Volume 9, Number 2 *2004*

Allied Academies
International Conference

Maui, Hawaii
October 13-16, 2004

Academy of Accounting and Financial Studies

PROCEEDINGS

Volume 9, Number 2 *2004*

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THE RELATIONSHIP BETWEEN INTEREST RATES AND THE NUMBER OF LARGE AND SMALL BUSINESS FAILURES

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ABSTRACT

This paper presents evidence suggesting interest rates have dissimilar effects on the large firm and small business failures. We examine monthly time-series data for the period 1984-1998 and find the interest rate is positively associated with the number of large business failures and negatively associated with the number of small business failures. We also find interest rates exhibit a long memory. For small businesses the negative impact of the interest rate on the number of failures is immediate and the lagged interest rate continues to be significant and strong and for over four years; for large firms the positive impact of the interest rate on the number of failures is delayed several months before gaining strength. Using maximum likelihood estimation to relate the number of large and small business failures to the interest rate, we find the interest rate is a statistically significant determinant of small business failure and the sign of the coefficient is negative. We do not find the interest rate a statistically significant determinant of large business failure. These results suggest the interest rate is more influential in the small business failure process.

THE EFFECT OF DIVIDEND TAX RATE REDUCTIONS ON STOCK PRICES AND DIVIDEND PAYOUT RATIOS

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ABSTRACT

Recent tax laws drastically reduced the tax rates for qualified dividends so they receive the same preferential treatment as long- term capital gains. Will the changes have a major influence on corporate dividend policies? Will the investments in dividend paying stocks suddenly be more attractive due to improved after-tax returns? This paper examines the factors affecting dividend payout ratios, compares the proportion of companies paying dividends before and after the tax change, and tests the relative stock price changes of dividend paying firms and non-payers. Exploration of these topics may assist policymakers in understanding the economic impacts of proposed changes in dividend taxation.

RETURN OF THE NATIONAL SALES TAX

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ABSTRACT

The Bush administration and some members of Congress have stated their goal of changing the federal tax structure to simplify the determination of tax due, reduce compliance costs for taxpayers and decrease administrative costs for the government. A shift from income taxes to a national consumption-based tax has been mentioned as a possibility. Supporters of a federal sales tax claim it would promote economic growth and result in a fairer tax system. Opponents say a value added tax would result in a higher total tax burden on individuals and businesses than the current income tax. This paper examines the validity of arguments on both sides and looks at the total tax burden and economic growth rates in European countries which have already adopted a value added tax. Potential tax evasion issues of a national sales tax are also explored.

WHY REPURCHASE EQUITY IN RESPONSE TO PERFORMANCE DECLINE? VILLAGE ROADSHOW LIMITED

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ABSTRACT

Firms suffering a significant decline in their performance may engage in a number of financial restructuring strategies. These include asset sales, debt reorganizations or equity for debt swaps. One strategy that would not normally be associated with financial distress is the repurchase of equity, given the repurchase needs to be financed out of cash reserves or new debt, and a firm in financial distress would be expected to be cash-constrained or have limited access to debt. We examine the recent case of Village Roadshow Limited, a firm that announced a repurchase of preference shares following a significant decline in financial performance. The case demonstrates how the structure of financial instruments can constrain the efficacy of a firm's recovery strategy.

INTRODUCTION

Village Roadshow Limited (VRL) is a diversified business incorporated in Australia with interests in radio, cinema exhibition, theme parks, film distribution and film production. In radio it is the market leader in Australia in the 'under 40s' demographic in mainland capital cities through a 60% interest in Austereo Limited. In cinema exhibition it has 1136 screens in 11 countries. It is the market leader in film distribution in Australia and New Zealand, and a significant international producer of Hollywood films.

In 2003 VRL announced a proposal to repurchase all of its Class-A preference shares. Under the terms of the offer, the consideration amounted to A$320 million. On close inspection, this repurchase represents reconstruction of the capital structure of the company in response to performance decline. This differs from many equity repurchases, which are undertaken by companies with surplus cash resources or who wish to distribute excess franking credits. VRL had recorded a loss after tax of A$26 million in 2002/03, and cash from operations were –A$65 million over the same period. This compared to profit after tax of $51 million and cash from operations of A$189 million in the previous period. The company suspended dividends on ordinary shares in 2003, leading to a significant fall in share price. Despite the loss in 2002/03, the company did record an increase in earnings before interest and taxes over the period, attributed largely to the success of movies such as Matrix Reloaded, Harry Potter and Lord of the Rings.

Firms suffering a significant decline in their performance may engage in a number of financial restructuring strategies in an attempt to relieve immediate financial pressures until such time as the underlying business experiences recovery. For example, firms may engage in asset sales, debt reorganizations (renegotiation of term or repayments) or exchanges of equity for debt. One strategy that would not normally be associated with financial distress is the repurchase of equity, given the repurchase typically needs to be financed out of cash reserves or new debt, and a firm in financial distress would be expected to be cash-constrained or have limited access to debt. In this light, the proposal of VRL to repurchase equity raises a number of interesting questions. First, why repurchase preference shares in response to a decline in financial performance? Second, is the financing of the repurchase a major consideration? Third, does the repurchase offer a premium to the preference shareholders? If so, is there a transfer of wealth from other stakeholders in VRL? We address each of these questions in this paper.

