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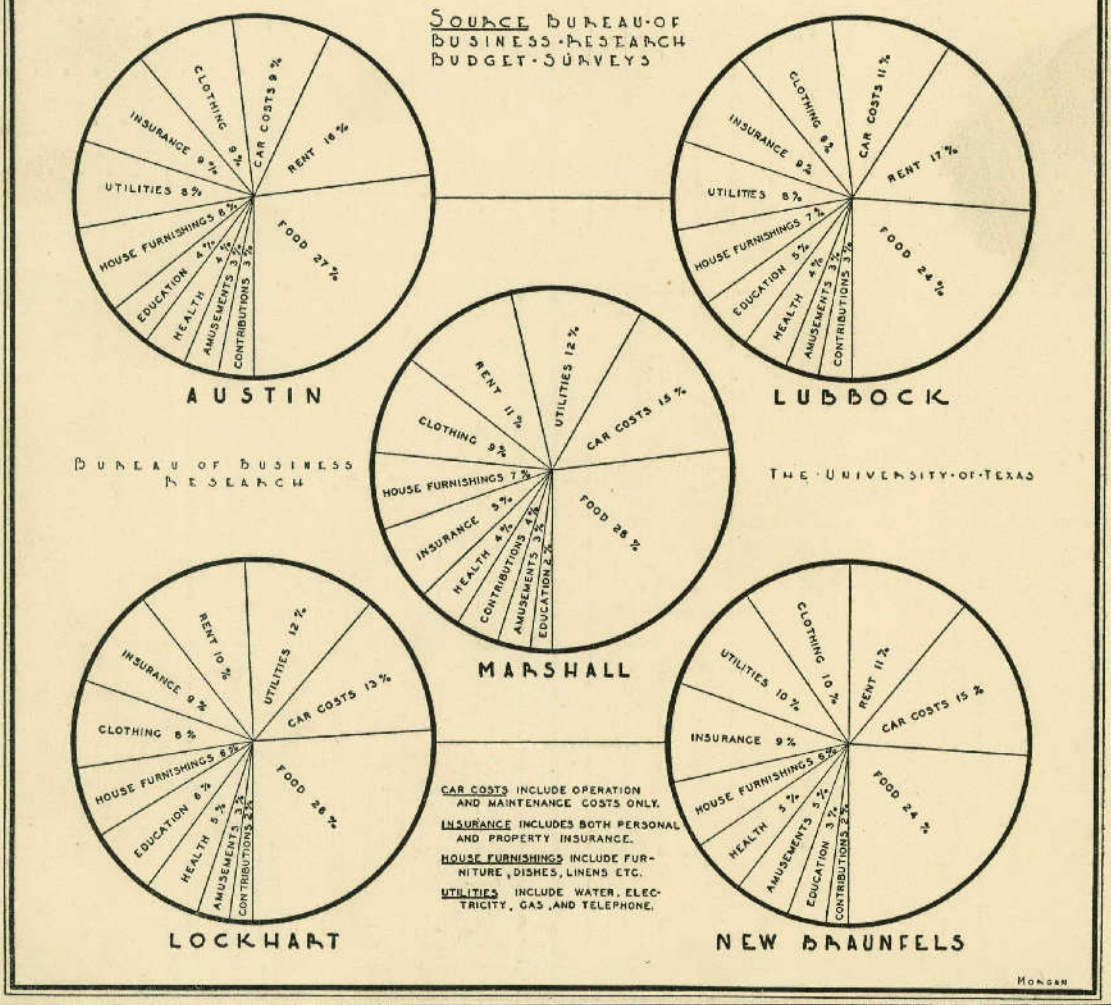
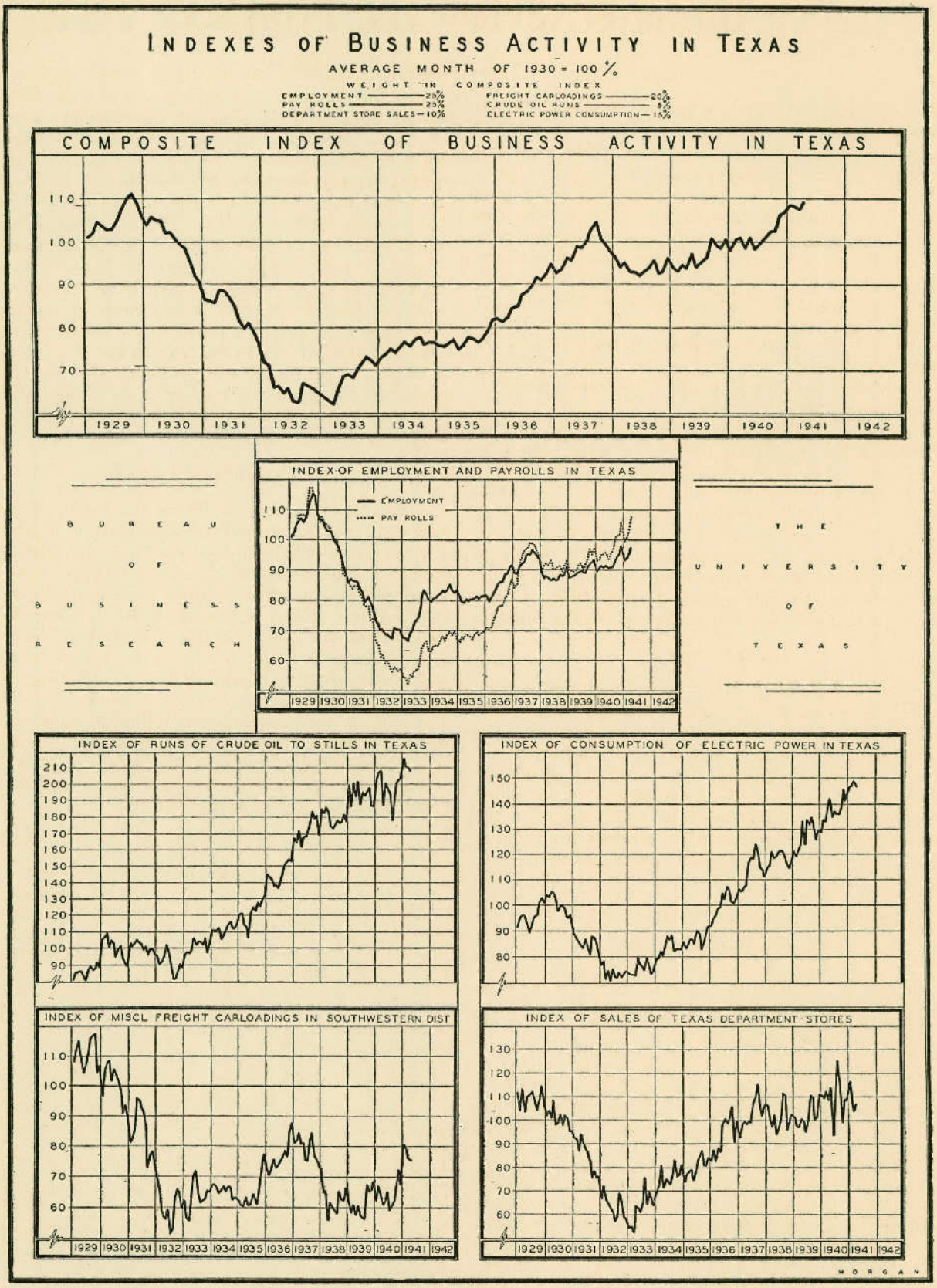
DISTRIBUTION OF AVERAGE FAMILY DOLLAR AMONG ELEVEN PRINCIPAL BUDGET ITEMS IN FIVE TEXAS CITIES




INDEXES OF BUSINESS ACTIVITY IN TEXAS
AVERAGE MONTH OF 1930 = 100 %
WEIGHT IN COMPOSITE INDEX
EMPLOYMENT — 25%
PAY ROLLS — 25%
DEPARTMENT STORE SALES — 10%
FREIGHT CARLOADINGS — 20%
CRUDE OIL RUNS — 5%
ELECTRIC POWER CONSUMPTION — 15%
COMPOSITE INDEX OF BUSINESS ACTIVITY IN TEXAS
110
100
90
80
70
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
BUREAU OF BUSINESS RESEARCH
INDEX OF EMPLOYMENT AND PAYROLLS IN TEXAS
EMPLOYMENT
PAY ROLLS
110
100
90
80
70
60
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
THE UNIVERSITY OF TEXAS
INDEX OF RUNS OF CRUDE OIL TO STILLS IN TEXAS
210
200
190
180
170
160
150
140
130
120
110
100
90
INDEX OF CONSUMPTION OF ELECTRIC POWER IN TEXAS
150
140
130
120
110
100
90
80
INDEX OF MISCL FREIGHT CARLOADINGS IN SOUTHWESTERN DIST
110
100
90
80
70
60
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
INDEX OF SALES OF TEXAS DEPARTMENT STORES
130
120
110
100
90
80
70
60
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
MORGAN

Business Review and Prospect

General Business

Although the total output of industry and trade in the Nation at large has in recent months been at the highest level in the history of the country, the wide local differences in the rate of business activity is quite significant in many ways. Wherever national defense projects are highly concentrated, capacity operation in industries producing war materials prevails, and additional production will follow immediately upon completion of the plant expansion programs now getting well under way. Localities having only civilian industries, however, not only are failing to participate in current boom conditions, but with the rationing of basic materials needed for defense purposes, the rate of business activity in areas without defense projects often will be seriously retarded, at least temporarily.

