interest on county and road district bonds or warrants voted or issued prior to January 2 , 1939, and declared eligible prior to January 2, 1945, for payment out of the County and Road District Highway Fund under
existing law; provided, however, that one-fourth $(1 / 4)$ of such net revenue from the motor fuel tax shall be allocated to the Available School Fund. ${ }^{2}$

The dedication applies not only to the current fuel taxes but would apply to various alternatives that have been proposed. It would apply to state sales tax receipts that might result from any future elimination of the sales tax exemption for highway motor fuels. The dedication provision may be broad enough to apply to local sales taxes collected on highway fuel or to any city or county option fuel taxes authorized by a future legislature through statute.

The statutory dedication of

FIGURE 2. Allocation of Gasoline Tax Revenue Amounts Based on the Comptroller's Revenue Estimate, 1989 (Millions of Dollars)


Source: Comptroller of Public Accounts, Revenue Estimate, October 1987.
gasoline is more complicated than the constitutional dedication (see Figure 2). One percent of gross collections is allocated to the Comptroller to cover the cost of enforcement. ${ }^{3}$ Gasoline consumed in motorboats is not subject to the gasoline tax; however, gasoline taxes are incidentally collected on fuel used in motorboats. Boat owners may claim refunds on fuel consumed in boats, but only a small percentage of available boat refunds is actually claimed. The unclaimed boat refunds are not covered by the constitutional dedication for highway fuels. Instead, unclaimed motorboat refunds are allocated 25 percent to the Available School Fund and 75 percent to the Fish, Game and Water Safety Fund for use by the Parks and Wildlife Department for enforcement of game, fish and water safety laws and wildlife management. ${ }^{4}$
Twenty-five percent of the remaining motor fuels revenue is allocated to the Available School Fund for distribution to school districts on a per-student basis. The remainder ( 75 percent of net motor fuel tax collections) goes to highway-related purposes. ${ }^{5}$
The diesel and liquefied petroleum gas taxes are allocated one percent of gross collections to the Comptroller for enforcement, then the tax remaining after refunds is allocated 25 percent to the Available School Fund and 75 percent to the State Highway Fund (see Figure 3). ${ }^{6}$
The dedication of such a large portion of fuel tax receipts to a nontransportation use is unique among the states. According to U.S. Department of Transportation statistics, in 1986, only three states used motor fuel revenue for nontransportation purpose-Texas (25 percent), New Jersey (one percent) and Delaware (six percent). The use of Texas fuel tax revenue for general purposes has long been
a source of controversy. It is suggested that the Available School Fund allocation clouds the status of fuel taxes as a user fee and complicates the issue of highway user equity.
In 1986, Texas spent only 1.1 percent of its fuel tax revenue on local roads and streets; while in the nation as a whole, almost a third of all state fuel tax revenue went for support of local streets and roads. Nationally, just under three percent of state fuel taxes went to finance mass transit.? Texas does not use fuel tax revenue for mass transit purposes but rather relies primarily on local sales taxes for mass transit funding.

## Interstate Comparisons

After tripling the gasoline tax over the past four years, Texas finds itself near the middle of the pack in motor fuels tax rates,
slightly above the national average. At 15 cents per gallon, the Texas gasoline tax rate is lower than 20 states, while 22 states impose a higher diesel tax than Texas. In each case, four other states levy a tax at the same rate as Texas (see Table 2).
In 14 states, local governments are authorized to tax motor fuels through either a motor fuels tax or a sales tax. No local fuel taxes or sales taxes are imposed on fuels in Texas. Ten states collect a sales tax on motor fuel. The Texas gasoline tax rate is lower than the
3. Section 153.501 V.A.T.S.
4. Section 153.502 V.A.T.S.
5. Section 153.503 V.A.T.S.
6. Sections $153.504,153.505$ V.A.T.S.
7. U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 1986, p. 64.


TABLE 2. State Motor Fuels Tax Rates, January 1988

| Rank | State | Gasoline Tax Rate | State | Diesel Tax Rate |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Hawaii | $25.9{ }^{1}$ | Hawaii | $26.93{ }^{1}$ |
| 2 | Wisconsin | 20 | Colorado | 20.5 |
| 3 | Montana | 20 | Wisconsin | 20 |
| 4 | Connecticut | 19 | Montana | 20 |
| 5 | Utah | 19 | Connecticut | 19 |
| 6 | Maryland | 18.5 | Utah | 19 |
| 7 | Washington | 18 | lowa | 18.5 |
| 8 | Colorado | 18 | Maryland | 18.5 |
| 9 | Nebraska | 17.9 | Washington | 18 |
| 10 | Virginia | 17.5 | Nebraska | 17.9 |
| 11 | North Dakota | 17 | Tennessee | 17 |
| 12 | Mississippi | 17 | Nevada | 17 |
| 13 | Tennessee | 17 | Minnesota | 17 |
| 14 | Minnesota | 17 | North Dakota | 17 |
| 15 | Oklahoma | 16 | Mississippi | 17 |
| 16 | Delaware | 16 | Louisiana | 16 |
| 17 | Louisiana | 16 | Delaware | 16 |
| 18 | lowa | 16 | Virginia | 16 |
| 19 | Arizona | 16 | New Mexico | 16 |
| 20 | North Carolina | 15.5 | Arizona | 16 |
| 21 | Texas | 15 | Illinois | 15.5 |
| 22 | Michigan | 15 | North Carolina | 15.5 |
| 23 | Kentucky | 15 | Texas | 15 |
| 24 | Rhode Island | 15 | Michigan | 15 |
| 25 | South Carolina | 15 | South Dakota | 15 |
| 26 | Ohio | 14.7 | Indiana | 15 |
| 27 | Idaho | 14.5 | Rhode Island | 15 |
| 28 | Nevada | 14.25 | Ohio | 14.7 |
| 29 | New Hampshire | 14 | Idaho | 14.5 |
| 30 | Indiana | 14 | Oregon | 14 |
| 31 | New Mexico | 14 | New Hampshire | 14 |
| 32 | Maine | 14 | Vermont | 14 |
| 33 | Oregon | 14 | Maine | 14 |
| 34 | Arkansas | 13.5 | South Carolina | 13 |
| 35 | South Dakota | 13 | Kansas | 13 |
| 36 | Vermont | 13 | Oklahoma | 13 |
| 37 | 1 llinois | 13 | Arkansas | 12.5 |
| 38 | Pennsylvania | 12 | Pennsylvania | 12 |
| 39 | Missouri | 11 | Kentucky | 12 |
| 40 | Alabama | 11 | Alabama | 12 |
| 41 | Massachusetts | 11 | Missouri | 11 |
| 42 | Kansas | 11 | New Jersey | 11 |
| 43 | West Virginia | 10.5 | Massachusetts | 11 |
| 44 | California | 9 | West Virginia | 10.5 |
| 45 | New Jersey | 8 | New York | 10 |
| 46 | Wyoming | 8 | California | 9 |
| 47 | Alaska | 8 | Florida | 9 |
| 48 | New York | 8 | Alaska | 8 |
| 49 | Georgia | 7.5 | Wyoming | 8 |
| 50 | Florida | 4 | Georgia | 7.5 |
|  | U.S. Average | 14.4 | U.S. Average | 14.8 |

Source: Commerce Clearing House, State Tax Guide.

1. Rates are combined state and county rates.
combined state and local taxes on gasoline in 28 states. The diesel tax rate in Texas is lower than the combined state and local taxes on diesel in 29 states (Table 3).

Since 1981, 39 states and the District of Columbia have increased their gasoline tax rates. Nebraska has seen six rate increases during this period and Connecticut five, with a one-cent-per-gallon increase scheduled every year through 1991. Of the states which have not increased their gasoline tax rates, six collect a sales tax on motor fuels. Ten states have implemented variable rate taxes, and three states impose variable rate taxes indexed by the cost of highway maintenance.

## Factors and Outlook

During the boom years of the late 1970s and early 1980s, fuel tax collections in Texas achieved a curious equilibrium. The same energy price increases that fueled the growth of the Texas economy prompted federal fuel efficiency mandates and other conservation measures.
During the period 1977-83, the fuel tax rates remained constant at five cents per gallon on gasoline and 6.5 cents per gallon on diesel, but other factors influencing fuel tax collections changed dramatically. Vehicle registrations in Texas increased by 2.6 million or 24 percent. Gasoline prices doubled from approximately 60 cents per gallon to just over $\$ 1.20$ per gallon. Passenger car fleet efficiency increased to 19 miles per gallon (MPG) in 1987 from 14 MPG in 1974, a 36 percent improvement (see Figure 4). As a result of these offsetting forces, fuel tax collections remained amazingly stable, rising from $\$ 444$ million in 1977 to $\$ 487$ million in 1983.

Although tax collections remained stable through the 1977-83 period, the ability of fuel taxes to
meet spending demands for highways and education eroded dramatically.
The cost of building highways increased significantly. The federal highway construction cost index, the most commonly used measure of highway construction costs, increased by 46.5 percent between 1977 and 1983 (Figure 5). ${ }^{8}$ As a result of cost increases and expansion of the Texas highway system, spending on highway construction and maintenance in Texas more than doubled to $\$ 1.52$ billion in 1983 from $\$ 662$ million in 1977, an increase of $\$ 859$ million. In contrast, the motor fuel tax allocation to the highway fund in 1983 was only $\$ 41$ million more than the 1977 allocation. The fuel tax allocation, which paid for 48 percent of highway construction and maintenance spending in 1977, paid for only 24 percent in 1983 (Figure 6).
The motor fuel allocation plays a much smaller role in education
finance than in highway finance, but the pattern of lost purchasing power is the same. During the 1977-83 period, the portion of the state share of Foundation School Program costs financed by the motor fuel allocation to the Available School Fund shrank to 3.5 percent from 6.6 percent (Figure 7).
Texas responded to the diminishing ability of fuel tax revenue to fund highways and schools in a manner typical of state governments of the period: first, by using general revenue to fund highways, then by raising fuel taxes.
The fuel tax rate increases to 15 cents per gallon have virtually restored the purchasing power of fuel tax revenues to the 1977 level. In the current biennium, motor fuel taxes will fund 46 percent of highway construction and maintenance
8. U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 1986, p. 61.

FIGURE 4. Motor Vehicle Fuel Efficiency, 1970-91


Source: Data Resources, Inc., Energy Review, Winter 1987-88.

1. Estimates.

TABLE 3. Combined State and Local Fuel Tax Rates Cents Per Gallon, January 1988

| Rank | State | State \& Local Gasoline Tax | State | State \& Local Diesel Fuel Tax |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Hawaii | 25.91 | Hawaii | $26.9{ }^{1}$ |
| 2 | Illinois | 23.82 | Illinois | 23.48 |
| 3 | Nevada | 21.00 | Colorado | 20.50 |
| 4 | Montana | 20.00 | Montana | 20.00 |
| 5 | Wisconsin | 20.00 | Wisconsin | 20.00 |
| 6 | Connecticut | 19.00 | Connecticut | 19.00 |
| 7 | Utah | 19.00 | Utah | 19.00 |
| 8 | Maryland | 18.50 | Indiana | 18.86 |
| 9 | Nebraska | 18.30 | lowa | 18.50 |
| 10 | Colorado | 18.00 | Maryland | 18.50 |
| 11 | Washington | 18.00 | Nebraska | 18.30 |
| 12 | Michigan | 17.97 | Michigan | 18.12 |
| 13 | Virginia | 17.50 | Washington | 18.00 |
| . 14 | Indiana | 17.08 | Louisiana | 17.07 |
| 15 | Minnesota | 17.00 | Minnesota | 17.00 |
| 16 | Mississippi | 17.00 | Mississippi | 17.00 |
| 17 | North Dakota | 17.00 | Nevada | 17.00 |
| 18 | Tennessee | 17.00 | North Dakota | 17.00 |
| 19 | Louisiana | 16.91 | North Carolina | 16.05 |
| 20 | North Carolina | 16.05 | Arizona | 16.00 |
| 21 | Arizona | 16.00 | Delaware | 16.00 |
| 22 | Delaware | 16.00 | New Mexico | 16.00 |
| 23 | lowa | 16.00 | Tennessee | 16.00 |
| 24 | Oklahoma | 16.00 | Virginia | 16.00 |
| 25 | Oregon | 15.90 | Florida | 15.72 |
| 26 | Florida | 15.72 | New York | 15.61 |
| 27 | District of Columbia | 15.50 | California | 15.57 |
| 28 | West Virginia | 15.35 | District of Columbia | 15.50 |
| 29 | Texas | 15.00 | West Virginia | 15.35 |
| 30 | Kentucky | 15.00 | Texas | 15.00 |
| 31 | Rhode Island | 15.00 | Alabama | 15.00 |
| 32 | South Carolina | 15.00 | Rhode Island | 15.00 |
| 33 | Ohio | 14.70 | South Carolina | 15.00 |
| 34 | Idaho | 14.50 | Ohio | 14.70 |
| 35 | California | 14.33 | Idaho | 14.50 |
| 36 | Alabama | 14.00 | Maine | 14.00 |
| 37 | Maine | 14.00 | New Hampshire | 14.00 |
| 38 | New Hampshire | 14.00 | Oregon | 14.00 |
| 39 | New Mexico | 14.00 | Vermont | 14.00 |
| 40 | New York | 13.86 | Kansas | 13.00 |
| 41 | Arkansas | 13.50 | Oklahoma | 13.00 |
| 42 | South Dakota | 13.00 | South Dakota | 13.00 |
| 43 | Vermont | 13.00 | Arkansas | 12.50 |
| 44 | Pennsylvania | 12.00 | Kentucky | 12.00 |
| 45 | Kansas | 11.00 | Pennsylvania | 12.00 |
| 46 | Massachusetts | 11.00 | Massachusetts | 11.00 |
| 47 | Missouri | 11.00 | Missouri | 11.00 |
| 48 | Georgia | 10.59 | New Jersey | 11.00 |
| 49 | Alaska | 8.00 | Georgia | 10.53 |
| 50 | New Jersey | 8.00 | Alaska | 8.00 |
| 51 | Wyoming | 8.00 | Wyoming | 8.00 |
| . | U.S. Average | 15.41 | U.S. Average | 15.52 |

Source: Texas Department of Highways and Public Transportation; Lundberg Monthly Share of Market Statistical Report, January 1988.

1. State tax rate varies among counties.
and seven percent of public education costs.
The period of rapid fuel efficiency increases in the car and truck fleet may be over. A recent forecast of fleet efficiency by the economic forecasting firm of Data Resources, Inc., shows only a 1.4 percent average annual increase in automobile miles per gallon and a 0.9 percent average MPG increase in the truck fleet from 1990-2000. ${ }^{9}$

Despite the slowdown in MPG improvement, fuel tax revenue is not likely to experience rapid growth in the next few years. Official estimates of fuel tax revenue beyond fiscal year 1989 are not currently available from the Comptroller. However, the State Department of Highways and Public Transportation (SDHPT) independently prepares estimates of the highway fund motor fuel allocations. Their projections are for fuel tax revenue to grow at an average annual rate of 0.4 percent from 1989 to $1997 .{ }^{10}$

On the spending side of the fuel tax equation, the cost of public schools and highways is likely to outstrip the growth in motor fuel tax revenue forecast by the SDHPT. Enrollment in Texas public schools is expected to increase by approximately two percent per year through fiscal year 1993. The federal highway cost index is forecast to escalate at an annual rate of 4.6 percent in the period 1990-96. ${ }^{11}$ The state cost of the Foundation School Program (FSP) increases with growth in attendance, but neither the FSP
9. Data Resources, Inc., Energy Review, Winter 1987-88.
10. Texas Department of Highways and Public Transportation, Executive Summary: Department Financial Status as of November 30, 1987.
11. Wharton Econometric Forecasting Associates, Cost Planning: Long-Term Forecast Update, First Quarter 1988.


Source: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 1986; Wharton Econometric Forecasting Associates, Cost Planning: Long-Term Forecast Update, Fourth Quarter 1987.

FIGURE 6. Relationship Between Highway Expenditures for Construction and Maintenance and Fuel Tax Allocation to the Highway Fund


[^108]nor the highway budget is statutorily protected from inflation. However, if the purchasing power of the current volume-based fuel taxes is again eroded by the
12. See Chapter 3 of this report, "Who Pays Texas Taxes?"
increasing cost of building highways and educating Texas public school students, the pressure to replace that lost purchasing power of the fuel taxes is likely to mount.

## Incidence and Equity

Questions about fuel tax inci-

FIGURE 7. Relationship Between State Foundation School Program Cost and Fuel Tax Allocations to the Available School Fund, 1977-89


Source: Comptroller of Public Accounts, Revenue Estimate, October 15, 1987; Annual Financial Reports, various years.
dence and equity come in several forms. As with other taxes, questions arise about the portion of the tax paid by individuals versus business and the distribution of the tax across income groups. With fuel taxes, equitable treatment among the various fuels is an additional issue. The most controversial fuel tax equity issue focuses on fuel taxes as a high-way-user revenue. Specifically, the issue involves the highway cost responsibility of different classes of highway users relative to the highway-user revenue paid by that class of user.

Distribution by income group. According to Comptroller's office estimates, households consume 66 percent of the motor fuel taxed in the state. ${ }^{12}$ Data from the 1984 Consumer Expenditure Survey confirm the Comptroller's estimates. The Select Committee staff presented a variety of incidence scenarios based on different assumptions about who ultimately pays the business portion of the fuel taxes.

All the scenarios assumed that the burden of the tax on fuel purchased by households fell on the consumer. With respect to the portion of the tax on fuel pur-

TABLE 4. Distribution of Fuel Taxes Across Income Groups

|  | $\begin{gathered} \text { Less than } \\ \$ 10,000 \\ \hline \end{gathered}$ | $\begin{gathered} \$ 10,000- \\ 14,999 \\ \hline \end{gathered}$ | $\begin{gathered} \$ 15,000- \\ 19,999 \end{gathered}$ | $\begin{gathered} \$ 20,000- \\ 29,999 \end{gathered}$ | $\begin{gathered} \$ 30,000- \\ 39,999 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Over } \\ & \$ 40,000 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Income | \$5,375 | \$12,393 | \$17,316 | \$24,568 | \$34,441 | \$61,078 |
| Expenditures for Motor Fuel and Motor Oil | \$596 | \$874 | \$1,037 | \$1,211 | \$1,440 | \$1,676 |
| Tax@ 5 cents/gallon | \$24 | \$35 | \$42 | \$49 | \$58 | \$135 |
| Tax@ 5 cents as a \% of Income | 0.45\% | 0.28\% | 0.24\% | 0.20\% | 0.17\% | 0.22\% |
| Tax @ 15 cents/gallon | \$73 | \$105 | \$125 | \$146 | \$173 | \$404 |
| Tax@ 15 cents as a \% of Income | 1.36\% | 0.85\% | 0.72\% | 0.59\% | 0.50\% | 0.66\% |
| Tax Income Elasticity | 0.65 |  |  |  |  |  |

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey (Washington, D.C., 1984).
chased by households, the staff research found that fuel taxes are regressive: with each one percent increase in income, the fuel tax burden increased by only 0.65 percent (Table 4).
The staff findings were based on fiscal 1984 tax rates. However, the recent rate increases to 15 cents per gallon do not substantially alter the share of total fuel taxes paid by each income group.
Distribution among businesses. Figure 8 , illustrating the percentage of truck fuel consumed by various types of businesses in the state, is derived from the 1982 Census of Transportation's Texas truck survey. The largest business consumer of truck fuel in the state is the for-hire transportation sector. Wholesale and retail trade accounts for a significant portion of the state's truck fuel consumption. Agriculture and construction are also major consumers of truck fuel; however, a significant portion of the fuel consumed by those sectors is not taxable because it is consumed for nonhighway purposes. ${ }^{13}$
Equity among fuels. One equity issue among the fuels is related to the energy content of the different fuels. A gallon of gasoline produces approximately 125 thousand British Thermal Units (MBTUs) of energy, a gallon of diesel 137 MBTUs, a gallon of liquefied gas 87 MBTUs. The argument is as follows: the higher the energy content of the fuel, the greater the distance a gallon of the fuel can propel a vehicle; thus, the current equal tax rates are unfair to users of the lower energy content fuel.

Another interfuel issue involves the liquefied gas decal schedule. While LPG taxes per mile traveled are frozen by the decal schedule, gasoline and diesel vehicle efficiency gains are reflected automatically in lower taxes per mile traveled. The current decal
schedules were derived from the original weight/distance schedule written in 1981. The tax rate has been tripled since 1981, but assumptions about vehicle MPG have remained the same. LPG users argue that vehicle MPG has improved substantially since 1979, and that the schedules should be adjusted to reflect changes in vehicle efficiency.

The equity problem is compounded for vehicles that run both LPG and gasoline. The owner pays the LPG decal price as if the vehicle ran on LPG at all times. In addition, the owner pays the gasoline tax on gasoline consumed by the vehicle.
Equity among vehicle classes. Federal and state highway systems are financed largely through user fees. The Texas highway system is no exception. State motor fuel taxes, state registration fees and federal funds derived from federal user fees will account for 95 percent of all state highway revenue in the current two-year state budget period.

The most widely accepted theory of highway user equity is that the highway user tax structure should reflect the highway costs caused by each class of
vehicle. In order to gauge the degree to which highway finance systems meet this standard, the federal government and over half of the state governments have undertaken highway cost allocation studies. The studies attempt to assign responsibility for the cost of highway construction and maintenance by vehicle class. The cost assigned to each vehicle class is then compared to the amount of user fees paid by that class.
The final report of the federal cost allocation study was published in 1982. The study found that in 1977 passenger vehicles were paying $\$ 1.11$ compared with each dollar of federal highway cost responsibility, single unit trucks were paying $\$ 1.50$ per dollar of cost responsibility, and combination trucks were paying only $\$ 0.59$ for each dollar of cost responsibility (Tables 5 and 6). ${ }^{14}$
13. U.S. Department of Transportation, Federal Highway Administration, 1982 Census of Transportation: Truck Inventory and Use Survey-Texas, March 1985.
14. U.S. Department of Transportation, Federal Highway Administration, Final Report on the Federal Highway Cost Allocation Study, May 1982.

FIGURE 8. Percentage of Truck Fuel Consumption by Type of Business, 1982


Source: U.S. Department of Commerce, Bureau of the Census, 1982 Census of Transportation: Truck Inventory and Use Survey-Texas (March 1985).

Studies conducted by states have generally come to the conclusion that heavy trucks are undertaxed relative to autos and light trucks. Each state has a different tax structure, a different vehicle fleet make-up and a different mix of roadways. Cost allocation study methodologies have also varied widely among the states.
However, it is likely that a Texas cost allocation study would have similar results because the two major user fees used in the statemotor vehicle registration fees and fuel taxes-generally fail to reflect the cost responsibility attributable to heavy vehicles: Fuel taxes do not accurately reflect cost respon-
sibility because fuel consumption does not increase with weight in proportion to cost incurred. Registration fees increase with weight; however, they do not vary with miles traveled.
The State Department of Highways and Public Transportation is currently conducting a Texas cost allocation study in conjunction with the Texas Transportation Institute at Texas A\&M University and the Center for Transportation Research at the University of Texas. Findings are currently being reviewed by the department.
The most frequently proposed remedy to inequities pointed out
by cost allocation studies, a weight-distance tax, is discussed in the following section.

## Alternatives

Most alternatives to the current volume-based fuel taxes are responses to the issues described in the previous sections-the erosion of the purchasing power of fuel tax revenue and equity between fuel users.
Price-based fuel taxes. Pricebased taxes provide one alternative to the current volume-based taxes. In a price-based system, rates could be based on the pump price at the time of purchase, or the tax rate (expressed as a cents-

TABLE 5. Comparison of Cost Responsibility and Federal User Charge Payments by Vehicle Class, 1977

| Vehicle Class | Millions of Dollars |  | \$/Vehicle |  | \$/1000 VehicleMiles Traveled |  | Ratio of User Charges Paid to Cost Responsibility' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cost Responsibility | User Charges Paid | Cost Responsibility | User <br> Charges Paid | Cost Responsibility | User Charges Paid |  |
| Passenger Vehicles | , \$4,333.20 | \$4,820.70 | \$33.80 | \$37.60 | \$3.27. | \$3.64 | \$1.11 |
| Autos | 3,346.00 | 3,690.70 | 33.20 | 36.60 | 3.16 | 3.49 | 1.10 |
| Large | 2,661.40 | 3,211.80 | 33.20 | 40.20 | 3.17 | 3.83 | 1.21 |
| Small | 684.60 | 478.90 |  |  |  |  |  |
| Motorcycles | 29.50 | 13.50 | 5.90 | 2.70 | 2.57 | 1.17 | 0.46 |
| Pickups and Vans | 873.80 | 1,074.10 | 40.10 | 49.30 | 3.50 | 4.30 | 1.23 |
| Buses | 83.90 | 42.40 | 170.60 | 86.20 | 14.22 | 7.19 | 0.51 |
| Intercity | 17.60 | 20.50 | 140.60 | 46.40 | 15.87 | 18.48 | 1.16 |
| Other | 66.30 | 21.90 | 871.30 | 1,014.90 | 13.84 | 4.57 | 0.33 |
| Trucks | 2,308.80 | 1,821.30 | 439.90 | 347.00 | 21.83 | 17.22 | 0.79 |
| Single Unit | 489.10 | 739.70 | 115.80 | . 175.10 | 9.02 | 13.65 | 1.51 |
| Under 26 KIPS ${ }^{2}$ | 260.10 | 341.30 | 80.20 | 105.30 | 6.67 | 8.75 | 1.31 |
| Over 26 KIPS | 229.00 | 398.40 | 233.10 | 405.40 | 15.06 | 26.20 | 1.74 |
| Combinations | 1,819.70 | 1,081.60 | 1,777.60 | 1,056.60 | 35.30 | 20.98 | 0.59 |
| Under 50 KIPS | 164.40 | 137.60 | 679.30 | 568.60 | 22.12 | 18.51 | 0.84 |
| $50-70 \mathrm{KIPS}$ | 302.30 | 258.10 | 1,041.10 | 888.90 | 25.36 | 21.65 | 0.85 |
| 70-75 KIPS | 504.80 | 301.40 | 2,229.50 | 1,331.20 | 35.52 | 21.21 | 0.60 |
| Over 75 KIPS | 848.20 | 384.50 | 3,202.10 | 1,451.60 | 47.14 | 21.37 | 0.45 |
| All Vehicles | \$6,642.00 | \$6,642.00 | \$49.80 | \$49.80 | \$4.64 | \$4.64 | \$1.00 |
| Source: U.S. Department of Transportation, Final Report on the Federal Highway Cost Allocation Study, May 1982. |  |  |  |  |  |  |  |
| 1. Ratio of less than 1.0 indicates underpayment. <br> 2. KIPS = a unit of weight equal to a thousand pounds. |  |  |  |  |  |  |  |

per-gallon rate) could be set periodically based on some established measure of fuel prices. The major advantage of a price-based tax is that it provides inflation protection in a period of rising fuel prices.

A price-based tax also has several disadvantages. First, the instability of energy prices makes a pure price-based tax an unreliable revenue source which is difficult to forecast. Second, the tax rates would be highest when the motorist can afford it least-when the price of fuel is high. Third, the tax would be more difficult to administer than a flat-rate tax. If the tax rate is set periodically, the more often the tax rate changes the more difficult the tax would be to administer.
A variation of a pure pricebased tax is a price-based tax with a floor or minimum cents-per-galion rate. For example, a 15 percent tax with a 15 -cent-per-gallon floor would generate the same revenue as the current tax until the price of fuel reaches one dollar, at which point the tax would start producing addi-
tional revenue. Such a tax eliminates the downside risks of the pure price-based tax, but retains the inflation hedge potential.
A comparison of the revenue that would be generated by two hypothetical taxes, a flat-rate tax at 15 cents per gallon and tax at 15 percent of retail price, is illustrated in Figure 9. (Note: In each year, the amount of revenue generated by a 15 percent tax with a 15 -cents-per-gallon floor would equal the greater amount of revenue generated by the flat rate or price-based tax.) The price history and estimates are based on data from Wharton Econometric Forecasting Associates (WEFA). ${ }^{15}$ Historical fuel consumption figures are based on gasoline consumption in Texas. The forecast fuel consumption is derived from State Department of Highways and Public Transportation estimates. ${ }^{16}$

The figure shows significant swings in the amount of revenue that would have been generated by a price-based tax. In 1981, the price-based tax would have generated $\$ 250$ million more than
the 15-cent-per-gallon tax. In 1987, the price-based tax would have generated $\$ 375$ million less than the 15 -cent-per-gallon tax. By 1996, the price-based tax is projected to generate $\$ 400$ million more than the flat-rate tax. The difference between the price-based tax and flat rate tax in 1996 results from WEFA's forecast of gradually increasing. gasoline prices. Thus, the ability to forecast fuel prices is critical in a price-based tax system.
Table 7 illustrates the difficulty of estimating a price-based tax three years in advance. A 15 percent tax in effect in the 198486 period would have generated $\$ 950$ million less than an estimate based on the average of price projections published by
15. Wharton Econometric Forecasting Associates, Long-Term Historical Data: Annual Model, September 1987, and U.S. Long-Term Forecast: Annual Model, March 1988.
16. Derived from State Department of Highways and Public Transportation, Executive Summary: Department Financial Status as of November 30, 1987. Calculations by Legislative Budget Board staff.

TABLE 6. Federal Highway User Charges at Time of Cost Allocation Study

| Tax | 1977 Rates | Autos | Pickups/ Vans | $\begin{gathered} \text { Single } \\ \text { Unit } \\ \text { Trucks } \end{gathered}$ | Combination Trucks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Motor vehicle fuels | 4 cents/gallon | + | + | + | + |
| New trucks and trailers | $10 \%$ of manufacturer's sale price for trucks and trailers over 10,000 pounds GVW |  |  | + | + |
| Truck parts and accessories | $8 \%$ of manufacturer's sale price for all truck parts and accessories |  | + | + | + |
| Heavy vehicle use tax | $\$ 3 / 1,000$ pounds GVW for trucks over 26,000 pounds GVW |  | , | + | + |
| Lubricating oil | 6 cents/gallon | + |  | + | + |
| Tire, tube, and tread rubber | 9.75 cents/pound for tires, 10 cents/pound for inner tubes, 5 cents/pound for tread rubber | + | + | + | + |

Source: U.S. Department of Transportation, Final Report on the Federal Highway Cost Allocation Study, May 1982.

Chase Econometrics and Data Resources in $1983 .{ }^{17}$

Sales tax on fuels. Eliminating the sales tax exemption on fuels was an option proposed in the past. The extension of the sales tax to motor fuels could be combined with an adjustment of the cents-per-gallon fuel tax rate to produce the desired overall tax rate on fuels.
The advantages of taxing fuel under the sales tax are inflation protection in times of rising fuel
17. See Chase Econometrics, Energy Analysis Quarterly, Fourth Quarter 1983; and Data Resources, Inc., Energy Review, Summer 1983.
prices and additional revenue to cities, MTAs and counties levying a local sales tax. The disadvantage is the downside risk from declining prices.

Under the current constitutional structure, a sales tax on highway motor fuels would be dedicated to schools and highways. This presents an administrative problem. Sales tax receipts from fuel sales would have to be:
(1) identified and segregated for allocation to the Available School Fund and the Highway Fund, or
(2) estimated for the purpose of allocation.

FIGURE 9. Illustration of the Impact of a 15 Percent Gasoline Tax Versus a 15 Cent Per Gallon Gasoline Tax


Source: Based on data from Wharton Econometric Forecasting Associates and the State Department of Highways and Public Transporation.

An additional complication is that the constitutional dedication of fuel taxes may apply to the city, MTA and county sales taxes levied on fuels.

Taxes indexed to factors other than fuel prices. Another method of insulating the purchasing power of fuel taxes from inflation is to index the tax rates to highway costs. Three states-Michigan, Ohio and Wisconsin-index fuel tax rates to the federal highway operations and maintenance index. In these states, motor fuel taxes are pure user fees dedicated for highway purposes. (Under the current constitutional dedication, it might be appropriate to use a weighted composite index based 75 percent on highway cost inflation and 25 percent on education cost inflation in Texas.)
The three states that use the federal highway operations and maintenance index tie the tax rate inversely to taxable fuel sales as well. This additional factor may not be appropriate in a state in which population increases are likely to result in modestly increasing fuel consumption and added demands for roads and schools.
The following alternatives address issues of equity, especially the issue of highway cost and funding.
Differential tax rates by fuel. One of these alternatives is to differentiate the tax rates on the

TABLE 7. Effects of Fuel Price Unpredictability Based on 1983 Estimates of Gasoline Prices and 15 Percent Tax Rate

|  | Actual <br> (Cents/ <br> gallon) | DRI <br> (Cents/ <br> gallon) | Chase <br> (Cents/ <br> gallon) | Average <br> Chase/DRI <br> (Cents/ <br> gallon) | Tax On <br> Estimated <br> Price <br> (millions) | Tax On <br> Actual <br> Price <br> (millions) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

various fuels according to the energy content of each fuel. (The rationale for the different rates was discussed in the section on equity.)

A similar option, but one with a different rationale, is to tax diesel at a higher rate than gasoline or LPG as a means of compensating for the additional highway construction and maintenance costs attributable to heavy, dieselpowered trucks. This may well have been the basis for the differential between the gasoline tax and diesel tax rates in Texas from 1941 to 1984 . The differential could be coupled with rebates to lightweight diesel vehicles. However, these rebates would complicate the administration of the tax.

Either of the options outlined above might marginally improve the correlation between highway costs attributable to various vehicle categories and the fuel taxes paid by vehicles in those categories. However, cost allocation studies indicate that the most important factors determining the cost a vehicle adds to the cost of constructing and maintaining highways are the weight and axle configuration of the vehicle.

Weight-distance tax. The tax most frequently proposed to match highway cost responsibility and user taxes paid by vehicle class is a weight-distance tax. Eleven states currently impose some form of weight-distance tax. Under the most common form of the tax, a per-mile tax is imposed, with the rate graduated according to increasing registered gross weight. A variation of the weightdistance tax is the ton-mile tax which is based on the actual weight of the vehicle and load and miles driven. It would also be possible to devise a graduated tax structure based on axle weight rather than gross vehicle weight. Current weight-distance taxes vary widely among the states which impose them. One of the least
complex weight-distance rate schedules can be found in Idaho, as shown below (Table 8).

Other states have more complicated weight-distance rate schedules. New York imposes different rate schedules for laden and unladen trucks. Oregon has rate schedules for both gasoline and diesel consumers as well as for computing the tax on any fuel purchased outside of Oregon. In Arizona, the tax rates are set annually so that the total revenue will be $\$ 21$ million.

Opponents of the weightdistance tax voice several objections. First, they challenge the validity of the cost-allocation studies on which the weightdistance taxes are based. Second, they argue that the weight-distance tax would place an inordinate burden on the trucking industry without regard to the ability of the industry to pay the added taxes. Third, they argue that a system based on registered gross weight taxes a vehicle as if it were fully loaded at all times, whereas many types of trucks travel a sizeable portion of miles empty or partially loaded. Fourth, they argue that the weight-distance tax would impose an additional administrative burden and promote avoidance. Fifth, opponents argue that spreading vehicle weight over a greater number of axles decreases the cost responsibility attributable to a vehicle, thus registered weight is not the proper measure of the damage a vehicle does to roads. Sixth, they argue that the added cost of the tax would be passed on to the consumer in the form of higher prices. Seventh, opponents point out that several states that levy a weightdistance tax have defeated the purpose of the tax by providing selective exemptions. And finally, several states levy retaliatory taxes against interstate vehicles registered in states imposing a weight-
distance tax.
A December 1986 estimate by the Comptroller of Public Accounts projected that approximately $\$ 180$ million would be generated annually by a weightdistance tax with a graduated rate schedule in Texas. This estimate was based on the fee schedule shown in Table 9. ${ }^{18}$
Inverse oil-price tax. In the second called session of the 69 th Texas Legislature in 1986, a supplemental fuel tax based on the inverse of oil prices was proposed. The proposal, House Bill (H.B. 48) by Representative Dutton, was different from any fuel tax currently in effect. Under
18. Comptroller of Public Accounts, Texas and Taxes (Austin, 1986), p. VI. 113.

| TABLE 8. Idaho Weight-Distance <br> Tax Schedule |  |
| :--- | ---: |
| Maximum Cross Welght of <br> Vehicle Combination <br> of Vehicles | Cents <br> Per Mile |
| $16,000-26,000$ |  |
| $26,001-40,000$ | 2.475 |
| $40,001-50,000$ | 3.580 |
| $50,001-60,000$ | 5.420 |
| $60,001-80,000$ | 7.895 |
| $80,001+$ | 11.665 |
| Source: Commerce Clearing House, |  |
| Inc., Idaho $\mathbb{I}$ 50-385. |  |

TABLE 9. Weight-Distance Schedule Used in Comptroller Estimate

| Weight in Pounds | Fee Per Actual <br> Miles Traveled |
| :---: | :---: |
| $50,000-55,000$ | 2.5 cents |
| $55,000-60,000$ | 3.0 |
| $60,000-65,000$ | 3.5 |
| $65,000-70,000$ | 4.0 |
| $70,000-75,000$ | 4.5 |
| 75,000 and over | 5.0 |
| Source: Comptroller of Public |  |
| Accounts. |  |

the proposal, the flat-rate tax would have remained in effect. When the price of oil was between $\$ 15$ per barrel and $\$ 21$ per barrel, a five-cent-per-gallon supplemental tax would have taken effect. When the price of oil was below $\$ 15$ per barrel, a ten-cent-per-gallon supplemental tax would have taken effect.

When oil prices were over $\$ 21$ per barrel, no supplemental taxes would have been in effect. The rate would have been changed quarterly on the basis of oil prices in the prior quarter.

The bill, in conjunction with a proposed constitutional amendment, would have changed the fuels tax dedication to allow the use of the supplemental tax for nonhighway purposes. The changed allocation scheme also provided for diversion of some of the flat-rate tax revenue from highway use in periods of low oil prices.

The idea of a supplemental fuels tax could be considered independently from changing the constitutional dedication of taxes. Also, the level at which oil price changes trigger the supplemental tax and the rate of the tax could be adjusted. The advantages of the inverse oil-price tax are:
(1) it would produce additional revenue when it is most needed, and
(2) the burden on the consumer would be minimized because the tax would be in effect only in periods of low fuel prices.

The disadvantages are difficulty of administration and the lack of an inflation hedge.

## Effects of Tax Increases

Are fuel taxes really passed

[^109]along to the consumer? The five-cent-per gallon tax increases of 1984 and 1987 provide an opportunity to assess the extent to which fuel taxes are actually passed on to the consumer. If the gasoline tax increases were actually passed on to the consumer, a price increase at the time of each tax hike would be expected. Data from the Lundberg Letter were used to track the behavior of the price of unleadedregular gasoline around the time of each tax increase. ${ }^{19}$ Figure 11 shows the results of those comparisons.

Houston prices behaved as would be expected if the tax increases were to be passed on to the consumer. At the time of the first five cent tax increase in 1984, prices in Houston rose by 4.2 cents. In comparison, the unweighted average price for regular unleaded in selected U.S. cities (Albuquerque, Jackson, Little Rock) declined by one cent, making the Houston relative change 5.2 cents.

At the time of the five cent tax increase of January 1, 1987, the increase in Houston prices exceeded the average change in the U.S. by six cents. If Houston price changes alone were used as the gauge, it would appear that the tax increases were passed on to the consumer:

The evidence in Dallas is less clear. In August 1984, Dallas prices for regular unleaded gasoline rose by five cents, while the unweighted average prices in New Orleans, Tulsa and Phoenix declined by 1.4 cents. In January 1987, Dallas prices jumped by 9.4 cents, compared to 6.8 cents for the U.S. average, making Dallas' relative increase only 2.6 cents per gallon.

In El Paso in August 1984, the price of regular unleaded rose by 3.8 cents while the average price in selected cities fell by one cent per gallon. In January 1987, El Paso prices increased four cents per
gallon more than the U.S. average price.

In every case, a substantial portion of each fuel tax increase was apparently passed on to the consumer in the form of higher fuel prices. However, in El Paso the price boost at the time of each tax increase seems to have been eroded in subsequent weeks. To a lesser degree, the same pattern occurred in Dallas.

## Recurrent Issues

There are a several issues related to fuel taxes that have been raised in most recent legislative sessions. The issues may involve relatively small amounts of revenue, but they are significant enough to warrant mention.

Gasohol. The first of these issues is gasohol. Gasohol is defined as a gasoline-alcohol mixture containing at least ten percent ethyl alcohol. Gasohol has had many incarnations in recent yearsfirst as a fuel extender in the days of gasoline shortages, then as a lead replacement to boost octane, and most recently, as a means of reducing air pollution.

In 1981, the Texas Legislature enacted a program of gasoline tax credits for gasohol. The credit was initially set at five cents per gallon through 1986 and scheduled to phase out in one-cent-per-year increments over the period 1987-90.

Eligibility of out-of-state gasohol was linked to reciprocity. If a state offered a credit for gasohol containing Texas-produced alcohol, gasohol containing alcohol from that state was eligible for a credit in Texas. The amount of the pergallon credit for out-of-state gasohol could not exceed the pergallon credit granted to Texas gasohol in the reciprocating state.

The Comptroller estimated that the revenue loss to the state from the credit would increase steadily from six million dollars in 1982 to

FIGURE 11. Price Change in Regular Unleaded Gasoline


Source: Lundberg Letter, various issues.
$\$ 32$ million by 1986. Because the loss would show up in the form of reduced gasoline tax collections, the revenue loss would have reduced the motor fuel allocations to the Available School Fund and the State Highway Fund. The motor fuel tax allocation losses to these funds were to be offset by General Revenue Fund transfers to the funds. Thus, the ultimate cost of the credit was to be incurred by the General Revenue Fund.
At the time the state credit was enacted, the federal government granted a fuel tax credit of five cents per gallon. The federal credit was increased to six cents, effective January 1, 1985.
The federal credit reduced receipts of the Federal Highway Trust Fund. Eventually this loss of federal receipts translated to reduced allocation of federal highway revenue. For each gallon of gasohol consumed in the state in lieu of a gallon of gasoline, Texas eventually loses approximately 5.1 cents of federal highway allocation.
Despite the tax credits, gasohol consumption in the state did not increase immediately. In all of fiscal year 1982, 6.1 million gallons of credit were claimed. During the 1983 fiscal year, gasohol began to be marketed not as gasohol, but as super unleaded. Consumption in the state increased rapidly, rising from 3.5 million gallons in Septem-
ber to 51 million gallons in May. The rapid increase in credits and the open-ended nature of the possible revenue loss prompted the Comptroller to revise his revenue estimate while the Legislature was in session.
The Legislature responded to the revenue estimate reduction by amending the gasohol statute to limit the possible loss of gasoline tax revenue. House Bill 2436 (68th Legislature, Regular Session) targeted a cap of $\$ 10.85$ million per year for gasohol credits. Texas gasohol received preferential treatment in a two-tiered system.
Each quarter, the Comptroller was required to set the cents-pergallon credit at a rate (up to the maximum established in the original statute) which would limit credits for Texas-produced gasohol to $\$ 2,712,500$ in the next quarter. If any credits remained after estimated in-state gasohol was taken into account, the Comptroller was required to set the cents per gallon credit for out-of-state gasohol at a rate that would limit the total estimated credits in the next quarter to $\$ 2,412,500$.
A nonseverability clause was added to the legislation: if any part of the law was successfully challenged in court, the entire law was void. The nonseverability clause eliminated any incentive for out-of-state gasohol producers to chal-

| TABLE 10. Texas Gasohol Credits |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Texas Produced (millions) | $\qquad$ | State Credit (millions) | Estimated Loss of Federal Reimbursement (millions) |
| 1982 | 6.1 gallons | - | \$0.2 | \$0.3 |
| 1983 | 61.2 | 240.5 gallons | s 10.9 | 12.8 |
| 1984 | 2.3 | 110.4 | 4.8 | 4.8 |
| 1985 | 4.0 | 390.1 | 17.6 | 18.9 |
| 1986 | 10.0 | 327.2 | 6.6 | 17.2 |
| 1987 | 6.4 | 451.1 | 12.3 | 23.3 |
| Source: Comptroller of Public Accounts. |  |  |  |  |

lenge the preferential treatment of Texas gasohol.
In 1986, the Legislature eliminated the general revenue gasohol transfers to the Available School Fund and Highway Fund, thus shifting 75 percent of the cost of the credits to the Highway Fund.
In the regular session of the 70th Legislature, the structure of the gasohol credit was changed again. The gradual phaseout of the cents-per-gallon credit was replaced with a maximum pergallon credit of four-cents-pergallon through 1990, when the credit is scheduled to expire. The quarterly target cap was set at $\$ 1,100,000$ in $1988, \$ 880,000$ in 1989 and $\$ 704,000$ in 1990. The impact of the most recent change is to limit the total revenue loss of the credits and to further the advantage of in-state producers.

Table 10 shows the gasohol credits claimed since the inception of the credits and an extrapolation of the indirect loss of federal revenue during the same period. Out-of-state gasohol accounted for over 95 percent of the gallons of gasohol receiving credits.

In 1987 and 1988, the amount of in-state gasohol production has increased. It is possible that in-state gasohol credits will use the entire quarterly target by the end of this year. When out-ofstate gasohol is no longer eligible to claim credits, the likelihood of a court challenge to the Texas credit will increase. If this occurs, there is likely to be pressure to restructure the credit.

In any event, the scheduled elimination of the credit in 1991 is likely to prompt calls to renew the credit. There has been a tendency among the states to phase out or drop the gasohol credits in the past four years. In 1983, 29 states offered some form of credit to gasohol; as of January

1,1988 , the number of states offering gasohol credits had shrunk to 17 (Table 11).

Aviation fuel. Texas is the only state that does not tax aviation fuel. The taxation of aviation fuel-especially fuel used in general aviation-as a means of funding aviation facilities and regulation is a fairly widespread practice. The taxation of commercial aviation jet fuel is not as widespread.
It is surprisingly difficult to assess the amount of aviation fuel taxes actually collected by the states. Often the taxes are not reported separately from other fuel taxes or sales taxes. The variety of exemptions offered by states also presents a problem.
The taxation of general aviation fuel would not be a source of large amounts of revenue, and a tax on commercial aviation fuel is subject to various forms of legal avoidance. Aviation fuel is, nevertheless, an untapped source of possible revenue. Two aviation fuel tax bills were introduced in the last legislative session. The Comptroller's office estimated that a two-cent-per-gallon tax on aviation gasoline and jet fuel would raise approximately $\$ 22$ million per year. ${ }^{20}$

Local governments. Fuels purchased by local governments are subject to the state motor fuel taxes. In recent sessions several bills which would have exempted local government purchases of fuels have been introduced. In the last regular session of the Legislature, H.B. 294, introduced by Representative Waldrop, sought a fuel tax exemption for school districts. The revenue loss to the state from the proposed fuel tax exemption for school districts was estimated to be approximately $\$ 4$ million per year.

Local governments are likely to pursue the local exemption issue before future legislatures. Local
governments are also likely to seek access to motor fuel tax revenue through an allocation of state fuel tax collections or through some form of local taxation of motor fuels.

## Conclusion

The Select Committee on Tax
Equity has utilized nine criteria to serve as a framework for the evaluation of a tax system. Seven of the criteria-adequacy, equity, efficiency, economic competitiveness, stability, simplicity and intergovernmental linkage-can also provide a framework by which a particular tax can be assessed.

The current volume-based fuel taxes do not respond to inflation, thus score low marks on adequacy in the long term. The fuel taxes are regressive across income groups and suspect in terms of equity among the various fuels and among vehicle classes.

As a result of the likely inequities of the taxes across vehicle classes, current fuel taxes probably distort economic decisions regard-
20. Comptroller of Public Accounts, Texas and Taxes, p. VI.64.
ing the transportation of goods in the state. Hence, the current fuel tax structure probably results in some economic inefficiencies.

The state fuel tax system is similar to that of most states, and the state tax rate is in the midrange of state tax rates; as a result, Texas fuel taxes are probably neutral with respect to the economic competitiveness of the state.

The lack of a state fuel tax exemption for local governments can be viewed as a negative in terms of intergovernmental linkage.

The current system of taxing motor fuels has two important advantages. The current volumebased fuel taxes are a stable and predictable source of state revenue, and Texas' fuel taxes are simple, familiar and easier to administer than the alternative forms of fuel taxes designed to address the problems of equity and adequacy.


# T exas Alcohol and Tobacco Taxes 

## A Background Analysis

## Summary

Excise taxes on alcohol and tobacco are levied in all 50 states. As consumption taxes, they are relatively easy to administer and the products consumed are generally considered to have a negative impact on society at large.

The present structure of state taxes on alcohol dates to the repeal of Prohibition nationally in 1935. Two forms of regulation were adopted by state governments at that time-private sector distribution and sale of alcohol under state license or statecontrolled distribution and sale. The number of control states has remained at 18 , but the trend within those states is away from state control in favor of the private sector.
Texas currently levies six types of alcohol taxes and two types of tobacco taxes. With two exceptions, the taxes are levied on a per unit basis, as in most states. As a result, inflation tends to erode the revenue from these sources and periodic tax increases have been needed to keep pace with inflation. The primary exception is the mixed drinks gross receipts tax, the revenue from which has grown steadily with only one tax increase since it was enacted in 1971.

Revenue growth from cigarette taxes used to be driven by increased consumption. Since the mid-1970s, however, consumption has fallen sharply as evidence mounts regarding the
adverse health effects of tobacco use. Alcohol consumption is also down nationally, but in Texas, the value-based mixed drinks gross receipts tax, comprising more than one-half of all alcohol tax revenue, has helped maintain positive alcohol tax revenue growth.
The current tax rate for cigarettes in Texas is 26 cents per pack. Nine states have a higher rate and four states have the same rate as Texas. Texas also levies the state and local sales tax on cigarettes, bringing total state and local taxes to 34 cents per pack of cigarettes in most large cities.
State alcohol taxes are difficult to compare because of their wide variety. One report ranks Texas 18th among the states in revenue per capita from all alcohol taxes.
Arguments for including excise taxes on tobacco and alcohol as part of an overall tax policy include the sumptuary nature of the taxes where society is attempting to discourage consumption and recovery of a portion of the social costs associated with alcohol and tobacco use.
Arguments against the imposition of alcohol and tobacco taxes usually center on their highly regressive nature. The trade-off for a relatively stable source of revenue that inspires little taxpayer resistance is that these taxes tend to fall most heavily on the poor.

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S
elective taxes on goods and services, or excise taxes, are among the oldest forms of taxation in the world. Commodities such as salt, perfume, sugar, tea, liquor and beer have been taxed by governments in China, Europe and elsewhere for hundreds of years. ${ }^{1}$

Today, excise taxes are still an important source of government revenue throughout the world, particularly in developing countries where the complexities of administration and developing economies make broad-based taxation difficult. ${ }^{2}$
In the U.S., excise taxes are levied by federal, state and local governments. The most common items subject to excise taxes in this country include motor fuels, cigarettes and other tobacco products and alcoholic beverages.

This chapter focuses on alcohol and tobacco excise taxes in Texas and how they compare with those taxes in other states. The performance of these taxes as sources of revenue for Texas state and local government is also discussed.
There are several arguments for

[^110]the imposition of excise taxes. In the case of excise taxes on articles of consumption, the objective may be either to discourage consumption (sumptuary taxes are those designed to regulate habits on moral or religious grounds) or to charge the user for social costs borne by the public at large. ${ }^{3}$ The "sin taxes" on alcohol and tobacco fall into both of these categories. They also provide a fairly significant, stable money source where public resistance to rate increases is relatively low.
The social costs of the use of alcohol and tobacco have been widely documented. Estimates for alcohol include a cost to business of $\$ 33$ billion per year in terms of lost productivity and increased medical benefits. ${ }^{4}$ Other studies have included the costs of alcohol-related accidents, property crime and child abuse. The social costs of tobacco use have also been documented and include the increased incidence of heart disease, emphysema and lung cancer. These costs, it is argued, are also borne by nondrinkers and

## 3. Thomas F. Pogue, "Excise Taxes," in

 Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), p. 262.4. Robert E. Martin, "Commodity Excise Taxes in Louisiana," in James A. Richardson (ed.), Louisiana's Fiscal Alternatives (Baton Rouge: Louisiana State University Press, 1988), p. 274.
5. Ibid.
6. Pogue, p. 261.
7. Texas Legislative Council, A Survey of Taxation in Texas: Part IIA-Analysis of Individual Taxes, Report No. 52-1 (Austin, 1951), p. 229.
8. Ibid., p. 230.
9. Ibid., p. 232.
10. Ibid., p. 234.
11. Ibid., p. 237.
nonsmokers through increased medical costs and higher taxes for Medicaid, Medicare and other health care programs. ${ }^{5}$ Social cost estimates are even higher when less direct expenses such as increased law enforcement and human services are included.

## In Texas, cigarette taxes were increased three times in four years from 1984 to 1987.

These policy issues may help to explain the relative popularity of these taxes when lawmakers are searching for additional revenue. Increased excise taxes were the most frequent kind of tax increase in $1985 .{ }^{6}$ In 1986, at the federal level, the Chairman of the House Ways and Means Committee included substantial increases in alcohol and tobacco taxes as part of a plan to reduce the federal budget deficit. In Texas, cigarette taxes were increased three times in four years from 1984 to 1987.

## Legislative History

Alcohol taxes. Texans have been paying alcoholic beverage taxes in one form or another since the days of the Republic. Throughout the 1800s, taxes were levied on establishments selling liquor, beer and wine. These early levies were in the form of operating permits or licenses. In 1840, a tax was levied on liquor for the first time at the rate of five cents per gallon, but licenses remained the predominant source of revenue. ${ }^{7}$
Texas reenacted taxes on alcoholic beverages after seceding and joining the Confederacy. As demands for revenue increased during the Civil War period,
alcohol taxes were increased dramatically along with other taxes. In addition, a new tax on breweries and distilleries was enacted. ${ }^{8}$
The Constitutional Convention of 1866, marking the end of Confederate rule in Texas, enacted graduated license fees for establishments selling liquor, beer and wine. The fees depended on the unit volume sold, apparently an effort to distinguish between wholesalers and retailers. Per drink taxes were enacted in 1879 but were repealed two years later. ${ }^{9}$
The prohibition movement of the early 1900s, which culminated with national Prohibition in 1920, was successful in Texas a year earlier. The Texas Legislature ratified statewide prohibition in 1918, and it became effective in 1919. Until that time, alcoholic beverage taxes were contributing about one million dollars annually to state coffers, equal to about four percent of state income in $1917 .{ }^{10}$
The present system of alcoholic beverage regulation begins in Texas with the repeal of national prohibition. In early 1933, the federal government exempted beverages which contained less than 3.2 percent of alcohol by weight from the National Prohibition Act. The Texas legislature quickly put the question before the voters and it was approved 317,340 to $186,312 .{ }^{11}$ The 43rd Legislature had enacted a tax of $\$ 1.50$ per barrel contingent on voter approval.
In 1935, when the federal government repealed Prohibition, the 44th Legislature convened in a special session to pass the necessary tax and regulatory laws on alcoholic beverages. A tax of 80 cents per gallon was imposed on liquor, and the beer tax was reduced to $\$ 1.24$. A tax of two cents per gallon was imposed on wine not over 14 percent alcohol; wine 14 percent alcohol or over was subject to a tax
of five cents per gallon. Sparkling wine was taxed at 25 cents per gallon and malt liquor (ale) at 15 cents per gallon. This basic rate structure has remained intact ever since.

In 1936, during a second special session, there was an increase in the tax rate on liquor from 80 cents per gallon to 96 cents. During the 1940s and 1950s, there were a series of increases on both liquor and beer, primarily enacted to deal with a specific revenue need such as the funding of new state hospital buildings in 1950.

In 1969, the state sales tax was applied to the sale of liquor, beer and wine. In 1971, the 62 nd Legislature enacted a mixed drinks gross receipts tax on "liquor by the drink" on a local option basis. The rate was ten percent and collections were divided between state and local governments with 15 percent rebated to the county and, if applicable, 15 percent to the city or town where the drink was sold.

This is the only alcohol tax that is value-based, and thus it grew
rapidly in the 1970s with the strong inflation of that period. By 1987, the gross receipts tax accounted for over half of all alcoholic beverage tax revenue.

> Texas was the 13 th state to adopt a cigarette tax and was among those states motivated by the fiscal problems of the Great Depression.

In 1984, the last time tax rates on alcoholic beverages were changed, beer was increased to $\$ 6.00$ per barrel, liquor was increased to $\$ 2.40$ per gallon and the mixed drinks gross receipts tax was increased from ten percent to 12 percent. The local government portion of the gross receipts tax was held constant by reducing its percentage from 15 percent to 12.5 percent.

Table 1 provides a summary of
the major legislative changes involving alcohol taxes since the first tax was levied on beer in 1933.

Cigarette and tobacco taxes. A cigarette tax was first enacted in Texas in 1931 at a rate of three cents per pack. Texas was the 13th state to adopt a cigarette tax and was among those states motivated by the fiscal problems of the Great Depression. By the end of 1939, 21 states had adopted cigarette taxes.
In 1933, after initial experience with the new tax, the 43rd Legislature adopted major clean-up legislation which clarified definitions and delineated administrative and enforcement responsibilities. Initially, one half of cigarette tax revenue was dedicated to public schools, with the remainder used for general purposes. In 1933, all revenue was temporarily diverted to education. Allocation changes were also legislated in 1935, 1936 and 1941, but there were no rate changes until 1950, when the rate was increased to four cents per pack.

TABLE 1. Legislative History of Major Texas Alcohol Taxes

| Year | Beer | Liquor | Mixed Drinks | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 1933 | \$1.50/barrel ${ }^{1}$ | No tax | No tax | Voters legalized 3.2 percent beer when exempted from national Prohibition. |
| 1935 | \$1.24/barrel | \$0.80/gallon | - | National Prohibition repealed. |
| 1936 | - | \$0.96/gallon | - |  |
| 1941 | - | \$1.28/gallon | - |  |
| 1950 | \$1.364/barrel | \$1.408/gallon | - | Temporary $10 \%$ increase for remainder of biennium to fund new state hospital buildings. |
| 1951 | \$1.37/barrel | \$1.408/gallon | - | Temporary rate made permanent. |
| 1954 | \$2.00/barrel | - | - |  |
| 1955 | \$4.30/barrel | - | - |  |
| 1959 | - | \$1.68/gallon | - |  |
| 1969 | - | - | - | Service fee enacted on alcoholic beverages sold by private clubs and airlines (five cents/drink). Sales tax applied to liquor, beer and wine. |
| 1971 | \$5.00/barrel | \$2.00/gallon | 10\% gross receipts | Five cent service fee repealed. |
| 1984 | \$6.00/barrel | \$2.40/gallon | 12\% gross receipts |  |

Source: Texas Legislative Council, A Survey of Taxation in Texas: Part II-A Analysis of Individual Taxes, Report Number 52-1, 1951, pp. 226-247; Texas Alcoholic Beverage Commission, 1987.

1. A standard barrel contains 31 gallons.

In 1959, the cigarette tax rate was increased to eight cents per pack, and other tobacco products, such as cigars and pipe and chewing tobacco, were taxed separately for the first time.

There were two major cigarette tax increases in the 1960s. There were no changes during the 1970s, apart from 1971, when the cigarette tax rate was increased to 18.5 cents per pack with a penny allocated to the Texas Parks Fund. Texas had the nation's third highest cigarette tax rate in 1971, and it has since continued to have a high tax compared to other states.

The cigarette tax rate was not

[^111]increased again until 1984. As part of House Bill 122-the omnibus tax bill of that year funding highways and public schools-the rate was increased to 20.5 cents

> As part of the 1987 tax bill (House Bill 61), the cigarette tax was raised to 26 cents per pack, the sixth highest rate in the country.

per pack over a two-year period. In addition, cigarettes became subject to the state and local sales tax. Snuff was added under the category of "other tobacco products," a change that brought

TABLE 2. Legislative History of Texas Tobacco Taxes

Year
Change

| 1931 | Cigarette tax enacted by 42 nd Legislature at 3 cents/pack. Allocation: one-half to public schools and one-half for general purposes. |
| :---: | :---: |
| 1933 | Major clean-up legislation after initial experience with tax. Temporary two-year diversion of all revenue to public schools. |
| 1935 | Administrative changes. Allocation: two-thirds to public schools and one-third for general purposes. |
| 1936 | Allocation: one-third for public schools and two-thirds for Texas Old Age Assistance Fund. |
| 1950 | - 4 cents/pack. |
| 1955 | 5 cents/pack. One cent increase allocated for generalpurposes. |
| 1959 | 8 cents/pack. Separate tax enacted for cigars and "other tobacco products" (pipe and chewing tobacco). Three rates for cigars depending on weight and price. 25 percent of factory list price for "other tobacco products." Cigarette increase and cigar and tobacco products tax allocated for general purposes. |
| 1965 | 11 cents/pack. Increase used primarily to fund teacher salary increases: Highest state tax rate that year. |
| 1969 | 15.5 cents/pack |
| 1971 | 18.5 cents/pack One cent allocated to Texas Parks Fund. |
| 1984 | 19.5 cents/pack (effective $8-1-84$ ). 20.5 cents/pack (effective 9-1-85). Cigarettes become subject to state and local sales tax. Snuff added to "other tobacco products" subject to tax |
| 1987 | 26 cents/pack. Tax rate for "other tobacco products" increased from 25 percent to 28.125 percent of factory list price. |

Source: Texas Legislative Council, A Survey of Taxation in Texas: Part II-A Analysis of Individual Taxes, Report Number 51-8 (Austin, 1951), pp. 1-7; Comptroller of Public Accounts.

Texas in line with most other states taxing tobacco products.

As part of the 1987 tax bill (House Bill 61), the cigarette tax was raised to 26 cents per pack, the sixth highest rate in the country (excluding state sales taxes). The tax on tobacco products, other than cigars, was also increased from 25 percent of factory list price to 28.125 percent. Table 2 summarizes legislative changes involving tobacco taxes since 1931.

## Alcohol and Tobacco Taxes Today

Alcohol taxes. Texas currently levies per-unit taxes on liquor, beer, wine, ale (malt liquor) and airline beverages and a gross receipts tax on mixed drinks. The current tax rate on a gallon of liquor is $\$ 2.40$. The current rate for beer is $\$ 6.00$ per barrel ( 31 gallons) and 19.8 cents per gallon for ale. The rate for wine depends upon the alcoholic content: 20.4 cents per gallon for wine not over 14 percent alcohol and 40.8 cents for wine over 14 percent. Sparkling wine is taxed separately at 51.6 cents per gallon.

Texas also levies a tax on alcoholic beverages served on airlines, passenger trains and limousines at a rate of five cents per serving. The mixed drinks gross receipts tax rate is 12 percent, and 12.5 percent is remitted to the county and (if applicable) the city where the tax was collected. Alcoholic beverages are also subject to the state and local sales tax.
The cumulative effect of these taxes can be illustrated by a hypothetical liter bottle of 100 proof vodka. Included in a consumer price of $\$ 11.87$ are: an 88 cent sales tax (eight percent rate), a 63 cent state excise tax and a $\$ 3.30$ federal excise tax. These taxes total 40.5 percent of the retail price. ${ }^{12}$

Cigarette and tobacco taxes. The cigarette tax is levied at the wholesale level on a per- 1,000 basis, de-
pending on the weight. The current rates are equivalent to 26 cents per standard pack of 20 cigarettes. The cigar and tobacco products tax is composed of four separate rates for cigars depending on weight, composition and factory list price and an ad valorem rate of 28.125 percent of factory list price for other tobacco products (smoking and chewing tobacco and snuff).

Cigarette taxes are collected through a stamp system. The wholesaler purchases tax stamps from the State Treasurer and affixes one to each pack of cigarettes as evidence that the tax has been paid. The remaining tobacco taxes are collected monthly by the Comptroller from the distributor on an inventory basis and have no stamp requirement.

The allocation of cigarette tax collections, after numerous adjustments by the Legislature through the years, is illustrated in Figure 1. Revenue from the cigarette tax is allocated for public schools, state and local parks, tax enforcement and general purposes.

## Administrative Issues

Alcohol taxes. The administration of alcohol taxes and statutory and regulatory enforcement of liquor laws are closely linked. In Texas, all of the regulatory responsibilities associated with alcoholic beverages-taxing, licensing and enforcement-come under the authority of one agency, the Texas Alcoholic Beverage Commission. This is not the case in all states, where in many instances, taxation and enforcement are the responsibility of separate agencies. In this regard, Texas is considered by some as a model state.

Cigarette and tobacco taxes. The Comptroller of Public Accounts has primary responsibility for the administration of the cigarette tax. The State Treasury,
however, manages the cigarette tax stamps which are purchased by wholesalers and affixed to all cigarette packs. The Alcoholic Beverage Commission is responsible for cigarettes brought into the state at ports of entry since

## Revenue from the cigarette tax is allocated for public schools, state and local parks, tax enforcement and general purposes.

employees are stationed there to regulate liquor importation.

Cigarette tax stamps are printed under the supervision of the Comptroller's office. The State Treasurer's responsibility is to disburse the stamps and collect the tax revenue. Reportedly, when the tax stamp system was
initiated, the State Treasury was the only agency with a vault for safekeeping of the stamps prior to disbursement. Distributors receive a 2.75 percent discount to compensate for the cost incurred in purchasing and applying the cigarette tax stamps and remitting the tax revenue to the Treasurer.
Many distributors prefer to purchase tax stamps on credit. Until recently, an extension of credit was obtained by securing a bond from a private bonding company. Changes in the insurance industry, an economic recession and other changes have made it increasingly difficult and expensive for cigarette distributors to secure bonds.
In response to these problems, the Cigarette Tax Recovery Trust Fund was established by the 70th Legislature as an alternative method of obtaining credit for the purchase of cigarette tax stamps by distributors. The advantages include three alternatives for

FIGURE 1. Allocation of Texas Cigarette Tax Revenue, 1987


[^112]Note: In fiscal year 1987, $\$ 8$ million was diverted from the allocation for the Local Parks, Recreation and Open Space Fund for the Texas Home Port Trust Fund.

FIGURE 2. Long-Term Growth in Texas Alcoholic Beverage Taxes, 1961-89


Source: Select Committee on Tax Equity.
Note: 1971 and 1974 revenue affected by mixed drinks tax growth.
obtaining credit, a quarterly dividend paid to the distributor (currently about 7.5 percent) and relatively low risk for the state. The Treasury estimates that should several of the largest distributors default, the fund could completely recover within six months.

Cigarette bootlegging-or tax evasion-is a major regulatory problem that affects every state. Bootlegging occurs on a small scale when someone purchases cigarettes in a neighboring low tax state for personal use and for acquaintances. A more serious problem in terms of lost state revenue is organized bootlegging where truckloads of cigarettes are purchased in a low tax state and distributed in a higher tax state for a profit.

| TABLE 3. Texas Alcohol and Tobacco Taxes Receipts, 1960-89 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Alcoholic Beverage Taxes |  |  | Cigarette and Tobacco Taxes |  |  |
|  | (millions) | $\%$ of Total State Taxes | \% Change | (millions) | \% of Total State Taxes | \% Change |
| 1960 | \$35.0 | 2.8\% | - | \$85.9 | 6.9\% | - |
| 1961 | 35.6 | 2.9 | 1.7\% | 91.9 | 7.5 | 7.1\% |
| 1962 | 38.1 | 2.6 | 6.9 | 94.7 | 6.6 | 3.0 |
| 1963 | 39.2 | 2.5 | 2.8 | 97.3 | 6.2 | 2.7 |
| 1964 | 41.1 | 2.4 | 4.8 | 97.4 | 5.7 | 0.2 |
| 1965 | 43.5 | 2.3 | 5.9 | 110.3 | 6.0 | 13.2 |
| 1966 | 45.2 | 2.3 | 3.9 | 130.8 | 6.6 | 18.6 |
| 1967 | 47.7 | 2.3 | 5.7 | 133.4 | 6.3 | 2.0 |
| 1968 | 52.1 | 2.2 | 9.2 | 135.8 | 5.8 | 1.8 |
| 1969 | 49.9 | 1.9 | -4.2 | 139.4 | 5.3 | 2.6 |
| 1970 | 54.6 | 1.8 | 9.5 | 186.4 | 6.1 | 33.7 |
| 1971 | 69.9 | 2.0 | 27.9 | 204.0 | 5.9 | 9.5 |
| 1972 | 78.6 | 2.0 | 12.5 | 232.3 | 5.8 | 13.9 |
| 1973 | 82.7 | 1.9 | 5.2 | 244.2 | 5.5 | 5.1 |
| 1974 | 117.9 | 2.4 | 42.6 | 248.5 | 5.0 | 1.7 |
| 1975 | 126.3 | 2.2 | 7.0 | 260.9 | 4.6 | 5.0 |
| 1976 | 131.1 | 2.0 | 3.8 | 279.2 | 4.2 | 7.0 |
| 1977 | 151.4 | 2.1 | 15.5 | 287.5 | 3.9 | 3.0 |
| 1978 | 164.1 | 2.0 | 8.3 | 299.8 | 3.6 | 4.3 |
| 1979 | 181.6 | 2.0 | 10.7 | 309.3 | 3.4 | 3.2 |
| 1980 | 200.5 | 1.9 | 10.4 | 321.8 | 3.0 | 4.0 |
| 1981 | 236.5 | 1.9 | 18.0 | 339.6 | 2.7 | 5.5 |
| 1982 | 267.7 | 2.0 | 13.2 | 346.0 | 2.6 | 1.9 |
| 1983 | 271.9 | 2.0 | 1.6 | 355.0 | 2.6 | 2.6 |
| 1984 | 284.8 | 1.9 | 4.7 | 340.3 | 2.3 | -4.1 |
| 1985 | 332.9 | 1.9 | 16.9 | 373.7 | 2.2 | 9.8 |
| 1986 | 348.0 | 1.9 | 4.5 | 378.7 | 2.1 | 1.3 |
| 1987 | 325.5 | 3.2 | -6.5 | 370.8 | 3.6 | -2.1 |
| 1988(est.) | 336.6 | 0.0 | 3.4 | 409.0 | 0.0 | 10.3 |
| 1989(est.) | 354.2 | 0.0 | 5.2 | 429.3 | 0.0 | 5.0 |

One of the most significant factors in the incidence of cigarette bootlegging in a given state is the tax rate in its bordering states. At 26 cents per pack, Texas has the highest tax rate compared with its bordering states and is nearly double the rate in New Mexico and Louisiana.

## Revenue Performance

Alcohol taxes. In 1987, alcoholic beverage taxes accounted for 3.2 percent of total state tax collections. Generally, though, these taxes have accounted for about two percent of state tax collections. Table 3 shows alcoholic beverage tax collections from 1960 through 1989.
In terms of growth, alcoholic beverage taxes in Texas have generally been a reliable revenue source with modest but steady gains from year to year regardless of the economic climate. The 1986-87 budget period marks a departure from this trend as revenues declined for the first time in almost ten years. Figure 2 illustrates the long-term growth rates for Texas alcoholic beverage taxes.
Figures 3,4 and 5 show the growth rate for each of the major alcoholic beverage taxes. The gross receipts tax has been the driving force behind the stable revenue performance of alcoholic beverage tax collections. One reason is that the tax is value based and the other is the localoption nature of the tax. As counties and cities elected to allow the sale of liquor by the drink in their jurisdictions, state tax collections grew. The addition of local jurisdictions has leveled off in recent years.
There are a number of factors which may be having a negative impact upon alcoholic beverage tax collections, among them increasing public sentiment
against alcohol, stronger drunken driving laws, the recent change in the drinking age from 19 to 21 , the recent change prohibiting drinking while driving and the economic recession. Consumption is down overall but is down most significantly for liquor because of a trend away from the consump-
tion of liquor toward beer and wine.
In the past, alcoholic beverage taxes have been considered "recession proof." However, the severity of the recession combined with these other factors may help to explain the recent decline in alcohol tax collections. Estimates

FIGURE 3. Growth Rates in Texas Mixed Drink Gross Receipts Tax Collections, 1974-87


Source: Select Committee on Tax Equity.
Note: Local option additions affected growth in the 1970s; a tax increase affected growth $n 1985$.

FIGURE 4. Growth Rates in Liquor Tax Collections, 1974-87


Source: Select Committee on Tax Equity.
Note: A tax increase affected growth in 1985.
for the 1988-89 budget period suggest that alcohol tax collections may recover with the Texas economy. Table 3 shows that alcoholic beverage taxes are expected to grow by 3.4 percent in 1988 and 5.2 percent in 1989.

The 1971 mixed beverage gross receipts tax provided an additional source of local revenue for those counties, cities and towns where alcohol is sold. Table 4 shows the top five counties and cities in terms of local tax revenue collected in 1987 from the gross receipts tax. Revenue from the
gross receipts tax has grown steadily since 1971 with the exception of the last two years. In 1987, just under $\$ 23$ million was remitted to counties and $\$ 21.2$ million was remitted to cities where liquor by the drink is permitted.

Cigarette and tobacco taxes. Cigarette and tobacco taxes, like most other excise taxes, are generally levied on a per unit rather than a value basis. As a result, without periodic rate changes, tax collections in relation to other taxes tend to decline as

FIGURE 5. Growth Rates in Beer Tax Collections, 1974-87


Source: Select Committee on Tax Equity.
Note: A tax increase affected growth in 1985.

TABLE 4. Local Mixed Drinks Gross Receipts Tax for Top Five Counties and Cities, 1987

| Counties | Amount | Clties | Amount |
| :--- | ---: | :--- | ---: |
| Harris | $\$ 5,313,613$ | Houston | $\$ 4,224,444$ |
| Dallas | $4,952,274$ | Dallas | $3,972,736$ |
| Tarrant | $2,139,708$ | San Antonio | $1,636,872$ |
| Bexar | $\mathbf{1 , 7 8 7 , 2 7 6}$ | Austin | $1,349,037$ |
| Travis | $\mathbf{1 , 4 3 5 , 7 8 7}$ | Fort Worth | 939,560 |
| Others | $\mathbf{8 , 7 1 4 , 2 2 3}$ | Others | $\mathbf{8 , 5 7 4 , 3 5 2}$ |
|  | $\$ 22,203,187$ | Total | $\$ 20,697,001$ |

[^113]Note: Total number of counties collecting tax is 219 ; total number of cities collecting tax is 437 .
inflation devalues collections. In Texas, despite regular tax increases, cigarette and tobacco taxes have declined from 6.9 percent of total state tax collections in 1960 to 3.6 percent of collections in 1987. Table 3 shows cigarette and tobacco tax collections from 1960 through 1987 and includes the Comptroller's estimates for 1988 and 1989.

Despite a shrinking share of total tax collections, cigarette and tobacco taxes may still be characterized as a relatively stable source of revenue, since year after year tax collections showed positive growth.

The main reasons behind the historic dependability of these taxes as a source of revenue are the inelasticity of demand and historic increases in consumption. Cigarette and tobacco consumption is relatively unaffected by tax increases. Concerns prior to major tax increases that revenue might actually decline as a result of decreased demand have not been borne out in any measurable way. This concern was expressed in Texas when the rate was increased in 1951 for the first time after 19 years; however, collections continued to rise sharply despite the increase. This historic trend can be attributed to steadily increasing consumption and periodic tax increases.

But more recently, the driving force behind revenue growth has been tax increases instead of consumption. Consumption of tobacco products in the United States increased steadily from 1900 through the mid-1970s but has fallen off dramatically since 1975. This trend is likely to continue as evidence mounts regarding adverse health effects and nonsmokers succeed in establishing more and more "smoke-free" environments. Figure 6 shows per capita cigarette consumption in the United States
from 1970 through 1987. As more people choose to quit smoking and as fewer people start, cigarette and tobacco tax revenues are likely to experience a decline in the absence of tax increases or tax rates tied to price rather than units sold.

Figure 7 shows the revenue performance of cigarette and tobacco taxes since 1960 along with projections through 1989. From 1960 to 1987, there were only two years of negative growth. Periodic tax rate increases have been required to help revenue keep pace with inflation. There were no tax increases from 1960 through 1964, and none for 13 years from 1971 through 1985. Even so, revenue growth remained relatively strong through 1983, with steady increases from a low of 1.7 percent in 1974 to a high of 13.9 percent in 1972. Revenue performance became more erratic after 1983 as consumption of tobacco products declined and two tax increases were enacted.
Tax rates and revenue performance. Alcohol and tobacco taxes are generally considered to have a relatively inelastic demand. It is often argued that higher taxes will not significantly affect consumption. But in response to proposals at the federal level to substantially increase the federal taxes on alcohol, cigarettes and motor fuels, the Texas Comptroller of Public Accounts determined that a significant revenue loss to Texas could result. The Comptroller estimated that the combined loss as a result of reduced consumption would be $\$ 166$ million for the 1988-89 biennium. ${ }^{13}$ This finding indicates that a threshold for alcohol, cigarette and motor fuels taxes exists and that a tax increase at one level (e.g., the federal level) could have the result of reducing revenue at another.

## Distributional Issues

Excise taxes are generally considered to be regressive. Households in the lower end of income categories tend to pay a greater percentage of their income on these taxes than do households in higher income categories. Also, the incidence of these taxes is primarily on individuals rather than businesses. In the case of alcohol and tobacco taxes, this occurs des-
pite the fact that the taxes are collected and remitted by business.
Research by the Select Committee shows that in 1984, cigarette and tobacco taxes in Texas were borne virtually 100 percent by individuals (see Chapter 3, "Who Pays Texas Taxes?"). Alcoholic beverage taxes had an initial
13. Comptroller of Public Accounts, letter dated July 13, 1987.

FIGURE 6. U.S. Per Capita Cigarette Consumption, 1970-87


Source: Select Committee on Tax Equity.

FIGURE 7. Long-Term Growth Rates in Texas Tobacco Taxes, 1961-89


Source: Select Committee on Tax Equity.
Note: Tax increases affected growth in 1966, 1970, 1972, 1985 and 1988.
impact on business of 13 percent and 87 percent on individuals. This compares with the tax incidence of state sales taxes, 54 percent for individuals and 46 percent for business, and with the tax incidence of state taxes overall, 37 percent for individuals and 63 percent for business. The potential for shifting these excise taxes to others is limited. The burden of the tax falls upon the individual consuming the commodity subject to the tax.
14. See Martin, p. 274; Donald Phares, State-Local Tax Equity (Lexington, Massachusetts: Lexington Books, 1973), pp. 5153; Cnossen, pp. 38-54.
15. Phares, p. 52.
16. Cnossen, p. 46.
17. "State Lawmakers Discuss Pros and Cons of Tobacco and Liquor Taxes," Tax Notes, Vol. 32, Number 7 (August 18, 1986), pp. 630-631.
18. U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, 1984, computer tape.
19. Tax Notes, pp. 630-631.

The regressivity of excise taxes has been well established. ${ }^{14}$ Among selective sales taxes, cigarette and tobacco taxes tend to be highly regressive. The distribution of alcoholic beverage taxes is less clear. Donald Phares in StateLocal Tax Equity found that alcoholic beverage taxes were nearly proportional across income categories. ${ }^{15}$ Sijbren Cnossen cites a Norwegian study which found alcoholic beverages to have more of the characteristics of "luxury commodities" than tobacco products. ${ }^{16}$
Research by Citizens for Tax Justice concludes that both alcohol and tobacco taxes are regressive. The group reported that the share of tobacco taxes for the poorest households was nine times higher than for the wealthiest 20 percent. In the same report, the poorest 20 percent of the population were found to pay a five times greater share of their income for alcohol taxes than the wealthiest 20 percent. ${ }^{17}$

Consumer expenditure data for 1984 compiled by the federal

FIGURE 8. Alcohol Tax Incidence, 1984


[^114]Bureau of Labor Statistics show that a household with an annual income of $\$ 5,000$ to $\$ 10,000$ spent two percent of its income on alcohol. By comparison, households with an annual income of $\$ 40,000$ or more spent 0.9 percent of their income on alcohol. With regard to tobacco products, those in the $\$ 5,000$ to $\$ 10,000$ income group spent 2.4 percent of their income on these products while households in the $\$ 40,000$ and over category spent 0.4 percent on average. ${ }^{18}$ These data are illustrated in Figures 8 and 9.
In the case of excise taxes, the issue of regressivity is weighed against other criteria. The sumptuary taxes on alcohol and tobacco represent a conscious effort by society to discourage consumption and to recover a portion of the costs incurred as a result of the consumption of these commodities. If the objective of the tax is to recover the external costs associated with consumption, there are those who argue that the taxes should be increased. Appearing before the National Conference of State Legislatures in 1986, George A. Hacker, Director of Alcohol Policies at the Center for Science in the Public Interest, told state. lawmakers that alcohol and tobacco taxes should be increased drastically as part of an overall state policy to recover these external costs. Mr. Hacker reported that state and federal taxes on alcohol amount to about $\$ 13$ billion annually, but that alcohol-related problems cost government agencies close to $\$ 120$ billion. ${ }^{19}$
The trade-offs that must be made between equitable distribution and external social costs are well documented and debated each time a tobacco or alcohol tax increase is considered. Given the growing public awareness about tobacco- and alcohol-related
health and social problems, proposals to increase these taxes continue to be popular at both the state and federal level despite their well-established regressivity.