TERMS OF THE REPURCHASE

The repurchase proposal covered A$320 million in non-redeemable preference shares in the form of cash and unsecured notes with a nominal value of A$1.25 per share. Holders would receive A$0.25 in cash and the balance in unsecured notes with a face value of A$1. The notes pay interest at 10% and carry a three-year term repayable in three equal annual installments at the end of each year. The notes would be subordinated to all VRL's creditors, and the repurchase consideration would be debited to VRL's share capital account, meaning no dividend component and potential capital gains tax liability on the part of preference shareholders.

In essence, this proposal offers preference shareholders the opportunity to receive a premium (preference shares were trading at $1.06 in late February 2004) in return for giving up long-term upside should the company recover and its underlying businesses perform well. For existing ordinary shareholders the repurchase results in an increase in gearing for the company, exposing these shareholders to increased financial risk. Independent expert reports indicated that had the transaction occurred on 30 June 2003, the gearing of VRL, measured by the debt/equity ratio, would have increased from 1.18 to 2.00 (Grant Samuel, 2004). Given VRL management held a large stake of ordinary shares in the company, the proposal has been interpreted as a signal of management beliefs in the upside potential of the company.

WHY REPURCHASE EQUITY?

It appears counterintuitive that a company experiencing financial difficulties should propose a debt-funded repurchase of equity as part of a restructuring plan.

The capital structure of VRL, and in particular the terms of the preference shares, had inhibited the distribution of earnings to both preference shareholders and ordinary shareholders. This reduced the attractiveness of preference shares and ordinary shares to investors, and had kept their value depressed. The key factor is that the dividend on preference shares has been set at 3 cents above the dividend on ordinary shares, and should VRL declare any dividend payment on its ordinary shares, it is obliged to pay a minimum dividend to preference shareholders of 10.175 cents per share. Under these terms, the maximum dividend that VRL can pay on its ordinary shares, while

keeping the preference share at a minimum, is 7.175 cents per share. Given the number of shares outstanding in both classes, this minimum dividend that VRL is obliged to pay is approximately A$42 million. VRL was not in a financial position to meet this minimum cash payment in 2003, following decline in its financial position. For this reason, VRL suspended dividends on ordinary shares in 2003, and declared it unlikely to be able to pay dividends in 2004 without the preference share repurchase.

There are a number of risk factors associated with the transaction. As stated, the increase in debt results in a substantial increase in the gearing of the company, and this is of consequence given the inherent cash flow volatility in film production businesses. Repayment of the unsecured notes substantially increases VRL's financial commitments over the three year term of the debt, and reduces the financial flexibility of the company over this period. Further, it is not easy to assess the underlying performance and prospects of VRL given financial results over recent years impacted by non-recurring items related to business exits. Repayment of the unsecured notes is expected to be funded out of cash flows from operations, unused finance facilities and the divestment of assets as and when required.

VALUATION OF THE OFFER

Grant Samuel, acting as independent experts, valued the equity of VRL in the range of A$1040 million to A$1324 million as at 31 October 2003.

Table 1
Valuation of Village Roadshow Limited ($A million)

Operating businesses	Low	High
Austereo (60% interest)	435	475
Cinema exhibition	370	425
Film production	280	330
Theme parks	130	170
Film distribution	75	95
Less corporate overheads	-225	-200
Less other liabilities	-100	-50
Net cash held	75	79
Value of net assets (equity)	1040	1324
Ordinary shares on issue (m)	234.9	234.9
Pref shares on issue (m)	250.2	250.2
Total shares on issue (m)	485.1	485.1
Value per share	$2.14	$2.73

If the preference shares are considered of equal value to the ordinary shares, the offer of A$1.25 per share is substantially lower than the value range of A$2.14 to A$2.73. This would

represent a significant transfer of value from preference shareholders to ordinary shareholders. Nonetheless, the offer price of A$1.25 represented an approximate 50% premium on the volume weighted average price of the preference shares over the 12 months prior to the announcement of the offer.

VALUING THE PREFERENCE SHARES

In assessing whether the A$1.25 offer per share is attractive to preference shareholders, it is necessary to value the shares themselves. The difficulty is valuing the preference shares separately from the ordinary shares. The VRL preference shares carry no voting rights, no absolute entitlement to a dividend, convert to ordinary shares under any successful takeover offer, and carry priority on wind-up of the company of up to A$0.50 per share over ordinary shares. Consequently there are a number of factors that suggest the preference shares are intrinsically more valuable than the ordinary shares: the preference shares pay a dividend that is 3 cents higher than the ordinary shares, with a minimum dividend of 10.175 cents per share; holders of the preference shares have a priority as to return on capital in the event of winding up, and while the Class-A preference shares carry no voting rights, there are substantial controlling interests in VRL which imply the voting rights of other ordinary shareholders are of limited influence.

