MIDWESTERN BUSINESS AND ECONOMIC REVIEW

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MIDWESTERN STATE UNIVERSITY
WICHITA FALLS, TEXAS

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THE ECONOMIC IMPACT OF MIDWESTERN STATE UNIVERSITY ON WICHITA COUNTY: AN UPDATE[1]

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ECONOMIC DEVELOPMENT AND EDUCATION

Education is one of the key factors in the economic development process. The role of educational institutions is two-fold. First there is a direct economic impact on the area served by the institution. That is, the contribution to economic development made by wages and salaries, construction outlays, purchases of utilities, a variety of goods and services, expenditures by students, and visitors coming to the area because of the existence of the educational institution.

There is also a second, "indirect", impact of education on the economic development process. This indirect impact takes the form of increasing the productive skills of the area labor force, providing technical assistance to the business and governmental sectors, as well as making available cultural opportunities for area citizens. The indirect benefits, while extremely important to the economic opportunity, are difficult to quantify.

The purpose of this article is to attempt to measure the direct economic impact of Midwestern State University (MSU) on Wichita County and to comment on the indirect benefits derived by the County as a result of the existence of MSU.

DIRECT IMPACT

The direct economic contribution to Wichita County by Midwestern State University is considerable. The university employed 867 full-time equivalent (FTE) employees, consisting of 171 full-time faculty, 262 full-time staff and 54 part-time individuals during the 1995-1996 academic year. Furthermore, 1,712 part-time student workers were employed, representing 428 FTE employees on the university's payroll. The 867 FTE employees received a total amount of $16,708,351 in the form of salaries and wages. From September 1995 through August 1996 MSU spent approximately $10,309,819 for utilities, materials, supplies, equipment, repairs, travel, retirement benefits and insurance. Thus, the total 1995-1996 university budget was $27,018,170, as shown on table 1.

In addition, MSU spent $10,461,211 for financial aid in the form of loans, grants, and scholarships during the same 12-month period. Loans and grants amounted to $7,026,090, scholarship support totaled $1,100,529 and $2,625,865 was provided for tuition exemptions.[2] Actual construction outlays during the period amounted to $2,334,602. During the 1995-1996 12-month period, MSU was the recipient of $5.2 million of local funds, which included gifts and grants. Some of these resources were in the form of endowments and the impact will be felt by the institution over the coming years. However, approximately $217,146 of these resources was spent during the 1995-1996 12-month period and is reflected in the normal expenditure process. MSU was thus responsible for direct expenditures of $40,322,402 during the 1995-1996 year.

Midwestern State University brings about 3,000 students to Wichita County. Furthermore, it keeps students in Wichita County who otherwise would have left to pursue their education or career preparation in other areas. A survey of 160 MSU students in 1997 revealed that they spent an average of $10,340 for the two academic semesters. The average enrollment over the nine-month academic period was 5,669. Total expenditures for the nine-month period by MSU students are thus estimated to have been approximately $58,617,460.

The two summer sessions combined equal 20 percent of the two regular semesters increasing the overall expenditures to $70,340,952. Financial aid in the amount of $7,026,090 was subtracted from the expenditures to avoid double counting. Scholarships in the amount of $1,100,529 and financial aid exemptions, which were estimated at $2,625,865, were also deducted from the overall total leaving net total student expenditures of $59,588,468.

Estimates for the 1995-1996 year indicate that there were 26,740 individuals who visited MSU from areas outside of Wichita Falls. These individuals came to attend a variety of programs including campus visits sponsored by School Relations, athletic programs, Continuing Education programs, and other events such as the Odyssey of the Mind, graduation ceremonies, Homecoming, Honors Symposium, Model Arab League, and band camps. Each outside visitor is conservatively estimated to have spent $25, resulting in a total outlay of $668,500.

Midwestern State University was responsible for expenditures amounting to $100,579,370 during the 1995-1996 12-month academic year. The total expenditures included payments for salaries, wages, utilities, equipment, materials, supplies, scholarships, grants, construction, and all types of student and visitor expenditures.

Income and social security taxes take an estimated 20 percent of gross salaries. It is also estimated that approximately 25 percent of gross income received by MSU personnel are spent outside of the Wichita Falls area. Individuals who are employed by MSU tend to save five percent of their gross income.

Given the above assumptions, the multiplier effect, which indicates the amount of income generated by a given amount of expenditure, will create an income for Wichita County of approximately twice the amount of the original gross income. As a demonstration, when $1 gross income is paid to a faculty member, that individual would spend 25 cents outside Wichita County, 20 cents in income and social security taxes, insurance, and retirement deductions, and save approximately 5 cents. The individual would spend 50 cents out of $1 within Wichita County. Then, an individual receiving the 50 cents in Wichita County will pay 20 percent for the taxes, insurance, and other deductions, save 5 percent and spend 25 percent outside of the County. The individual would spend 50 percent of his income, 25 cents, in Wichita County. The process will continue until the original $1 of gross income is taken out of the income stream cycle. By the time this takes place, the income generated by the original $1 of income, given our assumption, will be $2. This $2 will consist of the original $1 of income paid by MSU plus an additional $1 of income generated by its being spent several times. The multiplier is estimated to be two (2).

The estimated income generated in Wichita County by Midwestern State University during the 1995-1996 academic year amounts to $201,158,740 ($100,579,370 x 2). The economic impact of MSU on Wichita County is significant. The university's employment of 867 individuals represented 1.5 percent of the total employment in Wichita County.[3] Assuming a multiplier of 2, during the period under analysis MSU is responsible for generating approximately 15 percent of the aggregate household income in Wichita County.[4]

A new full-time student from outside the area who attends MSU spends on average $10,340 for the two regular semesters. Assuming a multiplier of 2, the economic impact of each student on the County's income is $20,680.

INDIRECT IMPACT

Universities differ from the usual manufacturing corporations in that they do not pay corporate profit taxes. Nor do they pay for raw materials used in the manufacturing process. Institutions of higher learning do spend a higher percentage of their total operating costs for wages and salaries than do firms in the manufacturing sector. For example, during the year of this study MSU spent 62 percent of its operating budget for wages and salaries compared to 40 percent for manufacturing in the United States in 1990.[5] The significance of this difference is that a university such as MSU is spending a larger percentage of its expenditures on individuals who reside in the immediate community. This fact compares favorably with manufacturing plants that will likely purchase their equipment and raw materials outside the area where the plant is located.

The tax incentive aspect is a two-edged sword. Communities often have to make significant tax concessions, provide free physical facilities, and attractive credit terms in order to attract desired producers. The danger exists that as they close their doors, communities are left with the financial burden. Institutions of higher learning on the other hand tend to be stable as their closing is extremely rare and they tend to be much less sensitive to business cycles than are the manufacturing concerns. Because of this, they are a stabilizing force in the areas they are located. Industries are looking to upgrade the skills of their employees and training programs are thus becoming increasingly critical to the economic development. The cultural attractions and programs to improve the quality of life, which are enhanced by an active university, are major positive factors in the overall economic health of an area. This is a factor, which is hard to quantify, but its presence is very real.

SUMMARY

Midwestern State University employed an equivalent of 867 full-time individuals during the 1995-1996 academic year. The university was responsible for generating annual expenditures in Wichita County during this 12-month period of $201,158,740. On average, MSU full-time students spent $10,340 over a nine-month period. Universities such as MSU, when compared with manufacturing plants, have some economic advantages. These include a high percentage of their expenditures going to wages and salaries, economic stability and long-term permanence. Those areas that have a university located within their region have a significant advantage in economic development compared to those that do not. The quality of life in an area is enhanced by the presence of a university because it provides cultural entertainment and athletic event opportunities for area citizens.

NOTES

1. This is an updated version of the article by Louis J. Rodriguez and Yoshi Fukasawa, "Economic Impact of a University on the Regional Economy: Midwestern State University, A Case Study, *Midwestern Business and Economic Review,* No. 12, Fall 1990, pp. 1-3.

2. In a strict sense, financial exemptions are potential income not collected and are a non-expenditure item.

3. The average employment in Wichita Falls MSA (Wichita County) was 57,700 in 1995. See *Texas Labor Market Review* various issues.

4. The aggregate household income of Wichita County was $1,376,251,200 in 1995. See U.S. Department of Commerce, *Census of Population and Housing, Summary,* File 3A, and CD-ROM.

5. The figure represents the ratio of payroll to the total value added in the manufacturing sector in 1990. See *Statistical Abstract of the United States, 1992,* p. 733.

MSU Economic Impact Academic Year 1995-1996	
The University	
Wages and Salaries	$16,708,351
Utilities, supplies, equipment repairs, travel, benefits, insurance	10,309,819
Sub-total	$27,018,170
Financial Aid	7,026,090
Scholarship	1,100,529
Financial aid exemption	2,625,865
Construction	2,334,602
Endowments	217,146
Sub-total	$13,304,232
Total	$40,322,402
The Students	
Two regular semesters ($10,340 X 5,669)	$58,617,460
Summer Semester	11,723,492
Sub-total	$70,340,952
- Financial Aid	-7,026,090
- Scholarship	-1,100,529
- Financial Aid exemptions	-2,625,865
Total	$59,588,468
The Visitors	
$25 x 26,740	$668,500
Grand Total	$100,579,370
Total Impact (Grand Total x 2)	$201,158,740

IDENTIFYING WINNERS AND LOSERS: AN ANALYSIS OF GROWTH FUNDS

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INTRODUCTION

Considerable research on mutual fund performance has focused on two areas: one area examines whether mutual fund managers as a group outperform the market; the second examines consistency of performance of winners and losers. Fama (1991) summarizes the results in the first area. The most frequently cited early research on mutual funds was by Jensen (1968) who examines two questions: (1) whether fund managers have access to special information which allows them to earn abnormal profits, and (2) whether some funds are better than others in uncovering useful information. He found that over a ten-year period, in 89 out of 115 cases, investors would have fared better holding the market portfolio (or a proxy thereof) than investing in mutual funds. On average, the wealth of an investor holding mutual funds is fifteen percent less than the market portfolio. Even if the loading charges are ignored, mutual funds under-performed the market by minus nine percent over the period. Jensen added back all published expenses of the mutual funds to their returns, and found them to trail the market by minus two and a half percent over the ten years. Jensen also did not find individual funds which consistently performed better than average.

Henriksson (1984) tested 116 mutual funds for the February 1968 to June 1980 period and concluded that fund managers have adequate private information to cover expenses and management fees. However, they do not cover load fees. Chang and Lewellen (1984) got similar results for the period 1971 to 1979. Ippolito (1989) used a larger sample (143 funds) and a longer period (1965-1984) and found that fund returns, after expenses were 0.83 percent above the SML and concluded that informed investors are rewarded for their information costs. Elton, Gruber, Das and Hklarka (1993) confirmed Ippolito's results using his methodology, but they then used a model with three factors: the S&P 500, a portfolio tilted towards non-S&P 500 stocks and a proxy for a market portfolio of bonds. This produced negative abnormal returns of 1.1 percent per year. These results matched the findings of Brinson, Hood and Beebower (1986) who examined the returns on 91 large corporate pension plans for 1974-1983. Bogle (1992, 1994) asserted that if passive managers operate at a lower cost than active managers, they would provide excess net returns compared to active managers implying that the average active fund manager wastes resources in an effort to earn excess returns. In a survey article on studies of mutual fund performance, Ippolito (1993) concluded that (1) mutual fund returns are generally consistent with the hypothesis that funds' risk-adjusted performance, net of expenses, is statistically indistinguishable from that of index funds and (2) the evidence is generally inconsistent with the hypothesis that mutual funds essentially waste their expenditures in a futile effort to find and act on new information.

Recent research in the second area, namely the consistency of performance of mutual funds appears to support the view that winners continue to be winners. Grinblatt and Titman (1992) split a ten-year sample into two five-year sub-periods, computed abnormal returns of each fund for each sub-period, and estimated the slope coefficient in a cross-sectional regression of abnormal returns computed from the second sub-period on abnormal returns computed from the first sub-period. They found positive persistence in mutual fund performance. Henricks, Patel and Zeckhauser (1993) found that a strategy of selecting, every quarter, the top performers based on the last four quarters significantly outperform the average mutual fund, and funds that perform poorly in the most recent year continue to be inferior performers in the near term. Goetzmann and Ibbotson (1994) used two-year, one-year and monthly selection and measurement periods and concluded that the results are consistent with the repeat winner hypothesis.

This study examines the performance of mutual funds which are listed as growth funds in Morningstar's computerized database. It is different from earlier studies because it considers loads and taxes. The purpose of this study is to determine whether it is possible to identify consistent winners and losers.

DATA, METHODOLOGY AND RESULTS

Morningstar's database of mutual funds was used to select the growth funds to be evaluated. Of the 726 growth funds listed, 137 funds had ten year annualized returns greater than zero for the period 1984-1994. Over the eleven year period, ten funds underwent a name change. However, verifying these changes with the mutual fund families involved allowed us to maintain these funds in our data set. Two funds changed investment objective during the most recent year of data collection and also remained. One fund changes to a closed end fund and was dropped from the sample. For each fund, six different scenarios are examined: (1) loads and taxes are ignored and the fund holdings are not liquidated (NLNTNI); (2) taxes are paid, but loads are ignored and the funds are not liquidated (NLNTNL); (3) taxes are paid and the funds are liquidated at the end of the holding period, but loads are ignored (NLTL). The scenario is repeated after accounting for loads (LNTNL, LTNL, and LTL) resulting in a total of six scenarios. Returns for each fund were extracted under each of the six scenarios. Tax rates assumed were 31 percent income tax and 28 percent capital gains tax. A base period is used to

rank mutual fund performance and subsequent performance is measured over the test period. Three difference base/test periods are used: (1) one year base period and one year test period; (2) two year base period and two year test period; and (3) five year base period and five year test period.

One Year Returns

Mutual funds were grouped into quintiles based on one-year returns. Funds in the top to bottom quintile were ranked 1 to 5. Quintile ranks were computed for the same funds for the next year. Using 1984 to 1993 as base years and 1985 to 1994 as test years, average quintile ranks were computed under each of the six scenarios. The results are shown in Table 1a. Analysis of variance test results for the six scenarios are shown in Table 1b. The test reveal that when loads are ignored, there is no difference in the mean quintile ranks during the test period. When loads are included, the differences are significant. Most funds in the top quintile were no-load funds, whereas most funds in the bottom quintile were load funds (Table 1c). Therefore, investors with one-year investment horizons should avoid load funds. Since it is unlikely that load funds will be held for short periods of one or two years, loads are ignored for the two-year holding periods and considered for only five-year holding periods.

Two Year Returns

For this part of the study, two-year returns were used in place of one-year returns. The mean quintile ranks are shown in Table 2a. Analysis of variance test results for the three no load scenarios are shown in Table 2a. As explained in the previous paragraph, loads were ignored for this short holding period. ANOVA results reveal that there is no difference in quintile ranks over the test periods, implying regression to the mean. A conclusion that can be derived from the one-year and two-year holding periods results is that for short term holding periods, the best funds do not out perform the worst funds.