## Interstate Comparison

Excise taxes-including alcohol and tobacco taxes-are a diminishing source of revenue for state governments nationally. As a percentage of total state tax collections and as a percentage of personal income, excise taxes are less of a share than they were in the 1960s or 1970s. ${ }^{20}$ One reason for this trend is the per unit nature of most excise taxes, which causes revenue to lose ground during periods of rapid inflation.
Alcohol taxes. All 50 states impose taxes, licenses and other revenue levies on alcohol. Thirty states are identified as "license states" where the state government regulates the private liquor industry, and the remainin 18 are identified as "control states" where the state actually owns and operates wholesale distribution outlets and, in some cases, retail liquor stores.
Table 5 shows the rates for beer, wine and spirits in the license states. Table 6 presents the same information for the control states and also includes a brief explanation of the method of control for each of the 17 states.
Since the end of Prohibition, the number of control states has remained at 18. However, there has been a trend away from regulation. A number of control states have repealed control at the retail level but maintain a state monopoly at the wholesale level. Alabama, Pennsylvania and Iowa are considering plans to reduce the level of state control or revert to license control completely.
Because of the wide range of methods used by states in taxing alcoholic beverages, interstate comparisons are difficult. Liquor store profits in control states may be
thought of as revenue in lieu of taxes, although they are not defined as tax collections. Another measure of alcohol tax burden is per capita revenue from all sources related to alcoholic beverages.

Thirty states are identified as "license states" where the state government regulates the private liquor industry and the remaining 18 are identified as "control states" where the state actually owns and operates wholesale distribution outlets and, in some cases, retail liquor stores.

The Distilled Spirits Council of the United States (DISCUS) has developed such a per capita measure of state and local tax burden. All revenue from alco-
holic beverage sources is included: selective sales taxes, liquor store profits general sales taxes and license fees.
By this measure, Texas ranked 17th highest in 1986 when all types of alcohol revenue are combined. Texas ranked 28th in revenue per capita from liquor, 34th in revenue from wine and seventh in revenue from beer. According to this data, Texas is imposing a much greater burden on beer drinkers and the beer industry than on their wine and liquor counterparts. Table 7 summarizes this information for each state.
The DISCUS data also compare the average per capita burden in control states versus license states. Overall, the per capita revenue from alcoholic beverages in control states in 1986 was $\$ 30.73$ and in the license states somewhat lower at $\$ 24.93$. The greatest disparity between control states and license states is in liquor taxes. In the control states, the
20. Pogue, p. 260.

FIGURE 9. Tobacco Tax Incidence, 1984


[^115]TABLE 5. State Alcohol Beverage Excise Tax Rates Per Gallon for License States, 1987

| State | Beer | Wine | Liquor | Other Taxes |
| :---: | :---: | :---: | :---: | :---: |
| Alaska | \$.35 | \$. 85 | \$5.60 |  |
| Arizona | \$.16 | \$.25-.84 | \$3.00 | * |
| Arkansas | \$.16-24 | \$.75 | \$2.50 | $\$ .25 /$ barrel beer; $\$ .05 /$ case sparkling and still wines; $\$ .20 /$ case liquors; $12 \%$ mixed drink tax. |
| California | \$. 04 | \$.01-.02 for wines/cider $\$ .30$ for sparkling wines | \$2.00-4.00 |  |
| Colorado | \$.08 | \$. 28 | \$2.28 | * |
| Connecticut | \$. 10 | \$.30-75 | \$3.00 | * |
| Delaware | \$. 06 | \$. 40 | \$1.50-2.25 | Paid by wholesaler on receipt-"floor tax." |
| Florida | \$.48 | \$2.25-3.00 wine $\$ 3.50$ for sparkling wine | \$2.25-9.53 |  |
| Georgia | $\begin{aligned} & \$ .045 / 12 \mathrm{oz} . \\ & \$ .32 \end{aligned}$ | $\$ 1.52$ <br> $\$ 2.54$ for dessert wine | \$3.79 | * |
| Hawaii | \$.50-. 81 | $\$ .81$ for wine coolers <br> $\$ 1.30$ for still wine <br> $\$ 2.00$ for sparkling wine | \$5.20 | $.5 \%$ wholesalers' tax $4 \%$ retailers' tax |
| Illinois | \$. 07 | \$.23-60 | \$2.00 | * |
| Indiana | \$. 115 | \$.47-2.68 | \$2.68 | 1.5\% discount for timely and accurate payment. |
| Kansas | \$.18 | \$.30-75 | \$2.50* | 8\% enforcement tax; $10 \%$ tax on clubs. |
| Kentucky | \$. 08 | \$. 50 | \$1.92 | Additional 9\% gross receipts on wholesalers; $\$ .05 /$ case on wholesalers; ad valorem property tax on distilled spirits. |
| Louisiana | \$. 32 | \$.11-1.58 <br> $\$ 1.58$ for sparkling wine | \$2.50 |  |
| Maryland | \$. 09 | \$. 40 | \$1.50 |  |
| Massachusetts | \$. 11 | $\$ .30$ for cider <br> $\$ .55-.70$ for sparkling wine | \$1.10-4.05 | Additional gross receipts tax on sales of packaged and on-premise liquor. |
| Minnesota | \$. 15 | \$.30-1.82 <br> $\$ 1.82$ for sparkling wine | \$5.03 | Additional $2.5 \%$ sales tax tax over and above regular sales tax packaged and on-premise liquor |
| Missouri | \$. 06 | \$. 34 | \$2.00 |  |
| Nebraska | \$. 23 | \$.75-1.35 | \$3.00 |  |
| Nevada | \$. 09 | \$.40-2.95 | \$2.05 | A 3\% tax refund is granted for early payment. |
| New Jersey | \$. 03 | \$.30 | \$2.80 | A $7.3 \%$ wholesale tax is used in lieu of sales tax.* |
| New Mexico | \$.18 | \$. 95 | \$3.94 | Gross receipt taxes are applied to all retail stores. |
| New York | \$. 055 | $\$ .12$ still wine <br> $\$ .33-66$ for sparkling wines | \$1.00-4.09 |  |
| North Dakota | \$.08-16 | $\begin{aligned} & \$ .50-.60 \\ & \$ 1.00 \text { for sparkling wine } \end{aligned}$ | \$2.50 | Sales tax is levied at 6.5\%. |
| Oklahoma | \$. 36 | \$.19-. 37 <br> $\$ .55$ for sparkling wine | \$4.00-5.56 | Additional gross receipt tax mixed bev. of 12\%.* |
| Rhode Island | \$. 06 | \$. 040 for still wine | \$2.50 |  |
| South Carolina | \$.77 | \$1.08 | \$2.72 | Additional 9\% liquor surtax plus 3 separate taxes on spirits: wholesale tax $\$ 1.81 /$ case; retailers' tax $\$ 2.99$ /case; a $2 \%$ discount taxes paid is allowed beer and wine.* |
| South Dakota | \$. 27 | $\begin{aligned} & \$ .93-1.45 \\ & \$ 2.07 \text { for sparkling wine } \end{aligned}$ | \$3.93 | Additional wholesale tax of $2 \%$ of purchase price on alcoholic beverages except beer. |
| Tennessee | \$. 125 | \$1.10 | \$4.00 | Enforcement tax of \$.15/case; 15\% gross receipts tax on drink licenses; beer wholesalers tax of $17 \%$, less $3 \%$ to cover collection costs. |
| Texas Wisconsin | \$.19-.20 \$.06 | \$.204-. 408 <br> $\$ .516$ for sparkling wine <br> \$.25-. 45 | $\$ 2.40$ $\$ 3.25$ | $12 \%$ mixed beverage gross receipts tax; sales tax has applied to beer and wine since 1969. |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), pp. 64-66; Commerce Clearing House, State Tax Guide (1987).
-Local tax rates are additional.
Note: Although many states levy rates based on barrels or liters, for purposes of comparison all rates except for Georgia's beer tax on 12 ounce containers are in terms of gallons. Tax rate ranges are usually dependent on percentage content of alcohol. The table does not include state and local license fees. Sales of liquor, wine and beer are generally subject to the sales tax.

TABLE 6. State Alcohol Beverage Excise Tax Rates for Control States, 1987

| State | Beer | Wine | Liquor | Other Taxes | Description of Control |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | \$1.05/gal. (includes $\$ .52$ ) gal. local tax) | \$.45/liter table wine; $30 \%$ markup subject to 6\% sales tax | 48\% tax; 30\% markup | * | Monopoly on spirits at wholesale. State also owns some retail stores. Beer and wine below $14 \%$ are sold at wholesale. |
| Idaho | \$.15/gal. | \$.45/gal. private outlet or 80\% state markup | 45\% markup; bottle charge plus $3 \%$ markup | $15 \%$ surcharge on goods sold at state stores; $5 \%$ sales tax | State-owned retail stores sell spirits and wine. Licensed retailers may sell wine and beer. |
| lowa | \$.19/gal. | \$1.75/gal. | 50\% markup |  | Licensed retailers may sell beer, wine and liquor. No state-owned store as of June 1987. |
| Maine | \$.35/gal. | $\$ .60-1.24 / \mathrm{gal}$. for still/sparkling wine | 75\% markup plus \$1.25/gal. | Taxes include rehabilitation dedication | State-owned and private stores sell all spirits and spirituous wine over $14.5 \%$ alcohol. |
| Michigan | \$.20/gal. | \$.51-.76/gal. | 12\% tax; 51\% markup | Tax of $1.85 \%$ of retail price of liquor for offpremise consumption | State-owned retail stores and licensed private distributors sell spirits. Licensed retailers sell wine and beer. |
| Mississippi | \$.43-.47/gal. (earmarked) | \$.35-1.00/gal.; <br> 24.5\% markup | \$2.50 tax; 24.5\% markup | $3 \%$ alcohol abuse tax; $1 \%$ warehouse tax | State monopoly of wholesale sales of alcoholic beverage over $4 \%$ by weight. |
| Montana | \$.14/gal. | $\$ 1.02 / \mathrm{gal}$. 40-60\% state markup | $26 \%$ tax; $40 \%$ markup |  | State retail stores and agencies sell spirits and wine. Licensed retailers may sell table wine and beer. |
| N. Hampshire | \$.30/gal. | $\$ .30 / \mathrm{gal}$. for certain wine coolers; 5563\% markup | 40-60\% markup |  | State-owned retail stores sell alcoholic beverages. Licensed retailers may sell wine and beer. |
| N. Carolina | \$.48-.53/gal. | \$.80-.91/gal.; varied markup for state stores | 28\% | \$.01-.05/bottle; $\$ 15.00$ / gal. mixed beverage tax | Liquor stores in counties allowing sale. Licensed retailers may sell wine and beer. |
| Ohio | $\begin{aligned} & \$ .08 / \mathrm{gal} . ; \\ & \$ .00125-.0075 / \\ & \text { per } 12 \mathrm{oz} \text {. } \end{aligned}$ | \$.26-.62/gal. \$1.27/gal. for sparkling wine | \$2.25/gal.; 42.86\% markup plus $5 \%$, markup |  | State-owned retail or agency stores sell alcoholic beverages over $21 \%$. Licensed retailers sell wine under $21 \%$ and beer. |
| Oregon | \$.085/gal. | \$.67-.77/gal.; 99\% state store markup | 99\% markup |  | State-owned stores sell spirits and some wine. Licensed retailers sell wine and beer. |
| Pennsylvania | \$.08/gal. | 25\% markup | 25\% markup | $6 \%$ sales tax; tax of $18 \%$ of net price; $\$ .46 /$ unit for spirits/wine | State-owned retail stores sell spirits and wine. Licensed retailers sell beer. |
| Utah | $\$ .355 / \mathrm{gal}$.; 68.5\% state store markup | \$.17-2.25/gal. | \$12.50/proof gal.; $103 \%$ markup | $6.25 \%$ sales tax; $13 \%$ additional school lunch tax | State monopoly of sales of alcoholic beverages. Licensed retailers may sell beer under $4 \%$. |
| Vermont | \$.265/gal. | \$.55/gal:; 25\% tax and $36.5 \%$ markup in state stores | 25\% tax; 41.5\% markup |  | State-owned stores sell beverages over $14 \%$ and beer over $6 \%$. Licensed retailers sell wine $14 \%$ or less and beer $6 \%$ or less. |
| Virginia | \$.26/gal. bulk; \$.02-.03/bottes | \$1.52/gal.; 50\% state store markup | 20\% tax; 41.5\% markup |  | State-owned stores sell beverages over $14 \%$ and beer over $6 \%$. Licensed retailers sell wine $14 \%$ or less and beer $6 \%$ or less. |
| Washington | \$.09/gal.; 70\% state markup | \$.83/gal.; 50\% state store markup | \$7.42/gal.; 46\% markup | 5.9-8.1\% state-local sales tax on beer/wine | Private retailers may sell only wine and beer. State may sell all beverages. |
| West Virginia | \$.18/gal. | \$1.00/gal. or 75\% markup | 55\%-88\% markup | 10\% sales tax | State-owned stores sell spirits and wine. Licensed retailers and beer. |
| Wyoming | \$.19/gal. | \$.28/gal. | \$.94/gal. | \$.17-2.75/case spirits* | State monopoly at wholesale level. |

Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), p. 68; Commerce Clearing House, State Tax Guide, Vol. 2.
*Local government taxes are additiona!.

| State | Liquor |  | Wine |  | Beer |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Revenue Per Capita | Rank | $\begin{gathered} \text { Revenue } \\ \text { Per Capita } \\ \hline \end{gathered}$ | Rank | Revenue Per Capita | Rank | Revenue Per Capita | Rank |
| Alabama' | \$17.97 | 10 | \$2.52 | 27 | \$14.71 | 9 | \$35.19 | 12 |
| Alaska | 14.33 | 18 | 3.00 | 20 | 10.83 | 25 | 28.16 | 18 |
| Arizona | 10.10 | 31 | 4.51 | 8 | 15.17 | 8 | 29.78 | 16 |
| Arkansas | 6.55 | 46 | 1.06 | 50 | 9.04 | 38 | 16.64 | 48 |
| California | 7.68 | 44 | 2.88 | 22 | 7.02 | 43 | 17.58 | 44 |
| Colorado | 8.41 | 40 | 2.59 | 24 | 9.12 | 35 | 20.12 | 40 |
| Connecticut | 17.89 | 11 | 5.23 | 7 | 13.50 | 13 | 36.63 | 11 |
| Delaware | 6.33 | 48 | 1.09 | 49 | 1.71 | 50 | 9.14 | 50 |
| Florida | 19.19 | 7 | 7.78 | 1 | 24.66 | 2 | 51.62 | 1 |
| Georgia | 9.49 | 34 | 3.41 | 16 | 14.52 | 10 | 27.42 | 22 |
| Hawaii | 14.08 | 20 | 6.24 | 5 | 28.38 | 1 | 48.70 | 4 |
| Idaho ${ }^{1}$ | 10.74 | 26 | 6.51 | 4 | 10.10 | 33 | 27.36 | 23 |
| Illinois | 8.89 | 36 | 2.55 | 25 | 10.40 | 30 | 21.84 | 35 |
| Indiana | 7.51 | 45 | 1.79 | 40 | 10.37 | 31 | 19.66 | 41 |
| lowa ${ }^{1}$ | 12.12 | 22 | 3.79 | 12 | 11.68 | 18 | 27.59 | 20 |
| Kansas | 8.37 | 41 | 1.48 | 45 | 10.53 | 29 | 20.37 | 36 |
| Kentucky | 6.01 | 50 | 1.13 | 48 | 8.33 | 41 | 15.46 | 49 |
| Louisiana | 7.82 | 42 | 1.46 | 46 | 13.53 | 12 | 22.81 | 31 |
| Maine ${ }^{1}$ | 22.24 | 5 | 3.47 | 15 | 14.32 | 11 | 40.03 | 7 |
| Maryland | 7.80 | 43 | 2.31 | 31 | 8.01 | 42 | 18.13 | 43 |
| Massachusetts | 10.40 | 29 | 2.48 | 28 | 4.41 | 47 | 17.30 | 47 |
| Michigan ${ }^{\text {' }}$ | 17.62 | 13 | 2.28 | 32 | 10.56 | 28 | 30.46 | 15 |
| Minnesota | 17.83 | 12 | 3.71 | 14 | 16.69 | 6 | 38.22 | 8 |
| Mississippi ${ }^{1}$ | 17.09 | 15 | 2.08 | 35 | 17.50 | 5 | 36.67 | 10 |
| Missouri | 6.44 | 47 | 1.81 | 39 | 9.09 | 37 | 17.35 | 46 |
| Montana ${ }^{1}$ | 18.34 | 8 | 2.52 | 26 | 4.29 | 48 | 25.15 | 26 |
| Nebraska | 6.24 | 49 | 1.71 | 43 | 9.56 | 34 | 17.50 | 45 |
| Nevada | 23.84 | 3 | 7.64 | 2 | 19.22 | 4 | 50.70 | 2. |
| New Hampshire ${ }^{1}$ | 126.01 | 2 | 6.17 | 6 | 11.37 | 21 | 43.56 | 6 |
| New Jersey | 10.29 | 30 | 3.06 | 19 | 6.00 | 46 | 19.35 | 42 |
| New Mexico | 8.45 | 38 | 3.30 | 18 | 13.28 | 15 | 25.03 | 27 |
| New York | 11.23 | 24 | 2.45 | 29 | 6.59 | 44 | 20.27 | 38 |
| North Carolina' | 16.54 | 16 | 2.26 | 33 | 13.50 | 14 | 32.29 | 13 |
| North Dakota | 8.77 | 37 | 1.75 | 42 | 11.40 | 20 | 21.92 | 34 |
| Ohio ${ }^{1}$ | 12.72 | 21 | 2.02 | 38 | 12.78 | 16 | 27.52 | 21 |
| Oklahoma | 9.72 | 33 | 1.66 | 44 | 8.75 | 39 | 20.13 | 39 |
| Oregon ${ }^{1}$ | 19.71 | 6 | 2.34 | 30 | 2.17 | 49 | 24.22 | 28 |
| Pennsylvania ${ }^{1}$ | 14.69 | 17 | 4.05 | 10 | 6.48 | 45 | 25.22 | 25 |
| Rhode Island | 10.96 | 25 | 4.43 | 9 | 12.56 | 17 | 27.94 | 19 |
| South Carolina | 18.07 | 9 | 2.91 | 21 | 23.64 | 3 | 44.62 | 5 |
| South Dakota | 10.74 | 27 | 2.04 | 37 | 11.42 | 19 | 24.20 | 2 |
| Tennessee | 9.42 | 35 | 2.05 | 36 | 10.57 | 27 | 22.04 | 33 |
| Texas | 10.44 | 28 | 2.24 | 34 | 16.68 | 7 | 29.37 | 17 |
| Utah ${ }^{1}$ | 14.18 | 19 | 3.80 | 11 | 9.11 | 36 | 27.10 | 24 |
| Vermont ${ }^{1}$ | 22.54 | 4 | 3.33 | 17 | 10.97 | 24 | 36.84 | 9 |
| Virginia ${ }^{1}$ | 17.35 | 14 | 3.77 | 13 | 11.12 | 23 | 32.24 | 14 |
| Washington' | 32.72 | 1 | 7.28 | 3 | 10.26 | 32 | 50.26 | 3 |
| West Virginia ${ }^{1}$ | 8.45 | 39 | 1.31 | 47 | 10.61 | 26 | 20.36 | 37 |
| Wisconsin | 10.01 | 32 | 1.76 | 41 | 11.34 | 22 | 23.11 | 30 |
| Wyoming ${ }^{1}$ | 11.38 | 23 | 2.75 | 23 | 8.63 | 40 | 22.76 | 32 |
| License States | \$10.49 |  | \$2.97 |  | \$11.47 |  | \$24.93 |  |
| Control States | \$16.83 |  | \$3.22 |  | \$10.67 |  | \$30.73 |  |
| U.S. Average | \$12.31 |  | \$3.05 |  | \$11.24 |  | \$26.59 |  |
| Source: Distilled Spirits Council of the United States, 1986. <br> 1. Control state. |  |  |  |  |  |  |  |  |

revenue per capita derived from liquor was $\$ 16.83$ compared to $\$ 10.49$ in the license states.
According to U.S. Census Bureau data, alcohol tax collections represented approximately 3.1 percent of total state tax collections in Texas in 1986. Table 8 shows total state alcohol tax collections and their share of total state taxes for the 50 states. The national average was 1.3 percent, with a high of 4.8 percent in Florida and a low of 0.2 percent in Wyoming. It is important to note that these figures do not include liquor store profits or license revenue.
Cigarette and tobacco taxes. All 50 states also levy some form of tax on cigarettes and tobacco. The first state to levy a tax on cigarettes was Iowa in 1921. The last state to levy a cigarette tax was North Carolina in 1969. The North Carolina rate remains the lowest at two cents per pack. The highest rate is in Minnesota at 38 cents per pack. Table 9 ranks the states by tax rate per pack.
The current rate in Texas of 26 cents per pack places Texas tied for tenth among the states. Nine states have higher rates and four states have the same rate as Texas. Texas included cigarettes under the state sales tax in 1984. By that time, of the 45 states with a state sales tax, all but nine imposed the tax on cigarettes. In 1987, all but six applied the sales tax to cigarettes.
State cigarette and tobacco tax collections comprised two percent of total state tax collections in 1986. Texas tobacco tax collections were 3.4 percent of total tax collections, significantly higher than the national average. The highest share was in New Hampshire at 6.8 percent and the lowest in North Carolina at 0.4 percent. Table 7 shows the share of tobacco tax collections for each of the 50 states.

TABLE 8. State Government Alcohol and Tobacco Tax Collections, 1986

| State | Tobacco Tax Collections (millions) | \% of Total <br> State Taxes | Alcohol Tax Collections (millions) | \% of Total State Taxes |
| :---: | :---: | :---: | :---: | :---: |
| Alabama ${ }^{1}$ | \$72.1 | 2.4\% | \$96.2 | 3.2\% |
| Alaska | 7.8 | 0.4 | 13.3 | 0.7 |
| Arizona | 50.8 | 1.6 | 40.8 | 1.3 |
| Arkansas | 63.1 | 3.5 | 23.4 | 1.3 |
| California | 259.5 | 0.8 | 133.0 | 0.4 |
| Colorado | 50.9 | 2.2 | 23.8 | 1.0 |
| Connecticut | 87.9 | 2.3 | 32.0 | 0. |
| Delaware | 12.3 | 1.4 | 5.0 | 0.6 |
| Florida | 286.0 | 3.1 | 435.2 | 4.8 |
| Georgia | 92.2 | 1.9 | 114.8 | 2.3 |
| Hawaii | 19.7 | 1.3 | 29.9 | 2.0 |
| Idaho ${ }^{1}$ | 9.9 | 1.3 | 9.2 | 1.2 |
| Illinois | 194.8 | 2.0 | 69.4 | 0.7 |
| Indiana | 75.7 | 1.7 | 36.4 | 0.8 |
| lowa ${ }^{1}$ | 72.3 | 2.9 | 14.8 | 0.6 |
| Kansas | 59.3 | 3.1 | 44.8 | 2.3 |
| Kentucky | 18.3 | 0.6 | 48.5 | 1.5 |
| Louisiana | 83.0 | 2.3 | 58.1 | 1.6 |
| Maine ${ }^{1}$ | 37.7 | 3.4 | 31.5 | 2.9 |
| Maryland | 67.0 | 1.4 | 28.0 | 0.6 |
| Massachusetts | 172.4 | 2.2 | 70.7 | 0.9 |
| Michigan ${ }^{1}$ | 218.8 | 2.3 | 94.4 | 1.0 |
| Minnesota | 101.4 | 2.1 | 51.4 | 1.0 |
| Mississippi ${ }^{1}$ | 54.3 | 2.8 | 35.4 | 1.8 |
| Missouri | 81.9 | 2.3 | 24.8 | 0.7 |
| Montana ${ }^{\text {1 }}$ | 13.1 | 2.1 | 14.1 | 2.3 |
| Nebraska | 30.9 | 2.8 | 14.6 | 1.3 |
| Nevada | 26.0 | 2.5 | 14.1 | 1.3 |
| New Hampshire ${ }^{1}$ | 132.7 | 6.8 | 11.0 | 2.3 |
| New Jersey | 214.2 | 2.6 | 58.6 | 0.7 |
| New Mexico | 14.8 | 1.0 | 17.8 | 1.2 |
| New York | 422.8 | 1.9 | 160.2 | 0.7 |
| North Carolina ${ }^{1}$ | 16.6 | 0.3 | 127.3 | 2.3 |
| North Dakota | 11.9 | 1.9 | 5.8 | 0.9 |
| Ohio ${ }^{1}$ | 183.1 | 2.0 | 69.7 | 0.8 |
| Oklahoma | 75.3 | 2.5 | 52.0 | 1.8 |
| Oregon ${ }^{1}$ | 73.9 | 3.8 | 10.8 | 0.6 |
| Pennsylvania ${ }^{1}$ | 233.5 | 2.2 | 135.1 | 1.3 |
| Rhode Island | 29.4 | 3.3 | 7.7 | 0.9 |
| South Carolina | 30.0 | 1.0 | 103.5 | 3.6 |
| South Dakota | 15.0 | 3.7 | 8.6 | 2.1 |
| Tennessee | 81.3 | 2.5 | 61.6 | 1.9 |
| Texas | 378.7 | 3.4 | 348.7 | 3.1 |
| Utah ${ }^{1}$ | 13.2 | 1.0 | 16.7 | 1.2 |
| Vermont ${ }^{1}$ | 12.1 | 2.4 | 14.8 | 3.0 |
| Virginia ${ }^{1}$ | 17.3 | 0.4 | 97.7 | 2.0 |
| Washington ${ }^{1}$ | 107.8 | 2.1 | 97.2 | 1.9 |
| West Virginia' | 35.3 | 1.9 | 7.2 | 0.4 |
| Wisconsin | 127.1 | 2.3 | 39.8 | 0.7 |
| Wyoming | 4.7 | 0.6 | 1.4 | 0.2 |
| U.S. Total \$ | \$4,449.7 | 2.0\% | \$3,062.1 | 1.3\% |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections, 1986 (Washington, D.C., 1987).

1. Control state.

Another measure of the tax burden on cigarettes is the portion of the retail price that represents taxes. In Texas in 1987, the average retail price for a pack of cigarettes was $\$ 1.28$ excluding local sales taxes. Of this, 42 cents represented state and federal taxes or 32.8 percent. The national average was $\$ 1.19$ per pack with 34.2 cents representing state and federal taxes or 28.8 percent. ${ }^{21}$
Local taxes on cigarettes are authorized in six states. In 1987, the tax rate at the local level
21. The Tobacco Institute, The Tax Burden on Tobacco, Vol. 22 (Washington, D.C., 1987), p. 98.
22. Tobacco Institute, p. vii.
ranged from one cent to 15 cents per pack. In 1972, local taxes on cigarettes were collected in ten states. Although the number of states has declined to six, the number of local jurisdictions has increased steadily to a total of 392 cities, towns and counties where $\$ 197$ million was collected in 1987. ${ }^{22}$ In other states, including Texas, local governments benefit from the sale of cigarettes through local sales taxes.
Of the 45 states with a general sales tax, all but six include cigarettes in the tax. In Texas, combined state cigarette taxes and sales taxes can be up to 34 cents per pack. In addition, the federal government levies a tax of 16 cents per pack.

## Evaluating Alcohol and Tobacco Taxes

Adequacy. With a few exceptions, Texas alcohol and tobacco taxes are levied on a per-unit rather than a value basis. The major exception is the mixed drinks gross receipts tax; tobacco products other than cigarettes and cigars are also taxed on a value basis though they represent a small share of alcohol- and tobacco-related revenue. The revenue performance of the mixed drinks gross receipts tax in comparison to other alcohol taxes and the cigarette tax underscores the advantage of taxes levied on an ad valorem basis.

Equity. There is little debate

TABLE 9. State Cigarette Tax Rates Per Pack, 1987

| State | Rate | Rank | State | Rate | Rank |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | \$. 165 | 35 | Montana | \$. 16 | 33 |
| Alaska | . 16 | 36 | Nebraska | . 27 | 9 |
| Arizona | . 15 | 39 | Nevada | . 20 | 23 |
| Arkansas | . 21 | 22 | New Hampshire | . 17 | 32 |
| California | . 10 | 45 | New Jersey | . 27 | 8 |
| Colorado | . 20 | 25 | New Mexico | . 15 | 38 |
| Connecticut | . 26 | 13 | New York | . 21 | 20 |
| Delaware | . 14 | 40 | North Carolina | . 02 | 50 |
| Florida | . 24 | 16 | North Dakota | . 27 | 7 |
| Georgia | . 12 | 44 | Ohio | . 18 | 27 |
| Hawaii | 40\% ${ }^{1}$ | 4 | Oklahoma | . 23 | 19 |
| Idaho | . 18 | 29 | Oregon | . 27 | 6 |
| Illinois | . 20 | 24 | Pennsylvania | . 18 | 26 |
| Indiana | . 16 | 37 | Rhode Island | . 25 | 14 |
| lowa | . 26 | 12 | South Carolina | . 07 | 47 |
| Kansas | . 24 | 15 | South Dakota | . 23 | 18 |
| Kentucky | . 03 | 48 | Tennessee | . 13 | 41 |
| Louisiana | . 16 | 34 | Texas | . 26 | 10 |
| Maine | . 28 | 5 | Utah | . 23 | 17 |
| Maryland | . 13 | 43 | Vermont | . 17 | 31 |
| Massachusetts | . 26 | 11 | Virginia | . 025 | 49 |
| Michigan | . 21 | 21 | Washington | . 31 | 2 |
| Minnesota | . 38 | 1 | West Virginia | . 17 | 3 |
| Mississippi | . 18 | 28 | Wisconsin | . 30 | 3 |
| Missouri | . 13 | 42 | Wyoming | . 08 | 46 |
|  |  |  | U.S. Average | \$.169 | -- |

[^116] 1987), p. 62; The Tobacco Institute, The Tax Burden on Tobacco, Vol. 22 (Washington, D.C., 1987).

1. Hawaii's rate is comparable to 30 cents per pack.
that alcohol and tobacco taxes are regressive, although some would argue that alcohol taxes are somewhat less regressive than tobacco taxes. This criterion is one of the most significant in arguments against alcohol and tobacco taxes and is a trade off against the social costs argument.

Efficiency. Because of the relative inelasticity of demand for these products, increased taxes do not tend to interfere significantly with private economic decisions. However, the Comptroller of Public Accounts has estimated that federal excise tax increases proposed in 1987 would have cost Texas $\$ 166$ million in lost revenue from alcohol, tobacco and motor fuels taxes as a result of reduced consumption. This would indicate that at some level, alcohol and tobacco taxes could begin to interfere with private economic decisions.

Economic competitiveness. As a commodity tax, alcohol and tobacco taxes do not have an especially important role in economic development considerations. The incidence of alcohol and tobacco taxes is largely on the individual consuming the commodity. Alcohol taxes have a limited impact on businesses.

Stability. Alcohol and tobacco taxes have been a relatively stable source of revenue for decades. However, recent social changes have put downward pressure on consumption of both alcohol and tobacco, and the future stability of these taxes as a source of continued revenue may be less reliable.

Simplicity. With the exception of the mixed drinks gross receipts tax, alcohol and tobacco taxes in Texas are levied at the wholesale level minimizing the
complexities inherent in taxes with a large number of remitters. Although the gross receipts tax is levied at the retail level, the tax is relatively easy for the retailer to compute based on gross receipts
> [R]ecent social changes have put downward pressure on consumption of both alcohol and tobacco, and the future stability of these taxes as a source of continued revenue may be less reliable.

per month. Because of the regulatory issue surrounding both types of commodities, some degree of simplicity is sacrificed to ensure compliance by the majority of taxpayers.

Bootlegging continues to be a serious problem requiring constant enforcement activity at the state level.

Balance. Texas imposes a tax on all forms of alcohol and tobacco products which is not the case in all states. The addition of the mixed drinks gross receipts tax in 1971 improved the balance of this particular group of selective sales taxes since it is levied on an ad valorem basis and at the retail rather than the wholesale level.

Broad-based taxes. Alcohol and tobacco taxes are sumptuary, targeted at specific consumer groups and the consumption of specific commodities. The mixed drinks gross receipts tax helped to broaden the tax base by taxing sales at the retail level. The extension of the sales tax to alcohol and tobacco products
further broadened these taxes.
Intergovernmental linkages. With the addition of the mixed drinks gross receipts tax and the inclusion of cigarettes and alcohol under the state sales tax, local governments gained an additional source of revenue.

## Conclusion

In Texas-as in most statesexcise taxes on alcohol and tobacco are an important component of the state tax system. These taxes are a relatively stable and predictable source of revenue compared to other taxes.
However, because the taxes are generally levied on a per unit basis, they do not tend to grow with inflation or the economy. As a result, revenue tends to erode over time in the absence of tax increases and the importance of these taxes has generally declined in favor of other taxes. Nevertheless, alcohol and tobacco taxes are frequently part of major tax legislation in Texas and elsewhere since there is little taxpayer resistance.

Alcohol and tobacco tax increases are likely to be part of future tax legislation, as state and national governments search for additional or alternative sources of revenue. Tax increases at the federal level could adversely affect consumption, and therefore state revenue as well. In addition, consumption. trends indicate that revenue from these sources may not be as reliable as in the past. In the long term, alcohol and tobacco taxes are likely to continue to decline in importance as consumption falls and inflation erodes revenue. Policy changes, including value based instead of per unit taxes and indexing for inflation, could slow this trend to some extent.

# S tate and Local User Fees 

Marketing Public Services

## Summary

User fees are direct charges for government services that are paid by the individuals benefitting from the service. Before a fee can be charged, direct benefits must be easily identified and it must be possible to exclude nonusers from the benefits. An example is a park entrance fee where only those enjoying the benefits of the park pay the fee. In general, fee revenue is dedicated to the service or program for which the charge is made.
Texas state and local governments are relying more heavily on user fees as a source of revenue as are state and local governments nationally. In 1957, for example, local governments nationally raised 40 cents in fee revenue for every dollar of tax revenue. By 1985, 65 cents in user fees were collected for every dollar of tax revenue.
At the state level, Texas user fees have undergone significant change in the last few years. As a result of legislative studies and demand for additional revenue, major fee increases were adopted in 1984. Motor vehicle registration fees are now the most important state fee.
As with any revenue source there are advantages and disadvantages with user fees. Advantages include increased efficiency of the public policy decision-making process since
user fees act in much the same way as prices in the private marketplace. As public demand for a service declines, public officials can respond more quickly than for tax supported programs because the changing demand can actually be measured.
Other advantages include enhanced equity and a high level of public support when compared to other revenue alternatives. Equity may be improved through the use of fees because individuals who are not interested in a particular service provided by government can avoid paying for it. If a city softball field or golf course is funded through tax revenue, nonplayers are subsidizing those who enjoy these activities.
The disadvantages of user fees include the potentially regressive nature of charging for a service without regard for the ability to pay of the individual. Another important disadvantage is the difficulty in determining the costs involved in the delivery of a particular service. In order for fees to accurately reflect the costs of providing a service, those costs must be measured and reviewed on an ongoing basis. Finally, since most fees are set at a flat rate, inflation tends to erode revenue over time and periodic adjustments are required if fees are to maintain their relative role in the revenue system.

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User fees are becoming an increasingly important component of state and local government fiscal systems. To varying degrees, federal, state and local governments have been moving toward directly charging individuals for a particular public service when those people are the sole beneficiaries of the service. Texas has been part of this trend at both the state and local level. This chapter explores the rationale behind the use of fees, their role in revenue systems, the national trends concerning fees and the role user fees play in Texas.

## Definition of User Fees-Is It a Fee or a Tax?

User fees are generally defined as direct charges for public services or commodities levied on persons who are benefitting from the service or commodity. Normally, the revenue derived from the fee is used or dedicated to defray the cost of providing the particular service. User fees are distinguished from taxes by the relatively voluntary nature in which they are paid, and the direct benefit received from the services which they support. In theory, a person may choose to avoid a fee and consequently not benefit from the particular government service or commodity. For example, a local park may charge
a $\$ 2.00$ entrance fee on weekends during periods of heavy use. An individual can avoid the fee, and the benefit of the park, by choosing not to visit the park on weekends; only those enjoying the park on weekends pay the fee.
Economist Edwin Seligman developed a framework for considering government revenue over 95 years ago that helps in distinguishing fees and taxes. According to Seligman, a revenue source may be considered "in terms of degree of volunteerism or compulsion under authority of police powers, tax powers or powers of eminent domain; and in accord with the economic relation of the individual to his government or more particularly the degree of individual benefit and the degree of public purpose." ${ }^{1}$ Within this classification system, taxes and user fees lie at opposite ends of the spectrum.

Because of the element of volunteerism, user fees have many of the same characteristics as prices in the private market; the public goods which are distributed through user fees take on many of the characteristics of private goods. Through prices, consumers essentially cast a vote regarding the desired quantity and quality of a particular service or commodity. Government is, in effect, selling specific services to the consumers. By applying this concept to the public sector, policymakers can receive and interpret valuable information regarding the level of services desired by the public.

1. Edwin R. A. Seligman, Essays in Taxation (Macmillan, 1895), quoted in Selma J. Mushkin (ed.) Public Prices for Public Products (Washington, D.C.: The Urban Institute, 1972), p. 4.
2. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification: User Charges (Washington, D.C., 1987), p. 4.

Economists say that public pricing can actually encourage more efficient use of public resources because consumers will take more responsibility for the amount or quality of a service they use when a real cost is involved. Public officials will also be encouraged to take more responsibility in rationing scarce public resources when there are clear signals of demand from citizens. There is greater accountability for both government and the public where public prices are involved, proponents argue.

## As a general rule, the more closely a public service resembles a private good, the more easily user fees may be employed as a method of finance.

Because of the large number and wide variety of user fees, there is also a wide variety of definitions depending on the scope of the discussion. The narrowest definition of user charges includes the many fees charged by government that can be viewed as voluntary (swimming pool and park entrance fees, trash collection, parking fees and bus fares). This group of fees is also referred to as "charges," "current charges" and "charges for services."
Another category of user charges-licenses-is generally included in a discussion of fees. License taxes are defined as a fee levied by a government as a condition for exercise of a business or nonbusiness privilege. Examples include occupational license for professionals such as engineers and barbers, driver's licenses and radio operator licenses.

Beyond this narrow definition, there is considerable debate about what additional sources of revenue should be included when a more comprehensive analysis of user charges is undertaken. Some studies include income from public utilities, motor fuels taxes and state-operated liquor store income-revenues from specific activities dedicated for related purposes. Though generally not classified as user charges these nontax revenues nevertheless reflect many of the same characteristics.
At the local level, special assessments-another kind of user-based fee-are becoming increasingly significant in funding infrastructure improvements. Special assessments are compulsory levies upon real property for specific benefits as a result of public investments or services. ${ }^{2}$
For example, a developer may be charged for such things as sidewalks, roads, curbs and water and sewer lines in the development that have traditionally been funded through general tax revenue. Although special assessments are not voluntary, they do direct payment toward the specific group benefitting from the public expenditure.

This chapter is restricted to the two primary types of fees: charges and license taxes.

## Principles and Guidelines

Not all government services are good candidates for financing through user fees. As a general rule, the more closely a public service resembles a private good, the more easily user fees may be employed as a method of finance. To charge a fee, two conditions must exist: direct benefits must be easily identified, and it must be possible to exclude nonusers from the benefits of the service.

The kinds of services at the local
level most amenable to this method of finance include transportation, health and hospitals, some aspects of education, parks and recreation, housing and urban development, public works and general government.

At the state level, areas that are likely to lend themselves well to user fees include: education, transportation and highways, public safety, parks and recreation, public health, natural resources and regulatory and administrative functions.
Because of the large number and wide array of user fees, it is helpful to organize them into types. Alice John Vandermeulen, of the University of California, has been a special consultant to the California Legislature on fees and licenses. She developed a fee classification system in 1964 that is still useful today. ${ }^{3}$ The five categories are:
(1) levies on particular kinds of economic activity;
(2) fees for making clerical entries, copying and printing;
(3) payments for specific services rendered to specific individuals;
(4) fees for licenses to engage, either for pleasure or for work, in activities controlled because they impose costs on others; and
(5) income from business transactions.

Within each of these five categories, Vandermeulen identifies various principles and guidelines for setting fees. Fees may be set in one of three basic ways: to recover all of the costs of providing the service, or above or below this level depending on the associated benefits or costs to the public at large.

Fees and licenses in the first category allow individuals to engage in certain occupations or
business activity, and are generally neutral in character to minimize interference with private business. Neutrality means the fee (or tax) will not unnecessarily or unintentionally interfere with private economic decisions. ${ }^{4}$

These fees are generally set at a rate sufficient to recover the costs of administration and enforcement. Examples of fees in this category include building permits, occupation licenses (plumber, electrician, barber, etc.), meat and produce inspection fees, restaurant licenses and concession permits.

The second category involves the record keeping functions of government. Fees in this category generally reflect the full cost of the benefit received. However, Vandermeulen suggests that, fees for issuing duplicate records may be set higher since carelessness on the part of the user is often involved. Examples of fees in this category include birth certificate copy fees, transcript fees, change of address fees and duplicate license fees.

The third category includes those fees associated with public health, recreation and education services. The user's ability to pay for the service is generally the overriding principle in considering the fee schedule for this category. Ability to pay is one way of evaluating state and local tax burden and means that a taxpayer should pay according to his or her available resources; therefore fees in this category frequently recover only a portion of the cost of the service.

This is in contrast to most fees which are generally considered in terms of the benefits-received principle of taxation where a taxpayer who benefits from a government service pays its costs.

Another argument for lower fees in this category is the indirect benefits to society at large, even
though the services may be rendered to a specific group of individuals. Examples of fees in this category include tuition, clinic charges, social service application fees and museum admission fees.

The fourth category includes fees for licenses that are required before engaging in a particular activity that has inherent social costs. The most common example of such an activity is driving. Various licenses and fees are required for the privilege of owning and operating a motor vehicle. The driver benefits directly from the privilege to drive, but there are additional social costs involved such as highway wear and the costs associated with traffic control and accidents. By assessing a fee, the driver shares a portion of these additional costs. A charge that simply covers the cost of issuing the various licenses does not address the many indirect costs involved in the activity.

Hunting and fishing license fees are another example of those charges that may reflect some of the costs incurred beyond the basic administration of the licenses. The expense of managing the natural resources and the depletion and replenishment of fish and game are indirect costs that are borne in part by those engaged in the activity if the fee is set higher than the basic cost of issuing the license.

The last category includes those fees and charges assessed as part of business transactions such as oil and gas leases, land sales and property rentals. The guiding principle for setting these fees is

[^117]generally fair market value rather than the cost of supporting a particular activity. These are similar to transactions in the private sector, and as in the private sector, government should attempt to maximize revenue from these fees in most cases.

Another set of useful guidelines has been developed by political economists John Due and Ann Friedlaender for determining when it might be appropriate to expand the role of fees in government finance. According to these guidelines, user fees should be considered when:
(1) benefits are primarily direct, toward an individual, rather than the community as a whole;
(2) substantial waste of the service will occur if it is provided free of charge;
(3) charges do not result in inequities to lower-income groups, on the basis of accepted standards; and
(4) costs of collection of charges are relatively low. ${ }^{5}$

Due and Friedlaender say that user fees should be avoided when:
(1) The benefits are enjoyed, at least in part, by the public at large so that charging a fee would result in the fee payer subsidizing the general public;
(2) little waste will occur if the services are provided free of charge;

[^118](3) equity standards require that lower-income groups be assured of obtaining the services; and
(4) collection costs are relatively high.

According to a series of opinion polls, the public prefers user fees over all other available revenue options.

## Advantages of User Fees

As with all revenue alternatives there are advantages and disadvantages to be considered. One advantage of user fees is their similarity to prices. Fees can improve the efficiency and equity of a revenue system and also enjoy broad public support.
Efficiency-measuring public demand. Financing selected government services through user charges shifts decisions regarding preferences for public services from the political process directly to the consumer. User fees provide governments with important information that can be evaluated in terms of the quality and quantity of services the public desires. When rates are set appropriately, this consumer demand information can be used to test new or expanded services such as more frequent trash collection. Government is also in a better position to respond quickly to changing public demands because immediate and relatively reliable information is available. In the case of a service no longer desired by the public, government can more quickly-and efficiently-shift scarce resources into other areas.

Some economists argue that the
overall efficiency of a government's revenue system is improved when user fees result in a reduction in high marginal tax rates. Tax rates are more likely to cause economic distortions when they are high relative to neighboring jurisdictions. By increasing user fees to reduce marginally high tax rates, these distortions can be reduced. ${ }^{6}$
Finally, user fees can help to correct private market prices and costs that do not otherwise account for certain indirect social costs. For example, industrial waste charges can recover a portion of the cost of pollution to the public as well as provide an incentive to industry for reducing pollution.

Equity. In some cases, user charges can be a more equitable means of financing government than general tax revenue. If the service involves a specific group of users, then supporting that activity through general tax revenue causes nonusers to subsidize those benefiting from the service. For example, it may be questionable for the taxpaying public to support a municipal golf course or swimming pool from general tax revenue.
Other groups that may benefit at the expense of the general public are nonresidents and nonprofit organizations. By paying user fees, these groups can contribute to the support of the services which they enjoy. Tourists, for example, help to support state parks through user fees, otherwise the taxpaying public would be subsidizing out-of-state visitors.

Public support. According to a series of opinion polls, the public prefers user fees over all other available revenue options. The U.S. Advisory Commission on Intergovernmental Relations conducts an annual poll which includes questions regarding the best way for governments to raise
additional revenue. In its 1986 survey, 49 percent of respondents preferred local user taxes compared to 26 percent for the local sales tax, the next most popular option. ${ }^{7}$ The property tax and income tax were favored by seven percent and nine percent respectively.

A public opinion survey conducted by the Lyndon B. Johnson School of Public Affairs for the Select Committee on Tax Equity also found strong support for user fees. When asked if heavy users of government services should be required to pay a greater share of the revenue burden, 68 percent responded that they agreed strongly with this statement.

## Disadvantages of User Fees

As with any revenue source, there are a number of disadvantages that must be weighed when fees are considered. In many cases the disadvantages of user fees can be addressed through the fee rate structure.

Regressivity. User fees tend to be regressive. In general, user fees take a larger portion of the lowincome family's resources than that of the higher income family. However, there are other factors which tend to mitigate this effect and fees can be structured to account for a taxpayer's ability to pay.

For those services from which a low-income family does not generally benefit, equity may actually be improved with a shift to user fees, because they are no longer subsidizing others who do benefit from the service. Additional adjustments can be made to the fee schedule to better account for ability to pay since the users may be identified, but this may make the fee structure too complex.

Difficulty in determining costs.

The expertise required to determine the actual costs, demand for and distribution of benefits of selected services is frequently beyond the resources of many government entities. In addition, the analysis may cross traditional departmental lines of government, further complicating the effort to

> The expertise required to determine the actual costs, demand for and distribution of benefits of selected services is frequently beyond the resources of many government entities.

determine total costs. The need for technical analysis in determining costs has given rise to the development of a new industry: consulting firms whose sole business is to assist state and local governments in reviewing and evaluating their user fee system.

A number of studies have recommended state level technical assistance for local governments in determining costs of services. ${ }^{8}$ The state can also perform the role of "clearinghouse" and provide local governments with information regarding user charges and rates successfully used elsewhere.
Nondeductibility. Unlike property and income taxes, user fees are not deductible on federal income tax forms. In states with a personal income tax, there is a bias toward deductible taxes. The issue has become less important for some states, including Texas, since the federal Tax Reform Act of 1986 eliminated the deductibility of the sales tax, eliminating a tax bias.
Revenue sharing. Another disadvantage that has become less significant as a result of recent
federal changes involves revenue sharing. The federal revenue sharing program that was repealed in 1986, distributed funds to local governments based on a formula that included tax effort, a statistical measure of how extensively the government used various tax sources. Local governments with a greater reliance on user fees were at a disadvantage in competing for these funds.

Although this is no longer an issue in terms of federal revenue sharing, many states distribute funds to local governments using formulas that include local tax effort. If a broader definition of local effort were used in the distribution formulas, the bias toward taxes as a source of local revenue could be reduced or eliminated.

Inherent disincentives. Like prices, high fees can reduce the demand for a service. Government officials may not support revenue alternatives that have the effect of reducing the demand for services they advocate.

For example, museum officials are not likely to support an entrance fee increase from 50 cents to $\$ 2.00$ if the result is to reduce visitation by 50 percent, even if a greater percentage of the operating costs are covered. Since public support for the museum is demonstrated by number of visitors, museum officials cannot be expected to
7. U.S. Advisory Commission on Intergovernmental Relations, Changing Public Attitudes on Government and Taxes (Washington, D.C., 1986).
8. See, for example, Selma J. Mushkin and Charles L. Vehorn, "User Fees and Charges," Governmental Finance (November 1977), p. 44; Graham S. Toft, "User Fee: Trends and Prospects for Indiana," in James A. Papke (ed.), Indiana's Revenue Structure: Major Components and Issues (West Lafayette, Indiana: Purdue University, 1982), p. 121; U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification: User Charges, p. 7.
9. John M. Boliman, Budget Officer of San Antonio, quoted in Fredrick D. Stocker, "User Charges: Their Role in Local Government Finance," National Tax Association, 67th Annual Meeting (Columbus, Ohio, 1974).p. 418.
10. Toft, p. 106.
support a policy change that would have the effect of reducing visitation. In addition, government agencies and departments may not advocate fees or fee increases since additional fee revenue could be used to replace general revenue rather than supplement it.

FIGURE 1. Fee Intensity for U.S. State and Local Government, 1964-86


Source: U.S. Department of Commerce, Bureau of the Census, Governmental Finances, various years.

Note: Fee intensity is the ratio of fees to total taxes and gives an indication of the relative reliance on the two revenue sources.

FIGURE 2. Growth in Local Taxes and Fees in the U.S.


[^119]The political process can also complicate rate setting as observed by a budget officer in San Antonio, "The principal limitations to expansion or increase in charges would be political with considerations given to local economic conditions, equity, and ability to pay." ${ }^{9}$
Revenue performance. Fees are generally set at a flat rate and as a result, revenue tends to erode over time with inflation. Periodic adjustments are required to account for the effects of inflation unless some form of indexing is used. Indexing has not been widely used as a solution to the effects of inflation.

## Trends at the State and Local Level

State and local governments have been increasing their reliance on user fees since the 1960s. Nationally, according to one estimate, nontax revenues increased from 17 percent of state and local tax revenue in 1960 to 25 percent in $1980 .{ }^{10}$ The reasons for this trend include continued pressure for additional revenue, increasing population and cutbacks at the federal level. Coupled with public resistance to tax increases and resultant tax limitation measures, some areas have seen a dramatic shift toward user fees, most notably California local governments.

Figure 1 shows the fee intensity for state and local governments nationally from 1964 through 1986. Fee intensity is simply the ratio of fee revenue to tax revenue and is used in assessing the relative importance of the two sources within a given revenue structure. Figure 1 illustrates the growing reliance on user fees by state and local governments as compared to taxes, with an especially marked shift toward fees during the late 1970s and early 1980s.

Even more instructive is the growth rate in user-type revenue compared to tax revenue increases. In the few years following 1978, user fee revenue rose at an annual rate of 20 percent compared to seven percent for tax revenues. This period, coined "fee fever" by one reporter, represents the most rapid fee increases in 25 years. ${ }^{11}$ Since 1982 there has been a more modest rate of growth.

These trends are even more dramatic at the local level where revenue options are usually more limited and the type of services provided, such as garbage collection and parking, is more amenable to user fee financing. In 1957, local governments nationally raised 40 cents in user charges for each $\$ 1.00$ of tax revenue. By 1985, 65 cents in user fees were collected for every dollar in tax revenue. ${ }^{12}$

The annual rate of growth in local fee revenue nationally compared to tax revenue, reveals three time periods as shown in Figure 2. From 1957-77, the annual rate of growth for fees was 9.3 percent compared to a growth rate of 8.6 percent for local taxes. From 1977-83, the growth rate for fees was 13.5 percent and for taxes, 7.1 percent. For the more recent period of 1983-85, the annual growth rate for fees has slowed to 9.8 percent and for taxes has increased slightly to 9.0 percent.

The impact of Proposition 13, the property tax limiting measure adopted in California in 1978, is an important case study in governments' response when revenue choices are constrained. As a result of Proposition 13, California city tax revenues were cut by $\$ 550$ million. Within a few months, 19 percent of the loss was recovered through a variety of fee increases. ${ }^{13}$ In California, a group called the "Spirit of 13 " was formed to protest the rapid increases in nontax revenue after Proposition 13.

Fee increases at the local level in California have continued above the national average. For the period 1972-1985, fee revenue increased at an average annual rate of 6.9 percent, compared to

Beginning in 1978, the Texas Legislature began to take a harder look at the role of fees in state finances, and the eventual outcome was a dramatic increase in fee intensity at the state level.
the national average of 3.6 percent. ${ }^{14}$ Fee intensity at the state level in California is also high relative to the national average. In 1985, 43 cents in user fee revenue were collected for every $\$ 1.00$ of tax revenue compared to a national average of 35 cents.

Increased reliance on user fees can be viewed as a response to public preferences, since the shift away from property taxes toward user fees accurately reflects the
outcome of public opinion polls. On the other hand, questions regarding the equity of user fees have been raised as the property tax burden has been shifted to specific user groups.

## History of Texas State Fees

Texas state licenses and fees have undergone significant changes within the last ten years. Beginning in 1978 with a report by the Legislative Budget Office, prepared for the House Appropriations Committee's fee and license income subcommittee, Texas fees have undergone a series of reviews and revisions. Major rate increases have tended follow each of the reviews.

Figure 3 shows fee intensity for
11. Stephen J. Sansweet, "Californians Discover Tax-Cut Mania Has a Corollary: Fee Fever," Wall Street Journal (June 1, 1979), p. 1.
12. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification, p. 11.
13. Sansweet, p. 1.
14. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification, p. 11.

FIGURE 3. Fee Intensity for Texas License and Fee Revenue, 1960-91


[^120]Texas license and fee revenue. Clearly, the role of fees in the state finance structure has been through some dramatic changes. The period from 1960 through 1980 was characterized by decline as fee and license revenues eroded in comparison to tax revenue. The primary forces underlying this trend were inflation and increases in sales and severance tax revenue.
Beginning in 1978, the Texas Legislature began to take a harder look at the role of fees in state finances, and the eventual outcome was a dramatic increase in fee intensity at the state level. Declining severance tax revenue also played an important role during the 1980s in the shift toward reliance on user fees in contrast to its influence during the 1970s.
In a review of eight major state agencies, the 1978 Legislative Budget Office report identified 90 different fees that cost more to collect than they generated in revenue. The report estimated an average administrative cost of $\$ 9,000$ for each fee in fiscal year 1974-75. Among those 90 fees found to be generating less than the cost of collection was a special trapping fee with revenue collections of $\$ 50$ in 1975. Other low revenue generators included a one dollar raw milk hauler fee that produced $\$ 508$; a one dollar fee for duplicate hunting licenses that produced $\$ 245$; and a five dollar fee for predatory animal control by aircraft that raised $\$ 25$. As a result of these findings, a series of fee increases was enacted by the 66th Legislature, and license and fee collections increased by 17 percent in 1980.

[^121]16. Ibid., p. 14.

The Senate Committee on Fees and Grants. The next year, the 67th Legislature adopted Senate Resolution 675 creating the Senate Committee on Fees and Grants. The Committee's charge was to:

Determine the state agencies, departments, and commissions charging fees for public services; compile the dates of the last changes in fees and the cost components determining the fees; study the statutory authority for each fee and identify steps necessary to make changes; work with agencies to recommend changes; determine the amounts, purposes and possible disposition of any federal grant funds or earned federal funds that are unexpended. ${ }^{15}$

The Committee, chaired by Senator John Leedom (R-Dallas) and assisted by the staff of the Legislative Budget Board and the Governor's Office of Budget and Planning, surveyed 110 agencies and issued a final report in November 1982. Despite the 1979 changes, the Committee found many fees that had not been increased since enacted, and many others that did not generate enough revenue to cover the costs of administration. The Committee recommended fee changes in 24 agencies with a potential biennial revenue gain of $\$ 131$ million.
Several examples illustrate the areas of the Committee's concern. Under its recommendations regarding fees collected by the Texas Department of Highways and Public Transportation, the Committee noted that, "the current fee structure compensates little for the extensive damage to state highways done by carriers of excess loads. ${ }^{16}$ The Committee recommended a four-fold increase in related fees to address these costs.

There also were a significant number of changes recommended for the Texas Parks and Wildlife Department mainly to reflect the effects of inflation. The recommendations for the Department of Public Safety totaled $\$ 3.8$ million, though only cost-recovery-related increases were proposed. The $\$ 1.00$ fee for duplicate drivers licenses cost the state over $\$ 2$ million in 1981, according to the report. An increase to $\$ 4.00$ was recommended to recover the costs of administration.

Across-the-board increases were recommended for most of the fees administered by the Alcoholic Beverage Commission. The Committee found that many of the fees had not been changed since the creation of the Commission in 1935. The increases necessary to account for inflation would result in $\$ 17.4$ million in additional revenue, according to the report.

The report also included major findings with regard to higher education tuition and fees. The Committee found that resident tuition in 1981 covered approximately five percent of the costs, and that tuition should be increased by two percent per year until 15 percent of the educational and general costs were covered. Thereafter, the Committee recommended that annual adjustments be made to maintain this 15 percent level.

With regard to nonresident tuition, the report found that 45 percent of costs were covered. The Committee recommended increased rates sufficient to cover 75 percent of the associated costs.

Although the Committee made no specific recommendations regarding the various fees charged at institutions of higher education, other than tuition, they did note that a number of institutions were charging fees in excess of the amount authorized by statute. In addition, the Committee uncov-
ered a number of miscellaneous fees that had no statutory basis and recommended a review by the respective governing boards. Finally, the Committee recommended that the Legislative Budget Board review these fees to determine whether they should be accounted for in the appropriations process.

The 68th Legislature. As a result of the recommendations by the Senate Committee on Fees and Grants and growing fiscal pressures for the state, the 68th Legislature in 1983 adopted fee increases totaling $\$ 124$ million for the 1984-85 biennium. Among the increases were: driver's license fees from $\$ 7$ to $\$ 10$; hunting license fees $\$ 5$ to $\$ 8$; copy of birth certificate from $\$ 5$ to $\$ 10$; mixed alcoholic beverage permit from $\$ 2,000$ to $\$ 3,000$; retail wine and beer dealer's permit from $\$ 30$ to $\$ 175$; and domestic corporation charter fee from $\$ 100$ to $\$ 200$.

The 68th Legislature also enacted some policy changes affecting licenses and fees. House Bill 894 provided for fee changes to be made within the context of the general appropriations bill, meaning fees could be set as part of the general budget-writing process. Previously, fees set by the Legislature could only be changed through specific legislation. Tuition increases were ultimately exempted from the provisions of the bill. Another change gave counties the authority to charge fees for recreational facilities. This was a compromise from earlier proposals to grant counties broad fee authority.

A 1984 special session to address public education and highway spending needs included an increase in motor vehicle registration fees as part of the financing package, House Bill 122. The bill provided for a three-phase increase for all motor vehicle registration fees beginning in

August 1984 and ending with an increase in August 1986 for a total increase of $\$ 25.00$.

The 69th Legislature. Following the tax increased of the 1984 special session, the Legislature was ready to look elsewhere for the funds that eventually would be required to balance the budget

## As a result of the recom-

 mendations by the Senate Committee on Fees and Grants and growing fiscal pressures for the state, the 68th Legislature in 1983 adopted fee increases totaling $\$ 124$ million for the 1984-85 biennium.in 1985. Governor Mark White took the lead by proposing a package of fee increases at the start of the session. Eventually, a long list of fee increases became part of House Bill 1593, which became known as the Omnibus Fee Bill.

After a long process of legislative debate and compromise, a conference committee reconciled the House and Senate versions of H.B. 1593. The bill as finally passed contained increases totaling $\$ 146$ million for the biennium. Forty-one new fees were enacted including: fees for registered family homes and day care facilities; 12 new fees administered by the Texas Education Agency for various certificates and application requests; additional inspection and permitting fees for the Department of Health; and eight new permit and filing fees administered by the Railroad Commission.

Among existing fees that were
increased in the omnibus bill were: the driver's license fee from $\$ 10$ to $\$ 16$; personalized license plate fee from $\$ 25$ to $\$ 70$; marriage license fee from $\$ 7.50$ to $\$ 25$; and district court filing fee from $\$ 25$ to $\$ 75$.

The fee bill, together with a bill substantially raising tuition, enabled the Legislature to write the 1986-87 budget without a tax increase. However, the magnitude of the fee increases caused critics to question the role of fees in the budget process. Opponents were successful in amending the fee bill in the House to limit increases to an amount necessary to cover the costs of the service involved with a review every two years. This provision was deleted at the conference committee level.

The recommendations of the Senate Committee on Fees and Grants used cost recovery and inflation adjustments as the basis for their proposals. Assuming some incremental increases to account for two years of inflation, the omnibus bill went far beyond the changes envisioned by the 1983 study. Many of the increases in the 1985 fee bill were purely revenue-generating measures, with little regard for the actual cost of the service involved. This prompted fee opponents to argue that "taxes" was now spelled "f-e-e-s."

Some examples of 1985 fee increases compared to the 1983 Committee recommendations provide some idea of the magnitude of the increases. The 1983 Committee report recommended no change in the $\$ 7.00$ driver's license fee. The 68th Legislature increased the fee to $\$ 10$, and the 69th Legislature increased it again to $\$ 16$. The Fee Committee recommended no changes in fees for the Department of Pardons and Paroles; the Omnibus Fee Bill increased the probation supervision fee from $\$ 15$ to $\$ 40$ per
month. The 68th Legislature adopted the Fee Committee recommendations to double proprietary school certification fees from $\$ 250$ to $\$ 500$. The 69th Legislature doubled the fee again to $\$ 1,000$.

The 70th Legislature. The 70th Legislature in 1987 also turned to fees as part of the revenue package needed to finance the 1988-89 budget. A flat rate of $\$ 110$ per year was added to the annual license
17. The professions are: accountants, architects, chiropractors, dentists, doctors, optometrists, psychologists, real estate brokers, registered engineers, securities dealers and veterinarians.
fees for 11 professions and a new $\$ 110$ per year occupation tax for lawyers was also enacted; the "tax" was necessary because attorneys pay an annual fee to the Texas Supreme Court which is not authorized to collect a tax on behalf of the state. ${ }^{17}$ Prior to this increase, the licensing fees for the 12 professions ranged from $\$ 18$ to $\$ 120$. These temporary increases will contribute an estimated $\$ 79$ million to the state treasury in the 1988-89 biennium.
The 70th Legislature also enacted a new $\$ 25.00$ sales tax permit fee. Businesses and individuals collecting sales taxes on
behalf of the state are required to obtain a permit from the Comptroller of Public Accounts; previously, the permit had been issued free of charge.

## A Profile of Texas Fees

In 1987, revenue from state licenses and fees totaled $\$ 1.1$ billion and accounted for 6.2 percent of total state revenue. Table 1 shows revenue collections from 1960 through the 1991 revenue projections. License and fee revenue accounted for a low of 3.9 percent of the total in 1981 and a high of 9.6 percent in 1961, the year the state sales tax was

enacted. Primarily as a result of the 1985 Omnibus Fee Bill, revenue collections increased by 34 percent in 1986 and fee intensity increased from 8 to 11 percent.

Although thousands of fees are levied at the state level, in 1986 over 58.9 percent of fee revenue came from motor vehicle registration, driver's license and other transportation-related fees according to the Comptroller of Public Accounts. ${ }^{18}$ When higher educa-
tion fees are added, 73.2 percent of all fee revenue is accounted for between the two types.

Individuals pay the bulk of state user fees and licenses. Business paid 28 percent of Texas fees in 1986 and individuals paid the remaining 72 percent. Professional fees (licenses, renewals, test fees) account for most of the fee revenue paid by business while individuals pay the bulk of motor vehicle related fees.

Approximately 79 percent of Texas fee revenue was dedicated to special funds in 1986, meaning the revenue is reserved for specified purposes, with the remainder deposited in the General Revenue Fund, the state's purse for general spending purposes. ${ }^{19}$ Table 2 provides some examples of the
18. Comptroller of Public Accounts, Texas Fees: Putting a Price on State Services (Austin, May 1987), p. 4

TABLE 2. Examples of Texas State Fees, Charges and Licenses

Transportation Fees
motor vehicle registration driver's license fees motor vehicle inspection motor vehicle certificates driver record information commercial transportation driver training school fees highway beautification outdoor signs automobile clubs
antifreeze registration
Business Regulation Fees
professional fees -accountants -architects -attorneys -auctioneers -barbers -court reporters -funeral directors -land surveyors -landscape architects -plumbers -polygraph examiners -professional engineers -psychologists
general business filing
financial institutions
bingo operators
coin-operated machines
manufactured housing
boiler inspections
boxing and wrestling
health spa inspections
amusement ride inspection
insurance agents license
Utilities Fees
automatic dial announcing
compressed natural gas

Alcoholic Beverage Fees
liquor permit fees
wine and beer permit fees
Tobacco Fees
Natural Resources Fees
air pollution control
waste treatment inspection
oil and gas drilling
land office fees
water permit fees
surface mining permits
survey permits
surface damages
boat sewage disposal
Agriculture Fees
inspection fees
business regulatory fees
registration fees
livestock export/import
agriculture association
Parks and Wildlife Fees
state park fees
motorboat registration
mobile beach business
protected plant permits
hunting and fishing licenses
Education Fees
student fees
administrative fees
teacher certification fees

## Health Fees

waste disposal facilities
medical examinations
radioactive materials
health professional fees -chiropractors -dentists -dieticians -deaf interpreters -massage therapists -pharmacists -physical therapists -podiatrists
health care facilities -abortion facilities -adult day care -alcoholism treatment -birthing centers -home health services -hospitals -hospitals-construction -nursing home admin. vital statistics services food and drug fees

Human Services-MH/MR child support collections out-patient counseling private institution licenses social worker regulation adoption registry

Other Fees
marriage licenses
copying and filing examinations and audits judicial fees
administrative services returned check fees

[^122]types of fees levied in Texas.
More than 1,000 fees are found in state law with specific rates or ceilings set by the Legislature. Many more fees are authorized by the Legislature and set by individual agencies. No systematic review or inventory of all state
19. Texas Fees, Section 6.
fees has been conducted recently at the state level. However, the legislative process does include at least two oversight activities with regard to fees.
The Sunset Commission was created in 1977 to conduct a periodic review of most state agencies on an agency-by-agency basis. Unless reauthorized by the


Legislature in the regular session immediately following the review process, the agency under review is automatically abolished or "sunset." As part of the Sunset process, the Commission and staff examine the fees administered by each agency under review.
In the early years of the Sunset Commission, the criteria used in evaluating an agency's fee structure were relatively broad. The staff recommendation was usually either to provide total agency flexibility regarding fee rates or to increase statutory rate limits to a level that would provide more agency discretion.
In 1983, the Commission refined its criteria regarding fees. A review now begins with the assumption that a fee should generally recover a minimum of 50 percent of the costs of the program which the fee supports. If fee revenue is in the range of 50 percent recovery, the Commission frequently recommends a rate or rate limit increase sufficient to account for the antici-

TABLE 3. Per Capita State Charges by Source for Texas and U.S.

| Category | 1975 |  | 1978 |  | 1981 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Texas | U. S. | Texas | U.S. | Texas | U. S. |
| Education | \$22.81 | \$26.61 | \$34.06 | \$35.12 | \$44.72 | \$46.42 |
| Hospitals | 6.23 | 8.10 | 7.97 | 12.48 | 11.88 | 18.03 |
| Highways | 1.19 | 4.59 | 1.30 | 5.36 | 0.89 | 5.91 |
| Natural Resources | 0.45 | 1.47 | 0.42 | 1.78 | 1.22 | 2.50 |
| Parks and Recreation | 0.13 | 0.78 | 0.19 | 1.21 | 0.34 | 1.44 |
| Water Transport | - | 0.60 | - | 0.84 | - | 1.18 |
| Airports | - | 0.45 | - | 0.71 | - | 0.91 |
| Other | 1.65 | 6.47 | 2.20 | 4.66 | 1.00 | 6.47 |
| Total | \$32.33 | \$48.29 | \$46.10 | \$62.16 | \$60.04 | \$82.87 |
| Total State Taxes | \$297.23 | \$370.88 | \$414.17 | \$519.39 | \$574.44 | \$660.96 |
| Fee Intensity | 10.9\% | 13.0\% | 11.10\% | 12.0\% | 10.5\% | 12.5\% |
| Total Own Source Revenue' | \$370.75 | \$447.82 | \$521.31 | \$622.01 | \$746.46 | \$827.08 |
| Current Charges as a \% of Own Source Revenue | 8.7\% | 10.8\% | 8.9\% | 10.0\% | 8.0\% | 10.0\% |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Finances, various years.

1. Does not include utility, insurance trust or liquor store revenue.

Note: Fee intensity is the ratio of fees to total taxes and gives an indication of the relative reliance on the two revenue sources.
pated effects of inflation over the 12 -year Sunset review cycle. ${ }^{20}$
The Legislative Budget Board staff also conducts a systematic review of fees as part of its responsibilities in preparing budget recommendations for the legislature. Beginning in 1985 with the preparation of the 1986-87 budget recommendations, the LBB added a form to budget request documents sent to each state agency requesting an inventory and description of all current fees, the authorizing statute, fund number, statutory limit (if applicable) and current rate, number issued, net revenue, renewal period, date of last change, rate prior to last change, and estimated percent of cost recovered. This information is used by the LBB staff in preparing recommendations for the legislature.
Although the information gathered by the Sunset Commission and Legislative Budget Board is useful and results in periodic fee adjustments, it still falls short of a comprehensive, regular analysis of state fees and their relationship
to program costs. The burden is on each agency to identify and propose justifiable fee increases. Many agencies, particularly the small licensing agencies, may not have the resources to perform the task on their own.

## Revenue Performance

Figure 4 shows the long term revenue performance of Texas fees and license from 1961 through the 1991 estimates of available state revenue. Licenses and fees have served the state well over the long term as a relatively reliable source of revenue. The late 1980s were marked by major fee increases that pushed revenue growth into the 30 percent range.
Since motor vehicle and related licenses and fees comprise the bulk of fee revenue and since most people consider owning and operating a vehicle essential to their daily lives, an increasing population has been a driving force behind revenue performance since the 1960s.

Rapid inflation and the ab-

| 1983 |  | 1986 |  |
| :---: | :---: | :---: | :---: |
| Texas | U. S. | Texas | U. S. |
| \$50.09 | \$56.10 | \$71.63 | \$71.19 |
| 14.25 | 22.69 | 14.86 | 26.13 |
| 1.19 | 6.55 | 1.52 | 8.08 |
| 1.34 | 2.72 | 1.43 | 3.35 |
| 0.41 | 1.72 | 0.53 | 2.15 |
| - | 1.21 | - | 1.34 |
| - | 1.00 | 0.00 | 1.27 |
| 1.35 | 7.08 | 2.77 | 10.87 |
| \$68.62 | \$99.08 | \$92.7 | \$124.39 |
| \$573.59 | \$732.71 | \$666.87 | \$945.98 |
| 12.0\% | 13.5\% | 13.9\% | 13.1\% |
| \$749.28 | \$930.64 | \$919.90 | \$1,223.27 |
| 9.2\% | 10.6\% | 10.1\% | 10.2\% |

sence of compensating fee increases probably prevented better performance throughout the 1970s.Future growth will likely depend on periodic increased to compensate for the effects of inflation.

## Interstate Comparisons

Comparing the states in terms of fees and licenses is difficult because of the number and variety represented. In addition, many services that are provided at the local level in some states are provided at the state level in others. With these caveats in mind, there are some general comparisons that can be made.

Table 3 compares Texas fee collections per capita and fee intensity with the United States as a whole for selected years. In general, Texas reliance on fees has tended to be less than the U.S. average as measured by fee intensity.

This table puts into perspective the relative magnitude of the recent series of fee increases as the state dealt with serious fiscal problems. Texas fee intensity, as measured by U.S. Bureau of the Census data, was 10.9 percent in 1975 compared to the national average of 13.0 percent. By 1983, the gap had narrowed slightly with a Texas fee intensity of 12 percent compared to the national average of 13.5 percent. By 1986 however, as a result of major across-the-board increases, Texas passed the national average for the first time, 13.9 percent compared to 13.1 percent. The gap is likely to narrow over the next several years unless the Texas Legislature enacts increases similar to those in 1985.
Table 4 shows similar informa-

[^123]TABLE 4. Per Capita State Government Licenses and Fees for Texas and U.S., 1986

| Category | Texas |  | U.S. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount | \% of Total | Amount | \% of Total |
| Education | \$71.63 | 77.20\% | \$71.19 | 57.20\% |
| Hospitals | 14.86 | 16.0 | 26.13 | 21.0 |
| Highways | 1.52 | 1.6 | 8.08 | 6.5 |
| Natural Resources | 1.43 | 1.5 | 3.35 | 2.7 |
| Parks and Recreation | 0.53 | 0.6 | 2.15 | 1.7 |
| Water Transport | - | - | 1.34 | 1.1 |
| Airports | 0.00 | 0.0 | 1.27 | 1.0 |
| Other | 2.77 | 3.0 | 10.87 | 8.7 |
| Total Charges | \$92.74 | 100.0\% | \$124.39 | 100.0\% |
| Motor Vehicle License Taxes | 38.58 | 74.9\% | \$31.85 | 64.9\% |
| Hunting and Fishing | 1.84 | 3.6 | 2.54 | 5.2 |
| Occupations and Businesses | 5.69 | 11.1 | 8.53 | 17.4 |
| Motor Vehicle Operator | 3.07 | 6.0 | 2.88 | 5.9 |
| Alcoholic Beverage | 1.44 | 2.8 | 0.99 | 2.0 |
| Public Utilities | 0.32 | 0.6 | 1.17 | 2.4 |
| Amusements | 0.13 | 0.2 | 0.5 | 1.0 |
| Other | 0.43 | 0.8 | 0.65 | 1.3 |
| Total Licenses' | \$51.5 | 100.0\% | \$49.11 | 100.0\% |
| Total Charges and Licenses | \$92.74 | - | \$124.39 | - |
| Total State Taxes | \$666.87 | - | \$945.98 | - |
| Charges and Licenses as a \% of State Taxes | 21.60\% | - | 18.30\% | - |
| Total Own Source Revenue ${ }^{2}$ | \$919.90 | - | \$1,223.27 |  |
| Charges and Licenses as a \% of Own-Source Revenue | 15.70\% | - | 14.20\% | - |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Finances, 1985-86 (Washington, D.C., 1987).

1. Does not include corporation license taxes.
2. Does not include utility, insurance trust or liquor store revenue.

TABLE 5. Texas Rank Among the Fifty States for Selected Fees, 1986

| Type of Fee | Rank | Fee Amount | Comments |
| :---: | :---: | :---: | :---: |
| Fees Per Motor Vehicle | 5 | Avg. \$68.56/vehicle | Primarily motor vehicle registration fees. Legislative increases moved Texas from 39th in 1984 to 5th in 1986; average fees per vehicle in 1984 were $\$ 29.11$. |
| Motor Vehicle Operating License | 8 | Average \$6.19/driver | Increase in 1985 moved Texas from 26th in 1984 to 8th in 1986; average fee per driver in 1984 was $\$ 3.39$. |
| Hunting and Fishing License Fee | 46 | Avg. $\$ 6.23$ fee revenue/license | Texas ranked 37th in 1984 with fee revenue of $\$ 7.60 /$ license. |
| Parks and Recreation Fees | 18 | Avg. revenue 48 cents/visitor | In 1984, Texas ranked 26th with average revenue of 46 cents per visitor. Many fees are levied by the car load. |
| Alcoholic Beverage Fees | 9 | Avg. six cents/gallon | In 1984, Texas ranked 16th in fee revenue per gallon of alcoholic beverages sold. There are 42 different liquor permits and 24 different wine and beer permits in Texas. |

tion for 1986 but adds license revenue for a more complete picture of user-based revenues. A comparison of all licenses and fees in 1986 as defined by the U.S. Bureau of the Census finds Texas still slightly above the national average in fee intensity compared with the U.S. average, 21.6 percent compared to 18.3 percent.
Inthe Comptroller's office analysis of fees, an attempt was
made to compare fee revenue for several categories where detailed state revenue data was available. By drawing on a number of sources, a ranking of Texas fee revenue in several categories was constructed.
Table 5 summarizes the rankings for five of the major fee types for which comparisons were possible. In 1986, Texas ranked fifth in fees per motor vehicle,
eighth in driver license fees, 9 th in alcoholic beverage permit fees, 18th in parks and recreation fees, and 46th in hunting and fishing license fees. The most dramatic change between 1984 and 1986 was for fees per motor vehicle. Texas ranked 39th in 1984 with average fees per vehicle of \$29.11 and moved to 5th in 1986 with average fees of $\$ 68.56$ per vehicle.

TABLE 6. Selected State Fees Not Charged in Texas, 1987

| Type of Fee | Number of States | Type of Fee | Number of States |
| :---: | :---: | :---: | :---: |
| Peddlers/ltinerant Merchants | 25 | Soft Drinks, by Brands | 11 |
| Bllling and Collection Agencies |  | Taxidermists | 11 |
| license | 25 | Aeronautics | 18 |
| examination/investigation | 8 | Animal Processing | 10 |
| permit/certificate | 2 | Billiard or Pool Tables | 10 |
| Livestock Auctions/Markets | 24 | Electricians | 10 |
| Hotel/Motel | 21 | Mobile Home/RV Parks | 10 |
| Automotive Fees |  | Trading Stamp Companies | 10 |
| dismantler/salvage yard | 21 | Agricultural Lime Brands | 9 |
| salesman new/used | 15 | Bail Bondspersons |  |
| races and operators | 3 | license | 9 |
| used car dealers | 3 | runner | 2 |
| auto repair shops | 3 | examination | 2 |
| leasing and rentals | 2 | agent | 1 |
| car washes | 1 | applications | 2 |
| body shops | 1 | Business Sales, Going Out of | 9 |
| Food Establishments | 19 | Tramways/Ski Lifts/Gondolas |  |
| Builders/Contractors |  | license | 9 |
| license | 16 | inspection fee | 3 |
| salespersons | 6 | application | 1 |
| electrical | 6 | Commercial Fertilizer, by Brand | 8 |
| general | 6 | Elevators/Escalators |  |
| nonresident | 5 | construction license | 8 |
| home improvement | 4 | crattspersons/operators | 4 |
| Cold Storage/Cold Lockers | 25 | inspection | 3 |
| Explosives |  | certificate | 1 |
| handlers/users | 14 | Firearms/Weapons |  |
| magazines/storage | 8 | dealers | 8 |
| dealers | 8 | wholesalers | 2 |
| manufacturers | 7 | Arborists/Tree Surgeons | 7 |
| blasters | 3 | Bowling Alleys | 7 |
| distributors | 2 | Clinical Laboratories | 7 |
| Charitable Solicitors | 13 | Dance Halls | 7 |
| Agricultural Dealers |  | Bakeries | 6 |
| livestock | 12 | Land Sales/Realty Transfers | 6 |
| commodities | 5 | Theaters | 6 |
| Cleaners/Dry Cleaners |  | Beef Cattle Feedlots | 5 |
| establishment license | 12 | Camps/Campgrounds | 4 |
| exam/inspection | 12 | Cotton Gins | 4 |
| Junk Dealers/Shops/Yards | 12 | Legislative Agents/Lobbyists | 4 |
| Warehouses/Storage | 12 | Auction Sales | 4 |
| Pets Shops and Kennels | 11 | Fortune Tellers | 2 |

Source: Comptroller of Public Accounts, Texas Fees: Putting a Price on Public Services (Austin, May 1987).