Associated with these sharp variations in the rate of business activity are similar conditions with respect to employment. Labor shortages, especially of skilled workers, are already apparent in some sections; while unemployment is still a serious problem in other large sections of the country. As the national defense program gains momentum, even more stringent restrictions will have to be imposed upon certain types of consumer goods industries, thus intensifying the disparities in business and employment conditions throughout the country.

Texas Business

Industry and trade in Texas have been gaining consistently, but not strikingly, during the past ten months. Indications point to a somewhat stronger upward trend in business for the balance of this year. The composite business index for the State is now more than eleven per cent above a year ago, all of the factors in the index having contributed to the advance. Only three of the components, however, registered an advance from March to April—employment, pay rolls, and department store sales.

INDEXES OF BUSINESS ACTIVITY IN TEXAS

(Average Month 1930=100)

	April 1941	April 1940	March 1941
Employment	97.6	90.4	95.0
Pay Rolls	107.7	95.1	102.9
Miscellaneous Freight Carloadings (Southwest District)	75.2	60.9	76.6
Crude Runs to Stills	208.0	187.4	210.2*
Department Store Sales	106.8	98.5	104.0
Consumption of Electric Power	147.0	136.4	149.1*
COMPOSITE INDEX	109.5	98.2	108.1*

*Revised.

The sharp local variations in rate of business activity already noted with respect to the country as a whole prevail also in Texas, and for similar reasons. National defense projects are as yet concentrated in a comparatively few areas of the State, and in these a relatively high rate of activity in industry is already getting under way. This situation is being reflected in wide differences among the various localities of the State in the volume of retail sales, availability of housing facilities, and employment conditions. Because of this situation, conflicting reports regarding the rise in cost of living are in circulation. The charts on the cover page of this issue of the Review may be helpful in appraising the validity of some of these reports. The proportion of the average family budget expanded for various purposes is graphically represented for five Texas localities. For some of these items—rent, for example—a marked rise may have occurred as a result of the defense program. This fact may give a wrong impression if it is used as a criterion for living costs in general. Most of the elements entering into the costs of living have thus far increased but moderately, if at all, except in the special localities already mentioned.

Farm Cash Income

Agricultural income in Texas (exclusive of federal subsidies) has maintained the wide margin of gain over a year ago which has been noted for the past several months. The computed income for April was more than twenty-eight million dollars compared with twenty-four million dollars a year ago, an increase of more than sixteen per cent. For the year to date, the income was more than eighty-five million dollars compared with about seventy million dollars during the corresponding period a year ago, an increase of twenty-one per cent. The note on the bottom of the following table indicates the approximate adjustments which should be made for the computed dollar figures. The indexes of agricultural income both for the State and the crop reporting districts, however, require no adjustment.

INDEXES OF AGRICULTURAL CASH INCOME IN TEXAS

(For Indexes, Average Month 1938–1932=100)

Districts	April 1941	March 1941	April 1940	Cumulative Income Jan.-Apr. 1941	Cumulative Income Jan.-Apr. 1940
				(000 Omitted)	
1–N	112.7	82.8	113.6	8,126	8,282
1–S	183.7	278.2	129.4	8,937	6,484
2	132.8	137.2	85.4	9,564	5,626
3	100.4	111.0	95.3	4,350	3,798
4	126.7	80.3	88.5	10,131	7,476
5	65.3	50.7	42.8	2,522	1,544
6	162.6	258.0	183.1	7,261	5,750
7	130.1	113.0	134.0	6,978	7,180
8	103.1	93.2	85.0	5,723	4,970
9	101.7	145.4	105.1	7,266	5,594
10	115.0	89.8	86.0	5,310	4,543
10–A	119.8	126.1	106.3	9,461	9,560
STATE	121.5	117.5	104.6	85,629	70,807

Note: Farm cash income as computed by this Bureau understates actual farm cash income by from 6 to 10 per cent. This situation results from the fact that means of securing complete local marketings, especially by truck, have not yet been fully developed. In addition, means have not yet been developed for computing cash income from all agricultural specialities of local importance in scattered areas throughout the State. This situation, however, does not impair the accuracy of the *indexes* to any appreciable extent.

For Other Texas Data, See Statistical Tables at the End of This Publication

Most of the increase in farm cash income over a year ago is attributable to the increase in farm prices rather than to an increase in volume of marketings. Since further advances in farm prices are indicated, and a gain in marketings of wheat, livestock, and livestock products during coming months also appears probable, the margin of gain in farm cash income compared with a year ago promises to increase still more. Favorable range and pasture conditions, together with a rise in the level of prices of meat and milk, have further brightened the outlook for the beef and dairy industries of the State.

F. A. BUECHEL

Some Economic Realities

The general objective of the various articles I have prepared for the TEXAS BUSINESS REVIEW during the past three or four years has been to present something of a background of those economic realities which have been developing so rapidly and moving so swiftly over the world, particularly since World War I, and which have now actively penetrated in one form or another practically every community, no matter how isolated that community appeared to be. The more actively a region is penetrated by movements operating on a wide pattern, the more the economic life of that region is conditioned by factors and forces that center from outside the region. The degree to which a region's economic life is affected by these realities is a function of that region's natural resources and its physical conditions on the one hand and the "state of the industrial arts" on the other. The obvious result is of course the steady but sure breaking down of forces that have made for narrow provincialism in the past.

SUBSTANCE OF ECONOMIC PROBLEMS

In brief, these economic realities may be divided into three main groups: first, the world's endowment of natural resources, the main outlines and significant patterns of which we are just now beginning to perceive in this, the middle of the 20th century; second, the technology that man has devised by which to use these resources more effectively—a technology based on scientific attainments the economic aspects of which we are just now beginning to perceive, as is evident in J. G. Crowther's recent volume on *The Social Relations of Science;* and third, the various forms of organization that have been developed which condition production on the one hand and the distribution of the productive output on the other.

The effects of these rapidly advancing movements in world affairs have been tremendous in the past few decades. One illustration of these effects is implied in the recent phrase, "England was once an island," and in more recent months it has become apparent that North America itself has now become an island. No longer can the impact of these inclusive and tremendous forces resulting in world changes be ignored by any country, or by any section thereof.

In dealing with the larger aspects of world affairs, there are three groups of items that must be kept in clear perspective. These include the great economic blocs, the policies of expansion sought by these blocs, and the consequent tension zones. The major world economic blocs include: first, Germany which now dominates the mainland of Europe west of Russia; second, Russia, a vast continental mass dominantly land-locked; third, Japan and the position of the Greater Asia economic bloc; fourth, North America, the most favored by Nature of all the continents individually considered; and fifth, the British Empire, directed from a comparatively small island base, and which we may say has grown up in parallel fashion with the growth of the Industrial Revolution from its very inception in England at the middle of the 18th century. This is not the place to analyze the factors basic to the occurrence of these blocs but it is appropriate to note that the destinies of whole continents are concerned in the policies of these blocs.

Policies of expansion with reference to these dominant blocs include such aims as maritime outlets for Russia, the German drive to control the rich iron ore resources of Sweden or to secure the great oil reserves of the Near East together with various strategic minerals and a number of tropical products from Africa. Here are included the attempts of Japan to dominate China and the Japanese movements southward which obviously include the East Indies. In addition, there is the problem of the future world relations of all the Latin American countries and of Africa, Australia and New Zealand.

Outstanding tension zones that now are so much in the forefront of the news include the Baltic "window," the Mediterranean, with its strategic points, as Gibraltar, the Dardenelles and Suez, together with the numerous island outposts in the Atlantic and Pacific oceans. These various items which bulk so large in world affairs usually are regarded as political problems. They are, but they are political problems to the extent that they have economic reality with reference to certain economic policies.

Concerning the importance of economic realities, there is nothing particularly new in this suggestion. In fact, in the *Dartmouth Magazine* as far back as January, 1932, Dr. Adelbert Ames, Jr., had this to say:

> From the old economic point of view such new developments may be looked upon merely as supplying a new demand, and that prosperity comes when new demands are created; an analysis of the facts shows that that is only part of the story, and that a new factor of a different and more fundamental nature comes into operation with such developments.
>
> It is this. New developments, such as mentioned (telegraph, telephone, steam engine, electric light) enable individuals to do more in less time—they increase the individual's horse power, so to speak, or the number of slaves at his bidding. In other words, they increase his capacity for economic activity.
>
> Such increase in individual capacity for economic activity means, and it alone means, increase in economic well being. Gold, silver, credit, economic wealth, national economy, though they may be indications, and not very accurate at that, of the existence of a high capacity for economic activity, do not in themselves make economic well being.

One has only to read the late Allyn Young's paper on *Increasing Returns and Economic Progress* to get a clear-cut presentation of economic realities as Young envisaged them more than a decade ago. A few representative quotations will reflect Young's insistence on the facts of production, particularly industrial production, as the positive bases for his paper.

Mr. Ford's methods would be absurdly uneconomical if his output were very small, and would be unprofitable even if his output were what many other manufacturers of automobiles would call large. In certain industries, although by no means in all, productive methods are economical and profitable in America which would not be profitable elsewhere. The importance of coal and iron and other natural resources needs no comment. Taking a country's economic endowment as given, however, the most effective single factor in determining the effectiveness of its industry appears to be the size of the market. And again, "What is required is that industrial operations be seen as an interrelated whole. On the other side of the account are various factors which reinforce the influences which make for increasing returns. The discovery of new natural resources and of new uses for them and the growth of scientific knowledge are probably the most potent of such factors. The casual connections between the growth of industry and the progress of science run in both directions, but on which side the preponderant influence lies no one can say. At any rate, out of better knowledge of the materials and forces upon which men can lay their hands there come both new ways of producing familiar commodities and new products, and these last have a presumptive claim to be regarded as embodying more economical uses of productive resources than the uses which they displace. Some weight has to be given also to the way in which, with the advance of the scientific spirit, a new kind of interest—which might be described as a scientific interest conditioned by an economic interest—is beginning to infiltrate into industry."