Five Year Returns

Five-year returns are probably more appropriate to judge mutual funds returns. Five-year returns and Shape[1], Treynor[2] and Jensen[3] measures were computed for each fund for the periods 1985-1989 and 1990-1994 and funds were ranked by each of these measures. Funds were grouped into quintiles based on their 1985-1989 (formation period) ranks for each of the four categories. Mean ranks for each quintile were calculated for the period 1990-1994 (test period). The results are shown in Table 3a. There is obvious evidence of regression towards the mean, but the average ranks of the funds in the top two quintiles remained higher than the ranks of the bottom two quintiles in the test period with the exception of the following:

The Sharpe ranks of the second quintile in the NLTL and NLTNL scenarios were lower than that of the fourth quintile.

In all other scenarios, the ranks of the first and second quintiles remained higher than the fourth and fifth quintile funds.

In order to assess if the differences in ranks remained significant in the test periods, paired one-tailed t-test were performed for all scenarios. The results are shown in Table 3b. In every scenario, the ranks of the funds in the first quintile were significantly higher than the ranks of the funds in the fourth and fifth quintiles at the 5 percent level. The ranks of funds in the second quintile were also higher than the ranks of the funds in the fourth and fifth quintiles at the 10 percent significance level except for the following:

Returns rank of 2 vs 4 in the NLNTNL scenario,   **Sharpe rank of 2 vs 5 in the NLTL scenario,**
Sharpe rank of 2 vs 4 in the NLNTNL scenario,   **Sharpe rank of 2 vs 4 in the LNTNL scenario,**
Treynor rank of 2 vs 4 in the NLNTNL scenario,   **Treynor rank of 2 vs 5 in the LTNL scenario,**
Treynor rank of 2 vs 5 in the NLTNL scenario,   **Returns rank of 2 vs 4 in the LTL scenario, and**
Returns rank of 2 vs 4 in the NLTL scenario,   **Sharpe rank of 2 vs 4 in the LTL scenario.**
Treynor rank 2 vs 5 in the NLTL scenario,

In addition to the above, the second quintile funds failed to outperform the fourth and fifth quintile funds at the 5 percent significance level in the following additional cases:

Sharpe rank of 2 vs 4 in the NLTNL scenario,
Sharpe rank of 2 vs 5 in the NLTNL scenario,
Sharpe rank of 2 vs 5 in the LNTNL scenario,
Treynor rank of 2 vs 4 in the LTNL scenario,
Sharpe rank of 2 vs 4 in the LTNL scenario,
Treynor rank of 2 vs 5 in the LTL scenario, and
Sharpe rank of 2 vs 5 in the LTL scenario.

From this evidence one can conclude that funds in the second quintile do not outperform funds in the fourth and fifth quintile on a consistent basis over the long run.

Conclusion

Over short holding periods of one to two years there is no evidence of persistence in mutual fund performance. There appears to be a tendency to regress towards the mean in all three no load scenarios. If load funds are purchased for short holding periods, they underperform no load funds.

The results are different for five-year holding periods. Under all six scenarios using risk-adjusted and risk-unadjusted ranks, the top quintile funds outperform the funds in the fourth and fifth quintiles. However, funds in the second quintile do not consistently outperform funds in the fourth and fifth quintiles, particularly when returns are adjusted for risk.

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END NOTES

1. The Sharpe measure is measured by the equation:

$$S = (R_i - R_f) / \sigma_i$$

Where S is the Sharpe measure, Ri is the return on the portfolio i, R_f is the risk-free rate, and σ_i is the standard deviation of returns of security i.

2. The Treynor measure is measured by the equation:

$$T = (R_i - R_f) / \beta_i$$

Where T is the Treynor measure, R_i is the return on the portfolio i, R_f is the risk-free rate, and β_i is the standard deviation of returns of security i.

3. The Jensen α is derived from the equation:

$$R_i - R_f = \alpha + \beta_i(_m - R_f)$$

R_i is the return on the portfolio i, R_f is the risk-free rate, and β_i is the standard deviation of returns of security I. α is interpreted as risk-adjusted excess returns.

Table 1a
One Year Mean Quintile Standing

Base Year: 1984 Test Year: 1985

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.97	3.04	3.19	2.67	2.67	2.74
2	2.67	2.70	2.67	2.37	2.33	2.44
3	3.33	3.41	3.52	3.56	3.26	3.33
4	2.93	2.78	3.19	3.26	3.41	3.30
5	2.96	3.21	2.62	3.28	3.45	3.31

Base Year: 1989 Test Year: 1990

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.76	2.78	2.89	2.41	2.37	2.44
2	2.74	2.81	2.67	2.59	2.56	2.74
3	2.89	3.92	3.11	3.07	3.19	2.74
4	3.11	3.22	2.96	3.48	3.44	3.67
5	3.37	3.38	3.48	3.55	3.55	3.52

Base Year: 1985 Test Year: 1986

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.31	2.22	2.22	2.15	2.33	2.22
2	2.78	2.89	3.07	2.70	2.33	2.56
3	3.07	3.11	3.07	2.93	3.11	2.96
4	3.19	3.17	3.11	3.52	3.37	3.56
5	3.56	3.52	3.62	3.79	3.93	3.79

Base Year: 1990 Test Year: 1991

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.66	3.48	2.85	2.44	2.48	2.48
2	2.63	3.30	2.81	2.67	2.70	2.85
3	3.15	2.89	3.15	3.33	3.48	3.52
4	3.33	2.63	3.48	3.52	3.41	3.26
5	3.11	2.86	2.86	3.10	3.07	3.03

Base Year: 1986 Test Year: 1987

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.72	2.93	2.85	2.41	2.48	2.41
2	2.89	2.96	2.59	3.00	2.89	2.70
3	2.96	2.89	3.19	2.63	2.74	3.15
4	2.96	2.93	3.22	3.78	3.31	3.85
5	3.33	3.41	3.28	3.31	3.33	3.03

Base Year: 1991 Test Year: 1992

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	3.79	3.78	3.70	3.33	3.41	3.41
2	3.04	3.15	3.41	3.00	3.11	2.96
3	2.89	2.89	2.74	3.19	2.93	3.15
4	2.93	2.89	2.93	2.81	2.81	2.89
5	2.15	2.48	2.41	2.83	2.90	2.76

Base Year: 1987 Test Year: 1988

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	3.79	3.93	3.93	3.52	3.48	2.96
2	3.48	3.74	3.56	2.78	2.81	2.78
3	2.52	2.67	3.15	3.33	3.33	2.74
4	2.96	2.89	2.07	2.96	2.93	3.30
5	2.04	2.00	2.48	2.59	2.62	3.34

Base Year: 1992 Test Year: 1993

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	2.03	2.00	2.04	1.96	1.96	2.22
2	2.67	2.70	2.78	2.44	2.44	2.19
3	3.07	3.11	3.19	2.70	2.67	3.07
4	3.60	3.26	3.26	3.56	3.74	3.37
5	3.89	4.00	3.83	4.38	4.24	4.20

Base Year: 1988 Test Year: 1989

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	3.34	3.41	3.52	3.15	3.07	3.15
2	3.11	3.30	3.03	3.11	3.11	3.00
3	3.33	3.22	3.27	2.81	2.89	3.15
4	2.48	2.70	2.67	3.07	3.15	3.11
5	2.56	2.55	2.66	3.00	2.93	2.76

Base Year: 1993 Test Year: 1994

Quintile	Scenarios					
	NLNTNL	NLTL	NLTNL	LNTNL	LTL	LTNL
1	3.52	3.44	3.44	3.22	3.19	2.81
2	2.85	2.93	2.78	2.48	2.59	2.78
3	2.93	3.27	3.07	3.00	2.93	2.81
4	2.67	2.56	2.93	3.15	3.22	3.41
5	2.85	2.93	2.93	3.28	3.21	3.31

Table 1b
One Year Holding Period ANOVA

Scenario	F-Value	p-Value
NLNTNL	0.15	0.9625
NLTNL	0.35	0.8460
NLTL	0.22	0.9287
LNTNL	5.41	0.0012
LTNL	9.35	0.0001
LTL	5.94	0.0006

Table 1c
Load vs No Load Funds per Quintile
1 Year Holding Period Returns

Year: 1985

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	9	18	1	9	18	1	8	19
2	10	17	2	10	17	2	12	15
3	17	10	3	15	12	3	14	13
4	20	7	4	21	6	4	20	7
5	20	7	5	21	8	5	22	7

Year: 1986

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	5	22	1	4	23	1	6	21
2	10	17	2	9	18	2	10	17
3	19	8	3	19	8	3	17	10
4	18	9	4	19	8	4	19	8
5	24	5	5	25	4	5	24	5

Year: 1987

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	7	20	1	7	20	1	9	18
2	13	14	2	11	16	2	12	15
3	13	14	3	15	12	3	13	14
4	20	7	4	20	7	4	21	6
5	23	6	5	23	6	5	21	8

Year: 1988

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	8	19	1	8	19	1	8	19
2	8	19	2	7	20	2	6	21
3	17	10	3	18	9	3	16	11
4	22	5	4	22	5	4	20	7
5	21	8	5	21	8	5	26	3

Year: 1989

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	7	20	1	7	20	1	7	20
2	13	14	2	10	17	2	13	14
3	15	12	3	17	10	3	15	12
4	18	9	4	19	8	4	17	10
5	23	6	5	23	6	5	24	5

Year: 1990

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	8	19	1	7	20	1	8	19
2	14	13	2	13	14	2	14	13
3	15	12	3	17	10	3	16	11
4	19	8	4	18	9	4	18	9
5	20	9	5	21	8	5	20	9

Year: 1991

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	8	19	1	8	19	1	8	19
2	10	17	2	9	18	2	9	18
3	17	10	3	17	10	3	17	10
4	19	8	4	20	7	4	22	5
5	22	7	5	22	7	5	20	9

Year: 1992

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	12	15	1	12	15	1	12	15
2	12	15	2	13	14	2	12	15
3	15	12	3	14	13	3	15	12
4	17	10	4	16	11	4	17	10
5	20	9	5	21	8	5	20	9

Year: 1993

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	8	19	1	8	19	1	6	21
2	9	18	2	7	20	2	10	17
3	17	10	3	17	10	3	16	11
4	20	7	4	22	5	4	22	5
5	22	7	5	22	7	5	22	7

Year: 1994

	Scenario: LNTNL			Scenario: LTL			Scenario: LTNL	
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	9	18	1	8	19	1	7	20
2	11	16	2	11	16	2	13	14
3	16	11	3	16	11	3	14	13
4	19	8	4	20	7	4	19	8
5	21	8	5	21	8	5	23	6

Table 2a
Two Year Mean Quintile Standing

Base Years 1984-85 Quintile	Test Years NLNTNL	1986-87 Scenarios NLTL	NLTNL		Base Years 1988-89 Quintile	Test Years NLNTNL	1990-91 Scenarios NLTL	NLTNL
1	3.11	2.96	2.56		1	2.89	2.70	2.59
2	2.62	2.67	3.15		2	3.08	3.15	3.15
3	2.96	2.96	3.30		3	2.85	2.86	3.04
4	3.04	3.00	2.85		4	2.92	2.96	2.96
5	3.37	3.46	3.28		5	3.37	3.39	3.38

Base Years 1985-86 Quintile	Test Years NLNTNL	1987-88 Scenarios NLTL	NLTNL		Base Years 1989-90 Quintile	Test Years NLNTNL	1991-92 Scenarios NLTL	NLTNL
1	3.21	3.15	3.11		1	2.57	2.41	2.67
2	2.96	3.00	2.44		2	3.50	3.44	2.96
3	2.89	2.93	3.15		3	3.07	3.14	3.26
4	2.69	2.74	3.15		4	3.04	2.96	3.37
5	3.33	3.25	3.28		5	3.00	3.11	2.90

Base Years 1986-87 Quintile	Test Years NLNTNL	1988-89 Scenarios NLTL	NLTNL		Base Years 1990-91 Quintile	Test Years NLNTNL	1992-93 Scenarios NLTL	NLTNL
1	3.57	3.59	3.48		1	3.64	3.56	3.48
2	3.12	3.07	3.78		2	3.69	3.63	3.78
3	2.74	2.82	2.96		3	3.26	3.29	3.33
4	3.08	2.89	2.22		4	2.65	2.56	2.74
5	2.67	2.71	2.72		5	2.00	2.07	1.90

Base Years 1987-88 Quintile	Test Years NLNTNL	1989-90 Scenarios NLTL	NLTNL		Base Years 1991-92 Quintile	Test Years NLNTNL	1993-94 Scenarios NLTL	NLTNL
1	3.75	3.52	3.44		1	3.11	3.22	3.00
2	3.04	3.26	3.33		2	2.58	2.63	2.48
3	3.07	3.04	2.93		3	3.00	2.89	3.15
4	2.85	2.85	2.93		4	3.12	3.15	3.00
5	2.47	2.43	2.55		5	3.30	3.18	3.48

Table 2b
Two Year Holding Period ANOVA

Scenario	F-Value	p-Value
NLNTNL	1.03	0.4069
NLTNL	0.57	0.6854
NLTL	0.73	0.5773

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	53.57	-39.07
2	42.00	59.96	-17.96
3	69.00	72.26	-3.26
4	96.00	69.85	26.15
5	123.50	87.85	35.65

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	16.57	-2.07
2	42.00	54.89	-12.89
3	69.00	65.15	3.85
4	96.00	91.44	4.56
5	123.50	118.07	5.43

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	41.46	-26.96
2	42.00	66.70	-24.70
3	69.00	79.74	-10.74
4	96.00	70.44	25.56
5	123.50	86.41	37.09

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	54.46	-39.96
2	42.00	54.00	-12.00
3	69.00	71.48	-2.48
4	96.00	82.33	13.67
5	123.50	82.75	40.75

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	32.57	-18.07
2	42.00	73.63	-31.63
3	69.00	69.26	-0.26
4	96.00	82.78	13.22
5	123.50	87.43	36.07

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	47.82	-33.32
2	42.00	63.30	-21.30
3	69.00	76.96	-7.96
4	96.00	81.19	14.81
5	123.50	76.25	47.25

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	55.96	-41.46
2	42.00	57.93	-15.93
3	69.00	71.37	-2.37
4	96.00	71.11	24.89
5	123.50	88.39	35.11

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	32.18	-17.68
2	42.00	60.37	-18.37
3	69.00	78.96	-9.96
4	96.00	84.11	11.89
5	123.50	89.96	33.54

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	47.96	-33.46
2	42.00	75.41	-33.41
3	69.00	70.04	-1.04
4	96.00	69.22	26.78
5	123.50	82.64	40.86

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	49.71	-35.21
2	42.00	63.11	-21.11
3	69.00	69.93	-0.93
4	96.00	77.89	18.11
5	123.50	84.50	39.00