Texas levies most of the major licenses and fees found in other states. However, Table 6 provides some examples of fees collected in other states that are not levied in Texas. In some cases, Texas may levy a tax where another state might collect a fee. Agency by agency surveys have been the traditional source of ideas for new fee levies in Texas, such as the one conducted by the Senate Committee on Fee and Grants.

## Texas Fees at the Local Level

The national trend toward increased reliance on user fees at the local level is also occurring in Texas. Table 7 shows local user charges for Texas and the United States from 1975 through 1986. Fee intensity for Texas local governments grew from 45 percent in 1975 to 67 percent in 1986, a growth rate similar to the national average.
However, Texas local govern-
ments tend to rely somewhat more on fee revenue than do local governments nationally. In 1975, fee intensity for local governments nationally was 38 percent compared to Texas' fee intensity of 45 percent. This may reflect, in part, the relative role of Texas state and local governments compared to other states and heavy reliance on the local property tax. By 1986, the fee intensity ratio had risen to 66 percent in Texas and 61 percent

TABLE 7. Per Capita Local Charges and Fee Intensity for Texas and U.S., 1975-86

| Category | 1975 |  | 1970 |  | 1981 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Texas | U.S. | Texas | U.S. | Texas | U.S. |
| Current Charges | \$98.83 | \$108.14 | \$137.01 | \$139.17 | \$235.08 | \$224.94 |
| Total Taxes | 217.95 | 287.68 | 293.21 | 368.61 | 386.34 | 418.35 |
| Fee Intensity | 45.3\% | 37.6\% | 46.7\% | 37.8\% | 60.8\% | 53.8\% |
| Total Revenue from Own Sources ${ }^{1}$ | \$316.79 | \$395.82 | \$430.23 | \$507.78 | \$621.42 | \$643.29 |
| Current Charges as a \% of Own-Source Revenue | 31.0\% | 27.0\% | 32.0\% | 27.0\% | 38.0\% | 35.0\% |

Source: U.S. Department of Commerce, Bureau of the Census, Government Finances, various years.

1. Does not include utility, liquor store or insurance trust revenue.

Note: Fee intensity is the ratio of fees to total taxes and gives an indication of the relative reliance on the two revenue sources.

TABLE 8. User Charges in Selected Texas Cities, 1986 (Thousands of Dollars)

| Category | Austin |  | Dallas |  | El Paso |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | \% of Total | Amount | \% of Total | Amount | \% of Total |
| Education | - | - | - | - | - | - |
| Highways | - |  | \$1,008 | 0.9\% | \$1,471 | 3.5\% |
| Hospitals | \$50,578 | 40.2\% | - | - | - | - |
| Sewerage | 35,260 | 28.0 | 50,274 | 43.9 | 14,053 | 33.2 |
| Other Sanitation | 12,620 | 10.0 | 21,891 | 19.1 | 9,044 | 21.4 |
| Parks and Recreation | 5,742 | 11.4 | 14,172 | 12.4 | 2,885 | 6.8 |
| Housing and Community Development | - | - | - | - | - | - |
| Airport | 11,318 | 9.0 | 14,510 | 12.7 | 12,932 | 30.5 |
| Parking Facilities | 1,070 | 0.9 | 944 | 0.8 | 486 | 1.1 |
| Other | 9,156 | 7.3 | 11,608 | 10.1 | 1,469 | 3.5 |
| Total | \$125,744 | 100.0\% | \$114,407 | 100.0\% | \$42,340 | 100.0\% |
| Total Taxes | \$137,712 | - | \$412,451. | - | \$75,310 | - |
| Fee Intensity | 91.3\% | - | 27.7\% | - | 56.2\% | - |
| Total Revenue from Own Sources ${ }^{1}$ | \$385,610 | - | \$617,012 | - | \$170,783 | - |
| Charges as a \% of Own-Source Revenue | 32.6\% | - | 18.5\% | - | 24.8\% | - |

Source: U.S. Department of Commerce, Bureau of the Census, City Government Finances in 1985-86 (Washington, D.C., 1987):

1. Does not include utility or employee-retirement revenue.

Note: Fee intensity is the ratio of fees to total taxes and gives an indication of the relative reliance on the two revenue sources. National fee intensity ratio averaged 36 percent in 1986.
in the United States as a whole, the U.S. average increasing at a somewhat faster rate.
Texas local governments are under the same kinds of fiscal pressures as local governments nationally. Per capita federal aid to Texas fell by 23 percent between 1980 and 1984. ${ }^{21}$ Inflation, population increases and declining property values have also contributed to the fiscal problems faced by Texas cities and counties. As a result, local officials have in-
creasingly turned to user fees as an alternative source of revenue. But user fees are not available to the same degree among Texas local governments.
There are two types of cities in Texas: home-rule and general law. General law cities, which comprise 80 percent of Texas' cities and generally have a population of less than 5,000 , are restricted by state law. Home rule cities are governed by a charter adopted by its citizens and look to the state

| 1983 |  | 1986 |  |
| :---: | :---: | :---: | :---: |
| Texas | U. S. | Texas | U.S. |
| \$305.39 | \$282.06 | \$415.25 | \$366.72 |
| 458.92 | 483.57 | 624.73 | 601.46 |
| 66.5\% | 58.3\% | 66.5\% | 61.0\% |
| \$764.31 | \$765.63 | \$1,039.98 | \$968.18 |
| 40.0\% | 37.0\% | 40.0\% | 38.0\% |


| Fort Worth |  | Houston |  |
| :---: | :---: | :---: | :---: |
| Amount | \% of Total | Amount | \% of Total |
| - | - | - | - |
| \$6 | 0.0\% | \$240 | 0.1\% |
| - | - | - | - |
| 29,697 | 55.7 | 140,661 | 55.7 |
| 10,673 | 20.0 | - | - |
| 5,627 | 10.5 | 4,882 | 1.9 |
| 973 | 1.8 | - | - |
| 2,005 | 3.8 | 88,534 | 35.1 |
| 1,042 | 2.0 | 6,565 | 2.6 |
| 3,314 | 6.2 | 11,597 | 4.6 |
| \$53,337 | 100.0\% | \$252,479 | 100.0\% |
| \$135,037 | - | \$611,194 | - |
| 39.5\% | - | 41.3\% | - |
| \$245,655 | - | \$1,117,545 | - |
| 21.7\% | - | 22.6\% | - |

revenue systems. ${ }^{22}$ The most common revenue raising or cost cutting action during the past two years was increases in user fees; 58.1 percent of those surveyed had increased user fees during that time. Deferred or postponed capital projects was the next most common action ( 46.7 percent), followed closely by increased property taxes (45.1 percent). In those cities where user fees were increased, the most common increases were for water rates ( 34.2 percent), wastewater rates (29.2 percent) and garbage collection ( 25.2 percent).

If it were necessary to take further action to balance the budget, 13.1 percent of the respondents indicated user fees and

[^124]property tax increases as the most likely alternatives, while 39.6 percent predicted further delay in planned capital improvements. The choice of user fees and property taxes varied greatly depending upon the size of the city. The largest cities were much more likely to predict an increase in user fees while the smallest cities were more likely to predict an increase in property taxes as shown in Table 10. These results probably reflect the different kinds of services and revenue alternatives that are available in these cities, particularly the greater flexibility found in larger home-rule cities.

Table 11 shows fees (or charges) and licenses as a percent of general revenue for five Texas cities in fiscal year 1987. With the exception of Fort Worth, fees comprise a far
greater portion of combined fee and license revenue. Fort Worth appears to rely on license fee revenue to a much greater degree than the other cities; license fees comprised 9.6 percent of Fort Worth's general revenue in 1987 compared to an average in Austin, Dallas and Houston of 1.3 percent. Combined license and fee revenue accounted for an average of 11.4 percent of general revenue for the four largest of the five cities; Fort Worth was highest at 16.4 percent and Beaumont was lowest at 3.2 percent.

According to city officials, the City of Houston has focused increasing attention on the role of user fees in the city's finances. For example, beginning in January 1989, an entrance fee will be charged at the Houston Zoo for the

TABLE 9. Examples of Local Fees, Charges and Licenses


[^125]first time. On the other hand, Houston is one of only a few large cities in the country without a garbage collection fee though it has been repeatedly proposed by City budget staff.

The City of Fort Worth has adopted a policy of contracting with a private firm on an annual basis to review license and fee rates and determine the increases that would be necessary to cover program costs or compensate for inflation. This policy may partly explain the higher proportion of fees to general revenue shown in Table 11.

Texas counties collect a variety of fees primarily in the areas of health, law enforcement, record keeping and the administration of state taxes, licenses and permits. Examples of fees collected by counties include charges for: recording legal documents, filing a
civil case in county or district court, serving a witness with a subpoena to appear in court, access to a county dump and permits for septic tanks. Table 12 is a summary of the types of user fees charged in three Texas counties. Fee intensity for these counties ranges from a low of 12 percent to a high of 48 percent. For all five of the counties, the bulk of user fee revenue comes from hospitals.

Although a comparison of fee intensity is useful in considering the relationship between userbased revenue and general taxes, there are significant limitations that should be noted. For example, in those jurisdictions with a county hospital, the comparison is distorted in the same way the city comparisons were affected by the city owned hospital in Austin. Differences in reporting may also
make comparisons less reliable. With these limitations in mind, the information can provide some idea of the relative reliance on user fees and the mix among various types of fees.

## Fees as a Revenue <br> Alternative

Given the number and variety of state fees and licenses charged at the state and local level in Texas, there will always be some that could be justifiably be increased. There are at least 130 state fees with a current rate of $\$ 5$ or less which are probably not recovering the costs of administration. On the other hand, the revenue gain from raising these fees to a level sufficient to cover program costs would probably be small.
The state fees raising the most revenue, motor vehicle and education fees, have been substantially

TABLE 10. First Action Texas Cities Would Take if Revenue Diminished Further

| Action | Population |  |  |  |  | AII Cities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Less Than } \\ 2,000 \end{gathered}$ | $\begin{aligned} & \hline 2,001- \\ & 5,000 \end{aligned}$ | $\begin{aligned} & \hline 5,001- \\ & 10,000 \end{aligned}$ | $\begin{aligned} & 10,001- \\ & 25,000 \end{aligned}$ | $\begin{gathered} \hline \text { More Than } \\ 25,000 \end{gathered}$ |  |
| Impose Hiring Freeze | 7.5\% | 13.9\% | 11.5\% | 18.6\% | 30.3\% | 14.0\% |
| Impose Wage Freeze | 6.6 | 7.9 | 15.4 | 5.1 | 12.1 | 8.5 |
| Lay-Off Employees | 1.9 | 5.0 | 3.8 | 3.4 | 3.0 | 3.4 |
| Reduce Salaries | 0.9 | 1.0 | 3.8 | 1.7 | 0.0 | 1.4 |
| Raise User Fees | 9.4 | 12.9 | 19.2 | 11.9 | 18.2 | 13.1 |
| Raise Property Tax | 20.8 | 10.9 | 7.7 | 13.6 | 3.0 | 13.1 |
| Reduce Services | 6.6 | 4.0 | 7.7 | 5.1 | 6.1 | 5.7 |
| Eliminate Services | 1.9 | 2.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| Defer/Postpone Capital Projects | 44.3 | 42.6 | 30.8 | 40.7 | 27.3 | 39.6 |

Source: Texas Municipal League.
Note: Four hundred Texas cities were surveyed.

TABLE 11. Fees, Licenses and Permits as a Percent of General Revenue for Selected Texas Cities, 1986-87

| Source | Austin | Beaumont | Dallas | Fort Worth | Houston |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Fees | $9.1 \%$ |  |  |  |  |
| Licenses and Permits | 1.6 | $2.1 \%$ | $9.6 \%$ | $6.8 \%$ | $6.6 \%$ |
| All Fees, Licenses and Permits | 10.7 | 1.1 | 0.5 | 9.6 | 1.8 |
| Source: Budget documents for selected cities, fiscal year $1986-87$. | 3.2 | 10.2 | 16.4 | 8.4 |  |

increased recently and are not likely candidates for further increases in the near future. Motor vehicle fees, for example, are now among the highest in the nation. Higher education fees, primarily tuition, while still low compared to other states, have proven to be politically difficult to increase.

A series of revenue options prepared by the Comptroller provides some idea of the revenue potential of state licenses and fees. An across-the-board ten percent increase in all fees would generate approximately $\$ 240$ million in the 1988-89 biennium. Increasing rates by ten percent in only the eight major fee areas would generate approximately $\$ 152$ million. If Texas were to raise fees in the five fee categories shown in Table 5 to match the highest fee burden among the 50 states, approximately $\$ 360$ million in new annual revenue would result.

At the local level, where revenue alternatives are generally
more limited, fee increases are included in almost every budget proposal. A number of cities have completed cost analyses to determine the revenue that would be generated if all program costs were included in the fee. Following are some examples of the fee potential for several Texas cities:
(1) Corpus Christi-\$11 million;
(2) Houston- $\$ 87$ million (\$42 million in garbage collection fees);
(3) Dallas- $\$ 32$ million; and
(4) Fort Worth-\$10 million. ${ }^{23}$

It should be noted that the full fee potential as determined by an inventory of services and cost analysis assumes 100 percent of the service costs borne by the user. In many cases, as described earlier in this chapter, there are reasons for setting a fee well below the cost of providing the service.

## Conclusion

The principles and guidelines
outlined at the beginning of this chapter suggest that licenses and fees should be tied to the cost of the service for which the fee is charged. An analysis of the full costs of the program is an important prerequisite in developing fee policy.

An ongoing review of demand by the public, changes in program costs and the effects of inflation provide some ofthe information that is needed to adjust fees periodically. Without these adjustments, revenue tends to erode over time since fees are generally set at a fixed rate, and as a result, program costs are increasingly shifted to the general public. To whatever degree user fees do not recover the costs determined to be appropriately charged to the user, general tax revenue subsidizes the benefits enjoyed by a specific group.

[^126]TABLE 12. User Charges in Selected Texas Counties, 1986 (Thousands of Dollars)

| Category | Bexar |  | Dallas |  | Harris |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount | \% of Total | Amount | \% of Total | Amount | \% of Total |
| Education | - | - | - | - | - | - |
| Highways | - - | - | - - | - | - | - |
| Hospitals | \$36,591 | 85.8\% | \$59,551 | 67.9\% | \$34,598 | 45.0\% |
| Sewerage | - | - | - | - | - | - |
| Other Sanitation | - | - | - | - | - | - |
| Parks and Recreation | 123 | 0.3 | - | - | 1,250 | 1.6 |
| Housing and Community Development | - | - | - | - | 1,250 | - |
| Airport | - | - | - | - | - | - |
| Parking Facilities | - | - | 649 | 0.7 | - | - |
| Other | 5,907 | 13.9 | 27,520 | 31.4 | 41,051 | 53.4 |
| Total | 42,634 | 100.0 | 87,720 | 100.0 | 76,899 | 100.0 |
| Total Taxes | \$101,908 | - | \$203,237 | - | \$628,723 | - |
| Fee Intensity | 42.0\% | - | 43.0\% | - | 12.0\% | - |
| Total Revenue from Own Sources ${ }^{1}$ | \$184,820 | - | \$332,472 | - | \$1,040,681 | - |
| Charges as a \% of Own-Source Revenue | 23.0\% | - | 26.0\% | - | 7.0\% | - |

Source: U.S. Department of Commerce, Bureau of the Census, County Government Finances in 1985-86 (Washington, D.C., 1987).

1. Does not include utility or employee-retirement revenue.

Note: Fee intensity is the ratio of fees to total taxes and gives an indication of the relative reliance on the two revenue sources. National fee intensity averaged 41 percent in 1986.

## T he Lottery and Texas

## A Nontax Revenue Alternative

## Summary

As Texas' budget problems have mounted over the past few years, several proposals to establish a lottery have been brought before the Legislature. A mature Texas lottery (i.e., after five years of operation) would likely net the state over $\$ 600$ million annually.

Lotteries have a long history. They were popular in the early years of the United States until fraud and abuse led to their abolition. Most recently, lotteries have had a resurgence of popularity, as 27 states have gone into the lottery business.
On average, prizes account for about 45 to 50 percent of the lottery gross. Administrative expenses range from ten to 20 percent. The remaining proceeds are retained by the state, either as general revenue or for use in specific programs, such as education, local aid or capital construction.
Three types of games are most popular in the U.S.-instant, numbers and lotto. In instant games, the player buys a premanufactured ticket and scratches off latex coverings to determine instantly if the ticket is a winner. The instant game prize structure varies, but generally has higher odds of winning; however, prizes are typically lower than in other lottery games.

Numbers and lotto both allow players to select their series of playing numbers. Numbers
games involve selecting either a three- or four-digit number. Lotto involves selecting a series of numbers from within a given field. Given the better odds of winning, numbers jackpots are usually small. Lotto games are the big jackpot games, with winners receiving annuities paying large dollar prizes over a number of years.

The lottery is an extremely controversial issue. Opponents of a Texas lottery argue that the lottery is regressive gamblingputting the state in the position of exploiting the poor. Other concerns against the lottery involve compulsive gambling, possible links to organized crime, unstable revenues, high revenue collection costs (when compared to taxes) and the possibility of damage to the horse and dog racing industries.

Lottery supporters argue that polls show Texans generally support the lottery. They argue it is a voluntary game that no one is forced to play and that it will create jobs and put money into the Texas economy.

The Texas Constitution prohibits a lottery, so establishing one requires a two-thirds majority vote of both the House and the Senate and voter approval, as well. Given that Texas is the nation's most populous nonlottery state and that uncertainty about future state revenues remains, the lottery debate will likely continue in coming years.

By Dale K. Craymer
Office of the Speaker of the House and House Ways and Means Committee

Author's note: This report is to honor the request of the Select Committee on Tax Equity for background information on the subject. The report makes no recommendation either for or against the establishment of a state lottery in Texas.

## The Lottery Defined

While today's modern lotteries are slick, meticulously organized media productions, a "lottery" is really any game of pure chance in which the "winner" is determined by drawing a "lot." In today's modern, state-run lotteries, the lot is a game ticket, usually purchased for a dollar, from an authorized lottery ticket agent, typically a convenience store. Proceeds from the sale of tickets, or lots, are used to pay the prizes and defray the cost of administering the lottery. In addition, a certain percentage of the betting pool is retained as "profit" for the administering authority.

## History of the Lottery

Lotteries have a long history and have been used by many different civilizations for a variety of purposes other than raising money or awarding prizes. The system of justice in several early
civilizations used a lottery of sorts to determine guilt or innocence. The Greek King Agamemnon used a lottery to determine which of his soldiers would battle the Trojan warrior Hector-a procedure the United States Selective Service used again as recently as the early 1970s.
Lotteries are more popular, however, as fund-raising tools which serve an added purpose of providing entertainment. They were used in ancient China and were popular in the Roman Empire. Lotteries continued through the Middle Ages in Europe on a very localized basis. They were common in medieval Europe as a tool for raising money for public and church projects. Unlike today's lotteries which tend to be state-operated, most of the early European lotteries were licensed by the state but were privately operated.

With much of Europe at war at some point during the Renaissance and with the additional burden of financing the settlement of the New World, lotteries were often preferred as a revenueraising tool over taxes.

The Virginia Company was granted a public license by the British monarch, Charles II, for a lottery to support its settlement at Jamestown. In the early colonies themselves, private lotteries often served as a way to dispose of high value property in the face of chronic currency shortages. Very few could afford the property at its full price, but everyone could afford a few pence to buy a chance to win it. As in Europe, public lotteries were also used to raise

1. David Weinstein and Lillian Deitch, The Impact of Legalized Gambling (New York: Praeger Publishers, 1974), p. 9.
2. Ibid., p. 9.
3. Historical information presented in this section is from Weinstein and Deitch.
money for churches, schools and public projects.

By the mid-1700s, frequent fraud and abuse led most colonies to end lotteries used solely for private benefit. Instead, lotteries were licensed to serve established public needs. By the time of the American Revolution, 158 legal licenses had been granted in the New England colonies for various public purposes, including local government expenses, churches, schools, colleges, industry formation and welfare relief. Most religious groups, with the Quakers being the notable exception, supported the lottery system since they were among its prime beneficiaries. ${ }^{1}$

The Continental Congress and numerous states held lotteries to raise funds for the revolutionary war effort, but the revenues were a lesser source.

With the successful conclusion of the revolution, lotteries were to enjoy perhaps their greatest period of popularity in this country. The young nation had a tremendous need for cash at the same time the tax collection system was hampered by inexperience and inefficiency. Enjoying widespread public support, the lottery was the logical solution.

Not surprisingly, the lottery business underwent a fundamental change, as gambling experts Weinstein and Deitch note:

As lottery activity boomed, its character changed drastically. Lotteries became big business, and a group of commercial middlemen developed. First to appear were ticket brokers, who purchased tickets at a discount from the sponsors and resold them to the public. Lottery contractors then entered the picture to operate an entire lottery and hired brokers to sell
the tickets. Eventually, five or six nationwide companies dominated the industry. ${ }^{2}$

While states licensed the lotteries, there was little oversight, and, as would be expected given their sheer proliferation, abuses developed. In addition, fierce competition among the lotteries developed, and several unsuccessful lotteries went into default. There were also instances of unscrupulous lottery operators who absconded with the cash they raised-one notable case being the Grand National Lottery Congress authorized to raise funds for a beautification project of Washington, D.C.

As all of these scandals created sensational news, concern also mounted about the impact of gambling on the poor. Slowly, the tide of public approval began to turn. The years surrounding the Civil War were marked by the enactment of numerous antilottery statutes. By 1878 , lotteries were prohibited in all states except Louisiana. ${ }^{3}$

The "Louisiana Lottery" was actually a concession granted to a New York gambling syndicate. Reportedly, bribery was used to secure and maintain the concession, and the company was able to market across the nation. As much as 93 percent of the lottery's ticket sales came from outside Louisiana.

Other states turned to the federal government to prevent the Louisiana lottery from violating their borders. In 1890, a new law was passed making it illegal to send lottery materials through the mails. An immediate crackdown at the New Orleans post office shut down the $\$ 11$ million annual out-of-state lottery business. Lottery opposition in Louisiana mounted as well, and in 1893, the Legislature abolished the lottery.

The Louisiana lottery company
then established its own postal delivery system in Florida while moving its headquarters to Honduras. This lasted only a few years as tighter federal commerce laws effectively closed the lottery.

At the dawn of the 20th Century, no states operated lotteries while 36 state constitutions, Texas included, had provisions specifically outlawing them. ${ }^{4}$

## The Lottery Reborn

In the 1930s, some lawmakers saw the lottery as a way to offer dreams to all in a depressionimpoverished America. Lottery bills were introduced in a few states and even in the U.S. Congress, though none succeeded. Lottery bills were still few and far between in 1963, when the nation was surprised to find that conservative New Hampshire legalized a state-run lottery.

In reality, the lottery in New Hampshire was a familiar storyit was chosen as an alternative to higher taxes. At the time, the state had no income tax or sales tax, and provided little aid to local governments for education. As a result, local property taxes were approaching what was perceived to be an onerous level. The revenues from the lottery were to be distributed to local school districts in hopes of holding down property taxes.

New Hampshire's lottery was crude by today's standards. Only two lottery games were to be held each year. Tickets were a costly $\$ 3$. The game was entirely passive in that players could not choose their own "lucky" numbers. Instead, a form with a player's name and address had to be filled out with the purchase of a prenumbered ticket. Only 35 percent of gross revenues was reserved as prize money.

In spite of the fact that almost 80 percent of New Hampshire's
lottery sales were to non residents, lottery revenues fell far below initial expectations. Consequently, the nation's lottery bandwagon was slow to get started.

In 1967, New York became the second state to start a lottery. Learning a lesson from New Hampshire, the New York lottery

In the 1930s, some lawmakers saw the lottery as a way to offer dreams to all in a depression-impoverished America.
featured cheaper tickets (\$1) and more frequent drawings (monthly). New York only reserved 30 percent of its betting pool for prizes, though. As with New Hampshire, the game did not meet initial expectations of popularity.

The true modern lottery was born of innovation in New Jersey in 1970, after intensive market research. New Jersey's game was fast, frequent and cheap. There were no forms to fill out; drawings were held weekly; and tickets were only 50 cents. Even better than New Hampshire and New York, 45 percent of the betting pool was reserved as prize money.

The New Jersey lottery was fabulously successful, netting the state $\$ 30$ million during the first six months of activity. Following the New Jersey lead, Connecticut, Pennsylvania, Massachusetts, Michigan and Maryland soon started their own lotteries.

In the mid-1970s, a series of breakthroughs on the lottery front led to another explosion of revenues.

In 1974, Massachusetts took the lottery a step further by introducing the nation's first "instant"
lottery. Rather than having to wait for the weekly drawing, players could scratch off a latex covering on the ticket and tell instantly whether or not they were a winner. The games had an added attractiveness in that rather than a few big winners, the instant games were structured so that there were many winners of smaller, though still attractive, purses. The instant games were a great success, and many other states soon adopted them as well.

In 1975, New Jersey returned to the forefront of lottery innovation when it established "active" lottery games, in which players could actually select the numbers on which they wished to bet. In 1978, New York took this concept even farther with "lotto"-a longer odds version of numbers betting with huge prize payoffs. Lotto is the most popular type of lottery game today.

But perhaps the most important change the decade brought was in 1975, when a new federal law allowed state lotteries to advertise on prime-time television. By this time, states recognized that the lottery was a commodity to be marketed like any other, and access to television was a major coup. Not only could commercials be telecast, but also the prize drawings themselves.

## Lotteries Today

As of April 1988, 25 states plus the District of Columbia operate lotteries. Two states-Virginia and Wisconsin-are in the process of establishing lotteries. Three states-Indiana, North Dakota and Idaho-are voting on legalizing lotteries this in 1988.

California, the nation's most populous state, also boasts the nation's largest lottery. In 1987, only its second year of operation,
4. Weinstein and Deitch, p. 90.

California's lottery sales topped $\$ 1.6$ billion. New York, Pennsylvania, Illinois, Massachusetts, Ohio, New Jersey and Michigan, all older, more established lotteries, had ticket sales in excess of a billion dollars.
Total nationwide lottery sales were a record $\$ 13$ billion in 1987, a figure which should easily be top- ped in 1988, given the addition of numerous new lotteries (Table 1).
Lotteries are popular in almost
all parts of the world. A total of 107 nations had lotteries as of August 1987, including both Mexico and Canada (Table 2). Lotteries have long been popular in Europe and Asia. Even the Soviet Union and most of the Eastern bloc nations conduct lotteries. Africa is a relative newcomer to the lottery world.

While U.S. lotteries today basically consist of instant games, numbers and lotto, the mix of games varies across the world. For
example, while passive games no longer command much player interest in the U.S., they are still popular in Canada. Canada also awards cash prizes instead of the annuities awarded in the U.S.
Many nations also allow legalized sports betting through the lottery with the game of "toto." In toto, the player predicts the winners of various sporting contests, usually soccer. Unlike other lottery games, toto does involve skill rather than random luck.

TABLE 1. Lotteries in the United States, 1987 (Calendar Year Sales by Type of Game)

| State | Instant (millions) | Numbers (millions) | Lotto (millions) | Other (millions) | Total (millions) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Arizona | \$32.8 | \$0.0 | \$118.8 | \$0.0 | \$151.6 |
| California | 902.9 | 0.0 | 716.4 | 0.0 | 1,619.3 |
| Colorado | 95.6 | 0.0 | 0.0 | 2.9 | 98.4 |
| Connecticut | 76.9 | 167.9 | 273.9 | 0.0 | 518.7 |
| Delaware | 7.1 | 33.7 | 9.2 | 0.0 | 50.0 |
| District of Columbia Florida | 3.7 | 104.7 | 9.0 | 1.9 | 119.2 |
| Illinois | 235.9 | 431.9 | 644.5 | 0.0 | 1,312.3 |
| lowa | 77.8 | 0.0 | 32.5 | 0.0 | 110.3 |
| Kansas | 20.7 | 0.0 | 0.0 | 0.0 | 20.7 |
| Maine | 26.7 | 8.1 | 39.4 | 0.0 | 74.2 |
| Maryland | 69.4 | 546.2 | 163.3 | 0.0 | 778.9 |
| Massachusetts | 430.9 | 399.2 | 406.8 | 33.2 | 1,270.0 |
| Michigan | 117.4 | 499.6 | 394.5 | 0.0 | 1,011.5 |
| Missouri | 114.4 | 14.4 | 29.1 | 0.0 | 157.9 |
| Montana | 15.6 | 0.0 | 0.0 | 0.0 | 15.6 |
| New Hampshire | 29.2 | 6.2 | 30.0 | 0.0 | 65.4 |
| New Jersey | 82.9 | 620.4 | 439.2 | 0.0 | 1,142.4 |
| New York | 76.9 | 653.9 | 738.5 | 71.2 | 1,540.5 |
| Ohio | 197.4 | 483.9 | 522.4 | 0.0 | 1,203.7 |
| Oregon | 56.0 | 7.6 | 64.2 | 0.0 | 127.8 |
| Pennsylvania | 226.6 | 648.4 | 387.9 | 138.1 | 1,401.0 |
| South Dakota | 11.7 | 0.0 | 0.0 | 0.0 | 11.7 |
| Vermont | 18.4 | 1.4 | 12.2 | 0.0 | 31.9 |
| Virginia | N.O. | N.O. | N.O. | N.O. | N.O. |
| Washington | 46.9 | 12.8 | 130.6 | 0.0 | 190.2 |
| West Virginia | 37.1 | 9.6 | 11.7 | 0.4 | 58.7 |
| Wisconsin | N.O. | N.O. | N.O. | N.O. | N.O. |
| Total | \$3,010.7 | \$4,649.7 | \$5,173.9 | \$247.5 | \$13,081.9 |

Source: Gaming \& Wagering Business, selected issues.
Note: N.O. means lottery was not operational in 1987.

## The Lottery Games

There are five basic types of lottery games in use in various states. These include passive, instant, numbers, lotto and video. The games enjoy varying levels of popularity.
The passive game. The passive lottery is one in which the player purchases a ticket with a preprinted number on it. The first New Hampshire lottery game was a passive game.
For the most part, the day of the passive game in this nation may have come and gone. Most lottery states had a passive game at one time or another, only to replace them with today's more visual (instant lottery or video terminals) or active (numbers and lotto) games. Only a few states still provide passive games, some selling tickets through the mail on a subscription basis.
The instant lottery. All state lotteries operating today provide an instant game (Figure 1). The instant ticket usually costs one dollar. Parts of the ticket are covered, usually by several latex patches, which the player scratches off. Winning requires matching several numbers under the patches. Marketing studies have shown that players prefer the matching process rather than just using one latex patch to identify a winning ticket.

The philosophy of the instant ticket games differs from state to state, but generally are designed to maximize the number of winning tickets while still presenting an attractive prize structure. To maintain player interest, the instant ticket game usually has some theme, such as "Holiday Jackpot" at the end of the year.
The instant game is usually the first type of lottery game established in a state because it can be started up very quickly. While today's other games require computer terminals and an on-
line network, the instant game requires only a ticket seller.

Once the computerized network becomes operative and the bigger prize games begin, interest in the instant game usually diminishes.

Numbers. Three-digit and fourdigit games are the most common types of "numbers" games (Figure 2). The player selects a series of one-digit numbers, such as " $3-4$ 7." Winning a "straight bet" where the player selects the correct digits in the correct order, a one-in-a-thousand probability, is generally worth a $\$ 500$ cash prize. A

| FIGURE 1. The Instant Lottery Game |  |  |
| :---: | :---: | :---: |
| How to Play | The player purchases an instant ticket from an authorized lottery agent. All six of the latex playing patches are scratched off to reveal the amounts printed underneath. Matching three of six dollar amounts means the player wins that amount of money. |  |
| Odds and Prizes | Odds and prizes var game. Most instan than other lottery g amounts. The odds achusetts game we | ch different theme of instant ave greater odds of winning offer much smaller prize structure of a recent Massws: |
| Prize | Number of Prizes | Odds |
| \$1,000 | 1,000 | 1:18,144 |
| 100 | 11,052 | 1:1,642 |
| 25 | 53,568 | 1:339 |
| 10 | 120,960 | 1:150 |
| 5 | 302,400 | 1:60 |
| 2 | 1,270,080 | 1:15 |
| 1 | 1,088,640 | 1:17 |
| Free Ticket | 1,814,400 | 1:10 |

TABLE 2. The World's Lotteries (Number Operating in 1987)

| Continent | General | Instant | Lotto | Toto/Soccer Pools |
| :--- | :---: | :---: | :---: | :---: |
| Africa | 27 | 9 | 6 | 8 |
| Asia | 21 | 4 | 5 | 4 |
| Australia | 1 | 1 | 1 | 1 |
| Europe | 19 | 12 | 17 | 21 |
| North America | 11 | 1 | 4 | 4 |
| South America | 107 | $\mathbf{3 2}$ | 38 | 47 |
| Total |  |  |  |  |
| Source: Gaming \& Wagering Business, Vol. 8, Number 8 (August 15, 1987). |  |  |  |  |

lesser payoff may be offered for "boxed bet" tickets, i.e., tickets in which the digits were correct, but the order wrong. There may also be a payoff for a "leader" ticket in which the first digit is correct, or on a "bleeder" ticket in which the last two digits are correct.
Most states operate "fixedodds" numbers games with guaranteed prize amounts for winning tickets. Other states pay off variable prize amounts depending on the pari-mutuel pool. In most states, the three-digit numbers games are daily. Fourdigit numbers games tend to be daily in larger states, weekly in
smaller ones. Generally, a ticket can be purchased which is good for several days of drawings.
Numbers tickets are purchased through an on-line computer terminal. The terminal prints the numbers selected on the ticket, along with the time, date and a vendor identification number. In addition, a unique serial number is printed on the ticket. All of this information is recorded on the lottery's main computer, so it may be used in verifying the winning ticket.
Lotto. Lotto is the nation's most popular lottery game. It is a parimutuel game in which huge

FIGURE 2. The Numbers Lottery Game

How to Play
combination (in the three-digit game, for example, a
number from 0-0.0 to $9-9-9$ ). The player either tells
the lottery agent or fills out a computer betting slip,
which is then read by the agent's terminal. The
number is instantaneously transmitted to the
lottery's main computer and a ticket bearing the
appropriate numbers prints out at the agent's
terminal. Drawings are often televised nightly.

Odds and Prizes $\quad$| The odds of winning vary from state to state |
| :--- |
| depending on lottery policy. Most states used fixed |
| odds with a winner having a one-in $-1,000$ chance of |
| winning a "straight" bet and award a $\$ 500$ prize. |
| Lesser prizes may be awarded tor numbers |
| matching fewer digits. |

FIGURE 3. The "Lotto" Lottery Game

## How to Play

For example, a player selects six numbers from a field of 36. The appropriate numbers are marked on the betting slip, which is then "scanned" by the lottery terminal at the authorized sales agent. The number is recorded on the lottery's main computer, while a ticket with the selected playing number prints out at the agent's terminal. Winners are determined at a preset drawing (which are often weekly or biweekly).

Odds and Prizes

The odds of winning vary from game to game depending on the size of the number field to select from ( 36 in this example) and the number required to be selected (six in this example). Prize amounts are pari-mutuel, with the amount of the award depending on the size of the betting pool. Smaller, fixed dollar prizes are often awarded for matching fewer than six numbers (e.g., five or four out of six).
jackpots may be awarded.
In lotto, the player selects a certain amount of numbers, usually six, from a field of numbers, ranging from one to as high as 48 (Figure 3). The more numbers in the field to choose from, the greater the odds of winning, and usually the greater jackpot. Lesser prizes may be awarded for certain combinations-five out of six correct, four out of six correct, etc.
Lotto drawings are usually held weekly or biweekly, and states use various ways to randomly select the winning numbers. The method used may be as simple as a celebrity pulling random numbers out of a bin, but oftentimes today involves sophisticated machinery that provides visual entertainment as it randomly selects the numbers.

Not all lotto drawings produce jackpot winners. If no one has purchased a ticket with the exact winning number, the jackpot "rolls over" into the next drawing.

The dynamics of the lotto game change as huge jackpots roll over and accumulate. While the odds of winning the jackpot do not change, the potential payoff increases enough to attract huge player interest. For example, players are more interested in a one-in-a-million shot to win ten million dollars than they are in a one-in-a-million chance to win $\$ 500$ thousand. Consequently as the prize purse rolls over, more players are enticed into the game while previous players may buy even more tickets.
Since players pick their own prize numbers, it is possible for several players to have the same number. In such cases, the jackpot prize is split evenly among the winning ticket holders.

While lotto boasts the big dollar prizes, lotteries have come under criticism for misleading advertising. Lotteries generally do not award a million dollar prize check. Instead, they might award an
annuity paying $\$ 50,000$ a year for 20 years-an annuity with a present cash value close to $\$ 400,000$ (depending on current interest rates).
Lotteries defend the practice, arguing that a million dollars is actually awarded regardless of the payment schedule. The practice also allows for more winners, sparking a greater amount of player interest, and ultimately, more revenue for the state. In addition, providing a continuous revenue stream over an extended period of time is less disruptive to the winning individuals' lifestyles.
The video games. Lottery video games, or PALMs (player-activated lottery machines), are thought by some to be the next generation of lottery games, although recent trials do not seem to bear this out. These games resemble arcade video games and are played as such, although for a dollar rather than a quarter or 50 cents. At the end of the game, if the last digits of the players score match a number flashed on the screen, the player is a winner. The machine dispenses a ticket which can be cashed in for the appropriate prize.
No skill is involved in winning a cash prize-higher video game scores do not increase the chance of winning.
Video games are still a controversial subject in the lottery debate. Many lottery states prohibit them because of their similarity, in principle at least, to slot machines. Some of the states that do allow video games have experimented with them with mixed results.

## Administering the Lottery

All of the legal lotteries in the United States are operated by an arm of state government. While states may contract with private companies to operate certain
aspects of their lotteries, such as the on-line ticket system and the manufacture of instant tickets, no state contracts out the full management of the lottery. Mississippi recently considered such a proposal, but it failed to pass the legislature.
The distribution of gross lottery revenues varies from state to state, but generally, prizes account for 45 to 50 percent of the lottery wagering pool (Table 3). Prize structures may vary among the types of games.

Administrative expenses range anywhere from below 10 percent of the pool for some mature, efficient lotteries to over 20 percent for some newly established lotteries.
Remaining revenues after prizes and administration are "profit" retained by the state-on average

40 to 45 percent of the betting pool. Many states dedicate these proceeds for specific purposes. Massachusetts reserves its lottery revenues for local-government aid. Pennsylvania uses the proceeds for senior citizens programs. Michigan, Ohio, New Hampshire, New Jersey and New York reserve the money for education. Arizona, Colorado and Vermont reserve the money for capital construction projects.

The lottery is far from a simple operation. A mature lottery in Texas-i.e., one in operation for more than five years-would likely be a $\$ 1.5$ billion business, costing the state $\$ 225$ million a year to operate. It would add several hundred people to the state payroll (Table 4).

Should the state decide to contract out operation of its com-

TABLE 3. Distribution of Gross Lottery Revenues, 1986

| State | Prizes | Government <br> Revenues | Administrative <br> Expenses |
| :--- | :---: | :---: | :---: |
| New Hampshire | $55.0 \%$ | $32.1 \%$ | $15.3 \%$ |
| New York | 46.0 | 46.0 | 11.4 |
| New Jersey | 50.1 | 42.2 | 9.0 |
| Washington, D.C. | 49.8 | 37.2 | 17.1 |
| Connecticut | 50.8 | 40.0 | 9.7 |
| Massachusetts | 56.4 | 33.7 | 10.4 |
| Michigan | 48.1 | 41.5 | 12.8 |
| Pennsylvania | 49.0 | 41.8 | 9.2 |
| Maryland | 47.0 | 45.0 | 7.9 |
| Illinois | 49.2 | 42.1 | 9.0 |
| Maine | 51.8 | 30.6 | 17.9 |
| Ohio | 47.4 | 39.5 | 12.4 |
| Rhode Island | 47.1 | 37.9 | 16.9 |
| Delaware | 48.2 | 40.8 | 11.4 |
| Vermont | 50.7 | 27.2 | 22.7 |
| Arizona | 45.6 | 30.6 | 19.5 |
| Washington | 45.7 | 39.8 | 14.3 |
| Colorado | 5.0 | 28.8 | 21.0 |
| California | 50.2 | 39.2 | 11.5 |
| lowa | 48.1 | 33.7 | 21.2 |
| Missouri | 46.5 | 39.2 | 15.4 |
| Oregon | 52.3 | 32.2 | 18.8 |
| West Virginia | 46.9 | 40.5 | 11.1 |
| U.S. Average | $49.3 \%$ | $40.5 \%$ | $11.1 \%$ |

Source: Gaming \& Wagering Business, Vol. 8, Number 9 (September 15, 1987).
Note: Lotteries listed in order of year operations began. Totals may not add to 100 because of the use of previous years' accumulated funds or due to amounts retained for future use.

TABLE 4. Cost/Revenue Analysis of a Mature Texas Lottery (Millions of Dollars)

|  | Dollar/Amount | Comments |
| :---: | :---: | :---: |
| TICKET SALES: |  |  |
| Instant Games | \$350.0 | No on-line system required |
| Numbers | 400.0 | Through on-line terminal |
| Loto | 750.0 | Through on-line terminal |
| Gross Revenues | \$1,500.0 |  |
| LESS: |  |  |
| Allocation for Prizes | \$675.0 | 45 percent of the wagering pool |
| Net Gain to State | 600.0 | 40 percent of the wagering pool |
| Remainder for |  |  |
| Administration | 225.0 | 15 percent of the wagering pool |
| Sales Commissions | 90.0 | 6 percent of gross sales |
| Distributor |  |  |
| Commissions/Costs | 8.8 | 2.5 percent of Instant Game |
| Instant Ticket Printing |  |  |
| Costs | 8.8 | 2.5 percent of Instant Game |
| On-Line System | 34.5 | 3 percent of Numbers and Lotto 5,000 on-line terminals |
| Dedicated Computer |  |  |
| Phone Lines | 18.0 | \$300 per month per terminal |
| Advertising | 22.5 | 1.5 percent of ticket sales |
| Building Lease | 2.2 | Secure building, 5 regional offices |
| Salaries | 15.0 | 600 employees @ \$25,000/yr. |
| Other Associated Costs | 25.3 | Labor overhead, furniture, office supplies and other |
| Administrative Costs | \$225.0 | Total costs |
| Source: House Ways and Means Committee. |  |  |
| Note: This is only one possible distribution of the expenses of operating a mature Texas lottery. Policy decisions would, of course, play the major role in determining total administrative expenses and their distribution. |  |  |

TABLE 5. Lottery Agents by Type of Establishment

| Establishment | On-Line <br> Tickets | Off-Line <br> Tickets |
| :--- | :---: | :---: |
| Convenience Stores | $26.3 \%$ |  |
| Grocery Stores | 21.6 | $24.8 \%$ |
| Liquor Stores | 16.1 | 22.5 |
| Restaurants/Taverns | 9.1 | 13.2 |
| Drug/Variety Stores | 8.0 | 8.2 |
| Newsstands | 7.0 | 7.3 |
| Tobacco Shops | 1.8 | 1.3 |
| Other Establishments | 10.2 | 0.4 |
| Total | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{2 2 . 2}$ |

[^127]puterized ticket system and the distribution system, businesses in the state would see the possibility of almost $\$ 100$ million in contracts with the lottery. In addition, stores and other agents licensed to sell lottery tickets would realize almost $\$ 100$ million in commissions.

In short, the lottery is a big business.

Selling tickets through agents. All states license private vendors to sell the lottery tickets. This approach has the advantage of putting ticket sales in areas of high customer traffic. Convenience stores are the most popular lottery ticket outlets (Table 5), followed by groceries, liquor stores and restaurants.

Vendors are allowed to retain a percentage of their ticket sales revenues as a commission. Policies vary among the states, but a five percent commission is average. Some lotteries use up to an additional one percent of the ticket sales for vendor incentive programs. Many states award vendors one percent of the prize amounts for the winning tickets they sell. Other states award vendors bonuses for exceeding a certain quota of ticket sales.

In addition to selling tickets, vendors are generally required to cash in lower-tier winning tickets (e.g., $\$ 500$ or less). Bigger winners would have to fill out verification forms and would be subject to a slight delay in their award, which would come directly from the state lottery offices.

Production/distribution of instant tickets. All states contract with private companies to print and manufacture their instant lottery tickets. While the terms of the contracts vary, roughly 2.5 percent of the ticket price goes for printing costs.

When customers want to buy tickets, they might either notify the clerk of the number combination
they wish to bet on or fill out a computer slip. The number is read into the terminal and a ticket with the playing number is printed out.

The system of distributing instant tickets from the lottery office to the vendors varies among the states. Some states operate their own distribution system, while others contract out part or all of the system. Because Texas is such a geographically diverse state with many widely separated metropolitan areas, distribution costs in Texas could be about 2.5 percent of the value of instant tickets distributed-slightly higher than New York's two percent, for example.
Most large states use private courier systems. Some lottery officials prefer this rather than hiring state employees. Many private courier services have proven track records. In addition, should problems develop requiring disciplinary action, they find it easier to fire a courier service than to go through state employee grievance procedures.
The on-line ticket system. The on-line ticket system is the heart of the modern lottery. It involves connecting thousands of ticketselling terminals across the state to a main computer at the lottery headquarters.
The use of private contractors for the on-line system varies. Most states contract with private companies to setup and maintain the on-line system. The company supplies the main computer system and installs on-line company terminals where the state lottery instructs it to. In return, the company receives a commission on each ticket sold through the system. Commissions vary widely among state lotteries, as there are many factors entering into the contract (e.g., penalties for computer downtime, sales incentives, etc.). Commissions may range from 1.5 percent to
over six percent of the value of tickets sold.

Dedicated phone lines connect the ticket terminal with the main computer. (There is no "dial-up" feature so people cannot call from their home computers.)

Advertising. Advertising is the key to the success of the lottery and is also one of the more controversial issues surrounding it. Lottery proponents point out that successful marketing can mean the difference between a profitable lottery and a hugely successful one. Opponents claim the lottery is a vice and, like alcohol and tobacco, should be subject to media restrictions. A few states do have some restrictions, the most severe being in Missouri, where the lottery may only advertise information about the lottery, but may not advertise in such a way as to induce people to play. Generally, though, lotteries have free reign over their media strategies, their only limitation being the amount of their budgets.

Television is the most popular medium used by U.S. lotteries, followed by radio, print media and billboards (Table 6). Nationwide, lotteries spend about 1.5 percent of their gross revenues on advertising.

Staffing. The number of state
employees needed to run the lottery depends on certain policy decisions in three areas:
(1) whether to contract out the instant ticket distribution system to a private vendor or do it in-house;
(2) whether to contract out the on-line computer system to a private vendor or do it inhouse; and
(3) how intensive an effort the state makes to verify low-tier winning tickets.

Assuming the state contracts out the instant ticket distribution system and the operation of the on-line computer system, but makes a fairly intensive effort to validate low-tier (i.e., under \$500) winning tickets, the Texas lottery could employ, for example, roughly 600 people.

Choosing to operate the online computer system internally could add 50 to 100 people to the state payroll. Based on the experience in other states, if Texas chose to operate the instant ticket distribution system internally, this could add another 250 to 400 employees.

Security. Security is the overwhelming concern of the modern

TABLE 6. Lottery Advertising Strategies (Based on U.S. Lotteries, 1987)

| Media | Percent of Advertising Budget | Estimated Texas Spending (millions) |
| :---: | :---: | :---: |
| Television | 42.6\% | \$9.6 |
| Radio | 13.8 | 3.1 |
| Printed Media | 9.0 | 2.0 |
| Billboards | 2.8 | 0.6 |
| Public Relations | 3.7 | 0.8 |
| Production, Consulting and Other | 28.1 | 6.4 |
| Total | 100.0\% | \$22.5 |
| Source: Gaming \& Wagering Business, Vol. 8, Number 6 (June 15, 1987). |  |  |

lottery. Lotteries operate with the public's confidence, and any scandal that called a lottery into question would destroy years of carefully established good faith with the public. Given the high technological procedures used by modern lotteries, any repeat of the scandals of the early Nineteenth Century is unlikely.
Security begins with the tickets themselves. All lottery tickets have a series of intricate codes printed on them to prevent fraud or alteration.
Instant tickets are specifically designed and constructed to prevent any type of tampering. The ticket normally includes a series of validation codes under the latex patches, that verify both winning and losing tickets. In addition, the ticket contains a separate "VIRN,"-"void if removed number." This is a unique, non-sequential serial number hidden beneath another latex match clearly labeled "Void If Removed." The lottery will not honor the ticket if this patch is removed. The VIRN is used by the lottery to verify larger dollar winning tickets.

Using private companies to manufacture the instant game tickets is another security measure by itself. The manufacturer could know which tickets were winners beforehand, but does not tell the lottery. The lottery knows at which outlets the sets of tickets will be sold, but does not tell the manufacturer.
On-line tickets sold for numbers and lotto games also reflect the security-conscious attitude of the lottery. The on-line ticket contains not only the playing number, but also a unique verification number assigned by the computer, along with the time, date and vendor identification number.
After a drawing, the lottery can turn to the computer to determine how many jackpot winning tickets were sold and exactly where and when they were sold. When the lucky player presents the winning ticket, lottery officials check the verification number to insure the ticket is legitimate.

Because the computer is the key to the security of the lottery, computer locations and lottery headquarters facilities are "secure" buildings with badge entry

TABLE 7. Lottery Participation and Family Income

| Family Income | Percent of Income Group Who Bet | Average Annual Bet | Percent of Income |
| :---: | :---: | :---: | :---: |
| Under \$5,000 | 30.6\% | \$7.48 | 0.30\% |
| \$5,000 to \$10,000 | 45.5 | 16.91 | 0.23 |
| \$10,000 to \$15,000 | 52.5 | 16.84 | 0.13 |
| \$15,000 to \$20,000 | 60.0 | 11.15 | 0.06 |
| \$20,000 to \$30,000 | 57.4 | 14.23 | 0.06 |
| Over \$30,000 | 50.6 | 8.72 | 0.02 |
| All Income Groups | 47.8\% | \$12.43 | 0.08\% |
| Source: Commission on the Review of the National Policy Toward Gambling, Gambling in America (Washington, D.C., 1976); and Daniel B. Suits, "Gambling Taxes: Regressivity and Revenue Potential," National Tax Journal, Vol. XXX, Number 1 (March 1977), pp.19-35. |  |  |  |

systems and around-the-clock guards and surveillance.
Detailed background checks are generally performed, not only on the lottery employees themselves, but also on those who apply for a license to sell lottery tickets. As might be expected, the start-up phase of a lottery can be very labor intensive because of the sheer number of personnel investigations to run.

## The Spirited Lottery Debate

Proponents and opponents of the lottery have strong feelings on the issue. The effort to legalize the lottery in Texas and in other states has been long and hard and has been the focus of some very difficult political battles.
In general, Texas lottery opponents argue that the lottery is a regressive burden that puts the state in the position of preying on the poor. Lottery supporters counter that the lottery is entirely voluntary and that the public favors the establishment of a Texas lottery.
The issue of regressivity. Since a large part of a successful lottery is marketing, there have been countless studies on who purchases lottery tickets. While not all studies agree on all points, most suggest that the lottery is regressive-i.e., the poor spend a greater proportion of their income on the lottery than do the wealthy. For example, Daniel Suits, who has done numerous academic surveys of lottery participation, found that lotteries were twice as regressive as the sales tax.
That does not mean that the poor necessarily participate in extraordinary numbers relative to the rest of the population. It does mean, however, that since they play the lottery and have less income, the lottery may be more burdensome to them. Table 7 illustrates this point.

Complicating the issue of regressivity is the fact that consumer patterns vary among the different lottery games when there is a choice of games presented to the player. Charles T. Clotfeller and Philip J. Cook found that the numbers games tended to be the most regressive, having a particular appeal to the poor. Lotto games in which a large jackpot has accumulated did not appear to be regressive. Overall, though, Clotfeller and Cook concluded that "the incidence of implicit lottery taxation is decidedly regressive. ${ }^{15}$

While regressivity is a troubling issue for policy makers, lottery supporters argue that almost all transactions-taxed or not-are regressive, simply because the wealthy are able to save a greater portion of their income. If a lottery is to be likened to a tax, it might more closely parallel the "sin" taxes on "luxury" items such as alcohol and tobacco-taxes which are most certainly regressive, but which are also extremely popular ways to raise revenue in the eyes of the public.

There are views at the other spectrum of the regressivity issue:

One philosopher reasons that the poor do spend a higher portion of their income on lotteries than do the rich; but they also spend a higher portion on food and less on jewelry and yachts. Since play is voluntary, the randomly distributed prizes will go proportionately more to the group that plays more. Therefore, the lottery is neither progressive nor regressive. ${ }^{6}$

This argument fails, however, to take into account the fact that large numbers of lower income families end up subsidizing the few winners. The incidence is still regressive for those lower income individuals who do not win.

Milton Friedman, Nobel laureate
in economics, offered his thoughts on gambling and the poor in 1948, when he argued that for the poor, the marginal utility of money increases rather than decreases as it does for other groups. The poor have little to lose from gambling, he argued, but a lot to gain if they win big. In such a situation gambling may not be an irrational activity. ${ }^{7}$

> If a lottery is to be likened to a tax, it might most closely parallel the "sin" taxes on "luxury" items such as alcohol and tobacco-taxes which are most certainly regressive, but which are also extrememly popular ways to raise revenue in the eyes of the public.

The state as a gambling concern. Lottery critics also contend that running a lottery puts the state in the position of running a gambling operation to exploit its citizens for profit.

It is difficult to say whether the lottery in the final analysis is really a "for profit" operationeven though it takes in far more than it pays out in winnings. The net revenues are returned to the public in the form of government services.

One alternative to keeping the state out of the gambling business would be to turn the administration of the lottery entirely over to a private business. Given the checkered past of privately operated lotteries, it is unlikely that a privately operated lottery would capture the public confidence the way many state-run
lotteries have.
As for the issue of gambling, lottery supporters stress that the lottery is really more entertainment than anything else. Nonetheless, the lottery is still gambling, and the issue of the state being directly involved in such an operation is a deeply emotional one. People have strong feelings about what their government should and should not do.
The long odds of winning. The odds of winning the lottery are certainly stacked against the player. Lottery opponents point out that a person has a greater chance of getting hit by lightning than winning the lottery grand prize jackpot.
Lotteries generally can control the odds of winning the grand prize and lower-tier prizes. Lottery experience shows, however, that the most popular games are those in which the jackpots are greatest. By necessity, these games are also the ones in which the odds are longest.
The lottery and compulsive gambling. One common argument offered against the lottery is that it may create compulsive gamblers. According to sociologist H. Roy Kaplan, there is anecdotal evidence that suggests that some people will compulsively play the lottery far above any level their livelihood should allow:

From Pennsylvania we hear that a young couple quit their jobs, sold their possessions,
5. Charles T. Clotfeller and Philip J. Cook, "Implicit Taxation in Lottery Finance," Working Paper No. 2246, National Bureau of Economic Research, Inc. (May 1987).
6. Andrew Marc Liebler, "An Analysis of State Lotteries in the United States," Professional Report (Austin: The University of Texas at Austin, 1984).
7. "The Economic Case Against Gambling," Business Week (August 4, 1975).
and invested their money in lottery tickets. For four months they purchased tickets in a losing attempt to beat the lottery. After spending $\$ 14,100$
and losing $\$ 6$ thousand in wages to win $\$ 15$ thousand they decided to channel their energies into more constructive pursuits. In Delaware a middleaged housewife spent thousands in a vain attempt to win the lottery; a similar story has emerged from Toronto, where a bank teller embezzled over \$80 thousand, which she squandered on lottery tickets in an unsuccessful bid to capture a million dollar prize. ${ }^{8}$

Statistical evidence suggests, however, that the lottery is generally unattractive to compulsive gamblers. One noted gambling researcher, Dr. Robert Custer, says that of the thousand compulsive gamblers he had evaluated over several years, only four were addicted to lotteries. ${ }^{9}$
Most research suggests that the lottery does not wet the appetite of compulsive gamblers. Gamblers generally enjoy instant gratification-such as the roll of a die. The big jackpot lottery games usually require the player to wait several days until the drawing to determine a winner. Compulsive gamblers also prefer games in which they can develop a "system" for winning, and the lottery, being a game of pure chance, does not allow for this.
Still, many lotteries are at a crossroads of having to develop
8. H. Roy Kaplan, "The Social and Economic Impact of State Lotteries, The Annals of the American Academy (July 1984).
9. Lone Star Lottery Fact Book.
10. "Combating Flat Sales Among Directors' Goals," Gaming \& Wagering Business, Vol. 9, Number 3 (March 15; 1988).
new games in order to maintain public interest. The video lottery game is one attempt. These new games may move closer to the fastpaced action, risk and excitement that are attractive to compulsive gamblers.

New Jersey has taken a unique step by dedicating $\$ 75$ thousand of its annual lottery proceeds for compulsive gambling studies. This is one way to constantly check the "pulse" of compulsive gamblers relative to the lottery.

Stability/instability of lottery revenues. Lottery revenues can be very volatile, ultimately leveling off or declining as the lottery matures.

Historical experience suggests that there is a natural revenue path lotteries follow. Huge ticket sales the first year center around the instant game. Interest wanes in the instant game over time, and the next revenue surge comes with the introduction of on-line games. The variety of on-line games (threeand four-digit numbers and lotto) maintains the public's interest as they "educate" themselves about the games, but after a few years, interest levels off and sales flatten.

While total lottery revenues nationwide have averaged 27.1 percent growth since 1975, much of this growth is due to the growth in the number of new lottery states. Almost every lottery today which is over five years old has experienced at least one year of declining receipts over the previous year. Perhaps the major issue mature lotteries now face is the slowdown in revenue growth. As Massachusetts lottery director James Hosker has pointed out:

Like any other consumer product, you have to come out with a new and improved product every year or two. The public simply tires of our products. ${ }^{10}$

Virginia has taken a novel
approach to dealing with the revenue volatility issue. Its newly enacted lottery law prohibits appropriations from lottery proceeds until the following fiscal year. This way, rather than budgeting an estimated amount of future proceeds, the state is budgeting a known amount of money already in the treasury. A similar step would be difficult in Texas, given that the state operates on a two-year, rather than one-year, budget cycle.

Lottery supporters argue that while revenue volatility is certainly a drawback, if that were the sole criterion for evaluation of a revenue source, Texas would have to eliminate most of its current taxes. One way that has been suggested for dealing with the revenue stability issue would couple the lottery with the proposed budget stabilization fund. Should the voters approve the proposed constitutional amendment creating a budget stabilization fund in November 1988, a portion of lottery proceeds could eventually be dedicated to the stabilization fund. This could help smooth over much of the potential instability of lottery revenues.
The longer-term concern that lottery revenues may eventually level off is an issue many years away, if ever. In order to prepare for this possibility, legislators and the public should be made aware that the lottery is not the panacea for all of the state's possible revenue woes.

Revenue collection costs compared to taxes. Another argument offered against the lottery is that it is an inefficient way for government to raise money. It costs the state substantially more to raise one dollar of lottery revenue than it does to collect one dollar of taxes. In Texas, it costs the state less than a penny to collect a dollar in taxes, while the
lottery costs as much as 37.5 cents to raise a dollar of revenue for the state.

Lottery supporters counter that this is not a legitimate comparison. The sole purpose of taxation is to raise money. The lottery has two purposes to raise money and to entertain the public. There is a substantial cost in providing that entertainment-i.e., the prize money.

In addition, the lottery is a business, as well as a government operation, so a direct comparison of taxes and lottery revenues is not really valid. If the state wanted to minimize the cost of revenue generation, the state could simply license the lottery to a private vendor, like horse racing, and tax the gross proceeds.

A similar comparison could be offered that the lottery is like a publicly operated utility. It generates revenues, but it costs money to operate. And besides, lottery supporters counter, the money it costs to run a state lottery is money that is poured back into the state economy.

## The lottery and organized

 crime. Lottery opponents express concern that the lottery may attract organized crime--either directly associated with the lottery or by encouraging illegal games outside of the lottery.In 1982, the New Hampshire Attorney General recommended against awarding a lottery contract to one company because of concern that one of the firm's founders (who still maintained ties with the company) had connections with reputed organized crime figures.
There have also been isolated instances in which lottery officials have been accused of favoritism and conflict of interest in the performance of their duties, but evidence does not necessarily
suggest that the lottery is any different in this respect from any other multimillion-dollar enterprise.

Information on suspected direct links to organized crime is anecdotal, so there is little basis for any general statements about ties

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to organized crime. Certainly, there have been attempts to rig or defraud lotteries in the past, but these most often have served to point out just how successful the modern lottery has been at maintaining security.
Even more clouded is the issue of whether the lottery encourages illegal gambling.
Many lottery opponents contend that the lottery creates and educates a new class of gamblers, stimulating growth in illegal gambling activities, since these games may offer better odds than the state-run game.
Some lottery supporters counter that the lottery diminishes illegal gambling by crowding out the competition. Since it is impossible to accurately estimate illegal gambling, the issue remains unsettled.
Lotteries versus horse and dog racing. In one of the odder alliances of our times, many horse and dog racing interests side with those religious and other groups opposed to the lottery.
A recent study prepared by

Thalheimer Research Associates of Lexington, Kentucky, for the Florida Horse Council, suggests that the Florida lottery is draining dollars that otherwise would have gone to horse and dog wagering. Decreases in attendance and in wagering pools were noted at several Florida tracks during the first days and weeks of the lottery. Given that the average household has only a limited amount of discretionary income for pursuits such as entertainment, it is logical to assume that the lottery could drain dollars from other types of pursuitsespecially given the greater visibility and access of the lottery to consumers.
Still, the decline in interest in horse and dog racing in Florida had begun long before the lottery was established. Since 1960, attendance at Florida tracks has fallen by 50 percent, while the amount wagered has fallen by 71 percent. ${ }^{11}$
Some Florida horse racing interests suggest that since they are in competition with the lottery for customers, the state should legalize off-track betting.
The racing industry in many states has come on hard times in recent years. Many are pressuring their legislators to eliminate the tax on their wagering pools-a tax that averages from four to six percent, compared to a 40 to 45 percent equivalent "tax" rate of the lottery. The lottery as a revenue generator. There are many arguments in favor of a Texas lottery, but first and foremost in times of lean revenues is its tremendous revenue potential. A mature lottery in Texas (i.e., one in existence for over five

[^128]years) would probably sell over one and a half million tickets annually, of which $\$ 600$ million would be retained by the state for whatever purpose it desired. For fiscal year 1988, that would amount to just over three percent of the total state revenues and almost 4.4 percent of revenues affecting the state's General Revenue Fund.
Less certain is the amount of tickets that would be sold in the lottery's formative years. The determining factor for sales in the early years of a lottery are more a function of ticket supply constraints-i.e., generally states can sell as many tickets as they can put on the market.
Limiting constraints are the amount of time it takes to establish the initial instant game, the number of ticket vendors that can be licensed, the amount of time it takes to establish the online computer system.
The lottery as a free choice. Lottery supporters argue that no one is forced to play the lottery. If someone has objections to the lottery, he doesn't have to play it.
Lottery opponents argue that the use of drugs is voluntary, but society does not approve of their use. Besides, one may choose not to play the lottery, but that does not mean one will not be continuously exposed to the massive media blitz that accompanies the lottery. They argue that it is necessary for society to control some types of activities.
Public support for a lottery. Recent surveys suggest that the public overwhelmingly supports the lottery. No lottery operating today can survive without widespread public support.
12. Lone Star Lottery Fact Book.
13. Ibid.

Recent polls suggest that twothirds of all Texans support a state lottery. A July 1986 poll by Shipley and Associates indicated that 68 percent of Texas voters favored the adoption of a state lottery. A December 1986 survey by Texas Tech University revealed 67 percent of the public support the lottery. The Dallas Times Herald in a December 1986 poll reported that three-fourths of Dallasites surveyed favored a state lottery. ${ }^{12}$

## Because the Texas

 Constitution prohibits the lottery, establishing the lottery will require a twothirds majority of both the Texas House and Senate, and corresponding voter approval at the polls.Today, over 66 percent of the nation's population lives in a state that operates a lottery. In only one state, North Dakota, have voters ever turned down a lottery.
Texans and participation in other state lotteries. A February 1986 poll found that 20 percent of all Texans have purchased lottery tickets at one time or another. This percentage may increase over time as additional states enter the lottery business. Lottery supporters report that the Canadian lottery sells one million dollars worth of lottery tickets per month to Texans. ${ }^{13}$
The lottery as a job generator. The lottery will create a number of jobs in both the public and private sectors.
As mentioned earlier, the split between the number of public versus private jobs depends on
certain policy decisions. All totalled, however, direct operation of the lottery and the ticket system could create over 1,000 jobs (either public or private), while retail outlets actually selling the lottery tickets might be expected to hire anywhere from 1,000 to 3,000 additional employees.

The overall net employment gain to the state is less certain, though, since lottery sales may dampen purchases of other discretionary items and result in some job cut-backs in other areas. Nonetheless, it is expected that the lottery would be a net job producer overall.
Lottery opponents counter that the lottery is a poor job creator relative to its volume of sales. A typical $\$ 1.5$ billion annual business would normally be expected to generate a greater number of jobs.

## Lottery Debate to Continue

Because the Texas Constitution prohibits the lottery, establishing the lottery will require a two-thirds majority approval of both the Texas House and Senate, and corresponding voter approval at the polls. So far, lottery measures have stalled in the Legislature, most recently in 1987, when the proposal fell 28 votes shy in the House.
But if there is one thing about a Texas lottery that is certain, it is that the debate will continue to rage for years to come. Texas is the nation's largest nonlottery state and is the only one of the nine most populous states without a lottery. That suggests that the tremendous revenue potential will continue to attract the interest of the lottery industry and of some state lawmakers.

## Part VI: The Personal Income Tax

# T he State Personal Income Tax 

Theory, History and Potential Application in Texas

## Summary

In recent years, many arguments have been put forward for adopting a personal income tax in Texas. Most boil down to slight variations on one of three themes: the more equitable distribution of tax burden, the need for more revenue or, less frequently, the desire to redistribute income or wealth.

In reality, the ability of the income tax to accomplish any of these policy goals depends heavily on how it is structured and used within a state tax system. This chapter reviews the development of the income tax as a revenue source and its current use by state and local governments nationally. It also looks at some of the issues surrounding the construction of a Texas personal income tax.
The income tax originated ${ }^{-}$ centuries ago in Europe. It was introduced in the United States during the colonial period. Massachusetts adopted the tax first in the New World in 1643.
The modern income tax in the United States, however, dates from the early 1900s. The federal government adopted the tax in 1913, but by that time, voters in Wisconsin had already approved the tax for use in that state in 1911.
Today, the tax is used in 43 states and the District of Columbia. Of these states, three states have extremely limited taxes on so-called unearned income-meaning dividends
and capital gains.
Six states impose flat-rate taxes, while the others use some form of graduated rate, primarily with rates increasing with increased level of income.

The overwhelming majority of states use a federal income tax starting point to calculate their taxes. Excluding the three with limited income taxes, only six states do not begin with some federal income tax statistic as a starting point. Most often, states have chosen to use federal adjusted gross income as their starting point. States vary widely on the adjustments (exemptions, deductions, credits) they allow against the initial starting point.

Although the idea currently meets with significant public opposition in Texas, the tax has been used early in the state's history. There was an income tax of sorts levied in colonial Texas, and there was a general income tax in effect in the state for a time in the mid1800s. Various income tax proposals have been introduced in the Texas Legislature in modern times but without success.

A Texas income tax would be a significant revenue producer. A tax with "competitive" rates could generate anywhere from $\$ 1.1$ billion to more than $\$ 5$ billion a year on a 1985 estimating base.

By John Wieferman
George W. Douglas and Company, Austin

## Overview of the Personal Income Tax

To the casual observer, the personal income tax may appear straightforward: taxpayers sum their income, exclude business expenses, subtract personal exemptions for family members and then subtract certain allowable deductions. If any money is left over, they multiply the balance by the tax rate and, finally, subtract any allowable credits to arrive at the amount of tax due.
If only it were so simple. Immediately the question arises as to what should be counted as "income." In 1921, R. M. Haig provided a definition that is still cited in the economics literature. Haig defined income as "the increase or accretion in one's power to satisfy his wants in a given period insofar as that power consists of (a) money itself, or (b) anything susceptible of valuation in terms of money." ${ }^{1}$
Although Haig's definition may be elegant to an economist, it is less than instructive for legislators and tax collectors. Should the

[^129]increase in the value of one's house be counted as income, even though one never moves? What about its imputed rental value-or the value of a spouse's homemaking services? What about unrealized capital gains or Social Security retirement income? Looking at it another way, how should we distinguish between intermediates and final consumption? Do we tax all of the cost of a business lunch, none of it or just the second and third martinis? Questions like these have plagued tax writers since the income tax's inception.
In recent years, many arguments have been put forth for adopting a personal income tax in Texas. Most boil down to slight variations on one of three themes: the more equitable distribution of the tax burden, the need for more-generally lots more-tax revenue and the desire to redistribute income or wealth.

The first argument is the most common and, perhaps, the most powerful. The concept of equity has two dimensions-equals should be treated equally (horizontal equity) and unequals should be treated unequally (vertical equity). In theory a graduated income tax with a progressive rate structure satisfies both criteria. Individuals with the same incomes pay the same taxes, and individuals with higher incomes pay higher taxes. Yet problems arise even at this basic level. If one's concept of equity
2. Richard Goode, The Individual Income Tax (Washington, D.C.: The Brookings Institution, 1976), p. 36.
3. Joseph A. Pechman, Federal Tax Policy, Fifth Edition (Washington, D.C.: The Brookings Institution, 1987),
pp. 133-134.
4. Clara Penniman, State Income Taxation (Baltimore: The John Hopkins Press, 1980), p. 29.
holds that taxpayers with higher incomes should simply pay higher taxes, then a progressive rate structure is not needed: a flat (proportional) tax will suffice. However, if vertical equity is extended to imply that tax burdens should increase as a proportion of income as income rises, then a progressive tax is necessary. To many, the income tax is the most efficient means of achieving this goal. According to one noted tax economist, no other tax seems as capable of adjusting the share of tax burden to income level and family size. ${ }^{2}$ Generally speaking, most mainstream economists think that income taxes are fair. For instance, Joseph A. Pechman has written: "The [federal] individual income tax . . is widely regarded as the fairest source of government revenues . . . . Despite [its] deficiencies [it] continues to be the best tax ever devised. ${ }^{\prime 3}$
The equity argument, however, loses weight as tax writers riddle the income tax base with loop-holes-i.e., deductions, exclusions and credits. While such features may be enacted with the best intentions, they ultimately create widely divergent effective tax rates for people with similar incomes, destroying horizontal equity. Moreover, since upper income taxpayers are often better informed and more strategically situated to take advantage of many deductions and credits, they can reduce their effective tax rates to a greater extent than taxpayers in lower brackets. As a consequence, vertical equity may be eroded.
The second major reason for adopting a state income tax is purely pecuniary-to increase state revenues (or to replace existing taxes) and to ensure future revenue growth. As a revenue generator, the progressive income tax performs remarkably well, with one potential drawback: relative instability.

Assuming adequate administration and enforcement, any personal income tax is capable of generating tremendous amounts of revenue as long as the general income level grows at a steady pace. With a perfectly flat income tax, revenues should grow proportionately with income; but with a progressive tax, revenues will accelerate as incomes bump up into higher tax brackets and as more individuals are brought into the tax base when their incomes grow to exceed minimum taxable levels ("bracket creep"). However, just as revenues go up at a faster pace than personal income, they also decline at a faster rate during a recession.

In general, taxable income fluctuates far more with changes in economic activity than any other alternate tax base available to the states-including property values and consumption. And, depending on the number of brackets and rate range, a progressive income tax is more unstable than a flat tax. ${ }^{4}$

During inflation, the progressive income tax generates silent, "unlegislated" tax increases. Thus, purchasing power can fall, yet tax liability increase. The predisposition towards silent tax hikes has some advantages. As long as nominal personal income rises, state legislators can expect steady growth in tax revenues without going through the politically painful process of raising rates. In fact, if inflation and/or economic growth outpace the state's spending needs, legislators are in a better position to push through pet "tax expenditures" in the form of deductions and credits. Alternately, they can assemble "tax reform" packages of rate cuts.

As another advantage, the progressive income tax has an automatic flywheel effect on the economy. The tax works in a
counter-cyclical direction, stabilizing the economy when it heats up too fast and siphoning less off when it goes into a tailspin.

The third major reason for considering a personal income taxincome redistribution-applies more to a national tax structure and the national economy. The question immediately arises as to whether it is possible, let alone appropriate, to attempt to redistribute income within individual states, which are, of course, open economies. At the extreme, it could be argued that such a policy would succeed only in creating a different sort of "leveling": all the "haves" would emigrate to states with more forgiving tax structures, while all of the other states' "have-nots" would emigrate to states featuring redistributionist policies.

Two other arguments in favor of the personal income tax should be mentioned. The first is a variation of the revenue goal; the second invokes the concept of economic efficiency. The first argument is based on the provision in the federal tax code that allows the deduction of state income taxes. A state raising taxes by any means other than an income tax sees more of its citizens' cash disappear to the federal government than would be the case if it had switched to an income tax. Whether this is "good" or "bad" depends, in part, upon one's perception of whether it is better to let Congress or the state legislatures make spending decisions.

Second, it may be argued that the income tax, to the extent that its base captures virtually all economic activity, minimizes distortions in the allocation of resources and activity. This is a fairly controversial position. To most economists, the only tax that does not distort economic decisions is politically unsupportable: an equal levy on each person, regard-
less of income-a head tax. However, even granting for the sake of argument that a broadbased personal income tax might be the second best alternative, a problem still arises in the transition from theory to reality. Over time, legislative actions tend to erode the tax base, putting upward pressure on rates. As the base erodes, the opportunities for shifting income increase; and as rates go up, so does the incentive to shift income. Whatever efficiency was built into the system disappears as more and more decisions turn upon "tax advantages."

The efficiency argument is further undermined to the extent that, even with a proportional tax, the choice between saving/ investment and consumption is distorted; and with a progressive income tax, the existence of increasing marginal tax rates distorts the choice between work and leisure.

## Historical Precedents

The income tax originated in Europe as an emergency measure, levied only to raise war revenue. It can be traced as far back as the Renaissance, when it was adopted by warring north Italian communes. In 1660, following the Restoration, England enacted a temporary income tax to finance the war against France.

During the Reign of Terror, France adopted a progressive tax on the rich; by the Napoleonic period, nearly a third of the national revenue derived from property and income taxes levied on trades and professions. Back across the Channel, England had, by 1820 , accumulated considerable experience with the tax, revisiting it routinely to support its own war efforts. Rates ranged from 0.01 percent to ten percent.

The income tax was grudgingly tolerated in England only to
finance the campaigns against Napoleon, and it would not be going too far to say that it often rivaled Napoleon in unpopularity. Even in these early times, the income tax raised many of the same issues we hear today. Carolyn Webber and Aaron Wildavsky have written:

From the outset, legislators, policymakers, and the public argued over tax preference. Business and agricultural interests raised questions about tax policy, and each group propounded measures favoring its respective interest. If income is taxable, how should income be defined? In computing taxable income, what costs of earning income may legitimately be deducted? Should not earned income, bearing as it does the cost of personal effort, be taxed at a lower rate than inherited income or the return from invested capital? What tax rates and what incidence would yield adequate revenue without penalizing entrepreneurial effort? To yield the highest return to government, at what point in its production should income be taxed? And how might the state raise revenue without burdening its poor? Each time England's income tax of 1778 came up for renewal-in 1802, 1806, and 1812-debate was focused on these issues. ${ }^{5}$

Thus, the tax was riddled with caveats to ensure equity. The English tax exempted incomes below $£ 60$ and taxed income below $£ 150$ at lower rates. Deductions for dependents and work and trade expenses were also
5. Carolyn Webber and Aaron Wildavsky, A History of Taxation in the Western World (New York: Simon and Schuster, 1986), p. 338.
allowed. When the wars ended, Parliament quickly replaced the income taxes with indirect taxes.
The modern, peacetime income tax traces back to 1842 , when England found itself confronting a serious budget deficit and high unemployment. In a rare coalition between the poor and the rising industrialists, Parliament enacted a "temporary" 1.5 percent peacetime income tax. The tax was promoted as a facilitator of free trade, replacing many excises and export/import duties.
A remarkable forerunner to today's supply-side theories, the argument was that, by eliminating tariffs, duties and various indirect taxes while simultaneously reducing the rates on remaining indirect taxes, the
ensuing economic growth would be so great that Parliament would eventually be able to eliminate the income tax as well; and the country's revenue needs could be met from the few indirect taxes that remained.
While the theory of market behavior bore true, the theory of parliamentary behavior did not. With the reduction in tariffs, free trade flourished and so did the economy. But Parliament's fear of deficits and the income tax's huge productive capacity (revenues grew ten to 14 percent annually) made it virtually impossible to give up. As Table 1 shows, England's success with the tax did not go unnoticed; one European country after another followed suit.
The Colonies. Over in the

TABLE 1. Early National Income Taxes

| Country | Year Imposed | Rate |
| :--- | :---: | :---: |
| England | 1842 | $1.5 \%$ |
|  | 1853 | $2.0-2.5$ |
|  | 1863 | $3.0-3.5$ |
|  | 1865 | 1.6 |
|  | 1875 | 1.3 |
|  | 1886 | 3.3 |
|  | 1894 | $1.3-3.3$ |
|  | 1907 | 5.0 |
| Switzerland' | 1910 | $5.5-8.3$ |
| Austria | 1840 | $1.5-6.0$ |
| Italy | 1849 | 5.0 |
| Japan | 1864 | $7.5-15.0$ |
| Germany | 1887 | $1.0-5.5$ |
| New Zealand | 1891 | $0.1-4.0$ |
| Canada' | 1891 | $2.5-5.0$ |
| Holland | 1892 | $1.5-5.0$ |
| Australia | 1892 | $2.0-3.2$ |
| Sweden | 1895 | $1.2-3.0$ |
| Denmark | 1897 | $1.0-4.0$ |
| Cape of Good Hope | 1903 | $1.3-2.5$ |
| Norway | 1904 | $2.5-5.0$ |
| France | 1905 | $2.0-2.5$ |
| United States | 1909 | $3.0-5.5$ |
|  |  | $1862-71$ |
| 1914 | $3.0-10.0 \%$ |  |

[^130]1. Levied at subnational level.

North American colonies, rudimentary forms of the income tax, levied on various trades and occupations, predated even the English war taxes.
The first colonial (and early state) income taxes were levied on income only in a constructive sense. Actually these were faculty taxes: local tax assessors attached specific, fixed values to different occupations and trades, based on estimates of relative "ability" or income. Shipmasters were taxed at the maximum level; carters and artisans at the minimum. Unskilled workers paid no tax.
Table 2 indicates that Massachusetts holds the honor of adopting the New World's first income tax, with a general income or "ability" tax levied in 1634. South Carolina followed in 1701. The faculty assessments were added to the property tax liability, but in practice they produced so little revenue that they gradually died out.
Following the panic of 1837, several states found themselves forced to revisit the income tax in order to replace the federal funds for internal improvements that were withdrawn by the Jackson and Van Buren administrations. Other states were drawn to the tax as a means of relieving some of the tax burden on property by shifting the burden to wage earners and to industrial capital. It had become obvious that major sectors were going untaxed. For example, Virginia's income tax applied a one percent rate on all wage income greater than $\$ 400$ and a 2.5 percent rate on the interest income of notes with a value greater than $\$ 100$. Professionals could opt to pay a fixed fee.