That Young was perfectly aware of the existence of unrealities in some of the conventioned methods sometimes used is amply expressed in a single quotation from his significant paper:

"The apparatus which economists have built up for the analysis of supply and demand in their relations to prices does not seem to be particularly helpful for the purposes of an inquiry into these broader aspects of increasing returns. In fact, as I have already suggested, reliance upon it may divert attention to incidental or partial aspects of a process which ought to be seen as a whole."

Another economic reality is the obvious economic trend in practically every country in the world toward autarky. This means that the dominant economic trend is away from dependence on the world commodity markets which have so long been dominant in various economic affairs—including such items as the business cycle. This movement is consequently the main factor in the depressing outlook which has for years dominated commodity markets abroad. Such a condition is obviously a basic factor in the economic outlook, not only for the United States but also for Canada and all of the Latin American countries as well. This is but another way of emphasizing the changing trends basic to international trade, and consequently to international relations. Forces that have come into operation during the past decade may change (may have already changed, for that matter) the realities of international trade to a greater extent than all the changes wrought in international trade in the hundred years prior to World War I.

At this place it may be noted that one of the determining points of emphasis is that communities and states and nations can no longer remain isolated from world-wide movements, whether these movements be good or evil. Years back the statement was made that "Europe must Europeanize the Balkans or the Balkans will Balkanize Europe." Or to take an example of another type, the economic life of Texas, cannot be considered as existing in a water-tight compartment, unrelated to economic developments and movements in the rest of the United States or elsewhere beyond its borders. As a matter of fact, such never was the situation since the coming of white men to this region; but in recent years the factors of interrelations and interdependence have become so fundamentally important and so permeating that events of past historic periods seem by contrast to have occurred mainly independently of widespread enveloping forces. Another point of emphasis is that any major movement must become world-wide in its operations if it is to survive as a major movement.

Industry the Basic Thing

Still another point of emphasis is that a nation's power is dependent upon that nation's industry. Since 1870, for instance, Germany has utilized every possible means to encourage and expand her industries. Russia's need for industry was crystallized in World War I, which also made possible the inauguration of opportunistic policies in Japan—a movement which as yet has by no means spent itself. During the past 20 years Russia has been scrambling together its forces in an effort to industrialize that vast country. Japan's economic base is too narrow for the building of a great industrial nation, hence Japan's recent attempts to control China's undeveloped industrial resources on the one hand and its obvious desire to control the economic developments that have been made to the southward—as, for instance, the Dutch East Indies. The central factor in the Far East concerns the potentialities for the building up of a great industrial economy in that section of the world, and upon whom is to be vested the control in this development.

The movement toward industrialization in the United States as a major item in our economic history began in the 1870's. Thus the growth of our industry has been contemporaneous with that of Germany, but in this period since the 1870's the United States has not been so emphatically concerned with industrialization as has been the case of Germany. Both countries borrowed widely of the industry techniques developed in England; in the two countries, the techniques were conditioned, however, by very different social factors—a highly significant factor in subsequent history. In 1870 the large portion of the Trans-Mississippi West still awaited sufficient growth to give it any important economic position in the Nation; and so strong was the influence of the Westward Movement that for years following the closing of the agricultural frontier around the turn of the century the United States was dominated by forces concerned with the national outlook which had been set in motion by the Westward Movement. The Westward Movement as the dominant factor in American life in the 19th century was a function of industry on the one side and of the commercial availability of new regional environments and their associated natural resources on

the other. For the 20th century industry is the dominant factor in our economic life—a fact that applies to all the major economic blocs that now are engaged in the struggle for domination in world affairs. It is only in recent decades, one might say even years or perhaps months, that the United States has finally awakened to the fact that its industry is the dominant factor of its economic life, and therefore the dominant fact in national security.

Industrialization as an institutional factor in world affairs is so new in the historical sense, that its economic realities and implications have not become "standard equipment" in economic thinking. Historical precedents concerning industrialization prior to World War I were taken for granted rather than as reflecting the emergence of a new and dominant economic movement. Illustrative of this feature, events in the years 1914–1918 clearly proved that oil, to take one industrial commodity, had ceased to be merely a private concern of oil companies as had formerly been the case, and had become a major concern of national policies. That the "struggle for oil" has become an important item in the policies of nations is perfectly evident today. In a similar manner, national concern over the growth and expansion of industry has become one of the outstanding factors in the world of today. Industry has proven to be crucial in national power and world politics, a fact that at long last is permeating the American mind.

We have come to see also that industry is something more than merely the transforming or the reforming of raw materials, important though that feature of industry is. It involves the complex organization by which bulky and other raw materials are brought together in the industrial plant, it involves the organization basic to the interrelations and interdependence of industrial plants; it involves the organization by which the most advanced technology is used in transforming these materials into usable products; and it involves organization for reaching the markets that consume these products.

Industry, as every one knows, employs the principle of division of labor and Adam Smith first formulated the famous expression that division of labor depends upon the extent of the market; yet the implications of this principle have not as yet become a reality in our attempts at economic thinking. This latter aspect is mentioned here because of its fundamental significance in economic policies that will necessarily become realities in the post-war period. It may appear sheer folly now to say that the industrial problem is to be the problem of the post-war world. Yet it will be and that problem will revolve about industry specialization, industry differentiation and integration together with inter-industry trade and inter-regional trade—particularly with reference to the major industrial regions.

We may say that the increase in wealth production is a function of cultural and economic advances in widely diversified regions, numerous enough and inherently productive, whereby a continuously increasing regional specialization and consequently regional productivity is made possible and feasible. The heart of the problem is the region, its inherent physical characteristics and its associated natural resources—not conditioned by isolation or dominated by provincial attitudes, but in economic combination with numerous regions of diverse physical characteristics.

Strategic Aspects of Industry

Even the "man on the street" is coming to have a surprisingly keen interest in our industrial problems. One significant illustration of this awakening is reflected by current newspapers in the headings of numerous articles relating to highlights in modern industry trends. Some of these headings are as follows:

(1) Rubber, Fuel and Oil.
Critical Supply Problem Faces Both Commodities Due to Shipping Space. Relief Proposals Include More Synthetic Rubber Units, U. S. Financed Pipelines. Serious Price Situation Looms.

(2) Oil Needs of Axis Powers
Unfavorable to Them for "Long Pull"

(3) Shell to Double Toluene Output.

(4) Copper Sulphate Shortage Severe
Producers Withdrawn From the Market—Plate Glass Shipments at Peak.

(5) First Production of Metal From the Ocean In the History of the World (Magnesium).

(6) U. S. Arranges for 300,000-Ton Supply of Nitrate From Chile.

(7) Ship Priorities
Voluntary System Launched for Materials Imported for Defense. Copper, Sugar, Castor Beans Among Items Likely to Get First Call on Space. Industry Prepared for Step.

(8) New Demands on Rails May Bring Car Shortage Within Few Months.

(9) Electric Firms Expect Record Volume in 1941. Must Power "Two-Ocean" Navy, Provide Long List of Other Defense Materials. Two Units' Bookings 1 Billion.

(10) G. E. Official Says Industry Handicapped By Obsolete Machinery. E. O. Shreve States That in 1939 70% of Plant Equipment of U. S. Was Over 10 Years Old.

(11) War, Navy Departments to Purchase $100,000,000 Machine Tools in 1941. Program Limited to "Critical" Equipment—Will Add 50% to Many Producers' Present Bookings.

(12) Machine Tool Industry, Key to Defense Effort, Pushes Expansion. Output This Year Will Reach Total of $650,000,000. Better Than Triple the Production Achieved in 1939–1940. Output $400,000,000. Backlogs Are Still Mounting.

(13) Big Steel Orders Prompt Industry to Begin Major Expansion of Facilities. Ingot Production in 1941 Expected to Top 1940 Peak. Problem of Producers Is How Much They Can Turn Out and How Soon.

(14) U. S. Plans Economic Drive to Oust Axis Business in South America.

Americans as a whole have taken most industry items and problems simply for granted. And anyway, for years now we have been deluged with overproduction. Now that critical "bottlenecks" are apparent all along the line, it is obvious that the industry problem of the United States is not so simple after all. Neither theoretical considerations nor the awfully "practical" things can help much in the absence of the economic realities—and these realities include such prosaic items as the availability of machine tools or chemicals, the adequacy of tin and rubber, manganese and nickel, the efficiency of proper catalysts, or the state of mind of the skilled workman, for these are among the basic things required by modern industry. Then there are the patents' problems, and particularly looming large are those involved in strategic industry which are held in foreign countries. And the sources of our strategic materials become increasingly important. The bulk of the world's tin and all of our supplies of rubber come from under Japan's nose. Already people are beginning to consider the changed pattern in the oil world should Germany secure control of the highly strategic oil reserves of the Near East.