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	18.29	-3.79
2	42.00	50.11	-8.11
3	69.00	69.59	-0.59
4	96.00	89.33	6.67
5	123.50	117.75	5.75

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	42.75	-28.25
2	42.00	69.30	-27.30
3	69.00	83.19	-14.19
4	96.00	68.33	27.67
5	123.50	81.93	41.57

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	54.14	-39.64
2	42.00	52.15	-10.15
3	69.00	74.78	-5.78
4	96.00	89.11	6.89
5	123.50	75.14	48.36

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	31.93	-17.43
2	42.00	68.85	-26.85
3	69.00	71.96	-2.96
4	96.00	85.56	10.44
5	123.50	87.39	36.11

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	49.61	-35.11
2	42.00	60.93	-18.93
3	69.00	77.44	-8.44
4	96.00	77.26	18.74
5	123.50	80.07	43.43

No Load, No Taxes, No Liquidation

Returns Rank

Quintile	1985-89	1990-94	Difference
1	14.50	49.50	-35.00
2	42.00	67.37	-25.37
3	69.00	66.48	2.52
4	96.00	75.56	20.44
5	123.50	86.18	37.32

Treynor Rank

Quintile	1985-89	1990-94	Difference
1	14.50	33.54	-19.04
2	42.00	60.70	-18.70
3	69.00	72.11	-3.11
4	96.00	88.74	7.26
5	123.50	90.43	33.07

Sharpe Rank

Quintile	1985-89	1990-94	Difference
1	14.50	49.00	-34.50
2	42.00	72.37	-30.37
3	69.00	68.67	0.33
4	96.00	77.04	18.96
5	123.50	78.32	45.18

No Load, No Taxes No Liquidation		No Load, No Load, No Taxes No Liquidation		No Load, No Taxes No Liquidation		No Load, No Taxes No Liquidation		No Load, No Taxes No Liquidation		No Load, No Taxes No Liquidation	
Returns Rank		**Returns Rank**		**Returns Rank**		**Returns Rank**		**Returns Rank**		**Returns Rank**	
Quintile 1990-94		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**	
1 vs 4	0.038	1 vs 4	0.004	1 vs 4	0.015	1 vs 4	0.003	1 vs 4	0.001	1 vs 4	0.006
1 vs 5	0.000	1 vs 5	0.001	1 vs 5	0.018	1 vs 5	0.001	1 vs 5	0.011	1 vs 5	0.001
2 vs 4	**0.185**	2 vs 4	0.022	2 vs 4	**0.128**	2 vs 4	0.040	2 vs 4	0.004	2 vs 4	**0.172**
2 vs 5	0.002	2 vs 5	0.011	2 vs 5	0.001	2 vs 5	0.010	2 vs 5	0.003	2 vs 5	0.024
Treynor Rank		**Treynor Rank**		**Treynor Rank**		**Treynor Rank**		**Treynor Rank**		**Treynor Rank**	
Quintile 1990-94		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**	
1 vs 4	0.020	1 vs 4	0.000	1 vs 4	0.000	1 vs 4	0.025	1 vs 4	0.000	1 vs 4	0.000
1 vs 5	0.011	1 vs 5	0.000	1 vs 5	0.000	1 vs 5	0.015	1 vs 5	0.000	1 vs 5	0.000
2 vs 4	0.000	2 vs 4	**0.392**	2 vs 4	0.008	2 vs 4	0.000	2 vs 4	*0.073*	2 vs 4	0.001
2 vs 5	0.000	2 vs 5	**0.383**	2 vs 5	**0.124**	2 vs 5	0.000	2 vs 5	**0.180**	2 vs 5	*0.056*
Sharpe Rank		**Sharpe Rank**		**Sharpe Rank**		**Sharpe Rank**		**Sharpe Rank**		**Sharpe Rank**	
Quintile 1990-94		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**		**Quintile 1990-94**	
1 vs 4	0.011	1 vs 4	0.009	1 vs 4	0.004	1 vs 4	0.007	1 vs 4	0.001	1 vs 4	0.006
1 vs 5	0.000	1 vs 5	0.004	1 vs 5	0.045	1 vs 5	0.000	1 vs 5	0.001	1 vs 5	0.002
2 vs 4	**0.337**	2 vs 4	*0.063*	2 vs 4	**0.274**	2 vs 4	**0.476**	2 vs 4	*0.073*	2 vs 4	**0.338**
2 vs 5	0.006	2 vs 5	*0.063*	2 vs 5	**0.156**	2 vs 5	*0.063*	2 vs 5	0.010	2 vs 5	*0.094*

Table 3c
Load vs No Load Funds per Quintile

5 Year Holding Period Returns

Years: 1990-94

Scenario: LNTNL			Scenario: LTL			Scenario: LTNL		
Quintile	Load	No Load	Quintile	Load	No Load	Quintile	Load	No Load
1	10	17	1	12	15	1	14	13
2	17	10	2	16	11	2	14	13
3	16	11	3	14	13	3	12	15
4	15	12	4	17	10	4	20	7
5	18	11	5	17	12	5	16	13

THE RELATIONSHIP BETWEEN INCREASE IN DIVIDENDS ANNOUNCEMENTS, RETURNS, AND GROWTH

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INTRODUCTION

The positive signaling effects of an unexpected increase in dividends are well documented in the finance literature (Miller and Rock [6], Aharony and Swary [1], Bhattacharya [2], Charest [3], Pettit [7]). However, recently John and Lange [5] theorized that investors might not always interpret a dividend increase as positive; it may signal a reduction in investment opportunities instead of higher profits. High growth firms with many investment opportunities should be reinvesting their earnings into these profitable opportunities instead of paying dividends. Investors may interpret management's decision to increase dividends for these firms as indicating that the firm has fewer investment opportunities than anticipated. However, for mature firms with fewer investment opportunities, a dividend increase is positive. The dividend increase in this case indicates that projects have been more profitable than expected, justifying an increase in dividends.

Our paper examines how investors perceive an unexpected dividend increase announcement for "High" growth versus "Low" growth firms. Growth is defined in terms of changes in assets in the two years before the announcement. We hypothesize that the percentage increase in dividends is negatively related to cumulative abnormal returns (CARs) for High growth firms but positively related to CARs for Low growth firms. Our results found that the percentage increase in dividends did not impact the CARs of Low growth firms, but small increases in dividends have a positive impact on CARs of High growth firms which diminish with the size of the dividend increase.

DATA

An unexpected dividend increase is defined as an increase in quarterly dividends following at least eight quarters of constant dividends. The COMPUSTAT database was examined for all firms with an unexpected dividend increase over the five-year period 1989-1993. The *Wall Street Journal Index* was used to find the announcement date. The event period is the announcement date and the day following (t = 0,+1) due to possible delays in reporting the announcement by the financial press. Unexpected dividend increase announcements with confounding announcements two days before or after the dividend announcement were eliminated. Return data for each security and the value-weighted market index were obtained from the Center for Research in Security Prices (CRSP) for the period 125 days before the unexpected dividend increase announcement to 1 day after the announcement. Our final sample consists of 149 announcements.

"High" growth versus "Low" growth firms are defined in terms of growth in assets two years before the announcement. Since dividend announcements may occur anytime within a quarter, we could not be sure that the quarterly financial statements from the quarter before the announcement (Q=-1) would be available when the announcement occurred. Therefore, growth in assets is defined as the percentage change in assets two quarters before the announcement (Q=-2) relative to nine quarters before the announcement (Q=-9). "High" growth firms are the 75 firms with the highest percentage change in growth, and "Low" growth firms are the 74 firms with the lowest percentage change in growth.

REGRESSION MODEL

Abnormal returns, or returns that differ from what is predicted based on the risk of the firm, are used to examine the impact of unexpected increase in dividends announcements on the firm. Changes in returns caused by new information (i.e., the dividend increase) should be immediately incorporated in the returns. Therefore, the dependent variable is the cumulative average returns (CARs) over the event period (t=0, +1).

To avoid confounding the estimation period and the event period, the five days preceding the announcement are omitted. An estimation period of t=-125,-6 days is used to estimate returns based on the single-index model as follows:

$$R_{it} = \acute{\alpha}_i + \beta_i {}^*R_{mt} \tag{1}$$

where,

R_{it} = actual returns on security i on day t

$\acute{\alpha}_i$ = alpha or intercept for the market model regression

β_i = beta or slope for the market model regression

R_{mt} = actual return on value-weighted market index on day t

Abnormal returns are calculated for each security for each day in the event period, t = 0,+1:

$$AR_{it} = R_{it} - (\acute{\alpha}_i + \beta_i * R_{mt}) \qquad (2)$$

The cumulative abnormal return (CAR) is the sum of the abnormal returns over the event period:

$$CAR_i = AR_{io} + AR_{i1} \qquad (3)$$

The independent variable is the percentage change in dividends from the previous dividend announcement. Therefore, the regression model is

$$CAR_i = \alpha + b_i * DIV \qquad (4)$$

where,

DIV = percentage change in dividends

To control for the impact on the size of the percentage change in dividends, our sample was divided into three subgroups: (1) dividend increases of less than 10% (small dividend increase), (2) dividend increases of at least 10% but less than 20% (moderate dividend increase), and (3) dividend increases of at least 20% (large dividend increase). These definitions are similar to ones used by Filbeck and Mullineaux [4] and Charest [3].

RESULTS

Table 1 presents summary statistics for the High growth and Low growth groups. As planned, the two groups are very different in terms of change in assets (growth). The High growth group has an average change in assets of 14.1%, median of 10.7%, and a range of 4.8% to 73.0%. The Low growth group, on the other hand, has an average change in assets of –0.8%, median change of 0.4%, and a range of 4.6% to –48.6%.

In terms of dividend increases, generally, the average increase in dividends is 17.1% with a median increase of 12.5% for the High growth group versus an average increase of 14.4% and a median increase of 8.3% for the Low growth group. Also, a higher percentage of the Low growth group has a smaller dividend increase than the High growth group at 57% versus 43%, respectively.

The asset size of the firms two quarters before the announcement (Q=-2) in the two groups is also different. The average asset size for the High growth firm is $2,885 thousand with a median of $565 thousand, but the average asset size for the Low growth group is slightly larger at $3,369 thousand with a median of $833 thousand.

Finally, in terms of risk as measured by beta, the High growth group has an average beta of 0.690, median beta of 0.581, and a range of beta of 2.154 to –0.259. The Low growth group appears slightly less risky with an average beta of 0.513, a median beta of 0.444, and a range of betas of 1.505 to –0.231. Also, the lower limit of beta is similar for both groups, but the High growth group has a higher upper limit of betas and more firms with betas greater than 1.0 than the Low growth group.

The results of the High growth versus Low growth group's descriptive statistics are not unexpected given the stereotype of High growth versus Low growth firms. The High growth group appears to consist of smaller, more risky firms relative to the Low growth group.

Table 2 provides the results of the regression analysis.

For the total sample, the unexpected dividend increase announcement has a negative impact on CARs for High growth firms, which is significant at the 10% level, but an insignificant impact on Low growth firms. The results for the High growth group is as hypothesized.

Controlling for the magnitude of the dividend increase provides additional insights into how investors react to dividend increases. For High growth firms, a small dividend increase of less than 10% has a significant positive impact on the CARs. For moderate dividend increases between 10% and 20%, the dividend announcement impact is still positive, but it is no longer significant. Finally, for large dividend increases of 20% or more, the dividend impact on the CARs is negative, but not significant.

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Our more detailed analysis indicates that investors' perception of an unexpected dividend increase for a High growth firm may depend on the size of the increase. A small dividend increase is positive indicating profitable projects will continue. But, as the magnitude of the dividend increases, investors appear to discount the signal perhaps questioning why the funds are not used to finance the profitable projects. And, for very large increases in dividends of 20% or more, investors may even perceive the signal to be negative.

The results for the Low growth firms are more clear-cut. Regardless of the amount of the unexpected dividend increase, the CAR-dividend relationship is negative and not significant. Therefore, investors do not appear to give much importance to this relationship for Low growth firms.

CONCLUSION

We hypothesized that investors perceive unexpected dividends increase announcements differently for High growth firms versus Low growth firms. In particular, we hypothesized that investors interpreted an unexpected dividend increase for a High growth firm as an indication of fewer investment opportunities than previously anticipated and that the announcement would have a negative impact on the High growth firms' returns. On the other hand, an unexpected dividend increase for Low growth firm indicates greater profitability than expected, and a positive impact by the announcement on returns was expected.

Our initial results supported the negative return-dividend increase relationship for High growth firms. However, upon further analysis, we found that for High growth firms, small dividend increases have a significantly positive impact on the CARs. This impact tends to diminish as dividends increased to moderate and high levels. For the Low growth group, unexpected dividend increase announcements did not significantly impact the firm's returns regardless of the amount of the dividend increase.

Our results indicate that investors perceive a small dividend increase from a High growth firm as a positive signal. A moderate to large dividend increase, however, may be perceived by investors as indicating fewer investment opportunities than anticipated are available. Our results also indicate that dividend increases do not have much impact on the returns of Low growth firms regardless of the magnitude of the increase. Consequently, how investors interpret a dividend increase appears to be dependent on the magnitude of the dividend increase as well as on the growth of the firm.

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A. **AVERAGE ANNUAL COMPOUND GROWTH IN ASSETS**

	HIGH GROWTH	LOW GROWTH
Average	14.1 %	- 0.8 %
Median	10.7	0.4
Standard Deviation	10.3	6.9
Maximum	73.0	4.6
Minimum	4.8	- 48.6

B. **DIVIDEND INCREASE**

	HIGH GROWTH		LOW GROWTH	
DIVIDEND INCREASE	n	percent	n	percent
0% < increase < 10%	32	43 %	42	57 %
10% < increase < 20%	18	24	13	17
20% < increase	25	33	19	26
	75	100 %	74	100 %

	HIGH GROWTH	LOW GROWTH
Average	17.1 %	14.4 %
Median	12.5	8.3
Standard Deviation	20.6	16.6
Maximum	100.0	100.0
Minimum	1.2	1.3

C. **ASSET SIZE (Q=- 2)**

	HIGH GROWTH	LOW GROWTH
Average	$ 2,885	$ 3,369
Median	565	833
Standard Deviation	6,908	9,149
Maximum	46,742	56,274
Minimum	34	12

D. **BETA**

	HIGH GROWTH	LOW GROWTH
Average	0.690	0.513
Median	0.581	0.444
Standard Deviation	0.511	0.420
Maximum	2.154	1.505
Minimum	- 0.259	- 0.231

TABLE 2: REGRESSION ANALYSIS RESULTS

The dependent variable is the cumulative abnormal returns (CAR) over the event period ($t = 0, +1$), where day $t = 0$ is the announcement date. The independent variable is the percentage increase in unexpected dividends (DIV).