The state income taxes enacted during the mid-1800s proved no more productive than their colonial predecessors. The
problem lay in decentralized and lax administration, evasion and difficulty in reaching certain income. Local property tax assessors were still put in charge of administering the tax; and apparently they could not comprehend the transition from the taxation of tangibles to the taxation of intangibles. ${ }^{6}$
It did not help that the revenues went to the state capital instead of the county treasury. To make collections more difficult, citizens proved less than eager to comply-especially since none of the laws required atsource reporting. The states experimented with many different rate structures and bases, but owing to the administrative problems, none were successful. Most were repealed by 1884.
Texas. Texas's experience with the income tax predates statehood, going as far back as 1829. On May 4, 1829, the government, under the power of Article 97, Attribute 9 of the Constitution of the State of Coahuila and Texas, enacted Decree Number 90 . The new law required every male citizen with a rent, salary or other income to pay a tax equal to three days' income.

In contrast to the state taxes in the U.S., the Texas tax bore administrative teeth. The tax had to be paid in advance and was collected every four months. If an individual refused to reveal his income, it was estimated by the government based on the income experience of three men in the same occupation. Employers had to withhold a portion of wages for tax purposes, and even nonmonetary compensation (such as room and board) was taxed.
Both the 1845 and 1861 constitutions gave the Legislature the power to tax income. On January 13, 1862, the Legislature exercised that power for the first time, with a salary tax of 15 cents on each
$\$ 100$ of income over \$500.
The salary tax was superseded the next year by two taxes: one on the income or receipts from the sale of merchandise and the other on the sale of distilled spirits, fermented liquors and wines. It is interesting that both were called income taxes. They were later extended, in 1864, to the gross receipts of dentists, lawyers and railroad employees.
The Texas income taxes during the Confederacy were closer to occupation taxes and at best could only be called "partial" income taxes. This changed with Reconstruction. Following up on the suggestion of Governor Throckmorton, the Legislature adopted a general, graduated income tax on November 6, 1866. The tax featured graduated rates from one to three percent. The law provided a $\$ 600$ exemption for the head of a family and itemized deductions for real estate losses, taxes, interest, rent and salaries paid.

The tax was easily evaded, largely because of poor administration and broad, liberal exemptions for farmers and ranchers. These included real estate profits, stock dividends, interest income and payments of old debts. Thus, even then the problem of agricultural exemptions, income shifting and tax shelters cropped up. In 1948, Thomas E. McMillan observed: ". . the exemptions were so favorable to farmers and ranchers that there was a great temptation for merchants, lawyers, doctors, and others to engage to some extent in agriculture." ${ }^{7}$

The other problem lay in administration, which was placed entirely in the hands of county tax collectors, who may
6. Penniman, p. 29.
7. Thomas E. McMillan, History of the Movement for a State Income Tax in Texas, Masters Thesis (Austin: The University of Texas at Austin, 1948), p. 11.

| TABLE 2. Early Colonial Faculty Taxes and State Income Taxes |  |
| :--- | :--- |
| Colony or State | Years Enacted/ln Force |
|  |  |
| Massachusetts (general) | 1634 |
| Connecticut | 1650 |
| Rhode Island | 1673 |
| South Carolina (general) | 1701 |
| New Hampshire | 1719 |
| Vermont | 1788 |
| Pennsylvania | $1841-1871$ |
| Maryland | $1842-1850$ |
| Virginia | 1843 |
| Alabama | $1843-1866$ |
| Florida | $1845-1855$ |
| North Carolina | 1849 |
| West Virginia | $1863-1863$ |
| Georgia | $1863-1866$ |
| Texas | $1863-1870$ |
| Louisiana | 1865 |
| Kentucky | $1867-1872$ |
| Delaware | $1869-1872$ |
| Tennessee | 1883 |
| South Carolina | 1897 |
| Hawaii (Territory) | 1901 |
| Oklahoma | 1908 |
| Source: Select Committee on Tax Equity. |  |

have been reluctant to pry too far into their neighbors' affairs. Thus, out of a total of 133 counties in 1867, no incomes were reported at all in 42 and no salaries in 101. Of the 136 counties in 1868 , no incomes were reported in 61 and no salaries in $115 .{ }^{8}$
Early federal experience. At the national level, an income tax had been proposed and debated as early as during the War of 1812, but it was not until the Civil War that Congress passed the first national income tax. When implemented in 1862 , the nation's initial income tax imposed a three percent rate on incomes from $\$ 600$ to $\$ 10$ thousand and a five percent rate on income above $\$ 10,000$. In 1865, Congress raised the upper rate to ten percent on incomes greater than $\$ 5,000$. As an incentive to encourage the purchase of war bonds, a special 1.5 percent rate applied to interest income from government securities.
The tax was riddled with deductions, exclusions and especially beneficial provisions for farmers. Progressivity in the rate structure was driven not so much by equity considerations as by the more basic expedient of raising revenue.
The tax expired at the end of 1872 and was replaced by a system of tariffs and excises. The years thereafter saw at least one income tax bill introduced during virtually every Congressional session. Responding to a severe economic slump and consequent drop in excises and tariffs, Congress returned to the income tax in 1894. In 1897, the Supreme Court ruled the tax unconstitutional, concluding it was a direct tax not levied proportionately
8. Ibid., p. 12.
9. Pollock v. Farmers' Loan and Trust Company, 157 U.S. 429 (1897), 158 U.S. 601 (1897).
among the states. ${ }^{9}$
In 1909, Congress approved a constitutional amendment allowing Congress to "lay and collect taxes on income, from whatever source derived." At the same time, it passed a new corporate income tax to be levied at the rate of one percent on incomes greater than $\$ 5,000$. The corporate tax was quickly found constitutional, and state legislatures scrambled to ratify the individual income tax amendment.
On February 25, 1913, the necessary 36 states had acted, validating the income tax's legality through the 16th Amendment of the Constitution. Within two months, the House Ways and Means Committee reported out a bill. President Wilson signed it into law on October 3, 1913; the $\operatorname{tax}$ was retroactively effective March 1, 1913.
Several states failed to act on the amendment, but only fourConnecticut, Florida, Utah and Rhode Island-rejected it. Unlike most of its predecessors at the state and national levels, this income tax was not adopted to finance a war or as a last resort to cover budget deficits. Rather, it was an outgrowth of the populist movement and the desire to redistribute income.
The state income tax movement. The rapid ratification of the federal income tax was due, in part, to Wisconsin's early success with the tax. Wisconsin's voters, who are credited with adopting the first truly "modern" state income tax, embraced it as a major revenue-generating and redistributive tool in 1911. The vote was 85,696 to 37,729 .
Wisconsin's tax was "modern" because it incorporated three innovations that assured its success:
(1) centralized administrationlocal collectors were selected
under the merit system and placed under the direct control of the State Tax Commission;
(2) "at-source reporting"-the requirement that employers report information on dividends and employee salaries to the State Tax Commission; and
(3) the power to subpoena records and individuals and to attach property and sell it for taxes due. (Withholding was not introduced until World War II.)

One year after Wisconsin's action, Mississippi became the second state to adopt an income tax (1912), followed by Oklahoma (1915), Virginia and Massachusetts (1916), Delaware (1917) and New York (1919). Although Texas was the ninth state among the original 36 to ratify the 16 th Amendment, it was not so quick to revisit the tax at the state level. In fact, it took more than ten years before anyone in the state even proposed the adoption of a Texas income tax.
On January 12, 1923, in the 38th Legislature, Rep. S. A. Bryant (Memphis) introduced House Bill 74 (H.B. 74), calling for a progressive tax on corporate and personal income. The bill responded to Governor Pat M. Neff's budget request, which espoused taxation on the ability to pay principle and cited urgent spending needs for the state's prison, school and highway systems.
Under H.B. 74, wages and salaries would have been taxed at one-quarter percent on the first $\$ 1,000$, with rates graduated up to a maximum of ten percent on income greater than $\$ 10,000$. The bill received an unfavorable report from the House Committee on Revenue and Taxation in February and was never printed.
Later in the same session, Rep.
C. E. Dinkle (Greenville) introduced another income tax bill, to be locally administered, with graduated rates from one to six percent. It, too, received an unfavorable report; but, not to be deterred, Rep. Dinkle reintroduced it in the second special session. This time the bill passed both houses. As amended, the House version coupled the tax directly to the federal income tax, imposing rates equal to 20 percent of the federal rates. The Senate version remained truer to Rep. Dinkle's original bill but called for central administration. The conference committee failed to reach a compromise, and so the bill was lost. During the same special session, Representative Wright Patman introduced another income tax bill-this time with a flat four percent rate. It was killed by an unfavorable report. The third special session saw three more income tax bills. None got out of the House.
For the next 16 years, the idea of a Texas income tax lay dormant, surfacing only occasionally as the topic of editorials. No serious attempts occurred until 1929, when the 41st Legislature, prodded by Governor Moody, entertained four graduated income tax bills during several special sessions. None reached the House floor.
State legislators devised even more income tax proposals and bills in the early 1930s-the prevailing philosophy being that an income tax would be fairer than the existing scheme of ad valorem taxes. Critics argued then, as they do now, that an income tax would stifle economic development. Hard lines were drawn, and while the income tax opponents prevailed, there was a curious sense of inevitability. In 1935, Rep. Charles D. Rutta (Columbus) observed that ". . . the inevitable, whether we like it or
not, is a general sales tax coupled with an income tax." ${ }^{10}$
The Depression only added to the confusion: revenues dried up, and an income tax began to look more attractive as an alternate revenue source. However, the depressed state of the economy made it even harder to argue for the tax. When Miriam A. "Ma" Ferguson was about to be sworn in as governor, her husband, former Governor James Ferguson, observed that while Ma preferred a sales tax, she would approve an income tax, if passed by the Legislature--but that it probably would not do any good, as "nobody has an income."
While Texas debated, other states enacted; by 1929, 18 states had individual and/or corporate income taxes on their books (Table 3). Another 16 (including Washington, D.C.) joined their ranks during the Thirties. Many of the latter states also enacted general sales taxes during the same period.
During the 1930s, states turned to the income tax for several reasons: to levy taxes more in line with ability to pay and introduce progressivity in the tax structure, to reach income (such as from intangibles) that had been escaping the property tax and, especially in the farm states, to equalize the burdens between property and nonproperty holders.
The most compelling reason, however, was the desperate need for more revenue. Many states that had previously gotten by on sales tax revenues had to add the income tax to make up for the drop in revenues brought about by the Depression. Ironically, perhaps, income tax states saw an even greater drop, reflecting the greater volatility of income; and many of them were
forced to adopt sales taxes. By 1939, only 14 of the income tax states had failed to adopt a sales tax.
To illustrate the severity of the problem, federal income tax collections fell from $\$ 1$ billion in 1929 to $\$ 246$ million in 1931, and state income tax collections fell. from $\$ 133$ million in 1929 to $\$ 59$ million in 1933.
In 1937, Maryland became the last state to adopt an income tax in the 1930s. In the years following, West Virginia and South Dakota repealed the tax, and it was not until 1961 that another state would adopt an income tax, when West Virginia reinstâted it. The "lull", was largely due to steady economic growth and a lack of fiscal crises. The sales taxes enacted in the Thirties provided steadily growing revenue streams; minor budget crises could be resolved simply by gradually increasing the rate or expanding the base.
Then, too, there was a sense of federal "preemption." The higher rates and reduced exemptions enacted during the war had dramatically increased the scope of the federal income tax. Between 1939 and 1944, the number of taxable returns had jumped from four million to 42 million, and collections increased from $\$ 1$ billion to $\$ 16$ billion.
Given the magnitude and highly progressive nature of the federal tax, it was easy to argue that state sales taxes, regressive as they were, provided a necessary balance to the federal income tax. Recall that even as late as the 1951-64 period, the bottom federal rate was 20-22 percent, and the top federal rate was $91-92$ percent.
10. McMillan, p. 92.

With increased population pressures and the ensuing drive towards suburbanization in the early 1960s, many states' spending needs began to outpace their revenue streams. The line between income tax states and sales tax states blurred more, as Massachusetts, Minnesota, New York and Wisconsin added a sales tax to their revenue arsenals. (This left only Oregon, Delaware, New Hampshire, Montana and Alaska without a sales tax.)

Concurrently, the five states comprising the heart of the industrial Midwest, long holdouts against the tax, all gave in: Indiana (1963), Michigan (1967), Illinois (1969) and Pennsylvania and Ohio (1971). Nebraska (1967), Maine (1969) and Rhode Island (1971) also adopted a general income tax in this period. New Jersey (1976) was the last state to adopt an individual income tax.

Major Elements of the Personal Income Tax The tax base and federal coupling. The concepts of economic efficiency and equity demand a comprehensive tax base that captures nonmonetary as well as monetary income (see Figure 1). Otherwise, the tax system will favor individuals with nonmonetary income and encourage income shifting to untaxed sources.

Creating a comprehensive tax base, however, is extraordinarily difficult. Few tax collectors have the ability or the resources to measure nonmonetary income, such as imputed rent, homemaker values and unrealized appreciation. Fewer politicians would feel comfortable even entertaining the thought that such items be included in the tax base. For this reason, every income tax state's tax base falls far short of the
theoretical ideal.
Most states start with one of four federal tax bases. In terms of increasing "conformity" with the federal tax system, these are:
(1) gross income,
(2) adjusted gross income (AGI);
(3) taxable income; and
(4) tax liability.

The issue of conformity with federal tax law cuts two ways: the more remote the federal starting point, the greater freedom a state has to expand its base beyond existing federal de-finitions-and the more opportunities it has to pepper the base with loopholes and deductions.
This latter point is especially relevant in those states that rely heavily on the income tax as a primary revenue source, as there will be greater political pressure

TABLE 3. State Income Tax Dates of Adoption

| State | Personal | Corporate | State | Personal | Corporate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hawaii | 1901 | 1901 | New Mexico | 1933 | 1933 |
| Wisconsin | 1911 | 1911 | lowa | 1934 | 1934 |
| Mississippi | 1912 | 1921 | Louisiana | 1934 | 1934 |
| Oklahoma | 1915 | 1931 | California | 1935 | 1929 |
| Massachusetts | 1916 | 1919 | Kentucky | 1936 | 1936 |
| Virginia | 1916 | 1915 | Colorado | 1937 | 1937 |
| Delaware | 1917 | 1957 | Maryland | 1937 | 1937 |
| Missouri | 1917 | 1917 | Alaska (now repealed) | 1949 | 1949 |
| New York | 1919 | 1917 | West Virginia | 1961 | 1967 |
| North Dakota | 1919 | 1919 | Indiana | 1963 | 1963 |
| North Carolina | 1921 | 1921 | Michigan | 1967 | 1967 |
| South Carolina | 1922 | 1922 | Nebraska | 1967 | 1967 |
| New Hampshire | 1923 | 1970 | Connecticut | 1969 | 1915 |
| Arkansas | 1929 | 1929 | Illinois | 1969 | 1969 |
| Georgia | 1929 | 1929 | Maine | 1969 | 1969 |
| Oregon | 1930 | 1929 | Ohio | 1971 | 1971 |
| Idaho | 1931 | 1931 | Pennsylvania | 1971 | 1935 |
| Tennessee | 1931 | 1923 | Rhode Island | 1971 | 1947 |
| Utah | 1931 | 1931 | New Jersey | 1976 | 1958 |
| Vermont | 1931 | 1931 | Florida | - | 1971 |
| Alabama | 1933 | 1933 | Nevada | - | - |
| Arizona | 1933 | 1933 | South Dakota | - | - |
| Kansas | 1933 | 1933 | Texas | - | - |
| Minnesota | 1933 | 1933 | Washington | - | - |
| Montana | 1933 | 1917 | Wyoming | - | - |

for "tax reform" in the sense of increased deductions, credits and exclusions-which have the effect of weakening horizontal equity. ${ }^{11}$
Gross income. Federal gross income captures income from all sources except those that are specifically excluded and, thus, never enter the tax base.
Income sources that are or have been excluded to arrive at "gross" income include:
(1) accident and health insurance proceeds;
(2) bequests and devises;
(3) child support payments;
(4) damages for certain torts;
(5) dividends not exceeding \$100;
(6) employer-provided life insurance;
(7) gains on sale of personal residence by taxpayers over 65 years old;
(8) gifts;
(9) interest on municipal bonds;
(10) life insurance proceeds;
(11) medical care payments under employer-financed plans;
(12) parsonage rental value;
(13) railroad retirement benefits;
(14) scholarships and fellowships;
(15) sickness and injury benefits;
(16) Social Security and disability benefits (partial);
(17) unemployment compensation benefits (partial);
(18) veterans benefits;
(19) welfare payments; and
(20) worker's compensation payments.

Thus, even the concept of gross income starts out with significant erosion. Bringing just a few of the excluded items into the base would permit much lower rates overall.

Currently, no state uses federal gross incomé as its starting point; but two, Massachusetts and New Jersey, use the gross income principle.

Massachusetts starts with federal adjusted gross income (AGI) and builds backward, adding many of the income sources that were excluded in arriving at AGI.
New Jersey uses gross income but does not reference the federal tax return. The overwhelming majority of states avoid using gross income because it fails to allow for intermediates-the costs of creating income. These costs are handled in the calculation of AGI.
Adjusted gross income. Federal AGI equals gross income less certain business deductions. These include:
(1) bad debts;
(2) contributions to self-employed retirement plans;
(3) depreciation;
(4) education costs;
(5) moving expenses;
(6) trade or business expenses of employer;
(7) business losses; and
(8) travel costs (e.g., meals, lodging, transportation).

Other non-business-related expenses that can be deducted in arriving at AGI include payments to Individual Retirement Accounts and Keogh plans and alimony payments.
Thus, in opting to use AGI as a tax base, states forfeit the ability to control for most business deductions and lose income channeled into deferred compensation or retirement programs.

Alimony is excluded as a payment because it is picked up as income; however, in states with sharply progressive rates, there is still a loss to the extent that alimony payers fall in higher tax
brackets than receivers.
Taxable income. Federal
11. Robert Cline, "Personal Income Tax," in Steven Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), pp. 189, 207.


taxable income is the base used for applying the tax rate. It can be defined as AGI minus personal exemption allowances and deductions. Using taxable income as a base couples the state closely to the federal tax system: the only elements remaining under state control are credits to offset tax liability and the rate structure.

Tax liability. Federal tax liability is how much the taxpayer actually pays in taxes. States can use this as a base simply by requiring state residents to apply a fixed percentage (e.g., 20 percent) to their federal tax bill. No increasing rate structure is necessary to ensure progressivity, as that is already embodied in the calculation of federal liability.
This is the "cleanest" tax base for taxpayers, legislators and administrators: taxpayers need only make one calculation off their existing federal tax records, legislators debate only one rate and administrators can monitor compliance to the maximum extent through federal information sharing.
At the same time, though, this base, by virtue of its "degree absolute" coupling to federal tax law, gives the state no independent control over its income tax, leaving it helpless in the face of Congressional changes in (and IRS interpretations of) federal tax law.

When it is considered how often Congress changes the federal tax code, this can be a real problem. Since 1969, the federal tax code has been revised no fewer than ten times, most recently including the Tax Reform Act of 1986.

Following the 1986 Act, 38 states, including the District of Columbia, followed (either voluntarily or by their own initiative) with tax revisions of their own. Only New Jersey, Pennsylvania and North Carolina
left their codes alone.
Exemptions, deductions and credits. Figure 2, which diagrams California's income tax, shows that deductions and credits can be written into the tax code for a wide variety of expenses; their history of use and abuse is as old as the income tax itself.

Deductions and credits serve two purposes. First, income even in its broadest sense is a less than perfect measure of ability to pay. Consider the effects of catastrophic medical bills or losses due to natural disasters. Many would argue that two equal-income families that are all identical in respects, except that one faced medical expenses equal to half its income, would not be "equal" for tax purposes.

To require the family with the medical bills to bear just as heavy a tax as their otherwise identical counterpart would violate the principle against treating unequals equally.

One "solution" wold be to allow the medically burdened family to deduct all or some of its medical costs before arriving at taxable income. Many deductions start out as reasonable attempts to restore equity by redressing similar problems.

Second, tax write-offs can be used as a public policy tool, to encourage or discourage certain economic or social behavior. Here, the possibilities are bound only by legislators' (or lobbyists') imaginations. Sometimes these goals are stated openly (e.g., to encourage or facilitate charitable donations, the installation of solar screens or car-pooling). Sometimes, they are more subtle, obliquely influencing decisions concerning the number of children to raise and whether to marry or cohabit.
The ability to write special provisions-"tax expenditures"into the tax code offers legislators
several advantages unattainable through any other tax system. Sometimes tax expenditures are easier to enact, or work out to be cheaper, than their alternativesdirect subsidies or, at the extreme, creation of a new agency.

On the negative side, such preferences are much less visible than direct subsidies. They also tend to warp the proverbial "playing field." (There is a delicious irony here because it is the rare tax break that is not introduced as an honest attempt to do nothing more than "level" that by now bizarrely contorted playing field.)

The most serious problem with deductions is that they invite misuse and constant pressure for expansion in an ever-widening circle of attempts to redress the inequities that they themselves create.

For example, the deduction for medical expenses encourages voluntary procedures (e.g., cosmetic surgery), turning the original goal of restoring equity on its head. And if a deduction for cosmetic surgery is allowed, why not a deduction for hairpieces?

In practice, even the deductions that are intended to increase equity can produce perverse, regressive effects. That is, in a progressive rate structure deductions provide greater relief to upper income taxpayers because their value increases with the tax rate: a $\$ 1,000$ deduction at the two percent tax bracket is $\$ 20$; at an eight percent bracket, it is worth $\$ 80$, or four times as much.

Two solutions are possible, neither of which is wholly satisfactory. The first is to eliminate itemized deductions entirely, replacing them with a standard deduction. Normally, the "standard deduction" is an option, designed to simplify compliance and administration by approxi-
mating the pretax value of "everyman's" itemized deduction. It also provides an additional break for low income taxpayers, many of whom would fare far worse by itemizing. The problem with this "solution" is that while it solves the proliferation problem, the deduction is still worth more in the upper income brackets.

The second solution is to use credits instead of exemptions. With credits, the benefit will stay constant regardless of income. Credits also can be multiplied by the number of household members to preserve horizontal equity across families of different sizes. Moreover, not only do credits preserve horizontal-as well as vertical-equity, they can be used to counteract other tax burdens.

The problem with credits is that they are no less prone to proliferation than are deductions. In fact, given their deceptively modest "value" (a $\$ 20$ credit seems far more benign than a $\$ 1,000$ deduction), they may be more susceptible to proliferation.

The personal exemption. The personal exemption is used in the federal tax and by all states but Pennsylvania. One of the most politically visible elements of an income tax, the personal exemption provides a poverty floor (exempting from taxation those with the least ability to pay) and provides an easy adjustment for family size, in keeping with ability-to-pay criteria. It shelters a minimum subsistence level for all taxpayers.

Rate structure. The rate structure most often used by the states is graduated, with nominal rates rising progressively with income. As a practical matter, four rate structures are possible, and to make matters more complex, the effective rates-the ones that taxpayers actually have to live withcan pattern far off the intended target, depending on the exclu-
sions, deductions and credits allowed. The four rate structures are:
(1) Progressive-the proportion of income that is taxed increases as income rises;
(2) Proportional or flat-the proportion of income that is taxed remains constant as income rises.
(3) Regressive-the proportion of income that is taxed decreases as income rises; and
(4) Degressive-a fixed amount of income is exempt from taxation and a flat rate applies over all income above the exempt level.

In practice, most nominally "flat" taxes allow for some sort of personal exemption and are thereby degressive. The degressive tax is a hybrid progressive and flat tax. It is in effect mildly progressive: the effective rate increases with income because personal exemptions make up a smaller portion of income as income rises.

To confuse matters further, nominally progressive taxes are often virtually flat over most income levels because the top rate is reached at relatively low income levels. At the same time, the availability of itemized deductions works against the front-loaded progressivity.

Finally, even a nominally progressive rate structure runs the risk of turning regressive at the upper end if taxpayers can deduct federal income tax payments. Like any other deduction, this shrinks the base, requiring a rate increase to raise the same revenue. Unlike most other deductions, this one not only increases with income but increases at a faster pace because of the progressive nature of the federal tax system.

Thus, it tends to reduce a state income tax's progressivity by a percentage approaching the taxpayer's marginal tax rate. ${ }^{12}$
From the above discussion, it should be clear that implementing the appropriate rate structure is difficult, even assuming agreement can be reached as to which structure is "appropriate." Most controversy focuses on the virtues (or lack thereof) of using a graduated rate structure.
Arguments in favor of graduated rates include:
(1) their obvious countercyclical effects;
(2) the social goal of income redistribution (this does not appeal to everyone);
(3) the "benefits" principle that the richer are more dependent on government than the poor (since they have much more to lose in anarchy) and therefore should bear more of the tax burden; and
(4) the common belief that the richer have a greater "ability to pay."

The arguments against a graduated rate structure are equally appealing:
(1) it is too complex and more vulnerable to base erosion;
(2) the incentives to work, save and invest decline at upper income levels in response to the higher marginal rates;
(3) inflation pushes people into higher tax brackets with or without a corresponding increase in purchasing power; and
12. Cline, pp. 191-193.
13. J. R. McCulloch, A Treatise on the Principles and Practical Influence of Taxation and the Funding System (1865; reprinted; London: Scottish Academic Press, 1975), p. 147.
(4) problems in the treatment of married and single taxpayers.

The difficulties encountered in trying to establish a progressive rate structure were apparent even as early as 1865. As Professor J. R. McCulloch observed:

The moment you abandon, in the framing of such taxes, the cardinal principle of exacting from all individuals the same proportion of their income or property, you are at sea without a rudder or compass, and there is no amount of injustice or folly you may not commit. ${ }^{13}$

## Personal Income Tax Revenue in Other States

Since its inception, and especially since 1942 , the federal personal income tax has consistently grown, accounting for an increasingly larger share of total federal tax collections- to the point where it now counts for three-fourths of the federal tax take, excluding Social Security and Medicare taxes.
This trend is depicted in Table 4. State income taxes have also increased as a percent of total tax revenues, but not so quickly nor to such an extent (see Table 5).
The absolute and relative growth of state income taxes is attributable to two factors: more states adopting the tax and economic growth. As with the federal income tax, the dramatic increase in the importance of state income tax began with the advent of higher rates and withholding during World War II. Prior to the war, the income tax's share of total tax revenues, while volatile, still hovered around the ten percent mark.
In 1922, state individual and corporate income taxes accounted for 11 percent of state tax revenues; during the Depression the
share dropped to eight percent, returning to ten percent only as late as 1936. By 1942, however, the share started to climb well beyond historic levels; and by the mid1970s income taxes overtook sales taxes as the most important source of state tax revenue. State income taxes now account for 38 percent of state tax revenues.

The income tax's growth is all the more remarkable because sales taxes, rather than losing share, have also increased as a proportion of state tax revenue collec-tions-albeit at a slower rate. Thus, the income tax has not supplanted the sales tax, it has grown at the expense of other state revenue sources, such as excise and property taxes.
Tables 6 and 7 put the states' increased reliance on the income tax in greater perspective. Table 6 displays the personal income tax at the state level as a percentage of total state tax collections over the period 1939-80. In 1939, when individual income taxes accounted for an average of only 9.9 percent of state tax revenues (in states with income taxes), the tax accounted for ten percent or more of state tax revenues in only five states and more than 25 percent in only one-New York.
By 1950, the income tax still accounted for only 12.9 percent of tax revenues in income tax states, but it accounted for more than ten percent of the tax haul in 18 states, peaking at 29.5 percent in Oregon and New York. By 1970, however, the tax accounted for over ten percent of the taxes collected in 33 states and above 30 percent in ten.
Table 7 takes a closer look at the income tax's revenue share over the more recent period, 1976-86. By 1986, the income tax accounted for over ten percent of tax revenues in 39 of the 40 states with a general income tax and 30 percent or more of tax revenues in 25 states, peaking at 62 percent in

Oregon and 51 percent in New York. The lowest share occurred in New Mexico, at seven percent.

Table 7 also shows the remarkable degree to which the income tax's role has increased since the mid-1970s, averaging a 22.5 percent increase in share relative to total state tax collections. This shift has been extremely broad-based, with only four states showing a decline. Seventeen showed a share increase of 30 percent or more.

The recent ascendancy of the income tax cannot be attributed solely to state legislatures constantly raising rates and/or expanding the base. While rate hikes and base-broadening have not been uncommon in economic downswings, prosperity just as often has ushered in rate cuts and more liberalized exemptions and deductions. The growth in share is attributable to two factors: steady economic growth and "bracket creep."

## Personal Income Tax Features in Other States

Although the personal income
tax is now used as a major revenue source in 43 states and the District of Columbia, it is difficult to compare individual states' taxes given their widely divergent histories and economies.

Of the 43 states, three (New Hampshire, Connecticut and Tennessee) impose limited income taxes-on so-called "unearned" income (e.g., interest, dividends and capital gains). Connecticut

TABLE 4. Federal Income Tax Collections as a Percent of Total Federal Revenue, Selected Years, 1927-86

| Year | Individual Income Tax as <br> $\mathbf{a} \%$ of Total Tax Revenue | Corporate Income Tax as <br> $\mathbf{a} \%$ of Total Tax Revenue |
| :---: | :---: | :---: |
| 1927 | $20.0 \%$ | $28.7 \%$ |
| 1932 | 15.9 | 23.5 |
| 1936 | 13.1 | 14.7 |
| 1942 | 21.7 | 32.0 |
| 1948 | 43.6 | 21.9 |
| 1952 | 46.7 | 35.5 |
| 1957 | 51.0 | 30.3 |
| 1962 | 55.4 | 24.9 |
| 1967 | 53.4 | 29.5 |
| 1972 | 61.6 | 20.9 |
| 1977 | 64.3 | 22.5 |
| 1982 | 73.6 | 12.1 |
| 1985 | 72.8 | 13.5 |
| 1986 (estimated) | 73.9 | 13.4 |

Source: U.S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1970 (Washington, D.C., 1975); U.S. Advisory Commission on Intergovernmental Relations,Significant Features of Fiscal Federalism (Washington, D.C., 1987), Table 27.

TABLE 5. State Tax Revenue, Income Tax Revenue and General Sales Tax Revenue, Selected Years, 1922-85

| Year | Total State Tax Revenue (millions) | Individual Income Tax | Corporate Income Tax | Total Income Taxes | Income Taxes as a $\%$ of State Taxes | General <br> Sales Tax | Sales Tax as a \% of State Taxes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1922 | \$947 | \$43 | \$58 | \$101 | 10.7\% | - | - |
| 1927 | 1,608 | 70 | 92 | 162 | 10.1 | - | - |
| 1932 | 1,890 | 74 | 79 | 153 | 8.1 | \$7 | 0.4\% |
| 1936 | 2,618 | 153 | 113 | 266 | 10.2 | 364 | 13.9 |
| 1942 | 3,903 | 249 | 269 | 518 | 13.3 | 632 | 16.2 |
| 1946 | 4,937 | 389 | 442 | 831 | 16.8 | 899 | 18.2 |
| 1952 | 9,857 | 913 | 838 | 1,851 | 18.8 | 2,229 | 22.6 |
| 1957 | 14,531 | 1,563 | 984 | 2,547 | 17.5 | 3,373 | 23.2 |
| 1962 | 20,561 | 2,728 | 1,308 | 4,036 | 19.6 | 5,111 | 24.9 |
| 1967 | 31,926 | 4,909 | 2,227 | 7.136 | 22.4 | 8,923 | 28.0 |
| 1972 | 59,870 | 12,996 | 4,416 | 17,412 | 29.1 | 17,619 | 29.4 |
| 1977 | 101,085 | 25,493 | 9,174 | 35,667 | 34.3 | 30,896 | 30.6 |
| 1982 | 162,658 | 45,708 | 14,006 | 59,714 | 36.7 | 50,343 | 31.0 |
| 1985 | 214,874 | 63,644 | 17,637 | 81,281 | 37.8 | 69,207 | 32.2 |

did enact a general income tax in 1971 but repealed it later the same year.

Six states (Colorado, Massachusetts, Indiana, Michigan, Illinois and Pennsylvania) impose flat rate taxes, with rates ranging from 2.1 percent (Pennsylvania) to five percent (Colorado and Massachusetts). Four of these states were among the last ten states to enact an income tax, all within the period 1963-71. Colorado became a "flat tax" state in 1987.
Table 8 summarizes the major features of the individual states' income taxes.
Tax base. The overwhelming majority of states use a federal starting point to calculate rates. Excluding the three limited income tax states, only six (Alabama, Arkansas, Mississippi, New Jersey, North Carolina and Pennsylvania) do not use an entry on the federal tax return as a
starting point. Historically, the major structural difference for most of these states has involved their taxation of all capital gains. Given the 1986 federal code changes, even this difference is disappearing.
States choosing to use a federal starting point must decide whether to remain tied to a given code or to automatically adopt all federal changes. As of 1987, 18 states conform to whatever federal code is applicable and automatically adopt federal changes.
The remaining states are frozen to a specific IRS code as enacted at a given date. Those states must update their state codes in order to bring them into conformity with changes in federal law.
Of the 34 states tied to the federal tax code, two virtually "piggyback," using federal tax liability as their base. Vermont's tax is calculated as 25.8 percent of
federal tax liability; Rhode Island's, at 23.46 percent. Until 1987, Nebraska calculated its tax as 19 percent of federal liability; the state switched to a four-bracket, graduated structure, with rates ranging from two to 5.9 percent of federal AGI.

Four states (Idaho, Minnesota, North Dakota and South Carolina) use federal taxable income as their tax base. A trend may be starting toward the adoption of taxable income as a state starting point. North Dakota and Minnesota are the most recent converts. The former switched from tax liability; the latter from AGI.

The 28 remaining states use AGI as their base. In practice, however, most of them follow most of the federal itemized deductions. Thus, with the exception of differing personal deductions or credits, this method is similar to using federal taxable income as a base.

TABLE 6. Personal Income Tax Revenue as a Percent of Total State Tax Revenue, 1939-80

| State | 1939 | 1950 | 1960 | 1970 | 1980 | State | 1939 | 1950 | 1960 | 1970 | 1980 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 2.22\% | 12.35\% | 10.00\% | 12.94\% | 21.36\% | Missouri | 0.00\% | 15.56\% | 17.61\% | 15.79\% | 28.80\% |
| Arizona | 2.43 | 5.58 | 6.06 | 13.70 | 17.07 | Montana | 3.95 | 12.23 | 16.51 | 30.17 | 30.98 |
| Arkansas | 1.22 | 5.11 | 6.18 | 12.11 | 27.28 | Nebraska | 0.00 | 0.00 | 0.00 | 17.01 | 28.8 |
| California | 8.53 | 7.46 | 11.57 | 20.93 | 33.38 | New Hampshire | 5.99 | 5.65 | 3.79 | 3.65 | 3.92 |
| Colorado | 4.34 | 12.62 | 17.94 | 27.46 | 30.94 | New Jersey | 0.00 | 0.00 | 0.00 | 1.32 | 24.48 |
| Connecticut | 0.00 | 0.00 | 0.00 | 0.66 | 5.49 | New Mexico | 1.91 | 3.03 | 5.76 | 13.07 | 5.06 |
| Delaware | 11.10 | 28.70 | 37.29 | 35.00 | 45.72 | New York | 25.44 | 29.48 | 38.57 | 40.98 | 45.45 |
| Georgia | 5.41 | 8.73 | 9.87 | 19.65 | 31.96 | North Carolina | 4.00 | 11.47 | 19.99 | 22.76 | 36.71 |
| Hawaii | 0.00 | 0.00 | 23.17 | 30.85 | 31.19 | North Dakota | 2.45 | 9.43 | 7.89 | 12.64 | 14.35 |
| Idaho | 5.13 | 17.88 | 29.27 | 23.52 | 32.45 | Ohio | 0.00 | 0.00 | 0.00 | 0.00 | 21.81 |
| llinois | 0.00 | 0.00 | 0.00 | 20.06 | 26.87 | Oklahoma | 4.43 | 4.59 | 6.09 | 10.06 | 20.38 |
| Indiana | 0.00 | 0.00 | 0.00 | 21.59 | 20.65 | Oregon | 14.78 | 29.51 | 45.44 | 49.47 | 59.64 |
| lowa | 5.70 | 10.80 | 13.80 | 17.94 | 34.48 | Pennsylvania | 0.00 | 0.00 | 0.00 | 0.00 | 23.09 |
| Kansas | 3.67 | 6.97 | 11.62 | 18.20 | 26.47 | Rhode Island | 0.00 | 0.00 | 0.00 | 8.15 | 27.94 |
| Kentucky | 4.76 | 10.27 | 22.62 | 17.27 | 23.58 | South Carolina | 4.36 | 11.43 | 13.44 | 17.55 | 29.49 |
| Louisiana | 3.34 | 7.79 | 2.76 | 5.72 | 10.32 | South Dakota | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maine | 0.00 | 0.00 | 0.00 | 9.10 | 23.05 | Tennessee | 3.42 | 2.03 | 1.71 | 1.76 | 1.63 |
| Maryland | 1.59 | 13.90 | 24.74 | 38.20 | 39.73 | Utah | 4.43 | 9.43 | 16.17 | 24.38 | 33.77 |
| Massachusetts | 17.67 | 19.06 | 30.89 | 37.17 | 47.36 | Vermont | 5.70 | 14.97 | 26.13 | 32.30 | 31.23 |
| Michigan | 0.00 | 0.00 | 0.00 | 17.71 | 32.22 | Virginia | 4.56 | 16.31 | 26.51 | 29.59 | 40.21 |
| Minnesota | 10.69 | 19.80 | 25.34 | 33.86 | 39.43 | West Virginia | 3.01 | 0.00 | 0.00 | 10.41 | 20.69 |
| Mississippi | 3.16 | 5.13 | 3.93 | 9.09 | 11.95 | Wisconsin | 9.67 | 22.81 | 32.69 | 36.76 | 42.49 |
|  |  |  |  |  |  | Totals | 9.90\% | 12.90\% | 17.15\% | 21.17\% | 27.14\% |

Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections, various years.

Exemptions, deductions and credits. With the exception of Pennsylvania, which employs an extremely broad-based tax, all states with a general income tax allow a personal exemption,
either in the form of a deduction or a credit.

Most states give a deduction for personal exemptions. And, while the federal income tax code gives a straight $\$ 1,900$ de-
duction for each personal exemption, many states are not so generous. Nine still give the old, unindexed federal deductions of $\$ 1,000$ for a single return and $\$ 2,000$ for a joint return, with

TABLE 7. Personal Income Tax Revenue as a Percent of Total State Tax Revenue, 1976-86

| State | 1976 | 1980 | 1982 | 1984 | 1986 | $\begin{gathered} \text { \% Change } \\ \text { 1976-86 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 18.1\% | 21.4\% | 21.9\% | 23.0\% | 25.3\% | 39.8\% |
| Alaska | 24.4 | 7.0 | 0.1 | 0.1 | 0.0 | - |
| Arizona | 16.0 | 17.1 | 23.7 | 20.9 | 22.0 | 37.5 |
| Arkansas | 20.4 | 27.3 | 28.0 | 28.2 | 27.9 | 36.8 |
| California | 27.7 | 33.4 | 34.2 | 36.1 | 36.8 | 32.9 |
| Colorado | 33.2 | 30.9 | 32.4 | 35.8 | 40.8 | 2.9 |
| Connecticut ${ }^{1}$ | 3.9 | 5.5 | 5.8 | 9.0 | 7.8 | 100.0 |
| Delaware | 39.4 | 45.7 | 48.1 | 48.2 | 44.6 | 13.2 |
| Georgia | 24.6 | 32.0 | 36.0 | 37.1 | 39.6 | 61.0 |
| Hawaii | 28.9 | 31.2 | 26.5 | 32.3 | 31.4 | 8.7 |
| Idaho | 30.0 | 32.5 | 38.0 | 33.1 | 34.4 | 14.7 |
| Illinois | 25.4 | 26.9 | 29.9 | 34.0 | 27.0 | 6.3 |
| Indiana | 21.2 | 20.7 | 24.4 | 30.0 | 29.8 | 40.6 |
| lowa | 32.4 | 34.5 | 36.1 | 35.2 | 35.2 | 8.6 |
| Kansas | 22.7 | 26.5 | 31.9 | 31.7 | 30.5 | 34.4 |
| Kentucky | 20.8 | 23.6 | 24.1 | 25.4 | 25.5 | 22.6 |
| Louisiana | 7.1 | 10.3 | 7.0 | 13.0 | 12.6 | 77.5 |
| Maine | 9.8 | 23.0 | 28.7 | 28.5 | 30.6 | 212.2 |
| Maryland | 40.3 | 39.7 | 42.4 | 40.7 | 41.3 | 2.5 |
| Massachusetts | 44.6 | 47.4 | 48.3 | 47.8 | 47.2 | 5.8 |
| Michigan | 30.0 | 32.2 | 33.7 | 39.5 | 34.9 | 16.3 |
| Minnesota | 38.3 | 39.4 | 40.8 | 45.6 | 39.8 | 3.9 |
| Mississippi | 12.0 | 11.9 | 11.5 | 14.9 | 14.2 | 18.3 |
| Missouri | 24.6 | 28.8 | 32.9 | 29.6 | 30.9 | 25.6 |
| Montana | 35.1 | 31.0 | 27.2 | 29.2 | 27.9 | -20.5 |
| Nebraska | 21.6 | 28.9 | 26.3 | 28.5 | 31.4 | 45.4 |
| New Hampshire ${ }^{1}$ | 3.4 | 3.9 | 4.6 | 5.3 | 5.1 | 50.0 |
| New Jersey | 4.4 | 24.5 | 23.4 | 24.8 | 24.6 | $0.4{ }^{2}$ |
| New Mexico | 10.1 | 5.1 | 1.3 | 5.4 | 7.0 | -30.7 |
| New York | 40.4 | 45.4 | 52.0 | 49.8 | 50.9 | 26.0 |
| North Carolina | 29.4 | 36.7 | 38.2 | 38.5 | 39.6 | 34.7 |
| North Dakota | 20.4 | 14.3 | 6.6 | 10.8 | 11.9 | -41.7 |
| Ohio | 15.5 | 21.8 | 21.4 | 31.1 | 30.6 | 97.4 |
| Oklahoma | 20.1 | 20.4 | 23.6 | 24.7 | 23.2 | 15.4 |
| Oregon | 57.2 | 59.6 | 62.4 | 65.8 | 61.8 | 8.0 |
| Pennsylvania | 20.7 | 23.1 | 24.3 | 26.4 | 24.9 | 20.3 |
| Rhode Island | 24.0 | 27.9 | 31.9 | 35.2 | 32.4 | 35.0 |
| South Carolina | 23.4 | 29.5 | 32.8 | 33.4 | 31.4 | 34.2 |
| Tennessee ${ }^{\text { }}$ | 17.1 | 6.0 | 2.1 | 2.2 | 2.1 | 23.5 |
| Utah | 29.6 | 33.8 | 34.8 | 32.3 | 33.1 | 11.8 |
| Vermont | 28.7 | 31.2 | 33.9 | 32.0 | 32.1 | 11.8 |
| Virginia | 33.7 | 40.2 | 44.7 | 43.3 | 44.9 | 33.2 |
| West Virginia | 16.9 | 20.7 | 20.8 | 23.0 | 25.9 | 53.3 |
| Wisconsin | 39.6 | 42.5 | 42.7 | 42.6 | 40.8 | 3.0 |
| All States ${ }^{3}$ | 24.0\% | 27.1\% | 28.1\% | 30.0\% | 29.4\% | 22.5\% |
| Source: U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections, various years: |  |  |  |  |  |  |
| 1. No general income tax; percentage reflects share of tax on unearned income. |  |  |  |  |  |  |
| 2. No general income tax in place in 1976; increase measured over 1980-86. |  |  |  |  |  |  |
| 3. States with no income tax of any kind include Alaska, Florida, Nevada, South Dakota, Texas, Washington and Wyoming. |  |  |  |  |  |  |

TABLE 8. Summary of State Personal Income Tax Structures; $1987{ }^{\prime}$ Tax. Year ${ }^{1}$

| State | Rates: | Income Brackets |  | Personal Exemptions |  |  | Size of Standard Deduction |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under | Over | Single | Joint | Dependents | \% | Single: | Joint |
| Elat Rate States: |  |  |  |  |  |  |  |  |  |
| Illinois | 2.5\% |  | at Rate | \$1,000 | \$2,000 | \$1,000: | -- | -- | -- |
| Indiana | 3.2 |  | at Rate | 1,000 | 2;000: | 1,000: | - | -- |  |
| Massachusetts | 5.0 |  | at Rate | 2,200 | 4;400 | 1,000 | -- |  |  |
| Michigan | $4: 6$ |  | at Rate | 1,500 | 3,000: | 1,500 | -- | -- | -- |
| Pennsylvania' | 2.1 |  | at Rate | --- | ... | -- | -- | -- | -- |
| States Using Federal Tax Liability as Tax Base: |  |  |  |  |  |  |  |  |  |
| Rhode Island |  |  |  | 23.46\% of federal income tax liability $25.80 \%$ of federal'income tax liability |  |  |  |  |  |
| Vermont |  |  |  |  |  |  |  |  |  |
| States Using Federal Taxable:Income as Tax. Base: |  |  |  |  |  |  |  |  |  |
| Colorado |  |  |  | 5\% of federal taxable income |  |  |  |  |  |
| Idaho | 2.0-8.2\% | \$1,000 | \$20;000 |  |  | Sam | as feder | al |  |
| Minnesota. | 4.0-9.0 | 3,000 | 6,000 |  |  | Sam | as feder |  |  |
| North Dakota | 2.7-12.0 | 3,000 | 50,000 |  |  | Sam | as feder |  |  |
| South Carolina | 3.0-7.0 | 4,000 | 10,000 |  |  |  | as feder | I |  |
| States Using a Credit for the Personal Exemption. |  |  |  |  |  |  |  |  |  |
| Using Own Tax Base: |  |  |  |  |  |  |  |  |  |
| Arkansas | 1.0-7.0\% | \$3;000 | \$25,000 | \$20 | \$40 | \$20 | 10:0\% | \$1,000 | \$1,000 |
| Using Federal Adjusted Gross Income as Base: |  |  |  |  |  |  |  |  |  |
| California | 1.0-9.3 | 3,650 | 23,950 | $51^{1}$ | 102 | 51 | -- | 1,880 | 3,760 |
| lowa | 0.4-10.0 | 1,000 | 45;000 | 20 | $40^{\circ}$ | 15 | 15:0' | 1,230 | 3,030' |
| Kentucky | 2.0-6:0 | 3,000: | 8,000 | 20 | $40^{\circ}$ | 20 | -- | 650 | 650 |
| Oregon | 5:0-9:0 | 2,000 | 5,000 | 85. | 170 | 85 | 13.0 | 1,800 | 3,000 |
| Wisconsin | 4:9-7.0 | 7,500: | 15,000. | 20 | $40^{\circ}$ | 20 | -- | 5,200 ${ }^{\text {2 }}$ | 7,560 ${ }^{2}$ |

## States Using: a Deduction for the Personal Exemption:

Using Own Tax Base:

| Alabama | 2.0-5:0 | \$500 | \$3,000 | \$1,500: | \$3,000 | \$300 | 20.0\% | \$2,000: | \$4;000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mississippi | 3:0-5.0 | 5,000 | 10,000 | 6,000 | 9,500 | 1,500 | 15:0 | 2,300: | 3,400 |
| New Jersey | 2.0-3.5 | 20;000 | 50,000 | 1,000 | 2,000 | 1,000 | -- | -- | -- |
| North Carolina | 3.0-7.0 | 2,000 | 10,000 | 1,100 | 2,200 | 800 | 10.0 | 550 | 3 |
| Using Federal Adjusted Gross Income'as Base: |  |  |  |  |  |  |  |  |  |
| Arizona | 2.0-8.0 | 1,1.55 | 6,930 | 1,996: | 3,992: | 1,198 | 19:4 | 998 | 1,996 |
| Delaware | 1.0-8:8: | 1,00: | 40,000: | 1,000 | 2,000 | 1,000 | 100 | 1,000 | 1,000 |
| Georgia | 1.0-6.0 | 750 | 7,000 | 1,500 | 3;000 | 1,500 | 15:0 | 2,300 | 3,000 |
| Hawaii | 2.25-10.0 | 1,000 | 20,000 | 1,900 | 3,800 | 1,900 | -- | 1,000 | 1,700 |
| Kansas | 2.0-9.0 | 2,000 | 25,000 | 1,000: | 2,000 | 1,000 | 16:0 | 2,400 | 2,800 |
| Louisiana | 2.0-6.0: | 10,000 | 50,000 | 4,500 | 9;000 | 1,000 | 4. | ${ }^{4}$ | ${ }^{4}$ |
| Maine | 1.0-10.0 | 2,000 | 25,000 | 1,000. | 2,000 | 1,000 | 16.0 | 2,500 | 3;100 |
| Maryland' | 2.0-5.0 | 1,000 | 3;000 | 1,000 | 2,000 | 1,000 | $15.0{ }^{\circ}$ | 2,000 | 4,000 |
| Missouri | 1.5-6.0 | 1,000 | 9,000 | 1,200 | 1,200 | 400 | -- | Same as Federal |  |
| Montana | 2.0-11.0 | 1,300 | 46,400 | 1,060 | 2,120 | 1,060: | 20:0 | 1,990 | 3,980 |
| Nebraska | 2.0-5.9 | 1,800 | 27,000 | 1,000 | 2,200 | 1., 100 | -- | 2,530 | 3,740 |
| New Mexico | 1.8-8.5 | 5,200 | 41,600 | 2,000 | 4,000 | 2,000 | Same as Federal'- |  |  |
| New York | 2.0-8.5 | 1,000 | 14,000 | 900 | 1,800 | 900 | -- | 3,600 | 5,300: |
| Ohio | 0.75-6.9 | 5;000 | 100,000 | 650: | 1,300 | 650 | -- | 3,600 | 5,300 |
| Oklahoma | 0.5-6:0 | 1,000 | 7,500 | 1,000 | 2,000 | 1,000 | 15 | 2,000 | 2,000 |
| Utah | 2.75-7.75 | 750 | 3,750 | 750 | 1,500 | 750 | 15 | 1,000 | 2,000 |
| Virginia | 2:0-5.75 | 3,000 | 14,000 | 700 | 1,400: | 700 | 15 | 2,000 | 4;000 |
| West Virginia: | 3.0-6.5 | 10,000 | 60,000 | 2;000 | 4,000 | 2,000 | 5 | , | 5 |
| Washington, D.C. | 6.0-10.0 | 10,000 | 20;000 | 885 | 1,770 | 885 | -- | 2,000 | 2,000 |

[^131]| Income Tax Deducted? | Tax as \% of Income | Tax Per Capita: |
| :---: | :---: | :---: |
| no | 1.6\% | \$225 |
| no | 1.9 | 234 |
| no. | 3:8 | 543 |
| no. | 2.6 | 335 |
| no | 1.7 | 218: |
| no | 2.1\% | \$291 |
| no | 2.5 | 271 |
| no. | 2.0\% | \$28.1 |
| no | 2.3 | 257 |
| no | 3.3 | 533 |
| yes | 0.9 | 11.1 |
| no | 2.6 | 254 |
| no. | 2.1\% | \$200 |
| no | 2.7 | 408 |
| yes. | 2.4 | 286 |
| yes | 2.0 | 208 |
| yes | 3.5 | 488' |
| no. | 3.6 | 421 |
| yes | 1.8\% | \$177 |
| no. | 1.1 | 99 |
| no | 1.5 | 256 |
| no | 3.0 | 324 |
| yes | 1.7 | 191 |
| no | 4.4 | 588 |
| no | 2.6 | 288 |
| no | 3.2 | 407 |
| yes | 1.7 | 246 |
| yes. | 0.9 | 118 |
| no. | 2.4 | 255 |
| no | 2.8 | 403 |
| yes | 1.7 | 210 |
| yes | 1.9 | 219 |
| no | 1.7 | 199 |
| no | 0.6 | 59 |
| no | 4.1 | 585 |
| no | 2.0 | 259 |
| yes | 1.7 | 220 |
| yes | 2.6 | 262 |
| no | 2.6 | 341 |
| no | 2.4 | 260 |
| no | - | - |

thousand for each dependent; five give less.
At the other extreme, West Virginia and New Mexico give \$2,000/\$4,000 personal exemptions; and two other statesLouisiana and Mississippi-are so generous as to give upwards of \$9,000 on a joint return (Louisiana, however, includes its standard deduction in with its personal exemption). In contrast to the federal tax returns, six states give dependents lower exemptions.

Six states (Arkansas, California, Iowa, Kentucky, Oregon and Wisconsin) grant personal exemptions not through deductions but through tax credits. Since the credits are applied to a base much smaller than AGI, their magnitudes are much smaller. Three states give a $\$ 20 / \$ 40$ credit for single/joint filers; the other two, California and Oregon, give $\$ 51 /$ $\$ 102$ and $\$ 85 / \$ 170$, respectively. The values of tax credits vary with income.
Six states permit no standard deductions whatsoever. These include the five flat tax states plus New Jersey, whose rate structure is severely compressed, spanning only 1.5 percentage points. Sixteen states allow the standard deduction to be calculated as a percent of AGI. The percentage rates vary from ten to 20 per-cent-with caps varying from $\$ 550$ (North Carolina) to $\$ 2,500$ (Maine) for single filers and from $\$ 1,000$ (Delaware) to $\$ 4,000$ (Maryland and Virginia) for married filers.
Eight states allow a flat deduction, varying from $\$ 650 / \$ 650$ (Kentucky) to \$3,600/\$5,300 (New York). Wisconsin's nominal standard deduction is $\$ 5,200$ / $\$ 7,560$, but in application this is reduced as income rises. For taxpayers whose AGI exceeds $\$ 50,830$, the deduction is completely phased out.

Rate structure. As discussed above; six states employ a flat rate structure and two others apply a fixed percentage to federal tax liability; in effect giving them the same rate structure as embodied in the federal code. The remaining; ${ }^{3}$ states plus the District of Columbia employ their own graduated rate structures, with the number of brackets ranging from three (Alabama, Washington, D:C., Louisiana, Mississippi, New Jersey and Oregon) to 14 (Delaware), with the highest minimum rate at six percent (Washington, D.C.) and the highest maximum rate at 12 : percent (North Dakota):

In many states, the highest tax bracket is reached at relatively low income levels. For example, the highest bracket is $\$ 10,000$ or less in 12 states. In each, the top tax rate is nine percent or below.

Nonincome tax states. The states that have managed to get by without an individual income tax exhibit few similarities. Alaska abandoned its personal income tax only when the surfeit of oil severance taxes left the state treasury with a bulging revenue surplus. The state still maintains its corporate income tax, however. Florida, too, has a corporate income tax.

About the only thing that the five states without any sort of income tax-Texas, Wyoming, Washington, South Dakota and Nevadashare in common is that they fall in the last half of the alphabet and lie west of the Mississippi. TwoSouth Dakota and Washingtonhave had an income tax in the past: South Dakota in 1935 and Washington in 1936. South Dakota repealed its tax in 1943; Washington's tax was held unconstitutional in state court.
Today, only two states are commonly perceived to face a constitutional ban on a general income tax-Wyoming and Florida. Wyoming's constitution specifies that any state income tax
would have to allow for a full deduction for sales and property taxes paid, and Florida's constitution limits individual liability to the deductions taken on the federal income tax.

How do these states manage to survive without an income tax? Three states, Florida, Washington and South Dakota, use an extremely broad sales tax. Washington and Florida also still levy property taxes. Three othersTexas, Alaska and Wyomingrely on severance taxes. Nevada, of course, has gambling revenues.

## Revenue Effects of a Texas Personal Income Tax

As shown in Table 9, adoption of a personal income tax in Texas with "competitive" rates could generate-prior to netting out administrative costs-as little as $\$ 1.1$ billion (at one percent of taxable income) or as much as $\$ 5.2$ billion (at 20 percent of tax liability). At the time this report was written (June 1988) the latest IRS data that were publicly available were for the 1985 tax year. As a consequence, this analysis assumes 1985 federal tax code rates, exemptions, deductions, credits and so forth. Five hypothetical alternatives are explored.

In October, 1988 the IRS, pursuant to a Committee request, conducted special computer data runs allowing revenues estimates for a state income tax based on the
new federal tax code for the years 1992 through 1995. These are provided in an appendix to this chapter.

## A flat income tax on AGI.

Taxing AGI without allowing any personal deductions approximates Pennsylvania's tax base, which some regard as the least progressive among all states. Since Pennsylvania does exempt retirement income and unemployment benefits, taxing total AGI would be even less progressive.

Applying a flat tax rate to the AGI base with absolutely no deductions, credits or exemptions would imply no poverty floor, no zero-bracket and no equity across different sized families. Levied at a 2.5 percent rate, the tax would generate $\$ 4.2$ billion. Each single percentage rate increment would generate $\$ 1.7$ billion.

The family of 15 with a total income of $\$ 10,000$ would pay the same tax- $\$ 250$-as would a single person with the same income. Under this tax regime, virtually everyone filing a tax return would enjoy the privilege of bearing part of the tax burden. The only exceptions would be those filers demonstrating net losses or deficits.

Such a tax has the advantages of an extremely broad base (even more so now that AGI includes all capital gains), simplicity and conformity. It provides maximum revenues, while spreading the tax

TABLE 9. Potential Revenue from Alternate Texas Income Taxes and Rates, 1985 (Millions of Dollars)

| Base | Rate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1\% | 2.5\% | 5\% | 6\% | 20\% | 25\% |
| Adjusted Gross Income (AGI) | \$1,666 | \$4,164 | \$8,329 |  |  |  |
| AGl Less Personal Exemptions | 1,492 | 3,729 | 7,459 |  |  |  |
| Taxable Income | 1,135 | 2,837 | 5,674 |  |  |  |
| Tax Liability |  |  | 1,295 |  | \$5,181 | \$6,477 |
| Dividends and Interest |  |  |  | \$303 |  |  |

Source: Select Committee on Tax Equity.
exclusion on interest and the current federal exclusion on dividends) would generate $\$ 303$ million. This is roughly half the amount raised by the alcoholic beverage tax, which also had the effect of discouraging the activity being taxed.

Table 10 presents a breakdown of the distribution of taxpayers across 12 income groups, as measured by AGI. The table performs two functions. First, it displays the total universe of potential tax filers-those who would be required to file a return, whether or not they owed any taxes. The distribution of potential tax filers is displayed in the first column by income bracket.

Second, the table compares the distribution of two potential bases of taxpayers: those who would be liable under a broadbased flat tax on AGI (again, the first column) and those who would be liable under a less comprehensive tax base, such as taxable income or tax liability (the second column). The most striking differences occur at the lower income levels. For example, the bottom bracket is roughly four times greater in relative size under the broadbased tax.

Table 11 shows the proportion of tax burden that would be carried by each income group under three different types of income tax:
(1) a flat tax on AGI with no personal exemptions, credits or deductions;
(2) a mildly progressive single rate tax on taxable income with only the earned income credit; and
(3) a fully progressive tax calculated as a simple percentage of federal tax liability.

The figures in Table 11 suggest
how the tax burdens shift away from the lower and middle income groups as progressivity increases.

Few people would argue that Texas could implement a full scale income tax without some form of tax relief-for example, reducing the state sales tax or reimbursing local property taxes. Tables 12 and 13 are constructed to show, by way of example, how three different income taxes, each designed to raise $\$ 4.1$ billion (roughly the same amount as the state sales tax in 1985), would affect individual taxpayers across different income groups. These taxes are: a 2.5 percent tax on AGI, as above; a 3.65 percent tax on federal taxable income, as above; and a 16 percent tax on federal tax liability, as above.

Table 13 shows that the flat tax on AGI would, by including more payers (and by its higher rate at the lower income levels), spread the tax burden more "evenly" across income groups. Thus, it would result in a lower average
tax burden overall-approximately $\$ 623$ per payer. Taxpayers in the $\$ 20,000-25,000$ bracket would have on average $\$ 21$ withheld from their paycheck every two weeks, while taxpayers in the $\$ 100,000-200,000$ bracket would lose approximately $\$ 126$.
The differences become more pronounced with more progressive tax structures. First, the average tax per payer increases to $\$ 756$ because of the built-in poverty floor created by the personal exemptions and standard deductions. Thus, at the lowest income bracket- $\$ 0-5,000-$ approximately three-fourths of the tax filers escape any tax burden; 26 percent escape at the next lowest bracket- $\$ 5,000$ to \$10,000.

Second, while the taxpayer in the $\$ 20,000$ to $\$ 25,000$ income bracket would face virtually the same pay cut under the mildly progressive 3.65 percent tax on taxable income, that payer would fare much better under the 16 percent tax on tax liability, losing

TABLE 10. Distribution of Texas Taxpayers by Income Tax Brackets, 1985

| Income Bracket | \% Liable, Flat Tax ${ }^{1}$, <br> (\% Filing, Graduated Tax) | \% Liable, <br> Graduated Tax |
| :--- | :---: | :---: |
| $\$ 0-5,000$ | $15.6 \%$ | $4.0 \%$ |
| $5-10,000$ | 16.4 | 14.4 |
| $10-15,000$ | 13.2 | 15.1 |
| $15-20,000$ | 10.8 | 12.9 |
| $20-25,000$ | 8.5 | 10.3 |
| $25-30,000$ | 7.5 | 9.2 |
| $30-50,000$ | 8.4 | 22.4 |
| $50-100,000$ | 8.0 | 9.8 |
| $100-200,000$ | 1.1 | 1.4 |
| $200-500,000$ | 0.4 | 0.5 |
| $500-1,000,000$ | N.A. | N.A. |
| Over $1,000,000$ | 0.1 | 0.1 |
| Total | $\mathbf{1 0 0 . 0 \%}$ | $-100.0 \%$ |

Source: Internal Revenue Service, Statistics of Income.

1. Broad-based flat tax on AGI, no personal, itemized or standard deductions; single rate schedule for all fliers. Assumes all individuals filing a return would have a tax liability.
2. Graduated, progressive tax on taxable income or federal tax liability. Assumes all federal exemptions and deductions. Assumes that not all filing taxpayers would have a tax liability.

TABLE 11. Distribution of Tax Burdens by Texas Income Tax Base, 1985

| Income Bracket | Texas Income Tax Base |  |  |
| :---: | :---: | :---: | :---: |
|  | AGI ${ }^{1}$ | Taxable Income ${ }^{2}$ | Tax Liability ${ }^{3}$ |
| \$0-5,000 | 10.1\% | 0:2\% | 10.1\% |
| 15-10;000 | $5: 0$ | 2.7 | 1.3 |
| 10-15;000 | 6.6 | 5.3 | 2:9 |
| 15-20,000 | 76 | 7.1 | 44 |
| 20-25,000 | 6.8 | $16: 6$ | 4.4 |
| 25-30,000 | 8.4 | 8.5 | 6:0 |
| 30-50;000 | 28.5 | 29.4 | :23.8 |
| 50-100;000 | 20.7 | 21.9 | 23.5 |
| 100-200,000 | 5.9 | 6.4 | 9.4 |
| 200-500;000 | 4.4 | 48 | $8: 9$ |
| 500-1;000;000 | 2:0 | 2.3 | 4:6 |
| Over 1,000,000 | 4.1 | 4.9 | 10.4 |
| Total | 100.0\% | 100:0\% | 100.0\% |

Source: Select Committee on Tax:Equity, calculated from Internal Revenue Service, Statistics of ilncome.

1. AGI: Assumes flat rate imposed on AGI;.no personal,, itemized or standard deductions; single rate schedule for all filers. Assumes allindividuals: filing a return would have a tax.liability.
This tax has the:largest number of itaxpayers in its:base.
2. Taxable Income: Assumes aftatrate applied to federal taxable income,makingtax mildy progressive.
3. TaxiLiability: Assumes one rate applied to federal taxable'income, making tax highly progressive.

TABLE 12. Distribution of Taxes Due by Income Brackets Under Various
Texas iPersonal Income'Taxes, 1985

| Income Bracket | Texas Income Tax, Amounts Due |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 2.5 \% \text { of } \\ \text { AGII } \end{gathered}$ | $3.65 \%$ of Taxable Income ${ }^{2}$ | $\begin{gathered} 36 \% \cdot \text { of } \\ \text { Tax Liability }{ }^{3} \end{gathered}$ |
| \$0-5,0004 | \$4 | \$34 | \$17 |
| 5-10,000 | 188 | 137 | 166 |
| 10-15;000 | 310 | :264 | 145 |
| 15-20;000 | 619 | 415 | 257 |
| :20-25;000 | 554 | 545 | . 363 |
| 25-30;000 | 1687 | 699 | 493 |
| :30-50,000 | 9.56 | 1988 | 800 |
| 50-100,000 | 1,599 | 1,686 | 18811 |
| 100-200:000 | 3,276 | 3,546 | 5,213 |
| 200-500;000 | 7,329 | 7;968 | 14,786 |
| 500-1;000;000 | 16,656 | 19,091 | 38;212 |
| Over 1,000;000 | [56,908 | 67.878 | 144,180 |
| Average | \$623 | \$756 | \$757 |

Source: : Select Committee on Tax Equity, calculated from Internal iRevenue
:Service, Statistics of Income.

1. AGI: Assumes flatrate imposed on/AGl:no;personal, itemized or:standard deductions; single trate 'schedule :lor all: filers. Assumes all: individuals'filing a a return would have a ataxiliability. This tax has the largest number of taxpayers: inits:base.
2. Taxable:Income: Assumes a aflatrate appliedito federal taxable income, making:tax mildy progressive.
3. Tax:Liability: /Assumes a s single rate applied to federal taxable income, making tax thighly fprogressive.
4. Figures for this bracketican be misleading; bracket includes returns:showing:a:netideficit:AGI.
only $\$ 14$ every two weeks-or about $\$ 363$. However, it is still not clear that households in this income group would be better off under an income tax than under the sales tax; it is unlikely that many would have paid more than $\$ 300$ in state sales taxes in 1985.

At the other end of the income scale, filers in the $\$ 100,000-200,000$ income category would face proportionately larger tax bites in their pay envelopes under the more progressive taxes-approximately $\$ 136$ and $\$ 200$ every two weeks. Obviously, only the most of dedicated shoppers in this incomegroup would not be made worse off under an income tax.

Table 13 calculates effective tax rates for the same three tax regimes, by income tax bracket. The table shows, of course, that the flat tax is just that-flat throughout-while the 3.65 percent levy on taxable income is mildly progressive, with effective rates rising steadily from 1.75 to 2.95 percent as income increases. With the more progressive 20 percent tax on federal tax liability; the effective rates rise much more steeply, from 0.88 to 6.3 percent.

Interestingly, an analysis of how two potential Texas income tax bases have behaved over time suggests that neither a flat nor a progressive tax would be any more-or any less-stable than the state's existing revenue collections.

This is underscored by the fact that annual percentage changes in Texans' federal AGI, Texans' federal tax liability, Texas sales tax collections and Texas total tax revenues over the period 1976-86 track fairly close together.

## Personal Income Tax Trends and Issues

Who should be taxed-the individual or the family? The choice of the proper taxing unitindividual or family-presents a
virtually intractable dilemma. One way or the other, it seems, someone's horizontal equity is violated. The question becomes, which is the more appropriate concept: that individuals of equal income be treated equally or that families of equal income be treated equally?
From 1913 through 1948, the federal tax code adhered to the former concept: all taxpayers, married or single, filed under one rate schedule. The Revenue Act of 1948 embodied the latter concept: the family became the taxing unit. The new joint return and rate schedule allowed married filers to "split" their income, treating it as if half were earned by each-even if it were earned by only one member. This, in turn, created two new problems.
First, while families of equal income faced the same marginal rates; individuals did not. Individuals with equal income were no longer taxed equally.

Second, the tax code provided a marriage bonus because singleearner families-the rule rather than the exception in 1948-faced marginal rates that were lower than those that would apply if the one partner's income were taxed :under the single filer rate sched;ule. At higher income:levels (where the top rate reached 91 percent), the pecuniary payoff for getting married could be substantial.

Congress has revisited the "marriage bonus" problem numerous times since 1948, ;with little success. In the years following, the tax code has generated marriage penalties, marriage bonuses and marriage penalties and bonuses at the same time, depending upon how much each spouse earned.

The federal schizophrenia on this issue has left the states in a lurch. Following the federal pattern has obvious auditand
enforcement advantages, given the "tighter fit" between federal and state returns.
Currently, only eight states allow full income splitting under.a joint rate schedule (i.e., brackets are doubled in size). These are: Alabama, Arizona, Idaho, Kansas, Louisiana, Oklahoma, Oregon and Utah. One state, North Carolina, does not permit joint returns at all. The great majority have attempted to deal with the problem through a single rate schedule.

A single rate structure, however, presentsits own problems. That is, a marriage penalty can occur for spouses: whose income falls below the top tax bracket: that spouse's income would be:taxed at a rate equal to or higher than the rate applicable for their higher-income spouse.
Several solutions are possible. Married couples can be given the option of filing combined separate
returns; they may be provided a special rate structure that does not comprehend income splitting; or they may be allowed a special "married couple" deduction. The Federal Tax Reform Act of 1984 eliminated the married couple deduction on federal tax.returns and, by extension, on state returns coupled to the IRS code. Currently, only New York grants this deduction, and even there it will be eliminated for 1988 returns.
Eight states (Arizona, California, Hawaii, Maine, Nebraska, Ohio, Utah and Wisconsin) have joint schedules designed to eliminate any marriage penalty; and 12 (Arkansas, Delaware, Iowa, Kentucky, Maryland, Mississippi, Missouri, Montana, New York, North Carolina, Virginia and Washington, D:C.) allow married individuals to file separately on joint returns. Georgia,Idaho, Kansas, Louisiana, Minnesota,

TABLE 13. Distribution of Effective Tax Rates, by Income Brackets Under Various Texas Personal Income Taxes, 1985

| Income Bracket | Texas Income Tax, Effective Rates |  |  |
| :---: | :---: | :---: | :---: |
|  | $2.5 \%$ of AGI ${ }^{1}$ | $3: 65 \%$ of Taxable Income ${ }^{2}$ | $\begin{gathered} 16 \% \text { of } \\ \text { Tax Liability }{ }^{3} \end{gathered}$ |
| \$0-5,0004 | --\% | -\% | -- \% |
| -5-10;000 | 2.5 | . 1.75 | 0.88 |
| 10-15,000 | 2.5 | 2.15 | 1.18 |
| 15-20,000 | 2.5 | 2.37 | 1.47 |
| :20-25;000 | 2.5 | $2: 48$ | 1.65 |
| 25-30,000 | 2.5 | 2.55 | 118.1 |
| .30-50;000 | 2.5 | 2:59 | 2.09 |
| 50-100,000 | 2.5 | 2.63 | 2.83 |
| 100-200:000 | 2.5 | 2.71 | 3:98 |
| 200-500;000 | $2: 5$ | 2.75 | 5.10 |
| 500-1,000,000 | 2:5 | 2.85 | 5.71 |
| :Over 1;000,000 | 2.5 | 295 | 6.27 |

Source: Select Committee on Tax:Equity, calculated from Internal Revenue Service, Statistics of,/ncome.

1. AGI: Assumes flat rate imposed on. AGl; no, personal, temized or standard deductions; single rate-schedule for all-filers. Assumes all- individuals filing a return would have a tax liability. This tax has the largest number of taxpayers in its base.
2. Taxable:Income: Assumes a flat rate applied to federal taxable, income, making tax mildly progressive.
3. Tax Liability: Assumes one rate applied to federal taxable income, making:tax highly progressive.
4. Lowest bracket is misleading:because it includes returns, having; AGIs showing: a deficit.

New Jersey, New Mexico, North Dakota, Oklahoma, Oregon and West Virginia require twoearner couples to combine their income on a single return.

The married/single filer problem does not occur in the flat tax states. Married or single, everyone pays the same rate on all income.
Simplified rate structures, broader bases and flatter taxes. Most recent converts to the income tax have opted for flat or compressed rate structures. Just as the federal government has lowered rates and the number of tax brackets, so have the states. Thus, New York is phasing in a two-bracket system, reducing its top rate to seven percent; and Minnesota is phasing out its 16 -bracket system (with a top rate of 9.9 percent) to a two-bracket structure with a top rate of eight percent. Those states tied to a federal starting point have, by extension, also seen their bases broadened.
The advantages to tax "simplification" have been widely discussed. First, it appears to be popular with many constituents. Second, it seeks to rid the tax structure of some of its most glaring inequities. Horizontal equity is improved and so is compliance: people are more likely to underreport income, the thought goes, if they perceive others openly avoiding taxes through "unfair" loopholes.
Base broadening does allow lower rates but, in and of itself, does not imply any lessening in progressivity. The argument for fewer brackets and flatter rates appeals more to the concern that top rates have been too "confiscatory," discouraging initiative, saving and investment. As a rule, the price of simplicity is lost equity, and the
price of equity is complexity. The task is to find the right balance.

One means of measuring the change in tax progressivity is to compare tax elasticity over time. Tax elasticity is defined as the percentage increase in tax revenues brought about by a one percent increase in personal income. An elasticity equal to one implies a perfectly proportional tax system, while a figure of two implies that a one percent increase in income will induce a two percent increase in revenue. The higher the number, the more progressive the rate structure.
Table 14 shows a slight, gradual decline in progressivity. Over the period 1977-83, only five states registered an increase in progressivity, while 36 showed a flattening. This has occurred despite inflation and the increase in incomes as more taxpayers have reached the highest income bracket and more have grown out of the zero bracket.
The inflation solution: indexation. A progressive income tax permits increases in either nominal or real income to generate a disproportionate increase in tax liabilities because people's salaries grow into higher tax brackets and more people are brought into the tax base. At the same time, the values fall for any fixed exemptions, deductions and credits. The net effect is a silent tax hike: effective tax rates are increased. As shown in Figure 3, the effect is particularly insidious at lower income levels.

Table 15 displays effective tax rates over the period 1976-86. In 1976, the effective income tax rate was 1.9 percent; by 1986 it had jumped 42 percent-to 2.7 percent across all income tax states. The effective rate went
up in 29 states, with the burden jumping by 50 percent or more in eight states and by 100 percent or more in four. In contrast, the rate stayed constant in five states and decreased in only ten (including Alaska, which repealed the tax several years ago).

This inflation tax can be offset by regularly revisiting the tax code, revising rates and values to bring them into line with changes in inflation. However, this runs the risk of time-lag problems, as well as legislative overkill or underkill.

Indexing the rate structure presents an attractive alternative. Tax brackets and the values of rates, exemptions, deductions and credits are automatically adjusted according to a specified inflation factor (e.g., the consumer price index or CPI). For example, in California, tax brackets and the credits for personal exemptions and the standard deduction are increased five percent in each year that the state's CPI rises. more than three percent.

Eight states (Arizona, California, Iowa, Maine, Montana, Oregon, South Carolina and Wisconsin) now index. The number has actually gone down, as Colorado and Minnesota eliminated indexing when they revised their tax codes following federal tax reform. South Carolina recently repealed indexing for future years.

In contrast to the stabilizing effects of indexing, many state legislatures have felt forced to raise tax rates in response to revenue shortfalls following the 1981-82 recession. Eight states increased rates in 1982 while 16 increased them in 1983. Six of those raising rates in 1983 were among the eight that had raised rates the previous year.

More recently, with the advent of the broadened base brought about by federal tax reform, many of the states using a federal starting point have faced the more agreeable question of how far to cut rates. To date, 13 have opted to keep their windfall, 17 have avoided it by reducing rates or revising their code and five have kept part and returned part.

The treatment of retirement income. An important aspect of the base-broadening debate, the treatment of retirement income, has come under increased scrutiny over the past several years. Given the improvements in life expectancy, the expanding retired population and the indexation of retirement benefits, more retirees are drawing incomes that many would consider "comfortable"-and thus ripe
for tax plucking. Congress took the first step in 1984, amending the income tax code to bring into the base as much as half of the Social Security benefits for
people with a "combined". income (defined as AGI plus one-half of Social Security benefits plus "tax-free" interest income) exceeding $\$ 25,000$ for a

FIGURE 3. Indexed Versus Unindexed Change in Nominal Federal Tax Liability, 1979-84


Source: U.S. Advisory Commission on Intergovernmental Affairs, The Inflation Tax (Washington, D.C., 1980).

TABLE 14. Personal Income Tax Elasticities, 1977 and 1983

| State | 1977 | 1983 | State | 1977 | 1983 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 1.32 | 1.18 | Mississippi | 2.00 | 1.88 |
| Alaska | 1.52 | - | Missouri | 1.69 | 1.49 |
| Arizona | 1.41 | 1.76 | Montana | 1.42 | 1.50 |
| Arkansas | 1.58 | 1.47 | Nebraska | 2.01 | 1.86 |
| California | 2.06 | 2.14 | New Jersey | 1.55 | 1.40 |
| Colorado | 1.57 | 1.47 | New Mexico | 3.80 | 2.43 |
| Delaware | 1.64 | 1.54 | New York | 1.69 | 1.57. |
| Georgia | 1.70 | 1.48 | North Carolina | 1.47 | 1.38 |
| Hawaii | 1.54 | 1.53 | North Dakota | 1.78 | 1.62 |
| Idaho | 1.68 | 1.49 | Ohio | 1.76 | 1.74 |
| Illinois | 1.21 | 1.14 | Oklahoma | 1.98 | 1:78 |
| Indiana | 1.17 | 1.18 | Oregon | 2.05 | 1.67 |
| lowa | 1.47 | 1.43 | Pennsylvania | 1.09 | 1.03 |
| Kansas | 1.56 | 1.52 | Rhode Island | 1.73 | 1.71 |
| Kentucky | 1.43 | 1.26 | South Carolina | 1.73 | 1.50 |
| Louisiana | 2.23 | 2.20 | Utah | 1.37 | 1.20 |
| Maine | 2.03 | 1.81 | Vermont | 2.06 | 1.68 |
| Maryland | 1.33 | 1.23 | Virginia | 1.62 | 1.44 |
| Massachusetts | 1.31 | 1.29 | West Virginia | 1.50 | 1.77 |
| Michigan | 1.44 | 1.32 | Wisconsin | 1.92 | 1.71 |
| Minnesota | 1.85 | 1.82 |  |  |  |
|  |  |  | State Average | 1.69 | 1.57 |
|  |  |  | Federal Income Tax | 1.75 | 1.72 |

[^132]single filer or $\$ 32,000$ for joint filers.
Thirteen states (Colorado, Georgia, Indiana, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, Utah, West Virginia and Wisconsin) follow this pattern. Three more (Rhode Island, South Carolina and Vermont) follow by default because their taxes are based on federal taxable income or tax liability. The remaining states exempt all Social Security benefits from taxation.
In contrast, all but 11 states tax all pension income in excess of employee lifetime contributions. Nine of these states permit varying levels of benefits (ranging from $\$ 2,000$ to $\$ 20,000$ ) to be excluded from state taxable income. In only two states, Illinois and Pennsylvania (otherwise ex-
tremely broad-based), is all pension income excluded from the base.

## The Personal Income Tax and Economic Development

As the world has evolved into a true "global economy," the United States has become increasingly vulnerable to foreign competition, and many states' economies have been severely disrupted.

Industries that were counted upon year in and year out to provide steady revenue and employment growth have lost their markets to lower cost or more technologically sophisticated foreign competitors. Many of those firms that have managed to hang on are now searching out low-cost environments for refuge,
respite and rejuvenation.
Even the most diversified states have become acutely sensitive to maintaining the viability of their existing business base, attracting business relocations and job creation. Rare indeed is the state without an "economic development agency" to tout its hospitable business climate, to advise state officials on how to improve it and to put together inducement "packages" of tax breaks, loans, bonds, bond guarantees, interest subsidies, equity financing and other forms of relocation assistance.