The seriousness of our own situation with reference to the complexity of the strategic raw materials problem is aptly summarized in an article on "Gaps in Raw Materials Now a Military Worry" by John C. De Wilde in *The New York Times* of May 11, 1941:

The American defense program, pending the accumulation of reserves and the development of alternative sources, depends upon continued access to the crude rubber and tin of the Far East. Rubber and tin are vulnerable spots in our economic armor. The Army rolls on rubber tires. It depends on tin cans for its food. Without either of these raw materials the nation would be critically handicapped, and that is why a plant for smelting Bolivian tin ore is being built at Texas City, Texas, and why an Army bomber carrying rubber seeds recently hopped off for Brazil.

On the whole, of course, the United States is exceptionally fortunate in the possession of rich and varied resources. We have plenty of iron ore, coal and oil, which together constitute the prime requisites of any industrial economy. Ordinarily we are self-sufficient in the three great nonferrous metals—copper, lead and zinc. We produce enough sulphur, phosphates and cotton, and we can today dispense with imports of Scandinavian woodpulp and German potash. But there are gaps.

Excepting molybdenum, we have not produced enough of any of the ferro-alloys which are so vital to modern steel-making. In recent years we have supplied less than 5 per cent of our requirements of ferro-manganese, needed as an oxidizer and alloying agent in steel production. We import virtually all the nickel and chromium which give steel the toughness and hardness required in armor plate and armor-piercing projectiles.

Paucity of Tungsten

Nor have we had sufficient domestic production of tungsten, essential in the making of high-speed tool steels; of antimony, needed, among other things, for small-arms ammunition; of mercury, required in the production of fulminate for high explosives; and of bauxite, the raw material of aluminum. In recent years imports have contributed about 43, 11, 65 and 43 per cent of our consumption of tungsten, antimony, mercury and bauxite, respectively.

We also lack the strategic grades of mica which are invaluable as insulating material in spark plugs, radios and many other items essential to communication. Almost the entire supply of high-grade splittings and from 65 to 85 per cent of the sheet mica come from foreign sources, primarily British India and Madagascar. Other deficiencies include cobalt and vanadium (used largely in the production of steel), asbestos (needed for brake-band linings, clutch facings, heat insulation and construction), and graphite.

As for the non-minerals, we depend on the outside world not only for rubber but for silk, which has important military uses in parachutes and cartridge bags, for quinine and for certain tropical vegetable oils. Our entire supply of Manila hemp, which is still essential in the making of marine cordage, comes from the distant Philippines, and a third of our apparel wool is imported. The leather industry has been buying about a third of its hides, skins and tanning materials abroad.

Zinc and Lead

Even the American supply of copper, zinc and lead is insufficient for the increasing requirements. The demand for zinc, for instance, has risen so rapidly that stocks at the end of March fell to 6,969 tons from 72,144 tons the year before.

In many cases shortages are due not so much to lack of raw materials as to inadequate smelting and processing facilities. This is true of zinc and, above all, of aluminum and magnesium. There has been plenty of bauxite available to us, but the production of virgin aluminum, which has long been monopolized by the Aluminum Company of America, has not kept pace with the sharply rising requirements of our aircraft industry. For similar reasons magnesium remains a 'critical' item.

Today the Federal Government is relying on a number of measures to insure adequate supplies of raw materials for the most essential purposes. Among these may be listed: (1) more intensive exploitation of domestic resources, including the possibilities of synthetic production; (2) increased reliance on the Western Hemisphere; (3) accumulation of stock piles; and (4) rationing and conservation. Let us examine these measures.

Increasing Domestic Supplies—In the case of aluminum, plants now in the making will raise the output of the Aluminum Company from 412,560,000 pounds in 1940 to a capacity of over 700,000,000 pounds before the end of 1942. The RFC is also financing the construction of two virgin aluminum plants by the Reynolds Metals Company which are expected to have a combined capacity of 100,000,000 pounds.

Gains in Magnesium

The Dow Chemical Company, which has monopolized the production of primary magnesium, is expected to increase its output from 12,500,000 pounds in 1940 to 30,000,000 pounds in 1941. In this case, too, the RFC is financing a competing concern, which will build a plant in California with a reported capacity of between 24,000,000 and 30,000,000 pounds a year.

The Geological Survey and the Bureau of Mines have for some time been exploring domestic deposits of these minerals in which we are most seriously deficient. The investigations appear to indicate that in case of need we can be almost self-sufficient in mercury and tungsten. Although there are enough low-grade manganese, antimony and chromium ores to yield a much larger output at increased cost, it is doubtful that domestic supplies of these metals will ever exceed a third of our requirements.

Use of Synthetics

Synthetic production offers greater possibilities. Nylon can apparently be substituted for silk in parachutes, although it is still said to be unsuitable for cartridge bags. Rayon and stable fiber may be used to supplement the supply of wool for civilian clothing. Plastics, growing rapidly in output, will prove extremely useful as a substitute for many metals such as aluminum, zinc and copper. Three government-owned synthetic ammonia plants are being built to supply the nitrates for high explosives.

Synthetic rubber products, of which the best known is Du Pont's neoprene, have been on the market for some years, and new plants under way may raise annual capacity by the end of 1941 to almost 30,000 tons, an amount still negligible in comparison with a crude rubber consumption of over 600,000 tons last year. In an emergency, however, enough plants could be

erected within eighteen to twenty-four months to supply a very large part of our requirements.

Western Hemisphere Supplies—The countries to the north and south of us supplement our resources to an important extent. Canada can meet our deficiencies in nickel, asbestos and cobalt. Chile, Peru and Mexico can supply the extra copper we need. (To meet our new copper shortages the Metals Reserve Company, a subsidiary of the RFC, has purchased 235,000 tons of Latin-American copper, which is now just beginning to move to the United States at the rate of 25,000 tons a month.)

Other Stopgaps

Mexico and Peru can send us the lead and zinc we require, Peru the vanadium and Colombia the platinum. The erection of an antimony smelter at Laredo, Texas, in 1935, enabled us to draw on the ores of Mexico and Bolivia which have almost completely displaced China as a source of supply.

Bolivia, Mexico, Argentina and Peru have furnished increasing quantities of tungsten, contributing over half of our imports last year. About a quarter of our manganese imports is also coming from Latin-America, particularly from Brazil and Cuba. While these countries could not meet our entire needs, the potentialities of Brazil have not yet been fully realized. Brazil also possesses rich and relatively unexploited reserves of chromite. Latin America as a whole, however, has contributed only about 10 per cent of our chrome imports in recent years.

The Texas Smelter

We shall be able to draw on Bolivian tin as soon as the government owned smelter in Texas is completed. This smelter will handle 50,000 tons of tin concentrates yearly—enough for 18,000 tons of fine tin, or about one-fifth of our annual consumption. Latin America can supply some of the hides and skins and part of the wool we need.

The Department of Agriculture is also planning long-term projects to stimulate the production of rubber, quinine, manila hemp and other agricultural products in the Western Hemisphere. Most of these, however, are only in the initial stage.

Stockpiles—Beginning in 1939, the Treasury Department began to purchase stockpiles of strategic raw materials for emergency purposes. The Commodity Credit Corporation, moreover, acquired 85,000 tons of rubber in a 1939 barter agreement with Britain.

A much broader stockpiling program was launched in June, 1940, when the RFC was authorized to finance large purchases for emergency reserves. Through its subsidiaries, the Rubber Reserve Company and the Metals Reserve Company, the RFC had by the middle of January, last, entered into contracts for the purchase of 430,000 tons of crude rubber, 200,000 tons of chrome ore, more than 2,000,000 tons of manganese ore, 75,000 tons of Far Eastern tin, as well as quantities of antimony, graphite and tungsten. Another subsidiary, the Defense Supplies Corporation, has contracted for 300,000 tons of Chilean nitrates. Moreover, under an arrangement with the British Government, 250,000,000 pounds of British-owned wool, an amount in excess of our average annual import requirements, is being stored in the United States and will be available in emergency.

Private Stocks Also

Although only a small part of all these supplies are as yet available in the United States, they will in the end supplement to a very large extent private stocks which in the meantime have also been increased. It is expected, for example, that the United States will have enough natural rubber on hand by the end of 1941 to last for fully one year. Actual and assured stocks of manganese are also sufficient for more than a year's consumption.

Rationing and Conservation.—Since July 5, 1940, we have been conserving our supplies of strategic materials by controlling exports. Outright embargoes have been imposed on shipments of aviation gasoline and iron and steel scrap to countries outside the Western Hemisphere with the exception of Great Britain.

To insure the satisfaction of defense needs mandatory priorities now govern the allocation of a number of raw materials, including aluminum, magnesium, ferro-tungsten, nickel and neoprene. Under a voluntary arrangement part of the zinc supply is also set aside for allocation by priorities. At the same time the Office of Production Management is stimulating efforts to economize the use of aluminum, manganese, tin and other relatively scarce materials. The possibility of employing substitutes is being actively explored.

The seriousness of the current situation is further emphasized in a United Press release of May 17, from Washington according to which Dr. C. K. Leith recently told a Senate military affairs sub-committee that industrial stocks of strategic minerals are substantial but "far short of our objective." By the time the movement to accumulate a two-year supply reserve stockpiles of these minerals was started early in 1940, the world situation, Dr. Leith continued, "was already so disturbed that it was just simply impossible to get going fast enough to build up the necessary stocks until the situation closed in on us."