A: **HIGH GROWTH FIRMS**

DIVIDEND INCREASE	alpha	DIV	R^2	n
Total sample	0.0054 (1.60)	- 0.0237 * (1.87)	4.6 %	75
Increase < 10% 32	- 0.0045 (0.67)	0.2138 * (1.76)	9.4	32
10% < Increase < 20%	- 0.0560 (1.72)	0.3835 (1.65)	14.5	18
20% < Increase	0.0089 (1.05)	- 0.0298 (1.56)	9.6	25

B: **LOW GROWTH FIRMS**

DIVIDEND INCREASE	alpha	DIV	R^2	n
Total sample	0.0009 (0.26)	- 0.0119 (0.74)	0.8 %	74
Increase < 10%	0.0089 (1.08)	- 0.1736 (1.23)	3.7	42
10% < Increase < 20%	0.0171 (1.00)	- 0.1290 (0.99)	8.1	13
20% < Increase	0.0007 (0.05)	- 0.0102 (0.30)	0.5	19

absolute t - value in parenthesis

* significant at 0.10

HOME EQUITY LENDING FOR TEXAS

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INTRODUCTION

It is a well known fact that the largest source of capital for the average household is the equity in their residence. The problem facing these households is how to be able to access this source of capital without having to give up the use of the home. The solution has been to access this equity through various types of home equity conversion techniques, such as second mortgages, reverse annuity mortgages, sale and lease backs, and more recently HOME EQUITY LOANS.

A home equity loan (HEL) is a loan secured by the equity in the household's residence. The equity in a particular homestead is the difference between the market value of the property and the balance owing on any loans secured by an interest in the property. The evolution of home equity loans as a source of spendable cash has been mainly due to the high levels of residential price appreciation that have occurred during the last two decades and the federal tax law.

The two major causes of this appreciation have been the increased demand for housing due to income and demographic changes, and the high level of inflation experienced during the 1970's. In 1992 it was estimated that of the approximately 92 million occupied housing units in the United States, 64.2 percent were owner-occupied, with an estimated total value of $4,669.3 billion and an average loan to value ratio of 36.7 percent, resulting in an estimated total equity of $2,955.6 billion [1]. This is an average household equity of approximately $50,000.

The second cause of the increased interest in HEL's is the Tax Reform Act of 1986. Even before the tax changes in 1986, these equity secured loans were attractive as they allowed the home owner to leverage their largest asset, their residence, and thereby access larger amounts of money than by utilizing more traditional forms of consumer debt. Under the 1986 act, the deducibility of interest on consumer debt for federal income tax purposes was phased out, while the deduction for interest paid on home equity loans and residential mortgages was still allowed.

Until 1988 the use of tax deductible HEL's was limited by the tax code to an amount equivalent to the purchase price of the home and the documented cost of improvements to this residence. Subsequent revisions of the Federal tax code now allow tax deductions for home mortgage indebtedness up to $100,000 in excess of purchase money financing, irrespective of how the funds are actually used. For example, the borrower could use the funds for non-real estate related expenditures, including a great many purchases that previously were considered to be consumer debt.

In 1992 it was estimated that approximately 25 percent of consumer debt was thought to be held in the form of home equity debt, and because of the deductibility of the interest paid on HEL's, it is widely believed that consumers have substituted home equity debt for credit card and consumer loan debt. [2] In addition, since the home equity debt is secured by the residential equity, the rate charged the borrower was lower than an unsecured loan rate, usually one to two percentage points above the prime rate. [1]

HEL's are attractive from the stand point of not only the borrower, but also the lender. The lenders have experienced significantly lower delinquency rates and default rates when compared to normal consumer loans. These lower rates, in conjunction with the tax advantage created by the deductibility of HEL interest, have further increased the attractiveness of this financing vehicle.

There are basically two types of HEL's: the first is the traditional closed-end loan, and the second is the open-end loan agreement. Closed-end loans represent the typical second mortgage loans where the property owner receives one lump sum that is repaid in periodic installments of both principal and interest. Interest rates on closed-end loans may be either variable or fixed, and the proceeds from closed-end loans are most commonly used to finance home improvements. The lender is protected from the standpoint that the amount of the loan is set at inception and the value of the collateral for the loan (the second mortgage lien) is improved through the use of the proceeds of the loan.

Open-end loans represent a revolving line of credit with flexible repayment options that may include extended periods of interest only payments. Rates on open-end lines of credit are usually variable with both interest rate caps and floors, and options to convert the loan balance to fixed installment loans at the borrower's discretion. Under open-end lines of credit, the value of the equity cushion, the loan to value ratio, and thus the risk of the loan, constantly changes over the life of the lending agreement due to changes in interest rates, property values, and the use of the credit line by the homeowner. Lenders generally reserve the right to freeze or reduce the credit line if there are significant changes in the value of the collateral or if the

interest rate cap is reached. While this reduces the growth in future indebtedness, it has no effect upon the current loan to value ratio and therefore the lender's exposure to the effects of declining property values.

In 1990 the delinquency rates on closed-end HEL's, open-end HEL's, and normal consumer loans were 1.37 percent, 1.30 percent, and 2.18 percent respectively. [2] At the same time, the default rate on HEL's was significantly less than the one-half to three-fourths percent experienced on other home financing products. [2] The main reason for this differential in delinquency rates and default rates is thought to be that homeowners are much more concerned about the risks represented by the HEL of detrimentally affecting the equity or even ownership of their residence.

While the delinquency and default statistics on HEL's may be lower than other financing products, the inference that there is greater safety in using this type of lending may be misleading. Critics of home equity loans argue that delinquency and default rates on home equity loans are tied to general economic conditions, and as an economic downturn continues or deepens, delinquency and default rates will increase. In addition, relatively recent deterioration in the real estate market has not only slowed the appreciation of property values but in some areas, i.e. California, has actually reduced the value of home equity as collateral. As a result, homeowners are finding themselves owing considerably more than the current market value of their property thereby increasing lender's loan to value ratio and the underlying risk of home equity loans.

There is additional concern that the level of home equity debt will continue to increase as it did during the more recent period of downsizing in middle management, when property owners drew upon their home equity lines of credit as a form of unemployment insurance. Despite these concerns HEL's remain a viable means to convert residential equity into spendable income. According to The University of Michigan Survey Research Center, 13 percent of all homeowners held HEL's in 1994 as compared to 11 percent in 1988 [1]. The major uses of these funds have been for consolidating debt, repaying automobile loans, and repaying credit card debt.

THE PROBLEM

While HEL's are an available means to convert home equity into spendable income in other states, they are not viable in Texas. Texas is the only one of the fifty states that does not allow home equity loans. The reason is the Texas Homestead Act. [3] The key barrier to home equity lending in the state of Texas has been the Act's creation of the homestead exemption, which protects property owners against creditors.

This Act, a part of the Texas Constitution since 1839, was originally passed to encourage the settlement of frontier Texas. While the Act has been amended as recently as last year, it has been consistently broadened as to who or what is included in the homestead exemption. Most simply, the Texas Homestead Act prevents the lender from seizing any property defined by the act as part of the homestead for the repayment of all personal debt except, (1) the purchase money mortgage or loan used to acquire the homestead property; (2) taxes; (3) liens for work and materials used in maintaining or repairing the homestead property; and (4) as of last year, new liens granted incident to a divorce property settlement. In practice, the homestead exemption has been consistently upheld in the courts and liberally interpreted, strengthening its legal status and widening its scope.

The Homestead Act does not prohibit home equity lending, but simply makes all liens except those stated above unenforceable. Thus, the unenforceable lien provision is only a problem when a HEL goes into default and requires foreclosure. If the lenders are unable to enforce the lien against the property, the loan is effectively unsecured. As a result, no lender is willing to make HEL's in Texas.

If the default rate for HEL's is estimated to be between one-half and three-fourths of one-percent, this means that in Texas, more than 99 percent of the potential borrowers cannot access the equity in their homes without abandoning the homestead through the sale of their residence. In 1992, an estimated 60.9 percent of the 6,071 million occupied housing units were owner occupied, and therefore subject to the homestead exemption. These owner-occupied household units were estimated to have a total market value of $220.4 billion and an average loan to value ratio of 44 percent representing total home equity of $123.4 billion. This indicates an average equity of approximately $33,380 for each owner-occupied homestead. [1]

There is and has been pressure from large Texas banks, including the "super regional" banks now operating in the state, to have the Texas Constitution amended or to have the homestead exemption declared unconstitutional thereby allowing second mortgages in Texas. The basic argument for the change is that the accumulated capital contained in the equity in the homestead belongs to the homeowner, and no government has the right to limit the homeowner(s)' ability to utilize the equity value in their homes, whatever their purpose in doing so. This use of state power to deny exercise of a basic right of ownership is arguably unconstitutional. The United States Supreme Court, however, has refused to hear a case addressing the constitutionality of the act.

It was recently announced that there will be another attempt to have the Texas Constitution amended to allow second mortgages. This time the argument is that the original purpose of the act --- to encourage settlement of the frontier --- is no longer relevant. The opponents of nonconforming home equity loans (those loans that do not conform to the current act) allege that the main benefactors of the repeal of the homestead act would be the lending institutions themselves, not homeowners. If the law is repealed the lenders would have the right to encumber the homestead for any loan obligation of the household. Thus, in order for a relatively small percentage of the state's homeowners to acquire a home equity loan, all homeowners would lose the protection of the homestead exemption.

It has also been argued that the Texas Homestead Act is in reality a "straw man," and that property owners in financial distress lose their homes regardless of the protection provided by the law. In a previous publication, it was statistically demonstrated that (1) the act did provide homestead

protection for a significant portion of those homeowners forced to seek the protection of Chapter Seven bankruptcy, and (2) that the Homestead Act is equally protective of all debtors regardless of their previous financial status. [3]

While the decision whether or not to repeal the Homestead Act is largely politically and will not be addressed, this research will attempt to propose a format for home equity in the state of Texas that is consistent with the intent of the Homestead Act.

THE MODEL

The proposed model is designed for the "sandwich generation," that being those households who, when caught between obligations to help support elderly parents, college aged children, or facing substantial medical expenses, find themselves in need of an intermediate term loan. Since the unenforceable lien provision of the Homestead Act is only a problem when a loan goes into default, this model specifically incorporates those loans that go into default. In this model, when a HEL goes into default a new financial instrument is created called a Real Estate Default Certificate. Under the new instrument 1) the lender is paid off at the time of default in a manner consistent with foreclosure procedures in other states, and 2) the homeowner retains a life estate in their residence thereby maintaining the right of occupancy until their death, consistent with the intent of the Homestead Act. Unfortunately even this proposed model is legally unenforceable under the current Texas law.

HELT PLAN
HOME EQUITY LENDING FOR TEXAS
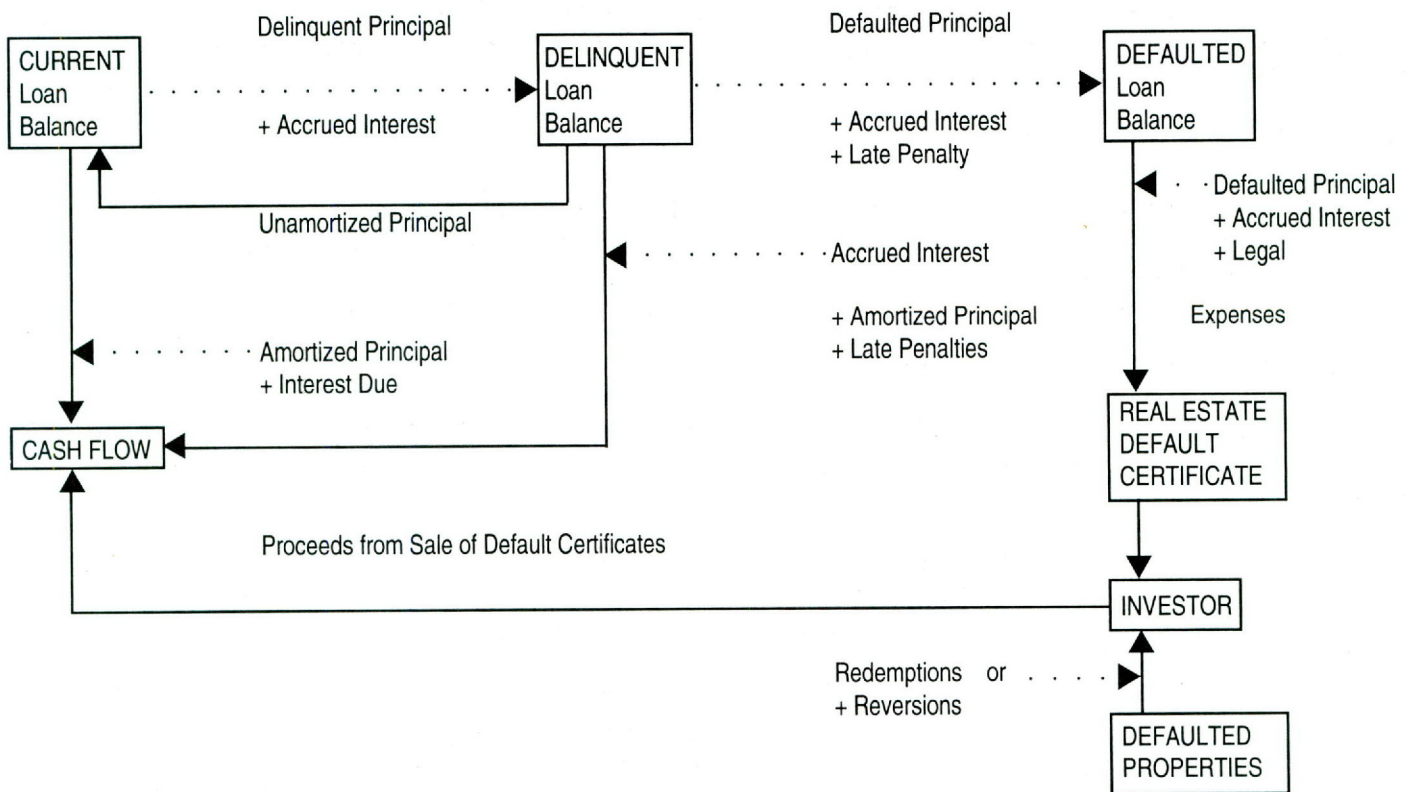
This model is internally funded by the premium paid by those households utilizing the HEL and thereby requires no outside capital. This premium is included in the contract rate for all HEL borrowers and compensates the lender for the losses incurred only upon the defaulted contracts. Thus, the HEL's contract rate consists of the base lending rate, plus this default insurance premium.

The active HEL contacts may be divided into three categories: current contracts, those that are being paid as per the contract; delinquent contracts, those that are late in making the required payments; and defaulted contracts, those that are sufficiently delinquent as to be classified as being in default and would be subject to foreclosure in other states. From the standpoint of the lender, the total outstanding loan balance may be divided into three components, current loan balance, delinquent loan balance, and defaulted loan balance. The first two categories of contracts will be handled as would any other home equity loans. Current loan payments will be taken into current cash flow, the delinquent loans will accrue late charges, and when collected, the delinquent payments including the late charges will be taken into current cash flow and the contracts will then be included in the current loan balance. After a given period, those delinquent loans that have not been brought current by the borrowers' paying the required payments, plus accrued late penalties, are classified as uncollectible. In other states the lender would initiate foreclosure procedures against these borrowers under the state laws where the property is located.