One of the most widely cherished beliefs among state officials, chambers of commerce and reditorial writers is that a state's "tax climate" is of paramount importance to the choice of business location/relocation. Texas's lack

TABLE 15. State Personal Income Tax Effective Rates, 1976 and 1986

| State | 1976 | 1986 | $\begin{gathered} \% \text { Change } \\ \text { 1976-86 } \\ \hline \end{gathered}$ | State | 1976 | 1986 | $\begin{gathered} \text { \% Change } \\ 197.6-86 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 1.3\% | 1:8\% | 38.5\% | Mississippi | 4.1\% | 1.1\% | 0.0\% |
| Alaska | 4.4 | - | - | Missouri | 1.4 | 1.7 | 21.4 |
| Arizona | 1.4 | 1.7 | 21.4 | Montana | 2.4 | 1.9 | -20:8 |
| Arkansas | 1.5 | 2.1 | 40.0 | Nebraska | 4.1 | 1.7 | 54.5 |
| California | 2.1 | 2.7 | 28.6 | New Hampshire | 0.1 | 0.2 | 100.0 |
| Colorado | 2.1 | 2.0 | -4.8 | Now Jersey | 0.2 | 1.5 | $7 .{ }^{12}$ |
| Connecticut | 0.2 | 0.5 | 150.0 | :New Mexico | 1.1 | :0.6 | -45.4 |
| Delaware | 3.6 | 4.4 | 22.2 | New York | 3.3 | .4.1 | 13.9 |
| Georgia | 1.6 | 26 | 62.5 | North Carolina | 2.2 | 3.0 | '36.4 |
| Hawaii | 3.3 | 3.2 | -3:0 | North Dakota | 1.6 | :0.9 | -43:8 |
| Idaho | 2.3 | 2.3 | 0.0 | Ohio | 0.8 | 2:0 | 150.0 |
| Hlinois | 1.6 | $1: 6$ | 0:0 | . Oklahoma | 1.4 | 1.7 | 21.4 |
| Indiana | 1.3 | 1.9 | 46:2 | Oregon | ; $3: 6$ | 3.5 | -2.8 |
| lowa | , 2.2 | 2.4 | 9.1 | Pennsylvania | 1.5 | 1.7 | 13.3 |
| Kansas | 1.4 | 1.7 | 21.4 | Rhode Island | 1.7 | 2.1 | 23.5 |
| Kentucky | 1.8 | 2.0 | 11.1 | South Carolina | 1.9 | 2.6 | 36.8 |
| Louisiana | 0.6 | 0:9 | 50.0 | Tennessee | 0.1 | 0.1 | 0.0 |
| Maine | 110 | 2.4 | 140.0 | Utah | 2.4 | 2.6 | 8.3 |
| Maryland | 30 | 2.8 | -6.7 | Vermont | :2.5 | 2.5 | . 0.0 |
| Massachusetts | 3.4 | 3.8 | 11.8 | Virginia | 2.1 | 2.6 | 23.8 |
| Michigan | 20 | 2.6 | 30.0 | West Virginia | 1.6 | 2.4 | 50.0 |
| Minnesota | :3.7 | 3.3 | -10.8 | Wisconsin | 3.7 | 3:6 | -2.7 |
|  |  |  |  | All States | 1.9\% | . $2.7 \%$ | 42.1\% |

[^133]1. Fiscal year income, tax collections divided by state, personal:income in the preceding calendar year.
2. No general income tax in place in 1976; increase measured over 1980-86.
of corporate and personal income taxes is thus viewed as an obvious and highly important incentive for economic development.
While the logic seems reasonable, it has not gone unchallenged. For example, the deductibility of state income taxes on the federal return repairs at least some of the damage done by state income taxes. This factor, however, has lost some of its weight with the reduction in federal rates.
More important, the long run vitality of California, Massachusetts, New York and North Caro-lina-all high income tax statessuggests that the existence of an income tax may not be as important as we would like to believe. Clara Penniman has noted that "taxes are without doubt important at the margins, but most business decisions appear to be made on the basis of other differences among the states that outweigh taxes. ${ }^{\prime \prime 1} 14$
In a nutshell, the pro-income tax argument holds that large firms weight a state's tax structure relatively low on their lists of decision criteria, secondary to such factors as proximity to markets and supplies, skilled and unskilled labor supply, labor rates and labor productivity. ${ }^{15}$
To some extent, these arguments may have merit, especially for well-run, efficient firms. And, if taxes are so important, the crucial fact may not be their level so much as their stability and predictability. In other words, uncertainty over the state's tax policy may do more harm to its "business climate" than even the most progressive of income taxes.
Moreover, to the extent that location decisions are made by upper and upper-middle management types, their own personal needs and preferences may play an important role in siting decisions. To the extent that
those preferences/needs involve a high quality of life-embracing recreation, transportation, educational and cultural facilities (none of which comes without spending)-the lack of a strong revenue base might easily be viewed not as a benefit but as a drawback.
On the other side, it cannot go

> One of the most widely cherished beliefs among state officials, chambers of commerce and editorial writers is that a state's "tax climate" is of paramount importance to the choice of business location/ relocation.

without comment that the focus on attracting other states' indus-tries-or new satellite plants of established firms-may be wrongheaded to begin with. Today, virtually all new jobs are created by relatively small firms. Over the period 1984-87, start-up firms with 19 or fewer employees created 5.2 million new jobs out of a total of $8: 6$ million; and startup firms with 20 to 99 employees creatd another 3.1 million new jobs. ${ }^{16}$
The job creation role played by small firms has two implications. First, tailoring our tax structure (or granting tax concessions) to attract existing-and in some cases terminally ill-plants into the state may be counterproductive. There is no guarantee that a "forgiving" tax policy will bear fruit; and, eventually, someone is going to have to pay for it (either in terms of forfeited services or
increased tax burdens on other sectors or firms in the state). In other words, such a policy could hurt firms that are much more productive in terms of job creation. What needs to be studied is how the state's tax structurewith and without an income tax-affects small entrepreneurs and the siting of de novo businesses.
In conclusion, if the decision of whether or not Texas should adopt a personal income tax turns on its potential effect on the state's "business climate," it would be wise to consider the types of firms that would provide the best benefits to Texas and Texans in the long run.

To do otherwise and engage in what some might describe as a futile, beggar-thy-neighbor holy war with our sister states runs the risk of either turning Texas into a resthaven for terminally inefficient firms or, at the very best, into a low-cost commercial colony attracting out-of-state firms' satellite plants, but rarely their home offices-in effect turning the Lone Star State into a "banana state."
14. Penniman, p. 12.
15. F. F. Foltman, Business Climate in New York State: Perceptions of Labor and Management Officials (Ithaca, N.Y.: New York State School of Industrial and iLabor Relations, 1976); :District of Columbia Tax Revision Commission, Financing an Urban Government (Washington, D.C.: University of the District of Columbia, 1978); Tamara Kay Kouba, The Personal Income Tax: An Alternative for Raising State Revenues in Texas, Professional 'Report (Austin: The University of Texas at Austin, 1987); Roger Schmenner, "Location Decisions of Large Firms: Implications for Public Policy;'" Commentary (January 1981).

[^134]
## Appendix: Estimated Impact of a Texas Personal Income Tax

Much of the discussion in this chapter has focused on the reve-nue-raising potential of a Texas income tax. This appendix estimates tax collections and effects by income group for the years 1993 through 1995 for a state-administered personal income tax designed to replace local property taxes for public schools.
For estimating purposes, it
was requested that the tax be based on federal Adjusted Gross Income (AGI) with allowances for only two adjustments: applicable federal personal exemptions and the federal standard deduction. It was also assumed that there would be no changes in the federal tax code or in federal rates.
This "Texas-adjusted" AGI Tax Base permits no itemized deductions or other exclusions or credits. A poverty safety-net

TABLE A1. Estimated Texas Personal Income Tax Base and Collections by Tax Year, 1992-93 (Millions of Dollars)

|  | Texas Adjusted <br> TGI Tax Base $^{2}$ | Tax Collections @: |  |
| :---: | :---: | :---: | :---: |
| Tax Year' | 3.25 Percent | 2.92 Percent |  |
| 1992 | $\$ 187,349$ | $\$ 6,089$ | $\$ 5,471$ |
| 1993 | 203,724 | 6,621 | 5,949 |
| 1994 | 218,185 | 7,091 | 6,371 |
| 1995 | 234,484 | 7,621 | 6,847 |

Source: Select Committee on Tax Equity.

1. Tax collections apply to tax year not necessarily the calendar year.
2. Calculated as federal AGI less (1) federal standard deduction and (2) federal personal exemptions. Assumes no other adjustments, exclusions or credits. Assumes no itemized deductions.

TABLE A2. Texas Personal Income Tax Estimates, by Income Group, 1993

| Income Group' | Texas-Adjusted <br> AGI <br> (Millions) | Total <br> Returns $^{\mathbf{2}}$ <br> (Thousands) |
| :---: | :---: | :---: |
| $\$ 0$ | $\$ 0$ <br> $0-5,000$ | $\$, 222$ |
| $5-11,000$ | 5,358 | 915 |
| $11-25,000$ | 27,034 | 1,028 |
| $25-50,000$ | 69,246 | 2,027 |
| $50-75,000$ | 38,708 | 2,262 |
| $75-100,000$ | 18,783 | 903 |
| $100-200,000$ | 16,420 | 298 |
| $200,000+$ | 26,953 | 152 |
| Total | $\$ 203,724$ | 62 |
|  | $\$ 7,700$ |  |

(or "zero-bracket") is provided to some extent by the standard deduction and personal exemptions, currently valued at $\$ 3,000$ for single filers, $\$ 5,000$ for joint filers and $\$ 1,900$ (personal) respectively.
The estimates provided herein are based on data provided in a special projection of income tax items by income class. The projections were conducted by the Office of Tax Analysis, Department of the Treasury at the Committee's request. These data have been supplemented, using historical relationships, with IRS Statistics of Income data and DRI personal income forecasts for Texas.
To get some idea of the magnitude of this tax, the estimates indicate that a state personal income tax set at 3.25 percent of Texas-adjusted federal AGI would permit the repeal of all local property taxes for public education.
The tax would generate about $\$ 6$ billion in 1992, about equal to projected local school property taxes under the . current funding system. By 1995, the tax would generate $\$ 7.6$ billion, $\$ 774$ million dollars greater than the projected local contribution of $\$ 6$ billion dollars in that year under current funding assumptions.
Using 1993 as a representative year, a 3.25 percent tax would imply that the average return would reflect a total tax liability of $\$ 859.87$ (Table A2). The average tax liabilities would vary from an average of $\$ 43.40$ for those returns showing an income of $\$ 5,000$ or less to an average of $\$ 14,128.59$ for those returns showing income greater than $\$ 200,000$. Over 80 percent of all returns would have a monthly liability of $\$ 83$ or less.

# A dministration of State Personal Income Taxes 

## Experience in Other States and Lessons for Texas

## Summary

Administration of a state personal income tax in Texas would be a tremendously complex undertaking. There would be about ten times as many taxpayers as for any tax currently administered by the state.

The crucial period for the tax would be implementation. Most of the personal income taxes in other states have been implemented during times of fiscal crisis, and this has given tax administrators minimal time to prepare for the new task. Some of the time constraints have been alleviated by anticipation of the adoption of the tax by tax administrators.
The technology of tax administration has changed since the last personal income tax was adopted, and Texas would probably want to take advantage of the advances.
The first thing that would need to be handled would be withholding from wages and salaries. This should start as quickly as possible after the effective date of the tax. Employers would have to be notified and educated to comply with the law. State tax administrators would have to be able to account for the amounts withheld for each individual taxpayer and employer. Estimated payments for unearned income would come next and finally the first year's returns. Much of this work would need to be coordi-
nated with the Internal Revenue Service or would be aided by information from it.

A wealth of information concerning implementation of a personal income tax is available from states who have gone through the process. Unfortunately, the most recent state to implement a personal income tax was New Jersey in 1976. It was, however, possible to get firsthand experience from tax administrators in New Jersey, Ohio and Pennsylvania.

The tax is about as expensive to administer as current Texas taxes. The Comptroller estimated that a personal income tax bill introduced in the 1987 session of the Texas Legislature would cost $\$ 133$ million the first year and $\$ 70$ million each subsequent year to administer. However, compared to the revenue raised by the tax, which could be in the range of $\$ 6$ billion per year at a rate of 3.25 percent or less, this represents about 1.5 percent of the revenue raised by the tax.

An alternative to state administration of the tax would be "piggybacking" on the federal income tax. There is a federal law that allows any state to have the IRS collect and administer their tax at no cost to the state. The drawback is that the state tax must conform very closely to the federal tax law. Federal tax policy would become state tax policy.

By Joe H. Thrash<br>Counsel to the Select Committee on Tax Equity

The adoption of a personal income tax in Texas would begin a new chapter in the history of tax administration in the state. While the administration of half a million sales taxpayers, a quarter of a million franchise taxpayers and thousands of others for the dozens of taxes levied by the state has been quite a job to handle, it would instantly be eclipsed if Texas were to adopt a state personal income tax. There are now about 17 million Texans, divided into six million or more households. Of these, probably seven to eight million would be required to file a state income tax return, more than ten times the number of taxpayers under the sales tax.

For this typically unpopular tax to have a chance of being well received by the public, it would have to be implemented in a smooth and orderly process. If a skeptical public were expected to fully and willingly comply, they would have to perceive that the state was ready to receive their taxes and returns and efficiently process them. Any perception of confusion or disorder on the part of the tax administrator could undercut public confidence. The time and expense required to complete the job could have serious implications for the viability of this tax as a revenue
option in a fiscal crisis.
This chapter takes a brief look at what is involved in the implementation and operation of a new state personal income tax. It will attempt to do this with attention to the particular situation in Texas.

## Implementation

Most recent state personal income taxes have been adopted due to a state financial emergency. That circumstance generally does not bode well for a tax administrator getting two or three years of lead time to prepare for the collection of the tax. Table 1 shows the time allowed for implementation for the last eight states to adopt a personal income tax. From this, it is easy to see that the time for the tax administrator to prepare for the collection of the tax is far more likely to be meas-
ured in months rather than years.
Of course, the tax adminis-trator-presumably the Comptroller of Public Accounts in Texaswould not have to wait until legislation was finally adopted to begin planning. By the time the passage of the legislation became a realistic possibility, planning could be well underway. Discussions with officials from the State of New Jersey revealed that they considered the adoption of an income tax to be inevitable at least two years before it became a reality and attempted to react to the probability. However, until the tax was a reality, there were obvious limits on the time and money that could be diverted from normal operations to contingency planning. Additionally, until the actual provisions of the bill were known, many facets of administration could not
be determined.
The shape of tax administration has changed considerably since 1975, when the last new income tax was put into effect. The use of computers was in its infancy. Paper records were stored for years to preserve the taxpayers' histories. The operations were extremely labor-intensive. Now, attention is being paid to automating every possible detail. Envelopes are opened and the contents extracted by machine. Tax forms are read by optical character readers. Virtually all tax information is stored in computers, with on-line access to the information at terminals throughout the country. Microfilming of records, once thought to be the ultimate solution to the problem of storage of millions of tax forms, is now beginning to be replaced by $C D$ -

| TABLE 1. Time for Implementation of Most Recent State Personal Income Taxes |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | $\begin{gathered} \text { Bill } \\ \text { Passed } \end{gathered}$ | Bill Effective | Withholding Began | First Returns Filed | Time Before Action Required | Number of Filers |
| Hinois | 6/30/69 | 8/1/69 | 8/1/69 | 4/15/70 | 31 Days | 4.3 million (1972) <br> 4.7 million (1986): |
| Maine | 6/28/69 | 7/1/69 | 8/4/69 | 4/15/70 | 36 Days | $\begin{aligned} & 340,000(1969) \\ & 512,000(1986) \end{aligned}$ |
| Michigan | 7/20/67 | 10/1/67 | 10/1/67 | 4/15/68 | 73 Days | 3.35 million (1968) <br> 3.73 million (1986) |
| New Jersey | 7/8/76 | 7/1/76 | 8/30/76 | 4/15/77 | 53 Days | 3.2 million (1976) <br> 4.0 million (1987) |
| Nebraska | 4/12/67 | 1/1/68 | 1/1/68 | 4/15/69 | 263 Days | $\begin{aligned} & 566,000(1968) \\ & 686,000(1986) \end{aligned}$ |
| Ohio | 12/20/71 | 1/1/72 | 1/1/72 | 4/15/73 | 11 Days | 3.2 million (1972) <br> 4.2 million (1987) |
| Pennsylvania | $\begin{array}{r} 3 / 4 / 71 \\ 8 / 31 / 71 \end{array}$ | $\begin{aligned} & 1 / 1 / 71 \\ & 6 / 1 / 71 \end{aligned}$ | $\begin{array}{r} 6 / 1 / 71 \\ 10 / 1 / 71 \end{array}$ | $4 / 15 / 72$ | Immediate | 5.29 million (1987) |
| Rhode Island | 2/26/71 | 1/1/71 | 2/26/71 | 4/15/72 | Immediate | 474,000 (1986) |

[^135]ROM (Compact Disc-Read Only Memory), digitally encoded pictures of the documents with better resolution than microfilm. Hard copy of the documents can be printed from any location with a telephone link to the storage facility. And the discs take up even less space than microfilm.
If Texas initiated a personal income tax, it would probably want to take advantage of every piece of available technology. Although it might be expensive in the beginning, it would ultimately pay dividends in maintaining the most efficient, modern system available. Unfortunately, it could also be time consuming to set up, a real problem if the time line for start-up were as short as it has been in other states. This is the type of compromise tax administrators would have to face in implementing a new tax.

## The First Steps

Under optimal conditions, the Legislature would begin a new income tax on the first day of January. This would be useful for several reasons. First, the initial tax year would be a complete year, and there would not be the necessity of calculating partial years of income for businesses and individuals. The wage and earning statements normally prepared at year-end for federal purposes would serve for state purposes as well, presuming the tax bases were the same. Additionally, this would provide the longest period of time from the effective date of the tax until the first returns were due to be filed. Presuming the state returns were due on April 15, this allows 15-1/2 months after the effective date for the operation to prepare for the first filing deadline. Realistically, the first few returns would begin arriving in January, but the deluge would not arrive until April.
The most immediate tax admini-
stration problem would be handling withholding. This would be likely to be remitted on a monthly basis, although quarterly filing is also a possibility. The quantity of revenue involved, however, points toward monthly or even more frequent filing, at

## Under optimal conditions, the Legislature would begin a new income tax on the first day of January.

least for larger taxpayers. Withholding reporting forms, instructions and tables for calculating the amount to be withheld would have to be prepared and distributed on or near the effective date of the tax. Then the tax administrator would have to be prepared to process the filings and deposit the money in the Treasury 15 to 30 days after the end of the first month of the tax. To properly account for the withholding payments, the Comptroller would need to be able to credit the account of the employer who remits the payment and the employee from whose salary it was deducted. The Texas Employment Commission reports that there currently are about 7.8 million Texans working. An account would have to be established for each of them.
In addition to the Comptroller's office being ready to begin withholding, the state's employers would need to be prepared. This would require a public information campaign and massive mailings to current employers. It would also require that state tax administration be prepared to answer the thousands of questions
that would be asked in the first few weeks of the operation.

Another initial step in the implementation of the tax would be coordination with the Internal Revenue Service. Most states with personal income taxes work very closely with the IRS, and Texas would need to establish a working relationship as quickly as possible. The sharing of information from the IRS would be essential to the efficient start-up of the state tax. The first thing the state would need to obtain would be the individual master file for the state. This contains the name, address, Social Security number and some basic income and tax information for every tax filer in the state. This file would be essential for mailing return packages after the first filing period and for verifying that all people who should be filing have done so. Other information from the IRS is essential for audit and enforcement activity but could wait until this activity got under way.

## Essential Functions

As can readily be seen, from the beginning of the administration of the tax, there would be many essential functions that must be ready from the first day of operation. There are others that can be phased in as necessary and as time permits. However, the alternative to having these essential functions operational at the inception of the tax would be having to manually process the initial part of the operation and creating a backlog that might last for months.
Any project of this magnitude should be highly automated to be even marginally efficient. This automation would consist of two parts. The first is mechanical equipment to handle the mass of returns and checks coming to the state. The second is computers to record the data from the returns. It is highly likely that the large
volume of paperwork generated by this operation would require not only additional equipment and computers but also additional space in which to operate them. Another complication is the need for security.
The state could not just go out and lease any vacant office building and begin moving people and equipment into it. The space assigned to this purpose would need to be well thought out, not only to facilitate the flow of paper and information, but also to ensure that the money and tax information would be protected against both internal and external threats. The best solution to these needs would probably be a building designed and built for this specific purpose. Unfortunately, it is unlikely that there would be time to even consider this before the operation had to be in place. Some states have indicated that a single-story building allowing uninterrupted flow of paper is the best arrangement for efficient return processing. Others have found ways to make multistory buildings suitable by carefully planning the timing of movement of paper between floors. Circumstances have sometimes required the use of temporary facilities of only marginal suitability.

## Taxpayer Education

Before a single dollar could be collected or a single return filed for the new income tax, there would have to be a major effort undertaken to inform taxpayers of their responsibilities under the law. At first this would have to be aimed at employers to insure that they started withholding the tax from the wages and salaries of their employees at the proper time. They would need information on rates, time to file and wages subject to the law. Presuming that there were estimated tax
payments required from those not subject to withholding or with income in excess of the amount subject to withholding, those would probably be the next taxpayers who would need to file. Finally, as the end of the first year drew near, the individual taxpayers would need to know of the requirements to file and pay the tax.
In addition to the publicity and dissemination of information, the Comptroller would have to be ready to answer the myriad questions that the new tax would inevitably generate. The toll-free telephone numbers the Comptroller has used for some years would have to be expanded considerably. The people who answer the phones would have to be trained on the new tax. Dozens of publications would have to be produced and disseminated to the public.

## Tax Policy

The new tax law might be so crystal clear that no additional interpretation would be necessary. Or it might be patterned so closely after the federal tax that all questions could be resolved by reference to the federal law, regulations and decisions. However, that just does not seem all that likely. It is more reasonable to expect that the Comptroller would be required to write numerous administrative rules interpreting various provisions of the law. These would need to be issued as quickly as possible to guide taxpayers in their efforts to comply with the law.

Administrative rules in Texas must be proposed and subjected to public scrutiny and comment before they are permanently adopted. In the case of an income tax, the public comment might be expected to be more voluminous than usual. Ironing out the details could take much
longer than the 30 -day minimum period between filing and adoption the law requires.

## Data Entry and Accounting

The handling of the massive amount of data that the taxpayers would produce would require considerable computer power. It would also require considerable computer programming power to design a system that would handle all of the data without breaking down. The use of computers and the need for other aspects of tax administration to be compatible with the computer tends to permeate many of the operations associated with administration of the income (and almost any other) tax.

During the early phases of implementation, it would be necessary to coordinate many of the other functions with the computer programmers. Such things as the design of tax return forms are critical to the computer operation, especially if optical character readers are going to be used. It would be necessary to determine exactly what information would be on the tax returns and what would be maintained in the computer files at an early stage in the development of the project. Such things as automated math checks of the returns could be designed into a system at this stage but would be more difficult to add later.

If manual data entry were contemplated, either for returns that the optical character readers could not read or for all returns, there would have to be planning to insure that forms were compatible with rapid manual entry as well as machine interpretation. Sometimes, these functions are incompatible.

Finally, the state computer operation would have to be designed to be compatible with the formats used by the federal
government in their tax report matching programs. Without the ability to match the amounts reported to the Internal Revenue Service to the amounts reported to the state, many states audit programs would be virtually nonexistent.

## Enforcement

Tax enforcement would be phased in as the first tax year progressed, to be repeated in subsequent years. The first requirements to be met by employers would be the withholding of taxes from wages and salaries. There are two major sources of data for cross-checking employers to verify compliance. These are IRS tapes on federal withholding and payments to the Texas Employment Commission by employers. This could be a highly automated collection process in the initial stages. Computers could compare the tapes and generate letters to the employers who were not withholding state income tax. Only those who did not respond to mail notices would have to be contacted directly, usually by phone initially. Only as a last resort would enforcement personnel be sent to visit the employers.

Following the filing of the first annual returns, those people who failed to file would have to be identified and notified. This, too, could be a highly automated process. It would be linked to withholding accounts and notice from the IRS of federal filings. Presumably, the state would also receive forms showing income received by individuals equivalent to the federal forms W-2 and 1099, showing earned and unearned income, respectively.

Functions such as audit of individual taxpayers would generally develop fully only after returns were filed for one or more years. Even then, full-scale audits
of individual taxpayers' books and records would not be very efficient until the tax had been paid for three or four years. However, most states rely largely on the federal government for audits of individual taxpayers. Due to generally low tax rates, the amounts involved at the state level are often not large enough to justify many hours of auditor time to catch any but the largest evaders. Taxpayers are generally required by state law to notify the state of any federal audit adjustments.

Similarly, legal functions, such as redetermination of taxpayer liabilities, would be unnecessary until the tax was well-established. Once required, the procedures might have to be reconsidered before being applied to personal income taxpayers. Less formal procedures might be appropriate for reconciling small disputed amounts.

Once the initial period of implementation was complete, the administrator would have to be concerned with the continuing operation of the tax. The annual cycles would become more routine, but the challenge of improving the revenue collections and efficiency of the operation would continue.

## Experience in Other States

While it has been 12 years since the most recent implementation of a state personal income tax, it has been possible to discuss the actual implementation process in other states with some of the key personnel involved. Extensive interviews were conducted with current and former employees of revenue departments in New Jersey, Ohio and Pennsylvania. From the experiences of these individuals, it is possible to learn a great deal about what is required to get a state personal income tax into operation.

New Jersey. New Jersey adopted its personal income tax on July 8,1976 , in the face of a court order closing the state's schools until revenue was provided to equitably fund education. ${ }^{1}$ The bill creating the tax was retroactive to July 1 , so the tax had to be implemented immediately. The Taxation Division had been anticipating passage of the income tax for some time and had some previous experience administering a commuter tax on New Jersey residents working in New York. However, the amount of preparation that was possible in anticipation of the passage of the law was limited by the changes that were made in the bill as it worked its way through the legislature.

The New Jersey tax is not based on the federal income tax. While many definitions are similar or the same as those under federal law, the tax does not have a federal starting point that allows the ease of administration of many other states ${ }^{\prime}$ taxes. This further complicated the job of implementing the tax.

Withholding of tax from wages began in October, and six months taxes were withheld in the final quarter of the year. All employers began as monthly filers. There were no estimated returns for the first tax year. Initial enforcement efforts were directed toward insuring all employers were withholding tax. Sales tax and unemployment compensation tax files were used

1. The most extensive discussions were held with the New Jersey Division of Taxation, including a visit to Trenton to discuss their operation. John Baldwin, Director of the Division of Taxation, and his staff were most helpful. Extensive follow-up telephone calls were made to Richard Gardner, Assistant Director; Jay Brown, Chief, Systems and Methods Division; and Glen Holland, Chief, Processing Division. Their assistance is greatly appreciated.
to identify employers.
The staff was organized along functional lines, into teams to manage different aspects of the project. For instance, one team was responsible for designing the tax return form and for programming for data capture from the form. Staffing for the new tax was originally from current employees. Additional personnel were hired as needs were determined. Temporary employees were used for the first time after the adoption of the income tax.
A new processing facility was created from an existing building in Trenton. The Mill Hill Processing Facility is a three-story building with two stories of about 17,000 square feet each, dedicated to tax processing for all taxes. The building was opened early in 1977, while the first personal income tax returns were being processed.
The new tax essentially tripled the size of New Jersey's tax processing operation. From three million documents per year before the tax, the load increased to almost nine million documents annually. During the first years of the tax, about 3.2 million returns were filed each year.
One of the items noted that allowed the New Jersey operation to get moving rapidly was a waiver of the normal purchasing requirements. The normal bidding process could have added months to the time for implementation of the tax. Normal process-

[^136]ing is accelerated through the use of a two-pass data entry procedure. When the returns are first received, only the essential identification and payment information is entered into the computer. When the peak period is past, the rest of the information is entered.
Ohio. Following a period of deterioration of state and local services in Ohio, John Gilligan ran and won the Ohio governor's race in 1970. He ran on a pledge to adopt a state personal income tax to restore health, education and other services.

The tax bill was introduced in the legislature in March 1971. The Department of Taxation staff began working on the implementation at that time. ${ }^{2}$ About 35 people were gradually taken from other areas of the department to work on the implementation. They did not have any additional funds prior to the adoption of the bill, so more resources could not be allocated.
By the time the bill passed in December, they had withholding tables prepared for a range of tax rates and brackets. Fortunately, they had a table for the ones actually adopted. They had a commercial printer waiting to receive the table immediately upon passage. It was printed and distributed to about 250,000 employers within a few days.

Computer programming for the new tax had started while the legislation was still pending. When it went into effect, the automated system was ready to process withholding and estimated payments. When the first returns were filed, the system was ready for the data entry from them. From the first year, the system has been fully computerized. All of the programming was performed in-house.
There was a significant public information campaign associated with the new tax. Numerous
brochures and booklets were produced and distributed. The press was given a barrage of information that could be turned into articles to inform the public about the new tax. A speakers bureau was also established to speak to tax practitioners and to other interested groups about the income tax.

The site for the processing center for the income tax was selected prior to the passage of the income tax. The owner of the building agreed to hold it until the state was ready to lease it. The initial operation required about 40,000 square feet. It has now expanded to about 120,000 . The income tax administration, when fully operational, required about 1,100 employees, including 300 temporaries. State purchasing requirements were followed without significant variance. Everything was expedited when possible. The other agencies of the government were cooperative in this effort.

The last part of the operation to get under way was the audit group. They worked principally from IRS matching programs. There was no real work for them to do until the first year's returns had been filed.
The Ohio tax system was modeled after Illinois and Michigan, both of which had recently implemented personal income taxes. They were very helpful during the implementation, as was the IRS. Ohio used IRS individual master files to identify taxpayers during the first few years. The Department of Taxation hired a consultant who had recently retired from the Michigan Department of Treasury who was also helpful. He had been involved with setting up the new tax in Michigan and knew many pitfalls to avoid.
The Ohio tax was simple in the beginning. The return was less than one page. However, even with that, there were some adjust-
ments necessary in the computer programming. Having some flexibility in the computer system was essential. Part of the problem was that there were many more refunds than expected. Taxpayers had intentionally overwithheld from their wages and salaries.

There were major changes in the corporate franchise tax in the same bill with the personal income tax. This created some additional burden for the department but was manageable. The tax went from a net worth franchise tax to a tax based on the higher of the franchise tax or the net income of the corporation. The taxpayer base did not change. It was mainly a matter of designing new returns and instructions, reprogramming the computers and setting the policy for the income tax.

Opponents of the personal income tax in Ohio placed a referendum to repeal the tax on the ballot in November 1972. It was defeated by a two-to-one margin. The major beneficiaries of the tax, such as public schools, colleges and hospitals, were instrumental in helping to defeat the referendum.

Pennsylvania. Following a state revenue shortfall, the first Pennsylvania income tax law was passed on March 4, 1971, with retroactive effect to January 1 of that year. ${ }^{3}$ That law was declared unconstitutional on June 21, 1971. The tax was based on the federal tax code and had progressive rates. The Pennsylvania Supreme Court, in finding the law invalid, held that the state constitution required all income to be taxed at an equal rate.

A new version of the law was passed on August 31, 1971, and made retroactive to June 1, 1971. The final version was a flat-rate tax on all income, with income divided into eight categories similar to, but not the same as the federal tax. It is not tied to the federal Internal Revenue Code.

Withholding of income taxes
began under the March 4 tax law. When it was declared unconstitutional, withholding stopped, but the amounts collected were not returned. Credit was given for the withholding when the August version of the tax was passed. The withholding was initially handled through a contract with a bank. The bank collected amounts from the employers and made the computer entries for the amounts collected to give proper credit to both the employers and the employees.

In the first days of the implementation process, staff was pulled from other bureaus to begin the operation. Hiring of additional personnel began almost immediately. There was emphasis on tax and management experience, with tax experience being harder to find. The operation was fairly wellfunded, so it was possible to get the kind of staff that was needed. Pennsylvania also hired a management consultant during the first attempt at implementing the tax. There was no consultant after the August reenactment of the law. Purchasing of equipment was expedited, but there was no waiver of normal requirements. Leases of buildings or equipment were approved by the Office of Administration in the Governor's Office. Purchases were approved through the Department of Property and Supplies (now the Department of General Services).

From 1971 to 1979, the Bureau of Individual Taxes performed all functions related to the personal income tax. In 1971, the Bureau was organized into sections. These included, among others, a mail room, receipts and deposits, accounting and collections, audit, security, information services, personnel and enforcement. The Bureau even had its own field offices only for the personal income tax. Within about a year, 24 offices were set up in the state.

The primary task of these offices was audit and enforcement, but they were also a resource for providing information to taxpayers.

At its inception, the Bureau was housed in a separate building eight miles outside Harrisburg. The building was vacant at the time and was leased for use as a processing facility. It was a large, single-story building and served its function well, according to Ed Mosko. Since 1979, the Department of Revenue has had a functional reorganization and the various operations required to process the income tax have been separated. The Department has also moved into one large building in Harrisburg. It now occupies 12 floors of a highrise building with tax processing divided among several floors.
Providing information to taxpayers was one of the early critical needs of the program. This was considered to be especially important since the tax was not tied to the federal tax law. This effort was centralized in Harrisburg until the field offices were functioning. A great deal of time was spent meeting with tax practitioners and taxpayers to help people learn about the law. Personnel at the field offices were given about three to four weeks' training in the new tax law.
Forms and instructions were modeled after the federal system as much as possible. The Internal Revenue Service was helpful in setting up the new system, as were
3. Information concerning the implementation of the Pennsylvania personal income tax came from Ed Mosko, now retired from the Pennsylvania Department of Revenue, who was a special assistant to the director of the income tax bureau while the tax was being implemented; Harriet Burigana, Director, Bureau of Employer Taxes; and Tom Frascella, Director, Bureau of Individual Taxes. Their assistance is greatly appreciated.
the states of New York and Illinois. There was no effort to coordinate this tax with the many local wage taxes in Pennsylvania. These taxes have a significantly different tax base from the state tax. There was, however, a credit given for local wage taxes paid.
The data processing facilities of the Department of Revenue did not have to be increased to accomodate the new tax in its first years. The Department had been keeping data on all vehicles registered in the state for the Department of Motor Vehicles. This was required to be removed so the new tax could be accomodated. Currently, and since its inception, only five lines of data from the personal income tax form have been entered into the computer, in addition to the identification data. This makes it somewhat harder to use the tapes available from the federal government to crosscheck the tax filings. Beginning in 1989, all returns will be entered. Only since 1985 has there been on-line access to full taxpayer information.
The Department of Revenue started with a manual system for accounting for the personal income tax. The basic information entered into the computer until 1976 did not allow automated accounting. The manual system never reached a point where it functioned well before it was replaced.
Currently, there are 300,000 employers filing withholding in Pennsylvania. This includes many in neighboring states. The employers may file quarterly, monthly or semimonthly, depending on the amounts withheld. They are again using a bank contractor for collection of withholding. For 1987, 5.29 million returns were filed. In 1982, the number was 4.92 million. About 20 percent of returns received a refund. Because of its flatrate tax, Pennsylvania has many returns that are exactly the same as the amounts withheld. As many as

40 percent of the total have been correct in recent years. There are 110 people involved in the processing section for this tax. That does not include the mail room function and the Bureau of Receipts and Control where the checks are removed from the tax-due returns. Turnaround time on refunds is about 42 days.

## Lessons for Texas

The implementation of a personal income tax is a difficult but not impossible task. Other states have been forced to learn by doing to get the tax going. There is a wealth of information available from other states with experience in administration of the tax. Should the implementation of a personal income tax become necessary in Texas, the process could be accelerated greatly by borrowing from other states. Everything from computer programs to processing flow charts to security plans are available.
While a personal income tax bill might be finally passed only after many special sessions and latenight meetings, there would be enough foreshadowing of the necessity for the tax to allow state administrators to plan a number of steps well in advance. Yet, only if a final bill is passed will the details necessary to set up an effective administration be known.

## Cost of Administration

Due to the size of the operation required to administer a state personal income tax, it is an expensive tax to administer. There would be additional costs involved with the implementation of the tax that would be one-time expenses. In relation to the amount of revenue raised, however, the tax is often considered somewhat more expensive to administer than other large state taxes, such as the sales tax. Much
of the added expense is due to the increase in the number of taxpayers.
The Comptroller's office has issued one fiscal note on a personal income tax bill. The bill was House Bill 13 by Representative Garfield Thompson, introduced in the second called session of the 70th Legislature in 1987. The effective date of the bill would have been January 1, 1988, and the note was issued on June 29, 1987.
The tax established by the bill would have been a progressiverate tax on incomes over $\$ 15,000$ per year, based on federal adjusted gross income. The tax would have applied to individuals, trusts, estates and partnerships with income earned or derived in Texas.

The administrative costs for the bill were estimated to be $\$ 133.4$ million for the first year of the tax and $\$ 70$ million for each year thereafter. The staff of the Comptroller's office would have had to increase by an additional 3,100 employees, including 600 seasonal employees to be hired each year at the peak processing period. Start-up costs for the first year were $\$ 63.4$ million. The narrative comments on the administrative costs were as follows:

This bill establishes a major new tax for the Comptroller's Office to administer and enforce. A state income tax system will require new computer facilities, a large staff to administer and enforce the tax law, and a building to house staff and equipment. This cost estimate is based on research of the California personal income tax system. Fiscal Year 1988 costs include $\$ 63.4$ million in start up costs. These start up costs include the following: a new computer system and processing equipment, $\$ 49.6$ million; integrated telephone system, automated
collection system and WATS line upgrade, $\$ 10$ million; lease costs of twenty field offices, \$2.4 million; printing, mailing and miscellaneous expenses, $\$ 1.4$ million. This cost estimate does not include a building facility to house approximately 3,100 employees and equipment. ${ }^{4}$

The 1989 appropriation for the Comptroller's office was approximately $\$ 104$ million compared to an estimated $\$ 70$ million to administer the personal income tax, a 67 percent increase. The office currently has about 2,750 employees, slightly more than 1,700 of whom are located at its headquarters in Austin. The employees are divided between two buildings, one in the Capitol area and one in downtown Austin, with some additional leased space. The administration of a state income tax was estimated to more than double the size of the office, with the majority of the employees added at the headquarters location. Others would be at 20 new field offices or at existing field locations. The cost estimate specifically excludes the cost of a building to house the operation and administration of this tax.

The result is a sizable organization to be put together on short notice at considerable expense to the state. However, compared to the revenue raised by the tax, which could be in the range of \$6 billion per year after 1992 at a rate of 3.25 percent or less, the administrative cost is in the range of one to 1.5 percent of the revenue raised by the tax rather than the five percent noted in the Comptroller's fiscal note. This is not greatly different from the current ratio of taxes collected to the Comptroller's appropriation. Obviously, the cost of administration as a percent of the revenue raised depends greatly upon the tax rate.

No comment is made in the fiscal note concerning the amount of time required to fully implement the operation of the tax. However, since that time, the Comptroller has estimated that it could take 31 months or longer from the passage of a tax law
> [T]he Comptroller has estimated that it could take 31 months or longer from the passage of a tax law before withholding, and the flow of revenue into the Treasury, could begin.

before withholding, and the flow of revenue into the Treasury, could begin. Based on the passage of a bill in the 1989 session of the Legislature, withholding would begin in January $1992 .{ }^{5}$

One unusual factor that could affect the operation of such a tax by the Comptroller is the existence of a regional IRS Service Center in Austin. This facility is one of the most intense employers of temporary personnel in the area, and the wages paid at the facility are relatively high for temporary work. Presumably, the state income tax returns would be due at or near the same time the federal returns were due. This could make it very difficult for the Comptroller to hire the 600 temporary workers estimated to be necessary for the administration of this tax in the Austin area.
There are some alternatives that could be considered to resolve this problem. Serious consideration might have to be given to location of the major state income tax processing facility in an area outside Austin. This would
undoubtedly cause some logistical problems for the operation of the office. Any time the management of an agency is physically removed from the operation, the level of oversight is reduced. How serious a problem that would be would depend on which operations were moved and where they went. Presumably, only the processing of returns would need to be moved. If there were access to the information contained on the returns at the other offices, logistical problems could be minimized. Even without physical proximity, deposit of the tax payments into the Treasury could be handled without additional delay.
Another alternative would be to compete with the IRS for temporary employees. This would probably involve increasing considerably the wages paid to such employees. This additional cost would have to be weighed against the cost of other alternatives. Another factor here would be the reaction from the IRS.
Close cooperation with the IRS is essential for the operation of a state income tax. An approach to this problem that jeopardized that relationship would have to be disfavored.
Finally, the operation could be restructured to minimize the number of temporary personnel. This might involve shifting other current operations to times that were outside the peak income tax processing periods. Another approach would be the "two pass" data entry method, where most of the information on the returns is entered after the initial rush is
4. Comptroller's Fiscal Note, H.B. 13, 70th Leg., 2nd C.S., 1987.
5. Letter from Comptroller Bob Bullock to Dan W. Cook III, chairman of the Select Committee on Tax Equity, August 16, 1988.
over. This, of course, presupposes manual rather than automated data entry.

## Federal Administration of State Personal Income

 TaxesA different approach to the possibility of collecting a state personal income tax in Texas is offered by the Federal-State Tax Collection Act of $1972 .^{6}$ This law authorizes states to "piggyback" collection of their state personal income taxes on the federal tax. The IRS would collect the state tax at the same time that it collects the federal tax and rebate it to the state. This would be done at no cost to the state. So far, no state has taken the federal government up on its offer.
Briefly, the system is intended to work like this. Texas would have to pass a tax law that very narrowly conforms to the Internal Revenue Code. Only a few specific deviations are allowed. Texas would set its tax rate as a percentage of federal taxable income or of the federal tax liability. Withholding would be increased to reflect the additional tax. The IRS would develop forms for Texas taxpayers that reflected both the state and federal taxes. When the form was completed, the taxpayers would have calculated both their state and federal liabilities. One check sent to the IRS would pay any additional liability for both governments.

The IRS would begin collecting for a state at the beginning of a year that is at least one year after notice is received that the state desires to have federal
6. 26 U.S.C. §§6361-65.
7. Comptroller's Fiscal Note, H.B. 13, 70th Leg., 2nd C.S., 1987.
collection. Revenue for the state would be paid every three days (or more frequently, if desired). It would be based on a percentage of the estimated total collections for the year rather than the amounts actually withheld or paid on estimated payments. A final reconciliation would take place after the returns were processed and the final tax collections determined.

> Texas is in a unique position to consider the option of federal collection of a state personal income tax.

Texas is in a unique position to consider the option of federal collection of a state personal income tax. Other states have had bureaucracies in place to collect their own taxes and have had tax laws in place that would have needed amendment to conform to the federal code. Texas, of course, has neither of these. This consideration also comes at a time when the federal tax laws have just been significantly revised. The laws are probably more nearly neutral in their effect than at any other time in the last 30 years. It is a Code to which a state could seriously consider conforming.
The obvious advantage is the savings to the state for the collection of the tax. Based on the Comptroller estimates, this saving would be over $\$ 200$ million for the first two years and $\$ 70$ million a year thereafter. It could be faster to implement than a state collection system, given the implementation times estimated by the

Comptroller. It would also be somewhat more convenient for taxpayers. There would be a minimal number of adjustments required to compute the state tax and only one agency to deal with rather than two.
There are also disadvantages to the state. The income tax policy of the state would be controlled by the federal government. If there were changes in the federal law that affected the state's revenue, there might not be an opportunity to react to it in time to prevent a deficit or surplus. There would be no opportunity to achieve economic objectives through credits or deductions as many states currently do. Items such as property tax circuit breakers could not be implemented through a federally collected tax. Finally, the state personal income taxes provide a wealth of data for tax administrators and other state agencies. Giving the administration to the federal government would mean limiting the state to the type of information that is currently available. These are data that are usually two years old before they are available, and they are data that are to some extent aggregated rather than the individual files on each taxpayer in the state.

## Conclusion

The administration of a personal income tax is truly a major undertaking. It would be an issue in and of itself in any discussion of whether Texas should have a personal income tax. Depending on the rate of the tax involved, state administration could cost as little as one or as much as five percent of the revenue raised. ${ }^{7}$ The alternative, federal collection of the tax, would save the cost of administration, but at the price of loss of control over the tax itself.

# L egal Issues Concerning a Texas Personal Income Tax 

## Summary

The Texas Constitution specifically authorizes the Legislature to adopt a personal income tax. This grant of authority, however, does not answer all of the legal questions about a potential Texas income tax.

The Texas Constitution's equality and uniformity clause has the potential to require that any rate that was assigned to the tax be uniform for all classes of income. However, from court cases on other taxes, it appears that Texas could use nonuniform, or progressive, tax rates. The income tax is not an occupation tax, so no revenue would be constitutionally dedicated. It could be used as general revenue or earmarked for any purpose the Legislature chose.

Many states tie their state income taxes closely to the federal income tax, even to the point of incorporating the Internal Revenue Code into their state laws. The Legislature could adopt the Internal Revenue Code as it currently exists by reference to the code in a Texas statute. It is less clear whether it could adopt future changes by Congress merely by adopting the Code and expressing that intent. This is considered to be a delegation of legislative authority to the Congress by some courts and invalid under state law.

The state of the law on this type of delegation in Texas is not entirely clear. There are
cases supporting the general idea that the Legislature could not delegate this authority, but no definitive case on the specific issue. The Legislature has authorized a delegation of this type of authority in the inheritance tax statute, but that part of the law has not been tested in court.
The state is not the only type of government which could adopt an income tax in Texas. The constitution authorizes home-rule cities to adopt income taxes by charter amendment. Fort Worth tried to adopt the tax, but the proposal was overwhelmingly defeated. No other local government in Texas has that authority without specific authorization by the Legislature.
The U.S. Constitution also imposes limitations on the scope of state income taxes. For instance, a state may not tax income from obligations of the federal government, such as treasury bonds. A state may tax all of the income of its residents but only the income earned in the state by nonresidents. The so-called "commuter taxes" have been held unconstitutional by the U.S. Supreme Court as a violation of the privileges and immunities clause. These taxes were attempts by states without personal income taxes to tax the income of their residents working in states with income taxes.

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There is a broad constitutional framework controlling the tax laws of Texas. This framework would come into play should Texas decide to adopt an income tax. This chapter attempts to outline some of the limitations on the adoption and features of such a tax in Texas and impediments that might be encountered along the way. It is not intended to be a comprehensive review of legal issues in existing state income taxes.

## State Constitutional Issues

In the Committee's consideration of a personal income tax, it is essential to review the limitations and difficulties that might be encountered in adopting this tax because of the Texas Constitution and legal precedents in the area of taxation. For instance, several states have been required to amend their constitutions before adopting income taxes. Other common restrictions include dedication of part or all of the revenue from particular taxes, limitations on rates and progressivity and exemption of certain individuals or types of income.

While it is often hazardous to guess how the courts will deal with an unexplored area of the law, there are many parts of the law with respect to the income tax that are clear. There are others
where reasonable conclusions can be inferred from the past interpretation of tax laws by the courts.
Taxation in Texas is generally authorized and controlled by Article VIII of the state constitution, although provisions related to taxation can be found in several other articles. The Texas Constitution invests broad powers of taxation in the Legislature. That document is highly restrictive in many areas, especially including state finance, but it is expansive in granting legislative power to levy different taxes. The income tax is specifically authorized in Article VIII:

Taxation shall be equal and uniform. All property in this State, whether owned by natural persons or corporations, other than municipal, shall be taxed in proportion to its value, which shall be ascertained as may be provided by law. The Legislature may impose a poll tax. It may also impose occupation taxes, both upon natural persons and upon corporations, other than municipal, doing any business in this State. It may also tax incomes of both natural persons and corporations other than municipal, except that persons engaged in mechanical and agricultural pursuits shall never be required to pay an occupation tax . . . . [Emphasis added]. ${ }^{1}$

1. Texas Constitution, Article VIII, Sec. 1.
2. Texas Constitution, Article VII, Sec. 27 (1845).
3. Texas Constitution, Article VIII, Sec. 1, comment at p. 447 (Vernon 1955).
4. Lynn Anderson, Constitutional Aspects of Revenue and Taxation In Texas, 35
Texas Law Rev. 1011 (1959).
5. Wade Newhouse, Constitutional Uniformity and Equality in State Taxation (Ann Arbor: University of Michigan Law School, 1959).

This language is similar to that used in the previous state constitutions and reflects the fact that income taxes had been in use in Texas while it was still part of Mexico and in the early years of statehood. Thus, it is clear that the Legislature, by statute, may adopt an income tax if it so desires.
The wording of the constitutional provision raises an interesting question. The statement that "persons engaged in agricultural and mechanical pursuits shall never be required to pay an occupation tax" strangely follows the authority to impose an income tax rather than the authority to impose occupation taxes in the previous sentence. This provision has its origins in the Constitution of 1845 , which read:

The Legislature shall have power to lay an income tax, and to tax all persons pursuing any occupation, trade, or profession: Provided, that the term occupation, shall not be construed to apply to pursuits, either agricultural or mechanical. ${ }^{2}$

That language was preserved intact in the Constitutions of 1861, 1866 and 1869. The interpretive commentary to the Vernon's Constitution implies that this limitation prohibits an income tax on agricultural and mechanical pursuits: "It [the Constitution of 1845] permitted an income tax on occupations other than agricultural and mechanical pursuits ...."3 Given the similarity of the language, such a restriction might be inferred in the current law. There is, however, other authority that calls this interpretation into question.
Professor Lynn Anderson of the University of Texas said that the constitution authorizes four types of taxes: property, poll, income and occupation taxes. ${ }^{4}$ The limitation on occupation taxes on
agricultural and mechanical pursuits is just that. It would have no impact on income taxes. If there are limitations on income taxes, they must be found in other places.

## Equality and Uniformity

One source of limitation in tax law is the equality and uniformity clauses found in the constitutions of most states. In general, these clauses resemble the federal equal protection clause in their effect. Most do not require total uniformity in the tax rates applied to different classes of property or income. They allow different rates or methods of taxation when there is a rational basis for classifying the items differently.
Some states' courts, however, have taken different views of the effect of their state's particular approach to the requirement. Consequently, the constructions placed on these clauses are as varied as the tax systems to which they apply. ${ }^{5}$ In Texas, there are two equal and uniform provisions, the one quoted earlier in Art. VIII, § 1, and a separate provision in Art. VIII, § 2, which applies to occupation taxes: "All occupation taxes shall be equal and uniform upon the same class of subjects within the limits of the authority levying the tax ...."
This distinction is of apparent importance because the authority to classify the objects of taxation is contained in this provision and not in the general uniformity clause applying to all taxes. This could require an income tax to be absolutely uniform and make no distinctions as to classes of taxpay ers or income. In other words, the tax would have to be at a single flat rate and tax all income with $n$ deductions or exemptions for any reason.
The classification of taxes in Texas is important for another reason. One-quarter of the reve-
nue from occupation taxes is dedicated to public education. However, appropriations to education have long exceeded this allocation, so it is less an issue than it might otherwise be. Further, the dedication of onefourth of occupation tax revenue to school purposes would not seem to apply to an income tax if the theory that the constitution creates four classes of taxes is accepted, as it should be.
The Texas courts have interpreted these provisions in a way that gives flexibility to the Legislature and some order to taxation in the state. Initially, most taxes were considered to be occupation taxes, and the courts have long considered more types of taxes to be occupation taxes in Texas than in any other state. Second, when squarely faced with the issue of whether there was authority to classify objects of taxation in other taxes, the courts found a general authority for the poll tax and, by implication, for all but the property tax. ${ }^{6}$ The requirement of equality and uniformity for income taxes in Texas should be the due process and equal protection standards that have been articulated for classification schemes under the sales, franchise or other taxes now in use. The standard is that a classification of an object of taxation will not be disturbed unless there is no rational basis for the classification.

Of particular interest in the area of income taxes is the effect of the equal and uniform taxation requirement on the use of progressive tax rates. Some statesPennsylvania and Massachusetts, for examples-have been held by their own courts to be constitutionally limited to flat rates. These decisions are based on the theory that the income tax is a tax on property and subject to requirements of absolute equality and uniformity. As discussed above,
the Texas Constitution appears to create four classes of taxes and to distinguish income taxes from property taxes.
The use of progressive tax rates is justified as a method of classification of the object of taxation, income. Each bracket would be a separate class of income, taxed at a different rate. If there is a rational basis for the classification of income in this manner, the progressive rate brackets would not violate the equal and uniform taxation clause.
While Texas courts have never faced the question in the context of an income tax, there have been decisions addressing different rates for different subclasses of taxpayers for other taxes. In Texas Co. v. Stephens, the court approved the classification of different businesses at different rates for a gross receipts tax. ${ }^{7}$ In Hurt v. Cooper, the court approved rates graduated according to the number of stores operated for the chain store tax. ${ }^{8}$ In State v. Hogg, the court approved the use of graduated inheritance tax rates based on the relationship to the deceased. ${ }^{9}$
In addition, the Attorney General ruled in 1932 that the Legislature could constitutionally impose an income tax with progressive rates. ${ }^{10}$ That opinion was criticized in one commentary but appears to be consistent with the analysis of the constitution in Braden's analysis of the Texas Constitution. ${ }^{11}$ It appears that a progressive rate structure would be within the options available to the Legislature for an income tax.
The power to classify income for tax purposes also forms the legal basis for the many deductions, exemptions and credits that so frequently appear in income tax statutes. There is no reason to think that Texas would be restricted in any way from
creating as simple or complex a system as any other state.

## Conformity With Federal

 Tax CodeAnother issue is the degree of conformity with the federal Internal Revenue Code that can be achieved under state law. For example, some states calculate their state personal income tax as a percentage of the federal tax each taxpayer owes. This degree of conformity is considered to be a delegation of much of the power to determine the state tax law to the federal government. States vary considerably in their approaches to tax conformity.

The legal issue in conformity revolves around the constitutional authority of the legislatures of the various states to make laws and to adopt taxes. In Texas, Article II, § 1 of the Constitution assigns the legislative functions to that branch of government. More specifically, Art. VIII, § 1 provides that the Legislature may impose various taxes. This authority can be delegated only to a limited extent. When a state attempts to adopt the Internal Revenue Code as its tax law, it faces problems at more than one level. It is generally accepted that another state's or federal laws can be adopted as
6. Solon v. State, 54 Tex. Crim. 261, 114 S.W. 349 (1908). For a detailed discussion of the history and interpretation of these provisions, see George Braden (ed.), The Constitution of the State of Texas: An Annotated and Comparative Analysis (Austin, 1977), p. 255.
7. 100 Tex. 628, 103 S.W. 481 (1907).
8. 130 Tex. 433, 110 S.W.2d 896 (1937).
9. 123 Tex. 568, 72 S.W.2d 593 (1934).
10. Tex. Att'y Gen. Op. No. 2902 (To Hon. Ben Oneal, Oct. 17, 1932), 1930-32 Tex. Att'y Gen. Biennial Rep. 468.
11. Newhouse, p. 257.
they exist at a point in time. ${ }^{12}$ This is merely incorporation by reference of the other law. It is the attempt to adopt the future changes to the code that results in challenges to the state law.
However, to effectively adopt the tax laws of the federal government and have conformity at all times, the Internal Revenue Code with future changes must be incorporated by the state.

Some states have been content to incorporate the existing Code and accept that the state law will increasingly vary from the federal with time. Since they frequently choose to depart from the federal law in specific areas, this is not seen as a major problem. This policy usually reflects an unwillingness on the part of the state's courts to accept that future changes to the federal law can be incorporated without specific con-
12. Featherstone v. Norman, 170 Ga. 370 , 153 S.E. 58 (1931).
13. Anderson v. Tiemann, 182 Neb. 393, 155 N.W.2d 322 (1967), appeal dism'd. 390 U.S. 714 (1968).
14. Tex. Tax Code § 211.003 (Vernon 1982), which provides: "Sec. 211.003. References to Internal Revenue Code. A citation of a reference to a subtitle, a chapter, or a section of the Internal Revenue Code of 1954 includes that subtitle, chapter, or section as it exists on September 1, 1981, or as amended after that date and also includes any other provision of the Internal Revenue Code enacted after September 1, 1981, that is similar to or a replacement of the subtitle, chapter, or section cited or referred to."
15. Tex. Tax.-Gen. Ann. art. 14.00B (repealed).
16. Tex. Rev. Civ. Stat. art. 7144a (repealed).
17. 1959 Tex. Gen. Laws, 56th Leg. 3d C. S., ch. 1, § 2.
18. 515 S.W.2d 142 (Tex. Civ. App.Austin 1974) rev'd. on other grounds, 527 S.W.2d 175 (Tex. 1975).
19.515 S.W.2d 145.
stitutional authority. Examples of this approach include Georgia, South Carolina and Minnesota.

## In some cases, states have amended their constitutions to allow future changes to the federal tax law to be incorporated into their law without legislative action.

In some cases, states have amended their constitutions to allow future changes to the federal tax law to be incorporated into their law without legislative action. This was done in New York in 1960 and in Nebraska in 1967. The Nebraska statute conforming its law to federal law was challenged in spite of the constitutional amendment but was upheld by their supreme court. ${ }^{13}$ In Texas, there is no specific decision on this issue. However, there is legislative precedent for adoption of federal tax laws, not only as they currently exist, but also of future amendments. The state inheritance tax is based on the federal credit allowed by the Internal Revenue Code, and references to the code are specifically intended to include the amendments subsequent to the enactment of the statute. ${ }^{14}$ The law prior to the codification, Taxation-General art. 14.00B, ${ }^{15}$ contained a similar provision, and the law that preceded that one, article $7144 a,{ }^{16}$ made specific reference to the Revenue Act of 1926, including "amendments and revisions thereto." ${ }^{17}$ This statutory approach has never been challenged in court.

There is one case that deals with
the inclusion of the federal law in the Texas statute. That is Citizens National Bank of Paris v. Calvert. ${ }^{18}$ In that case, the court answered the question concerning the incorporation of the federal code into the Texas law by reference but avoided the question of whether the incorporation is effective prospectively. The court noted that the statute in question here had been amended three years prior (1965) to the death of the current decedent (1968), and, "if express incorporation of the provision was needed," the amendment had specifically included amendments to the 1926 Code in the statutes incorporated. ${ }^{19}$ Thus, the court left the question of prospective incorporation of federal law for another day.

It is interesting to note that the discussion in the Citizens National Bank case never mentions the issue of delegation of legislative authority, either at the Court of Civil Appeals or the Supreme Court. Both courts were able to render decisions without addressing the issue. The decisions are not authority on the question.

There are, however, some other cases on the delegation of legislative powers to the federal government. In Calvert v. Capital Southwest Corp., the Texas Supreme Court reviewed a case involving taxation under the franchise tax of a mutual investment company of a type that was authorized by federal law after the state tax statute had been adopted. The court found that the law had to be interpreted as it was adopted by the Legislature, not as it might have been modified in reaction to the federal law establishing the mutual investment companies: "The Texas Legislature could not delegate to Congress or the Small Business Administration the power to declare the nature or
requisites of a mutual investment company." ${ }^{20}$

This is not a case dealing with an act of the Legislature intending to delegate a function to the Congress. It is distinguishable on that ground, but it does restate the general rule that the Legislature cannot delegate the power to make laws to Congress.

For the most complete discussion of the delegation of legislative powers in Texas, it is necessary to go to the 1927 case of Trimmier $v$. Carlton. ${ }^{21}$ In that case, the court specifically approves the concept of adoption of statutes by reference, and then went on to note that where the Legislature specifically intends to adopt a statute with subsequent amendments, the court will give effect to that intent. However, the case deals with another Texas statute adopted by reference. An examination of subsequent cases citing Trimmier does not reveal approval of the adoption of any statute other than that of Texas. The adoption of Texas statutes by reference, including subsequent amendments, does not involve the delegation of legislative power to another body. The subsequent amendments would all be adopted by the Texas Legislature.

A definitive answer to this question will have to await litigation of the inheritance tax or the adoption by reference of some other part of the Internal Revenue Code. The experiences of other states, however, show a significant chance that prospective adoption of federal statutes will not be allowed without a constitutional amendment.

## Local Income Taxes

The state constitution, in the absence of a specific statute, also controls the right of the political subdivisions of the state to adopt income taxes. In Article XI, §5, home-rule cities are authorized to
"levy, assess and collect such taxes as may be authorized by law or by their charters . . . "' The City of Fort Worth has on at least two occasions seriously considered the adoption of an income tax and could have done so by charter amendment. ${ }^{22}$ The Legislature could choose to limit or eliminate

> Perhaps the most wellknown limitation is the prohibition on states taxing income from obligations of the federal government.

this option by statute. The other limitation on taxation by homerule cities is that "no tax for any purpose shall ever be lawful for any one year, which shall exceed two and one-half percent of the taxable property of such city . . . " This would appear to be a limitation on property taxes. ${ }^{23}$ However, it could be taken as a measure of the value of any tax that might be levied and be implied to limit an income tax, also, since the provision does not specify that it applies to ad valorem taxes only. In realistic terms, it would be unlikely to impose a serious limitation on an income tax. Two and one-half percent of the property value of a city should represent a very significant portion of the income of all taxpayers in the city.

State law also controls the taxing power of counties, school districts, general-law cities and other local taxing jurisdictions. Unlike homerule cities, these bodies have only the powers given to them by the Legislature. In no case has the Legislature seen fit to give one of them the power to levy an income tax.

## Federal Constitutional

 IssuesIn addition to state constitutional issues, there are federal constitutional limitations on the power of states to levy and collect personal income taxes. The U. S. Constitution is a limitation on the powers of the government rather than a grant of authority, so the states, as sovereigns, may adopt any form or manner of taxation that is not strictly prohibited by the constitution or by federal law. These limitations include such traditional constitutional issues as equal protection, due process and privileges and immunities of citizens.
Perhaps the most well-known limitation is the prohibition on states taxing income from obligations of the federal government. Each state must exclude from its tax base the interest paid to its taxpayers from bonds, notes and other obligations issued by the United States Treasury or any other federal agency or instrumentality unless permitted to tax the income by act of Congress. This prohibition is based on the Supremacy Clause and dates to the seminal Supreme Court case of $\mathrm{McCulloch} v$. Maryland. ${ }^{24}$.The taxation of the obligations by the states could interfere with the power of the United States government to conduct its operations in an efficient manner. It should be noted that there is nothing in this
20. Calvert v. Capital Southwest Corp. 441 S.W.2d 247, 264 (Tex. 1969).
21. 116 Tex. 572, 296 S.W. 1070 (1927).
22. Cecil Johnson, "Heed that rapping, rapping at our door," Fort Worth StarTelegram, March 11, 1988.
23. Braden, p. 686.
24. U.S. Constitution, Article VI, Sec. 2; 17 U.S. (4 Wheat.) 316 (1819).
theory that prevents a state from taxing the obligations of another state, its own obligations or those of local governments.

The taxation of the income of nonresidents is an area where federal law has limited the states. A state may tax all of the income of its own residents, even if it is from a source outside the state or country. ${ }^{25}$ However, taxation of the income of nonresidents is limited to income earned in the state. ${ }^{26}$ It is considered to be a violation of due process of law for one state to tax income of a nonresident derived from without the taxing state. There must a sufficient connection between the earning of the income and the taxing state to warrant taxation of the income. ${ }^{27}$

The determination of where income is earned has been a source of continuing problems for income tax states. While wage income is usually easily allocable to a fixed location, business and investment income can be much more elusive. As states have felt the need for more revenue,
25. New York ex rel. Cohn v. Graves, 300 U.S. 308 (1937); Lawrence v. State Tax Commission, 286 U.S. 276 (1932); McGuire v. Trefry, 253 U.S. 12 (1920).
26. Shaffer v. Carter, 252 U.S. 37 (1920).
27. Jerome Hellerstein and Walter Hellerstein, State and Local Taxation (St. Paul: West Publishing Co. 4th Ed. 1978).
28. U.S. Constitution, Article IV, Sec. 2, cl. 1.
29. Guaranty Trust Co. v. Virginia, 305 U.S. 19 (1938); Curry v. McCanless, 307 U.S. 357 (1937).
30. Walter Hellerstein, Some Reflections on the State Taxation of a Nonresident's Personal Income, 72 Michigan Law Rev. 1309 (1974).
31. Austin v. State of New Hampshire, 420 U.S. 626 (1975). See also, Jerome Hellerstein, "State Tax Discrimination Against Out-of Staters," National Tax Journal, Vol. XXX, Number 2 (June 1977), p. 113.
nonresidents, unable to vote in the taxing state, have been likely targets. Attempts to tax nonresidents in a discriminatory manner are prohibited by the privileges and immunities clause of the U.S. Constitution. ${ }^{28}$ However, this does not prevent states from attempting to define ever-increasing amounts of income as subject to the state's taxes and taxing it at the same rates as other income.

Interestingly, though, states have refrained from a war to see who can extract the most revenue from sources outside the state. While there is a Multistate Tax Compact for division of business income, there is no such agreement for personal income. The Supreme Court has declined to prevent the taxation of income by more than one state as a violation of due process. ${ }^{29}$ Over time, an acceptance of the other states' right to tax income earned within it has led most states to give their residents a credit for income taxes paid to other states. On the other hand, fewer than half the states allow nonresidents to take such a credit, and most who do allow it condition the credit on the reciprocal allowance of a credit in the other state. So while in some instances the taxpayer may choose the state to which it wants to pay taxes, the majority case is that the tax will go to the state where the income is earned and the state of residence will tax only the residuum of income not taxed in another state. Tacit acceptance of this scheme of taxation has maintained some order where chaos might reign. ${ }^{30}$

One interesting exception to this orderly process was the so-called "commuter tax." These taxes existed where states with and without income taxes had a common boundary. Residents of the state with the tax-in this case, Maine-working in the other state-New Hampshire-would
normally have to pay income tax to their state of residence on their earnings in New Hampshire. No credit would be allowed because there was no income tax in New Hampshire. New Hampshire passed a tax that resulted in the Maine residents paying the tax on their earnings to New Hampshire. Maine allowed a credit to the taxpayers, so it cost them no more than if they had paid the tax to Maine. The only loser was the State of Maine, whose treasury lost a sizable sum. The Supreme Court struck down the law saying that it denied the Maine residents their constitutional rights under the privileges and immunities clause. ${ }^{31}$ They were required to pay a tax that no New Hampshire resident had to pay.
Federal equal protection is occasionally invoked in response to state tax laws. However, the state equal and uniform taxation clauses generally, and Texas' in particular, are considered to be coextensive with or more restrictive than equal protection restrictions. In the area outside property tax, the objects of taxation are subject to reasonable classification and courts are reluctant to disturb any but the most arbitrary classes.

## Conclusion

The United States Constitution will only impose limitations of reasonableness on the details of any personal income tax considered in Texas, having the most impact in the area of taxation of nonresidents. The Texas Constitution is more directly relevant to the consideration of this tax. It provides the Legislature with broad discretion to consider the type of tax it might impose. The only question that remains largely unresolved is whether Texas could adopt prospectively the Internal Revenue Code to achieve substantial tax conformity.

## A State Personal Income Tax

## An Economic Analysis

## Summary

This chapter examines the economic effects of substituting a personal income tax for all or part of other existing taxes in a state's fiscal structure. It is assumed that the overall state tax burden would not be changed by this substitution. Thus, the issue under consideration becomes one of examining the comparative advantages and disadvantages of an income tax relative to its most obvious alternative. In Texas's case, this is assumed to be the sales tax, although the effects of a value added tax is also examined as another major alternative.
Two fundamental principles figure prominently in the analysis. First is the accounting identity of aggregate income on the one hand and the value of aggregate output of goods and services on the other. Second is the fact that, in contrast with a nationwide tax, the effects of a state (or local) tax is strongly shaped by the mobility of labor and capital among various units of governments or geographic jurisdictions.
These principles are combined with the observation that a sales tax does not represent as comprehensive a tax base as an income tax. From this, it can be seen that a feasible sales tax tends to have more adverse effects on economic efficiency and growth than a feasible income tax. In addition, an income tax offers certain
advantages of flexibility in designing an equitable rate structure and limiting compliance and enforcement costs.

On the other hand, an income tax with too many special exemptions could be even more damaging to efficiency and growth, and more costly to comply with and enforce, than the best feasible sales tax. Also, a sales tax can tap the taxpaying ability of some industries and individuals (e.g., the "underground economy" and tourists) who might escape income taxation.

Moreover, there are clear political issues related to the two taxes, with the taxpayers' view of the two tax forms depending on the jurisdiction. While these have nothing to do with economic efficiency and performance of the tax system, they are critical in the formulation of tax policy.

Based on the analysis in the chapter, it is not possible to conclude without qualification that "an" income tax is either inferior or superior to "a" sales tax. Too much depends on the specific design of "the" income tax or sales tax actually as it is finally legislated. It is possible that a combination of the two would be superior to either alone, a choice many states have made. A value-added tax offers still another possible alternative.

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## Introduction

This analysis for the Select Committee on Tax Equity is not intended to conclude with a recommendation in favor of or opposed to a state personal income tax. Instead it is intended to provide an objective analysis of the advantages and disadvantages of such a tax, emphasizing economic considerations and employing a number of widely accepted criteria. The analysis is strictly economic; no consideration is given to the political problems of implementation.
It must be noted at the outset that all taxes are "bad" (as all prices we pay for the goods and services we get are "bad") in the sense that it would be better if we could get government services for nothing. But "there is no free lunch," as the saying goes, and the problem in taxation is to try to find the least burdensome approach. In discussing the advantages and disadvantages of a state personal income tax, therefore, one must have in mind a comparison with one or more alternative taxes. The author has chosen for comparison what seems to him the most likely comparably comprehensive tax:
a general state sales tax. ${ }^{1}$ This choice is not a prediction or a recommendation. Rather, it seems a useful choice in bringing out the distinctive characteristics of an income tax, since a general sales tax belongs to a class of taxes, including selective product taxes, which is widely believed to have a pattern of incidence and effects different from that of an income tax. Most of the comparison attempted below would apply equally to the alternative of a bundle of selective sales taxes.

It will help the reader in interpreting the analysis to have a precise statement of the assumptions used in the chapter at the outset:
(1) State government outlays are taken to be given as to both amount and type. The focus is, therefore, strictly on the question of financing those outlays through taxes with the "least bad" economic consequences. It would muddy the analysis-and unduly lengthen it-if one tried to combine the effects of different taxes with the effects of different kinds and amounts of expenditures.
(2) As a corollary of (1), it is assumed, in discussing effects, that the hypothetical income tax would yield the same amount of revenue as the alternative tax. Thus, the income tax is viewed as a substitute for one or more alternative taxes, and not as net addition to the total tax burden.
(3) It is assumed that a state personal income tax, if adopted, would be part of a broader system of taxes, rather than a single tax on which the state relied entirely. The same assumption is made with respect to the presumed alterna-

1. In a later section, still another possible alternative-a value added tax-will be briefly discussed.
tive comprehensive tax. Thus, the adoption of an income tax presumably would affect the system significantly but would not entirely replace it.
(4) It is assumed that a personal income tax would be comprehensive, applying to all kinds and sources of income. Questions of rate structure, personal exemptions, and so on, are left open. There is no presumption that these must resemble those of the federal tax. The companion assumption is that the alternative sales tax would be at least as comprehensive as the existing one in Texas, and perhaps moreso (again, with rates left open).
(5) It is assumed that a personal income tax would be accompanied by a corporate income tax, if for no other reason than to prevent avoidance through retention of earnings by corporate entities, including those set up specifically for that purpose. (This assumption is implied by the comprehensiveness assumption above.) It is understood, however, that the corporate income tax is being separately analyzed by other researchers. This study, accordingly, will not include an in depth analysis of that tax but will briefly indicate, in a final section, its connections with a workable personal tax.
(6) Finally, it is assumed that the level of taxes in other states is given. Combined with assumptions (1) and (2), this means that we shall be concerned strictly with the interstate impact of an income tax in contrast with the presumed alternative tax, not with the impact of change in Texas' total tax burden relative to that of other states.
In concluding this introduction, it should be noted that one cannot always reason from analyses of the
federal income tax to reach valid inferences regarding a state income tax. There are special problems regarding the latter not shared-at least in equal degreeby a national tax. The principal one, perhaps, is associated with the greater mobility of labor and capital among states within the nation than between the nation and other countries. One may, with less pecuniary and psychological cost, avoid a tax by migrating to another state than by migrating to another country, for instance. This matter is especially important in the presence of active competition by the various states for business locations and relocations. State taxes often involve, in addition, special problems of jurisdiction and of avoidance along the borders of the affected state. On the other hand, given the federal income tax, a state income tax may be more simply implemented and enforced, if properly designed, than if innovated independently by the state. These considerations will figure significantly in the analysis to follow.

## Evaluation Criteria

In "What is a 'Good' Tax System?" (Chapter 1), the following criteria for judging tax systems are suggested: (1) adequacy; (2) equity; (3) efficiency; (4) economic competitiveness; (5) stability; (6) simplicity; (7) balance; (8) breadth of base; and (9) intergovernmental links.
These are reasonable criterion, partly for reasons of organizing the discussion in such a way as to achieve maximum clarity and emphasis on the economic analysis, the following, slightly modified list will be used in this chapter: (1) incidence; (2) visibility; (3) equity; (4) economic efficiency, (a) resource allocation, (b) economic growth, (c) stability of
economy and revenues, (d) costs of collection and compliance and (e) problems of evasion and avoidance; (5) exportability; and (6) effect on federal tax liabilities.

The question of adequacy (in the first list) is more relevant to a system of taxes than to any one tax, such as the one under discussion. The questions of balance and breadth of base are dealt with in assumptions (3) and (4) in the introduction above. These assumptions imply a significant contribution to adequacy by either an income tax or the alternative sales tax. The other items in the first list are subsumed under "economic efficiency" and "exportability" in analysis. The list includes, in addition, two items, "incidence" and "visibility," the significance of which will be discussed below.

The criteria adopted here may now be explained briefly.

Incidence. The incidence of a tax is the location of its ultimate burden-the answer to the question: Whose real income is reduced by it? Unless we have a clear understanding of incidence, we cannot say anything definite about equity and very little about economic effects. The analysis in this chapter, therefore, starts with this subject.

Visibility. The effects of a tax may differ if it is "hidden," rather than clearly visible. From a democratic public choice point of view, visibility is a desirable characteristic in a tax since it helps allow taxpayers to weigh costs against benefits of government services. From some points of view, on the other hand, visibility may be a drawback, since voters may react more negatively to a clearly perceived burden on their incomes.

Equity. The effects of a tax may depend significantly on its perceived equity. Taxpayers are more likely to react negatively to a
tax perceived as inequitable, and one kind of negative reaction is greater effort to avoid or evade the tax, adding to collection and compliance costs. Of course, equity stands on its own philosophical merits, and does not require economic justification.

Resource allocation. If a tax is levied in such a way that it alters "artificially" the relative costs of producing different goods and services, it will induce a different allocation of productive re-sources-land, labor and capitalthan would otherwise have been obtained. On the assumption that in the absence of the tax, the free market would have induced an efficient allocation (one that yields the maximum total well-being consistent with total resource availability), such a tax would reduce over-all efficiency and impose an "excess burden"-a burden in excess of the payment to government. It is, of course, desirable to minimize any such excess burden.

Economic growth. Taxes may differ significantly in their effects on the rate of growth of output in a country or state. The differences arise out of different effects on the growth rates of labor and capital (land being fixed), on entrepreneurial activity and on technological progress and innovation.

Here, the mobility of labor and capital across state lines is especially important. Taxes that are especially repellent to inmigration of labor and entrepreneurial talent, or to capital inflows, are correspondingly especially harmful to economic growth. In the long run, growth can make a much larger contribution to the general welfare than one-time improvements in allocative efficiency.

Stability. Taxes may differ as to their effects on the cyclical stability of the economy of a
nation or state. When cyclical (or other) instability arises from outside the geographical unit, taxes may differ as to their effects on the stability of government revenues. Other things being the same, taxes that promote both kinds of stability are to be preferred.

Collection and compliance. Taxes impose two kinds of costs on taxpayers in addition to the tax payments themselves and any excess burden arising from allocative inefficiency. These are the costs of enforcing and collecting the tax and the costs to the taxpayer of compliance (e.g., record keeping, filling out returns, seeking professional advice, etc.).
Taxes with low collection and compliance costs are, of course, "less bad" than taxes, with high costs.

Evasion and avoidance. Taxes that are less easily evaded or avoided are obviously to be preferred, all things being equal, on the basis of most of the other criteria, from equity to allocative efficiency to collection costs.

Exportability. Particularly in the context of vigorous interstate competition, in which all may "play the game," a tax that burdens residents of other states is to be preferred over one that burdens residents of the home state. Although the U.S. Constitution limits the ability of states to burden interstate commerce with taxes, there are forms of taxes that are effectively exportable, some moreso than others. ${ }^{2}$

Relation to federal tax liabilities. The major tax paid by persons in middle to upper income brackets today is the federal

[^137]income tax. The federal tax law permits certain taxes paid to state and local governments to be deducted from gross income in calculating taxable income. Taxes that are deductible are thus less costly to residents of states that levy them than other taxes. State taxes that are deductible in effect distribute their burden over all federal taxpayers and are thus to a major degree "exportable" to all other states' residents.

Some relevant accounting identities. We begin with the intuitively obvious proposition that our real-inflation-adjustedincomes are our real products, or what our nominal incomes will buy in terms of physical quantities. ("Income" is economically defined as the maximum amount a person or group of persons could consume in a period without reducing net worth, either through borrowing or consuming
3. "Final products" are those ready for use in either current consumption or capital formation, and not for resale or further processing.
capital.) Thus, for a nation or state:

## Aggregate real income $\equiv$ Aggregate real product

The two sides can now be broken down as follows. Shown in Table 1. This breakdown corresponds to the above definition of "income" and to what is called, in the national income accounts, "net national product"-gross national product less allowances for capital consumption. If one added such allowances to both sides, the "incomes" and "products" would correspond to gross national (or state) income and gross national (or state) product. Note that sales by firms to other firms of intermediate goods and services (embodied in final products) cancel out, while imports of goods and services are excluded as the products of other nations (or states). ${ }^{3}$ Given the total output of the economy, it is clear from the foregoing accounting identity that, given output, any increase in real taxes, no matter of what kind,

TABLE 1. The Income-Product Identity

| Aggregate real income | Aggregate real product |
| :--- | :---: |
| Indirect taxes (e.g., sales) | Government goods and services' |
| Direct taxes (e.g., income) |  |
| After-tax private incomes: |  |
| Wages and salaries |  |
| Interest |  |
| Rent |  |
| Profit |  |
| Dividends |  |
| Retained |  |

must reduce the real disposable incomes of the general public by exactly the same amount. Given the price level, it must reduce nominal disposable incomes; given nominal privately disposable incomes, it must raise the price level. If the increase in real taxes reduces incentives to work and invest, so that output falls, the tax change reduces real privately disposable incomes by more than the real receipts of governmentan "excess burden." Similarly, a tax-resultant distortion of resource allocation which decreases efficiency and thus lowers aggregate output also imposes an "excess burden." A tax (or tax system) that minimizes such burdens is obviously to be preferred to one that does not.

A second accounting identity can be derived from that above. This identity says simply that all of the output of the nation (or state) is purchased (or directly used) by some entity, including other states or nations. (If net exports are negative-net im-ports-domestic purchases exceed domestic output, and domestic net worth falls by the same amount.)