Despite these factors, the preference shares have traded at a discount to the price of the ordinary shares, consistent with the share prices of other Australian companies carrying both voting and non-voting stock that otherwise has similar economic rights. Up to July 2002, the preference shares traded at a price discount of approximately 10-25% to the ordinary shares. However this spread widened from this period, such that the total market capitalisation of VRL attributed to holders of the preference shares fell from 47% in July 2002 to an approximate range of 35% to 43% to July 2003 (Grant Samuel). Based on the ordinary share price immediately before the repurchase proposal was announced, holders of preference shares will receive value representing approximately 52% of the total market value of VRL. On this basis, the preference shareholders can be deemed better off if the proposal proceeds.

CONCLUSION

There are many reasons why a firm may engage in the repurchase of equity. The firm may be accumulating substantial retained earnings, and with limited investment opportunities, deem it value-enhancing for the firm to buy back equity to maintain a target capital structure and not dilute asset returns. Alternatively, management may believe the firm is undervalued, and engage in equity repurchases to support the value of the firm. Taxation considerations in various jurisdictions may also make it judicious to repurchase equity. However, it seems unlikely that equity repurchases would be engaged by firms during periods of financial distress. In such times, firms would be expected to be short on cash reserves, and maintaining an appropriate equity base would appear necessary to protect creditors against potential erosion of their stake in the firm.

The proposal of Village Roadshow Limited to repurchase preference shares in 2003 is notable given the firm had suffered considerable financial distress, and the repurchase of shares would be debt-financed and result in a considerable increase in the gearing of the company. The key

factor in VRL's decision to repurchase equity is the structure of its preference shares. The company could not declare a dividend on ordinary shares without having to pay a dividend on preference shares, with a minimum threshold set on the preference share dividends. This resulted in the company facing a minimum cash payment when declaring a dividend. Given cash-flow volatility in its core businesses, VRL was not in a financial position to make the minimum payment, and expected not to be in such a position for a number of years. By repurchasing the preference shares, constraints on dividend payments would be relaxed, giving the company greater financial flexibility while trading through its difficult times. The case serves a timely lesson to analysts and other parities interested in the implications of various financial structures on the financial flexibility of firms in later periods where the firms may suffer a decline in financial performance. Such structures may inhibit the operating and financial flexibility of the company during periods of financial distress, and in so doing, reduce options for recovery.

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CAPITAL GAINS, DIVIDENDS, AND TAXES: MARKET REACTIONS TO TAX CHANGES: A BEGINNING

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ABSTRACT

The purpose of this paper is to study the effects of the reduction of the capital gains tax on the stock price of companies that have historically not paid dividends. If markets are efficient, one would expect that price would have already adjusted prior to the day the announcement was made, if no new information was included in the announcement. If markets have not already incorporated the information, there would be a possibility for abnormal returns from investing in the stocks on the date of the announcement. In this paper, we will study the returns from companies prior to, and subsequent to, the announcement date and compare the price changes to those of similar firms that have historically paid dividends. The a priori expectation of the study is that the majority of a positive change in prices will take place prior to the announcement date as investors anticipate the likelihood of passage by the Congress and the President.

INTRODUCTION

From the time firms first began paying their stockholders dividends, an argument has raged between those who believe dividends add to stock value and those who believe they detract from its value. (Miller and Modigliani, 1961) only added another school of thought by proposing that dividends are irrelevant in a world without taxes. The United States, however, is not a world without taxes and past evidence has found a significant positive impact on the price of tax-favored assets from an increase in beneficial tax treatments (Scholes and Wolfson, 1991). The focus of this paper is on the effects of the reduction of the capital gains tax on the sale of securities, specifically, on the impact of the tax reduction on the price of stocks that have not historically paid dividends to their shareholders. The study incorporates the use of parametric tests to determine the relative impact of the 1997 capital gains tax reduction on stocks that do not pay dividends compared to those that do pay dividends. This capital gains tax cut was unique in that it 1) occurred during a period of a relatively bullish market, 2) was not coupled with a change in the ordinary tax rate, and 3) occurred during an otherwise uneventful week in the stock market. These factors aid in distinguishing the unique impact of the tax change on the markets. Other studies have seen accompanying changes in the ordinary tax rate and market anomalies such as the Crash of '87, which make it more difficult to gauge the impact of the capital gains tax change.