It is at this point that the Real Estate Default Certificate, REDC, is created. This certificate is very similar to a real estate tax certificate whereby the taxing authority issues a certificate or lien against a property whose owner is delinquent in the payment of real estate taxes. The certificate represents

an enforceable claim for the amount of the delinquent taxes, plus any accrued late penalties and legal fees incurred by the taxing authority. This certificate is then sold in the financial markets to an investor who then has the right to collect the amount represented by the tax certificate, plus any penalty interest allowed by state law. The homeowner has the right of equitable interest or the right to redeem his property by paying the amount of the tax certificate, plus the accrued penalty interest within the specified period of equitable redemption, such as one year or two years under state law. If, at the end of the period of equitable redemption the certificate remains unredeemed, the holder of that certificate has the right to instigate foreclosure proceedings against the covered property.

With the REDC the process is similar. After the borrower defaults and a specified time period has passed, the lender has a right to issue a REDC for an amount equal to the defaulted loan amount, accrued interest, late penalties, and any legal expenses incurred by the lender in satisfying the legal requirements for the issuance of the default certificate. The right of equitable redemption under the REDC is equal to the life expectancy of the homeowner(s). That is, at any time during the lifetime of the homeowner(s), plus a designated time after the termination of the life estate, the homeowner(s) or their heirs have a right to redeem the property through payment of the outstanding balance of the REDC, plus the accrued penalty interest allowed by state law. In order to preserve the value of any residual equity, the holder of the certificate has the right to provide for hazard insurance protection, to perform any maintenance necessary to maintain the value of the property, and to include these expenses in the principal value of the certificate.

In order to calculate the required HEL default premium, it is necessary to assume several variables such as the age or ages of the homeowner(s), the sex of the homeowner(s), the value of the property, and an assumed price appreciation rate. In addition, one must input the amount of the loan and the term of the loan, the basic rate (consisting of the risk free rate plus, the appropriate risk premium) and the late penalty rate, as well as the cost of default. The cost of default consists of the legal expenses of issuing the default certificate, plus the statutory default interest rate. Using these inputs, the model can be used to estimate the HEL default premium for each contract.

SIMULATION

In order to demonstrate the use of this model, a hypothetical loan will be created and the appropriate default premium will be determined. The parameters assumed in this model are consistent with the best estimate of the actual parameter values given the information available. This assumed household consists of a married couple with the male being forty-five years of age and the female being forty-three. Using the Commissioners Standard Ordinary Life Tables of 1980, the model will determine the joint mortality for this household assuming a right of survivorship. The residence is assumed to have a current market value of $59,000, the median value of owner-occupied units in Texas in 1992. [1] It is further assumed that the expected price appreciation rate for this particular property is three percent per year.

The hypothetical loan is a closed-end HEL and therefore has full disbursement of the principal amount at the origination of the contract. The loan term is for ten years and requires equal monthly payments to fully amortize the principal amount over the maturity of the instrument. The initial loan to value ratio is eighty percent.

The contract rate consists of the base lending rate, the required liquidity premium, and the HELT default premium. The base rate is assumed to be the market required return on US Treasury Bonds with a similar maturity as the loan. In this case the base rate is the market-required return on ten year treasuries currently yielding 6.30 percent. The required liquidity premium is arbitrarily assumed to be one percent. Thus, the base rate plus the liquidity premium is assumed to be 7.3 percent. The delinquency rate is assumed to be 2 percent, the average length of the delinquency is assumed to be 50 days with a late penalty of five percent of the contracted payment per month after the expiration of a fifteen day grace period. [4] The default rate is assumed to be one-half of one percent of the outstanding contracts each year. The legal cost of the default certificate is assumed to be ten percent of the defaulted balance, and the average period of delinquency before default is assumed to be six months. [4] The market required default interest rate premium is assumed to be four percent above the base rate plus the liquidity premium, and therefore does not include the HELT default premium. In this case the yield on the REDC's will be 11.3 percent. Given all of the above assumptions the estimated HELT DEFAULT PREMIUM for this contract is 2.87 percent, and the contract rate for this contract will be 10.17 percent.

The next step is to examine the sensitivity of the HELT default premium to changes in the major inputs to the model. The magnitude of the default premium results from a complex interaction of the major input variables. Specifically, these variables consist of the age of the homeowner(s), the initial loan to value ratio, the assumed rate of property appreciation, the assumed base rate plus the liquidity premium, and the assumed market required default interest rate premium. While the default premium for the initial case, male age 45 and female age 43, is 2.87 percent, if the ages are increased to male 55 and female 53, the default premium declines to 2.76 percent, and for a 65 year old male and a 63 year old female the default premium declines to 2.47 percent. Thus, the HELT default premium is inversely related to the age of the participants. The inverse relationship between the HELT default premium and the age of the participants is due to the negative leverage effect. If the property appreciation rate is less than the sum of the base rate plus the liquidity premium plus the market required default interest rate premium, the ratio of the total value of the debt to the market value of the property increases over time. This increase in the total debt to market value ratio or the negative leverage effect increases the probability of a deficiency upon reversion of the property. A deficiency occurs when the total value of the debt exceeds the sales proceeds of the property at the reversion, (i.e., the death of the homeowner). As a result, the older the participants, the shorter the effective life of the contract and the smaller the adverse impact of the negative leverage and the shorter the time period the contract value is affected by low property appreciation rates. The shorter the time period the contract value is affected by the resulting negative leverage, the lower the risk of deficiency and the smaller the required default premium needed to compensate for the additional deficiency risk.

One would expect that the HELT default premium would be positively related to the initial loan to value ratio, and the simulations confirm this relationship. While the default premium for an initial loan to value ratio of eighty percent is 2.87 percent, the default premium for the initial loan to value ratios of sixty percent and forty percent decline to 2.84 percent and 2.79 percent, respectively. Again this relationship is due to the negative leverage effect. Because the appreciation rate applies to the entire value of the property (both debt and equity), the gain on the equity value partially offsets the negative leverage on the debt amount.

Lastly, given the existence of the negative leverage effect, it would also seem logical that the HELT default premium would be positively related to the rate differential between the base rate plus the liquidity premium adjusted for the market. Required default interest rate premium, and the property appreciation rate. Again, the simulation confirms this relationship as the base rate plus the liquidity premium increases by 100 basis points from 7.3 percent to 8.3 percent and then to 9.3 percent, the HELT default premium rises from 2.87 percent to 4.15 percent and then to 5.51 percent.

CONCLUSIONS

The Homestead Act has been in the Texas Constitution since 1839, and research shows that the act does provide protection of the homesteads for the homeowners that are forced to seek bankruptcy protection. However, changes in tax laws and demographics have increased the need for home equity lending in Texas. As demonstrated, the HELT Plan provides Texas homeowners a means to borrow against the equity in their residences, and still satisfy the intent of the Homestead Act. With the HELT plan, the lenders are paid off at the time of the default, the homeowners have a life estate in their home conferring the right to remain in the residence for the rest of their lives, the homeowner is able to deduct the interest paid on the loan from their taxable income, and the plan requires no outside capital.

Only when there is a default does the HELT Plan deviate from current home equity lending practices in the other states. Under HELT, when a default occurs, the lender creates a Real Estate Default Certificate which is sold to an investor in the financial markets. This certificate gives the investor the right to the residual equity at the end of the life estate of the debtor(s). At this time the lien against the residual equity required by the HELT plan is not compatible with the Homestead Act. It will be up to the Texas Legislature and the state's voters to decide whether this plan is in the best interest of the state and if the State Constitution should be amended to allow this plan. While this research indicates that this plan is financially viable, additional research is required as to the parameter values to use in order to implement this plan in any specific situation.

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AN ANALYSIS OF BUSINESS FAILURE THROUGH STAGES OF DECLINE

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Business failures have attracted much rekindled attention and for intriguing, compelling reasons (Corman and Lussier, 1992). With almost half of reported failures consisting of firms which started within the previous five years and businesses with two to three years more likely to fold than either new firms or those four years or older, the overall annual discontinuance rate among those with five or more years has been increasing steadily since 1985 (Cooper, 1989; Dun and Bradstreet, 1993). Numerous factors contributing to business decline—unfavorable economic environs, obsolete management knowledge and techniques, low level sales, high levels of expense, undercapitalization, disaster, fraud, lackluster asset management and general neglect of strategy, customer, technology, human resources, and organization structure—make times tough for business survival (Bruno and Harder, 1987; *The Wall Street Journal, 1989)*. This adversity, however, is also forcing organization development to get tough with itself—causing management's renewed vigilance to danger signals emanating largely from the challenging dynamic quality of environment (Porter, 1990).

Danger signals are as follows:
-- **Discoveries in product, process, and institutional technologies have multiplied.**
-- **New joint ventures and product market partnerships have proliferated among competitors.**
-- **Globalization has opened up and created new world markets.**
-- **Market strategies and initiatives have contrived devices for fragmenting and segmenting customer demand.**
-- **Mass communication has heightened public awareness of consumer products.**
-- **Resourceful mergers, amalgamations, and combinations of supplier industries have reshaped outsourcing arrangements in contractual agreements.**
-- **Computer technology has narrowed decision time spans.**
-- **New organization knowledge and management techniques have exploded.**
-- **Governmental demands and regulations have intensified.**
-- **Social drives for equality and political, legal, educational, and ecological reforms have escalated.**

As a result, many organizations are challenged to shift, or even reverse, gears in order to survive, let alone prosper (Kriegel, 1993). Survey research (Churchill, 1955; McQueen, 1989), case studies (Stockton, 1989; Sharplin, 1993), and field investigations (Moses and Liao, 1987; Steck, 1985) reinforce the general picture of findings on corporate demise.

Purpose

The purpose of this article is to link the basic framework of failures (Miller, 1977) using a stratified sample and allow the data to be analyzed over some time periods. Miller argues that company studies show that the progression is more consistent than consultants once thought. The sequence of poor decisions reflects the American economic environment, the personalities of the executives, and the current management philosophy. The summaries of Miller's four syndromes are listed below:

COMMON FAILURE SYNDROME

F_1: The Impulsive Syndrome: "Running Blind"

"This business of ours must be defined in the broadest possible terms if we are to continue to break our past growth records. We must take risks in order to grow. Seize opportunities first, consolidate later."

F_2: The Stagnant Bureaucracy: "If It Ain't Broke—Don't Fix It."

"Well, our methods and product lines were fine in the past and we'll be damned if we're going to change a successful strategy just because of some temporary fad."

23

F_3: The Headless Firm: "Don't Bother With All Those Boring Details—Just Get the Big Picture"

"We pride ourselves on the amount of autonomy that we leave to our divisions and departments. We control the finances; they make all the key strategies."

F_4: Swimming Upstream: The Aftermath—"Time for Big Turn-around"

"In order to turn this company around, we have to take sizable risks. We've got to move quickly to plug up the weaknesses of our operations and go after greener pastures with new blood."

Background Studies

The current study adds to explanatory aspects on the dynamics of failure, setting forth the usefulness of a phase model. In a preliminary study, these phases varied systematically with commonly used measure of the quality of sound business organization (King, 1992). Results indicate that failure syndrome formations can be measured in large populations—easily and reliably. This compact analysis augments the anecdotal and judgmental focus of much of the available literature, and permits rigorous tests of it (Witte, 1993).

The present study included over 1,500 firms and involved middle-level manager respondents of medium (1,000-5,000 employees) to large size (5,000-100,000 and over employees) firms focusing on a cross section of profitability profiles and range of industrial classifications for private sector businesses at dispersed locations nationwide. In several ways, the study was designed to test the stability of the pattern of correspondence of business decline with failure syndromes. Attention was directed toward: (1) identifying characteristics of the firms, (2) analyzing three dimensions (syndromes) regarded as sequential linkages to business failure, (3) defining successive phases of failures, and (4) testing phased combinations of the dimensions with factors often used to evaluate the quality of soundly management businesses.

DESIGNING A SAMPLE: WHAT TYPE OF RESPONSES?

The Dun and Bradstreet *Business Failure Record* provides names of firms having insecure, low, or negative earnings. The definition of "failure" for this study meant those firms experiencing two or more years of poor earnings and eroding market share or having already been in Chapter 11 bankruptcy.

The total questionnaire population was 6,580, located in 50 states. After a second follow-up mailing, there were 2,389 questionnaires returned. This represented an overall response rate of 42 percent. Comparisons of conventional industry characteristics showed that the sample closely resembled the total American population. For example, women were only slightly (and nonsignificantly) under-represented in the sample showing 37.8 percent women and 62.2 percent men. The total American split is 38.8 percent women and 61.2 percent men. The industry categories also showed a closeness of fit to the entire American business scene.

Statistical Notes

To assess warning signs that indicate when a firm is heading towards serious trouble, the instrument (Appendix 1) included 23 times, which tap three subscales: "Impulsive," "Stagnant Bureaucracy," and "Headless Management."

An important assumption of the Phase Model is that F_4 or the "Swimming Upstream" syndrome represents a confluence of adversities underlying the successive stages regressing toward failure. Typically, F_4 firms are already in great trouble from being in an F_1, F_2 or F_3 mode for an extended period (Miller, 1977; Hoad and Rosco, 1964; Tauzell, 1981; Shapiro and Giglierano, 1982; O'Neill and Duker, 1986).

Respondents to the survey received simple instructions:

Write one number in the blank to the left of each statement.

--To what extent do you agree or disagree with each statement:

"Very Much Disagree" 1 2 3 4 5 6 7 "Very Much Agree"

--Low numbers describe statements with which you disagree.

--High numbers describe statements with which you agree.

Factor analysis of the 23 items is shown in Table 1, along with item numbers on the survey to reflect how subscale items are interspersed on the instrument. Table 2 shows item, subscale, and total alpha reliabilities. Information in these two tables suggest the usefulness of three factors—impulsiveness, stagnation, and headlessness—with acceptable reliabilities accounting for total intercorrelation in the data. The variable correlations of items with subscale scores (right column of Table 2) suggest a major collective contribution of the three batches of items to the subscales.

Factor I (impulsiveness) is loaded by four items from other subscales, but the other two factors (stagnation and headlessness) get loaded $\geq .30$ only by items classified *a priori* within their respective subscale classification. The communalities, H^2, in Table 1 reflect the amount of each item's variance included in the factor analysis.

As the factor analysis suggests, the three subscales have moderate correlations, thus:

	Impulsive	Stagnant	Headless
Impulsive	1.0	.29	.56
Stagnant		1.00	.26
Headless			1.00

This pattern of correlations suggests that the three subscales make relatively independent contributions to defining the content of the properties of failure in declining organization.