It is important to note this identity in the present study, for in the case of a state or smaller regional area, which tends to be relatively specialized economically, "trade" with other states and the rest of the world (exports and imports) tends to involve a much larger share of output and domestic disposition than in the case of a large, diversified nation as a whole. This fact signifies, among other things, that the base of a final-goods sales tax may differ from the value of output, depending on whether the state has a trade deficit or surplus, and on the extent to which the tax can apply both to sales to out-of-state buyers and purchases from outside resold within the state.
To conclude this section, one
final accounting identity regarding total utility-producing activity is shown in Table 3.
This last identity, the sum of three identities, indicates that utility is derived from a much larger total than measured and reported net national (or state) product, although only the latter, narrower concept can feasibly form the base of either an income tax or a sales tax. The second category of income-product is quite large, when roughly estimated from comparable market values, reflecting a wide range of household internal services, from cooking, laundering, cleaning and maintenance to entertainment and babysitting-all of which would have to be bought in some degree in the market if household workers worked exclusively in paid outside occupations. ${ }^{4}$ The last category, leisure-utility, is also quite large in imputed pecuniary terms, under the assumption that if leisure is voluntary, an increment to it must be worth the pecuniary income foregone to get it. ${ }^{5}$ In any case, the second and third sources of income-product, not feasibly taxable, offer alternatives to persons taxed on their
4. In a study using 1965 data, James Tobin and William Nordhaus, is Growth Obsolete? (Washington, D.C.: National Bureau of Economic Research, 1972) estimated the value of nonmarket work to be just over fifty percent of recorded net national product (which excludes nonmarket values). Cited in R. J. Gordon, Macroeconomics (Boston: Little, Brown, 1984), Appendix A, p. vi.
5. According to Tobin and Nordhaus, adding the value of leisure, estimated as indicated, to recorded net national product would more than double the latter. Adding both the value of nonmarket work and the value of leisure would increase recorded net national product by 163 percent.
6. Short-run incidence is not the same as "impact" of a tax. The latter refers strictly to the point of collection, before any "shifting" through market transactions.
pecuniary incomes or purchased products. They must, accordingly, figure in our following discussion of the effects of alternative taxes.

## Comparative Analysis of Income Tax

Incidence. In this section, the discussion will be confined to "short-run" incidence: who pays a tax by the end of a period long
enough for market transactions to reflect it, but short enough that resource mobility and full demand and supply elasticities are not operative. ${ }^{6}$ Thus we visualize an initial set of burdens, which create incentives to change patterns of consumption, work, etc., and which lead to longer-run effects on resource allocation, growth and the distribution of real

TABLE 2. The Product-Purchases Identity

| Aggregate real product | Aggregate real purchases (or direct use) |
| :--- | :--- |
| Government goods and services | Government purchases of goods and services' |
| Capital goods and services | Business purchases of goods and services |
| Consumer goods and services | (on capital account) <br> Consumer purchases of goods and services |
|  | Net exports of goods and services |

1. Government purchases of goods and services are purchases of productive services (at which cost government product is valued) plus purchases of goods and services from private sector firms.

TABLE 3. The Utility Production-Consumption Identity

Total production of utility $\equiv \quad$ Total consumption of utility
(A)
"Measured" (marketed) income and product'
(As recorded in national income accounts)
Net national income $\equiv$ Net national product (sold through markets) ${ }^{2}$
(B)
"Unmeasured" (directly consumed) product
Implicit wages and in- $\equiv$ Goods and services proterest on household - duced and directly coninvestment sumed or invested in the household
(C)
Implicit utility enjoyed

| Leisure (time away from |
| :--- |
| production of above) |$\equiv$| Utility in the form of |
| :--- |
| rest, family life, recre- |
| ation, enjoyment of wider |
| range of products |

1. Corresponding to identity in Table 1.
2. With a few imputations reflecting comparable market values.
incomes. It is, of course, the longrun effects that ultimately interest us, including ultimate incidence, but we arrive at those effects by tracing out, in the sections to
3. To illustrate, suppose, for instance, that a direct tax on incomes is imposed, and that suppliers of productive services are somehow able to pass forward the nominal amount in the form of higher costs of production and hence prices. Suppliers have maintained their nominal disposable incomes, but their real values have fallen by the amount of the real tax, just the same as if nominal disposable incomes had fallen by that amount. Alternatively, suppose that a sales tax on all products is imposed, and that the collectors manage somehow to pass the nominal tax backward in the form of lower nominal incomes to suppliers of productive services. Again, obviously, there is no real shifting of the tax: what consumerinvestors escape as such they bear as suppliers of productive services. One cannot impose a tax on one side of an identity without equally imposing it on the other. It is meaningless to speak of "shifting" it from one side to the other.
4. In either case, the government can now either buy five percent of an undiminished output or hire five percent of undiminished productive resources to generate its own output in lieu of lost private output, or some combination.
5. Note that the savings rate of individuals is irrelevant to the burden, since both consumer goods and capital goods are equally taxed in each case. (Savings finance capital goods purchases, of course.)
6. It may be noted in passing that if a comprehensive tax is shifted "forward" in the form of higher prices, a rise in the general price level is implied. This generally would be impossible without an increase in the money supply. If the monetary policy of the national government is a strictly noninflationary one, forward shifting of a comprehensive tax is therefore impossible. The general price level in a state (as part of the national economy) cannot rise relatively to that of the nation without creating unemployment and inducing outmigration from that state. This observation is relevant to the discussion of long-run incidence later in the chapter. (A tax on a small class of products can be shifted forward, since the effect on the general price level may be negligible, and all that is required is a rise in the relative price of the class of products.)
follow, the responses of those on whom the first real burden falls. Long-run incidence will be later.
It is generally understood that mere legal entities (e.g., corporations) cannot bear any real burden (loss of utility-producing income) of the sort discussed here. Only natural persons can experience utility or disutility, so only natural persons can ultimately pay taxes. Any tax nominally paid by a firm must be "shifted" forward to consumers or backward to suppliers of raw materials or productive services, or be borne by the human owners of the business. If we classify owners along with creditors as suppliers of the productive services of capital, then all taxes must be borne either by persons as suppliers of productive services (of labor, land and capital) or by persons as consumers and investors in real capital; there is no other way.
When we are dealing with a single occupational income or a single class of good that is taxed, taxes may often be "shifted" from the nominal human taxpayer to someone else through either reduced supplies and higher relative prices or reduced demand and lower input prices. But as we increase the size of the aggregates being taxed, approaching all suppliers of productive services and their incomes and all consumers or investors of output, the distinction between suppliers and users diminishes, and it becomes less and less meaningful to speak of shifting taxes from one group to another. At the limit, they are the same group, as "heads" and "tails" are two aspects of the same coin. When we consider two very comprehensive taxes, such as an income tax and a general sales tax, we run into this kind of situation in discussing comparative incidence. ${ }^{7}$ As we shall see, there may be differences in incidence, but they are not as stark as those
between, say, a payroll tax and a gasoline tax.

Consider the first accounting identity discussed above:

> Aggregate real income Aggregate real product

In the absence of any taxes and government product, the two sides break down as follows:

| Wages and Salaries | Capital goods and |
| :--- | :---: |
| Interest | services |
| Rent | Consumer goods |
| Profit | and services |

Now suppose that preparatory to producing some of its distinctive services by hiring away workers and capital from the private sector, government levies a completely comprehensive proportionate income tax (say five percent of all pecuniary income of each household). Each household will now be able to buy only 95 percent of its former purchases of real capital and consumer goods. Suppose alternatively that the government levies a five percent sales tax on the value of all current output, including both capital and consumer goods. Households will have as much nominal income as before, but it will now buy only 95 percent as much real capital and consumer goods as before. ${ }^{8}$ If we take as given the amount and composition of the new government services and concentrate on the alternative taxes, it is apparent that the aggregate burdens are exactly the same, and that they are distributed among households in exactly the same way. ${ }^{9}$ Is, then, the burden of the income tax on income receivers or on consumerinvestors? Is the burden of the sales tax on consumer-investors or income receivers? The answer, obviously, is "either, in both cases." ${ }^{10}$
This result may be puzzling to those accustomed to thinking that income taxes and sales taxes are
fundamentally different as to incidence and related effects. What is the key to the present "strange" conclusion?
The key does not lie in the fact that the assumed rate structures are proportionate. The same result would follow if the rate structures were both equally progressive or regressive. ${ }^{11}$ Although a progressive sales tax would be more cumbersome to implement, the results of a sales tax and an income tax with identical rate structures would obviously be otherwise the same, with the same ambiguity as to location of the burden-on income versus purchases of output.
The key lies, rather, in the assumption that the two taxes are equally comprehensive in coverage. If the income tax is completely comprehensive, while the sales tax applies only to consumer goods, for instance, then the burden of the income tax is on all income receivers, while the burden of the sales tax is only on purchasers of consumer goods. This is the sense in which one can say that the burden of such a sales tax is on consumers, rather than suppliers of productive services: the burden is indeed on suppliers, but only in their capacity as consumers and in proportion to their purchases of consumer goods. The effect would be identical if an income tax exempted savings.
Now if the proportion of income spent on consumer goods varies inversely with income, one can say that a flat-rate sales tax on consumer goods only with no rebates is regressive, while a flatrate comprehensive income tax would be proportionate. ${ }^{12}$ It should be apparent also that if certain types of income were exempt from taxation and if these types were associated with high incomes per household, then a nominally flat-rate income tax
would be regressive also. The same would be true if savings were deductible from taxable income. Thus a major determinant of incidence in both types of taxes (and their effects) is the degree of comprehensiveness.
In its nature as a tax on private purchases in the market, a sales tax cannot be as comprehensive as a completely comprehensive income tax, since government services financed by taxes are not sold in markets whereas an income tax applies to all suppliers of productive services, including suppliers to government (e.g., government employees). If the sales tax further exempts capital goods and perhaps some types of consumer goods or services, then the incidence of such a tax may be substantially different from that of a comprehensive income tax.
Thus, the common understanding that a sales tax falls (mainly) on consumers and is regressive in effect rests on a similarly common understanding that the typical sales tax involves no allowances and rebates and is less than fully comprehensive, especially regarding capital goods and other business inputs. Studies of the burden of actual sales taxes universally show the general understanding to be correct. ${ }^{13}$ But as the foregoing discussion indicates, it need not be correct. Sales taxes can be designed to have quite different characteristics. ${ }^{14}$ It is also a common understanding that income taxes fall on recipients and tend to be progressive in rate structure. This, too, is factual in American experience, but need not be so. ${ }^{15}$ Either tax can be pretty much what its legislative designers want it to be, regarding incidence as well as other characteristics. The question then is: Given what we want a tax to be, which tax-a comprehensive income tax or a comprehensive sales tax-more efficiently
satisfies the aim? We need not start with the premise that a sales tax is necessarily regressive, and an income tax necessarily progressive.
Visibility. "Visibility" here refers to those properties of a tax that allow taxpayers readily to understand that they are being taxed and by how much. The behavioral reaction to a tax-and hence some of its effects-may vary with the sense of being explicitly taxed versus the general sense of falling real income, which could result from a great number of factors, only one of which is a tax being shifted forward to con-
> 11. Equivalent effective rate structures ("progressive" here) could be achieved as follows: Each household would be allowed, for each tax, certain exemptions and deductions to be claimed in an annual return. Under the income tax, the tax payment would be a flat percentage of income less the allowances. Under the sales tax, with the same flat rate, each household would receive a rebate equal to the allowances multiplied by the tax rate. If the sales tax were completely comprehensive, as assumed, proof of income would be proof of sales tax payments; no record of individual purchases would be required. Obviously, since the two taxes are equivalent, it would be simpler (by avoiding some collection and all rebate costs) to levy the tax directly on nominal incomes.
12. The proportion of income paid varies inversely with the size of income. "Progressive" means that the proportion varies directly with the size of income.
13. Robin W. and David E. Wildasin, in Boadway, Public Sector Economics, 2nd Edition (Boston: Little, Brown, 1984), pp. 382-387, citing numerous studies, including major ones by Gillespie (1965), Musgrave, Case and Leonard (1974) and Pechman (1977). As for the incidence of the Texas sales tax, see Billy Hamilton and Stuart Greenfield, "The State Tax Burden," Fiscal Notes (Comptroller of Public Accounts, August/September 1979), pp. 5-6. See also Chapter 3 of this report-"Who Pays Texas Taxes?"
14. See footnote 11 above, for example.
15. See Joseph A. Pechman, Who Paid the Taxes, 1966-1985? (Washington, D.C.: The Brookings Institution, 1985), p. 80.
sumers in the form of higher prices. Moreover, the visibility of all taxes is an aid to rational public choice, allowing more realistic cost-benefit analysis. Many would say that in a democratic society every person with the right to vote (and thus to demand government services of value to one's self) ought to have to pay some taxes to enforce some responsibility. Needless to say, if a person is unaware of paying "hidden" taxes, this civic disciplinary effect cannot operate; while others, counting on the ignorance of those actually taxed, may be led to demand excessively costly services to be financed by such "hidden" taxes on other persons.

The income tax as we know it is highly visible, either on the annual return required or on the periodic statement to employees of taxes withheld from pay. In either case, the amount in writing may be readily compared with gross income for the period in question. A sales tax is visible in principle, since there is a separate notation on sales slips, but the amounts are often small and seem trivial unless, at some inconvenience, the taxpayer keeps records and sums the amounts periodically to be compared with income for the same periods. When the sales tax was still deductible for federal income tax purposes, the taxpayer without sales tax records could still use standardized allowable deductions for the tax. For many, therefore, the kind of recordkeeping necessary to have an accurate impression of the amount of the tax paid never seemed worth the trouble. (Now, in the absence of sales tax deductibility, there is even less reason to keep records.) So it seems safe to say
16. They would be equally visible if the sales tax had a rebate provision, as in footnote 11 above, of course.
that the sales tax as we know it is effectively less visible than the income tax. ${ }^{16}$

Whether, on account of visibility, one sees the income tax as preferable to a sales tax or the reverse depends on whether one views visibility of taxes as a virtue or not.

Equity. Questions of equity seldom arise regarding the prices a household pays for goods and services in private market transactions. Assuming both parties to a transaction have alternatives (effective competition on both sides), any price paid and received is voluntary, and the transaction would not occur if not perceived as mutually beneficial. In other words, one receives what one pays for and voluntarily pays for what one receives. There can hardly be a question about fairness in that. (There might be a question of the fairness of one's endowment of purchasing power, but that is another matter.)

But taxes, as distinguished from certain kinds of fees and public prices, are by definition involuntary payments. They are involuntary because there is no necessary direct and proportionate receipt of government services by the individual taxpayer. The lack of direct connection between payment and receipt of value by the taxpayer is, in turn, usually connected with the fact that government services typically fall into the category of "public goods." Such services simultaneously provide benefits to more than one consumer (often all), e.g., defense, law enforcement, highways and bridges, flood control, etc., so that if they are provided at all, any consumer can enjoy them, whether or not that consumer helps pay for them. If there is no means of excluding consumers, as in general law enforcement, "freeriding" is invited, and the only solution is compulsory contribu-
tions (taxes) to the total cost. Then there arises the question of how much each consumer should pay as a matter of equity, since the value of the good consumed need have no connection with payment or non-payment. In addition, some kinds of government services are designed to assist those who are unable to help themselves adequately; others involve substantial externalities-benefits to society that go beyond benefits to the direct recipient-such as public education. In these cases, the direct beneficiaries cannot reasonably bear the full costs of the services. Here, too, the question arises as to who should pay how. much.

As noted earlier, one can say little or nothing about the equity of a tax or a tax system without being fairly certain about incidence. The sense of equity on the part of the taxpayer depends in large part on visibility. That taxpayers feel that a tax or tax system is equitable is important to its acceptability and to the costs of enforcement and collection. So equity is of critical importance in the comparison of an income tax with a sales tax.

In discussing equity, a distinction must be made between horizontal equity and vertical equity. The former refers to comparisons between taxpayers in (relevantly) like circumstances; it would seem to require like tax treatment. The latter refers to comparisons between taxpayers in unlike circumstances; it would seem to require appropriately unlike tax treatment. The rub, of course, comes in trying to decide precisely what is "relevant" and what is "appropriate" in these two cases. It should be obvious that how one would decide depends on broad philosophical, even religious, attitudes and habits of thought, going well beyond the economic. Thus, in any society,
there is likely to be great difference of opinion, and the differences cannot be resolved in any "scientific" way. The economist is no better equipped to say what is equitable and what is not than, say, the farmer or the crane operator. The economist's main contribution to the debate is to clarify matters of incidence and longer-range effects of taxes.

Nonetheless, it will be helpful here to indicate some possible approaches to pursuing equity.

The first has already been indicated in connection with the discussion of voluntary prices paid in the private sector. Many people would say that a tax (or tax system) is equitable if it taxes different payers in at least rough proportion to the value of government services received. The classic case of a state tax levied with this principle in mind is the motor fuels tax, often dedicated to the building and maintenance of streets and highways. Presumably, the more tax one pays, the more one uses these public facilities (the lighter, more fueleconomical cars doing less damage). The principle at least roughly "works" in this case, but clearly it cannot work in the case of jointly consumed public goods (as defined above) or in the case of deliberate aid to those who cannot pay for what they receive.

This brings us to the most widely applied principle in tax equity discussions, ability to pay. There would seem to be no more reasonable or feasible measure of ability to pay than income, or the products it will buy. Conceptually, wealth-measured as the present value of expected future income, from whatever source, not just from material or financial assets-is a superior indicator of ability to pay, but the difficulties of continuously valuing "human" wealth, such as the skills of a young surgeon or artist, are
practically insurmountable, to say nothing of the problem of young producers' being able to borrow against expected income to pay a tax on wealth measured as above. So we must concentrate on some variant of current income.
(1) Total measured income(Pecuniary income plus the imputed value of some income in kind). ${ }^{17}$ This is the measure of income nearly always used in calculating effective tax rates (and degree of progressiveness), whether the taxes are nominally income or sales taxes. The implication of such calculations is that total measured income represents ability to pay.
(2) Total measured income, less personal deductions, exemptions and certain deductible expensesThe implication here is that ability to pay begins with income in excess of costs of earning it and basic allowances for subsistence of taxpayer and dependents. This approach is that of the present federal income tax but with some types of income taxed at lower rates than others. As indicated earlier, this approach could be implemented through a comprehensive sales tax with rebates.
(3) Same as (2) but with further deduction-for some desired disposition of income, e.g., saving, on grounds that the favored disposition is especially in the public interest and may indirectly lighten the burden on government of providing certain services. The implication here is that ability to pay begins with income in excess of not only subsistence but sacrifices made at present in the interest of enhanced future productive ability, hence enhanced future taxpaying ability. The principle could be implemented with a sales tax on
consumer goods and services only, with rebates for subsistence.

Once the measure of ability to pay is established there remains the matter of rate structure applicable to this measure.
(4) One possibility is strict proportionality-a "flat-rate" structure. If (1) above is chosen, the result is a proportionate effective rate structure; if (2) is chosen, the result is a progressive one, the moreso as the allowable deductions rise; if (3), it is less progressive and possibly regressive, since the saving rate tends to rise with income. Again, it is possible, but cumbersome, to arrange these rate structures for a sales tax, as well as an income tax.
(5) Some would argue for a nominally progressive rate structure on that part of income in excess of allowances and deductions on the grounds that the marginal utility of income (probably) falls with rising income-in other words, that $X$ percent of a rich person's income paid in tax imposes less loss of utility than $X$ percent of a poor person's income. While this view is intuitively appealing, it cannot be supported empirically, since comparisons of utility (being subjective) are impossible. The level of progressivity to equalize sacrifice cannot be determined objectively.
(6) Some would argue for (5) above on either of two other grounds: deliberate redistribution of income to reduce inequality of opportunity arising from differences in either genetic or inherited (nonhuman) wealth; or to
17. Corresponding to net national product, as defined earlier.
reduce government outlays that otherwise would have to be directed toward the needy. ${ }^{18}$ Tax exemption for the poor now could mean less dependency and greater taxpaying ability in future. ${ }^{19}$
(7) It is difficult to argue for a regressive effective rate structure on ability-to-pay grounds, although a mildly regressive structure could be consistent with the absolute amounts of tax paid rising with income. The ability-to-pay principle is usually appealed to by those advocating at least a proportional rate structure.

Since equity is largely a subjective matter, reflecting the total value system of the viewer, it is not possible to say on purely objective grounds which of the above examples is "right"-the most equitable. We can only point out that whatever the equity criterion chosen, it is possible to design either an income tax or a sales tax (the latter with a rebate system) with the desired properties. It should be obvious, however, that designing a sales tax with personal and dependency allowances and a progressive rate structure would present more problems of record keeping, enforcement and administration than an income tax.
A third possible standard of equity is based on the proposition that a person gets utility only from consumption, not the part of
18. Or in other sources of advantage/ disadvantage, such as past discrimination in education, job advancement, etc.
19. Taxation of families at or below real subsistence levels may lead to early dropout of teenagers from school to enter the work force, increased illegal efforts to acquire income, poor nutrition of children and reduced future work capacity, etc. These costs to society could far outweigh the extra taxes higher-income families might pay to avoid them.
income that is saved-that since saving represents postponed consumption, it also represents postponed utility. Thus, utility maximization over time would be facilitated if, in effect, current receipt of utility were the base of current taxation. This in turn means that current consumption expenditures, rather than total expenditures (including acquisition of assets) equals income, ought to be the tax base. This principle is often stated as "taxation of what one takes out of the economy, not what one puts in" (through saving and investment). The exemption of saving from taxation is commonly advocated as a means of promoting growth, but in the present context, it is advocated as equitable-sharing the utility cost of government on the basis of current utility enjoyed. While a consumption tax, with a flat rate and no subsistence allowances, would be regressive as ordinarily measured by the tax/income relationship, it would simply be proportionate if measured by the tax/consumption (tax/current utility) relationship.

Note that this approach to current taxation of income or sales is the same as (3) above. As indicated in the discussion there, it is possible to design either an income tax or a sales tax with the desired properties, including personal and dependency allowances and proportional or progressive rate structure; but with the latter inclusions, an income tax is likely to be simpler and less costly to comply with and administer.

A final approach to equity (and also economic efficiency) is to impose taxes on goods or incomeyielding activities that involve external (extra-market) costs. For example, alcohol consumption imposes costs on society far beyond the price of the commodity directly paid by consumers.

One can say that as a matter of equity consumers should have to pay the full marginal cost of the product, and a special tax equal to the extra social cost would force them to do so. (One can also say that as a matter of economic efficiency-marginal cost equals marginal benefit-the consumer should have to pay the full marginal cost. The appropriate tax, then, would induce less consumption of the socially costly product and raise total utility.) Legislators generally recognize such cases, often referring to the indicated taxes as "sin taxes." For the most part, however, they are special cases and lie outside the categories of interest hereincome and general sales taxes.

To sum up on equity, whatever a person's or a society's philosophical values, the difference between an income tax and a sales tax does not reside in the immediate object taxed but in somewhat greater flexibility of an income tax in effecting both horizontal and vertical equity without incurring excessive administrative and compliance costs. The latter will be discussed in another section.
Economic efficiency. We have discussed incidence (in a period too short to allow major reallocative adjustments) and related questions of visibility and equity. We come now to the heart of this study, the matter of the longer-run economic effects of a comprehensive income tax versus a sales tax yielding the same real revenue-a sales tax that may be equally or less comprehensive than the income tax. The discussion to follow will examine three major kinds of effects: those on resource allocation, those on long-run growth and development and those on income and revenue stability.
Effects on resource allocation. If we assume a comprehensive
income tax in the sense of covering all sources of income and taxing all sources at the same rates, whatever the rate structure, then such a tax has no effects on the allocation of resources among different industries and occupations, other than those arising through the necessary reduction of privately disposable income and different income elasticities of demand. ${ }^{20}$ (Any other tax yielding the same revenue will have the same direct incomereducing effect in the aggregate, though possibly different distributive effects, so we shall concentrate on other sources of reallocative effects.) The reason for the absence of allocative effects is that an income tax of the sort specified does not change the relative marginal costs of producing different kinds of goods and services. Since a comprehensive income tax is the equivalent of a tax on all products at the same rate(s), there is no inducement from the cost side to alter relative outputs. Nor would such a tax, affecting all forms of income equally, whether wages and salaries, rent, interest or profits, provide any inducement to firms to alter the combinations of labor, capital and land in production.
The same could be said for a truly comprehensive sales tax with the same rate structure, due to the equivalence noted, if it were not for the fact that only privately consumed and invested goods and services are feasibly taxable at the sales level (while government goods and services are in effect taxable, too, through the incomes of all consuming them, including government employees and creditors). Most sales taxes are not even comprehensive of all privately consumed or invested goods and services; most specifically exempt certain goods and services, e.g., business capital goods and certain "subsistence"
goods differentially consumed by the poor. In the discussion to follow, therefore, we shall treat "the" sales tax compared with a comprehensive income tax as a tax on some substantial part of total output.
We thushavea class of goodsand services that is taxed at the sales level and another which is not. The tax therefore raises the relative price of the former class and lowers that of the latter. As a matter of maximizing the utility of their remaining disposable incomes, consumers (or investors in capital goods, if affected) buy less of the former class and more (relatively) of the latter. Productive resources must be reallocated from the former industries to the latter to accommodate the different structure of demand while maximizing profit in each. In short, a noncomprehensive sales tax alters the allocation of resources by altering the relative marginal costs (including the tax that must be collected by selling firms) of producing different categories of goods and services.
Why is this bad? While it is true that taxes in the aggregate pay for government services in the aggregate, some of which may be valuable as productive inputs in all industries, there is no necessary correspondence between the tax paid (or collected) by a given type of producer and the productive inputs received from government by that producer. When different producers' products are taxed differently, we cannot regard an excise or sales tax as simply another real cost of production, like the price of labor or capital. It is an "artificial" and arbitrary cost; it does not reflect an underlying disutility cost, like that of labor or of postponing consumption. So when firms maximize profits by equating their marginal costs with marginal revenues, the firms that collect the sales tax maximize
profits at a lower rate of output than would be justified by the underlying real disutility costs of supplying productive inputs; while exempt firms maximize profits at a higher rate of output than would be so justified. This means that some resources are used where their contributions to output (and utility) are less than they would have been if all products were taxed equally; which, in turn, means that aggregate output and the general welfare are lower than they would have been with equal taxation. This is the "excess burden" spoken of earlier-the cost to all members of the economy in excess of the transfer of real purchasing power to the government.

Since a comprehensive income tax as defined does not involve this type of excess burden, it must be deemed economically superior to a sales tax in this respect, all other things being equal. The degree of superiority is increased with each narrowing of the sales tax base. It is minimized, but not fully eliminated, by expanding the sales tax base to all privately consumed or invested goods and services. It is an irony, perhaps, that efforts to reduce the regressiveness of a sales tax by exempting certain "subsistence" goods and services from it may, through the excess burden effect, make all worse off, including the poor. This effect could be avoided by taxing all goods and services, and then moderating adverse effects on the poor by means of rebatesat substantial increase in administrative costs, of course.
It must be said that a noncomprehensive income tax also would cause an allocative excess burden.

[^138]If certain types or sources of income were exempt, wholly or partially, from taxation, then labor and capital would be reallocated "artificially" in the direction of those sources, driving down the social return on them below the underlying utility cost of their supply and thereby lowering the general welfare of the population as a whole. ${ }^{21}$ It is thus the assumed comprehensiveness of the income tax that makes it superior to a sales tax on allocative efficiency grounds.

A nonproportional rate structure on either tax-progressive or regressive-alters resource allocation also, but it does so through presumably desired distributional and income-elasticity effects, not through "artificial" distortion of relative costs. If the distributional effects are somehow enhancing to possible total utility, reallocation and profit maximization tend to raise the general welfare, not lower it.
Effects on economic growth. The economic growth of a region (state, nation, world) depends on growth of variable inputs-labor and capital, land being fixed-and improvement of the quality, or productivity, of those inputs, including land, through technological innovation, education and training. ${ }^{22}$ In the case of a state or smaller region, growth of labor and capital inputs may be heavily influenced by interstate migration and capital flows in response to relative interstate returns-real wages and real rates of return on capital. If labor and capital were
21. Readers may recognize this as the standard economic criticism of certain "special tax incentives" historically applied to oil, gas and other mineral incomes.
22. The depletion of natural resources or degradation of the environment should be interpreted as reduction in the quality, or productivity, of land, which may or may not be offset by technological innovation.
perfectly mobile, interstate returns would continuously be equalized through geographical movements of these inputs. Similarly, technology is highly mobile across state lines, although effective mobility depends in part on the mobility of entrepreneurial and technical labor. In general, it seems safe to say that in the United States, capital is highly mobile across state lines, labor somewhat less so-especially mature persons with families, home equities and long personal connections in a given regionand land not at all. Although labor and capital from local sources are always important in the local supplies, the elasticity of supply of both with respect to their real returns is heavily influenced by interstate mobility.
So we ask, now, what is the effect on growth of inputs and productivity of reducing the aftertax real return to each by means of a comprehensive income tax versus a sales tax of substantial degree of comprehensiveness yielding the same revenue to the state government? Still, it is assumed that home-state outlays are given as to quantity and type (these, too, affeciing growth) and unaffected by the choice between types of taxes; and that the level of total taxes in the home state is unchanged relative to that in other states. Thus we are concerned solely with the relative incentive effects of the two alternative types of taxes.

The base comparison to be considered is that between a comprehensive income tax and a comprehensive sales tax, each at the same flat rate and without any subsistence allowances or rebates. With the qualification about the nontaxability of government services on a sales basis, we have shown that the two taxes are equivalent. Both reduce the real incomes of all households in the
same proportions. There are two kinds of effects that follow: a substitution effect and an income effect. Each of these, in turn, is conditioned on the mobility of resources across state lines.

The substitution effect. Since both taxes are levied on "measured" incomes and (marketed) products, taxpayers may moderate the loss of utility by substituting for measured income some form of "unmeasured" (nonmarketed) income and product. Persons may drop out of the hired labor force in order to produce more goods and services for direct consumption in the household or to have more leisure, since the sacrifice of doing so is lowered by the imposition of either type of tax on measured income-product. The adjustments are marginal, of course, and may involve primarily secondary workers in the household, such as wives or husbands of primary breadwinners and teenage children. Persons may save and invest less pecuniary income and choose to use more home-produced income to invest in home repairs and remodeling, selfimprovement and the like. In short, the substitution effect takes the form of some reduction in the amount of labor and financial capital supplied in regular labor and capital markets at any given pretax real return.

The income effect. The income effect works in the opposite direction. Given fixed pecuniary obligations (such as mortgage debt), the necessity to provide adequate pecuniary income for retirement or disability, and the objective of such investments requiring pecuniary outlays as college education for children, the reduction in pecuniary real income occasioned by either of the taxes may induce new secondary workers to enter the regular hired labor force and a greater proportion of additional pecuniary
income may be saved. In short, the income effect may increase supplies of labor and capital in regular markets. ${ }^{23}$

These adjustments will, of course, vary among households in different situations-age, marital status, dependents present, skills and disabilities, for instance. So, apparently uniform taxes will have nonuniform effects on utility reduction among households. In any case, since substitution and income effects work in opposite directions regarding supplies of labor and capital, it should be no surprise that empirical studies of tax-induced supply effects usually reveal little or no net effect on labor and capital supplies. ${ }^{24}$

However, these studies typically use nationwide samples and therefore tell us nothing about another type of effect especially relevant to input supplies in smaller regions, such as states; namely, the migration effect. All persons in a state imposing either type of tax have, in principle, the option to migrate out of the state to another where taxes, by assumption, are given. Again, the adjustments are marginal, some households being more mobile than others, but the income and substitution effects now are in the same direction. The impediment to large-scale interstate migration is cost, of course-not only the pecuniary cost of moving persons and possessions but the pecuniary costs of finding new jobs and living quarters plus the psychic (utility) costs of separating from established personal connections (including those of children in the household). But some slowing of population and labor force growth in the taxing state due to the tax per se, is surely to be expected.

Net inflows of financial capital also are likely to be reduced in the taxing state, since financial capital is highly mobile in response to interstate differences in return.

An income tax reduces the aftertax real return in the state to those residing in the state but, depending on the law's effort to capture taxes from income derived in the state by outside investors, not necessarily that of nonresidents. If liability under a state income tax is based on residence in that state, residents cannot increase returns by diverting funds to out-of-state investments, unless they change residence also. Some human outmigration, as discussed above, may in this case be induced by a state income tax falling on capital income as well as labor income. If liability is based on location of source of income, however, capital mobility does not necessarily imply human mobility.
A state sales tax, which by present assumption is comprehensive and falls on capital goods sales as well as consumer goods sales, would tend to reduce the rate of return on all real investments in the state, whether financed by inside or outside financial capital, assuming that imported capital goods are taxed as well as domestically produced ones. ${ }^{25}$ It would not, however, reduce the rate of return to residents on investments outside the state in question. A resident of the taxing state would not have to migrate elsewhere to avoid the tax on capital goods (and their returns). Thus a comprehensive sales tax would perhaps slow capital inflow (and associated growth) somewhat more than an income tax, depending in part on the sales-taxability of imported capital goods (as well as source liability on capital income).

Perhaps the safest statement is that the two alternative comprehensive taxes would have approximately the same total effect on the interstate migration of labor and capital. It makes no difference to wage-earners considering leaving the labor force or
moving to another jurisdiction whether their real incomes are reduced by an income tax or a sales tax yielding the same real revenues to the governmentwhether they have $X$ percent less pecuniary income or must pay $X$ percent higher real prices with that income. It makes no difference to investors considering whether to save less or shift funds to another jurisdiction whether their real incomes are reduced by a sales tax of $X$ percent on capital goods or an income tax of $X$ percent on the net yield, which, in the marginal case, must have a present value, when discounted at the acceptable rate of return, equal to the effective price of the good. ${ }^{26}$ (Remember that land, the third factor of production, is fixed in
23. Note that over the past century rising labor productivity and real wages have been associated with reduced working hours per year. This seems to signify that leisure is a "luxury good" (high income elasticity), this income effect outweighing the substitution effect of rising marginal cost of leisure: The net effect suggests why a reduction of real income through taxation may reduce desired leisure and increase the supply of labor to productive activities.
24. For an extensive review of evidence, see Barry P. Bosworth, Tax Incentives and Economic Growth (Washington; D.C.: The Brookings Institution; 1984).
25. See explanation included in footnote 26 below.
26. For example: Effect on a marginally profitable investment of income tax versus sales tax. Pretax situation: Present value of expected income ( $\$ 100$ ) less cost of capital good $(\$ 100)=\$ 00$.* With ten percent sales tax on capital good: Present value of expected income ( $\$ 100$ ) less cost of capital good $(\$ 110)=-\$ 10 . *$ With ten percent tax on capital income: Present value of expected income ( $\$ 90$ ) less cost of capital good $(\$ 100)=-\$ 10$.**
*Expected rate of return = rate of discount $=$ required rate of return.
**Expected rate of return less than that required. The dollar income reduction to the investor (and potential revenue to the government) is the same under both. taxes, expressed in present value terms.
quantity and immobile. Thus, its supply and contribution to growth are unaffected by any tax-on its value, on the value of its products, or on the rents, royalties, etc., derived from it.)
Thus both taxes, if equally comprehensive and proportionate in rate, tend to slow growth in a state, but probably to almost the same degree, depending on other specifics of the law. ${ }^{27}$ Both are "bad" in this sense, but there is little if any reason to prefer the one over the other on that account.
The story is somewhat different, however, if we assume that one is more comprehensive than the other, or that the effective rate structures differ markedly. To those cases we now turn.

If a state income tax is comprehensive but the alternative sales tax is not (say, it exempts capital goods), then it follows from the above discussion that the income tax would be more discouraging to capital inflows but less discouraging to labor inmigration, than the sales tax. Referring to Table 1 again, we can see that since a tax on capital goods is the equivalent of a tax on capital income (interest, profits and rents from reproducible real estate), a tax on consumer goods is the equivalent of a tax on labor income, hence differentially discouraging to the supply of labor input. ${ }^{28}$
The net effect on growth of the state's economy of choosing the comprehensive income tax over
27. Specifics such as the ability of the state to tax nonresidents' capital income earned in the state; or the ability of the state to tax an out-of-state purchase of a capital good to be used in the state.
28. Plus the relatively small income on raw land. See Joseph E. Stiglitz, Economics of the Public Sector (New York: W. Norton \& Co.,1986) pp. 262-63.
29. See Gary Smith, Macroeconomics (New York: W. H. Freeman \& Co., 1985) pp. 556-57.
the assumed alternative noncomprehensive sales tax is ambiguous, for the following reasons:

## (1) Selection of the income tax

 would avoid the slow-down in the net growth rate resulting, for a time, from the adverse efficiency effect on resource allocation of a tax on some products only.(2) There is a corresponding avoidance of an adverse efficiency effect arising from taxation of one variable productive input but not the other.
(3) Faster growth of labor relative to capital in the state would tend to lower the growth rate of per capita real income, but not necessarily that of aggregate real income (the growth rate of population plus the growth rate of per capita real income).
(4) If the desired objective is faster growth of per capita income, selection of the comprehensive income tax would be adverse. However, given any reasonable production function, a tax favorable to substitution of capital for labor raises the level of the growth path in a one-time fashion but does not permanently raise the slope of the path, unless the higher gross volume of investment implied permanently speeds the introduction of new technology. ${ }^{29}$ The reason is basically that a faster relative growth of capital input drives down the rate of return on capital until it warrants only sufficient investment to equip the growing labor force at a fixed labor/capital ratio (absent the technological innovation factor), hence a fixed output per worker.
(5) In the long run, the dominant determinant of growth of per capita (and aggregate) real income is technological progress. As noted earlier, the effective transfer-
ence of technology across geographical boundaries is partly a function of the transference of technically trained labor. To discriminate against labor in taxation is, to some degree therefore, to discriminate against technological innovation.
(6) To the extent that entrepreneurial income is capital income (as distinguished from executive salaries), the comprehensive income tax would be relatively discouraging to innovation and associated growth. However, the adverse effect of the income tax is moderated by its favorable effect on risk perception. Since risk is defined as the dispersion of possible pecuniary outcomes from an undertaking, risk is moderated by a tax that is positive only if the outcome is favorable, and negative if the outcome is unfavorable (due to loss carryovers and deductibility against other income). This effect-lowering the risk premium in the required rate of return on innovative invest-ment--tends to moderate the otherwise adverse effect of taxing capital income.

Much the same observations as above on differential factor taxation can be made regarding a progressive rate structure versus a proportionate or regressive one, since capital income is associated with higher household incomes than labor income in general.

Even if it should be judged that a comprehensive income tax would be less favorable to growth than a sales tax exempting capital goods, the message is not that "an" income tax is inferior on this account to "a" sales tax, but that if an income tax has other desirable features on balance, it may still be preferable if savings are made deductible from taxable income. Such deductibility, as we have seen, would be equivalent to
exemption of capital goods from sales taxation. Similarly, if a progressive rate structure is deemed undesirable, for growth or other reasons, "an" income tax at the state level need not have this feature; it could be designed to have a regressive rate structure, either nominally or effectively by exempting savings (presumed to be positively associated with household income level). By the same token, if a sales tax has desirable growth features on balance, it can be designed, as we have seen, to have some desired qualities often associated with an income tax. The real question is, then, which tax can be designed to have all the desired efficiency and growth characteristics at least cost in terms of revenue instability, frequency of legislative adjustment, enforcement, collection, compliance and administration?

## Effects on income and revenue

 stability. Given the occurrence of cyclical fluctuations or other "shocks" producing fluctuations in output and employment, an income tax would add less to the amplitude of these fluctuations than a sales tax of similar comprehensiveness. The simple reason is that persons with zero current income (e.g., unemployed workers) or negative current income (e.g., farmers or other business proprietors) would pay zero or negative taxes under an income tax, but they would go on consuming goods subject to a sales tax to some degree-out of past savings, sale of assets, borrowing or unemployment compensa-tion-and so would continue to pay positive sales taxes to the state. Under the sales tax, then, after-tax incomes in a recession would on impact be lower than under an income tax, further deepening the recession. The income tax may thus be viewed as a relatively stabilizing tax withrespect to aggregate income and employment. ${ }^{30}$ The stabilizing effect of the income tax is even greater if the rate structure is progressive, since households may slip into lower marginal tax brackets in recessions and move into higher ones in booms.

Although moderated by the feed-back stabilization of output, fluctuations in state revenues tend to be larger under the income tax than under the sales tax, for reason of wider fluctuation in the income tax base. On the other hand, the stabilizing effect of the income tax on employment reduces government outlays on unemployment compensation, welfare and other aids to the impoverished; and it may reduce crime, drug abuse and other activities that tend to rise in "bad times" and require greater state outlays on law enforcement, prisons, etc. ${ }^{31}$ It thus is not alto-gether clear which tax on balance tends to produce wider swings in net revenues of a state, and therefore which requires more frequent and costly legislative adjustment to maintain a balanced budget, if desired or required by law as in most states. ${ }^{32}$

In any case, revenue yields from an income tax can be made more stable by exempting saved income from taxation (since saving tends to rise and fall more than proportionately with income), while the same can be accomplished by exempting purchases of capital goods from a sales tax (since real investment also rises and falls more than proportionately with income-indeed, is the simple counterpart of real saving). In short, aggregate consumption is more stable than aggregate income, so a consumption-based tax is more stable than an incomebased tax, all other things being equal.
Revenues under a comprehensive income tax may, however, be
more stable than revenues under a sales tax that applies to some or all capital goods but exempts most services. This is because household outlays for services, which account for slightly more than half of all personal consumption expenditures in the U.S., are more stable, with respect to the business cycle, than outlays on consumer nondurables (about a third of total consumption), which are in turn more stable than outlays on consumer durables (the remaining one-sixth, approximately).

It is of some interest to note that in the recession of 1981-83 the average annual rate of growth of all states' income tax receipts fell 3.1 percentage points (from 12.0 to 8.9 percent), while that of all states' sales and gross income tax receipts also fell 3.1 percentage points, but from a lower base of 9.6 percent. In the recovery of 1983-84, the income tax rate of growth rose 9.5 percentage points (from 8.9 to 18.4 percent), while that of the sales tax rose 10.1 percentage points from a lower
30. Due to the dominance of the personal and corporate income taxes, in the federal tax system since World War II, these taxes are often referred to as the major "automatic stabilizers" in the U.S. economyautomatic, because their stabilizing effects require no legislative action.
31. Crime, etc., imposes costs on society well beyond the costs of law enforcement, of course. To the extent that these costs tend to rise in periods of unemployment, any stabilizing element in the tax system is all the more valuable.
32. The income-stabilizing effects of any tax are reduced or eliminated if the requirement of an annually balanced budget is met by increases in taxes or reduction of government outlays in recessions. The stabilizing effects can be realized, however, with the build-up of a "rainy-day" fund in booms, to be run down in recessions. If the state could borrow and lend at the same interest rates, use of such a fund is equivalent to borrowing in recessions and repaying in booms.
base of 6.5 percent. ${ }^{33}$ These figures suggest (with the qualification that they are not adjusted for tax rate changes during the two periods) that as the two taxes are actually designed on average in the various states, income taxes yield slightly more stable revenues over the business cycle than sales and gross receipts taxes. The present writer suspects that this results from the typical sales tax being less comprehensive than the typical state income tax, more often exempting the stabler services and "subsistence" goods from taxation. Evidence is not available to confirm or reject this conjecture.

As for the tendency of revenues to grow with growth of population, aggregate income and the demand for government services, equally comprehensive income and sales taxes are in principle equivalent. However, sales tax revenues may grow more slowly if the proportion of product originating in government is growing relatively. Income tax revenues may grow more slowly if the tax rates and exemptions are indexed for inflation and inflation is significantly present. (The author
33. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), p. 40.
34. These and other ratios to total consumption calculated from data in Economic Report of the President, 1987 (Washington, D.C., 1988), p. 260.
35. Of the 40 states and the District of Columbia with broad-based income taxes, 35 are linked to the federal income tax form at some point. The largest single number, 20, start with federal adjusted gross income and allow most of the federal deductions. U.S. Advisory Commission on Intergovernmental Relations, Significant Features, p. 74.
36. A couple of other lines would be required to adjust tax due for taxes withheld or prepaid.
knows of no sales tax indexed for inflation.) More importantly for most sales taxes today, including that of Texas, if services are largely exempt from the sales tax, sales tax revenues tend to grow more slowly than income since outlays for services are, and have been for decades, growing more rapidly than income. Whereas services account for over half of consumption in the U.S. today, they accounted for only one-third in $1950 .{ }^{34}$

Again, an income tax and a sales tax can be so designed as to be at least roughly equivalent in stability effects, but the cost in other respects may be higher for one than the other. Some of these other costs will be examined in the next following section.

Compliance costs. Burden on taxpayer. The burden on the taxpayer in complying with the typical sales tax, in the absence of any provision for rebates or credits against a parallel income tax, is negligible. The taxpayer does not have to know the rates, the goods and services covered, or any special rules or exemptions. All this is the responsibility of the collector. The taxpayer need not keep records, fill out any forms periodically, pay for professional advice, or worry about deadlines, penalties, etc. No doubt this is one reason why there is relatively little taxpayer resistance to a sales tax as against an income tax.

The federal income tax does involve considerable taxpayer compliance cost and the annoyance that goes with it. If a state had its own set of rules, exemptions, rates, etc., with its income tax, the taxpayer compliance cost could double. Most states with income taxes, however, base them on one or more provisions of the federal tax, so that to a greater or lesser degree, the same records
and procedures serve both taxes, and the taxpayer compliance cost is less than doubled. ${ }^{35}$ It is entirely possible, indeed, to design a state income tax with negligible compliance cost-for example, simply by duplicating the federal rules and applying an $X$ percent surtax to the federal liability. The form, to be returned with a copy of the federal form in confirmation, need have only two lines: the amount on Line 53 of the federal form ("total tax"), and the calculated state tax due (Line 53 times $X$ percent). ${ }^{36}$ Although $X$ itself would be a flat rate applicable to all taxpayers, the state tax would have all the properties of the federal tax-exemptions, allowances, rate structure, etc. Since only those required to pay some federal tax would have to pay the state tax, there would be no additional burden, save filling in the very short form, associated with state tax compliance. Similarly, employers withholding taxes on wages and salaries would only have to multiply the amount withheld for the federal tax by $X$ percent. (Other simple approaches will be discussed below.)

As shown in other connections above, either the sales tax or the income tax at the state level can be complicated and costly to comply with; either, to repeat, can be pretty much what legislators want it to be. By the same token, compliance with either can be very simple and nearly cost-free. The difference between a sales tax and a state income tax need not be what the difference is between a sales tax and the federal income tax, ironically because the federal tax has to be complied with in any case.

Burden on employer of labor and capital. There is no burden of the sales tax on employers as such, since the tax does not have to be paid on purchases of labor (wages), financial capital (interest
and profits) or land (rent). Under an income tax, however, there could be such a burden of significant size, associated with withholding taxes on incomes and filing information returns under a quite different set of requirements from that of federal law. But as already indicated, the additional burden of state withholding also could be negligible.

Burden on the middleman tax collector. There is a very considerable burden on sellers of goods and services subject to a sales tax in complying with their collection obligations. It is they, as noted, who must know the rules, keep the records, be prepared for audits, etc. Even the simplest of sales taxes must involve this burden, spread over hundreds of thousands of vendors large and small; and the burden per dollar collected can be quite high for the small firm without computerized accounting, programmable cash registers, etc. ${ }^{37}$ It seems intuitively obvious that under the simplest state income tax (but not necessarily the most complex) the alternative business burden of withholding taxes on wages, and possibly interest income, must be smaller.
Burden on government as enforcer. There are possibly major enforcement problems associated with either a sales tax or a state income tax, again depending, in the latter case, upon the degree of integration with the federal income tax. Under a sales tax, enforcement problems include ensuring full remittance of collections by vendor-collectors (there being no taxpayer records to check against vendor remittances), ensuring that those obligated to collect the tax do so, collecting the user tax, often associated with a sales tax, on goods purchased out-of-state and brought into the state for use by the buyers, and especially dealing with out-of-state catalog sales, which have grown tremendously
in recent years. There is also the problem of legal avoidance of the sales tax proper along the borders of the state, where shoppers may cheaply cross the border to buy goods at possibly lower net prices.
If a state income tax is integrated to any significant degree with the federal tax, in contrast, enforcement of the state tax may be quite easy and cheap. If to violate the state tax law one must violate the federal law also, one will do the former less lightly. Moreover, there are other records usually to check against state returns, ranging from the federal return (a copy of which could be required with the state return) to employers' withholding records. Exchange of information between federal and state (and among state) income tax authorities would help enforce income tax payments by nonresidents on income derived from property in the subject state, or from wages earned by across-border residents commuting into the state to work. On the other hand, if the state income tax is unique and in no way connected with the federal tax, it could involve enforcement costs far greater than those of the sales tax.

Again, if legislators want to, they can design an income tax with very low enforcement costsand probably lower ones than those of the best feasible sales tax.
Problem of tapping the "underground economy." There is everywhere, in every state and country, a subeconomy in which significant numbers of people make their livings engaged in illegal activities. It is virtually impossible to tax the incomes earned in this way, for obvious reasons. (It is interesting and ironic that quite a few notorious persons, who could not be convicted of more egregious suspected crimes, have been sent to prison for income tax evasion-this crime presumably
committed to hide the greater suspected ones.) It is possible to tax these incomes, when they are spent in a taxing jurisdiction, in the form of sales taxes. The individuals involved do make purchases-of restaurant meals to autos-like the rest of us; and they cannot avoid paying sales taxes if patronizing law-abiding vendors. They need not try to, of course, since the transactions involved need not leave identifying records. So one clear advantage of a sales tax over an income tax is its ability to reach the taxpaying ability of those participating in a significant, if illegal, portion of the total economy.

Other considerations. Exportability. Although seemingly cynical, it may only be selfdefense to prefer state taxes the burdens of which are borne, in part or whole, by persons residing in other states or countries. Taxes which are deeply hidden in costs of production, often in production stages remote from the point of sale to final purchasers of goods, may be passed on to out-of-state buyers in simple prices. But this cannot occur in significant degree if there are close substitutes available elsewhere to out-of-state buyers, free of such taxes. (Where there are close substitutes for a good, the demand for it tends to be highly elastic, so that any effort to raise its price relative to that of substitutes simply diverts purchases elsewhere.) Only when there are not close substitutes available to out-of-state purchas-ers-in the limiting case, when the taxing state has a monopoly on the good in question-can a state substantially export a tax. Consequently, no quite comprehensive tax, such as an income tax or a

[^139]general sales tax, can be thought exportable as a whole. While every state usually has some regional specialties subject to inelastic demands in the larger national and world economies, it is best for the state to try to exploit them with selective taxes (e.g., of historical significance in Texas, the oil and gas severance taxes). ${ }^{38}$ There is no reason to believe that a sales tax has more exportable characteristics than an income tax, if they are equally comprehensive. ${ }^{39}$ If the sales tax is less comprehensive and focuses relatively more on regional specialty goods, then it may be regarded as more exportable than a fully comprehensive income tax. (Where demand is inelastic, as with specialty goods, forward shifting to out-of-state buyers is relatively easy.)

Coverage of retirees and tourists. Both retirees and tourists (often seeking special natural conditions, such as climate and other aspects of the input "land") bring purchasing power into a state and stimulate local industries, from housing to food service. Both use state government services, chiefly highways, parks, etc., in the case of tourists, but rarely the principal one, education; on this account, one could argue, both should pay taxes to the state, but perhaps less comprehensively than actively productive residents. Since retirees are usually on reduced income, a significant part of which may be legally tax-exempt, and
38. See footnote number 2. See also discussion in regard to retirement and tourist industries later in the chapter.
39. See further implications regarding exportability in discussion of long-run incidence later in the chapter.
40. For the major examples, see U.S. Advisory Commission on Intergovernmental Relations, pp. 83 and 92.
often live partly by running down assets acquired through prior saving (e.g., annuities), many would escape taxation under an income tax with exemptions, allowances, etc., similar to those of the federal income tax. A general sales tax, in contrast, would tap much of the purchasing power of these persons. Similarly, a general sales tax would tap the purchasing power of tourists, but an income tax would not.
Thus from the point of view of the tax collector, a sales tax would be superior to an income tax as regards these two groups. (One way of putting this superiority is that the sales tax is in effect more exportable, most obviously in the case of that paid by tourists.) From the point of view of broadening the economic base of a state through exploitation of natural attractions, on the other hand, an income tax would be superior. Perhaps the optimal approach in the present case would be a combination of the two types of taxes, both at modest rates, rather than heavy reliance on either alone.
Relation to federal income tax liability. In this area, as is now well understood, a state income tax now (beginning in the 1987 tax year) has the advantage over a sales tax yielding the same revenue of being deductible for federal income tax purposes. This is of concern, however, primarily for middle and upper income groups in the affected state, since the revised federal law also substantially raises the standard deduction that may be used in lieu of itemized deductions.
State tax sharing with local governments. Numerous states share certain types of tax revenues with local governmental units, especially cities and counties, or permit such units to levy certain taxes in common with the state which the latter collects and
distributes back to their origins. This is presently true of the sales tax in Texas, for instance. It is possible to follow this practice with either an income tax or a general sales tax, and many states having both types of taxes follow the practice with respect to both. ${ }^{40}$
There are somewhat different jurisdictional effects as between a shared income tax and a shared sales tax. For example, cities levying an income tax on residents encounter the problem of avoidance by persons who work in the city and use city services but commute in from nearby communities separately incorporated; while those levying such a tax on persons who work in the city encourage the outmigration of employing firms to surrounding communities. In contrast, cities levying a sales tax encourage those who work in the city and use city services in this regard to make purchases outside the city (thereby encouraging outmigration of retail establishments) whether retaining city residence or not. It is not clear whether the net advantage lies with the income tax or the sales tax in regard to state sharing with local governments; both induce the population to incur social costs to avoid taxes, and effectively increase tax rates on the relatively immobile residents. It is possible, however, that either type of tax is superior to the alternative of the property tax in limiting tax avoidance occurring through outmigration of residents and places of work.

Simplicity of state income tax form. As earlier noted, from the taxpayer point of view, compliance with a sales tax without rebates or a graduated rate structure is simplicity exemplified. In contrast, compliance with an income tax may be extremely complicated and costly to the taxpayer. This need not be so, however, as suggested in the section on
compliance costs. Below we give other examples of ways to make income tax compliance almost as simple as that of the sales tax:
(1) In repetition of the previous example, the taxpayer refers to Line 53 on the federal form ("Total tax") and multiplies it by $X$ percent, that flat state rate applying to all taxpayers. Under this method, the state tax has all the properties, from definition of income to rate structure, of the federal income tax. (Note that the ratio of .28X to .15X is the same as .28 to .15 . Note further that many of the more objectionable features of the federal tax have been eliminated or moderated in the tax legislation of 1981-1986.)
(2) The taxpayer refers to Line 36 ("Taxable income") on the federal form and consults a tax table prescribed by the state law to find the state tax due (e.g., A dollars, plus $Y$ percent of taxable income in excess of $B$ dollars), if a progressive nominal rate structure is desired. If a nominal flat rate is desired, Line 36 is simply multiplied by the specified flat rate. A nominal flat rate, using the Line 36 base, will produce an effectively progressive rate structure, since the federal law allows substantial personal exemptions and at least a standard deduction in calculating taxable income.
(3) The taxpayer refers to Line 30 ("adjusted gross income") on the federal form and calculates the state tax due in one of the manners described in (2). As compared with (2), this procedure would yield a less progressive effective rate structure, but it would not be regressive. It would be proportional with the flat-rate alternative.
(4) The taxpayer refers to Line 30 ("adjusted gross income") on the federal form, takes exemptions and
deductions allowed by the state tax law to calculate taxable income, and then applies state rates as in (2) above.
(5) The taxpayer proceeds as in (2) above, adding or subtracting any special allowances or disallowances specially prescribed by the state law.

Procedures (4) and (5) are obviously less simple than (1), (2) or (3), but (4) need not involve any record-keeping beyond that required for compliance with the federal tax law. If a state desired an income tax unique in most respects to itself, then, of course, the state tax form could indeed be complicated and require substantial additional record keeping on the part of the taxpayer. It would also involve greater enforcement cost for the state tax authorities
Perhaps the maximum complexity and compliance cost would be associated with provision for the deductibility of saved income. It would not be sufficient to allow deductions for additions, during the tax year, to certain types of financial assets, for this procedure would permit the taxpayer to avoid taxes by switching funds from real (or other nonprescribed) assets to the prescribed financial ones, or by borrowing funds to add to the prescribed assets, without doing any saving at all. Rather, it would be necessary, to accomplish the desired purpose (greater capital formation in the state), to require the taxpayer to submit balance sheets as of the beginning and end of the tax period to prove increase in net worth through saving during the period. There are other reasons why a savings deduction might not be worth while, but increases in compliance cost would be a major one. ${ }^{41}$

The advantage of procedures (1), (2) or (3) goes beyond simplicity: any one of them would allow the
state to reduce the regressivity of a system based largely on sales and other product taxes more simply and efficiently than by exempting certain "subsistence" goods from the sales tax, or by providing rebates of sales taxes to lowincome households. On the other hand, if the feature of deduction for savings is deemed of overriding importance, it would be simpler to extend the sales tax to all consumer goods and services and exempt capital goods from the tax. An income tax savings deduction could make it as regressive as a sales tax, unless the rate structure on the remaining taxable income was made highly progressive.
The question of possible revenue yield of a state income tax. The yield of a comprehensive state income tax in Texas would depend, of course, on the level of taxable income and the specific rate structure adopted. We can only indicate here an approximate yield under the simplest of assumptions: (1) that the ratio of taxable income to total personal income in Texas would be roughly the same as for the United States as a whole, and (2) that the rate of taxation would be constant across all household income levels (a "flat" rate of X percent of taxable income).
Pechman has shown that over the past two decades the U.S. ratio of taxable income to personal income averaged approximately 47 percent, with no secular trend in evidence. ${ }^{42}$ In 1985 , total Texas personal income was about $\$ 220$
41. These include allocative "excess burdens," the limited contribution of savings to growth with relative discouragement of inmigration of labor, especially technical labor, and social problems associated with further deepening the poverty of working poor.
42. Joseph A. Pechman, Federal Tax Policy, Fifth Edition (Washington, D.C.: The Brookings Institution, 1987) p. 67. See also Chapter 30 for actual estimates of an income tax in Texas.
billion. Taxable income, under the above assumption, would thus equal approximately $\$ 103$ billion. If the flat rate were five percent, the annual yield would be roughly $\$ 5$ billion. ${ }^{43}$ Allowing for growth of personal income from 1985 to, say, 1990, the yield probably would approach $\$ 6$ billion annually.

Incidence revisited (the long run). Our discussion of the relative incidence of income and sales taxes was confined to the short run (but long enough to go beyond "impact"), and there was no explanation of the presumed mechanism of tax shifting, primarily because of the equivalence of the two taxes when equally comprehensive in a short-run context. In a long-run context, when allowance must be made for alterations of relative supplies of labor and capital due to:
(1) substitutions between current and future consumption, and between marketed labor and nonmarketed labor or leisure and
(2) interstate migration of labor and capital, the subject must be re-opened and the shifting mechanism described.

It will help to begin with the mechanism of shifting a sales tax on a single (class of) product, such as motor fuel. Referring to Figure 1, we see that the price, in the absence of the tax, is determined by demand (curve DD) and supply, reflecting marginal cost curve $\mathrm{SS}_{1}$, at the level $\mathrm{P}_{1}$. The price in question is the relative price, i.e., the cost of the good in terms of the bundle of all other goods it exchanges for (or the dollar price deflated by an index of the general price level). After the sales tax is imposed, the

[^140]relative price that must be paid by the consumer (including the tax) is $P_{2}$, where $S_{2}$ intersects DD. In the short run, the amount of the tax shifted forward to consumers is the difference between $P_{2}$ and $P_{1}$, about half of the tax here (the vertical distance between $\mathrm{SS}_{2}$ and $\mathrm{SS}_{1}$ ), the remainder falling on suppliers of productive services, including owners of the firms in question (profit-receivers). Real sales fall $\left(\mathrm{Q}_{2}-\mathrm{Q}_{1}\right)$ and in the long run, suppliers of productive services will switch to firms producing untaxed goods and services until rates of earnings are re-equalized. This action, by reducing inputs and hence output, moves both $\mathrm{SS}_{1}$ and $\mathrm{SS}_{2}$ to the left (the vertical distance between them remaining equal to the tax) until the price rises enough that its full burden falls on consumers of the taxed good. The burden on consumers is relative, like the price; relative, because all producer/consumers bear the burden of some output now transferred to government use. There is also the cost of switching resources to other industries, borne by movers especially, including an efficiency loss borne by all.
When we turn to a consideration of a sales tax.on all products in a state, the terms of the analysis are significantly changed (see Figure 2). Now the "relative price" means the general price level in the taxing state relative to the general price level in all other states (and all extra-national areas in which the taxing state's goods may compete). The latter price level in dollars cannot be altered significantly by the taxing state's action, depending, as it does, on macroeconomic policies in the larger economy; so it can be taken as given. Noting that most of the taxing state's products face close substitutes in the broader (say, national) trading area, we see that the general demand for those
products must be quite elastic with respect to the relative price level, the more so as time passes; so the DD curve in Figure 2 is drawn accordingly to be almost horizontal. The result is a very small increase in the state price level in response to imposition of a sales tax on all products. This means that almost all of the shortrun burden of the tax falls on suppliers of productive services in the state, including profit-receivers. It also means a sharp contraction of general output in the state (difference between $\mathrm{Q}_{2}$ and $\mathrm{Q}_{1}$ ), with accompanying unemployment of labor and plant facilities. The longer-run response is, accordingly, major movements of labor and capital to other states to re-equalize rates of compensation. As this occurs, given the fixity of land supplies, the margin of land use shifts inward to more productive parcels, rents fall, labor and capital productivity rises (with a higher land to capital and labor ratio), and unit production costs eventually fall low enough to allow the tax to be borne at essentially the initial general price level. But the new output of the state's economy, and its population, will be significantly lower than initially. Again, there are costs of geographical resource reallocation, and productivity and real rates of compensation will be depressed slightly in other states with increased labor and capital supplies. The chief specific longrun burden of the tax falls on owners of land (reduced rents), the rest being absorbed in lower real costs of production, in the taxing state. If labor and capital are unequally mobile, a relatively greater burden is borne by the one of lesser mobility-most likely labor in the short run, since financial capital can move with little cost.

It is readily seen that essentially the same story could be told
if the general tax were a comprehensive income tax that directly reduced rates of compensation and set off re-equalizing movements of labor and capital to other states. Hence our earlier conclusion that an income tax and a sales tax, having the same rate structure and the same degree of comprehensiveness, are equally "bad" for economic growth in the taxing state. ${ }^{44}$ The two taxes also have the same pattern of incidence in the end, and that pattern is more complex than the simplistic popular view that sales taxes are "just passed on" to consumers inand out-of-state, while income taxes "stick" to points of initial impact.

Again, the story is somewhat different if the income tax is comprehensive while the sales tax is not. In the latter case, (1) the product mix is significantly altered, with a significantly larger "excess burden" to be borne by all; and (2) the burden of reallocation falls more heavily on labor resources. Furthermore, a second "excess burden" arises from induced alteration of the most profitable combination of land, labor and capital. After full geographical reallocation, however, the real marginal return to labor will be higher relative to that on capital, due to reduced relative supply of labor, and per capita real income before tax may be higher. Thus with a high degree of labor mobility, the ultimate real burden of a tax directly on labor is shared significantly with owners of other resources (capital and land). This is true also if both the income tax and the sales tax are effectively taxes on labor due to their exempting savings from taxation. ${ }^{45}$ If the poor are both predominantly in the labor category and less mobile than others, a tax effectively on labor may, however, deepen their relative poverty.

These extended observations
about tax incidence have somewhat different implications in the realm of equity than our initial ones, but the most important implications concern the level and growth rate of economic welfare in the taxing state. In general, they suggest that comprehensiveness is better, in whichever tax is chosen. In particular, they raise a doubt, when interstate mobility is taken into account, as to whether exempting savings from taxation, under either an income tax or a sales tax, can make a contribution to a state's growth outweighing
the inefficiency and inequity costs involved.

In any case, the growth of any state's economy depends predominantly on growth of the national economy of which it is an integral part. A state therefore
44. The reader is reminded that we are discussing the effects of taxes per se, and not the combined effects of taxes and the government services, including public investments, financed by them.
45. See footnote number 28 above and associated text.

FIGURE 1. Shifting of a Tax on a Single Product


## Legend:

$\mathrm{DD}=$ quantities demanded at different relative prices
$S S_{1}=$ quantities supplied at different relative prices before imposition of product tax (\% of value)
$\mathrm{SS}_{2}=$ quantities supplied at different prices plus tax
$\mathrm{P}_{2}{ }_{2}$ less $\mathrm{P}_{1}=$ portion of tax shifed to consumers before reallocation
Note: an arrow indicates shift in supply curves with interindustry reallocation of labor and capital.
cannot greatly effect its own growth by means of its internal fiscal policy, particularly when the tax instrument is only a part of the state tax system. A state is better advised to look to the efficiency
46. Jay Helms, "The Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach," The Review of Economics and Statistics, (November 1985).
47. The technique is multiple correlation, in which the dependent variable (some measure of growth) is simultaneously related to two or more independent variables. The result is a set of coefficients for the latter which indicate the sign (+ or - ) and the size of the relationship for each independent variable, holding the other variables constant.
and equity consequences of the system for its residents. Improvements there do not induce outmigration of labor or capital; rather, the reverse.

On empirical evidence concerning growth effects. On the comparative effects of state income taxes versus state sales taxes on state economic growth, there is very little valid evidence. Almost all the evidence concerning the effects of state taxes on growth relates to the total burden of taxes, which is not helpful for our purposes, since we have explicitly assumed in the above analysis that the total burden would not be changed by the introduction of an income tax in Texas, either absolutely or in
relation to other states. Where the growth model is correctly specified to include the other factors influencing growth, both the positive and the negative, the universal (and wholly expectable) finding is that the relative tax burden, cet. par. is a negative factor. ${ }^{46}$ It could not validly be otherwise; as stated at the outset, taxes per se are "bad." The usefulness of such studies is not in finding the obvious, but in measuring the quantitative degree of "badness" in the same equation that also yields the quantitative degree of "goodness" of the factors favorable to growth. ${ }^{47}$ Studies that merely correlate tax levels with growth are worse than

FIGURE 2. Shifting a Tax on All Products


Legend: Same as Figure 1, except:
Note: Ttwo arrows indicates shift in supply curves with geographical reallocation of labor and capital, with associated improvement in productivity.

Single arrow indicates shift in demand curve with geographical reallocation and reequalization of price levels.
useless; they may give an entirely false impression. For instance, if tax levels across states should be positively correlated with levels of "good" expenditures (e.g., public capital and education), merely correlating tax levels with growth may falsely suggest that taxes themselves are favorable to growth. ${ }^{48}$

By the same token, merely correlating the presence of a state income (or sales) tax with growth, without controls for other factors, including the total tax burden, may be worse than useless. The present writer has found only one study that in principle correctly specifies a growth model, while allowing the presence or absence of a state income or sales tax to influence results independently of the total tax burden. ${ }^{49}$ Using data for the period 1967-77, multiple regressions of three measures of industrial growth (value-added, employment and real capital stock) on 18 independent variables in this study indicate no statistically significant relationship of growth to the presence or absence of a personal income tax, a corporate income tax or a sales tax, given the total tax effort. ${ }^{50}$ One measure of growth, employment, was found to be negatively related to total tax effort (as expected) in a highly significant degree. (With other measures of growth, tax effort had the expected negative sign on the correlation coefficients, but the latter were not significant at a ten percent or higher level of confidence.
Such valid evidence as we have, then, suggests that industrial growth in Texas (and associated service industry growth, presumably) need not be adversely affected by the substitution of a personal
income tax for, say, some part of an alternative sales tax, leaving the total tax burden, relative to other states, unaffected. ${ }^{51}$

Relation of corporate income tax to personal tax. As suggested in the Introduction to this chapter, a corporate income tax must accompany a personal income tax if legislators wish to avoid substantial avoidance of personal tax liability on capital income. In the absence of a corporate tax, there would be incentive to use the corporate legal device as a means of retaining business net income that otherwise might be paid to stockholders as dividends. Since the taxation of capital gains that would result from retained earnings can at worst be deferred at the option of the stockholder, and at best permanently avoided if appreciated stock is given away or passed on at death to heirs, additional retention of earnings (and creation of corporations specifically for the purpose) would be in the interest of stockholders other than those requiring current income (e.g., retirees and the proverbial widows and orphans), who would be induced to switch to debt-type securities. Portfolio choices would be distorted, and there would be a utility excess burden here also resulting from noncomprehensive taxation.

But full taxation of corporate earnings at the same marginal rate as that of typical stockholders, or higher, creates an opposite effect to the extent that dividends are paid at all: double taxation of some capital income. There are two possible solutions to this dilemma: either allow individuals to deduct dividends from taxable income or allow corporations to deduct dividends paid from their taxable income, as if they
were the equivalent of interest. Little or no distortion would result from either procedure if the two marginal rates of taxation were approximately equal and "flat."
Perhaps the larger problem in state taxation of corporate income is the jurisdictional one. Should the state try to tax the incomes of all corporations doing business in the state, regardless of state or country of incorporation? If so, should the base of the tax be the total income of the corporation, national or worldwide (the "unitary" concept), or only that portion of net income earned in the taxing state? If the latter, how can the state police accounting practices to prevent the assignment of fixed costs (which to a degree is arbitrary and not subject to strict rules of acceptable accounting practice) in such a way as to minimize profits claimed as originating in the state? If the "nonunitary" concept is adopted, would not resident stockholders prefer to
48. It is also useless to ask businessmen how important taxes are in their location decisions without clearly specifying what other factors are assumed to be constant.
49. Thomas R. Plaut and Joseph E. Pluta, "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States," Southern Economic Journal (July 1983), pp.109-111.
50. "Statistical significance" is a measure of the probability that the results are not due to chance.
51. It would be useful if the authors could rerun their correlations on the basis of data for years since 1977. (Plaut is now in the Office of the Comptroller, where there should be independent interest in possible results.) It is significant that two of the independent variables in the Plaut and Pluta study were energy prices and the ratio of energy production to consumption, both of which have undergone major changes since 1977.
invest in national and international corporations, rather than those doing business chiefly in the state in question? Would this too not induce portfolio distortions and an associated "excess burden?" Clearly, the unitary concept is to be preferred to avoid such problems; but clearly, also, if all states take this approach without coordinating (low) rates, the larger national and international corporations could be taxed to death-which, of course, is the basis of their opposition to it.

A way out of this morass of problems would be not to tax corporate incomes separately, but to tax stockholders under the personal income tax on both dividends and their proportionate shares of retained earnings, then to allow sellers of corporate stock to take a deduction equal to cumulative retained earnings in calculating taxable capital gains. However, this too could present cash flow problems for those dependent on current investment income.

A more fundamental "solution" would be not to have a corporate income tax at all, but to tax corporations on some other basis, such as gross receipts or capitalization (e. g., Texas' franchise tax). Either of these bases encounters the "unitary" problem also. Moreover, either of these increases the cyclical sensitivity of corporate after-tax profits, since either would have to be paid even if the corporation had

[^141]cyclical negative net income. As noted previously in connection with the taxation of profits generally (not just those of corporations), an income tax reduces business risk, relative to a tax on such a base as gross receipts or assets, by reducing the

> A way out of this morass of problems would be not to tax corporate incomes separately, but to tax stockholders under the personal income tax on both dividends and their proportionate shares of retained earnings . . . .

dispersion of possible investment results-particularly with the privilege of carrying losses backward or forward. This property of a tax on net income (rather than some alternative business tax) can be especially attractive to start-up businesses and those engaged in risky innovative investments. It therefore can be especially conducive to the development of a state seeking to broaden the base of its economy by attracting (new) "industries of the future."

So there is no completely satisfactory corporate income tax. But one carefully integrated with the personal income tax (as by personal credits for corporate tax paid on dividends) can be more conducive to investment and growth in a state than alternative ways of "making business pay its fair share." Tying the state tax to the federal tax, in a manner similar to one of those discussed,
with reference to the personal income tax, can greatly reduce compliance cost.

A value added tax-a third alternative? Throughout the foregoing discussion we have assumed that the two alternative taxes were a personal income tax and a general sales tax. A value-added tax would also be an alternative, although despite its almost universal use at the national level in Western European countries, we have no experience with it at the national level on this continent, and so far, to the author's knowledge, only Michigan has tried it at the state level. ${ }^{52}$

The base of a value-added tax is, for each firm (where it is collected), the difference between the dollar value of sales and the dollar value of purchases (goods and services) from other firms. The difference between the value of purchased raw materials, for instance, and the sales value of a good processed out of them is the value added by processing. The sum of the values added by all firms in an economy is called net national product in the national accounts (our Identity I above). It is also the sum of all of the costs (except depreciation, which adds no value and is excluded from net national product) other: than purchases from other firms-the sum of wages and salaries, interest, rent and profits in the absence of any tax.

An example will illustrate. Assume the production of a good through three stages of processing, the final stage selling to some final user (consumer or investor) (see Table 4).

If we now assume that firms $A, B$ and $C$ make up the entire state economy (the firms selling the $\$ 10$ input to firm A being in another state or country) and
consolidate their accounts, cancelling offsetting interfirm purchases and sales, we have Table 5.

If we now assume that a valueadded tax of ten percent is levied on each firm, firm A would have the additional cost (and pay to the government) $\$ 19$, and Firms B and C $\$ 20$ each, for a total of \$59. If this tax is fully passed on to the final purchaser, the sales price of the final good becomes $\$ 659$. If it cannot be passed on at all, nominal incomes must fall by $\$ 59$. In either case, those selling productive services to firms have ten percent less purchasing power than before the tax, this difference now being in the hands of the state treasury. So the described value added tax is the equivalent of a flat-rate ten percent income tax or a ten percent sales tax on the state's product value (the remaining ten dollars in the final sales price being the product of another state or country).

Note that the value-added tax would tap all of the incomes generated in the production process, whether or not the profits were earned by corporations, and whether the interest, rent and dividends were received by residents or nonresidents of the state. Note too that if the state levied the ten percent sales tax on the sales price to the final purchasers it would yield one dollar more than the value added tax, for the state would then be effectively taxing an imported product (the ten dollar purchase from out-ofstate by Firm A).

Recall now another identity:
Net state product (= net state incomes)
= Domestic consumption Domestic investment (private + government each) Net exports

If all the income recipients are residents of the state, and they alone purchase the final goods not bought by government (say, the remaining $\$ 600$ worth, after passthrough of the $\$ 59$ to final purchasers and the government's purchase of $\$ 59$ worth), they can only do so by borrowing from or selling assets to nonresidents, since they have only $\$ 590$ of current income. This borrowing of the necessary ten dollars is the exact counterpart of the assumed net import of ten dollars (the negative of net exports as in the above identity). Net imports of goods and services are always identically equal to net inflows of capital into the state. Net imports may also allow (as has already been discussed earlier) a sales tax levied on the price to a final purchaser to have a larger or smaller overall tax base than a value added tax, depending on the effective sales-taxability
of imports and exports under the tax in question. Thus, whether there is a net inflow of capital in the state (hence net imports) can affect the base of a value added tax relative to a sales tax. Nonetheless, there is a rough equivalence of a value added tax and a completely comprehensive sales tax imposed at the same rate.

There is also an equivalence of a flat-rate income tax and a value added tax at the same rate, provided the income tax can equally tap residents' and nonresidents' income generated in the state's productive process. If the state's legislators wish to adopt a flat-rate comprehensive income tax, they could do it in the form of a value-added tax and perhaps avoid some of the problems of taxing the incomes of nonresidents and multi-state (or national) corporations. To make a value-added tax progressive in its effective rate

TABLE 4. Illustration of Value-Added Measurement


| TABLE 5. The Income-Value-Added Identity |  |  |
| :--- | :--- | :--- |
| Net state income | $\overline{=}$ | Net state product |
| Wages and salaries | $\equiv$ | Sum of <br> values <br> added |
| $\left.\begin{array}{l}\text { Interest } \\ \begin{array}{l}\text { Rent } \\ \text { Profits }\end{array} \\ \text { Sum: } \$ 590\end{array}\right\}$ |  |  |

structure, however, would involve a rebate provision, with the extra compliance and administrative costs discussed above in connection with sales tax rebates for the same purpose. To exempt savings from a value-added tax (the equivalent of exempting value added in the production of capital goods) it would be necessary to rebate the value added tax to the final purchasers of designated capital goods (for greatest local development effect, capital goods to be employed in the taxing state only).
Since the value added tax is the rough equivalent of either a comprehensive income tax or a comprehensive sales tax, given the same effective rates, all of the previous discussion concerning relative incidence and longer-run effects on economic efficiency and growth applies equally to it. As for compliance and enforcement costs, it is possible that a value added tax would be cheaper to implement, since the sums paid nominally by firms would be similar in size to, and involve similar accounting records as, current income taxes in other states, and since records of transactions between identifiable firms would be an aid to ensuring payment of the proper amount by each firm. A value added tax thus could reduce somewhat the regressivity of a tax system based on less-thancomprehensive sales, and perhaps reduce those taxpayer burdens in excess of the transfer of purchasing power to the state treasury. ${ }^{53}$
53. For a thorough discussion of the value-added tax as a type, see Charles E. McClure, The Value Added Tax: Key to Deficit Reduction? (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1987).

## Summary and Conclusions

Since a more detailed summary is provided at the beginning of this chapter, the findings may now be indicated briefly in a repetition of the list of advantages and disadvantages of a comprehensive state income tax in comparison with a (necessarily less comprehensive) sales (or value added) tax.

Relative advantages of income tax:
(1) greater flexibility and lower cost in implementing an effective rate structure deemed desirable on grounds of equity and/or economic efficiency;
(2) greater visibility, hence more informed public choice at taxpayer level. (But see the first disadvantage below.);
(3) less distortion in the allocation of resources, hence lower "excess burden" and greater economic efficiency;
(4) less adverse effect on economic growth (less distortion of the capital/ labor ratio through differential induced input migration);
(5) if appropriately linked to the federal income tax, lower compliance and enforcement cost;
(6) somewhat more elastic (and perhaps more stable) revenue source;
(7) superior for tapping incomes earned in the state by nonresidents;
(8) not limited by (U.S.) constitutional bars on "burdening" interstate commerce; and
(9) deductible (for those who itemize) for federal income tax purposes.

## Relative disadvantages of

 income tax:(1) greater visibility, hence greater taxpayer resistance;
(2) if it is deemed desirable to exempt savings from taxation, higher compliance cost than in exempting capital goods from sales (or value added) tax;
(3) does not as well tap incomes of retirees or temporary residents (e. g., students) who use state services. Does not tap incomes of tourists at all;
(4) if not tied to federal tax, greater compliance and enforcement cost;
(5) presents problems of integration with companion corporate income tax.

The advantages of an income tax may in some respects be smaller relative to a valueadded tax than to a sales tax.

Again to repeat, it is impossible to say that on balance "an" income tax is unequivocally either superior or inferior to the alternatives discussed. Much depends on the specific characteristics of "the" income tax actually legislated. Even with the conditions indicated in the tabulation above, one could be for or against an income tax, depending on the weights assigned to the different suggested advantages and disadvantages. It does seem possible to say, however, that a state income tax probably could be designed to be superior to the present state sales tax, if not superior to the "best" sales or value-added tax. Perhaps the most feasible improvement would be some combination of income and other general tax, designed to gain most of the advantages of both.

## Part VII: Other Issues

# T ax and Spending Limitations 

## A Review of Policies in Texas and Other States

## Summary

One of the most important public policy issues of recent years has been the size of government. Much of this debate dates from the adoption of Proposition 13 in California in 1978. Proposition 13 , which was a limit on property taxes, galvanized public dissatisfaction with rising taxes and governmental costs and had an impact on state and local tax policy well beyond the California state line. Since 1978, many states have imposed limitations on the ability of state and local government to tax and spend.
Three issues are addressed by most limitation policies: (1) whether the limits are placed on state or local government or both; (2) whether the limitation is on spending or revenue; and (3) whether the limitation is constitutional or statutory.
At the state level, the most common kind of limitation-used in 49 states including Texas-is the balanced budget requirement. Nineteen other states go a step farther and impose limitations on state taxing and spending powers. Among these states, 15 (including Texas) impose limits on spending and four on revenues.
The Texas limitation has not had a major effect on state spending, in part because poor economic conditions have kept the affected revenues below the ceilings established by the limit.
Another type of limitation used in six states (not including Texas)
is the requirement of an extraordinary majority vote on tax legislation. This ranges from threefifths to three-fourths of the membership of both houses of the legislature.
A final form of limitation is the budget stabilization fund, a special contingency reserve where 28 states set aside money for fiscal emergencies. Texas voters will consider a stabilization fund proposal in the November 1988 election.
Although there are a few cases of general tax and spending limits at the local level, the most common local limitations are those imposed on the property tax. These include: (1) rate limits; (2) levy limits; (3) assessment limits; or (4) full-disclosure requirements. Texas imposes rate limits on local jurisdictions and has a full-disclosure requirement. Texas also allows citizens to petition to roll back local property tax increases under certain conditions.
Research into the effectiveness of tax and spending limitations shows mixed results. There are cases where the limit has been effective-notably in California in recent months-but some analysts have found that most limits either have little or no effect or actually distort government decisions. Nonetheless, given public concern over government growth, such mechanisms are likely to continue to play a role in state and local fiscal policy.