When Congress first established the income tax system in 1913, realized capital gains were taxed as ordinary income. Prior to 1986, capital gains and dividend payment were taxed differently with 60 percent of long-term capital gains exempt from taxation. Such incentives made stocks offering higher capital gains, as opposed to higher dividends, more attractive to investors. In 1986, Congress passed the 1986 Tax Reform Act which changed the way capital gains were taxed. It essentially brought the taxation of dividends and capital gains to the same level. The act made all capital gains taxable at the same rates as other income. This removed the essence of the preference bias for capital gains as opposed to dividend income. It has been argued that part of the motivation behind this increase in the capital gains tax rate was an attempt to reduce the level of investment in risky assets, i.e., stocks that rewarded investors with capital gains rather than dividends.

LITERATURE REVIEW

Event studies have long been used to test for the presence of abnormal returns on a particular security occurring around a particular announcement (or event). If abnormal returns do coincide with announcement, then we conclude that the announcement contained some new information that was not already reflected in the price of the security. If this is true, then the strong-form market efficiency hypothesis does not hold. (Fama, 1965) defined strong-form market efficiency as investors' inability to earn excess returns using any information, either public or privately held. According to this hypothesis, when the announcement of passage of the 1997 Taxpayer Relief bill occurred on August 5, the market should have already incorporated that information into the price of securities. In other words, there should be no new information in the announcement. We do, however, hypothesize that there may be a small, possibly significant, impact in stock prices on the day of the actual signing of the legislation into law.

(Miller & Modigliani, 1961) demonstrate that in the absence of taxation, dividend policy has no effect on the valuation of shares by the market. But in the real world, taxes and tax policies do exist and do impact the way individuals value a share of stock. (Poterba & Summers, 1984) conduct a study on how the tax codes affect the valuation of dividends by investors. They find that a change in the taxation of dividends has a substantial effect on the premiums required by investors to induce them to receive returns in the form of dividends. This study was conducted when the top tax rate on capital gains had been lowered to 20% from its previous 28%. They also conclude that taxes account for part of the positive relationship between yields and stock market returns. (Bolster, Lindsey & Mitrusi, 1989) conduct a study of the effect of the 1986 Tax Reform Act on stock market trading. They find that the tax induced effects are significant and that holdings of long term winners fell in 1986 as individuals opted away from the capital gains stocks which were suddenly being taxed as ordinary income.

Does the fact that the announcement is preceded with a pledge to pass a capital gains tax change remove some of the effect of the announcement? (Subramanyam, 1996) concludes that the average price response declines with the absolute magnitude of the surprise. The amount of information disclosed could change as the market anticipates the outcome of the Congressional fight over the capital gains tax. Subramanyam suggests that, in fact, the level of reaction will be subdued as the level of surprise about the announcement diminishes. (Ball & Brown, 1968), in a study on the effects of earnings announcements on stock prices, concludes that only 10-15% of the

information contained in the announcement is not anticipated prior to the actual announcement. Would the stock market discount the information content of the passage of the Taxpayer Relief Act prior to the actual passage of the bill? Ball suggests that the presence of abnormal returns is often the result of some deficiency in the asset pricing model used in the study, not from inefficiencies of the market. If this is the case, using the proper pricing model, there should be no observable abnormal returns present at the announcement of the bill's passage.

(Lang & Shackleford, 1999) document that stock prices move inversely with dividend yields during the week surrounding the announcement of an agreement on the 1997 budget accord. The authors find that the change in share prices are decreasing in dividend yields among firms paying dividends. Lower dividend payers share prices are less adversely affected by the reduction in the capital gains tax rate than higher dividend payers. Investors place more value relevance on the expected capital gains tax rate when assessing firms with lower dividend yields. Stocks that will pay their shareholders in the form of capital appreciation become more valuable to the investor with decreases in the capital gains tax rate. Share prices should increase as investors purchase the stocks in hopes of taking advantage of the preferential tax treatment of the gains. The authors also find no evidence to support the contention that shareholders will sell of their shares of stocks with higher capital gains in order to take full advantage of the lower tax rate on their investments. The increase in price due to the advantage of the tax reduction more than negated any sell off of appreciated assets by investors.

DATA AND METHODOLOGY

The data used is this study consists of daily returns of stocks trading on the NYSE, AMEX, and NASDAQ that had paid regular dividends in each of the twelve quarters prior to the announcement of the passage of the tax reform bill and stocks on those same indices which have paid no dividend in the past twelve quarters prior to the that date. The period of interest is between 1995 and 1997 with the event occurring at the interval around the announcement of passage of the Taxpayer Relief Act of 1997. We examine a three-day window around May 2, 1997, which is the day President Clinton and the GOP announced their budget. On this date, the two parties made it clear that they intended to pass some form of capital gains tax reduction. We also examine a three-day window around August 5, 1997, the day the President signed the legislation into law. If the market was sufficiently convinced of the imminent tax reduction on May 2, there should be no abnormal returns generated by the official announcement of the reduction. We also examine a three-day window around May 7, the effective date of the capital gains tax reduction (also the day it was announced).