CONSULTING DATA TO FIT THE QUESTIONNAIRE MODELS

The most competent consultants seek patterns of behavior, which the client executives may not be able to see. The pattern of decline is perhaps the most dangerous phase of organizational life. The data shows that "impulsiveness" is the most common styles. No one knows for sure why this is so, but speculation says that the executives want to do something and will talk about jumping into the most promising market. Consultants can see that some risk taking is always necessary, but that unwarranted risks, overly broadened goals, and taking power away from the middle managers is the pathway to trouble.

Case Example

Contractors may have low fixed costs, high variable costs, and a high break-even point encouraging bold expansion. In episodic regularly assigned contacts with clients, certain projects may not be overly troublesome—a focus on tasks that is narrow and defined, familiarity with work schedules, satisfactory compliance, and so on. In a newly assigned, boldly energized mission, however, large increases in sales, easily accomplished by a large contract, can cause severe cash demands and resource strains, since relatively little increase in profit is realized. Over time, uncertainty about something highly important grows among managers. The firm suffers from inadequate information, as well as analysis and planning. With repeated enactments, such destabilizing features arouse an awareness of lack of control and undercut effective influence.

Move toward bureaucracy. The business data shows that executives can be uncomfortable after all that impulsiveness. The next stage is to reduce the uncertainty. The impulsive, innovative contractor converges on a few of its most successful projects, packages them into standard skills, and settles down to a new phase of stagnant bureaucracy. Executives in other markets may make similar decisions. For example, manufacturers and service firms hit on a hot product or timely service and orders its employees to become a complacent bureaucracy to mass produce the products or deliver those services over and over. The executives firmly believe that their troubles will be over.

Moving toward leaderlessness. Consultants understand that this means that the executives change their strategies and reorganize the firm. The executives can concentrate on overcoming obstacles by some familiar techniques. At this point in time, decentralization seems to be the way for the executives to share the blame. For example, lower level managers are ordered to create their own goals. Lower level managers are given more responsibility for quality and productivity. Upper level executives are willing to give middle managers more budget dollars for maintenance and problem-solving without much guidance. As the middle managers go their own way, the firm loses overall focus. The executives are willing to encourage the lower level managers, but such plans do not fit into the broader strategic plans.

Monitoring management processes. The consultant observes how well the executives can negotiate the power differences among lower level managers and themselves. As impulsiveness, bureaucracy, and headlessness growth executives may not be able to hold the firm together. The firm is now moving toward failure labeled the F_4 or "Swimming Upstream" syndrome. This is the final and most dangerous phase. Because of the past failures, the new executives talk themselves into a bold strategy of innovation, change, and turnaround. Such a plan strains the middle-level managers' ability to believe that the new plans are any better than the plans just abandoned.

This new team of executives takes over. These executives lack relevant information about this specific industry. There is now open conflict as the executives take back power and control which was given to the middle managers in the bureaucratic phase. The executives are confused and will try many misguided actions and projects, which may push the firm into more decline.

SUMMARY AND CONCLUSIONS

The questionnaire data supports the assertion that executives and managers can categorize their own actions in response to financial crises. Those actions can be labeled as impulsive, bureaucracy, or headlessness. The questionnaire responses did fit into the overall expected pattern.

The authors are interested in finding patterns and not just individual case studies when studying declining firms. First, the data supports the prior research that there are measurable phases of decline. The second idea is that the dangers were triggered by unexpected reversals and critical threatening events (*The Wall Street Journal*, 1989). Some executives will be able to see the danger signals and will recognize their firm as slipping into the impulsive phase. If so, executives with great skill and courage could immediately stop those behaviors in order to save the firm.

Future research is needed to examine how the phases of decline relate to financial variables. The financial variables might be the rate of return on assets, marginal sales analysis, inventory turnover, and net worth. There may be relationships, which could serve as warning signals to executives.

AUTHOR'S NOTE: The full survey instrument is available by contacting Dr. Al King.

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TABLE 1

FACTOR STRUCTURE FOR FAILURE SYNDROME

(Items=23; N=1,535)

Subscale Items		Rotated Factor*			
		I	II	III	IV
A. HEADLESS					
	1. Figurehead role	.80			.64
	2. Unit Decisions	.79			.63
	3. Lack Long-term Planning	.62			.44
	9. Shortage of Resources	.83			.71
	14. Seriously Weakened Survival	.64			.48
	15. Failure to Get Cooperation	.47			.25
	21. Cannot Be Expected to Recover	.57			.44
B. STAGNANT					
	5. Committed to Conventional Ways		.40		.21
	8. Insufficient Latitude for Innovation		.53		.28
	10. Competitors Gaining Market Share		.43		.20
	13. Formal Policies and Standard Procedures	.42	.46		.39
	18. Formal Reporting Relationships		.54		.33
	19. Resistant to Change		.56		.32
	20. Not Much Monitoring		.55		.45
	22. No Provisions for Self Criticism		.42		.18
C. IMPULSIVE					
	4. Bold Expansion Strategy			.43	.20
	6. Overly Ambitious Growth			.60	.40
	7. Complexity Rapidly Accelerating	.48		.34	.37
	11. Resources Overextended			.60	.43
	12. Decisions Conflict	.60		.32	.46
	16. Lack of Information			.50	.32
	17. Unexpected Crises	.46		.34	.37
	23. Aiming in All Directions			.37	.14
Eigen Value		6.1	2.5	1.9	
% Common Variance		26.4	10.9	7.9	
%Cumulative Variance		26.4	37.3	45.2	

*Show only loading >.30

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TABLE 2

RELIABILITIES OF SUBSCALES AND TOTAL SCORES

Failure Syndrome Subscale Items		Subscale Alpha Coefficient	Item Alpha Coefficient	Item/Subscale Correlation Corrected
A. HEADLESS		.86		
	1. Figurehead Role		.84	.70
	2. Unit Decisions		.84	.69
	3. Lack Long-term Planning		.85	.60
	9. Shortage of Resources		.82	.78
	14. Seriously Weakened Survival		.85	.63
	15. Failure to Get Cooperation		.87	.46
	21. Cannot Be Expected to Recover		.85	.58
B. STAGNANT		.72		
	5. Committed to Conventional Ways		.71	.30
	8. Insufficient Latitude for Innovation		.68	.46
	10. Competitors Gaining Market Share		.71	.36
	13. Formal Policies and Standard Procedure		.69	.40
	18. Formal Reporting Relationship		.68	.48
	19. Resistant to Change		.68	.48
	20. Not Much Monitoring		.68	.46
	22. No Provisions for Self Criticism		.70	.36
C. IMPULSIVE		.76		
	4. Bold Expansion Strategy		.74	.32
	6. Overly Ambitious Growth		.71	.49
	7. Complexity Rapidly Accelerating		.71	.50
	11. Resources Overextended		.70	.54
	12. Decisions Conflict		.72	.47
	16. Lack of Information		.72	.46
	17. Unexpected Crises		.71	.50
	23. Aiming All Directions		.75	.26
D. TOTAL	Failure Score	.86		

ANALYZING THE IMPACT OF MARK TO MARKET ACCOUNTING

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In 1993, the FASB issued Statement No. 115 (SFAS No. 115), *Accounting for Certain Investments in Debt and Equity Securities*, which constitutes the third phase of its financial instrument project. First in 1990, SFAS No. 105, *Disclosure of Information about Financial Instruments with Off-Balance Sheet Risk and Financial Instruments with Concentrations of Credit Risk*, required all firms to disclose their off-balance sheet risk (i.e., of accounting loss for financial instruments that exceeds the amounts reported on the balance sheet) and concentrations of credit risk (e.g., maximum exposure on such financial instruments should any party to the agreement fail to perform his or her duties). Secondly, in 1991, SFAS No. 107, *Disclosures About Fair Value of Financial Instruments* required all entities (except those who use specialized accounting principles for investments, such as securities brokers and dealers, investment companies and defined benefit pension plans) to disclose the fair market values of their financial instruments that were not covered by the provisions of another FASB authoritative pronouncement, where it was "practicable" to estimate that value. SFAS No. 115 is particularly important to financial institutions and other entities with large portfolios of financial instruments who may now need to recognize gains and losses on investments that they have not sold nor plan to sell. Changes in net income, assets and retained earnings that arise from adopting this Standard can also skew the comparability of prior period financial ratios and cause violations of loan covenants. Accounting and financial personnel should thus comprehend this Standard in order to analyze their present and potential clients' financial statements. Thus, the purpose of this study is to ascertain how this Standard will impact the financial services industry--and other similar users.

Furthermore, the Internal Revenue Service's general ban on recognizing losses on unrealized declines in the fair market values of investment portfolios will cause large fluctuations in deferred income taxes, as taxable entities adopt the provisions of this Standard. Therefore, entities should understand the provisions of SFAS No. 109, *Accounting for Income Taxes* to adhere fully to SFAS No. 115's provisions.

IMPORTANT TERMS AND SCOPE

Financial Instruments. SFAS No. 115 defines a financial instrument as evidence of ownership interest in an entity or a contract that both:

A. Contractually obligates an entity to
    (1) transfer cash or another financial instrument to a second entity, or
    (2) trade such instruments on potentially unfavorable terms with the second entity, and
B. Provides that second entity a contractual right to
    (1) receive cash or other financial instruments from the first entity, or
    (2) exchange such instruments on potentially unfavorable terms with the first entity.

These instruments include debt and equity securities. Therefore, one party to the transaction has a contractual obligation to deliver a security at a certain date and the other has a contractual right to receive the security at that date.

Security. Securities are shares, participations or other interests in property or in the issuer's enterprise represented by a financial instrument that can be divisible into classes of shares, participations, interests or obligations, including debt securities (also called credit instruments) and equity instruments, which represent ownership interests in a company.

Fair value. Fair value are amounts that buyers and sellers can willingly (not forced as in a liquidation sale) exchange financial instruments--deriving such values from as active a stock exchanges as possible using quoted market prices. E.g., the New York Stock Exchange) would supersede dealer markets that usually contain buy-sell "spreads" (e.g., the Over-the-Counter markets). Similarly, broker markets, where buyers and sellers often do not know each other's needs (e.g., private placements) are preferable to principal-to-principal markets, where buyers and sellers exchange securities for cash using intermediaries' services.

Available techniques to measure fair value include closing prices for auction markets; average of closing bid and asked prices for dealer markets; broker prices or quoted value of "similar" financial instruments to ascertain the value of certain not readily available fair values; and "valid" mathematical models (e.g., capital pricing, binomial pricing or Black-Sholes models) for certain types of financial instruments.

Scope. SFAS No. 115's provisions are inapplicable for investments accounted for under the equity method of accounting; investments in consolidated subsidiaries; enterprises that presently use the market or fair value method to recognize their financial instruments (e.g., brokers and dealers in securities, defined benefit pension plans and investment companies); and not-for-profit entities (but it does apply to cooperatives and mutual enterprises, such as credit unions and mutual insurance companies). Its provisions also do not alter the accounting for certain securities specified by other SFASs, including certain pensions and post-employment funds, stock options, warranty obligations and leases.

HISTORY OF ACCOUNTING FOR FINANCIAL INSTRUMENTS

In 1953, Accounting Research Bulletin No. 43 required entities to carry temporary marketable debt security investments (bonds and debentures) at cost, unless their market value falls significantly and permanently below cost. Firms reduced debt instruments to their market values and recognized such losses in the current periods' income statements.

SFAS No. 115 supersedes the provisions of SFAS No. 12, *Accounting for Certain Marketable Securities* (1975), which applied to marketable equity securities, including common stock, nonredeemable preferred stock and rights to acquire such stocks. Entities first separated short-and long-term marketable equity securities each period, evaluating each group separately at the lower of cost or market. They reported unrealized losses in market values both in a "valuation allowance" account in the balance sheet and in the current year's income statement and only reported gains that did not exceed previously reported losses. Entities reported changes in the valuation account for their short-term investments as part of their periodic income; however, they reported accumulated changes in the valuation allowance for long-term equity securities as a separate part of equity--without first including such changes in the income statement. They also realized losses for equity securities that declined in value and changed classifications from current to noncurrent or vice versa.

Due to recent, significant fluctuations in interest rates and the consequent wide swings in the values of both debt and equity securities, many regulators and financial analysts have questioned the appropriateness of using the amortized cost or other historical methods to account for these transactions--especially in light of certain trading and sales practices (e.g., sophisticated hedging techniques and new types of hybrid financial instruments). In response, SFAS No. 115 expands the use of fair value accounting for debt and equity securities, but allows entities to use the amortized cost methods for investments in debt securities that they have the positive intent and ability to hold until maturity.

PROVISIONS OF SFAS NO. 115

Equity investments with "readily determinable" market values and investments in debt securities are classified into three categories: held-to-maturity, trading and available-for-sale. Debt securities include U.S. Treasury bonds, U.S. agency securities, municipal securities, convertible debt, corporate bonds, commercial paper and secured debt instruments, such as collateralized mortgage obligations, but not unsecured trade accounts receivable and consumer loans payable. Equity securities consist of an entity's ownership interest in another entity or right to acquire or dispose of such an interest at a fixed or determinable price, including common stock, stock rights and warrants, and put and call options. Financial instruments also include foreign currency forward contracts, loan agreements, financial options and guarantees, loan commitments and letters of credit. However, equity securities do not include convertible debt or redeemable preferred stock.

SFAS No. 115 specifies that fair values of equity securities are readily determinable if they are traded on a securities exchange registered with the Securities and Exchange Commission or in the over-the-counter market--provided that sale prices or bid-and-asked quotations are currently determinable. Fair values of mutual funds are considered determinable if they are published and based on current transactions. However, the provisions of SFAS No. 115 would not apply to investments in equity securities that were accounted for under the equity method or financial statement consolidation.

Key Features of the Three Classes of Securities

The following criteria guide entities in classifying their debt and equity securities:

Held-to-maturity: A financial institution should carry at amortized cost all debt securities that it has both the positive intent and ability to hold to maturity. Thus, management may not include securities in this category that they plan to hold for an indefinite amount of time or lack a specific intent to sell or redeem by a specific date. Since the fair market value of such securities will normally reverse in the long-term, management should recognize no gains and losses on such debt instruments until the securities mature.

Trading: Firms buy trading debt and equity securities for resale purposes, primarily to make short-term profits rather than holding them for longer-term capital appreciation. A financial institution should thus carry at market value and include in income all unrealized gains and losses such securities that were bought and held for the purpose of selling them in the near-term (e.g., within the entity's operating cycle). Trading securities also include mortgage-backed securities held for sale in conjunction with mortgage banking activities. Financial institutions' portfolio managers often continually trade financial instruments in this category.

Available-for-sale: Firms should classify all securities not classified in held-to-maturity or trading categories as available-for-sale. This "catch-all" category includes debt securities not meeting the "intent-to-hold" criteria and equity securities not classified as trading securities. Entities should carry these investments at market value and include unrealized gains and losses as a separate component of stockholders' equity without first going through the income statement, thereby minimizing earnings fluctuations on changes in the market values of such debt and equity securities. Management should defer recognizing unrealized gains and losses until revenues from these financial instruments are realized.