Post-War Problems

All this means that the world situation has forced men everywhere to consider economic realities as perhaps never before in history. Nor will economic realities play a less vital role in the post-war world. It means, if some of us see somewhat clearly, a new appraisal and a thorough re-appraisal of resources, technology, and organization in reference to national power and policies in the years to come. Economic aspects of the inherent characteristics of natural resources as a subject for study and research had been pretty thoroughly ignored among the peoples of the English-speaking world prior to World War I, and not much more can be said for studies of the economic aspects of technology. Those who did see the economic significance of natural resources and of the technology by which natural resources are utilized have been generally accorded but little recognition. Recent and current developments are forcing into our consciousness the necessity from the standpoint of national security of understanding the fundamental features of the economics of resources and of their utilization. As for the economics of patterns of organization, attention has been directed more upon the provincial phases of this subject rather than upon its comparative features as illustrated in the economic history of the peoples of the earth.

We shall have to inaugurate new approaches to the study of industry and of what industry means in the economic life of the United States, in Germany, in Japan or Russia, in Brazil or the Dutch East Indies. If for no other reason, we shall have to do this in the United States as a means of insuring our national security. We shall have to recognize that there is such a thing as the economics of the Machine Age, and we shall have to recognize the inherent features of conditioning factors that play a dominant role in the machine world. It may be appropriate to recall that more than a quarter of a century ago Veblen wrote:

> A policy directed to making a nation industrially self-contained or self-sufficient necessarily depends on measures of inhibition. It is only by obstructing the free ramification of the industrial system across the national frontiers that such self-sufficiency can be achieved. A self-contained industrial community is one

whose industry draws for its raw materials only on the natural resources comprised within the national frontiers, whose population draws its subsistence from the soil of the country, and which imports only superfluities, or at the most, articles of consumption that can readily be dispensed with. On the other hand the modern state of the industrial arts is drawn on an international scale, in that it works to the best, that is to say the most productive, effect by the free use of materials drawn from many sources, far and near, and by such free local specialization of industry as will permit the supply of any given line of goods, finished or half wrought, to be turned out wherever the facilities for their production are at their best. This is the chief service of the modern means of transport and communication.

Paralleling the inauguration of studies concerned primarily with the economics of industry and the implications thereof, attention will necessarily have to be directed to regional analyses and interpretations of interregional relations.

Regions will have to be studied as regions, from the point of view of their inherent characteristics as human habitats. Not only will continents have to be analyzed regionally as regards areal differentiation of their surfaces but also as to the structural aspects of sub-surface regions, the latter a function of the various stages in the evolution of the various continents. Attention will be centered upon the entire architecture of continents in order that their regional make-up can be perceived in the light of economic realities which the peoples of the earth will have to face. The regional economy of continents will play a big part, perhaps a determining one, in the post-war world.

For the purpose of suggesting some of the factors involved in thorough-going studies of regions, the following tentative outline is presented.[1]

I. The pattern of factors comprising the physical environment; the resulting areal characteristics and differentiation.
   A. Areal combinations and interrelations of climate, geographic geology, water relations, natural vegetation, and soil, regionally expressed. These particularly are the bases and and conditioning factors of plant life and growth. They may further be considered in relation to:
      1. Adaptability factors;
      2. Accessibility and availability features;
      3. Productivity characteristics that is, the factors of inherent productivity of the soil.
   B. Sub-surface combinations and interrelations of geologic materials and structures, fuel and energy resources, metals, and non-metallics, all of which are associated with the various stages of continental evolution and which structurally have regional expressions.
      1. Energy sources as the bases of power;
      2. Machine resources, mainly metals, through which a given amount of energy is enabled to do more work than would otherwise be possible. The steam engine, e.g., was fundamentally a new way of using coal, and up to that time the uses for coal had not been very important; improvements in the steam engine not only made more coal available but enabled each unit of coal to yield more power. Metals have been appropriately termed the material backbone of the modern world.

         Energy is the work-doing principle; it functions through machines made of materials, mostly metals. The efficiency of the machine is a function of the manner by which energy is harnessed.
      3. Chemical resources, the products of which facilitate the efficiency of both the energy and the machine resources.

II. Patterns of institutions superimposed upon the resources combinations of the world's natural regions. From a comparative point of view the following are of major significance:
   A. Those associated genetically with deserts;
   B. Those associated genetically with the Mid-Latitude grassland plains;
   C. Those associated genetically with the Mixed-Farming areas of West-central Europe.
   D. Those associated with:
      1. The rise of handicrafts; and,
      2. The rise and dispersion of modern industry.

III. Regional Hierarchies.
   A. Types of major economic regions:
      1. Economically Activating Regions: The industrial regions:
         a. Primary: the coal regions, to which metals, particularly iron ore, are readily accessible.
         b. Secondary: oil, natural gas, and water-power regions.
      2. Economically Passive Regions—the raw material producing regions:
         a. Agricultural;
         b. Forest;
         c. Mineral;
         d. Marine.
   B. Economic interrelations and the consequent features of interdependence or dependence between regions.

In a series of articles to be begun in the TEXAS BUSINESS REVIEW next October, the following titles are among those planned: Industrial Development in the Southwest, Industrial Development in the Southeast, the Bases of the Rise and Growth of Internal Commerce, the Oil Industry in Texas, the Texas and Southwestern Market, the Economic Position of Texas in American Industry, and Economic Realities and Latin American Relations.

ELMER H. JOHNSON

[1]Some of the ideas and items contained in this outline have been suggested by published materials of Dr. E. W. Zimmermann; others by lectures and discussions with the late Dr. C. F. Marbut.

Cotton Situation

The cotton situation for the season and year, 1941–42, is now in the height of its making. Congress has boosted the loan price of cotton to eighty-five per cent of so-called 1909–14 parity, which will mean about 13.75 cents for M. 7/8 inch cotton gross to Texas farmers. This means that the United States has completely abandoned temporarily, at least, any effort to hold foreign cotton markets for United States grown cotton; for American cotton is now over-priced in foreign markets relative to competing foreign growths about twenty dollars per bale, and this means that the regular commercial export channels are almost, if not completely, cut off.

The important question now is: Will foreign grown cotton supplies be sufficient to satisfy foreign demand without the use of any of ours? According to Garside, world carryover of foreign grown cotton July 31, 1940, was 7,762,000 bales, and foreign production this year he estimates at 17,723,000 bales, making a total of 25,485,000 bales of foreign grown cotton for the year. Commercial estimates indicate that foreign consumption of all cotton this year will be about 16,500,000 bales, of which probably about one million bales will be American. In other words, the world outside the United States produced at least 2,000,000 bales more cotton this year than it consumed for the first time in over one hundred years. This fact is of tremendous significance to the cotton growing South.

The world carryover of foreign grown cotton this year will be about 10,000,000 bales. The amount of the new crop is still uncertain. The high loan value just passed by Congress may stimulate increases in cotton production in some countries; however, supplies of foreign grown cotton will certainly be large enough to supply world demand outside the United States, though certain qualities may be scarce and require some mill adjustments. The United States has thus at last lost its power to greatly influence world cotton prices by its policies of crop restrictions and above-market-price loans, as is evidenced by present cotton price parities in world markets.

The South has not yet come to realize the full significance to it of the changed cotton situation, and has, therefore, made relatively little progress in making the far-reaching adjustments in its economy made necessary by the loss of markets for its major farm product.

A. B. Cox

COTTON BALANCE SHEET OF THE UNITED STATES AS OF MAY 1, 1941

(In Thousands of Running Bales Except as Noted

	Carryover Aug. 1	Imports to May 1*	Final Ginnings	Total	Consumption to May 1	Exports to May 1	Total	Balance May 1
1931–1932	6,369	82	16,629	23,080	3,932	7,397	11,329	11,751
1932–1933	9,682	96	12,710	24,488	4,219	6,521	10,740	13,748
1933–1934	8,176	112	12,664	20,952	4,458	6,485	10,943	10,009
1934–1935	7,746	83	9,472	17,301	4,116	3,986	8,102	9,199
1935–1936	7,138	102	10,417	17,657	4,658	5,167	9,825	7,832
1936–1937	5,397	167	12,130	17,694	6,017	4,762	10,779	6,915
1937–1938	4,498	99	18,242	22,839	4,430	5,034	9,464	13,375
1938–1939	11,533	108	11,621	23,262	5,153	2,964	8,117	15,145
1939–1940	13,033	123	11,477	24,633	5,955	5,695	11,650	12,983
1940–1941	10,596	119	12,287	23,002	6,995	885	7,880	15,122

*In 500-pound bales.

The cotton year begins August 1.

PERCENTAGE CHANGES IN CONSUMPTION OF ELECTRIC POWER

	April, 1941 from April, 1940	April, 1941 from March, 1941
Commercial	+ 8.1	+ 0.4
Industrial	+ 8.0	+ 3.8
Residential	+ 7.0	− 4.3
All Other	+ 4.6	+ 4.5
TOTAL	+ 7.4	+ 1.5

Prepared from reports of 10 electric power companies to the Bureau of Business Research.

LUMBER

(In Board Feet)

	April, 1941	April, 1940	March, 1941
Southern Pine Mills:			
Average Weekly Production per unit	332,908	288,782	329,689
Average Weekly Shipments per unit	300,193	298,510	294,667
Average Unfilled Orders per unit, end of month	1,212,495	673,844	1,091,433

NOTE: From Southern Pine Association.