A screening of the sample is done to detect firm specific announcements around the event windows that would have had substantial impact on the value of the firm's securities. Those companies with anomalous market announcements during the event windows are eliminated from the sample to avoid introducing bias into the estimation. A three-day event window is used to aid in capturing the true impact of the announcement given possible information leakage. (Brown & Warner, 1985) suggests narrowing the window as much as possible to increase the power of statistical tests since a longer window tends to diminish power.

In order to conduct the event study, we first establish a time line which includes the event windows (the time of the announcements) and a pre- and post-event window. The estimation period for this study begins 271 trading days before the May 2 declaration of an imminent tax cut and ends 21 days before the actual May 2 announcement. The first event window examined is around May 2 and the second event window will be around August 5.

We use a market model to estimate normal expected stock returns on our sample of companies. Returns of the individual securities are regressed against the returns of the market during the same interval. The common market model is:

Rit = ai + biRmt + e?it for t = 1, 2, ..., T

Where,

Rit	=	the return on stock I for period t
Rmt	=	the return on the market index for period t
ai	=	Intercept
bi	=	the slope coefficient
?eit	=	the disturbance term
T	=	the number of periods in the estimation window

Companies that paid a dividend in the 21 days prior to the May 2 announcement or the 21 days after the August 5 announcement are not included in the sample due to the dividend bias presented by the payment. Companies that left the market during the event time period are dropped from the sample. The CRSP equally-weighted index will serve as the market proxy. The parameter ai and bi are calculated using the 250 trading day period before the first announcement of an imminent agreement. Each firm's residuals (abnormal returns) during the estimation period are calculated by the following equation: ARi,t = Ri,t - (ai + bi Rm,t)

Average abnormal returns across companies and cumulative abnormal returns are computed for each of the intervals of interest on our time line. We examine the abnormal returns and test the hypothesis that the CARs for the securities are equal to zero. T-tests are conducted on each of the time intervals to determine if the dividend paying companies differ from the non-dividend paying companies in their average abnormal return and, if so, when the impact occurred.

RESULTS

The data is analyzed to meet the criteria given and the result is a sample of 7,359 stocks from the CRSP data files. Of this sample, 3182 were identified as dividend paying and 4177 were identified as non-dividend paying. The findings show that the non-dividend paying companies experienced statistically significant abnormal returns on the day of the announcement of a deal and the following trading day. Dividend paying stocks experienced no statistically significant abnormal returns on either of the days. Again, the magnitude of abnormal returns for the non-dividend paying stocks is almost ten times that of the group of dividend paying companies.

On May 7, an effective date for the tax cut was announced by Senate Finance chairman William Roth and House Ways and Means Chairman William Archer. The effective date was May 7, 1997 but there was no specified capital gains tax rate. It was known that the rate would decline

and speculation was that the rate would be between 15 and 20 percent. The results show that there was a statistically significant cumulative abnormal return present on the day following the announcement of the effective date. The lower level of significance may be indicative of the fact that the market participants may have anticipated that the effective date would have been much earlier in the year. If this was true, much of the market adjustment would have already taken place.

The final period of interest is the three-day window around the date the legislation was actually signed by President Clinton. If the market had already responded to the news of the deal and the surprise factor had disappeared, we would expect to see little or no significant information contained in the actual signing. The results show that, indeed, there is no evidence of abnormal returns for either of the two groups on the signing date. This seems to indicate that the market had anticipated the outcome and adjusted their holdings to conform to their expectations.

SUMMARY AND CONCLUSIONS

In the summer of 1997 the Congress and President lowered the capital gains tax rate on equities held for at least 18 months (12 months if sold between May 7th and July 28th). This change in the tax structure provides an opportunity to test the relationship between dividend payment, taxes, and the market value of equity. In this paper we test the reaction of the stock market to this change by observing the daily returns of firms that have historically paid dividends to their owners and those that have retained their earnings and rewarded their owners in the form of capital gains.

There are three dates of interest to this study. On May 2nd the Congress and President announced their intent to lower the capital gains rate. GOP leaders announced on May 7th that the reduction would be effective on transactions from that date forward if approved by the President. On August 5th all uncertainty was resolved when the President signed the Taxpayer Relief Bill of 1997 into law.

Our results show a consistently negative reaction by the market on all three dates of interest. No one-day abnormal return is statistically significant, but the three-day cumulative abnormal returns are significant for the non-dividend paying stocks around the Deal Announcement day and the tax change Effective date. This would appear to indicate that rather than stimulate the purchase of non-dividend paying stocks, the tax reduction prompted investors that had felt trapped by the high tax liability to realize their gains. It is also apparent that some investors jumped the gun and began to sell their holdings around the Deal Announcement date. This early liquidation was probably in anticipation of the new rates being applied to the entire 1997 tax year rather than a mid-year effective date.

This research is very early in its development and all helpful comments are welcome.