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One of the most important public policy issues of the last decade has been the size of government. Much of this debate stems from the passage of Proposition 13 in California in 1978. Proposition 13 was, in reality, a limit on government's use of the property tax, but it quickly took on a much larger significance for state and local tax and budget policy nationally.

Although efforts to impose general limitations on government taxing and spending powers were relatively new at the time of Proposition 13's adoption, tax and expenditure limitations of various kinds have a long history in the United States, dating at least from the 1870s. Proposition 13's importance was in galvanizing mounting dissatisfaction with rising taxes and government growth and providing a vehicle for dealing with them. Many of these concerns continue today at all levels of government and so does interest in limitation mechanisms.
Texas has enacted a number of tax and spending limitations of its own. The state has long imposed local property tax rate limits. In the wake of Proposition 13, it also adopted full disclosure "truth-intaxation" requirements for pro-
posed local property tax rate increases and permitted voteroriginated rollbacks of property tax increases under certain circumstances.

State government in Texas has two major limitations on its own taxing and spending powers. The first is the "pay-as-you-go" provision of the Texas Constitution, which sets a limit on state spending based on available revenues as estimated by the Comptroller of Public Accounts. The pay-as-you-go provision was approved by voters in 1942. The second limitation, adopted in 1978, places a limit on the growth in state appropriations from tax revenues not dedicated by the Constitution.

Throughout their recent history, tax and spending limitations in Texas and elsewhere have been controversial. Proponents argue that they are a way of reining in government spending-a fiscal version of Chinese foot-binding, as one economist put it. ${ }^{1}$ Opponents charge they are, for the most part, simplistic schemes that invite evasion by government and distort public finance decisions. Some analysts argue they simply have not lived up to the claims made for them by supporters; others claim they could be "sleeping giants" that could awaken to dramatically impact public finance in years to come.

This chapter reviews the current use of tax and spending mechanisms in the United States and in Texas. It also examines evidence

[^142]of their effectiveness and the results of their use-intended and otherwise.

## Why Limits?

Advocates of tax and spending limitations offer several reasons for their adoption. These include the rapid increase in government spending in recent years, the attendant rise in tax burdens imposed by all levels of government and the mounting inequities stemming from increased tax burdens.
There is evidence to support all of these arguments. Government spending and taxes have risen significantly in the past two decades, nationally and in Texas. Some idea of the magnitude of this growth can be found in Table 1, which shows various spending and revenue indicators for all state and local governments nationally and in Texas for 1965 and 1985. Whether growth is measured in dollar expenditures or revenues, as a percent of personal income or by changes in public employment, the upward trend is unmistakable.
Nationally, direct general expenditures by state and local government increased by an average of ten percent a year from 1965 to 1985, compared with an average annual increase of about six percent in consumer prices and only about a one percent annual population increase. Spending by Texas state and local governments grew at an annual rate of almost 13 percent, the higher growth fueled at least partly by the strong growth of the Texas economy and population over much of this period.
General revenue and taxes have displayed similar trends. Nationally, state and local taxes increased at a 9.5 percent annual rate from 1965 to 1985; in Texas, the average rate was 11.7 percent annually. Both of these rates were
higher than the average growth in personal income over the period, meaning that the share of the average citizen's income taken by taxes increased both nationally and in Texas. In Texas' case, this occurred despite strong economic growth and rising incomes.

In fact, some researchers argue that it was not the rising cost of government that brought about the so-called tax revolt of the late 1970s, but rather frustration among taxpayers with a period when real tax burdens--the burden of taxes after adjustment for inflation-began to outstrip the growth in income. As one analyst summed up the problem:

There were few cries for controlling the size of government when the average growth in real income and real tax burden kept the relative tax burden nearly constant. From 1957 to 1967 real disposable income increased 50 percent and real tax burden 51 percent. As soon as the average growth in real tax burden exceeded the growth in real income, the protests grew in number and volume. . . . It did not matter what the reasons for growth were expenditures for social justice, effective lobbying by private interest groups, or the aggrandizement of public bureaucrats. Citizens felt the squeeze on their budgets and focused their frustration on the public sector. ${ }^{2}$

Rising tax burdens also magnify real and perceived inequities in the state and local tax systems. Taxpayers in Texas and nationally have become much more sensitive to tax rate increases. This sensitivity appears to focus on the property tax in particular. It was the target of Proposition 13 in California, and it continues to
be one of the most disliked taxes nationally. ${ }^{3}$ In many cases, anger over property tax inequities has been transformed into more general calls to limit government activity at all levels, however financed. ${ }^{4}$

It would be wrong, though, to assume that the case for limitations is clearcut in all cases. The causes of government growth are complex, and arguments abound on both sides of the issue. Despite the evidence offered by proponents of government limits, some analysts argue that the size of state and local government has not
risen dramatically in real, infla-tion-adjusted terms, and that much of the growth that has occurred can be attributed to such factors as inflation in the cost of government services, new demands for services from a growing population and the forcingdown of responsibilities previously handled by the federal government.
Still, the argument that government growth is out of control continues to be compelling for many Americans, and interest in limiting the size of governmentalthough not presently at the level
of intensity reached in the late 1970s-remains of interest to a great many citizens. Within this context, tax and spending limitations play a part in the state and local fiscal process for many states.

Sorting through the various approaches in the 50 states, it is
3. See, for example, U.S. Advisory Commission on Intergovernmental Relations, Changing Public Attitudes on Government and Taxes, 1987 Edition (Washington, D.C., 1987).
4. Raimondo, p. 34.

TABLE 1. Measures of State and Local Government Growth, Texas and U.S., 1965 and 1985

| Measure | All State and Local Governments |  | Texas State and Local Governments |  | Texas State Government Only |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1965 | 1985 | 1965 | 1985 | 1965 | 1985 |
| Direct General Expenditure (Billions of Dollars) Overall \% Change Average Annual Change | \$82.8 | $\begin{gathered} \$ 552.2 \\ 556.6 \% \\ 10.0 \% \end{gathered}$ | \$3.7 | $\begin{array}{r} \$ 32.8 \\ 790.2 \% \\ 11.6 \% \end{array}$ | \$1.6 | $\begin{array}{r} \$ 17.51 \\ 989.0 \% \\ 12.7 \% \end{array}$ |
| Expenditures Per $\$ 1,000$ of Personal Income | \$156 | \$183 | \$149 | \$163 | \$65 | \$87 |
| General Revenue (Billions of Dollars) Overall \% Change Average Annual Change | \$83 | \$597.7 619.8\% 10.4\% | \$3.7 | $\begin{array}{r} \$ 35.6 \\ 854.4 \% \\ 11.9 \% \end{array}$ | \$2.2 | $\begin{array}{r} \$ 18.81 \\ 772.4 \% \\ 11.4 \% \end{array}$ |
| General Revenue Per $\$ 1,000$ of Personal income | \$156 | \$198 | \$151 | \$177 | \$87 | \$94 |
| Tax Collections (Billions of Dollars Overall \% Change Average Annual Change | \$56.7 | $\begin{array}{r} \$ 349.8 \\ 516.5 \% \\ 9.5 \% \end{array}$ | \$2.4 | $\begin{array}{r} \$ 20.7 \\ 778.8 \% \\ 11.5 \% \end{array}$ | \$1.3 | $\begin{array}{r} \$ 11.51 \\ 808.7 \% \\ 11.7 \% \end{array}$ |
| Taxes Per $\$ 1,000$ of Personal Income | \$107 | \$116 | \$95 | \$103 | \$51 | \$57 |
| Public Employees (Full Time <br> Equivalents-Thousands) Overall \% Change Average Annual Change | 6,937 | $\begin{array}{r} 10,568 \\ 52.3 \% \\ 2.1 \% \end{array}$ |  | $\begin{array}{r} 764 \\ 109.35 \% \\ 3.8 \% \end{array}$ | 78 | $\begin{array}{r} 1781 \\ 126.5 \% \\ 4.2 \% \end{array}$ |
| Source: U.S. Department of Commerce, Bureau of the Census, Governmental Finances, various years; and Public Employment, various years; Brizius \& Foster, State Policy Data Book '87. <br> 1. Totals may differ from official state figures because of differences in definitions used. |  |  |  |  |  |  |

possible to discern three issues around which most tax and spending limitation policies revolve. They are:
(1) whether limits are placed on state or local government or both;
(2) whether the limitation is on spending or revenue; and
(3) whether the limitation is constitutional or statutory.

## Types of Limits

Table 2 summarizes the major types of tax and spending limitation mechanisms currently used by state governments. The states generally implement four types of limits: balanced budget requirements, spending limitations, revenue limitations and special majority vote requirements on tax legislation.

Of the four forms, by far the most common is the traditional balanced budget requirement, found in 49 states. (Vermont is the lone exception.) Balanced budget requirements in most states are similar to Texas'they require the state to produce a balanced budget over some set period of time. Past that generality, however, the details and stringency of individual state requirements vary significantly.

Less numerous are the states that have gone beyond balanced budget provisions have imposed additional special restraints on government taxing and spending authority. These states frequently attempt to constrain taxes or spending based on various measures of state economic growth.
Nineteen states currently have

[^143]such limitations. As Table 2 shows, the most commonly used are limits on spending, which 15 states-including Texas-have enacted, mostly in the wake of Proposition 13. Only four states have direct revenue limitations, although in some states, again including Texas, the spending limit applies only to spending from certain revenue sources. As in the case of the balanced budget provisions, the special tax and spending limitations may be either constitutional or statutory, and again, their degree of stringency varies.

A final form of limit used in six states-Arkansas, Delaware, Florida, Louisiana, Mississippi and South Dakota-is the requirement of an extraordinary legislative majority on tax bills. Under the Louisiana provision, a tax bill must pass by a twothirds vote in both houses of the legislature. In Arkansas, rate increases in existing taxes can be accomplished by a simple majority, but major structural changes require a three-fourths vote in both houses. Mississippi and Delaware require a threefifths majority on revenue measures, and South Dakota requires a two-thirds majority. In Florida's case, the only limit is on increases in the state corporate income tax (it has no personal tax), which must be approved by a three-fifths vote in both houses; other Florida tax bills require only a simple majority.
The reason for the large percentage of limits focused on spending-whether simple balanced budget provisions or more exotic spending limitation mechanisms-is relatively simple: governors and legislatures can exercise more direct control over the level of spending, which can be set during the
budget process, while projecting state income is a far more uncertain undertaking. However, even expenditures cannot be set precisely because some pro-grams-like welfare paymentscan be significantly affected by economic conditions or are driven by the revenue available from outside sources, notably the federal government.

There also are some differences in the philosophy behind the two approaches, as one analyst notes: "The advocates of revenue limitations wish to assure taxpayers that only a given amount of their money will be taken, and the advocates of expenditure controls are telling the taxpayer that governmental administrators are going to have to operate within tightly defined fiscal parameters. ${ }^{\prime 5}$ In this context, spending limits provide control over state purse strings without as much loss of flexibility as the revenue limitation approach seems to imply.

## Balanced Budget Requirements

Table 3 shows a detailed breakdown of the types of balanced budget limitations employed in the various states.

Twenty-nine states have either constitutional or statutory requirements prohibiting carrying a deficit from one fiscal year to the next, the most stringent limitation. Ten states-Texas among them-require action to eliminate a deficit problem before entering a new two-year budget period. This essentially is the situation Texas faced in 1986-87. The state experienced a record deficit at the end of 1986 and an even larger one at the end of 1987. By the end of the 1987 legislative session, a financing plan was enacted to eliminate the deficit by the end of the

TABLE 2. Restrictions on State Taxing and Spending Powers

| State | Constitutional or Statutory | Stringency Rating ${ }^{1}$ (High=10) | Spending Limit | Revenue Limit | Special Majority on Tax Bills? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | Con' | 10 | - -- | -- | -- |
| Alaska | Con, Sta | 6 | Con (1982) | -- | -- |
| Arizona | Con | 10 | Con (1978) | -- | -- |
| Arkansas | Sta | 9 | -- | -- | Yes |
| California | Con | 6 | Con (1977) | -- | -- |
| Colorado | Con | 10 | Sta (1977) | -- | -- |
| Connecticut | Sta | 5 | ( | -- | -- |
| Delaware | Con | 10 | -- | -- | Yes |
| Florida | Con, Sta | 10 | -- | -- | Yes ${ }^{3}$ |
| Georgia | Con | 10 | -- | -- | -- |
| Hawaii | Con,Sta | 10 | Con (1978) | -- | -- |
| Idaho | - Con | 10 | Sta (1980) | -- | -- |
| Illinois | Con | 4 | -- | -- | -- |
| Indiana | Con | 10 | -- | -- | -- |
| lowa | Con | 10 | -- | -- | -- |
| Kansas | Con | 10 | -- | -- | -- |
| Kentucky | Con, Sta | 10 | -- | -- | -- |
| Louisiana | Con | 4 | -- | Sta (1979) | Yes |
| Maine | Sta | 9 | -- | ( | -- |
| Maryland | Con | 6 | -- | -- | -- |
| Massachusetts | Con | 3 | -- | -- | -- |
| Michigan | Con | 6 | -- | Con (1978) | -- |
| Minnesota | Con,Sta | 8 | -- | -- | -- |
| Mississippi | Sta | 9 | -- | -- | Yes |
| Missouri | Con | 10 | -- | Con (1980) | 促 |
| Montana | Con | 10 | Sta (1981) | (198) | -- |
| Nebraska | Con | 10 | (1081) | - | .- |
| Nevada | Con, Sta | 4 | Sta (1979) | -- | -- |
| New Hampshire | Sta | 2 | -- | -- | -- |
| New Jersey | Con | 10 | Sta (1976) | -- | -- |
| New Mexico | Con | 10 | Sta(1076) | -- | - |
| New York | Con | 3 | -- | -- | -- |
| North Carolina | Con, Sta | 10 | -- | - | -- |
| North Dakota | Con | 8 | -- | -- | -- |
| Ohio | Con, Sta | 10 | -- | -- | -- |
| Oklahoma | Con | 10 | -- | -- | -- |
| Oregon | Con, Sta | 8 | Sta (1979) | -- | -- |
| Pennsylvania | Con, Sta | 6 | Sta (1070) | -- | -- |
| Rhode Island | Con | 10 | Sta (1977) | -- | -- |
| South Carolina | Con, Sta | 10 | Sta (1980) | -- | -- |
| South Dakota | Con, Sta | 10 | --- | -- | Yes |
| Tennessee | Con | 10 | Con (1978) | -- | Stes |
| Texas | Con | 8 | Con (1978) ${ }^{4}$ | -- | -. |
| Utah | Con,Sta | 10 | Sta (1979) | -- | -- |
| Vermont | None | 0 | -- | -- | -- |
| Virginia | Con, Sta | 8 | -- | -- | -- |
| Washington | Con, Sta | 8 | -- | Sta (1979) | -- |
| West Virginia | Con | 10 | -- | -. | -- |
| Wisconsin | Con | 6 | -- | -- | -- |
| Wyoming | Con | 8 | -- | -- | -- |
| Source: Survey of states; U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), pp. 114-117 and Fiscal Discipline in the Federal System: National Reform and the Experience of the States (Washington, D.C., July 1987); National Conference of State Legislatures. |  |  |  |  |  |
| 1. The degree of stringency index measures the relative strictness of state laws regarding a balanced budget-depending on how easy or difficult the budget is to override and other factors. It was developed by the Advisory Commission on Intergovernmental Relations. <br> 2. $\mathrm{Con}=$ constitutional; Sta $=$ statutory. <br> 3. Corporate income tax increases only. <br> 4. The Texas limit applies to spending from non dedicated tax revenue, but the limitation is on spending, not on how much revenue can be raise from the affected sources. |  |  |  |  |  |

TABLE 3. State Balanced Budget Requirements

| State | Governor Must Submit a Balanced Budget | Legislature Must Pass a Balanced Budget | Deficit May Be Carried Over but Must be Corrected in the Next Fiscal Year | State Must Act on Deficit in Current Biennium | State Must Act on Deficit in Current Fiscal Year | Degree of Stringency Scale ${ }^{1}$ $(\mathrm{High}=10)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | -- | -- | -- | -- | Con | 10 |
| Alaska | Sta ${ }^{2}$ | -- | Con | -- | -- | 6 |
| Arizona | -- | -- | -- | -- | Con | 10 |
| Arkansas | -- | -- | -- | -- | Sta | 9 |
| California | Con | -- | Con | -- | , | 6 |
| Colorado | -- | -- | 兂 | -- | Con | 10 |
| Connecticut | Sta | Sta | Sta | -- | -- | 5 |
| Delaware | -- | -- | -- | -- | Con | 10 |
| Florida | - | -- | -- | -- | Sta, Con | 10 |
| Georgia | -- | -- | -- | -- | Con | 10 |
| Hawaii | Sta, Con | -- | -- | Con | Con | 10 |
| Idaho | -- | $\cdots$ | -- | -- | Con | 10 |
| Illinois | Con | Con | -- | - | -- | 4 |
| Indiana | -- | -- | -- | - | Con | 10 |
| lowa | -- | -- | -- | -- | Con | 10 |
| Kansas | -- | -- | -- | -- | Con | 10 |
| Kentucky | - | -- | -- | Con | Sta | 10 |
| Louisiana | -- | Con | -- | -- | - | 4 |
| Maine | -- | -- | -- | -- | Sta | 9 |
| Maryland | Con | Con | Con | -- | -- | 6 |
| Massachusetts | Con | -- | -- | -- | -- | 3 |
| Michigan | -- | -- | Con | -- | -- | 6 |
| Minnesota | - | -- | -- | Sta, Con | -- | 8 |
| Mississippi | -- | -- | -- |  | Sta | 9 |
| Missouri | -- | -- | -- | -- | Con | 10 |
| Montana | -- | Con | -- | Con | Con | 10 |
| Nebraska | -- | -- | -- | -- | Con | 10 |
| Nevada | Sta | Con | -- | -- | -- | 4 |
| New Hampshire | Sta | - | -- | -- | -- | 2 |
| New Jersey | -- | -- | -- | -- | Con | 10 |
| New Mexico | -- | -- | -- | -- | Con | 10 |
| New York | Con | - | -- | - | -- | 3 |
| North Carolina | -- | -- | -- | - | Sta, Con | 10 |
| North Dakota | -- | -- | -- | Con | -- | 8 |
| Ohio | -- | -- | -- | -- | Sta, Con | 10 |
| Oklahoma | - | -- | - | -- | Con | 10 |
| Oregon | -- | -- | -- | Sta, Con | -- | 8 |
| Pennsylvania | Sta, Con | Sta | Sta, Con | - | -- | 6 |
| Rhode Island | -- | -- | --- | -- | Con | 10 |
| South Carolina | -- | -- | Sta, Con | -- | Con | 10 |
| South Dakota | -- | -- | , | -- | Sta, Con | 10 |
| Tennessee | -- | -- | Con | $\cdots$ | Con | 10 |
| Texas | -- | Con | -- | Con | -- | 8 |
| Utah | -- | -- | -- | -- | Sta, Con | 10 |
| Vermont | -- | -- | -- | $\cdots$ | -- | 0 |
| Virginia | -- | -- | -- | Sta, Con | - | 8 |
| Washington | -- | -- | -- | Sta, Con | -- | 8 |
| West Virginia | -- | -- | -- | -- | Con | 10 |
| Wisconsin | -- | -- | Con | -- | .- | 6 |
| Wyoming | -- | -- | -- | Con | -- | 8 |
| Totals | 11 | 8 | 9 | 10 | 29 | 7.9 (Avg.) |
| Source: Survey of states; U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, (Washington, D.C., 1987); National Conference of State Legislatures. |  |  |  |  |  |  |
| 1. The degree of stringency index measures the relative strictness of state laws regarding a balanced budget depending on how easy or difficult the budget is to override and other factors. It was developed by the Advisory Commission on Intergovernmental Relations. <br> 2. $\mathrm{Sta}=$ statutory: $\mathrm{Con}=$ constitutional. |  |  |  |  |  |  |

1988-89 biennium. However, the deficit itself was not eliminated in $1987 .{ }^{6}$

Other states have provisions requiring the Legislature to pass a balanced budget or the governor to submit one. Nine states allow deficits to be rolled from one budget period to the next, as long as action is taken to deal with them in the next budget period.
These provisions impose varying degrees of limitation on state legislatures' abilities to spend money. The U.S. Advisory Commission on Intergovernmental Relations (ACIR) has quantified these limitations in a so-called "degree of stringency" scale, which is shown in Table 3. The tougher the balanced budget requirement, the higher a state's rating on the ACIR scale. Although Texas has a fairly stringent constitutionally based requirement, its rating of eight on the scale of one through ten is not one of the highest. In fact, 29 states have higher ratings, primarily because Texas' law effectively allows deficits to roll from year to year within a biennium. In Texas, too, appropriations in excess of the Comptroller's estimates are possible with a fourfifths vote in both houses of the Legislature-technically making deficit appropriations and the perpetuation of a deficit possible. However, in the history of the pay-as-you-go requirement, dating back to the 1940s, such an override has never been used.
Some states also go beyond simple balanced budget requirements. For example, under Delaware law, no general appropriation can exceed 98 percent of available revenue. The unspent two percent and other surplus funds are set aside in a special reserve account to cover unanticipated deficits. Similarly, Wisconsin law prohibits any bill from pulling the projected state ending general fund balance at the end of
a two-year budget period below one percent of total general fund appropriations (although the state's provisions for dealing with shortfalls are less stringent than in many states).
In contrast, the Texas Legislature normally appropriates virtually all available resources, frequently leaving only a few thousand dollars in anticipated revenues unappropriated at the end of a legislative session. Like Texas, Kentucky allows full appropriation of available revenues but requires state agencies to set aside 2.5 percent of their budgets each year in the event of a revenue shortfall.

## Revenue Limits

Table 4 shows a detailed summary of the provisions of the tax and spending limitations currently in effect. Four states-Louisiana, Michigan, Missouri and Washing-ton-apply direct limits to the revenues the state can raise. Two of these provisions are statutory and two constitutional. The provisions in all four states attempt to link revenue growth to growth in the state economy measured by personal income. In Louisiana, Michigan and Missouri, revenues as a percentage of personal income cannot exceed the level reached in some base yearusually the year the legislation was adopted or the preceding year. Thus, if revenues equalled ten percent of state personal income in the year of adoption, they would not be allowed to exceed that level in any subsequent year, regardless of the rate of actual revenue growth. In contrast, Washington's limit sets an allowable annual rate of tax revenue growth based on the average rate of growth in state personal income over the preceding three years.
In strong revenue growth years, these states may face the situation
where actual collections exceed receipts allowed under the limit. The four states handle this situation in different ways. In Louisiana, for example, any excess is deposited in a Tax Surplus Fund to be used for tax refunds. Similarly, revenues above a certain growth level in Michigan are directed into a special budget stabilization fund for use in slow growth periods and budget emergencies. (See the later section of this chapter on stabilization funds.) If revenues exceed the Missouri limit by one percent or more, the excess must be refunded to income taxpayers. In Washington, any excess becomes part of the tax revenue for the next year in the limitation calculation.
All of the states except Louisiana allow the waiver of the limit upon an emergency declaration (by either the governor or legislature) and a vote of two-thirds of the members of both houses of the legislature. Louisiana's statute has no such escape mechanism, but since it is statutory, it can be changed by simple majority vote in the legislature.
All of the states apply the limitation to a selected range of state revenues, and the exclusions are often very important. Louisiana, for example, excludes utility and severance tax income. One study found that the limit had not been restrictive on the state because of the severance tax exclusion. ${ }^{7}$ Louisiana also excludes

[^144]TABLE 4. State Tax and Expenditure Limitations

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| State/Legal Basis/Year <br> Adopted |  |  | Coverage |

TABLE 4. State Tax and Expenditure Limitations (Continued)

| State/Legal Basis/Year Adopted | Description of Limitation | Coverage | Provisions for Waiver |
| :---: | :---: | :---: | :---: |
| Nevada Statutory 1979 | Limits executive budget requests to the rate of inflation and population growth. | Applies to governor's proposed spending only-not legislative. | Legislature is not limited. |
| New Jersey Statutory 1976 | Limits spending for operations and capital outlays to growth in per capita personal income over preceding two years. | State appropriations excluding state aid to local governments, federal funds and retirement of debt. | Limit can be exceeded only if approved by a majority of voters in a statewide referendum. |
| Oregon Statutory 1979 | Limits spending growth to the growth in income for the past two years. More than two percent over limit triggers tax refunds. | State general fund appropriations except debt service and appropriations for tax relief. | Statute can be amended. |
| Rhode Island Statutory 1977 | Annual growth in governor's budget request is limited. | Applies to governor's general fund recommendations. | Legislature is not limited. |
| South Carolina Statutory 1980 | Limits increases in state spending over the preceding year to the growth in personal income averaged over the preceding three years. | Applies to all state spending. | Limit may be exceeded for one year by a two-thirds vote on declaration of an emergency. Also, there is a review of limit every five years. |
| Tennessee Constitutional 1978 | Growth in appropriation financed by tax revenues is tied to growth in state economy (measured by personal income growth). | Applies only to appropriations supported by tax revenue. | Specific added spending may be approved by majority vote of the legislature. |
| Texas Constitutional 1978 | Limits growth in state appropriations to the growth in state economy (measured by personal income). | Applies only to appropriations supported by tax revenues not dedicated by the Constitution. | Specific added amounts may be approved by majority vote of the legislature if it agrees. |
| Utah Statutory 1979 | State appropriations cannot exceed 85 percent of growth in state personal income. | Excludes federal funds, debt service and user charges. | If emergency declared, limit can be overridden by twothirds vote in both houses. |
| Washington Statutory 1979 | Growth in tax revenue cannot exceed average growth in personal income over the preceding three years. Excess receipts used in next year. | Applies to all state tax revenue. | Upon declaration of an emergency by the legislature, specific amount may be approved by a two-thirds vote in both houses. |
| Total | 19 states | Spending-15 states Revenues-four states | Overrides for emergencies; special vote-11 states Amend statute-five states Referendum-one state Governor is limited-iwo states |

Source: Survey of states; U.S. Advisory Commission on Intergovernmental Relations; and Council of State Governments.
federal funds, as do Michigan and Missouri. Missouri also excludes revenue from voter-approved tax increases. Finally, the Washington limitation applies only to tax revenue.

The effects of revenue limitations can be effected significantly by economic and technical factors. For example, if tax system growth is lagging the overall economy which one 1983 study found to be the case at the time in Louisiana, Michigan and Washington--the limits have no effect. ${ }^{8}$ Thus, the limit might permit a six percent increase in revenues in a year, but if the revenue system only produces two percent growth, the limitation ceiling will not be approached.

A limit's effectiveness can be undercut if the base year for its calculation happens to be a peak year for tax collections, setting an exceptionally high ceiling. This situation occurred in Michigan in the early 1980s. The Michigan limit was based on 1978-79, when revenue amounted to about ten percent of income. In the two following years, revenues only amounted to 9.2 percent and 8.4 percent of income, so the limit had no effect.

## Spending Limits

In technical terms, there is no "typical" spending limit provision. However, all of the limits now in place (Table 4) attempt to limit all or a portion of state appropriations to some measure of economic growth-usually either growth in personal income
8. Gold, pp. 7-11.
9. California Tax Foundation, Up to the Limit: Article XIIIB 7 Years Later (Sacramento, 1987), p. 7.
10. Thomas F. Hannigan, quoted in Robert Reinhold, "Tax and Budget Revolt: A Backlash in California," New York Times (December 18, 1987).
(nine states, including Texas) or the combined growth in inflation and state population over a specified period (three states). Three states also fix growth at a fixed annual percentage increase, essentially at a rate that was meant to approximate the growth in inflation and state population.

Only three states-Alaska, Montana and South Carolinaapply their limits to all spending. Most of the limits apply instead to general fund spending, normally the portion of the state's budget fed primarily by tax revenue.
Most of the spending limit states also exclude certain types of spending from coverage. Most often excluded are spending from federally financed programs, various refunds and debt service. Four states-Arizona, California, Tennessee and Texas-apply their limits only to appropriations from certain tax-related sources, while two states-Nevada and Rhode Island-bind the governor's spending proposals but not the legislature's.

Virtually all of these states have some form of escape mechanism attached to the limitation. As in the case of the revenue limits discussed earlier, these normally require an emergency declaration by the governor or legislature and an extraordinary majority (e.g., two-thirds majority) on an approval vote in both legislative houses. If there is no escape mechanism, it is usually because the limitation is statutory and can be amended by simple majority vote.

Also, as in the case of the revenue limits, the direct evidence of the effectiveness of the spending limits is mixed. Largely because of the lack of available revenues, many states have never confronted the problem of bumping into the limitation ceiling. This has most often been the case in Texas. However, in a few cases,
there is evidence that the limitations have constricted state spending.

The one notable recent example of this can be found in California, where the eight-year-old spending limitation provision (now called the Article XIIIB limit) has again become a focal point of public debate. The reason is simple: in the 1986-87 fiscal year, for the first time, state spending bumped up against the law's limit. ${ }^{9}$ Because it also applies to local governments, the pinch has also come at that level. Driven by the state's strong economy, the state revenue system has produced a $\$ 1.1$ billion surplus, which is being refunded, largely because of the spending cap.

This situation provides a clear example of the divergence of opinion that frequently surrounds tax and spending limit provisions. In California, opponents argue that because of factors unanticipated in 1979 when the Article XIIIB limit was enacted-prison overcrowding, AIDS, burgeoning inmigration-the state should be spending at least part of the surplus rather than refunding it because of the limit. According to Thomas F. Hannigan, leader of the California State Assembly, "When we give back $\$ 1.1$ billion at a time when schools are unable to meet their needs, there's something wrong. ${ }^{10}$ Critics, including some conservative groups which support the overall limitation concept, argue for changes which would allow for more spending growth. For example, they have suggested substituting California's higher inflation rate for the national average now used in calculating the limit. They also propose changing the population growth factor from the growth in the general population to school enrollment growth-a measure far more meaningful in terms of spending demands.

Proponents of the limitincluding Paul Gann, its origina-tor-argue that it should not be abandoned simply because it is working. Nevertheless, Gann and others are proposing their own adjustments to the measure to exclude certain highway-related funding in recognition of the state's need for highway construction and maintenance.

## The Texas Limitation

Problems like California's have not surfaced in Texas to this point. The Texas limitation is significantly narrower than most, applying only to "appropriations from state taxes not dedicated by the Constitution. ${ }^{111}$ In effect, appropriations from federal funds, license and fee income and interest and dividend income are excluded, as are appropriations from constitutionally "dedicated" tax sources, such as the motor fuels taxes and one-quarter of the state's occupation taxes dedicated to public education (including portions of the oil and natural gas production taxes).

The major taxes affected by the limitation are the state sales tax, the franchise tax and the portions of the oil and gas production taxes not dedicated to education. The affected portion of the revenues available for appropriation totaled about $\$ 8.8$ billion in 1986, out of a total revenue of $\$ 18.4$ billion. This total equals about half all revenue and more than 85 percent of state tax income.
The spending limit for these non dedicated sources is calculated for an upcoming budget period by adjusting current spending from these sources for anticipated growth in the state economy. This growth is measured by the expected change in state personal income. The key to the limitation is the forecast of personal income growth, which is selected by the Legislative Budget Board (LBB)-
a committee of House and Senate budget leaders, including the Lieutenant Governor and Speaker of the House-generally from a range of estimates from several forecasters.

The Texas spending limit was added to the Constitution in 1978. However, enabling legislation was not adopted until May 1979, with a January 1980 effective date. Effectively this meant the 1982-83 budget period was the first to be covered by the limitation's provisions.

Over the relatively brief period it has been in force, the limitation appears to have been a factor in state finances only one time-in 1982. In a May 1982 special session, college construction and corrections programs were addressed. Actual appropriations during the session were $\$ 193.8$ million, a figure apparently chosen at least in part to stay within the spending limit in effect at the time.

Later that year, it appeared that available non dedicated tax revenue would exceed the spending limit by as much as a billion dollars. Accordingly, the LBB adopted a budget proposal that was $\$ 1.1$ billion below the total amount of revenue estimated to be available at the time, according to revenue estimates, to stay within the limit. This proved to be the right decision regardless of the spending limit because falling oil prices subsequently led to reductions in the revenue estimates in early 1983. These reductions pushed the available revenue figure well below the spending limit ceiling and the LBB draft budget. After that, the spending limit provision was no longer a factor in state finances in that period.
The limit also was not a factor in the 1985 legislative session, again primarily because a weak economy produced slower growth
than the projected rates used to set the limit.

In 1987, the LBB failed to adopt a limit. This failure resulted from the inability of LBB members to agree on a personal income forecast for 1988-89, as well as a recommended budget. (The LBB staff was directed to prepare two separate appropriations bills, one for submission in each house.)

At the time the limitation was considered, the LBB was considering personal income growth forecasts for 1988-89 ranging from a low of 10.6 percent to a high of 16.7 percent. At the same time, the LBB was considering a staffrecommended budget that would have exceeded the lower limit by more than $\$ 100$ million. Deadlocked on this issue, the LBB failed to set the limit, and none is currently in effect. The constitutional limit was not exceeded, however, because the budget and revenue package ultimately adopted resulted in an appropriations level well below any of the ceilings considered by the LBB, including the lower growth forecast for personal income.

The LBB had not produced an analysis of the spending limit parameters for the next (1990-91) budget period when this chapter was prepared. This will be done as the LBB works on its budget recommendations in the fall of 1988. It is too early to say to what degree the spending limit will enter into the state fiscal equation. Much depends on the revenue situation, which also is a question mark at this writing.

In that regard, it is clear that the major reason the Texas limitation has had such a minimal effect on state finances thus far is poor economic and revenue conditions during the time it has been in effect compared with the growth

[^145]forecasts used to set the limit ceiling. Presumably, in a period where growth exceeded expectations, the limitation would come into play, as it has in California.

## Budget Stabilization Funds

In addition to tax and spending limitations, many states have also enacted budget stabilization or "rainy day" fund provisions as another form of fiscal safeguard. While these special funds are primarily designed to stabilize state finances by providing an operating reserve against budget shortfalls, they also have an important role in limiting tax and spending growth in some states, since they effectively siphon off some available revenues to be used only for fiscal emergencies. These funds thus do not become part of the state's normal spending base. Moreover, in bad fiscal times, the reserve of cash may help moderate tax increases.

Table 5 shows the budget stabilization funds currently in effect. Presently, 28 states have some type of reserve fund. Amounts on deposit in these funds ranged from zero to several hundred million dollars at the time this report was prepared, although most states employing the funds appear to attempt to maintain balances equal to about one to five percent of general revenue or spending levels.

There is significant variation among the states in the methods for getting money into and out of the funds. Some have strict constitutional requirements, while others are more flexible. Nine states place some or all of their unbudgeted year-end surpluses into their funds. Florida, for example, deposits any year-end surplus equal to up to ten percent of general fund revenues in its Working Capital Fund.

Thirteen other states make direct appropriations to their
funds. As might be expected, this sometimes results in no transfers being made to the funds. Several states, though, have developed significant reserves through direct appropriations.

Other states have developed more exotic approaches, such as transfers determined by growth in state personal income, the method used in Ohio and Washington. Rhode Island dedicates a percentage of its state lottery revenue to its stabilization fund.

One of the most complex approaches is Michigan's for-mula-driven method. When inflation-adjusted state personal income growth exceeds two percent, a payment is made into the state's Counter-Cyclical Budget and Economic Stabilization Fund based on the excess over two percent.

Transfers out of the funds involve a similarly wide range of approaches, with most state laws creating at least some obstacles to "raids" on the balances for budgetary convenience alone. Just under half of the states with funds require legislative or executive action, often involving extraordinary majority votes in the legislature. However, many other states have automatic transfer provisions in cases of revenue shortfall. Three states, including Michigan, try to match transfers out of the fund to declining economic conditions, pumping money into the economy in bad times in an attempt to give the fund a counter-cyclical effect.
The Michigan procedure is essentially a mirror image of the method used to put money in. When real personal income growth falls below a set levelzero in this case-the percentage below the level is multiplied by the general fund total to reach the appropriate transfer amount. The Michigan law also allows transfers when state unemployment
tops eight percent for more than two quarters. These transfers, equal to up to five percent of the fund balance, can be used for various job creation programs.

The states also vary widely in pay-back requirements once reserves are tapped. Some states have no pay-back requirement, while two states-New York and South Carolina-constitutionally require that their reserves be replenished in a set amount of time. In New York, for example, borrowed reserves must be repaid over six years in three equal installments.

## House Joint Resolution 2

Until very recently, Texas did not have a budget stabilization fund; however, in late 1988, voters approved creation of one under the provisions of House Joint Resolution 2 (H.J.R. 2), authored by Representative Stan Schlueter and passed during the 1987 regular legislative session (70th Regular Session). In some ways, the Texas fund would be similar to others already in existence, but it has some unique twists peculiar to Texas' fiscal situation.

The stabilization fund created by H.J.R. 2 would transfer half of any unencumbered General Revenue Fund balances to the fund, much as is done in other states. However, it would also require transfers to the fund of 75 percent of those revenues from the oil and gas severance taxes that exceeded annualized 1987 collections-an amount equal to just under $\$ 1.2$ billion.

One obvious effect of this proposed amendment could be to prevent the sharp increases in state spending driven by rising oil and natural gas prices that occurred in the 1970s and early 1980s. The intent is to have the fund act as a partial brake on oil- and gasdriven spending growth when and if the oil economy turns around.

TABLE 5. State Budget Stabilization Funds, 1988

| State | Title of Fund | Source of Reserves | Procedure for Transfers Out of Fund |
| :---: | :---: | :---: | :---: |
| Alaska | Reserve for Emergency Operating Expenses | By appropriation. | Requires special session of legislature. |
| California | Contingency Reserve for Economic Emergencies | By appropriation. | Automatic transfer in case of General Fund shortfall. |
| Colorado | Six Percent Reserve | Six percent of appropriations. | Automatic transfer in case of a revenue shortfall. |
| Connecticut | Budget Reserve Fund | Year-end surplus up to five percent of General Fund appropriations. | Automatic transfer to cover operating deficits. |
| Delaware | Budget Reserve Account | Maximum of five percent of General Fund revenues. | By special appropriations requiring $3 / 5$ vote. |
| Florida | Working Capital Fund | Year-end surplus up to ten percent of General Fund revenues. | Governor in consultation with legislative committees. |
| Georgia | Reserve Shortall | Year-end surplus up to three percent of prior year revenues. | Automatic transfer to cover a revenue shortfall. |
| idaho | Budget Reserve Account | By appropriation. | By legislative appropriation. |
| Indiana | Counter-cyclical Revenue and Economic Stabilization Fund | Annual economic growth rate less two percent multiplied by total General Fund revenues. | Funds transferred to General Fund if annual economic growth rate is less than two percent. |
| Iowa | lowa Economic Emergency Fund | Year-end surplus up to five percent of spending. | By legislative appropriation. |
| Kentucky | 1. General Fund Surplus Account <br> 2. Budget Reserve Fund | 1. Reversions, excess revenues, miscellaneous sources. <br> 2. By appropriation. | 1. By appropriations with provision for automatic transfers. <br> 2. By appropriation. |
| Maine | Maine Rainy Day Fund | Unappropriated General Fund surplus up to $1 / 2$ of the total General Fund revenues received over official estimates in a fiscal year. | By two-thirds vote of the legislature on recommendation of the governor, but only for prepayment of outstanding general fund bonds or for construction. |
| Michigan | Counter-cyclical Budget and Economic Stabilization Fund | Annual growth in inflationadjusted personal income minus two percent multiplied by General Fund revenues. | Funds are transferred to General Fund if adjusted income growth is less than zero percent or in case of high state unemployment. |
| Minnesota | Budgetary Reserve Account | By appropriation. | Automatic transfer to cover revenue shortalls. |

TABLE 5. State Budget Stabilization Funds, 1988 (Continued)
$\left.\left.\begin{array}{llll}\text { State } & & \text { Title of Fund } & \text { Source of Reserves }\end{array}\right] \begin{array}{c}\text { Procedure for Transfers } \\ \text { Out of Fund }\end{array}\right]$

TABLE 5. State Budget Stabilization Funds, 1988 (Continued)

| State | Title of Fund | Source of Reserves | Procedure for Transfers Out of Fund |
| :---: | :---: | :---: | :---: |
| South Carolina | General Reserve Fund | Transfer equal to four percent of General Revenue Fund. | Automatic transfer to cover revenue shortfall. |
| Tennessee | Revenue Fluctuation Reserve | By appropriation. | Automatic transfer to cover revenue shortfall. |
| Virginia | 1. Economic Contingency Fund <br> 2. Revenue Reserve Fund | 1. By appropriation. 2. By appropriation. | 1. Allotted by governor for unbudgeted cost increases. <br> 2. Automatic transfer to cover revenue shortfall. |
| Washington | Reserve Fund | Revenue equal to growth in inflation-adjusted personal income over three percent each biennium. Maximum size is eight percent of biennial revenue. | By legislative appropriation. |
| Wyoming | Budget Reserve Account | Difference between amount appropriated and amount actually expended at end of biennium plus appropriations up to five percent of General Fund projections. | By legislative appropriation. |
| Total | 28 states ${ }^{1}$ | Appropriation/percent transfer-13 states <br> Year-end surplus-nine states <br> Transfer based on economic conditionsfour states <br> Other methods-iwo states | By appropriation-12 states <br> Automatic transfer under specified conditions-11 states <br> Transfer based on economic condi-tions-three states <br> Other methods-two states |
| Source: Survey of states; U.S. Advisory Commission on Intergovernmental Relations; National Association of State Budget Officers. |  |  |  |

H.J.R. 2 limits the size of the Texas economic stabilization fund to ten percent of General Revenue income from the preceding biennium-roughly a two billion dollar cap at present. Expenditures would be allowed from the fund with approval of three-fifths of the members of both houses of the Legislature during times of economic distress; however, the amendment would limit these expenditures to purposes for which appropriations have
already been made. The Legislature could not use the fund's resources to finance new programs except by an extraordinary two-thirds vote.

## Local Governments

Gaining a sense of the use of tax and spending controls at the local level is more difficult than at the state level. The number of jurisdictions involved is huge, and data on the policies of the thou-
sands of individual jurisdictions in the 50 states simply are not available. However, regardless of any limitations localities may apply to themselves, state legislatures have added a number of limitations of their own. This can be seen in Table 6, which summarizes the most common local limitations.
The original-and by far the most common-local limitations are property tax controls. Property tax limits have been commonplace in the United States for more
than a century, and today 41 states, including Texas, impose one or more property tax controls. As the table shows, these may take the form of rate limits, levy limits, assessment limits or full-disclosure requirements.

Rate limits control the tax rates local jurisdictions can impose. Twelve states impose overall rate limits, which control the aggregate tax rate for all local govern-ments-cities, counties, schools and special districts. Thirty states, including Texas, impose more specific rate limits, under which the maximum tax rates of individual types of local governments are set separately or limits are imposed on a narrowly defined set of spending objectives, such as debt service. (Table 7 shows the rate limits currently in effect in Texas.) Nine states have both overall limits and specific limits for individual types of governments.

Levy limits refer to an established maximum amount a local jurisdiction can raise from property taxes. Twenty-two states impose these limits. Texas does not, although it does have provisions for a citizen-initiated rollback of tax rate increases under certain circumstances.

Seven states limit assessment increases, meaning that taxable property values can increase only by a set amount regardless of how much real market values climb. The intent of this provision, which is not used in Texas, is to protect taxpayers from rising tax bills caused solely by rising property values. This does not necessarily cap local property tax increases, but it does force increases to be made primarily through more visible rate changes, rather than allowing local governments to rely on automatic growth caused by the appreciation of property values.
In addition to specific controls on property tax rates and levies,

14 states, including Texas, have instituted full-disclosure provisions. This process requires government officials to advertise and hold hearings on proposed tax rate increases as a way of encouraging public discussion and accountability.

## Other Local Limitations

In addition to property tax controls, 11 states impose some form of general tax or spending limit on one or more types of local governments. Texas does not impose such limits.

As might be expected, these limitations vary significantly. For example, California limits total annual appropriations by its local governments to increases in the cost of living and growth in population, as it does state government. In contrast, Nebraska limits combined local receipts to a seven percent increase over the prior year, with additional increases permitted in proportion to population increases.

Nevada limits local spending to the 1978-79 fiscal year level, with increases permitted for growth in population plus 80 percent of the previous five years' average change in national inflation. New Jersey limits increases for cities to five percent of the prior years' tax levy and increases for school districts to a fraction of the increase in the value of real property. Utah restricts increases in local government income to 90 percent of the growth in the state's per capita personal income plus an allowance for population growth.

Although Texas does not impose such limits, it does employ some controls by limiting the use of various revenue sources by local governments. This is particularly true of access to the sales tax, which can be used only by cities, metropolitan transit au-
thorities and some counties. This forces school districts, special districts and most counties to rely almost exclusively on the property tax as their main revenue source. The property tax, in turn, is subject to direct statutory limitations. At the same time, the jurisdictions that can use the sales tax are strictly constrained as to the rates they can impose.

## Do Limits Work?

Proponents of tax and spending limits see them as an effective means of curbing the growth of government spending and taxes. But while sweeping claims have been made for some of these provisions, conclusive evidence of their effectiveness is lacking.

There appears to be fairly broad agreement that balanced budget and full-disclosure statutes are generally good fiscal policies that promote sound fiscal management. On the other hand, specific tax and spending limits receive mixed reviews. In some states, economic conditions and other factors have diluted their impact. This clearly has been the case in Texas, particularly in 1983 and 1985. There also is the problem of how to measure their results, since it generally is impossible to predict what the course of government spending and tax policies would have been had the limits not been in effect. Finally, there is the problem of judging what constitutes a successful limitation program. As discussed earlier, it appears that California's spending limit is operating as its sponsors intended, but at least some segments of the public feel the overall effect is of more harm than benefit.

Economic research in this area has been similarly mixed. For example, in a 1983 study based on survey data for 19 states, the National Conference of State

TABLE 6. Restrictions on Local Government Taxing and Spending Powers

| State | Overall Property Tax Rate Limit | Specific <br> Property <br> Tax Rate Limit | Property <br> Tax Levy Limit | Limits on Assessment Increases | FullDisclosure Requirement | General <br> Revenue Limits | General Spending Limits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | $\mathrm{C}, \mathrm{M}, \mathrm{S}^{1}$ | C,M, S | -- | -- | -- | - | -- |
| Alaska | C,M, S | -- | C,M | -- | -- | -- | -- |
| Arizona | -- | -- | C,M | C,M,S | -- | -- | C,M,S |
| Arkansas | -- | C,M,S | C, M, S | -- | -- | -- | -- |
| California | C,M,S | -- | -- | C,M,S | -- | -- | C,M, S |
| Colorado | , M, | C, S | C,M | -- | C, M, S | -- | S |
| Connecticut | -- | - | -- | -- | -- | -- | -- |
| Delaware | -- | S | C | -- | $\stackrel{-}{-}$ | -- | -- |
| Florida | C,M | C,M,S | -- | -- | C,M,S | -- |  |
| Georgia | -- | S | -- | -- | -- | -- | -- |
| Hawaii | -- | -- | -- | -- | C | -- | -- |
| Idaho | -- | C,M, S | C,M, S | -- | -- | -- | -- |
| Illinois | -- | C,M, S | C,M,S | -- | C,M,S | $\therefore$ | -- |
| Indiana | -- | -- | C,M,S | -- | -- | -- | -- |
| lowa | -- | C, M | -- | C,M,S | C,M,S | -- | -- |
| Kansas | -- | + | C,M | -- | -- | -- | S |
| Kentucky | C,M, S | C, M, S | - | -- | C, M, S | -- | -- |
| Louisiana | -- | C, M, S | C,M,S | -- | --- | -- | -- |
| Maine | -- | -- | -- | -- | $\stackrel{-}{-}$ | ${ }^{--}$ | -- |
| Maryland | -- | -- | -- | C,M | C,M | C,M | - |
| Massachusetts | -- | -- | C,M,S | - | -- | -- | - |
| Michigan | C, S | M | C,M, S | -- | C,M,S | -- | - |
| Minnesota | -- | C,M,S | C,M,S | -- | -- | M | S |
| Mississippi | -- | C,M, S | C, M, S | -- | -- | C,M,S | -- |
| Missouri | -- | C, M, S | -- | -- | $\stackrel{--}{-}$ | C,M;S | -- |
| Montana | -- | C,M, S | -- | -- | C, M, S | -- | -- |
| Nebraska | $\stackrel{-}{-}$ | C, M, S | -- | -- | -- | C, M, S | -- |
| Nevada | C,M, S | S | C, M | -- | -- | --- | -- |
| New Hampshire | -- | -- | -- | -- | -- | -- | -- |
| New Jersey | -- | -- | C | -- | -- | -- | M, S |
| New Mexico | C, M, S | C,M,S | C, M, S | C,M,S | -- | -- | -- |
| New York | -- | C,M,S |  | C, M | -- | -- | -- |
| North Carolina | -- | C, M | -- | , | - | -- | -- |
| North Dakota | -- | -- | C,M,S | -- | - | -- | -- |
| Ohio | C,M,S | -- | C,M,S | -- | -- | .- | -- |
| Oklahoma | C, M, S | C,M,S | -- | -- | -- | -- | -- |
| Oregon | , | -- | C,M, S | C,M,S | -- | - | -- |
| Pennsylvania | -- | C,M,S | -- | -- | - | -- | -- |
| Rhode Island | -- | -- | M | -- | M | -- | -- |
| South Carolina | -- | -- | -- | -- | -- | - | -- |
| South Dakota | -- | C, M, S | -- | -- | -- | -- | . -- |
| Tennessee | -- | -- | -- | -- | C, M, S | -- | -- |
| Texas | -- | C,M,S | 2 | -- | C,M,S | -- | -- |
| Utah | -- | C,M,S | -- | -- | -- | -- | -- |
| Vermont | -- | -- | -- | -- | -- | -- | -- |
| Virginia | -- | -- | -- | -- | C,M | $\cdots$ | -- |
| Washington | C,M,S | C,M,S | C,M, S | -- | -- | S | -- |
| West Virginia | $C, M, S$ | C,M,S | , | -- | -- | -- | - |
| Wisconsin | -- | C,M, S | -- | -- | -- | -- | -- |
| Wyoming | -- | C, M, S | -- | -- | - | -- | $\because$ |
| Total | 12 | 30 | 22 | 7 | 13 | 6 | 6 |
| Source: Survey of states; U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C., 1987), pp. 114-117; and National Conference of State Legislatures. |  |  |  |  |  |  |  |
| 1. $C=$ counties; $M$ 2. Limits applied to 3. Texas allows vot | municipalitie certain specia a | school distri cts only. back of rate | n certain prop | ryy tax increases | eed eight perce |  |  |

Legislatures (NCSL) concluded that most limits had not restricted growth in government spending or taxes to that point, largely because economic conditions had worked to hold actual growth well below limit ceilings. ${ }^{12}$ There were some exceptions, however. The NCSL found that spending in Colorado and Hawaii had been lowered by their limitations. Writing in 1983, economist David Lowery came to two conclusions about the effectiveness of limitations:

[^146]The first conclusion concerns the effectiveness of the state imposed limitations on local property taxation. Simply put, those limits do not seem to have been entirely successful. . . . Reductions in property taxation were found, but they were accompanied by shifts to other revenue sources and little or no reductions in local government spending or employment. . . . The second conclusion concerns the likely effectiveness of [tax and expenditure limitationsTEL] in general. . . . Simply putting a cap on spending and revenue, and avoiding the complexities inherent in the incentives behind government growth, may be inadequate. ${ }^{13}$

Rutgers University economist Henry Raimondo came to similar conclusions about the effectiveness of state limitations on local taxing and spending in another 1983 study. He argued that the case for limits generally has been over-

TABLE 7. Maximum Property Tax Rates for Texas Local Jurisdictions

| Jurisdiction | Tax Rate |
| :---: | :---: |
| School Districts | Operating: $\$ 1.50$ per $\$ 100$ of assessed valuation. Debt: One dollar per $\$ 100$ or ten percent of value, whichever is less. (Can go to 16 percent in certain instances, such as in the case of a fire.) |
| Counties | $\$ .80$ per $\$ 100$ of assessed value for general purposes. <br> $\$ .15$ per $\$ 100$ for maintenance of public roads. <br> $\$ .30$ per $\$ 100$ for flood control and farm-tomarket roads. |
| Cities | $\$ 2.50$ per $\$ 100$ of assessed value for cities with a population over 5,000 . <br> $\$ 41.50$ per $\$ 100$ of assessed value for cities with a population under 5,000. (Some home rule cities may have more restrictive limitations.) |
| Special Districts | Rates are set by the Legislature and vary widely depending on bonded debt. Highest current rate is $\$ 27.50$ per $\$ 100$ of assessed valuation. |
| Source: State Property Tax Board |  |

stated based on available evidence. He concluded that even "where the case is sound, it is not obvious that the limits will solve the problems." ${ }^{14}$ He found that limitations pose administrative burdens on government and in the case of local limits are frequently poorly designed by state authorities to meet special local conditions. He also found that limits may distort governmental decision making, particularly in the capital financing area, by causing some spending to be postponed in favor of more immediately pressing current operating needs.

Lowery, in a 1986 study, identified some other, probably unintended, results of the tax limitation movement. Contrary to his expectations, he found that state and local fiscal systems became more progressive and more responsive to economic growth over the course of the fiscal limitation period. In part, at least, this seemed to have resulted from tax cuts, particularly property tax reductions, that were made as part of the reform effort and later reversed. Subsequent increases came from taxes, like the sales and income taxes, which were more progressive or more responsive to economic changes than the sources they replaced. ${ }^{15}$

Ultimately, two points seem clear from a review of state and local tax and spending limit policies. First, they are in place because they address a deeply felt desire on the part of many Americans to impose limits on government growth. But it is equally clear that their impact is far from uniformly positive. They may in fact limit spending and taxes in some cases, but just as clearly in other cases, they may distort decisions or simply have little or no impact at all. Clearly there is a need for effective fiscal controls in government, just as there are in the private sector; however, to this point, the jury is still out on how successful these legislated mechanisms are.

# T he Effects of the Tax Reform Act of 1986 on Texas State and Local Governments 

## Summary

Because the federal Tax Reform Act of 1986 repealed deductibility of general sales taxes on individual federal income tax returns, residents of states levying general sales taxes can no longer export part of their sales tax burden to federal taxpayers at large through the federal income tax. This change alone is predicted to increase income tax liability for individuals in Texas by $\$ 236$ million in 1987 and $\$ 200$ million in 1988.

Nevertheless, Texas taxpayers were not hurt appreciably by the elimination of general sales tax deductibility. This conclusion is derived from the fact that although Texas levies a general sales tax above the U.S. average, Texas taxpayers have traditionally been less likely to itemize deductions on their federal income tax returns than the average U.S. taxpayer. This conclusion is also derived from the assumption that the elimination of general sales tax deductibility contributed to the 1986 Tax Act's reduction in individual income tax rates.

In addition to having a direct effect on the federal tax liability of individuals, deductibility of state and local taxes has an indirect effect on the fiscal situations of state and local governments. Prior to federal tax reform, total state and local spending was estimated to be
about three percent higher because of tax deductibility. This boost to state and local spending was reduced to about one percent by the Tax Act. Among the states, Texas receives one of the smaller boosts to spending due to this aspect of tax deductibility.

A second important effect of the Tax Act on state and local governments may be a resulting increase in interjurisdictional tax competition. Effective state and local tax differentials are greater due to the reduction in federal marginal tax rates and the smaller proportion of individuals itemizing deductions. As a relatively low-tax state, Texas stands to gain from the increased interjurisdictional tax competition relative to high-tax states that are funding expenditures not generally supported by their voters or whose taxes are wasted by inefficiency in government.

The 1986 Tax Act also affected state and local governments by making more substantial changes in federal taxexempt bond law than any previous piece of federal legislation. Texas will be affected to approximately the same degree as the other states when volume caps on allowable private activity bond volume become effective constraints on issuance of taxexempt bonds in future years.

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## Introduction

The Tax Reform Act of 1986 (TRA 86 or the Tax Act) has been described as the most sweeping reform of federal tax law since the federal income tax was enacted 75 years ago. The objectives of this chapter are to describe the provisions of the U.S. Internal Revenue Code affecting state and local governments, to explain how these provisions were changed by TRA 86, to estimate the overall impact of these changes on state and local governments, to estimate the impact of the Tax Act on Texas and to compare the effects on Texas to the effects on other states.

The federal tax code affects state and local government finances in three major ways: through its effect on state and local income tax collections when those taxes are linked to provisions in the federal tax code (an impact not applicable to Texas), through federal deductibility of state and local taxes and as a result of the exemption from federal taxation of interest on state and local bonds.

In the aftermath of federal tax reform, much attention was focused on state individual and corporate income tax "windfalls"
that arose as a result of state links to the federal tax code. Some attention was also paid to state and local problems in complying with the changes in tax-exempt bond law. The overall impression, however, was that many states benefited from federal tax reform. The long-run effects of federal tax reform are likely to be of a much different nature than those apparent over the short run for several reasons.
First, as tax-exempt bond volume returns to its historical growth path, the lower state volume limitations on issuance of private activity debt imposed by federal tax reform are likely to become effective caps for an increasing number of states. Because the volume of desired issues will exceed allowable bond volume, states will be forced to set priorities among potential uses of private activity bonds.
Second, the reduced benefits of federal deductibility of state and local taxes may gradually lead taxpayers to pressure their state and local elected officials for slower growth in government spending.
At the same time, the higher effective interstate and interlocal tax differentials resulting from the reduced marginal tax rates and the reduction in the number of individuals itemizing deductions are likely to lead to intensified interstate and interlocal tax competition.

[^147]Thus, the long-run effect of federal tax reform will be to reduce some of the fiscal cushion that the federal tax code has provided for state and local governments, particularly for high-tax states and local governments.

> Despite the state's above average general sales tax rate, Texas taxpayers will not be hurt appreciably by the elimination of the general sales tax deductibility.

Texas is affected differently from many other states by the changes in the Tax Act:
(1) Because Texas has no individual or corporate income tax, it received no revenue "windfall" from federal tax reform.
(2) Despite the state's aboveaverage general sales tax rate, Texas taxpayers will not be hurt appreciably by the elimination of general sales tax deductibility.
(3) The general stimulus to state and local spending arising from federal deductibility of state and local taxes has been reduced less for Texas than for many other states such as New York and Wisconsin.
(4) Because Texas has traditionally been a low-tax state, it may benefit from the more competitive fiscal climate that state and local governments are likely to find themselves in as a result of tax reform.

With respect to the new federal law on tax-exempt bonds, though, Texas is affected about the same as other states.

The remainder of this chapter provides the detail supporting these general conclusions.

## Provisions of the Federal Internal Revenue Code Affecting State and Local Governments

The federal Internal Revenue Code affects state and local finances through so-called "tax expenditures" that provide implicit aid to state and local governments and because certain state and local income tax laws are linked to provisions in the federal code. ${ }^{1}$

The tax expenditures aiding state and local governments include the deductibility of state and local taxes from the federal individual income tax and the exemption from taxation of the interest on municipal bonds. Estimates of the fiscal year 1989 level of these tax expenditures are presented in Table 1.
The federal income tax provision that allows certain state and local taxes to be deducted from adjusted gross income, reduces federal income tax liability for those taxpayers who itemize deductions. Consequently, tax deductibility may make it easier for state and local governments to raise revenue. Some view this provision as a form of implicit aid to state and local governments. Others view the provision as a necessary adjustment under the federal income tax to make taxable income a better measure of the ability to pay taxes. ${ }^{2}$ Regardless of viewpoint, few question its benefits for state and local governments.

Another implicit subsidy to state and local governments is the exemption from taxation of the interest on municipal bonds. This allows state and local governments to borrow money at lower interest rates than if they
issued taxable debt. Although certain individuals long maintained that federal taxation of the interest on municipal bonds was unconstitutional under the intergovernmental tax immunity doctrine, the U.S. Supreme Court rejected this argument in its April 20, 1988, decision in South Carolina v. Baker. According to Justice Brennan, who delivered the majority opinion for the Court:
. . . the owners of state bonds have no constitutional entitlement not to pay taxes on income they earn from state bonds, and states have no constitutional entitlement to issue bonds paying
lower interest rates than other issuers. ${ }^{3}$

A complication in evaluating the impact of the implicit aid that tax-exemption of municipal bond interest provides is that many taxexempt bonds are issued for the direct benefit of private businesses or for individuals in their roles as homeowners or students, rather than to provide capital financing for state and local governments. It is difficult to determine to what extent these nontraditional types of tax-exempt bonds actually provide aid for state and local governments. Many state and local officials do
view tax-exempt bonds that directly benefit private businesses as providing implicit aid to state and local governments because of the role of these bonds in "creating jobs" for the community.

The federal Internal Revenue Code also affects state and local financing because income tax codes of many states, and of some local governments, are linked in some way to the federal code. Most attention has been paid to the linkages of personal income taxes to federal law. According to the U.S. Advisory Commission on
3. South Carolina v. Baker, Secretary of the Treasury, 94 U.S. 234 (1988).

TABLE 1. Tax Expenditures Aiding State and Local Governments, 1989 (Billions of Dollars)
Description Amount
Deductibility of:
Property taxes on owner-occupied homes ..... \$10.4
Nonbusiness state and local taxes other than on owner-occupied homes ..... 17.3
Exclusion of interest on:
Public purpose state and local debt ..... 15.4
IDBs for certain energy facilities ${ }^{1}$ ..... 0.4
IDBs for pollution control and sewage and waste disposal facilities ..... 2.2
Small-issue IDBs ${ }^{1}$ ..... 3.5
Owner-occupied mortgage revenue bonds ..... 2.4
State and local debt for rental housing ..... 1.6
Mass commuting vehicle IDBs' ..... *
IDBs for airports, docks and sports and convention facilities ..... 1.0
State and local student loan bonds ..... 0.4
State and local debt for private nonprofit educational facilities ..... 0.3
State and local debt for private nonprofit health facilities ..... 2.9
State and local debt for veterans housing ..... 0.4
Total (after interactions) ${ }^{2}$ ..... $\$ 43.5$

Source: U.S. Office of Management and Budget, Special Analyses, Budget of the
United States Government, Fiscal Year 1989 (Washington, D.C., 1987), Table H. 2.

[^148]Intergovernmental Relations (ACIR), 23 state individual income taxes are linked to federal adjusted gross income (AGI). When federal AGI is broadened, if these states maintain their current tax rates, their own bases will be broadened, and they are in a position to gain revenue "windfalls." An additional seven states are linked to the federal definition of taxable income and are also in the position to gain revenue in the event of federal base-broadening. ${ }^{4}$ Of course the seven states without individual income taxes, Texas included, are not affected by these linkages to the federal tax code.
There has been less attention to state linkage to the federal corporation income tax, in part because of the greater complexity of the corporate tax, and in part because the corporation income tax is a less important source of income for state and local governments than the individual income tax. Nevertheless, certain provisions of state corporate income taxes are linked to the federal code, with the same implications for increased
4. U.S. Advisory Commission on Intergov ernmental Relations, "A Description of the Coupling of State Income Tax Codes to the Federal Income Tax Structure: Major Categories of Coupling," unpublished.
5. Pamela Fessler, "Tax Reform Was an Easy Act to Follow," Governing (November 1987), p. 60.
6. Karen Benker, Fiscal Survey of the States, National Association of State Budget Officers, National Governors' Association (September 1987), p. 13.
7. Robert H. Aten, "The Magnitude of the Additional State Corporate Income Taxes Resulting from Federal Tax Reform," Tax Notes (August 3, 1987), pp. 529-534.
8. Michael Vlaisavljevich, "Federal Impacts on State Business Taxes: How Can States Handle Them?", prepared for the Conference "State Tax Reform: Agendas for the Next Five Years" (Washington, D.C.: October 22-23, 1987).
state and local revenue as a result of federal base-broadening.

## The State and Local Revenue "Windfall" from Federal Tax Reform

The so-called "windfall" in state individual income tax revenues was the initial focus of interest after enactment of TRA 86 for the state and local government community. It was predicted that annual state individual income tax revenues would rise from five to six billion dollars because of state links to the federal base unless state legislatures acted to decouple from the federal tax base or to lower their rates. The projected windfalls by state as presented by the ACIR are shown in Table 2, both in dollar amount and in percentage terms. Although the Southwestern states on average were estimated to receive potential individual income tax windfalls of almost 20 percent, because Texas does not levy an individual income tax, the state was not in the position to receive a windfall.
Most states did not choose to use these potential windfalls to fund new spending programs, however. As one journalist noted: "Estimates that states might get billions of dollars in additional revenues by automatically tying into the new federal tax code gave legislators a chance to lower income tax rates, simplify their tax systems, eliminate taxes on the poor and not spend a penny to boot." ${ }^{5}$ As of September 1987, with all but two state legislatures having taken action, the cumulative effect of state legislative actions was to return about 80 percent of the potential individual income tax windfall to taxpayers in the course of reforming state income taxes. ${ }^{6}$
Potential for state corporate income tax windfalls received
serious analysis somewhat later. Robert Aten of the U.S. Treasury estimated that the total potential corporate windfall for states was about $\$ 3.2$ billion for 1987. ${ }^{7}$ The states generally had more trouble in estimating the magnitude of potential corporate windfalls and obtained these estimates somewhat later than for their individual income taxes. For example, New Jersey obtained estimates from the Policy Economics Group in December 1987 that predicted a corporate windfall equal to about ten percent of previous corporate business tax collections or equal to about one percent of total state tax collections. As of the end of 1987, eight states had reduced corporate tax rates to offset some of the windfall, but a majority, including New Jersey, appear to have retained their increased corporate tax revenues. ${ }^{8}$
One can make a persuasive argument that a year or two from now, income tax windfalls from federal tax reform will be of little interest. The impact of federal income tax reform on state taxes through their linkages to the federal code did not change the essential fiscal capacities of either state or local governments nor did it change the "prices" taxpayers pay for state or local services. That the automatic base-broadening resulting from state links to the federal tax code could contribute to increased spending for some states and for other states could finance tax reform proposals that had long been on the backburner (such as removing the poor from the income tax rolls) may only indicate a temporary fiscal illusion on the part of state and local taxpayers.

## Federal Deductibility of State and Local Taxes

The lasting effects of federal tax reform are more likely to come
from increases in the effective "price" of state and local services than from state links to the federal tax code. The benefits of federal deductibility, which serve to reduce the effective "price" of state and local services, were reduced by the Tax Act because of the elimination of general sales tax deductibility, and more
importantly, because of the reduction in marginal tax rates and in the proportion of taxpayers itemizing deductions.
The following section explains the manner in which federal tax deductibility affects tax liability for individual taxpayers. Next, the changes in tax deductibility made by TRA 86 are described in
more detail. This is followed by a description of the effect of the Tax Act on the "price" of state and local services and the resulting impact on the level of state and local expenditures. The final section discusses the likely effects of the Tax Act on interjurisdictional tax competition and on the revenue mix of states and localities.

TABLE 2. Effects of Tax Reform Act of 1986 on State Personal Income Tax Liabilities (Millions of Dollars)

| Region/State | Amount | Percent Change | Region/State | Amount | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$5,187.8 | 7.4\% | Southeast | \$740.1 | 6.9\% |
|  |  |  | Alabama | 30.0 | 3.8 |
| New England | 32.6 | 0.7 | Arkansas | -6.8 | -3.1 |
| Connecticut ${ }^{1}$ | 34.7 | 11.1 | Florida ${ }^{2}$ | N.A. | N.A. |
| Maine | 38.5 | 11.6 | Georgia | 237.4 | 12.5 |
| Massachusetts | 10.3 | 0.3 | Kentucky | 115.4 | 13.4 |
| New Hampshire ${ }^{1}$ | -. 01 | -0.4 | Louisiana | 142.4 | 27.9 |
| Rhode Island | -34.4 | -11.5 | Mississippi | 7.2 | 2.6 |
| Vermont | -16.4 | -9.9 | North Carolina | -32.4 | -1.5 |
|  |  |  | South Carolina | -8.7 | -0.9 |
| Mideast | 1,167.7 | 6.3 | Tennessee ${ }^{1}$ | -0.7 | -1.3 |
| Delaware | 34.2 | 9.6 | Virginia | 208.7 | 9.4 |
| Washington D.C. | 47.9 | 10.2 | West Virginia | 47.6 | 11.0 |
| Maryland | 155.2 | 7.7 |  |  |  |
| New Jersey | -51.5 | -2.4 | Southwest | 324.9 | 18.9 |
| New York | 1,014.8 | 9.4 | Arizona | 102.4 | 15.0 |
| Pennsylvania | -32.9 | -1.2 | New Mexico | 61.9 | 29.4 |
|  |  |  | Oklahoma | 160.6 | 19.4 |
| Great Lakes | 673.9 | 5.3 | Texas ${ }^{2}$ | N.A. | N.A. |
| Illinois | 102.4 | 3.6 |  |  |  |
| Indiana | 38.6 | 2.7 | Rocky Mountain | 343.5 | 17.3 |
| Michigan | 241.1 | 7.1 | Colorado | 223.7 | 22.0 |
| Ohio | 221.1 | 7.4 | Idaho | 0.8 | 0.3 |
| Wisconsin | 70.7 | 3.4 | Montana | 28.4 | 14.3 |
|  |  |  | Utah | 90.6 | 18.1 |
| Plains | 719.5 | 12.6 | Wyoming ${ }^{2}$ | N.A. | N.A. |
| lowa | 112.3 | 12.5 |  |  |  |
| Kansas | 151.1 | 22.7 | Far West | 1,113.7 | 8.5 |
| Minnesota | 325.5 | 12.9 | California | 951.5 | 8.1 |
| Missouri | 168.7 | 14.0 | Nevada | N.A. | N.A. |
| Nebraska | -29.8 | -8.6 | Oregon | 162.2 | 11.1 |
| North Dakota | -8.3 | -10.2 | Washington ${ }^{2}$ | N.A. | N.A. |
| South Dakota ${ }^{2}$ | N.A. | N.A. |  |  |  |
|  |  |  | Alaska ${ }^{2}$ Hawaii | $\begin{aligned} & \text { N.A. } \\ & 71.9 \end{aligned}$ | $\begin{aligned} & \text { N.A. } \\ & \text { 15.1 } \end{aligned}$ |

[^149]The effect of tax deductibility on individual taxpayers. While deductibility of state and local taxes has a direct effect on the federal tax liability of individuals, it affects the fiscal situation of state and local governments only indirectly. Individual taxpayers who itemize deductions on their federal tax return and who are liable for state and local taxes that are allowable deductions find that federal tax liability is reduced by such deductions.
The total federal tax reduction accruing to an itemizing taxpayer
9. This calculation is approximate because disallowance of state and local tax deductions may put the taxpayer in the situation of using the standard deduction rather than of itemizing deductions. For an individual in the 15 percent marginal tax bracket, if disallowing $\$ 500$ of his total state and local tax deductions moved him to the standard deduction, then his total tax savings from tax deductibility would really be only $\$ 75$ ( $\$ 500 \times .15$ ).
10. John G. Wikins, "The United States Tax Reforms," remarks before The Institute for Fiscal Studies, Conference on International Tax Reform (London: November 24, 1986).
11. The IRS reported that 26.1 percent of Texas taxpayers itemized deductions in 1982, and that the proportion itemizing deductions was growing year by year. A Price Waterhouse income tax model run of February 8, 1988, produced the 1987 and 1988 estimates of the proportion of Texas taxpayers who are itemizers.
12. State and local business taxes are considered a cost of doing business that therefore should be deducted to arrive at the appropriate tax base, net income. For this reason, it is highly unlikely that the federal government would begin to characterize state and local business taxes as a tax expenditure or eliminate deductibility of state and local taxes for businesses. Canada, which has never allowed deductibility of provincial and local taxes for individuals, allows businesses to deduct most provincial and local taxes when computing income for federal tax purposes.
13. Tax Reform Act of 1986, Conference Report to Accompany H.R. 3838 , Vol. II, U.S. Government Printing Office, September 18; 1986.
can be approximately calculated by multiplying total state and local taxes deducted by the taxpayer's marginal tax rate. For example, $\$ 1,000$ of state and local tax deductions for the taxpayer in the 15 percent marginal tax bracket translates into a federal tax savings of $\$ 150$. ${ }^{9}$ Even though this taxpayer still makes the full direct payment of $\$ 1$ thousand to state and local

> While deductibility of state and local taxes has a direct effect on the federal tax liability of individuals, it affects the fiscal situation of state and local governments only indirectly.

government, once the companion reduction in federal income tax liability is taken into account, it is apparent that the net cost to this taxpayer of the $\$ 1,000$ state and local tax bill is only $\$ 850$ ( $\$ 1,000-$ $\$ 150$ ).
Of course, only taxpayers who itemize deductions on their federal income tax returns can benefit from state and local tax deductibility. Itemizing taxpayers will further benefit from state and local tax deductibility according to the amounts of state and local taxes they pay which are allowable deductions from the federal individual income tax and their marginal federal tax rates. The higher each of these factors is, the more the individual will benefit from tax deductibility.

Changes made by TRA 86. The Tax Act eliminated deductibility of a single type of state and local taxes-general sales taxes. State and local taxes that remain deductible are individual income, real property and personal
property taxes. TRA 86 also effectively reduced the benefits of these remaining tax deductions, however, by reducing the proportion of taxpayers itemizing deductions and by reducing marginal tax rates. It has been estimated that approximately 11 million fewer returns nationwide will have itemized deductions as a result of the more generous standard deduction and because of cutbacks in allowable itemized deductions. ${ }^{10}$ According to estimates by Price Waterhouse, the effect on Texas taxpayers is to reduce the proportion itemizing deductions from over 26 percent to 19.6 percent in 1987 and 18.2 percent in 1988. ${ }^{11}$ Federal marginal tax rates faced by individuals were also reduced considerably by the Tax Act. Under prior law, marginal tax rates ranged from 14 to 50 percent. The top individual marginal tax rate was reduced to 38.5 percent for 1987 and to 28 percent for 1988.

Although the Tax Act retained deductibility of general sales taxes for businesses, it made a modest, little noticed, change with respect to business treatment of state and local taxes. ${ }^{12}$ Under prior law, state and local taxes incurred in a business were generally deductible even if the taxes were paid on the purchase of depreciable property. The Tax Act gained $\$ 1.3$ billion over the fiscal year 1987-91 period by requiring that general sales taxes paid when purchasing depreciable property be capitalized and used to increase the basis of the property, and then depreciated along with the remaining value of the property, rather than deducted on a current basis. ${ }^{13}$
Estimates of the effects of sales tax deductibility on individual taxpayers. Table 3 presents 1982 estimates of the federal tax savings from deductibility of general sales taxes per
return, by state. It indicates that the benefits of deducting general sales taxes, repealed by TRA 86 , were distributed unevenly among the states. Taxpayers in states not levying a general sales tax did not benefit from sales tax deductibility. ${ }^{14}$ Taxpayers in New York, Tennessee and Washington benefited the most from the ability to deduct general sales taxes under prior law. Taxpayers in Texas apparently benefited about the same as the average U.S. taxpayer.

A key problem with a table such as this is that it leaves the mistaken impression that taxpayers in all states can gain from a particular tax deduction. This misimpression is one more example of the illusory hope for a "free lunch." The fact is: allowing deductibility of a particular item means that either federal tax rates must be higher to make up the loss in revenue or the federal deficit will be higher than it otherwise would be. Taxpayers themselves must pay for any given tax expenditure, either in the current year or in the future.

If one makes the assumption that the provision allowing deductibility of general sales taxes contributed to higher individual income tax rates than would otherwise have been the case, then the real benefits for the average taxpayer in each state of this deduction can be estimated by a simple exercise. Since each state can only benefit to the extent that it gains more by tax deductibility than it loses from the higher tax rates that make tax deductibility possible, one can subtract the average tax savings for the U.S. from the tax savings noted for each state. Under this assumption, Texas taxpayers probably neither gained nor lost, on average, from the ability to deduct general sales taxes in 1982. Although their apparent average
income tax liability was about $\$ 105$ lower because of the deductibility provision, the higher income tax rates that made general sales tax deductibility possible resulted in a net income tax bill about $\$ 106$ higher. ${ }^{15}$

> Since 1982, an important development in Texas finances has been the state's increased reliance on general sales taxation.

Since 1982, an important development in Texas finances has been the state's increased reliance on general sales taxation. In 1982, Texas' four percent general sales tax rate was equal to the U.S. median rate. In 1987, Texas' six percent rate exceeded the U.S. median general sales tax rate by 20 percent. ${ }^{16}$

At the same time, though, the most recent figures available indicate that Texas taxpayers continued to be about 20 percent less likely to itemize than U.S. taxpayers on average. ${ }^{17}$ Because only itemizers benefit from the ability to deduct state and local taxes, this is an important statistic when evaluating the benefits for Texans of the potential availability of general sales tax deductibility. Using 1982 data, it was clear that Texas taxpayers on average neither gained nor lost from the ability to deduct general sales taxes on their federal individual income tax returns. Today, it is probable that the average Texan would not gain appreciably from the ability to deduct general sales taxes if the income tax provision were reinstated at the expense of higher federal marginal tax rates.

A Price Waterhouse income tax simulation model was used to
14. The figures from Table 3 were estimated using the most recent available IRS data on specific tax deductions broken down by state. These data are subject to some error in reporting regarding the state of tax payments. For example, a taxpayer living in the State of Washington and paying general sales taxes in that state, but using a professional tax preparer in Oregon, could easily be included with other Oregon taxpayers on the basis of the address on his or her federal income tax return. This helps account for the fact that Oregon taxpayers are credited with positive benefits from general sales tax deductibility, even though Oregon does not levy a general sales tax.
15. U.S. Advisory Commission on Intergovernmental Relations, "The Tax Reform Act of 1986-Its Effect on Both Federal and State Personal Income Tax Liabilities" (January 1988), Table 5a. This table estimates the effects of the fully phased-in Tax Act on federal individual income tax liabilities in each state. According to the ACIR estimates, taxpayers in Texas will find their federal income tax liabilities reduced by 12 percent on average as a result of the Tax Act. The changes in itemized deductions alone, including the disallowance of general sales tax deductibility, have the effect of increasing Texans' tax liability by 4.5 percent. The changes in personal exemptions, standard deduction, earned income credit and the rate reductions more than compensate for the loss of itemized deductions, however, resulting in the estimate of a 12 percent net future decrease in federal tax liability for the average Texan.
16. U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, Vol. I (Washington, D.C.: 1987), p. 56.
17. IRS data for 1982 indicates that although 33.4 percent of U.S. returns itemized deductions, only 26.1 percent of Texas returns itemized tax deductions. (U.S. Secretary of the Treasury, Office of Tax Analysis, "Tabulations from the 1982 Statistics of Income File for the Fiscal Relations Study," December 14, 1984, Table 2.) In 1986, both the average U.S. taxpayer and the average Texas taxpayer were more likely to itemize, but the Texas rate of itemization ( 32 percent) still fell approximately 20 percent of the average U.S. rate ( 39.2 percent). See Internal Revenue Service, Department of the Treasury, Statistics of Income, SOI Bulletin, Vol. 7, Number 3 (Winter 1987-88), Table 2, p. 80.
18. The Price Waterhouse simulation model is based on publicly released IRS data for 1984. The data have been modified, however, in order to reflect the new federal tax law, the increase in Texas general sales taxation and the distribution of taxpayers for future years. This estimate of the effect of disallowing general sales tax deductibility assumes that all other provisions of TRA 86 are retained. This estimate implicitly assumes that the proportion of general sales taxes with an initial impact on business is the same in Texas as it was in 1984. To the extent that subsequent base-broadening of the general sales tax has changed the proportion that is initially borne by individuals versus the proportion initially borne by business, some error in the estimate has been introduced.
estimate the benefits foregone by individuals in Texas in 1987 and 1988 as a result of the disallowance of general sales tax deductibility. ${ }^{18}$ Table 4 presents by adjusted gross income class the predicted number of total income tax filers and itemizers expected before incorporating the possible effects of reinstating deductibility of the general sales tax. The fourth column indicates the predicted amount of general sales tax deductions if the deductibility provision were reinstated, and the final three columns present the potential tax savings

TABLE 3. Federal Tax Savings from Deductibility of General Sales Taxes, Per Return, by State, 1982

| State | Amount | State | Amount |
| :--- | ---: | :--- | ---: |
| U.S. Average |  |  |  |
|  | $\$ 106$ | Minnesota | $\$ 75$ |
| Minimum |  | Mississippi | 141 |
| Maximum | 3 | Missouri | 101 |
|  | 164 | Montana | 11 |
| Alabama |  | Nebraska | 85 |
| Alaska | 132 | Nevada | 100 |
| Arizona | 58 | New Hampshire | 10 |
| Arkansas | 105 | New Jersey | 96 |
| California | 65 | New Mexico | 103 |
| Colorado | 132 | New York | 154 |
| Connecticut | 96 | North Carolina | 90 |
| Delaware | 146 | North Dakota | 69 |
| Washington, D.C. | 9 | Ohio | 104 |
| Florida | 101 | Oklahoma | 96 |
| Georgia | 96 | Oregon | 3 |
| Hawaii | 97 | Pennsylvania | 78 |
| Ilaho | 127 | Rhode Island | 98 |
| Illinois | 60 | South Carolina | 91 |
| Indiana | 132 | South Dakota | 99 |
| lowa | 81 | Tennessee | 164 |
| Kansas | 61 | Texas | 105 |
| Kentucky | 79 | Utah | 103 |
| Louisiana | 80 | Vermont | 38 |
| Maine | 140 | Virginia | 98 |
| Maryland | 83 | Washington | 160 |
| Massachusetts | 88 | West Virginia | 97 |
| Michigan | 68 | Wisconsin | 88 |
|  | 86 | Wyoming | 103 |

[^150]to Texans, in total, per filer and per itemizer.