The provisions of SFAS No. 115 have placed several severe restrictions on entities claiming a positive intent to hold a debt instrument to maturity. For example, a firm should not reclassify a held-to-maturity security as available-for-sale in response to changes in:

• market interest rates;	• funding sources and terms;	• the availability or yield of alternative investments;
• the securities prepayment risk;	• liquidity needs;	• funding sources or terms; and
• foreign currency risk;	• in loan demands;	• payments of insurance claims.

These restrictions of "positive intent" allow few investments to qualify for inclusion in the held-to-maturity category. However, positive intent would not be undermined when certain "non-controllable" events arise, including new tax laws that modify the tax-exempt status of a security; significant deterioration's of the issuer's creditworthiness; major business combinations or disposals; sales occurring within three months of maturity or after at least 85% of the principal was collected; or sales or transfers in response to isolated, nonrecurring or unusual events that the entity could not have reasonably anticipated.

Few debt securities would be considered in the held-to-maturity category since they typically represent temporary, "excess" funds as part of management's cash management policy. To include debt instruments into this category, the entity's cash management policies should designate a specific portion of such securities as not available-for-sale.

Accounting for Transfers Among the Three Investment Categories

The above restrictive definitions of investment categories require management to rarely transfer securities between groupings, especially transfers from the held-to-maturity category. Management should account for such transfers as sales and repurchases at fair value, and recognize unrealized gains and losses and related income tax effects on any temporary differences at the transfer date as follows:

a. Recognize in earnings immediately unrealized gains and losses for transfers into the trading category;
b. Make no reversal of unrealized gains and losses for transfers from the trading category;
c. Recognize immediately as a separate component of stockholders' equity unrealized gains/losses of transfers from the held-to-maturity to available-for-sale categories; and
d. Amortize unrealized gains and losses already reflected in a separate component of stockholders' equity over the remaining life of the security for transfers from the available-for-sale to the held-to-maturity categories.

FINANCIAL STATEMENT DISCLOSURES

SFAS Nos. 12 and 115 have similar financial statement disclosure requirements.

Balance Sheet Disclosures

Company balance sheets or financial statements footnotes should disclose aggregate fair value, gross unrealized holding gains and losses, and amortized cost basis for all three investment categories (i.e., held-to-maturity, trading and available-for-sale). Management should also classify all individual, trading and available-for-sale securities as current and long-term, as appropriate. For example, the classification for held-to-maturity securities depends upon the maturity or exercisable call date, whichever is more probable, and for available-for-sale ones that would hinge upon such factors as the reasonableness of management's intent--based upon a review of their prior classifications and maturities of such financial instruments. However, management should classify currently available-for-sale marketable debt and equity securities as current assets in the balance sheet, even if they have no formal plans to dispose of them. Since such assets usually represent a surplus of immediately available funds, management can usually sell them at their discretion.

Financial institutions should disclose specific major types of securities, including equity securities; U.S. Department of Treasury- and other government agency-issued securities; foreign government debt securities; and corporate and mortgage-backed securities.

Management should disclose maturity dates of contractual maturities, fair values and amortized costs of debt securities for those expected to mature within one year; between one and five years; between five and ten years; and exceeding ten years. Firms can also disclose separately a portfolio of securities that do not mature at a specific date (e.g., mortgage-backed securities) provided that it discloses the basis for allocating these sets of securities (e.g., those collateralized by trust deeds or by specific locations).

Income Statement Disclosures

Dividend and interest income for all three types of securities should be included in the entity's earnings, as are realized gains and losses for available-for-sale and held-to-maturity securities and both realized and unrealized gains and losses for trading securities. Entities should also disclose for each presented income statement period the:

(1) Proceeds from sales of available-for-sale securities, including gross realized gains and losses from those sales;
(2) Cost basis (e.g., average cost or specific identification) used to compute realized gains and losses;
(3) Gross gains and losses included in income resulting from transfers from the available-for-sale into the trading category;
(4) Changes in net unrealized holding gains or loses on available-for-sale securities that were included in the separate component of stockholders' equity for the period;
(5) Changes in the net unrealized holding gains or losses on trading securities that were included in earnings for the period; and
(6) Security's amortized cost, the resulting realized or unrealized gain or loss, and the circumstances leading to the decision to sell or transfer all sales or transfers from the held-to-maturity securities sold--or transferred to another category.

Statement of Cash Flows Disclosures

Entities' statements of cash flows should disclose separately cash flow activity in the held-to-maturity, trading and available-for-sale categories. They should classify cash flows from purchases, sales and maturities of trading securities as cash flows from operating activities, and those from

available-for-sale and held-to-maturity activities as investing activities. This statement should also disclose--as non-cash investing and financing activities--transfers between the held-to-maturity or available-for-sale and trading categories.

Disclosing the Effect of Adopting SFAS No. 115

Entities should report the effect of adopting the provisions of SFAS No. 115 in the financial statements footnotes. Since they may not present proforma disclosures of retroactively applying the Standard's provisions, such a disclosure for a financial institution who transferred securities from held-to-maturity to available-for-sale category, adopting the provisions as of January 1, 1997 would be as follows, assuming a tax rate of 40%:

Note Z--Accounting Changes

The Financial Accounting Standards Board recently issued SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. The ABC Bank adopted the provisions of the new Standard for investments held as of or acquired after January 1, 1997. Per the provisions of the Statement, prior period financial statements have not been restated to reflect the change in accounting principle. The cumulative effect as of January 1, 1997 of adopting Statement No. 115 increased net income by $1,000,000 (net of $600,000 in deferred income taxes), or $1.00 per share. The opening balance of shareholders' equity was increased by $2,000,000 (net of $1,200,000 in deferred income taxes) to reflect the net unrealized holding gains on securities classified as available-for-sale previously carried at amortized cost or under the lower of cost or market approach. The amortized cost of these securities totals $40,000,000. The period to maturity for the majority of these securities is deemed too long which necessitates the transfer.

EMPIRICAL STUDY

Methodology

To explore the impact of SFAS No. 115 on financial institutions we surveyed four major groups who must implement this Standard: CPAs who specialize in auditing financial institutions; bank accounting executives (AE) of financial institutions selected from Faulkner & Gray's *Bank Accounting & Auditing Executives Data Base*; management accountants (MA) specializing in financial institutions from the Institute of Management Accountant's *Membership List*; and financial analysts (FA) selected from *1993 Membership Directory* published by the Association for Investment Management and Research. The 320 questionnaires were sent to 80 members from each group.

Based upon the review of the provisions of SFAS No. 115 and of Mahoney and Kawamura's study of disclosures for the FASB, we developed a preliminary survey instrument which was then pretested and revised based upon the comments of six academicians, five CPAs, five financial officers and six management accountants.

To garner a high response rate, we hand-signed all correspondence, sent four waves of surveys, including pre-notification letters, and applied postage stamps on envelopes to and from the respondents. We received 184 usable responses from 43 CPAs, 47 AEs, 51 MAs and 43 FAs, an overall 46% response rate. While achieving a relatively high response rate, we tested for non-response bias using (1) the early-late hypothesis [Oppenheim, 1986], and (2) comparing known characteristics of respondents and non-respondents [Ferber, 1948]. The results indicate no significance ($p<.05$) differences between early and late respondents, suggesting strongly that no significant non-response bias occurred.

A seven-point Likert scale (1 indicating agreement and 7 disagreement) was used by the respondents to indicate their degree of agreement or disagreement to statements addressing the key issues. A summary of the sample means is presented in Table I.

TABLE I - MEAN RESPONSES OF GROUPS SURVEYED*

QUESTIONS	GROUP RESPONSE				
	CERTIFIED PUBLIC ACCOUNTANT (43)	BANK FINANCIAL EXECUTIVE (47)	MANAGEMENT ACCOUNTANT (51)	FINANCIAL ANALYST (43)	TOTAL (184)
Q1	1.24	1.38	1.45	1.83	1.49
Q2	1.33	1.17	1.41	1.71	1.42
Q3A	3.71	3.92	3.76	3.83	3.82
Q3B	1.76	1.71	1.86	1.91	1.83
Q3C	1.17	1.28	1.71	1.85	1.50
Q3D	1.92	1.86	1.72	1.80	1.82
Q4	3.71	3.92	3.76	3.83	3.82
Q5	3.93	4.11	3.74	3.22	3.75
Q6	3.41	3.60	3.21	3.38	3.39
Q7	1.71	2.54	3.35	2.51	2.53
Q8	5.27	5.23	5.67	5.49	5.44
Q9	5.61	5.75	5.91	5.82	5.88
Q10	5.41	5.44	6.21	4.25	5.33

1.	Values represent a 7-point scale (1=strong agreement through 7= disagreement with the statement).
2.	A summary of the questions is found in Exhibit I.
3.	If significant differences using one-way analysis of variance (p.<.05) in the response patterns between at least two groups were noted, Scheffe's multiple comparison test was used to determine which group had statistically significant weaknesses.
4.	Response to questions 1, 7 and 8 indicated such significant differences, with the results appearing in Table II.

When **ANOVA** found significant differences among mean responses of various treatment groups, we used Scheffe's multiple comparison test to determine which groups had statistically significant differences. A summary of the Scheffe's test is provided in Table II.

TABLE II - SCHEFFE TEST RESULTS
(Pairwise comparisons)

QUESTION NUMBER	GROUPS	GROUP MEANS	GROUP DIFFERENCES
Q5	4 2 1 3	3.22 4.11 3.93 4.11	NO DIFFERENCES BETWEEN GROUPS
Q7	3 2 1 4	3.35* 2.54 1.71* 2.54	1,2,4 > 3
Q10	1 2 4 3	5.41 5.54 4.25 6.21*	4 > 3,1,2

Notes:
1.	Abbreviations for groups presented in the above Table:
(1) Public Accountants (2) Bank Financial Officers; (3) Management Accountants; and (4) Financial Analysts.
2.	(*) Denotes pairs of groups significantly different at the 0.05 level of significance.
3.	Scheffe's test were performed on questions which exhibited significant differences in means between groups in the **ANOVA** tests.

Questions

The questionnaire addressed three main areas:

1.	Questions relating to financial reporting and economic reality;
2.	Questions regarding reporting entities decision making as a result of SFAS No. 115;
3.	Questions relating to the potential "manipulation" of the surveyed company's financial statements as a result of the provisions of SFAS No. 115.

Results and Observations

Responses are summarized and presented in Table I, with the paired comparison test, ANOVA and Scheffe's test results presented in Table II. The results showed only two sets of significant differences among the four groups of respondents. Regarding Question No. 7, CPAs (1.71) generally considered the provisions of this Standard more cost-beneficial than did the other three groups (AE: 2.54; MA: 3.35; and FA: 2.51), and for Question 10 management accountants (6.21) disagreed strongly that this Standard would allow the "manipulation" of income more than did CPAs (5.41), financial executives of financial institutions (5.44) and financial analysts (4.25).

Discussion

The groups are nearly unanimous in their evaluations of the three areas of questions. However, financial analysts believe the FASB should have considered certain ramifications in issuing SFAS No. 115, and they do not believe mark to market requirements are too expensive to be useful. Overall, all respondents do not believe that SFAS No. 115 will enhance economic reality, with the perceived "compromise" Standard increasing the reliability and relevance of financial reporting.

FEATURES OF SFAS No. 115

SFAS No. 115 contained many changes from present practice, including:

(1)	Under the provisions of ARB No. 43, debt securities were recognized at amortized cost. Now, only debt securities classified as held to maturity can be recognized at amortized cost. All other debt securities should be accounted for at their fair market value, reporting both unrealized gains and losses in the market values of such securities in the income statement.

(2) Most non-public entities will classify their equity securities as available-for-sale, changing their valuation from the lower of cost or market (per the provisions of SFAS No. 12) to a fair value approach--causing them to recognize **both** gains and loses from changes in the fair market values of their equity securities.

(3) Firms should disclose the cost, gross unrealized holding gains and losses and fair values of available-for-sale equities. To keep track of these original cost values, they should use several marketable securities accounts--the fair value one for balance sheet purposes and the historical one to help compute unrealized gains and losses.

CONCLUSIONS

Favoring a balance sheet view for financial reporting, the SFAS No. 115 uses current value accounting for debt and equity securities--but still allows held-to-maturity securities to be carried at amortized cost. Financial institutions' accounting and financial managers--both as producers and users of financial information--should recognize that the classification requirements restrict the flexibility of transfers among the three categories. Many financial institutions with large portfolios of marketable securities will, thus, eliminate the held-to-maturity category and classify many security investments as trading and available-for-sale, thereby eliminating the problems of determining management's intent and ability to hold these securities to maturity. These restrictions underscore the FASB's compromise between the historical cost and market value methods of accounting for security instruments. Thus, this Standard probably does not represent a final word in this long debate.

The magnitude of debt and equity securities relative to most financial institutions' asset bases requires management to develop and review strategic plans for these portfolios. This plan should include an analysis of the volume and potential volatility of securities placed in the liquidity, interest-rate risk management and strategic income sections of their portfolios.

Adhering to SFAS No. 115's provisions can derive significantly different financial results than under the previous Standards, especially as interest rates fluctuations cause wide swings to the values of their investment portfolios. These changes could significantly affect such calculations as return on investment, debt-to-equity, price-to-book and other ratios involving net asset bases and net income.

Finally, the study's results show that four of the groups most affected by this Standard generally support its provisions and believe that it should have been issued to help strengthen the relevance and reliability of accounting for debt and equity financial instruments. These results should be of interest to a wide array of financial statement users and preparers.

EXHIBIT I - SUMMARY OF QUESTIONNAIRE USED IN SURVEY

Please indicate the extent to which you agree or disagree to the following statements.

Strongly Agree   Neither Strongly Agree nor Disagree   Strongly Disagree
< 1----------------2----------3----------------4--------------5-------------6----------7 >

1. Do you believe that the FASB should have issued Statement of Financial Accounting Standard (SFAS) No. 115, *Accounting for Certain Investments in Debt and Equity Securities?*
2. Do you believe that the provisions of SFAS No. 115 will achieve the FASB's objectives to obtain more uniformity in reporting investments in debt and equity securities?
3. Do you believe that market value provisions of SFAS No. 115 will make financial statements:
   a. More reliable to the needs of financial statement users?
   b. More relative to the needs of financial statement users?
   c. Provide overall "better" financial statements?
   d. Better reflect current value accounting as the primary basis for overall financial reporting?
4. Do you believe that the provisions of SFAS No. 115 will prevent business entities from selectively selling securities recorded at historical cost in order to "manipulate" earnings?
5. Do you agree that the provisions of SFAS No. 115 will cause the following scenario to occur: "If you mark part of the assets to market, and if you mark an equal dollar amount of liabilities to market, you will not have a better balance sheet?"
6. Do you agree with the following basis of support of the provisions of SFAS No. 15: "Assets and liabilities are valued at a particular point in time and do not reflect the value of the institution as a going concern?
7. Do you agree that the mark to market provisions of SFAS No. 115 are too expensive to be useful?
8. Do you agree that the mark to market provisions of SFAS No. 115 will reveal many insolvencies (especially with financial institutions) and, thus, erode public confidence?
9. Do you agree that the provisions of SFAS No. 115 will cause many companies to overload the "available for sale" category of marketable securities?
10. Do you agree that the provisions of SFAS No. 115 will cause companies to classify marketable securities to "manipulate income rather than report economic reality?"