EMPLOYMENT AND PAY ROLLS IN TEXAS

April, 1941

	Estimated Number of Workers Employed* March 1941[1]	Estimated Number of Workers Employed* April 1941[2]	Percentage Change from March 1941	Percentage Change from April 1940	Estimated Amount of Weekly Pay Roll March 1941[1]	Estimated Amount of Weekly Pay Roll April 1941[2]	Percentage Change from March 1941	Percentage Change from April 1940
MANUFACTURING								
All Manufacturing Industries	140,185	142,757	+ 1.8	+ 8.3	$2,721,483	$2,906,534	+ 6.8	+13.2
Food Products								
Baking	6,329	6,467	+ 2.2	+ 4.0	137,989	141,709	+ 2.7	+ 5.9
Carbonated Beverages	2,761	2,927	+ 6.0	±[3]	65,090	72,394	+11.2	+ 9.0
Confectionery	828	843	+ 1.8	+13.9	8,386	8,971	+ 6.9	+28.1
Flour Milling	1,825	1,883	+ 3.2	+11.3	31,998	33,881	+ 5.9	+ 9.1
Ice Cream	851	970	+13.9	+ 9.9	16,913	19,454	+15.0	+14.1
Meat Packing	4,621	4,764	+ 3.1	+17.4	95,188	98,049	+ 3.0	+10.7
Textiles								
Cotton Textile Mills	7,127	7,197	+ 1.0	+15.2	92,360	96,725	+ 4.7	+32.8
Men's Work Clothing	3,675	3,899	+ 6.1	+10.9	41,944	47,443	+13.1	+53.5
Forest Products								
Furniture	2,212	2,201	− 0.5	+23.0	44,303	41,407	− 6.5	+61.1
Planing Mills	2,266	2,270	+ 0.2	+22.4	43,734	47,335	+ 8.2	+51.7
Saw Mills	16,338	16,551	+ 1.3	+ 9.7	199,361	217,023	+ 8.9	+17.9
Paper Boxes	599	614	+ 2.4	+17.8	9,454	11,138	+17.8	+42.8
Printing and Publishing								
Commercial Printing	2,275	2,420	+ 6.4	− 2.1	51,569	57,840	+12.2	+ 2.4
Newspaper Publishing	4,858	4,921	+ 1.3	+ 3.5	123,956	125,124	+ 0.9	+ 3.3
Chemical Products								
Cotton Oil Mills	3,239	2,661	−17.8	+39.8	30,071	23,990	−20.2	+46.5
Petroleum Refining	20,056	20,231	+ 0.9	+ 1.0	647,529	697,904	+ 7.8	+ 4.7
Stone and Clay Products								
Brick and Tile	2,222	2,141	− 3.6	+ 8.3	26,349	27,602	+ 4.8	+22.4
Cement	917	996	+ 8.5	+10.9	26,936	29,937	+11.1	+21.5
Iron and Steel Products								
Foundries and Machine Shops	11,622	12,347	+ 6.2	+ 6.6	331,610	363,778	+ 9.7	+16.9
Structural and Ornamental Iron	2,361	2,399	+ 1.6	+29.5	45,098	48,620	+ 7.8	+47.4
NONMANUFACTURING								
Crude Petroleum Production	29,079	29,569	+ 1.7	− 2.9	952,385	974,084	+ 2.3	+ 0.2
Quarrying	[4]	[4]	+ 1.3	+ 3.3	[4]	[4]	+ 3.2	+14.1
Public Utilities	[4]	[4]	+ 5.0	+10.2	[4]	[4]	+ 3.3	+12.6
Retail Trade	184,072	197,938	+ 7.5	+20.5	3,330,991	3,557,772	+ 6.8	+15.4
Wholesale Trade	60,393	61,097	+ 1.2	+ 2.3	1,791,169	1,812,533	+ 1.2	+ 8.2
Dyeing and Cleaning	2,279	2,340	+ 2.7	− 1.2	31,258	33,727	+ 7.9	+ 2.5
Hotels	15,740	15,643	− 0.6	− 0.5	186,959	185,987	− 0.5	+ 8.1
Power Laundries	10,847	11,012	+ 1.5	+15.7	134,363	142,827	+ 6.3	+23.0

CHANGES IN EMPLOYMENT AND PAY ROLLS IN SELECTED CITIES[5]

	Employment Percentage Change March, 1941 to April, 1941	Employment Percentage Change April, 1940 to April, 1941	Pay Rolls Percentage Change March, 1941 to April, 1941	Pay Rolls Percentage Change April, 1940 to April, 1941
Abilene	+ 1.3	− 7.4	+ 4.5	+12.6
Amarillo	− 7.1	+ 4.7	+ 1.6	+16.6
Austin	+ 5.2	+11.4	+ 3.7	+ 5.8
Beaumont	+ 1.4	+ 9.4	+ 4.9	+11.5
Dallas	+ 3.5	+19.2	+ 4.1	+25.5
El Paso	− 2.3	+16.6	− 1.0	+25.1
Fort Worth	+ 2.9	+10.3	+ 3.5	+13.1
Galveston	+ 7.9	− 4.2	+13.4	+ 8.3
Houston	+ 7.7	+ 8.6	+ 7.6	+16.5
Port Arthur	− 0.4	− 4.8	+ 9.7	+ 4.8
San Antonio	+ 2.2	+ 6.4	+ 2.2	+ 8.3
Sherman	+ 7.4	+12.6	+13.0	+35.5
Waco	+ 0.9	+ 6.2	+ 1.8	+23.1
Wichita Falls	+ 4.5	+ 9.2	+ 8.2	+15.4
STATE	+ 2.7	+ 7.9	+ 4.7	+13.4

ESTIMATED NUMBER OF EMPLOYEES IN NONAGRICULTURAL BUSINESS AND GOVERNMENT ESTABLISHMENTS[6]

	1940[1]	1941
January	944,000	1,052,000[1]
February	943,000	1,092,000[1]
March	965,000	1,086,000[1]
April	963,000	1,095,000[2]
May	983,000	
June	982,000	
July	983,000	
August	988,000	
September	1,009,000	
October	1,022,000	
November	1,048,000	
December	1,084,000	

*Does not include proprietors, firm members, officers of corporations, or other principal executives. Factory employment excludes also office, sales, technical, and professional personnel.

[1] Revised.

[2] Subject to revision.

[3] No change.

[4] Not available.

[5] Based on unweighted figures.

[6] Not including self-employed persons, casual workers, or domestic servants, and exclusive of military and maritime personnel. These figures are furnished by the Bureau of Labor Statistics, U.S. Department of Labor.

Prepared from reports from representative Texas establishments to the Bureau of Business Research coöperating with the United States Bureau of Labor Statistics.

POSTAL RECEIPTS

	April, 1941	April, 1940	March, 1941
Abilene	26,789	18,677	26,353
Amarillo	35,714	34,465	34,503
Austin	76,001	69,481	75,316
Beaumont	30,327	27,217	27,474
Big Spring	7,618	7,080	6,227
Brownsville	7,240	6,163	7,121
Brownwood	16,196	6,311	15,017
Bryan	6,429	5,629	5,471
Childress	2,916	2,687	2,602
Coleman	2,417	2,311	2,669
Corpus Christi	35,292	28,538	32,708
Corsicana	6,778	5,936	5,437
Dallas	406,204	359,817	396,608
Del Rio	6,767	4,091	7,047
Denison	6,652	5,639	6,187
Denton	9,684	9,265	7,650
El Paso	61,624	49,106	60,712
Fort Worth	161,985	144,723	160,289
Galveston	37,661	31,185	33,663
Gladewater	2,858	2,828	3,143
Graham	2,344	2,572	2,152
Harlingen	7,178	6,984	6,954
Houston	280,183	252,254	271,385
Jacksonville	4,004	1,608	3,040
Kenedy	1,654	1,315	1,222
Kilgore	6,892	6,338	5,753
Longview	10,669	10,019	10,029
Lubbock	21,978	19,606	19,726
McAllen	5,418	5,021	4,793
Marshall	6,730	6,654	6,674
Palestine	5,364*	5,098*	†
Pampa	8,045	7,988	6,799
Paris	6,532*	†	7,472*
Plainview	4,707	3,833	3,910
Port Arthur	16,963	15,574	13,699
San Angelo	14,367	12,318	13,541
San Antonio	156,913	133,595	145,482
Sherman	8,493	8,082	7,553
Snyder	1,398	1,322	1,445
Sweetwater	6,137	5,617	4,514
Temple	7,727	6,975	7,011
Tyler	16,759	16,454	16,405
Waco	38,712	35,920	35,576
Wichita Falls	25,245	26,173	26,556
TOTAL	1,606,200	1,407,371	1,537,888

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

*Not included in total.

†Not available.

APRIL RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	Number of Firms Reporting	Percentage Change in Dollar Sales April, 1941 from April, 1940	April, 1941 from March, 1941
TOTAL TEXAS	1,055	+20	+ 4
TEXAS STORES GROUPED BY PRODUCING AREAS:			
District 1–N	61	+12	+ 5
Plainview	10	+ 5	+26
All Others	51	+13	+ 3
District 1–S	20	+21	− 5
District 2	75	+22	+ 4
Abilene	12	+59	+ 4
Wichita Falls	12	+ 5	+ 8
All Others	51	+12	+ 2
District 3	40	+35	+ 4
District 4	240	+17	+ 4
Dallas	39	+17	+ 8
Fort Worth	43	+20	− 2
Waco	26	+16	+ 7
All Others	132	+15	+ 4
District 5	114	+21	+ 2
Tyler	14	+ 9	+14
All Others	100	+24	+ (1)
District 6	28	+24	− 8
El Paso	15	+25	− 9
All Others	13	+12	+14
District 7	57	+20	+10
San Angelo	12	+28	+11
All Others	45	+13	+ 8
District 8	201	+18	+ 4
Austin	23	+20	+ 9
Corpus Christi	10	+12	+ 4
San Antonio	58	+24	+ 3
All Others	110	+ 6	+ 1
District 9	154	+26	+ 9
Beaumont	20	+40	+23
Galveston	15	+55	+ 6
Houston	55	+22	+10
Port Arthur	14	+32	− 7
All Others	50	+17	+ 7
District 10	33	+13	+ 6
District 10–A	32	+ 7	−12
Brownsville	10	+ 3	+11
All Others	22	+10	−20

(1) Change of less than .5%.