The total predicted change in income tax liability for Texas taxpayers as a result of disallowing general sales tax deductibility is $\$ 236$ million in 1987 and $\$ 200$ million in 1988. Table 4 indicates that the average Texan itemizing deductions on his or her federal income tax return would pay approximately $\$ 173$ more in income taxes in 1987 because of repeal of general sales tax deductibility, and approximately $\$ 154$ more in income taxes in 1988. As expected, this change has a disproportionate impact on high-income Texans. Of the total predicted increase in federal income tax liability arising from disallowance of general sales tax deductibility, Texans with adjusted gross income over $\$ 30,000$ in 1988 are predicted to bear almost 90 percent of that increase. When the increase in federal income tax liability is measured as a percentage of adjusted gross income, disallowance of general sales tax deductibility also appears to have a greater negative impact as one goes up the income scale. Because this change in the federal code affects only taxpayers who are otherwise able to itemize tax deductions and homeowners are more likely to itemize than renters, this provision has a disproportionately negative impact on homeowners.

All of these estimates are subject to the important qualification described above. If reinstatement of general sales tax deductibility were accompanied by an increase in individual income tax rates, then Texans on average would be unlikely to gain appreciably from allowing general sales tax deductibility, as was illustrated in Table 3.
Effect of tax deductibility on state and local spending. Fed-
eral deductibility of state and local taxes affects the fiscal climate for those governments as well as the federal income tax liability of their citizens. One way in which tax deductibility affects state and local governments is through its effect on the net price of state and local services faced by individuals. The individual
who is in a 28 percent marginal tax bracket effectively pays 72 cents of every extra dollar of state and local taxes. In contrast, a taxpayer in the 15 percent tax bracket pays on net 85 cents of every extra dollar of state and local taxes.

State and local taxpayers are likely to demand lower spending
levels in response to the increased "price" of state and local services caused by federal tax reform.
Whereas the top bracket individual who itemized deductions on his federal tax return used to pay 50 cents of every extra dollar of state and local taxes, after tax reform, if he is in the 28 percent tax bracket he will now pay 72

TABLE 4. Distributional Analysis of the Effect of Repealing the Sales Tax Deduction for Taxpayers in Texas

Tax Summary for 1987

| Adjusied Gross Incmce Class |  | Total <br> Filers (thousands) | Total liemizers (thousands) | Sales Tax Deductions (thousands) | Change In Tax (thousands) | Change in Tax |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Per Filer |  |  |  | Per Itemizer |
| Less than | 5,000 |  | 1,130.8 | 11.5 | \$3,179.0 | \$0.0 | \$0.0 | \$0.0 |
| 5,000- | 7,500 | 550.4 | 8.5 | 6,685.7 | 437.5 | 0.8 | 51.5 |
| 7,500- | 10,000 | 604.3 | 23.2 | 5,039.2 | 267.6 | 0.4 | 11.5 |
| 10,000 - | 12,500 | 476.6 | 31.8 | 8,556.0 | 698.2 | 1.5 | 22.0 |
| 12,500 - | 15,000 | 455.1 | 18.1 | 14,907.3 | 1,744.7 | 3.8 | 96.4 |
| 15,000. | 20,000 | 759.1 | 59.3 | 46,904.0 | 3,250.0 | 4.3 | 54.8 |
| 20,000 - | 25,000 | 517.4 | 60.4 | 41,363.9 | 5,847.0 | 11.3 | 96.8 |
| 25,000 - | 30,000 | 558.6 | 155.8 | 94,447.0 | 14,507.0 | 26.0 | 93.1 |
| 30,000 - | 40,000 | 711.2 | 239.7 | 177,869.5 | 27,677.0 | 38.9 | 115.5 |
| 40,000 - | 50,000 | 432.3 | 224.0 | 177,941.1 | 40,359.0 | 93.4 | 180.2 |
| 50,000- | 70,000 | 437.7 | 266.6 | 220,198.9 | 58,730.0 | 134.2 | 220.3 |
| 70,000- | 100,000 | 184.6 | 146.6 | 125,992.0 | 41,154.0 | 222.9 | 280.7 |
| 100,000 - | 200,000 | 90.3 | 77.2 | 86,185.0 | 27,590.0 | 305.5 | 357.4 |
| More than | 200,000 | 45.5 | 43.4 | 45,401.0 | 13,737.0 | 301.9 | 316.5 |
|  | Total | 6,953.9 | 1,366.1 | \$1,054,669.6 | \$235,999.0 | \$33.9 | \$172.8 |

Tax Summary for 1988


[^151]cents of every extra dollar. Many taxpayers who used to itemize deductions, and thus effectively pay only part of their state and local taxes, will now effectively be liable for the entire state or local tax payment


#### Abstract

19. The reduced price of state and local services arising from federal deductibility of state and local taxes is one example of tax exporting. Because tax deductibility reduces an individual's federal income tax liability, it is likely that the general level of federal individual income tax rates must be higher in order to allow the tax deductibility provision. For this reason, tax deductibility is often characterized as an opportunity for taxpayers in certain states to export federal tax payments to taxpayers of other states. Another example of tax exporting involves the tourist industry where states can export sales and excise taxes to residents of other states.


20. Daphne A. Kenyon, "Implicit Aid to State and Local Governments Through Federal Tax Deductibility," in Michael E. Bell (ed.) Intergovernmental Fiscal Relations in an Era of New Federalism, JAI Press, forthcoming.
21. Paul N. Courant and Daniel L. Rubinfeld, "Tax Reform: Implications for the State-Local Public Sector," The Journal of Economic Perspectives, Vol. 1 (Summer 1987), pp. 87-100.
22. Edward M. Gramlich, "The Deductibility of State and Local Taxes," National Tax Journal, Vol. 38, Number 4 (December 1985), pp. 447-465.
23. For the basic methodology behind these estimates see Appendix Table 3 and the footnote to Table 5. For a more detailed explanation see Daphne A: Kenyon, "Federal Income Tax Deductibility of State and Local Taxes," in U.S. Department of the Treasury, Office of State and Local Finance, Federal-StateLocal Fiscal Relations, Technical Papers, Vol. I (September 1986), pp. 417-496. These estimates do not predict how long it will take for the change in net price of state and local services to have an effect on the level of state and local spending desired by taxpayers.
24. For a recent literature review see Daphne A. Kenyon, "Interjurisdictional Tax and Policy Competition: Good or Bad for the Federal System?" submitted to the U.S. Advisory Commission on Intergovernmental Relations (February 29, 1988).
because they no longer itemize deductions. ${ }^{19}$

Aggregate estimates. There have been several estimates of the impact that eliminating or reducing federal tax deductibility would have on the demand for state and local services. Kenyon estimated that tax deductibility increased aggregate state and local spending by approximately three percent over what it otherwise would have been prior to federal tax reform, but that the overall stimulus has been reduced to approximately one percent after tax reform. ${ }^{20}$ Paul Courant and Daniel Rubinfeld estimate that the Tax Reform Act of 1986 will reduce aggregate state and local spending by between 0.9 and 1.9 percent. ${ }^{21}$

As is often the case, aggregate estimates mask a considerable variability in effects among governments. Edward Gramlich produced estimates for local governments in Michigan and found that eliminating tax deductibility would have no effect on the demand for state and local spending in Detroit, that it would decrease demand by slightly over ten percent in the suburbs of Detroit and Lansing and that it would reduce demand by between six and ten percent in the rest of the state. ${ }^{22}$

Kenyon's estimates of the percentage by which tax deductibility increased state and local spending in each state prior to tax reform are shown in Table 5. According to her estimates, state and local governments in the District of Columbia, Maryland, Michigan, New York and Utah received the greatest stimulus from federal tax deductibility prior to federal tax reform-spending was predicted to be about four percent higher in each state because of the price reduction arising from tax deductibility. Texas, on the other hand, benefited from only a two
percent boost in state and local spending prior to the Tax Act.

The second column of Table 5 presents Kenyon's estimates of the remaining stimulus to state and local spending afforded by tax deductibility after federal tax reform. These estimates take into account the reduction in the percentage of taxpayers itemizing deductions, the reduction in marginal tax rates and the elimination of general sales tax deductibility. According to her estimates, state and local spending in New York will be only two percent higher than it would be without tax deductibility. The stimulus to spending in Texas is also reduced-to one percent from two percent. ${ }^{23}$

The effects of TRA 86 on interstate tax and service competition. The Tax Act may also have an important effect on the level of state and local taxing and spending because of its effects on interjurisdictional tax and service competition. Many studies have shown that both individuals and business firms take the level of taxes and spending into account when choosing a location for residence. ${ }^{24}$ One unambiguous effect of the federal Tax Act is to increase interjurisdictional tax differentials. In some cases, this will put pressure on high-tax states and localities to reduce their tax levels.

Take, for instance, an individual who is indifferent between the government services and other amenities of two suburbs in a large metropolitan area: Green Acres and Walnut Creek. Suppose that before federal tax reform, the taxpayer was an itemizer in a 50 percent tax bracket living in Green Acres and that local taxes in that suburb totaled $\$ 3,000$, and in Walnut Creek, $\$ 2,000$. The net cost of local taxes to this
taxpayer, after federal tax deductibility, was $\$ 1,500$ in Green Acres and $\$ 1,000$ in Walnut Creek. Although Walnut Creek was clearly the more advantageous community for this taxpayer, the difference in net tax burdens (\$500) might not have been sufficient to induce the taxpayer to relocate. Suppose that after tax reform, this taxpayer no longer itemizes his taxes. Now the yearly difference in tax burdens is $\$ 1,000$. It is possible that this increased tax differential will induce the taxpayer to relocate.

It is important to note that the literature on interjurisdictional tax and service competition comes to different conclusions regarding the effects of tax differentials when these differentials are matched by perceived benefits in spending. The above example made the important assumption that the individual in question was indifferent between the government services of the two suburbs. If the difference in perceived amenities between the two suburbs matched the difference in tax burdens, then despite a $\$ 1,000$ difference in annual tax burdens, the individual taxpayer would have no incentive to relocate.

A development that is heralded by many as the first sign of the post-TRA 86 climate of increased interstate tax competition is the move by nine states to lower their top individual income tax rates. For example, New York lowered its top individual rate from 13.5 to seven percent, and Minnesota lowered its top rate from 14 to eight percent in the wake of federal tax reform. ${ }^{25}$

The implications for Texas are two-fold. As a relatively low-tax state, Texas stands to gain relative to high-tax states that are funding expenditures not generally supported by their voters or
whose taxes are to some extent wasted by inefficiency in government. In the face of higher effective interstate tax differentials, Texas should begin to attract additional inmigration of individuals and businesses. ${ }^{26}$ The second implication is that, to the extent that Texas raises its taxes to fund spending widely supported by voters, Texas will not lose its competitive advantage relative to the other states.

Effect on state and local tax mix. A final impact of federal tax reform is its effect on state and local revenue mix, an effect which has been particularly controversial in Texas. This is
illustrated by excerpts from two opposing editorials which contain very different assessments of the continued benefits of raising revenues through state and local general sales taxes. Bernard Weinstein and Harold Gross argue:

> 25. Fessler, p. 60 .
> 26. Even though a number of states reduced their marginal income tax rates in the wake of federal tax reform, this is unlikely to have a great effect in reducing Texas' comparative advantage as long as taxpayers are mainly concerned about their total tax bill rather than the tax rate they pay on an extra dollar of income.

TABLE 5. Estimated Percent by Which Tax Deductibility Increases StateLocal Spending

| State | $1988$ <br> Federal Law | 1982 <br> Federal <br> Law | State | $1988$ <br> Federal Law | $1982$ <br> Federal Law |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 1\% | 2\% | Nebraska | 1 | 2 |
| Alaska | 0 | 0 | Nevada | 0 | 2 |
| Arizona | 1 | 3 | New Hampshire | 1 | 1 |
| Arkansas | 1 | 2 | New Jersey | 1 | 3 |
| California | 1 | 3 | New Mexico | 0 | 2 |
| Colorado | 1 | 4 | New York | 2 | 4 |
| Connecticut | 1 | 3 | North Carolina | 1 | 2 |
| Delaware | 2 | 3 | North Dakota | 1 | 2 |
| Florida | 1 | 2 | Ohio | 1 | 2 |
| Georgia | 1 | 2 | Oklahoma | 1 | 2 |
| Hawaii | 1 | 3 | Oregon | 2 | 3 |
| Idaho | 1 | 2 | Pennsylvania | 1 | 2 |
| Illinois | 1 | 3 | Rhode Island | 1 | 3 |
| Indiana | 1 | 2 | South Carolina | 1 | 2 |
| lowa | 1 | 2 | South Dakota | 0 | - 1 |
| Kansas | 1 | 3 | Tennessee | 0 | 2 |
| Kentucky | 1 | 2 | Texas | 1 | 2 |
| Louisiana | 0 | 2 | Utah | 1 | 4 |
| Maine | 1 | 1 | Vermont | 1 | 2 |
| Maryland | 2 | 4 | Virginia | 1 | 3 |
| Massachusetts | 2 | 3 | Washington | 1 | 2 |
| Michigan | 2 | 4 | West Virginia | 1 | 1 |
| Minnesota | 2 | 3 | Wisconsin . | 1 | 3 |
| Mississippi | 0 | 2 | Wyoming | 0 | 1 |
| Missouri | 1 | 2 |  |  |  |
| Montana | 1 | 2 | U.S. Average | 1\% | 3\% |

Source: Daphne A. Kenyon, "Implicit Aid to State and Local Governments through Federal Tax Deductibility," in Michael E. Bell (ed.), Intergovernmental Fiscal Relations in an Era of New Federalism, JAl Press, forthcoming.

Note: Computations based on estimated reduction in price for state and local services by state from tax deductibility and assumed price elasticity of demand for state and local services of -0.25 .

Texas provides a textbook example of how not to raise revenue under the new [federal tax] regime. Facing a huge budget deficit brought on by falling severance-tax revenues, the legislature recently passed a $\$ 5.7$ billion tax bill . . . . The sales tax's nondeductibility has made this increase an extremely costly one for Texas taxpayers. ${ }^{27}$

John Sessions presents a very different argument:

The motivating factor for a more broad-based sales-tax
27. Bernard L. Weinstein and Harold T. Gross, "States Given Leeway for Low Income Tax," The Wall Street Journal (October 29, 1987).
28. John Sessions, "Texans Had Better Prepare for an Assault on Their Wallets," Fort Worth Star Telegram (December 1 , 1987).
29. Dennis Zimmerman, "Federal Tax Reform and State Use of the Sales Tax," Proceedings of the Seventy-Ninth Annual Conference, 1986, National Tax Association-Tax Institute of America (1987), p. 326.
30. U.S. Advisory Commission on Intergovernmental Relations, Changing Public Attitudes on Governments and Taxes, 1984 and 1987 (Washington, D.C.). The relevant questions asked in various years between 1972 and 1987 are: "Suppose your local government must raise more revenue, which of these do you think would be the best way to do it?", "Suppose your state government must raise taxes substantially, which would be a better way to do it?" and "lf your state government decided to raise a small amount of additional revenue to help meet costs and improve services, which one of these would you prefer?"
31. Zimmerman estimated that the price of state and local services financed by general sales taxes was $\$ 0.884$ before tax reform, as was the price of state and local services financed by other deductible taxes (producing a ratio of 1.00 ) After federal tax reform, Zimmerman notes that the price of state and local services financed by general sales taxes rose to $\$ 1.00$, while the price of state and local services financed by other deductible taxes rose to $\$ 0.921$.
system, versus imposition or increases in income taxes, was generated by the 1986 U.S. Tax Reform Act. In the past, the federal income-tax system gave states a far greater incentive to assess state income taxes rather than sales taxes (because sales taxes were deductible to a lesser degree and were deducted at lower effective tax rates than were income taxes). Though the sales tax is no longer deductible, the benefits of deductibility of state income taxes have been scaled back because of the higher standard deduction and the reduction in federal tax rates. No longer is there a simple balance to the states' incentives for sales versus income taxes. ${ }^{28}$

The resolution of these conflicting points of view depends partly on how one weighs the other benefits and costs of raising revenue through income taxes versus general sales taxes and partly on the resolution of an empirical question.
Weinstein and Gross are correct in noting that the disallowance of sales deductibility means that Texas can no longer export some portion of this tax to U.S. taxpayers through the federal income tax. The Tax Act has made raising revenue through the general sales tax more expensive than raising revenue through an individual income tax, all other factors being equal. To put this in more precise terms, Dennis Zimmerman has calculated that the average "price" of raising an extra dollar of revenue through all deductible taxes prior to federal tax reform was about 88 cents. After the Tax Act, the average price of raising an extra dollar of revenue through raising the sales tax is one dollar, and through other . taxes is about 92 cents. ${ }^{29}$

Sessions may be right, however, in noting that before TRA 86 there was "a simple balance" in the choice between a sales and an income tax for certain states. An income tax is usually less stable than a sales tax, and the ACIR has consistently found that taxpayers prefer that state and local revenue be raised through increases in sales taxes rather than in income taxes. ${ }^{30}$ Taking these factors into account, together with the relative ability for tax exporting via each tax, may have resulted in a "tie" between the two taxes as far as policymakers and citizens were concerned. If there were a "tie" between the income tax and the sales tax prior to tax reform, the important empirical question is what was the effect of TRA 86 on the relative "price" of raising revenue through the two taxes?
Zimmerman's calculations imply that the ratio of the price of deductible sales taxes to income taxes changed from 1.00 before federal tax reform to 1.09 after tax reform ${ }^{31}$ If these estimates are approximately correct, the Tax Act made the general sales tax less attractive relative to the individual income tax.
However, as Sessions correctly notes, sales taxes were always deductible to a much lesser degree than were income taxes. Partly this was due to the fact that sales taxes are regressive taxes, while state income taxes tend to be proportional or sometimes progressive. This means that the burden of sales taxes is felt disproportionately by taxpayers who do not itemize deductions on their federal income tax returns, whereas the burden of income taxes tends to fall disproportionately on taxpayers who are itemizers. Furthermore, as Sessions notes, general sales taxes tended to be deducted against lower marginal tax rates than were income taxes. The fact that
general sales taxes were deductible to a lesser degree than income taxes also resulted from the infrequent updating of the sales tax tables at the back of Form 1040, which many taxpayers used to calculate allowable sales tax deductions. It was generally acknowledged that the sales tax tables understated actual sales taxes paid by approximately 50 percent. For these reasons, the ratio of the price of revenue raised through the general sales tax to the price of revenue raised through the income tax was probably greater than 1.0 prior to tax reform. It is conceivable that the benefits of deducting income taxes were reduced in some states by such a large proportion that despite elimination of general sales tax deductibility, the general sales tax did not lose attractiveness on net relative to the income tax.

The major logical flaw of the Sessions argument, however, is that states are not limited to a choice between relatively progressive income taxes and general sales taxes. States do have the choice of levying an income tax that has much the same incidence as the general sales tax. Such an income tax can be distributed similarly to payroll taxes levied by several cities. These flat rate income taxes continue to be deductible on federal income tax returns.

The public finance literature provides a mixed message regarding whether the change in the benefits of deducting state and local taxes due to the Tax Act will have much effect on state and local tax mix. Zimmerman's review of the literature concludes that use of the income tax does appear to be sensitive to its price as affected by tax deductibility, but that use of the sales tax does not appear to be sensitive to that price effect. Zimmerman con-
cludes that changes made by the Tax Act "will not cause a substantial change in the state and local sector's use of general sales taxes." ${ }^{32}$ The events of the past year provide support for Zimmerman's assessment: eight states (including Texas) raised their sales tax rates, while three states (again including Texas) broadened their sales tax bases. ${ }^{33}$

Having examined the various ways in which the changes in the benefits of tax deductibility are likely to affect state and local governments, we now turn to a second major set of changes in the Tax Act that affect Texas as well as other state and local governments.

## Effects on the Issuance of Tax-Exempt Debt

The role of tax-exempt debt in public and private finance has changed dramatically during the last decade. The volume of long-term debt issued annually by state and local governments increased from $\$ 46.2$ billion in 1978 to $\$ 101.9$ billion in 1984 , then in anticipation of the 1986 Tax Act swelled to $\$ 204$ billion in 1985. The volume of debt issued in 1986 and 1987 was more modest$\$ 142.5$ billion and $\$ 94$ billion, respectively, but was still at least double the annual volume at the beginning of the decade. ${ }^{34}$

A second major development over this period has been the growth of debt issued for nontraditional purposes. In 1970, education, transportation, water and sewage, public power and certain other general government purposes accounted for 95 percent of total long-term tax-exempt bonds issued. By 1983, these categories accounted for only 34 percent of all long-term taxexempt bonds. The remainder included bonds issued for private purposes such as hous-
ing, industrial development and student loans and for nonprofit hospitals and educational institutions. ${ }^{35}$ This growth in the proportion of tax-exempt debt that benefited private businesses, homeowners and students rather than traditional state and local government capital financing was a major reason for the proposals put forward by the federal Treasury Department to repeal tax exemption for nongovernmental bonds. Although such a drastic change was not enacted, TRA 86 made a number of significant changes in federal law that affect the issuers of tax-exempt debt and the tax-exempt bond market. Many issuers view the changes made by the Tax Act in a much different light than does the Treasury Department. As a recent article put it: "The Tax Reform Act is considered a villain by many public finance experts. ${ }^{136}$

Those changes that directly affect the supply of tax-exempt bonds or, in other words, that directly affect the future volume of tax-exempt debt will be discussed first. In the following section, the changes of the Tax Act that affect the likely purchasers of tax-exempt bonds will be briefly described. Discussion of certain other changes in the federal law on tax-exempt bonds of a less important nature, such
32. Zimmerman, p. 326.
33. Benker, Fiscal Survey of the States.
34. Credit Markets (January 18, 1988), p. 49.
35. John E. Petersen, "Recent Developments in Tax-Exempt Bond Markets," in Office of State and Local Finance, Department of the Treasury, Federal-State-Local Fiscal Relations, Technical Papers, Vol. Il (September 1986), Figure 2.3, p. 761.
36. W. John Moore, "Bond Voyage," National Journal (January 23, 1988), p. 187.
as the changed requirements for reporting tax-exempt bond volume and the restrictions on financing the costs of issuing taxexempt bonds, are beyond the scope of this chapter.

## Issuer Changes

Under federal tax law, interest on state and local debt is exempt from income taxation if the bonds in question can be classified as either governmental bonds or as allowable private activity bonds. ${ }^{37} \cdot$ In brief, a bond is clas ified às a governmental bond if it passes either a "trade or business test" or a "security interest test." If a bond fails both those tests, it is classified as a private activity bond. Table 6 lists those categories of private activity bonds allowed to be issued on a tax-exempt basis under both prior law and after the Tax Act. Private activity bonds that are not included in any of the allowable categories can only be issued on a taxable basis. ${ }^{38}$
General dividing lines. One major change in the federal law under the Tax Act is a tightening in the general rules that divide governmental bonds from private activity bonds. Tax-exempt bonds

[^152]generally no longer qualify as governmental bonds if more than ten percent of bond proceeds is used directly or indirectly in any trade or business-the trade or business test-and more than ten percent of the payment of principal or interest is secured directly or indirectly by payments or

> Under federal tax law, interest on state and local debt is exempt from income taxation if the bonds in question can be classified as either governmental bonds or as allowable private activity bonds.

property used in a trade or business-the security interest test. The dividing line for the security interest and trade or business tests previously was 25 percent.

An example of the application of these tests is the construction of a municipal recreation building which includes a private concessionare, such as a fast food restaurant. If more than ten percent of the bonds used to finance construction of the recreation building is used by the fast food restaurant, and if more than ten percent of the interest or principal is secured by the restaurant, the bonds will not qualify as governmental bonds. Unless there is a special provision for such an issue under the rules on private activity bonds, these bonds could not be issued on a tax-exempt basis. (In fact, under current federal law, construction of a fast food restaurant could not be financed with tax-exempt bonds.)
A second general dividing line is labeled the "private loan rule."

Under the new law, if an amount exceeding the lesser of five percent or $\$ 5$ million of the proceeds of a bond issue is used to make loans to individuals, the bond does not qualify as a governmental bond. State and local bonds issued to buy land that is later sold to developers äre most likely to run afoul of the private loan rule.

Finally, in the case of power facilities, a bond is no longer governmental if more than $\$ 15$ million of the proceeds of an issue-when added to the proceeds of prior issues-is used in a trade or business.

Allowable purposes. Changes were also made in the allowable purposes for which private activity tax-exempt bonds can be issued. Under the new law, taxexempt bonds can no longer be issued for pollution control or sports facilities, among other purposes. On the other hand, a new category of allowable private activity debt was created for the cleanup of hazardous waste, and the prior law sunsets for two major types of bonds were delayed by the Tax Act. The ability to issue both tax-exempt singlefamily mortgage subsidy bonds and small issue industrial development bonds (IDBs) for manufacturing was extended by one year.
By including a column indicating the average volume of taxexempt debt issued in Texas for the 1983 to 1986 period for most categories of private activity debt, Table 6 illustrates which of these changes will have the most. important impact on Texas state and local governments. Texas issuers accounted for more than $\$ 400$ million per year on average of tax-exempt bonds for multifamily housing; airports, docks and wharves; pollution control; small issue IDBs; mortgage revenue bonds and nonprofit hospital and
educational facilities. Bonds for privately owned airports, docks and wharves or for financing pollution control can no longer be issued on a tax-exempt basis. On the other hand, postponing the sunsets for small issue IDBs and mortgage subsidy bonds has a favorable effect on two types of
private activity debt that have accounted for a large proportion of tax-exempt debt issued in Texas over the past few years. Volume cap. Another important factor affecting the future supply of tax-exempt debt as a result of the Tax Act is a lower unified volume cap on private activity
bond issues. Under prior law, there were two important separate state-by-state volume caps: one on mortgage subsidy bonds and the other on IDBs and student loan bonds. The new law combines those volume caps. The initial cap was set at the greater of $\$ 75$ per capita, or $\$ 250$ million for

TABLE 6. Treatment of Private Activity Bonds Under Prior Law and After Tax Reform Act of 1986

| Type of Bond | Average Texas Volume 1983-86 (millions) | Prior Law ${ }^{\text {b }}$ |  |  |  | Tax Reform Act of 19867 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tax-Exempt |  |  | Tax-Exempt |  |  |
|  |  | Taxable | Cap | No Cap | Sunset | Taxable | Cap No Cap | Sunset |
| Multifamily | \$687 |  |  | $X$ |  |  | X |  |
| Sports | $4^{1}$ |  | X |  |  | $x$ |  |  |
| Convention/Trade Show | 01 |  | $p$ | G |  | X |  |  |
| Airports, Docks \& Wharves | 282 |  | P | G |  | P | G |  |
| Mass Commuting Facilities | Not reported |  | P | G |  | P | G |  |
| Parking | Not reported |  | X |  |  | X |  |  |
| Sewage | $160^{2}$ |  | X |  |  |  | X |  |
| Solid Waste | (2) |  | X |  |  |  | P G |  |
| Electric Energy and Gas | Not reported |  | X |  |  |  | X |  |
| Pollution Control | 474 |  | X |  |  | $x$ |  |  |
| Water Furnishing | Not reported |  | X |  |  |  | $x$ | $\bigcirc$ |
| Hydroelectric | Not reported |  | X |  | 12/88 |  | X | $12 / 88$ |
| Heating or Cooling | Not reported |  | X |  |  |  | x |  |
| Hazardous Waste | Not reported | $x$ |  |  |  |  | X |  |
| Industrial Park | , |  | X |  |  | x |  |  |
| Small Issue IDBs | $610^{3}$ |  | X |  | Nonmfg. 12/86 Mfg. 12/88 |  | x | Nonmfg. 12/86 Mfg. 12/89 |
| Student Loans | 235 |  | X |  | M. 12 ( |  | X |  |
| Mortgage Revenue | 6274 |  | Sep | arate | 12/87 |  | $x$ | $12 / 88$ |
| Veterans. | 4 |  | Sep | arate |  | $\cdots:$ | Separate |  |
| Redevelopment | . Not reported |  |  | rovision Code ${ }^{6}$ |  |  | X . |  |
| Nonprofit hospital and educational facilities | 936 |  | $X$ |  |  |  | $\mathrm{X}^{8}$ |  |

Source: Bond volume figures are total short-term and long-term face amount reported on IRS Form 8038.
$P=$ privately owned, $G=$ governmentally owned

1. Combined average volume for sports, convention and trade show IDBs is $\$ 4$ million.
2. Combined average volume for sewerage and solid waste is $\$ 160$ milion.
3. Combined average volume for industrial park and small issue IDBs is $\$ 610$ million.
4. Average for 1985-86 only; combined average volume for mortgage revenue and veterans bonds is $\$ 627$ million. In 1985 , the veterans bond total was $\$ 252$ million.
5. Prior law had three separate caps:

Qualified mortgage bond cap $=$ greater of $\$ 200$ million or nine percent of average mortgage originations for preceding three years.
Qualified veterans' mongage cap $=$ average annual issuance between $1 / 79$ and 6/84. (Allowed only in Alaska, California, Oregon, Texas and Wisconsin).
IDB/student loan bond cap = greater of $\$ 200$ milion or $\$ 150$ per capita ( $\$ 100$ per capita after 1986 ).
6. Under prior law, some of what are now called redevelopment bonds were taxable bonds, others were governmental and thus tax-exempt and uncapped. Under the new law, certain redevelopment bonds will be tax-exempt and under the cap.
7. The new law retains a separate veterans' bond cap and combines the mortgage and IDB/student loan bond caps. Cap = the greater of $\$ 75$ per capita or $\$ 250$ million from $8 / 15 / 86$ to end of 1986 and for 1987. Beginning in 1988 , the cap $=$ the greater of $\$ 50$ per capita or $\$ 150$ million.
8. $\$ 150$ million per organization limit on outstanding nonhospital bonds.

1987, and is lowered to the greater of $\$ 50$ per capita, or $\$ 150$ million, beginning in 1988. ${ }^{39}$ (As a populous state, the volume caps applicable to Texas are the $\$ 75$ per capita lid for 1987 , and the $\$ 50$ per capita lid applicable beginning in 1988.) In addition, some changes were made in the application of the volume cap. The most important was the extension of a volume cap to multifamily housing IDBs for the first time. Other more minor changes are shown in Table 6.
The changes in allowable categories of tax-exempt bonds
39. The third prior law volume cap, which applies to veterans' mortgage subsidy bonds, was unchanged by TRA 86. This cap is set at the average annual issuance of veterans' bonds between January 1979 and June 1984. Under federal law, only Alaska, California, Oregon, Texas and Wisconsin can issue this type of taxexempt bond.
40. The choice of years for this calculation is a difficult and somewhat arbitrary decision, guided in this case by the fact that IRS data are only available for the 1983 to 1986 time period. If it were possible, it might be better to include 1982 and/or 1987 tax-exempt bond volume data in order to obtain a better estimate of the average level of debt issuance. The problem is that the rush to market in 1985 caused by the impending tax bill considerably distorted the volume of issuances in that year.
41. Texas' newly created Bond Review Board could eventually help create an alternative system for allocating bond volume among state issuers. Since the bond board does not review local issues, however, it cannot help to allocate allowable bond volume among the local issuers. Congress gave state legislatures the power to set the allocation systems for allowable private activity debt. In the absence of state legislative action, however, the allowable volume is divided equally between state and local issuers and then allocated to local issuers on the basis of relative population levels.
42. Reported in Daphne A. Kenyon, "Recent Developments in Federal-StateLocal Fiscal Relations," Hamline Journal of Public Law and Policy, Vol. 8, Number 1 (Spring 1987), p. 146.
and the new unified volume cap will directly affect the supply of tax-exempt bonds each state can issue. The effects of the newly lowered volume cap have not been seen yet because tax-exempt bond volume has fallen for other reasons. The most important reasons are that states issued a record high volume of debt in 1985 in anticipation of the Tax Act, thereby reducing their current needs for debt issuance, and the absence of important regulations supporting the Tax Act, such as the arbitrage rebate regulations, has created an uncertain climate for issuing taxexempt debt. When tax-exempt bond volume returns to the historical trend, however, the unified volume cap will prove an effective constraint for many states. The degree of the constraint will depend importantly on whether the sunset dates for small issue IDBs and mortgage subsidy bonds, extended in previous years, are extended again. If the sunsets are extended, the volume caps are much more likely to be constraining because these two types of bonds account for a large proportion of private activity debt issued.
Estimates of the impact of TRA 86 on tax-exempt volume. The effects of the changes in allowable categories of tax-exempt bonds and of the new volume cap on private activity bond volume in Texas under the fully phased-in law have been estimated, assuming that the state returns to its past average levels of debt issuance. Assuming that neither the small issue IDB nor the mortgage subsidy bond sunsets actually take place, the volume cap will reduce tax-exempt volume for bonds under the cap by 58 percent. The limits on allowable purposes together with the volume cap will reduce total private activity debt issued in Texas by 63 percent
relative to the average level from 1983 to 1986. ${ }^{40}$

Assuming that the two important sunsets do take place, the volume cap will be binding but will not have such a dramatic effect. It will only reduce the volume of private activity debt under the cap by approximately 17 percent. The volume cap in combination with the limits on allowable purposes will still have the same impact on total volume of private activity debt howeverit will fall by about 63 percent relative to the average level of the recent past. The difference for the State of Texas is in the implied need for reevaluating its system for allocating allowable tax-exempt bond volume. The more constraining the volume cap, the more controversy the system for allocating bond volume will generate. Continuing a first-come, first-served allocation system, such as is currently in place in Texas, is likely to prove difficult if the volume cap itself causes a significant reduction in volume of tax-exempt issues. ${ }^{41}$
There have been other estimates of the impact of the Tax Act on volume of tax-exempt debt issued. The model of the U.S. Treasury Office of Tax Analysis estimated the impact of all changes directly affecting the supply of both private activity and governmental tax-exempt debt. The Treasury model projected an approximate 20 percent cutback in the volume of private activity debt issued over the 1987-91 period relative to what would have been issued under prior law. The Treasury's comparable estimate for governmental bonds is an approximate cutback in volume of ten percent over the 1987-91 period. ${ }^{42}$ An important difference between the estimates presented here and the Treasury's is the starting point for comparison. This chapter includes estimates of the effects of
changes in allowable purposes and of the new volume cap on volume of tax-exempt debt issuance relative to average levels of issuance for the 1983 to 1986 period. The Treasury estimated the effects of all direct changes affecting supply relative to the volume of issuance that their model predicted under prior law. Since the sunsets of small issue IDBs and of mortgage revenue bonds were included under prior law, the postponement of these sunsets in TRA 86 was a significant factor serving to increase volume of tax-exempt debt relative to prior law. Because of its treatment of these sunsets, the Treasury's starting point for comparison will tend to make its estimate of the resulting cutback in tax-exempt volume lower than estimates based on the average level of issuance in the past.

The Public Securities Association (PSA) has also produced estimates of the cutback in taxexempt bond volume resulting from TRA 86. ${ }^{43}$ The Association estimated the percentage of the private activity tax-exempt volume issued in 1984 subject to the new unified volume cap that could not be issued given the 1987 level of that cap. They predicted that 64 percent of Texas' 1984 private activity bond volume would be "lost" to Texas as a result of the 1987 volume cap. According to their estimates, Texas is affected about the same as the states on average, who lose an estimated 59 percent of their 1984 volume as a result of the 1987 volume cap. The PSA estimates do not take into account any reduction in volume arising from changes in the allowable categories of private activity bonds or from changes in the law concerning arbitrage or advance refundings, to which we now turn.

Advance refundings. New
restrictions on advance refundings are also expected to reduce the future volume of taxexempt bonds. Issuers generally refund their debt to take advantage of debt service savings or to get out of restrictive bond covenants. In an advance refunding, when new bonds are issued, the old bonds remain outstanding.
> [The Public Securities Association] has predicted that 64 percent of Texas' 1984 private activity bond volume would be "lost" to Texas as a result of the 1987 volume cap.

(This is different from a current refunding, in which outstanding bonds are redeemed at the same time or at nearly the same time as the refunding issues are sold.)

Under prior law, industrial development bonds and mortgage subsidy bonds could not be advance refunded, where an advance refunding was defined as a refunding more than 180 days before the refunded bonds are redeemed. The Tax Act redefines a refunding more stringently as an issuance more than 90 days before the prior issue is redeemed. More importantly, it places restrictions on refundings of governmental tax-exempt bonds and tax-exempt bonds issued for private nonprofit hospitals and educational institutions. ${ }^{44}$ Some of the more important restrictions are:
(1) Issues that were originally issued before January 1, 1986 may be advance refunded a total of two times.
(2) Issues that were originally
issued after December 31, 1985, may only be advance refunded once.
(3) In the case of advance refundings producing a present value debt service savings, if the bonds were issued after December 31, 1985, refunded bonds must be redeemed no later than the first call date.
(4) Fọr those bonds issued before January 1, 1986, the refunded bonds must be redeemed no later than the first date on which they may be redeemed at a premium of three percent or less.

Arbitrage. The final set of changes expected to have a direct effect in reducing the volume of tax-exempt debt are the new restrictions placed on the ability to earn arbitrage. In the context of tax-exempt bond law, arbitrage is the investment of proceeds from tax-exempt bonds in an investment vehicle earning the higher rate of interest applicable to taxable investments. Although issuing debt for the purpose of earning arbitrage was generally prohibited under prior law, in certain circumstances, an issuer could take advantage of arbitrage earnings for limited periods.

There were two major changes in the treatment of arbitrage in TRA 86. The first stemmed from the reversal of the State of Washington decision, which made it no longer possible to pay
43. Public Securities Association, "1987 Volume Caps for 'Private Activity' Bonds Compared to 1984 and 1985 issuances."
44. The more precise term "501(c)(3)," which stands for the section of the Internal Revenue Code granting exemption from income taxation, has been replaced by "private nonprofit hospitals and educational institutions," because the latter term describes the bulk of 501 (c)(3) organizations that issue tax-exempt bonds.
issuance costs out of arbitrage earnings. ${ }^{45}$ The U.S. Treasury considered this an important reform, in part because it eliminates the incentive to structure collapsible issues, for which issuance costs were often paid out of arbitrage earnings, but which may never have been intended to finance capital construction. The Treasury was also concerned that the ability to pay issuance costs out of arbitrage earnings provided a general incentive to increase issuance of tax-exempt bonds.

The second major change in the arbitrage area is the extension of the requirement to rebate most arbitrage earnings to the federal government, which under prior law applied to IDBs and mortgage subsidy bonds, to other types of tax-exempt bonds. Two important exceptions to the arbitrage rebate requirement are for governmental units that issue no more than five million dollars in governmental tax-exempt bonds during a year and for issues for which all but a minor portion of the proceeds are spent within six months of the date of issue. TRA 86 required the Treasury to set up a program to enable issuers to avoid earning rebatable arbitrage. This program has been set up but few issuers have used it.

The arbitrage rebate law is currently one of the more controversial aspects of the new federal law on tax-exempt bonds. The National League of Cities, the State of Georgia, the Atlanta City Council and the Government Finance Officers

[^153]Association joined in a court challenge of the constitutionality of the arbitrage rebate on August 31, 1987. Subsequently, the potential for success in their suit has probably been considerably reduced by the South Carolina v. Baker decision. Meanwhile, the fact that general regulations on the arbitrage rebate law have not been issued has created uncertainty for issuers.

Taxable municipal bonds. The various restrictions placed on issuance of tax-exempt bonds were widely predicted to spur the growth of the taxable municipal market. During legislative consideration of the Tax Act, some knowledgeable participants in the municipal market predicted that the annual volume of taxable state and local bonds would soon grow to as much as $\$ 30$ billion. This growth has not yet materi-alized-in 1987, total taxable volume included only 135 issues totalling $\$ 2.7$ billion. Texas participated in this taxable market by issuing seven taxable issues in 1987, totalling \$167.3 million. ${ }^{46}$ As investors become more accustomed to taxable municipals, these bonds will become more marketable. In addition, once states come up against their volume caps, issuers will find more need to issue taxable bonds. Both of these factors point to a growing role of taxable municipal bonds in the future.

## Changes Affecting the De-

 mand for Tax-Exempt BondsIn addition to the numerous changes described above that directly affect the supply of taxexempt bonds, many more changes were enacted by TRA 86 that affect the purchasers of taxexempt bonds or that affect the
demand side of the market. These changes have an indirect effect on state and local government issuers, however, by affecting the marketability of their debt and the interest rates that issuers must pay.

Factors serving to reduce the demand for tax-exempts. One important factor serving to reduce the demand for tax-exempt bonds is the across-the-board reduction in marginal tax rates for both individuals and corporations enacted by TRA 86. Another important factor is the extension to financial institutions of the general rule disallowing a deduction for the costs of carrying tax-exempt debt. Including tax-exempt interest on most newly issued private activity taxexempt bonds as a direct preference under the individual and corporate minimum taxes, and including other tax-exempt interest as an indirect preference under the corporate minimum tax through the book income provision, will also tend to reduce the demand for tax-exempt bonds, all else equal.

One indication of the impact of the Tax Act is the fact that the nation's largest 1,000 banks reduced their holdings of municipal bonds by nine percent in the first half of 1987. This can be attributed in part to the disallowance of the prior law deduction for the costs of carrying taxexempt debt. On the other hand, banks' appetites for municipal bonds fall off sharply when they earn losses instead of profits and have no need to shelter income. This is probably the more important factor in Texas, where banks sold off almost 20 percent of their tax-exempt bonds in the first half of $1987 .{ }^{47}$

Factors serving to increase the demand for tax-exempts. All else is not equal, however. The Tax Act also included provisions
which tend to increase the demand for tax-exempt bonds. Individuals who have not previously purchased tax-exempt bonds may turn to the municipal market as other avenues for sheltering income from the federal income tax have been sharply curtailed by such provisions as the new limits on deducting passive losses, full taxation of long-term capital gains and the disallowance of deductible IRAs for most highincome individuals. On the business side, too, because basebroadening measures have the effect of increasing taxable income for certain sectors of the economy, this will tend to increase the demand for tax-exempt bonds as a means of sheltering otherwise taxable income.

Effects on borrowing costs for state and local governments. Given the number of factors serving both to increase demand for tax-exempt bonds and to decrease demand, as well as the supply changes described above, determining the changes in borrowing costs for state and local governments resulting from the Tax Act is very complicated. Changes that tend to reduce the demand for tax-exempt bonds will tend to drive up borrowing costs, while changes that tend to increase demand or reduce supply will tend to lower tax-exempt interest paid by state and local governments. A greater difficulty, perhaps, is untangling the effects of other market factors on interest rates in general from the effects of the Tax Act alone. As an example, the volume of taxexempt bonds in January and February 1987, just after enactment of TRA 86, rose to record high levels because the generally low level of interest rates made refundings attractive, not because of changes included in the Tax Act. ${ }^{48}$ At present, it is not clear whether the net effect of the Tax

Act taken alone is to increase or decrease interest rates which state and local governments pay to finance their capital spending. Extending the municipal market overseas. Because of issuers' concerns about the continued marketability of their debt and the possibility that taxable municipal debt may be a

> Despite the state's aboveaverage general sales. tax rate, Texas taxpayers will not be hurt appreciably by the elimination of general sales tax deductibility.

more important borrowing tool in the future, a few innovative issuers have begun to market some of their municipal debt on an international basis. For example, in the first months of 1988, international investors purchased $\$ 50$ million of shortterm debt issued by Los Angeles County. Opening a new market is not easy, however, as issuers have to gain name recognition in order to market their debt. For example, bond counsel associated with the Los Angeles County sale noted: "We first had to explain what a county is for some investors. ${ }^{\prime 49}$

## Conclusion

This survey of the effects of the Tax Reform Act of 1986 on state and local governments, which paid particular attention to the effects on Texas, distinguished among three major types of effects of the law.

First, a number of states other than Texas received so-called "windfalls" in individual and corporate income tax revenues
because of their links to federal taxes whose bases were broadened by TRA 86.

Second, the elimination of general sales tax deductibility, reduction in the proportion of taxpayers itemizing deductions and the across-the-board reductions in federal marginal tax rates all reduce the benefits of federal deductibility of state and local taxes. This effectively increases the price of state and local services and, as one analyst put it. "makes state tax payments more crucial." Despite the state's above-average general sales tax rate, Texas taxpayers will not be hurt appreciably by the elimination of general sales tax deductibility. This is true because Texas taxpayers have consistently been less likely to itemize deductions than the average U.S. taxpayer, and the assumption that eliminating general sales tax deductibility helped to "pay for" the general reduction in federal marginal tax rates. In considering the reduced benefits from deductibility of individual income and property taxes, Texas is likely to be hurt less than other states or may even be helped as relatively low-tax states stand to gain in the environment of increased interstate tax competition.

The third major type of effect of the Tax Act on state and local governments is its impact on taxexempt bond law. In the course of describing the changes made by TRA 86, some differences between the effect on Texas and the effect on other states were noted. In general, though, Texas is affected about the same as other states by the new federal law on

[^154]tax-exempt bonds. All states are negatively affected in the short run, as they attempt to comply with the numerous changes in a climate of uncertainty. It appears that Texas will be affected to approximately the same degree as other states when the volume caps on allowable private activity bond volume become effective constraints on tax-exempt bond volume in future years.

## Looking Toward the

## Future

These federal tax changes affecting state and local governments will not be the last that will be seen over the next few years. Congress appears to have a continued appetite for making changes in the federal tax code. Although the 1987 tax law made only one significant change in federal law with respect to taxexempt bonds, many changes were considered. Because elimination of general sales tax deductibility was adopted after active consideration of President
Reagan's proposal to eliminate deductibility of all state and local taxes, there may be further curtailment of tax deductibility in the future. An even more important possible future change in federal tax law would be an adoption of a national value added tax, of special interest to Texas given the importance of the sales tax base to the state.
One potential change in federal tax law that is quite unlikely is the reinstatement of general sales tax deductibility. This prediction can be supported in three ways. First, the state and local lobby appears to be one of the least powerful on Capitol Hill. Second, by its 1987 repeal of the

[^155]general revenue sharing program, Congress has indicated a lack of support for aiding state and local governments through general purpose aid. Third, the historical pattern has been for Congress to

> One potential change in federal tax law that is quite unlikely is the reinstatement of general sales tax deductibility.

nibble away at the benefits of state and local deductibility. Limitations were placed on state and local tax deductibility in 1964, when deductibility of automobile and drivers' licenses and selective excise taxes except gasoline were disallowed, and in 1978, when deductibility of gasoline excise taxes was disallowed. There have been no instances of past federal tax changes that have increased the scope of state and local tax deductibility.
Another unlikely option is the institution of a federal value added tax, barring a federal crisis of far greater magnitude than the current budget and deficit controversies. The debate over a federal value added tax reappears periodically and appears to have gained only a marginally greater foothold in the policy agenda. At the same time, economists and policymakers appear to have a growing awareness of the implementation and administrative problems of the tax. They are realizing that, although in theory a value added tax can be far superior to the current income tax system, in practice any value added tax the U.S. might adopt is likely to be plagued by some of the same flaws as the current
income tax. Furthermore, as long as conservatives resist the introduction of a new tax on the basis that it will only provide a new "tax handle" for the federal government and lead to increased growth in federal spending, there will be a solid core of resistance to the adoption of such a tax.
The most likely future limitations on state and local tax deductibility are the repeal of personal property tax deductions or the institution of a floor on all remaining tax deductions. (With a floor, deductions above a minimum eligibility amount are allowable. A likely proposal is a floor equal to one or two percent of adjusted gross income.) Repeal of personal property tax deductions would follow the past pattern of selective repeal of particular taxes. The political difficulty with that proposal arises from the fact that because not all states have personal property taxes, its impact would vary considerably among the states. On the other hand, a floor on allowable deductions, especially if set at a low level, would have very similar impacts among the states. This type of provision would be patterned after the floors placed on medical and miscellaneous itemized deductions, among others.
The single most likely type of future federal tax change affecting state and local governments is modification of federal taxexempt bond law. During this decade, Congress has modified federal law on tax-exempt bonds five times-in 1980, 1982, 1984, 1986 and 1987. In the view of the chief lobbyist for the National League of Cities, "Congress has been chipping away at the taxexempt status of municipal bonds for the last decade and I think the decision in South Carolina v. Baker means the erosion will be speeded up. ${ }^{150}$

We shall come back, no doubt. . . . But that will be a long time from now, and soon now we shall go out of the house and go into the convulsion of the world, out of history into history and the awful responsibility of Time.

Robert Penn Warren
All the King's Men

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[^0]:    1. Rupert Richardson, Texas: The Lone Star State (New York: Prentice-Hall, 1943), p. 114.
[^1]:    Source: Legislative Budget Board and Comptroller of Public Accounts.

[^2]:    5. Minnesota Tax Study Commission, Final Report of the Minnesota Tax Study Commission, Volume 1: Findings and Recommendations (St. Paul, Minnesota:
    Butterworths Legal Publishers, 1986), p. 5.
[^3]:    Source: Comptroller of Public Accounts.
    *Estimated.

[^4]:    1. Does not include all categories of state and local spending. Totals do not add. Rankings are based on all 50 states.
[^5]:    11. Phares, pp. 64-66.
    12. Unfortunately, 1981 was the final year that the IRS published this kind of data for individual states. Consequently, the business ownership breakdowns are based on 1981 data.
    13. Based on the methods used to derive the data, the 20 percent ownership figure could conceivably be lower; but it almost certainly could not be higher.
[^6]:    Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.

[^7]:    Note: The Case 1 tax-shifting scenario is individual consumers only; Case 2 is business owners only; Case 3 is half consumers and half business owners; and Case 4 is an equal distribution to consumers, owners and wage earners.

[^8]:    Source: State Property Tax Board.

[^9]:    Source: Comptroller of Public Accounts.

[^10]:    Source: House Ways and Means Committee.

[^11]:    Source: House Ways and Means Committee.

[^12]:    Source: House Ways and Means Committee.

[^13]:    Source: State Property Tax Board.

[^14]:    Source: State of Texas, Annual Financial Report, various years.

[^15]:    Source: Select Committee on Tax Equity, based on data in State of Texas, Annual Financial Report, various years.

[^16]:    Source: Select Committee on Tax Equity, calculated from State of Texas, Annual Financial Report, various years; Wharton Econometric Forecasting Associates.

[^17]:    Source: State of Texas, Annual Financial Report, various years.

[^18]:    Source: Legislative Budget Board, Fiscal Size Up, various years and Legislative Tax Handbook; Texas Commission on State and Local Tax Policy, Our State Tax Policy: Its History; Its Future (Austin, 1959); Comptroller of Public Accounts, Texas and Taxes (Austin, 1987).

    1. Includes one bill increasing motor vehicle registration fees and college and university tuition only (1957).
    2. Includes one major tax bill removing the sales tax on residential gas and electricity sales and the inheritance tax in 1978 and imposition of the small public utilities assessment (Public Utility Commission administrative tax) in 1975.
[^19]:    11. Committee for Economic Development, Trends in Public Expenditures in the Next Decade and Paying for Better Public Schools (New York, 1959).
[^20]:    Source: Select Commitee on Tax Equity.

[^21]:    TABLE 7. Sources of Funding for the Texas Highway Program, 1988-89 (Millions of Dollars)

[^22]:    5. Texas Research League, Building a Framework: Texas Public Capital (A Report to Governor Mark White) (Austin, 1986), p. 9.
    6. Frank Sturzl, Texas Municipal League, testimony before the Select Committee on Tax Equity, December 18, 1987.
    7. Anderson v. City of San Antonio, 67 S.W.2d 1036 (Tex. 1934).
    8. Vance $v$. Town of Pleasanton, 261 S.W.2d 457 (Tex.Civ.App.-San Antonio, 1924, no writ); City of Heath v. King, 705 S:W. 2 d 812 (Tex.App.-Dallas, 1986, no writ); Texas City v. J. L. Martin Inv. Co., 222 S.W.2d 139 (Tex.Civ.App. Galveston, 1949, writ ref'd.).
[^23]:    13. Legislative Budget Board, Fiscal Size Up, 1988-89 Biennium, p. 66.
    14. Texas Research League, Bench Marks for 1987-88 School District Budgets in Texas (Austin, 1987), p. 19.
    15. U.S. Department of Commerce, Bureau of the Census, Federal Expenditures by State for Fiscal Year 1987 (Washington, D.C., 1988), pp. 3-15.
    16. State Property Tax Board, Annual Report for Tax Year 1986 (Austin, 1987), p. 3.
    17. Ibid., p. 3.
[^24]:    Source: State Property Tax Board.

[^25]:    37. Texas Research League, Bench Marks for 1987-88 School District Budgets in Texas, p. 5.
    38. Texas Public Power Association, Comparison of P.U.B. Revenue Transfers (Austin, 1987).
[^26]:    43. Testimony by Sam Seale.
    44. Rickey Dailey, "Officials Urge Changes in Indigent Health," Valley Morning Star, April 9, 1988.
    45. Terrence Stutz, "Jail Crowding Risks to Counties Cited," Dallas Morning News, April 20, 1988.
[^27]:    Source: Commerce Clearing House, State Tax Guide; House Ways and Means Committee.

[^28]:    Source: House Ways and Means Committee; John L. Mikesell, "General Sales Tax," in Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986).

[^29]:    Source: House Ways and Means Committee.

[^30]:    Source: House Ways and Means Committee.

[^31]:    7. John L. Mikesell, "General Sales Tax," and Robert J. Kleine and John Shannon "Characteristics of a Balanced and Moderate State-Local Revenue System," in Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986).
[^32]:    Source: House Ways and Means Committee.

[^33]:    1. Comptroller of Public Accounts, "Texas Business Taxes," Fiscal Notes (May/June 1988), p. 3.
    2. Comptroller of Public Accounts.
    3. Commerce Clearing House, State Tax Guide (1987).
[^34]:    7. John Due, State and Local Sales Taxation (Chicago: Public Administration Service, 1971).
    B. Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, State Tax Policy: Evaluating the Issues (1983), pp. 36, 42.
    8. John Mikesell, "Retail Sales Taxation in the Indiana Revenue System," in James Papke (ed.), Indiana's Revenue Structure: Major Components and /ssues (West Lafayette, Indiana: Purdue University, 1982), p. 48.
[^35]:    11. National Bellas Hess, Inc. v. Department of Revenue of the State of Illinois, 386 U.S. 753,87 S.Ct. 1389 (1967).
    12. Acts 1961,57 th Legislature, 1 st C.S., chap. 24, art. 1.
[^36]:    13. House Bill 122, Acts 1984, 68th Legislature, 2nd C.S., chap. 31.
[^37]:    *The author was employed by the City of Dallas when this chapter was written.

[^38]:    1. Comptroller of Public Accounts, City Adoption of Local Sales and Use Tax:
    Effective Year/Quarter 6-81 Through 8-81.
[^39]:    Source: U.S. Department of Commerce, Bureau of the Census, Finances of Municipal and Township Governments, various years.

[^40]:    3. Kyland Howard, "Composition of Municipal Revenues," Baseline Data Report, Vol. 18, Number 4 (Washington, D.C.: International City Management Association, July/August 1986).
[^41]:    Source: U.S. Department of Commerce, Bureau of the Census, City Government Finances, various years.

[^42]:    Source: U.S. Department of Commerce, Bureau of the Census, City Government Finances, various years.

[^43]:    Source: U.S. Department of Commerce, Bureau of the Census, City Government Finances, various years

[^44]:    Source: Kyland Howard, "Composition of Municipal Revenues," Baseline Data Report, Vol. 18, Number 4 (Washington, D.C.: International City Management Association, July/August 1986).

    1. Percentage change in tax income for each one percent change in personal income
    2. Miscellaneous revenue includes special assessments, property sales and interest earnings.
[^45]:    1. William J. Shultz, American Public

    Finance (New York: Prentice-Hall, 1939), p. 243.
    2. Texas Legislative Council, $A$ Survey of Taxation in Texas, Part II-Analysis of Individual Taxes (Austin, 1951), p. 211.

[^46]:    3. Texas Legislative Council, p. 212.
    4. This number is occasionally given as 44 states, which excludes South Dakota, whose income tax applies only to banking and financial institutions, or as 46, which includes both South Dakota and Michigan, which levies a value-added tax rather than an income tax.
    5. This categorization is taken from Robert P. Strauss, "Business Taxes," in Steven D. Gold (ed.), Reforming State Tax System (Denver: National Conference of State Legislatures, 1986), pp. 231-258.
    6. New Mexico also imposes what is called a gross receipts tax, but in the way it functions, it is closer to a broad-based sales tax than a business receipts tax of the type discussed here.
[^47]:    Source: Robert P. Strauss, "Business Taxes," in Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), pp. 233-234; Harold M. Groves and Robert L. Bish, Financing Government, Seventh Edition (New York: Holt, Rinehart and Winston, Inc., 1973), pp.254-261; Robert Ebel, The Michigan Business Activities Tax (East Lansing, Michigan: Michigan State University, 1972), pp. 40-41.

[^48]:    10. Comptroller of Public Accounts, Sales and Franchise Tax Exemptions: A Report to the Texas Legislature (Austin, January 1987). This report is required by state law prior to each regular legislative session. It has not been updated since its release.
[^49]:    Source: Select Committee on Tax Equity.

[^50]:    Source: Comptroller of Public Accounts franchise tax file

[^51]:    1. Steven Gold (ed.), Reforming StateTax Systems, National Conference of State Legislatures (Washington, D.C., 1986).
[^52]:    3. Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).
[^53]:    8. Michigan Department of Treasury.
[^54]:    18. Robert Tannenwald, "Rating Massachusetts' Tax Competitiveness," New England Economic Review (November/ December 1987), p. 34.
    19. Ibid., p. 37.
    20. Ibid., pp. 33-45.
    21. Wheaton, "Interstate Differences," pp. 83-94.
[^55]:    24. Robert Kleine and John Shannon, Characteristics of a High Quality StateLocal Tax System (Washington, D.C.: U.S. Advisory Commission on Intergovernmental Relations, September 1985).
[^56]:    Source: Marianne K. Clarke, Revitalizing State Economies, Center for Policy Research and Analysis, National Governors' Association (Washington, D.C., 1986), p. 18.

[^57]:    1. John K. Hill, "Energy's Contribution to the Growth of Employment in Texas, 19721982," Economic Review, Federal Reserve Bank of Dallas (May 1986), pp. 11-18.
    2. Stephen P. A. Brown and John K. Hill, "Lower Oil Prices and State Employment," Working Paper 8706, Federal Reserve Bank of Dallas (August 1987).
[^58]:    17. Dale S. Bremmer and John R. Maroney, "Outlook for Texas Oil and Gas: A Progress Report," unpublished paper (Texas A\&M University, 1987).
[^59]:    18. Severance tax revenues still offer Texas a fiscal advantage over the average state. The average state government receives little more than one percent of its revenue from severance taxes.
    19. Brown, "New Directions for Economic Growth," and Harberger, "Taxation and Welfare."
[^60]:    20. Romans and Subrahmanyam, "State and Local Taxes, Transfers and Regional Economic Growth."
    21. Legally, residents of Texas owe tax to the State of Texas for goods purchased out of state and imported to the state for personal use. These taxes are largely uncollected.
    22. Local taxes have pushed sales tax rates higher than six percent in most areas of the state.
[^61]:    2. Steven D. Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), p. 232.
    3. Ibid.
    4. Ibid., p. 233.
[^62]:    5. Gold, p. 255.
    6. Jerome R. Hellerstein, State Taxation, Vol. 1 (New York: Warren, Gorham \& LaMont, 1983) p. 263.
    7. For a discussion of the Commerce and Due Process Clause limitations, see Hellerstein, Chapter 4.
    8. Complete Auto Transit, Inc. v. Brady, 430 U.S. 274, 279 (1977).
    9. All States Tax Handbook (Paramus, N.J.: Prentice Hall, 1988), p. 130.
[^63]:    1. Clara K. Sullivan, The Tax on Value Added (New York: Columbia University Press, 1965).
[^64]:    5. See Harvey E. Brazer, "Michigan's' Single Business Tax-Theory and Background," paper presented at the 69th Annual NTA-TIA Conference on Taxation, Phoenix, Arizona, November 16, 1976.
[^65]:    6. Henry J. Aaron, The Value-Added Tax: Lessons from Europe (Washington, D.C.: The Brookings Institution, 1981).
[^66]:    Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).

[^67]:    Source: Select Committee on Tax Equity.

[^68]:    Source: Michigan Department of Treasury, Taxation and Economic Policy Office, Analysis of the Michigan Single Business Tax (Ann Arbor, January 1985).

[^69]:    1. Bernard Weinstein, "Texas Tax Intake Threatened by Yankees," Texas Business, Vol. V, Number 12 (June 1981), p. 29.
[^70]:    Source: Comptroller of Public Accounts.

[^71]:    4. Texas Constitution, Article VIII § 1.
    5. lbid., § 17
    6. See Chapter 3 of this report, "Who Pays Texas Taxes?"
[^72]:    12. Petroleum Independent (September 1987), p. 14.
    13. State Property Tax Board, Preliminary Report of the Findings of the 1987 Property Value Study of School and Appraisal Districts (Austin, January 1988), p. 77.
[^73]:    Source: Public Utility Commission and Comptroller of Public Accounts.

[^74]:    * The author was chief budget officer for the Senate Finance Committee when this paper was written.

[^75]:    1. William F. Fox, Insurance Taxation in Minnesota, p. 252.
    2. Ibid.
    3. The term "foreign" in insurance tax discussions typically means insurance companies with their headquarters in other states. Throughout this chapter "foreign" and "out-of-state" are used interchangably.
[^76]:    4. Doyce R. Lee, testimony before the Joint Task Force on Premium Tax (Austin, 1986), p. 29-31.
    5. Ibid.
    6. Ibid., p. 30.
    7. House Bill 122, Second Called Session, 68th Texas Legislature.
    8. Joint Task Force on Premium Tax, Interim Report to the 70th Legislature (Austin, 1987), p. 9.
    9. Council of State Governments, Retaliatory Taxation of the Insurance Industry (1986), p. 2.
[^77]:    12. Comptroller of Public Accounts.
    13. Senate Bill 1316, 69th Legislature, Regular Session, 1987. Also, H.B. 2335, 70th Texas Legislature, Regular Session, 1987.
    14. House Bill 1152, 70th Legislature, Regular Session, 1987. Also, H.B. 2335, 70th Texas Legislature, Regular Session, 1987.
[^78]:    15. Companies that paid no taxes due to exemptions or guarantee fund assessments are not included in this count.
[^79]:    Source: State Board of Insurance.

[^80]:    Source: State Board of Insurance, 1987 Annual Report.

[^81]:    1. U.S. Department of Commerce, Bureau of the Census, Government Finances in 1985-86 (Washington, D.C., 1987).
[^82]:    2. Arthur D. Lynn, Jr., "Property Tax

    Development: Selected Historical Perspectives, ${ }^{\text {" }}$ in Richard W. Lindholm (ed:), Property Taxation USA (Madison, Wisconsin: The University of Wisconsin Press, 1967), p. 9.
    3. Alfred G. Buehler, Public Finance, 2nd edition (New York: McGraw-Hill Book Company, 1940), p. 409.
    4. Lynn, p. 11.
    5. The faculty tax was a forerunner of the income tax. It was imposed at fixed amounts according to occupations and callings.
    6. Lynn, p. 10.
    7. Ibid.

[^83]:    11. Tax Commission of 1899, Report, as cited in Isabel Nart, "Property Tax Reform in Texas," p. 21.
[^84]:    12. Texas Research League, The Texas Property Tax: Background for Revision, 2nd edition, prepared for the Texas Advisory Commission on Intergovernmental Relations (Austin, 1976), p. 45.
[^85]:    13. Texas Research League, The Texas Property Tax: Background for Revision, p. 43.
    14. Texas School Finance Study Group, Preliminary Estimates of 1970 Market Value of Taxed Property of Texas School Districts (Austin, September 6, 1972).
    15. Texas Research League, The Texas Property Tax: Background for Revision, p. 18.
    16. Ibid., p. 34
    17. Texas Committee on State and Local Tax Policy, Property Tax Assessing in Texas (Austin, 1967), p. 1.
    18. Ibid., p. iv.
    19. Charles R. Bartlett, Property Taxes in Texas School Districts, A Study for the Governor's Committee on Public School Education (Austin, 1968), p. 5.
[^86]:    20. Texas Committee on State and Local Tax Policy, Property Tax Assessing in Texas (Austin, 1967), p. 13.
    21. Martin v. City of Mesquite, 590 S.W.2d 793 (Civ. App.-Dallas 1979, writ ref'd. n.r.e.).
[^87]:    23. In addition, there was a $\$ 3,000$ exemption from assessed value for purposes of state taxation, which is no longer relevant.
[^88]:    24. Texas Research League, The Tax Relief Amendment: What Happens Next? (January 1979), p. 8.
[^89]:    Source: U.S. Department of Commerce, Bureau of the Census, Census of Governments, Vol. 7, 1957, 1967, 1977 and 1982.

[^90]:    Source: Texas Research League.

[^91]:    31. Illinois, Indiana, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas and Wisconsin.
    32. Alabama, Arizona, Arkansas, California, Florida, Georgia, Kentucky, Louisiana, Mississippi, Nevada, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.
[^92]:    34. There are 253 appraisal districts and 254 counties in Texas; Potter and Randall counties operate a joint appraisal office.
[^93]:    35. State Property Tax Board, Annual Report, p. 14.
    36. Texas Research League, Appraisal Practices, p. 12.
[^94]:    37. The rates cited here are nominal tax rates.
[^95]:    Source: Adapted from Steven D. Gold, "How the Taxation of Business Property Varies Among the States," Assessment Digest (January/February 1987); updated with Commerce Clearing House, State Tax Guide (1988).

[^96]:    *Subject to legal provisions for partial exemptions either as to specified type or specific value levels.

[^97]:    42. Steven D. Gold, State Tax Relief for the Poor (Denver: National Conference of State Legislatures, April 1987), p. 56.
[^98]:    43. Steven D. Gold, State Tax Relief for the Poor, p. 59.
    44. lbid., p. 99.
    45. Ibid., p. 62.
[^99]:    Source: Legislative Budget Office, May 1988. Based on computer model runs completed on the Legislative Budget Office's State Aid Model for fiscal year 1989, using State Property Tax Board final values for 1-1-87 and projected student enrollments for fiscal year 1989.

[^100]:    Sources: U.S. Department of Commerce, Bureau of the Census; the Texas Municipal League. Per capita figures based on 241.1 million population estimate for the U.S., 16.7 million for Texas and 12.4 million for the population of cities in Texas.

    1. Revenue from all sources includes utility service charges and intergovernmental aid.
    2. The per capita figure for school districts includes independent community college districts and schools funded by a general-purpose government such as a city or county.
[^101]:    1. U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification: Income, Sales Taxes and User Charges (Washington, D.C., 1974).
[^102]:    2. See Chapter 28, "State and Local User Fees."
[^103]:    7. Elizabeth Deran, "An Overview of the Municipal Income Tax," in Richard Connery (ed.) Municipal Income Taxes, Proceedings of the Academy of Political Science, Vol. XXVIII, Number 4 (New York: Columbia University, 1968).
    8. "New York City: Personal Income Tax Update," CPA Journal, Number 46 (October 1976), p. 50.
[^104]:    20. Ronald E. Grieson, "Theoretical Analysis and Empirical Measurements of the Effects of the Philadelphia Income Tax," Journal of Urban Economics, Vol. 8 (1980), p. 123.
    21. Donald R. Haurin, "Local income Taxation in an Urban Area," Journal of Urban Economics, Vol. 10 (1981), p. 323.
    22. L. Jay Helms, "The Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach," The Review of Economics and Statistics, Vol. 67 (1985), p. 574.
[^105]:    31. See Chapter 27, "Texas Alcohol and Tobacco Taxes."
[^106]:    32. U.S. Advisory Commission on Intergovernmental Relations, Significant Features, Vol. 1, pp. 64-66.
    33. U.S. Advisory Commission on Intergovernmental Relations, "The States and Intergovernmental Aid" (Washington, D.C., 1977), p. 7.
[^107]:    34. U.S. Advisory Commission on Intergovernmental Relations, Significant Features, Vol. 2, p. 83.
[^108]:    Source: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 1986; Wharton Econometric Forecasting Associates, Cost Planning: Long-Term Forecast Update, Fourth Quarter 1987.

[^109]:    19. Legislative Budget Board calculations based on issues of the Lundberg Letter from 1984, 1986 and 1987.
[^110]:    1. Sijbren Cnossen, Excise Systems: A Global Study of the Selective Taxation of Goods and Services (Baltimore: The Johns Hopkins University Press, 1977), p. 1.
    2. Ibid., p. 4.
[^111]:    12. Randy Yarbrough, Assistant Administrator, Texas Alcoholic Beverage Commission, testimony before the Select Committee on Tax Equity, September 17, 1987.
[^112]:    Source: Vernon's Texas Codes Annotated, Section 154.603; Comptroller of Public Accounts, FACTS Manual of Accounts.

[^113]:    Source: Comptroller of Public Accounts, Mixed Drink Tax Remittances, 1987 Quarterly Reports.

[^114]:    Source: Select Committee on Tax Equity.

[^115]:    Source: Select Committee on Tax Equity.

[^116]:    Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism (Washington, D.C.,

[^117]:    3. Alice John Vandermeulen, "Reform of a State Fee Structure: Principles, Pitfalls, and Proposals for Increasing Revenue," National Tax Journal, Vol. XVII, Number 4 (December 1964), p. 394.
    4. See Chapter 1 of this report.
[^118]:    5. John F. Due and Ann T. Friedlaender, Government Finance, 6th Edition (Homewood, Illinois: Richard D. Inwin, Inc., 1977), p. 80.
    6. U.S. Advisory Commission on Intergovernmental Relations, p. 30.
[^119]:    Source: U.S. Advisory Commission on Intergovernmental Relations, Local Revenue Diversification: User Charges (Washington, D.C., 1987).

[^120]:    Source: Comptroller of Public Accounts.

[^121]:    15. Report of the Senate Committee on Fees and Grants to the 68th Legislature (November 1, 1982).
[^122]:    Source: Charles J. Goetz, "The Revenue Potential of User-Related Charges in State and Local Governments," in Richard A. Musgrave (ed.), Broad-Based Taxes (Baltimore: Johns Hopkins University Press, 1973), p. 115; Comptroller of Public Accounts, Texas Fees: Putting a Price on State Services (Austin, May 1987).

[^123]:    20. Interview with Bill Wells, Executive Director, Texas Sunset Advisory Commission (June 20, 1988).
[^124]:    22. Texas Municipal League survey.
[^125]:    Source: Selma J. Mushkin (ed.), Public Prices for Public Products (Washington, D.C.: The Urban Institute, 1972), p. 7; and annual budgets of various Texas cities, 1987.

[^126]:    23. David M. Griffith and Associates, published reports (May 1985, June 1985, June 1986 and March 1988).
[^127]:    Source: Gaming \& Wagering Business, Vol. 8, Number 6 (June 15, 1987).

[^128]:    11. "Lottery Will Drain Parimutuel Dollars," Gaming \& Wagering Business, Vol. 9 , Number 3 (March 15, 1988), p. 33.
[^129]:    1. R. M. Haig, "The Concept of IncomeEconomic and Legal Aspects," The Federal Income Tax (New York: Columbia University Press, 1921), p. 7.
[^130]:    Source: Carolyn Webber and Aaron Wildavsky, A History of Taxation and Expenditures in the Western World (New York: Simon and Schuster, 1986).

[^131]:    Source: U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism; 1988 Edition: (Washington, D.C., 1987), Table 15.

    1. States without any form of personal income tax include Alaska, Florida, Nevada; South Dakota; Texas, Washington and Wyoming.
    2. Wisconsin: Standard deduction gradually phased out and disappears when AGI equals: $\$ 50,830$ :
    3. North Carolina: Spouse with smaller income allowed an additional $\$ 1,100$ deduction; no joint filing:
    4. Louisiana: Standard deduction is combined with personal exemption.
    5. West Virginia: Personal exemption intended to cover all deductions-no standardior itemized deductions allowed.
[^132]:    Source: Daniel R. Feenberg and Harvey S. Rosen, State Personal Income and Sales Taxes: 1977-1983, National Bureau of Economic Research Working Paper No. 1631, June 1985, as reported in Steven Gold (ed.), Reforming State Tax Systems (Denver: National Conference of State Legislatures, 1986), p. 197.

[^133]:    Source: 'U.S. Department of Commerce, Bureau of the Census, State Government Tax Collections, various years.

[^134]:    16. David L. Birch, "The Hidden Economy" The Wall Street Journal (June 10, 1988) p. 25R.
[^135]:    Source: Select Committee on Tax Equity.

    - Bill passed March 4, 1971, was declared unconstitutional but was reenacted with revisions on August 31.

[^136]:    2. The implementation of the personal income tax in Ohio was discussed with Robert J. Kosydar, who was Tax Commissioner for the State of Ohio during the period in which the tax was proposed, debated, adopted and implemented. Additional discussions were held with James Kamerick, current Director, Income Tax Division, Ohio Department of Taxation, and Donald Swepston, Legal Counsel for the Property Tax Division. Their assistance is greatly appreciated.
[^137]:    2. Traditionally, oil and gas severance taxes have been viewed as highly exportable, but with one world price of oil today, outside the control of Texas producers, the exportability of these taxes is now zero.
[^138]:    20. "Income elasticity" refers to the relative response of purchases of a given kind to a change in income. "Luxury goods" are usually defined as those with high income elasticities.
[^139]:    37. A recent study of the Texas state sales tax indicates that there are approximately 430,000 sales tax permit holders in the state remitting taxes. See Chapter 9.
[^140]:    43. This figure is about 25 percent greater than the Texas sales tax yielded in 1985.
[^141]:    52. Robert Kleine, and John Shannon, "Characteristics of a High Quality StateLocal Tax System," (U.S. Advisory Commission on Intergovernmental Relations, 1985), p. 4. These authors state that "State policy makers might well consider ... [a] value-added tax rather than an income tax." (page 28)
[^142]:    1. Diane Fuchs, "The Great Tax Limits Debate," in Dean Tipps and Lee Webb (ed.), State \& Local Tax Revolt: New Directions for the '80s (Washington, D.C.: Conference on Alternative State and Local Policies, 1981), p. 334.
    2. Henry J. Raimondo, "State Limitations on Local Taxing and Spending: Theory and Practice," Public Budgeting \& Finance (Autumn 1983), pp. 33-34.
[^143]:    5. J. Ward Wright, Tax and Expenditure Limitations: A Policy Perspective (Lexington, Kentucky: The Council of State Governments, 1981), p. 20.
[^144]:    6. Under the Texas pay-as-you-go provision, there is no direct requirement that a budget deficit be dealt with. Instead, the law requires the Comptroller to subtract any deficit from the amount of revenue available for appropriation in the next budget period as part of the normal revenue estimating process. In effect, the budget deficiency comes "off the top" of the funds that can be budgeted in the new budget cycle.
    7. Steven D. Gold, State Tax and Spending Limitations: Paper Tigers or Slumbering Giants? (Denver: National Conference of State Legislatures, 1983), p. 7.
[^145]:    11. Texas Constitution, Article VIII, Sec. 22.
[^146]:    12. Gold, p. 4.
    13. David Lowery, "Limitations on Taxing and Spending Powers: An Assessment of Their Effectiveness," Social Science Quarterly, Vol. 64, Number 2 (June 1983), pp. 259-260.
    14. Raimondo, p. 41.
    15. David Lowery, "After the Tax Revolt: Some Positive, If Unintended, Consequences," Social Science Quarterly, Vol. 67, Number 4 (December 1986), p. 748 .
[^147]:    1. A tax expenditure is generally defined as a special tax exemption, deduction, exclusion, credit or tax deferral that has the effect of reducing the tax revenue that would otherwise be collected.
    2. See William H. Oakland, "Consequences of the Repeal of State and Local Income Tax Deductibility Under the U.S. Personal Income Tax," in U.S. Department of the Treasury, Office of State and Local Finance, Federal-State-Local Fiscal Relations, Technical Papers, Vol. I.(September 1986), pp. 397-416.
[^148]:    1. IDBs are industrial development bonds.
    2. The estimate of total tax expenditures reflects interactive effects among the individual items. Therefore, individual items cannot be added to obtain a total
[^149]:    Source: Computer simulations by Policy Economics Group reported in U.S. Advisory Commission on Intergovernmental Relations, "The Tax Reform Act of 1986-lts Effect on Both Federal and State Personal Income Tax Liabilities" (January 1988), Tables 6a and 6b.

    1. State has a very limited income tax.
    2. State has no income tax.

    Note: This table shows how state personal income taxes would have changed as a result of fully phased in federal tax reform if no state legislative changes were made. Details may not add to total because of rounding.

[^150]:    Source: Daphne A. Kenyon, "Federal Income Tax Deductibility of State and Local Taxes," U.S. Department of the Treasury, Office of State and Local Finance, Federal-State-Local Fiscal Relations; Technical Papers, Vol. 1 (September 1986).
    Note: Calculations are based on data from Internal Revenue Service, Statistics of Income, 1982; Individual Income Returns and additional special !RS tabulations.

[^151]:    Source: Price Waterhouse simulations.

[^152]:    37. As will become clear below, the term "private activity debt" has a specific definition under the Internal Revenue Code that was last modified by P.L. 99514, the Tax Reform Act of 1986. "Privatepurpose debt" is a related, nonlegal term often used to refer to many of the same types of bonds.
    38. Many governmental bonds are also general obligation bonds, and many private activity bonds are revenue bonds, but the match between the categories is not perfect. For example, veterans' bonds, which are issued in five states. (Alaska, California, Oregon, Texas and Wisconsin) in order to help finance veterans' land purchases at less than market interest rates, are simultaneously general obligation and private activity bonds.
[^153]:    45. State of Washington v. Commissioner, 692 F.2d 128 (D.C. Cir., 1982).
    46. Credit Markets (January 11, 1988), pp. 3S-5S.
    47. Matthew Kreps, "Tax Act Pushes Banks to Cut Muni Holdings," Credit Markets (December 21, 1987), pp. 14-15.
[^154]:    48. "1987: A Year to Forget," Credit Markets (December 28, 1987), p. 1.
    49. Dennis Walters, "Los Angeles County Finds New Investors Overseas," Credit Markets (February 1, 1988), p. 1.
[^155]:    50. Frank Shafroth, in "High Court's Sickle Leaves Municipals Exposed for Tax Harvest by Congress," Credit Markets (April 25, 1988), p. 8.