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CONSUMER SHOPPING BEHAVIOR IN MALLS WITH LARGE SCALE ENTERTAINMENT CENTERS

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INTRODUCTION

The idea of adding a major entertainment center to a shopping mall has been gaining in popularity over the past few years. Several of these so-called 'mega-malls' have been constructed in various regions of the country, with substantial square footage allocated to large-scale entertainment centers. The first major entertainment mall was probably the West Edmonton Mall in Alberta, Canada, which came complete with a full amusement park and indoor surfing. Some of the largest U.S. entertainment malls now include The Mall of America in Minnesota, Forest Fair Mall in Cincinnati, River Fair Mall in Louisville, North Park Mall in Davenport, Iowa, and Sawgrass Mills Mall in Florida. The entertainment centers in these mega-malls typically feature attractions like: carousels, ferris wheels, trains, bumper cars and other children's rides, skill games, bowling alleys, miniature golf courses, roller or ice skating rinks, and video arcades.

The generally accepted notion within the industry is that such entertainment centers can substantially extend a mall's draw, lengthen shopper stays, and increase revenues for tenants. Patterson (1994) points out that entertainment centers function as anchors in malls, 'they are a traffic generator without being a competitor with smaller specialty stores'. Risley (1990), further points out that 'there is a growing recognition in the industry that fun and games – if done properly – not only can attract shoppers but also can improve the bottom line'. Forest Fair Mall, in Cincinnati, which was on the brink of filing for bankruptcy in 1989, is said to have saved itself from disaster by installing rides and games. Forrec International of Toronto, Canada, calculates that major amusements can extend a mall's draw by as much as five times current industry averages. Whereas shopping centers used to be in the business of selling only merchandise, they now see themselves as being in the business of providing fun and entertainment, and an enjoyable family shopping experience. In fact, this growing trend, and the success of most of these mega-malls has mall developers now looking at other attractions in addition to amusement rides, e.g., theme museums, aquariums etc.

However, there has been very little academic research done across different malls that lends support to these arguments about the substantial benefits provided by entertainment centers. Most of the available research studies are those done by individual malls which have primarily dealt with the amount of patronage at the entertainment centers and the mall in general, and the overall draw of the mall. There has been almost no focus on the exact extent to which the existence of an entertainment center impacts the shopping behavior of consumers in terms of the distance traveled to reach the mall, the amount of time and money spent at the mall, and the extent of patronage at other mall stores.

The present study proposes to examine the impact of such entertainment centers by investigating the characteristics and shopping behavior of consumers who visit the entertainment centers, and comparing these to the characteristics and shopping behavior of customers who did not visit the entertainment centers

LITERATURE REVIEW

The concept of 'entertainment' is hard to define in the context of a shopping center. It could be viewed in a very narrow sense as consisting of just rides, games, and shows, or in a broad sense as a combination of the entire shopping experience. The present study, however, focuses specifically on common area entertainment centers within malls, operationally defined as a concentrated, centralized, entertainment area of at least 30,000 square feet and containing a variety of entertainment opportunities, including various types of rides for children, carousels, miniature golf courses, soft play structures, simulator rides, etc. Although malls have traditionally offered several different types of entertainment options, it is this category that has seen the most growth in recent years.

Most previous academic research studies have treated such entertainment centers as just one additional characteristic of a shopping center which could be included in retail gravitational models to predict consumer patronage of shopping centers or the market potential of a particular location. Such gravitation models have traditionally included factors like distance and travel time, size of a shopping area, characteristics of the shopping center, consumer characteristics, and the cost of shopping to consumers (Craig, Ghosh, & McLafferty, 1984). In terms of shopping center patronage Bellenger et al (1977) found that some consumers placed the greatest value on convenience and economic attributes including convenience to home, accessibility, and the presence of services such as banks and restaurants. Others, however, emphasized recreational attributes including atmosphere, fashionability, variety of stores and merchandise. More recent studies have supported these results on the importance of recreational attributes including atmospherics (Donovan & Rossiter, 1982); pleasurable shopping experiences (Dawson, Bloch, & Ridway, 1990); and the social aspects of mall shopping (Feinberg,

Sheffler, Meoli, & Rummel, 1989; Jarboe & McDaniel, 1987).

However, as mentioned earlier, there has been very little academic research on mega-malls and the effects of entertainment centers in such malls on consumer behavior. Most of the research conducted on this relatively recent phenomenon has been done by either mall developers in specific malls (e.g., Stiller and Smith 1992) or by private research agencies that provide a fee-based information service (e.g., U.L.I. Publications). These studies have primarily focused upon defining the trading area of the mall, the consumer characteristics, and the extent of patronage at various stores and entertainment centers. Testimonials to the effectiveness of the entertainment centers seem to be based not so much on this research as on the gut instinct of developers and the success of most of the mega-malls. For example, John Denlinger, the vice president of operations for Time-Out Amusements Inc., an operator of entertainment centers, says that such entertainment centers "are helping attract people from farther away, encouraging them to bring the whole family to the mall, and getting them to shop more once they are there". James Ginsberg, vice president of Recreational Concepts Inc., also an operator of such entertainment centers has similar views, "if malls get people into their centers, they will stay longer. This is especially true in the case of people coming from longer distances who to justify the time spent getting there, are more likely to spend more money because they are there" (Blvins 1989). None of these statements, however, are supported by any published research findings.

The present study seeks to provide this support by investigating the effects of the entertainment centers on the shopping behavior of consumers. In particular, the characteristics and shopping behavior of consumers who visit the entertainment centers is investigated and compared to the characteristics and shopping behavior of consumers who do not. Factors investigated include the distance traveled to reach the mall, demographic characteristics and group composition, the amount of time and money spent at the mall stores, the department stores, and the food court.

HYPOTHESES

Hypotheses were developed based mainly on the comments cited in the literature and reasonable assumptions.

Hypothesis 1: **Consumers who visit the entertainment centers are more likely to have traveled a greater distance to reach the mall as compared to the distance traveled by consumers who do not visit the entertainment centers.**

One of the most frequently cited comment in the literature is that a family entertainment center benefits a mall by 'extending a mall's draw', or drawing consumers from a larger geographical area. The assumption is that the additional attraction of a large family entertainment center will encourage consumers to drive a longer distance to reach the mall than they would normally have driven. In fact, taking this fact as a given, some industry experts have even gone on to say that since these consumers are driving a longer distance to reach the mall, they are likely to stay longer and spend more.

Hypothesis 2: **Consumers who visit the entertainment centers are more likely to be visiting as a family with young children than consumers who do not visit the entertainment centers.**

By definition the entertainment centers are family oriented and feature attractions that appeal to small children. It would seem reasonable to assume therefore that shoppers who visit the entertainment centers are more likely to be visiting as a family with young children than shoppers who do not visit the center.

Hypothesis 3: **Consumers who visit the entertainment centers are likely to spend more time and money shopping at mall stores and department stores as compared to consumers who do not visit the entertainment centers.**

This is also a comment that is mentioned frequently in the literature. The assumption is that consumers who visit the entertainment centers spend a longer time at the mall and hence spend more time and money shopping "at the mall's other stores" and department stores.

Hypothesis 4: **Consumers who visit the entertainment centers are more likely to visit the food court and spend more money there as compared to consumers who do not visit the entertainment centers.**

Although the impact of the entertainment centers on the food court in particular is not mentioned in the literature, it would seem reasonable to assume that consumers who visit the entertainment centers are also more likely to visit the food court. These consumers are likely to be spending a longer time at the mall, in an area that in most cases is located close to the food courts. They might therefore be more likely to visit the food court.

METHODOLOGY

Unlike most previous research on malls with large-scale entertainment centers, which focused only on one specific mall, this study attempts to study consumer behavior across several different malls located in different areas of the country. Data was collected from 1592 respondents from four different malls. River Fair Mall in Louisville (248 respondents), Forest Fair Mall in Cincinnati (425 respondents), North Park Mall in Davenport, Iowa (419 respondents), and Woodline Center Mall in Toronto, Canada (500 respondents). The entertainment centers at these malls fit our operational definition of common area entertainment centers, since each had a concentrated, centralized, entertainment area of at least 30,000 square feet with a variety of entertainment opportunities, including various types of rides for children, carousels, miniature golf courses, soft play structures, simulator rides, etc. The geographic locations of these four malls in different regions of the U.S. and Canada also provides some amount of generalizability for our results.

The survey instrument was a structured personal interview questionnaire, administered by trained market research agency personnel. Interviewers conducted mall intercept exit interviews on a random sample of mall shoppers. Questions focused on the following issues – distance traveled to reach the mall, whether the respondents had visited the entertainment center and the food court that day, number of department stores and mall stores visited, amount of time and money spent at the entertainment center, the food court, and other stores, and various demographic variables.

RESULTS

Overall, our sample of 1592 respondents from four different malls consisted of 424 families, with one or more children. Median income levels were $25,000 - $50,000. The largest percentage (66%) were between the ages of 18-44, and 18% were students. A majority, 85.5% were Caucasian while 13.3% were African American. Average time spent at the mall was 2 hours, with an average of $17 spent at the mall stores. Thirty-two percent of the total respondents had actually visited the entertainment center that day, for an average of 23 minutes and had spent an average of $7.

Hypothesis 1:   **Consumers who visit the entertainment centers are more likely to have traveled a greater distance to reach the mall as compared to the distance traveled by consumers who do not visit the entertainment centers.**

The results of a T-Test comparing the mean number of miles traveled by consumers who visited the entertainment center and consumers who did not, showed no significant differences between the two groups ($\alpha=.05$). Similar results were obtained when each mall was analyzed separately. Only River Fair mall in Cincinnati showed a difference that was marginally significant at the $\alpha=.10$ level of significance. This hypothesis therefore was not supported. Consumers who were visiting the entertainment center did not appear to be traveling a longer distance to reach the mall. The entertainment center by itself did not seem to extend the mall's draw.

Hypothesis 2:   **Consumers who visit the entertainment centers are more likely to be visiting as a family with young children than consumers who do not visit the entertainment centers.**

Seventy-two percent of respondents who visited the entertainment center were families with children under the age of twelve, whereas only 20% of respondents who did not visit the entertainment center were families. Further, 75.6% of all respondents who came to the mall with young children (under 12) visited the entertainment center. These results supported the hypothesis, showing that the entertainment center seemed more likely to attract consumers who were visiting the mall with young children.

Hypothesis 3:   **Consumers who visit the entertainment centers are likely to spend more time and money shopping at mall stores and department stores as compared to consumers who do not visit the entertainment centers.**

T-Tests were used to compare the mean amount of time and money spent by the two groups of respondents, those who visited the entertainment centers and those who did not. The results indicated that respondents who visited the entertainment center spent significantly less time ($\alpha=.05$) shopping at both mall stores and department stores, although the total amount of time they spent at the mall was higher because of the time they spent at the entertainment centers. The number of mall stores visited were not significantly different between the two groups although the amount of money spent at mall stores by consumers who visited the entertainment centers was significantly less than consumers who did not visit the entertainment centers.

There was a significant difference between the two groups in terms of the number of department stores visited and the amount of money spent at the department stores. The consumers who visited the entertainment centers tended to visit far fewer department stores and spent much less money at these stores than the other group.

Further, analyzing only the group of consumers who visited the entertainment center, a significantly higher percentage visited mall stores as compared to the percentage that visited department stores.

Hypothesis 4:   **Consumers who visit the entertainment centers are more likely to visit the food court and spend more money there as compared to consumers who do not visit the entertainment centers.**

Fifty-seven percent of respondents who visited the entertainment center also visited the food court, whereas only thirty-four percent of the respondents who did not visit the entertainment center visited the food court. This difference is significant at the $\alpha=.05$ level. This hypothesis was therefore supported.

IMPLICATIONS AND CONCLUSIONS

The results of the above hypotheses provide some interesting insights into the effects of entertainment centers on shopper behavior in malls. First, it would appear that contrary to the generally accepted notion, the entertainment centers do not seem to extend the malls trading area significantly, at least in terms of shoppers who visit the entertainment centers vs. shoppers who do not. Shoppers who visited the entertainment centers were not driving a longer distance to reach the mall.

It may, however, be possible that the entertainment center provides a more synergistic relationship, and enhances the overall attractiveness of the mall, both for shoppers who visit the entertainment center and those who do not. If this was true, then, although we might not find differences in the two groups as we have done here, we might find that the overall drawing area of the mall is reduced if the mall did not have an entertainment center or is smaller than a comparable mall which does not have an entertainment center. The only way to test this would be to compare the drawing area of two similar malls, one with a major entertainment center and one without, or to ask respondents their exact reasons for visiting the mall and then to compare respondents who indicate the entertainment center as their primary reason and those who do not. Perhaps future studies could address this issue.

The results of the second hypothesis although not surprising, do indicate the drawing power of such entertainment centers for families with young children. A very large majority of families who came to the mall with small children visited the entertainment center. This is a fairly desirable segment, from the point of view of most mall developers, in terms of size, growth, and spending patterns. If the marketing strategy is to attract this segment, then an entertainment center should definitely be considered.

The results of the third hypothesis showing that shoppers who visit the entertainment centers are more likely to visit the mall stores rather than the department stores have significant implications for mall developers and tenants. These results basically show that the entertainment centers are more likely to draw shoppers who spend time at the mall stores but not shoppers who visit department stores. It could be that shoppers who visit the department stores come to the mall for specific purchases whereas shoppers who visit the entertainment centers are more likely to be 'browsers' who are there for the social and entertainment aspects of the mall experience rather than for specific purchases.

Even when they did visit the department stores, shoppers who visited the entertainment centers spent less money there, although they spent similar amounts of money at the mall stores. This finding is also contrary to expectations since most experts have stated that the entertainment centers are likely to increase revenues for all of the mall's other tenants. Overall, the results of this hypothesis show that the mall stores may benefit more than the department stores from the presence of the entertainment centers.

The results of the final hypothesis lends more support to the theory that the entertainment centers draw more from shoppers who are at the mall for social and entertainment aspects rather than for specific purposes. The food court appears to be a complimentary attraction to the entertainment center. Here again there may be more of a synergistic relationship, where the combination of the two attractions has more drawing power than each one by itself and where each helps to draw customers for the other.

Overall therefore, the results of this study seem to contradict some of the assumptions about entertainment centers while lending support to others. There is very little evidence to show that the entertainment centers extend the mall's drawing area, or that they get consumers to spend more time and money in general at the mall. The entertainment centers however do seem to be effective in drawing younger families, who visit the mall more for the social and entertainment aspects, and spend additional time at the food court and the mall stores.

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    iii. First page should begin with an abstract not exceeding 100 words;
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