NOTE: Prepared from reports of independent retail stores to the Bureau of Business Research cooperating with the U.S. Bureau of the Census.

APRIL SHIPMENTS OF LIVE STOCK CONVERTED TO A RAIL-CAR BASIS*

	Cattle		Calves		Hogs		Sheep		Total	
	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940
Total Interstate Plus Fort Worth¶	6,540	6,953	813	836	1,016	756	541	799	8,910	9,344
Total Intrastate Omitting Fort Worth	602	551	90	83	10	27	4	21	706	682
TOTAL SHIPMENTS	7,142	7,504	903	919	1,026	783	545	820	9,616	10,026

TEXAS CAR-LOT* SHIPMENTS OF LIVE STOCK, JANUARY 1–MAY 1

	Cattle		Calves		Hogs		Sheep		Total	
	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940
Total Interstate Plus Fort Worth¶	13,521	14,683	3,170	3,079	3,806	2,901	1,508	2,099	22,005	22,762
Total Intrastate Omitting Fort Worth	1,176	1,542	425	387	64	97	55	76	1,720	2,102
TOTAL SHIPMENTS	14,697	16,225	3,595	3,466	3,870	2,998	1,563	2,175	23,725	24,864

*Rail-car Basis: Cattle, 30 head per car; calves, 60; hogs, 80; and sheep, 250.

Fort Worth shipments are combined with interstate forwardings in order that the bulk of market disappearance for the month may be shown.

NOTE: These data are furnished the Agricultural Marketing Service, U.S.D.A. by railway officials through more than 1,500 station agents, representing every live stock shipping point in the State. The data are compiled by the Bureau of Business Research.

APRIL RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	Number of Firms Reporting	Percentage Changes April, 1941 from April, 1940	Percentage Changes April, 1941 from March, 1941	Percentage Change Year-to-date 1941 from Year-to-date 1940
TEXAS	1,055	+20	+ 4	+14
STORES GROUPED BY LINE OF GOODS CARRIED:				
APPAREL	106	+27	+17	+ 8
Family Clothing Stores	27	+41	+24	+11
Men's and Boys' Clothing Stores	34	+32	+44	+ 8
Shoe Stores	17	+45	+25	+10
Women's Specialty Shops	28	+20	+ 3	+ 7
AUTOMOTIVE*	68	+31	−12	+27
Motor Vehicle Dealers	65	+30	−13	+27
COUNTRY GENERAL	113	+16	+ 8	+10
DEPARTMENT STORES	53	+21	+ 6	+11
DRUG STORES	136	+ 9	− 2	+ 6
DRY GOODS AND GENERAL MERCHANDISE	20	+21	+19	+ 3
FILLING STATIONS	41	+11	+ 8	+ 5
FLORISTS	24	+52	+34	+ 5
FOOD*	177	+ 6	−(a)	+ 3
Grocery Stores	51	+ 2	− 2	+ 6
Grocery and Meat Stores	119	+ 7	+(a)	+ 2
FURNITURE AND HOUSEHOLD*	60	+ 5	+ 9	+10
Furniture Stores	50	+ 5	+ 8	+10
JEWELRY	31	+33	+ 9	+30
LUMBER, BUILDING, AND HARDWARE*	187	+12	+14	+17
Farm Implement Dealers	10	+42	+19	+21
Hardware Stores	57	+17	+21	+10
Lumber and Building Material Dealers	116	+ 8	+11	+19
RESTAURANTS	25	+ 5	− 6	+ 3
ALL OTHER STORES	14	− 1	−11	+ 5
TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:				
All Stores in Cities of—				
Over 100,000 Population	196	+20	+ 5	+12
50,000–100,000 Population	117	+27	+ 3	+23
2,500–50,000 Population	457	+20	+ 2	+13
Less than 2,500 Population	285	+ 8	+ 5	+ 5

*Group total includes kinds of business other than the classifications listed.

(a)Less than .5% change.

NOTE: Prepared from reports of independent retail stores to the Bureau of Business Research cooperating with the United States Bureau of the Census.

APRIL, 1941, CARLOAD MOVEMENT OF POULTRY AND EGGS

Shipments from Texas Stations

Destination*	Cars of Poultry: Live Chickens Apr. 1941	Live Chickens Apr. 1940	Live Turkeys Apr. 1941	Live Turkeys Apr. 1940	Dressed Chickens Apr. 1941	Dressed Chickens Apr. 1940	Dressed Turkeys Apr. 1941	Dressed Turkeys Apr. 1940	Cars of Eggs† Apr. 1941	Cars of Eggs† Apr. 1940‡
TOTAL	1	—	—	43	47	10	7	354	201	
Intrastate	0	—	—	0	4	1	0	130	84	
Interstate	1	—	—	43	43	9	7	224	117	

Origin	Receipts at Texas Stations								
TOTAL	—	—	—	1	2	1	—	103	68
Intrastate	—	—	—	0	1	0	—	99	65
Interstate	—	—	—	1	1	1	—	4	3

*The destination above is the first destination as shown by the original waybill. Changes in destination brought about by diversion orders are not shown.

†Powdered eggs and canned frozen eggs are converted to a shell egg equivalent on the following basis: 1 rail carload of powdered eggs equals 3 carloads of shell eggs, and 1 carload of frozen eggs equals 2 carloads of shell eggs.

‡Revised.

NOTE: These data are furnished to the Agricultural Marketing Service, U.S.D.A. by railroad officials through agents at all stations which originate and receive carload shipments of poultry and eggs. The data are compiled by the Bureau of Business Research.

TEXAS CHARTERS

	April, 1941	April, 1940	March, 1941
Domestic Corprations			
Capitalization*	$1,021	$2,609	$1,358
Number	89	128	109
Classification of new corporations:			
Banking-Finance	3	4	5
Manufacturing	15	21	7
Merchandising	26	32	30
Oil	8	18	14
Public Service	0	1	0
Real Estate-Building	11	8	18
Transportation	2	12	2
All Others	24	32	33
Number capitalized at less than $5,000	29	50	43
Number capitalized at $100,000 or more	3	6	1
Foreign Corporations (Number)	23	16	23

*In thousands.

NOTE: Compiled from records of the Secretary of State.

BUILDING PERMITS

	April, 1941	April, 1940	March, 1941
Abilene	71,761	56,345*	119,117
Amarillo	294,761	240,085	175,697
Austin	497,012	549,067	441,444
Beaumont	250,768	122,094	151,556
Big Spring	30,595	36,135	17,670
Brownsville	36,016	16,523*	13,526*
Brownwood	63,650‡	§	76,075‡
Bryan	38,510	76,760	25,140
Coleman	11,853	23,650	41,300
Corpus Christi	1,981,504	327,930	925,880
Corsicana	8,803	21,041	10,650
Dallas	1,142,093	1,234,524	1,068,405
Del Rio	13,173	13,510	12,383
Denton	36,781	32,525	48,805
El Paso	265,321	356,402	208,395
Fort Worth	484,401	449,457	570,839
Galveston	187,618*	133,850	591,997†
Harlingen	95,050	37,675	13,215
Houston	1,380,809	1,704,330	2,854,000
Jacksonville	12,812	6,250	7,000
Kenedy	3,500	2,300	2,700
Kilgore	14,250	53,275*	19,800
Longview	10,625	21,250	18,275
Lubbock	374,242	415,250	225,071
Lufkin	54,614	55,883	86,166
McAllen	34,380	17,110	7,790
Marshall	38,081	46,271	50,678
Midland	31,790	71,075	22,375
Palestine	15,631‡	14,573‡	§
Pampa	37,350	18,000	27,505
Paris	8,380	12,655	6,710
Plainview	10,700	5,375	26,050
Port Arthur	94,433	119,113	74,823
San Angelo	47,216	45,251	69,490
San Antonio	449,070	585,192	476,384
Sherman	22,956	40,952	35,226
Sweetwater	13,100	18,190	20,145
Tyler	56,061	88,485*	90,640
Waco	173,583*	105,699	239,278
Wichita Falls	170,836	179,496	203,468
TOTAL	8,484,808	7,238,975	8,999,593

*Does not include public works.

†Includes 25 U.S. Government buildings $145,000.

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

‡Not included in total.

§Not available.

COMMODITY PRICES

	April 1941	April 1940	March 1941
Wholesale Prices:			
U. S. Bureau of Labor Statistics (1926=100%)	83.2	78.6	81.5
Farm Prices:			
U.S. Department of Agriculture (1910–1914=100%)	110.0*	98.0	103.0
U.S. Bureau of Labor Statistics (1926=100%)	74.4	69.4	71.6
Retail Prices:			
Food (U.S. Bureau of Labor Statistics, 1935–39=100%)	100.6	96.2	98.4
Department Stores (Fairchilds Publications, Jan. 1931=100%)	95.5	92.8	94.8

*Preliminary.