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PRICING AND OPERATING EFFICIENCY OF VENTURE-BACKED AND NONVENTURE-BACKED INTERNET IPOS

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ABSTRACT

Initial Public Offerings (IPOs) were the most popular form to raise new capital in the united States during the last decade (1990-2000). Thousands of companies went public for the first time, particularly in the technology-heavy Nasdaq stock market. Along with the regular IPOs came the Internet IPOs backed by the venture-capitalists, who specialize in financing promising start-up companies and bringing them public. When we examine these Internet IPOs issued during 1996-2001, we find that the first-day returns of both the venture-backed and nonventure-backed IPOs were much higher than in other time periods, but they were slightly higher for the nonventure-backed IPOs than that of the venture-backed IPOs. Also, the former group performed better than the latter group regarding operating ratios and the growth of cash flows. The regression results show that the first-day closing price was significantly and negatively associated with the return variables, thus suggesting the underpricing of the Internet IPOs during 1996-2001 – the period covered by our study.

INTRODUCTION

Initial Public Offerings (IPOs) were the most popular form to raise new capital in the United States during the last decade (1900-2000). Thousands of companies went public for the first time, particularly in the technology-heavy Nasdaq stock market. Along with the regular IPOs came to Internet IPOs backed by the venture-capitalists, who specialize in financing promising start-up companies and bringing them public. More than half of the Internet IPOs were backed the venture-capitalists during 1996-2001. For example, in 1998 venture-capitalists put $13.7 billion into 2,023 start-ups, up from $2.5 billion invested in 627 companies in 1994. In 1999 alone, Internet companies received nearly $20 billion in venture capital funding. As a matter of fact, hardly there was a successful Internet IPO in that year that did not receive funding from at least one big-name venture capitalist.

In this paper, we have addressed the question whether the venture-backed Internet IPOs performed better than the nonventure-backed Internet IPOs during 1996-2001. We have taken a sample of 117 Internet firms selected randomly, covering both the New York Stock Exchange and the Nasdaq stock market. Our objective here is to examine the pricing performance and operating efficiency of both the venture-backed Internet IPOs during the period covered by our study. By probing into these performance measurements of the Internet IPOs, we hope to shed new light into

the controversy found in the Finance literature, that in general, the venture-backed IPOs performed better than the nonventure-backed IPOs during the past decade.

EMPIRICAL FINDINGS

In Table 1, we have calculated the returns of different selected periods for the venture-backed Internet IPOs of our sample. Here we find that both the mean value and the median value of the first-day returns were much higher than the returns of other time periods, particularly as compared to the second-day and third-day returns which were drastically reduced. Both the six-month and one-year returns were negative for the venture-backed Internet IPOs. This also proves that the Internet IPOs were severely underpriced

Table 1
Selected Returns of the Venture-Backed Internet IPOs (in Percentage)

	Mean	Median	Stand. Dev.	Max. Value	Min. Value
First Day Return	88.45	48.54	137.73	657.14	-48.53
Second Day Return	8.13	1.44	36.81	194.02	-34.09
Third Day Return	7.47	0.61	37.63	185.89	-40.11
First Month Return	19.32	1.21	70.93	267.00	-82.86
Six Month Return	-20.54	-33.01	52.24	92.83	-93.38
One Year Return	-32.06	-69.27	76.84	261.76	-98.42

when the first-day closing price was compared with the offer price, as seen in many IPO studies of the United States.

Table 2 shows the returns of the nonventure-backed IPOs of different time periods of our sample. We find that the mean and the median value of the first-day return of this group were slightly higher than the returns of the venture-backed Internet IPOs. Also, both

Table 2
Selected Returns of the Nonventure-Backed Internet IPOs (in Percentage)

	Mean	Median	Stand. Dev	Max. Value	Min. Value
First Day Return	90.82	41.83	144.82	773.08	-50.00
Second Day Return	6.59	-0.25	29.99	149.33	-45.81
Third Day Return	4.20	-2.00	30.32	168.00	-43.67
First Month Return	26.13	8.44	65.42	244.26	-77.95
Six Month Return	59.57	12.60	156.29	713.22	-94.99
One Year Return	48.22	21.37	210.62	1271.00	-97.87

The second-day and third-day returns were precipitously lower as compared to the first-day return. But the six-month and one-year returns were positive and quite high as compared to the venture-backed Internet IPOs, as seen in Table 1.