PURCHASES OF SAVINGS BONDS

	April, 1941	April, 1940	Year-to Date 1941	Year-to Date 1940
Abilene	16,294	19,369	†	139,444*
Amarillo	16,463	32,625	173,569	167,644
Austin	33,094	55,256	295,070	277,913
Beaumont	34,594	27,788	230,825	291,930
Big Spring	18,469	1,969	46,088	58,632
Brownwood	9,169	1,200	29,251	33,356
Bryan	11,663*	†	44,832*	†
Dallas	137,081	172,988	1,366,088	1,306,407
Del Rio	150	263	5,907	12,638
Denison	2,738	10,856	39,976	79,632
Denton	2,447	806	20,983*	†
Fort Worth	79,594	99,225	566,645	412,571
Galveston	69,769	64,125	327,694	239,381
Gladewater	2,269	1,256	49,781	61,369
Harlingen	1,932	2,513	21,451	32,494
Kenedy	413	0	5,550	9,206
Kilgore	2,981	11,869	54,094	40,256
Longview	9,319	19,931	135,094	121,350
McAllen	1,556	9,075	34,294	37,462
Marshall	806	10,669	60,655	125,006
Palestine	12,394*	12,525*	†	56,531*
Pampa	2,063	6,413	18,470	26,058
Paris	4,219	3,356	32,513*	†
Plainview	3,319	2,063	12,056	32,494
Port Arthur	21,750	48,881	139,724	156,469
San Angelo	31,988	6,056	105,545	104,831
San Antonio	139,913	95,738	888,244	897,788
Sherman	994	5,719	21,023	41,682
Tyler	16,162	8,456	182,532	176,793
Waco	9,506	16,577	202,631	338,997
Wichita Falls	20,306	25,631	162,019	282,301
TOTAL	689,358	760,671	5,174,276	5,364,660

*Not included in total.

†Not available.

NOTE: Prepared from reports from Texas chambers of commerce to the Bureau of Business Research.

CEMENT

(In thousands of Barrels)

	April, 1941	April, 1940	March, 1941
Texas Plants			
Production	798	713	742
Shipments	779	699	707
Stocks	827	775	808
United States			
Production	12,196	10,043	10,600
Shipments	14,132	10,829	10,056
Stocks	24,052	25,313	25,853
Capacity Operated	59.3%	47.4%	49.8%

NOTE: From U.S. Department of Interior, Bureau of Mines.

TEXAS COMMERCIAL FAILURES

	April 1941	April 1940	March 1941*
Number	23	17	28
Liabilities†	$220	$161	$800
Assets†	89	111	665
Average Liabilities per Failure†	10	9	29

*Revised.

†In thousands.

NOTE: From Dun and Bradstreet, Inc.

APRIL CREDIT RATIOS IN TEXAS RETAIL STORES

(Expressed in Per Cent)

	Number of Stores Reporting	Ratio of Credit Sales to Net Sales 1941	1940	Ratio of Collections to Outstandings 1941	1940	Ratio of Credit Salaries to Credit Sales 1941	1940
All Stores	67	65.2	66.7	41.3	40.3	1.0	1.1
Stores Grouped by Cities:							
Abilene	3	65.9	63.4	32.4	34.2	1.4	2.5
Austin	6	59.3	60.2	48.7	47.6	1.1	1.2
Beaumont	3	68.0	70.9	39.0	40.2	0.8	1.5
Bryan	3	61.2	63.4	39.0	37.3	2.8	3.7
Dallas	10	72.1	73.1	43.8	40.8	0.7	0.8
El Paso	3	57.2	59.9	40.1	39.0	0.9	1.1
Fort Worth	6	64.7	66.5	37.1	37.4	1.2	1.3
Houston	6	63.6	65.7	42.1	42.2	1.2	1.5
San Antonio	6	56.9	58.5	43.3	46.8	1.2	1.1
Waco	5	62.5	64.4	29.7	30.0	1.4	1.6
All Others	16	61.6	61.6	40.8	38.7	1.4	1.7
Stores Grouped According to Type of Store:							
Department Stores (Annual Volume Over $500,000)	20	64.8	66.6	42.1	42.5	1.0	1.1
Department Stores (Annual Volume under $500,000)	11	63.2	62.1	36.9	34.0	1.5	1.9
Dry-Goods-Apparel Stores	5	62.8	65.8	38.0	38.2	1.5	1.9
Women's Specialty Shops	16	65.5	66.6	40.3	36.5	0.7	0.8
Men's Clothing Stores	15	68.8	70.0	40.5	39.2	1.1	1.6
Stores Grouped According to Volume of Net Sales During 1940:							
Over $2,500,000	9	67.6	69.7	42.5	43.2	0.7	1.0
$2,500,000 down to $1,000,000	11	60.7	61.7	40.9	38.7	0.9	1.3
$1,000,000 down to $500,000	10	60.7	61.7	41.3	40.0	1.2	1.5
$500,000 down to $100,000	28	62.5	64.1	40.1	39.6	1.4	1.6
Less than $100,000	9	58.9	62.8	40.0	39.9	2.9	3.5

NOTE: The ratios shown for each year, in the order in which they appear from left to right are obtained by the following computations: (1) Credit Sales divided by Net Sales. (2) Collections during the month divided by the total accounts unpaid on the first of the month. (3) Salaries of the credit department divided by credit sales. The data are reported to the Bureau of Business Research by Texas retail stores.

PETROLEUM

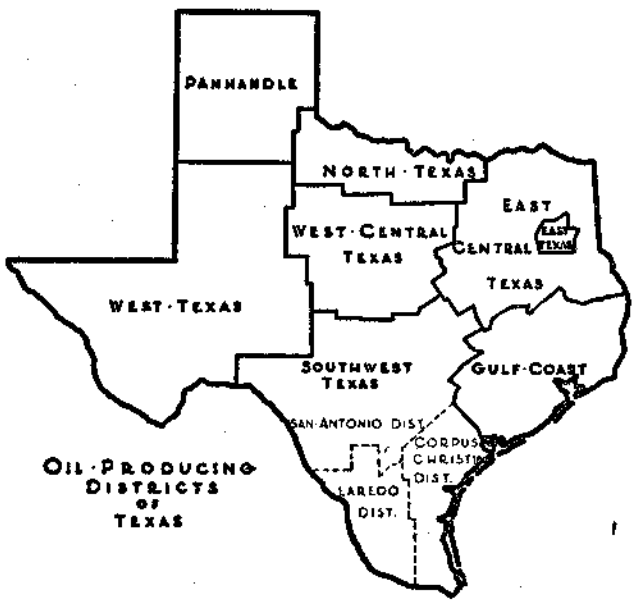
Daily Average Production

(In Barrels)

	April 1941	April 1940	March 1941
Coastal Texas*	249,010	253,150	255,800
East Central Texas	76,550	86,200	76,150
East Texas	344,880	396,800	392,100
North Texas	99,290	102,650	101,650
Panhandle	77,850	79,200	74,000
Southwest Texas	192,660	254,750	209,500
West Central Texas	37,825	33,700	30,450
West Texas	226,000	272,350	239,750
STATE	1,296,500	1,478,800	1,379,400
UNITED STATES	3,620,910	3,825,650	3,680,850
Imports	267,057	186,607	308,964

*Includes Conroe.

NOTE: From American Petroleum Institute. See accompanying map showing the oil producing districts of Texas.



Gasoline sales as indicated by taxes collected by the State Comptroller were: March, 1941, 123,301,000 gallons; March, 1940, 116,513,000 gallons; February, 1941, 107,671,000 gallons.

BANKING STATISTICS

(In Millions of Dollars)

	April, 1941		April, 1940		March, 1941	
	Dallas District	United States	Dallas District	United States	Dallas District	United States
DEBITS to individual accounts	$ 968	$38,325	$ 828	$34,079	$ 1,215*	$51,929*
Condition of reporting member banks on—	April 30, 1941		May 1, 1940		April 2, 1941	
ASSETS:						
Loans and investments—total	602	27,550	527	23,542	598	26,952
Loans—total	316	9,870	269	8,661	321	9,828
Commercial, industrial, and agricultural loans	214	5,532	175	4,409	219	5,465
Open market paper	2	354	2	326	2	347
Loans to brokers and dealers in securities	3	465	5	626	4	504
Other loans for purchasing or carrying securities	12	445	13	474	12	454
Real estate loans	24	1,235	22	1,187	24	1,228
Loans to banks	—	40	1	52	1	52
Other loans	61	1,799	51	1,587	59	1,778
Treasury Bills	33	869	21	593	30	742
Treasury Notes	34	2,190	40	1,871	36	2,183
U.S. Bonds	114	7,753	89	6,496	109	7,653
Obligations fully guaranteed by U.S. Gov't	43	3,115	49	2,427	39	2,753
Other securities	62	3,753	59	3,494	63	3,793
Reserve with Federal Reserve Bank	146	11,208	136	10,859	149	11,315
Cash in vault	12	516	10	447	12	491
Balances with domestic banks	301	3,386	297	3,177	294	3,588
Other assets—net	31	1,226	29	1,224	31	1,174
LIABILITIES:						
Demand deposits—adjusted	546	23,712	479	19,696	542	23,093
Time deposits	138	5,452	136	5,305	137	5,441
U.S. Government deposits	27	410	30	578	27	420
Inter-bank deposits:						
Domestic banks	286	9,043	261	8,460	284	9,343
Foreign banks	1	643	1	720	1	633
Borrowings	—	6	—	1	—	—
Other liabilities	4	765	4	741	4	751
Capital account	90	3,855	88	3,748	89	3,839

NOTE: From Federal Reserve Board.
*Five weeks.

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