In Table 3, we have calculated the operating ratios and the annual growth of cash flows of the venture-backed Internet IPOs. Except for 1997, both the mean and the median operating ratios were positive during 1996-2001. It was highest in 1996 when the number

Table 3
Operating Ratio and Growth of Cash Flows of the Venture-Backed Internet IPOs

Year	Mean Operating Ratio	Median	Stand. Dev.	Annual Growth of Cash Flows	Median	Stand. Dev.
1996	18.58	7.94	26.05	-0.29	-2.23	3.28
1997	-21.37	-12.44	30.48	0.04	1.11	2.45
1998	11.02	0.78	22.91	5.09	3.42	6.33
1999	7.69	0.96	17.85	5.48	2.85	8.93
2000	16.86	1.78	40.13	6.42	2.51	9.72
2001	4.36	1.13	9.99	9.03	7.93	12.00

of Internet IPOs were very small, the second best year being 2000 when the number also started to dwindle. That was also the year when the standard deviation of the mean operating ratio was the highest. As for the annual growth of cash flows, the mean growth rate was the highest in 2001 when the number of IPOs again became much smaller, and the fluctuation of the mean ratio was also the highest as reflected in its standard deviation. However, the negative growth rate of cash flows in 1996 meant that the Internet sector had just started to roll which had no time to build cash flows. Both the high mean and median values in 1998-2000 showed the growth of cash flows of the venture-backed IPOs in the United States.

Table 4 shows the mean and median operating ratios as well as the mean and median growth of cash flows for the nonventure-backed IPOs. Here we find that both the mean and

Table 4
Operating Ratio and Growth of Cash Flows of the Nonventure-Backed Internet IPOs

Year	Mean Operating Ratio	Median	Stand. Dev.	Annual Growth of Cash Flows	Median	Stand. Dev.
1996	1.46	1.43	0.48	1.17	1.26	0.42
1997	34.76	3.86	82.51	18.87	4.22	27.33
1998	15.07	1.33	33.97	15.18	6.55	23.03
1999	13.14	1.52	37.89	15.20	3.88	32.44
2000	8.27	1.25	45.44	18.73	3.06	58.59
2001	6.60	1.11	30.76	17.19	3.18	47.27

median operating ratios were positive throughout the time period covering 1996-2001, unlike that of venture-backed IPOs. It was highest in 1997 when the standard deviation was also the highest. The annual growth of cash flows was also the highest in 1997, the second best result coming in 2000. The very high rate of growth of cash flows again reflects the robustness of this sector among the IPOs. When we compare the results with that of Table 3, we find that the annual growth of cash flows was much higher for the nonventure-backed IPOs than that of the venture-backed IPOs during 1996-2001 – the period covered by our study.

We have also employed the OLS regression model in order to explore the causal relationship between the IPO return as the dependent variable, and various relevant variables as the independent variables, for both the data-sets of venture-backed IPOs and the nonventure-backed IPOs. The multiple regression equation is of the form:

AR = a0 + b1 FC + b2 OP + b3 SO + b4 MC

Where:

AR = Returns of different periods;
FC = First-day closing price ($);
SO = Shares offered (million);
MC = Market capitalization ($ million).

In Table 5, we have shown the regression returns for the venture-backed Internet IPOs listed in both the NYSE and Nasdaq stock markets. We find that only the first-day closing price (FC) was significantly and negatively associated with the return variables in four of the six equations, particularly for the first two days as well as for the six-month and one-year returns. Offer Price (OP) was significant in two out of the six equations, but the sign was negative and consistent for all the equations. Shares Offered (SO) was significant only for the one-year return, as was Market Capitalization (MC). Thus the significance of the FC variable indicates the underpricing of the IPOs, particularly on the first day, when the IPOs were offered to the public for the first time.

Table 5
Multiple Regression Equations of Returns as the Dependent Variable (Venture-Backed IPOs)

Dependent Variable	Independent Variables					
(ARs)	FC	OP	SO	MC	R2	F-Ratio
First-Day Return (AR1)	-2.557*	-0.432	0.816	0.024	0.650	6.281
	(-7.254)	(-0.331)	(0.268)	(0.731)		
Second-Day Return (AR2)	-1.028*	-0.656	0.461	0.004	0.556	4.528
	(-1.919)	(1.147)	(0.345)	(0.719)		
Third-Day Return (AR3)	-0.939	-0.725**	0.565	0.008	0.303	4.001
	(-0.397)	(-1.358)	(0.424)	(1.028)		
First Month Return (AR4)	-0.144	-0.998*	0.738	0.013	0.367	5.632
	(-0.157)	(1.911)	(0.288)	(1.065)		
Six Month Return (AR5)	-0.118*	-0.626	0.726	0.018	0.257	4.638
	(-1.818)	(-0.816)	(0.405)	(0.259)		
One Year Return (AR6)	-0.115*	-1.044	-0.264*	0.080*	0.276	3.251
	(-2.421)	(-0.996)	(-1.797)	(2.675)		

t-values of the independent variables are in parenthesis.
*1% level of significance.
**5% level of significance.

Table 6 shows the regression results for the nonventure-backed Internet IPOs, also listed in the NYSE and the Nasdaq market. Here we also find that the first-day closing price (FC) was negatively and significantly associated with the return variables in four out of six equations, also for the same crucial time periods as in Table 6. Offer Price (OP) was also significantly and negatively associated with four out of six equations. But Shares Offered (SO) was significantly (and negatively) associated only with the first-day return as the dependent variable, as Market Capitalization (MC) was significant (positively) only for the one-year return. Both the R2 and F-

ratio indicate the relevancy of the equations, following the methodology of the OLS regression model.

Table 6
Multiple Regression Equations of Returns as the Dependent Variable (Nonventure-Backed IPOs)

Dependent Variable	Independent Variables					
(Ars)	FC	OP	SO	MC	R2	F-Ratio
First-Day Return (AR1)	-2.996*	-2.492*	-0.701**	-0.008	0.432	6.472
	(-6.229)	(-1.619)	(1.158)	(-0.492)		
Second-Day Return (AR2)	-0.661*	-0.630	-0.073	0.001	0.351	6.031
	(-1.558)	(-0.921)	(-0.482)	(0.557)		
Third-Day Return (AR3)	0.078	-0.921*	-0.036	0.002	0.342	5.370
	(0.696)	(-1.421)	(-0.250)	(0.403)		
First-Month Return (AR4)	0.085	-1.346	-1.191	0.002	0.286	7.704
	(0.282)	(0.817)	(0.522)	(1.083)		
Six Month Return (AR5)	-0.281*	-2.792*	-0.789	0.010	0.324	6.648
	(-1.480)	(2.301)	(-1.046)	(0.857)		
One Year Return (AR6)	-0.378*	-3.513*	-1.013	0.013*	0.485	4.110
	(-2.436)	(-2.701)	(-0.906)	(1.433)		

t-values of the independent variables are in parenthesis.
*1% level of significance.
**5% level of significance.

CONCLUSIONS

We have found that, for both the venture-backed and the nonventure-backed IPOs, the first-day returns were much higher as compared to the second-day and third-day returns, but the first-day return of the nonventure-backed IPOs was slightly higher than that of the venture-backed IPOs. Also, both the six-month and one-year returns of the nonventure-backed IPOs were positive, while they were negative for the venture-backed IPOs. The first-day high returns, thus, supports of the findings of other researchers that the IPOs of the United States had suffered from initial underpricing, which was specially true for the *Internet* IPOs. As for the operating ratios of these two groups as a performance measure, the mean operating ratios were positive during 1996-2001 for the venture-backed IPOs, except for 1997, while they were positive throughout the whole period for the nonventure-backed IPOs. Also, the annual growth of cash flows was much higher for the nonventure-backed IPOs as compared to the venture-backed IPOs during 1996-2001.

When we employ the regression equations to estimate the causal relationship between the return statistics as the dependent variable and other relevant variables as the independent variables, we find that only the first-day closing price was significantly and negatively associated with all the return variables. Offer price was also significant and negatively related, but not in all equations, while the number of shares offered as well as market capitalization were significant only in two or three equations. The negative significance of the first-day closing price in the regression results proves, again, the underpricing of the IPOs, as seen in many other studies. But our study has reached the opposite conclusion of Professors Brav and Gompers, as we find that the nonventure-

backed Internet IPOs performed better than the venture-backed Internet IPOs when 1996-2001 period was taken into account.

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A COMPARISON OF CHARACTERISTICS OF BANKRUPT AND NONBANKRUPT SMALL FIRMS IN THE 1990'S

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ABSTRACT

In the past 40 years, numerous studies have focused on predicting bankruptcy of business firms. For the most part, these studies have investigated the failures of large, well established companies traded on the New York Stock Exchange (NYSE) and/or the American Stock Exchange (AMSE). A host of financial and market variables which might assist in predicting bankruptcy have been suggested in these research inquiries. The primary objective of this empirical study is to critically compare, contrast and evaluate the performance of various characteristics deemed important in the literature for distinguishing the path of bankrupt firms from that of nonbankrupt firms. This investigation utilizes the method of univariate analysis and has selected a matched sample of 316 OTC traded small firms in the 1990's. The matching of the failed and nonfailed firms is done on three important criteria to ensure a valid comparison: 1) industry; 2) size; and 3) fiscal year of financial reporting. In our sample, the average total assets of bankrupt firms is $34.23 million while the same of the matched nonbankrupt firms is $33.32 million. The analysis in this paper begins three years prior to bankruptcy.

Our results consistently indicate that many of the variables tested exhibit significant differences in the two groups of firms and these differences become more illuminating as the bankruptcy approaches. The findings strongly suggest that univariate analysis can be successful in detecting deteriorating financial condition of small firms as well as in distinguishing between the failed and nonfailed firms. It is believed that the analysis offered can be an immensely useful tool for gauging financial health of small firms and the trends found could possibly serve as an early warning signal of potential business collapse.

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TEACHING TIME VALUE OF MONEY CONCEPTS IN ACCOUNTING COURSES

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ABSTRACT

Time value of money (TVM) is a concept taught in almost all introductory and intermediate financial and managerial accounting courses. The concepts are necessary for students to master such topics as bonds, leases, pensions, and capital budgeting. A survey of accounting textbooks demonstrates that TVM concepts are consistently taught using time value tables, although some textbooks are now incorporating the use of financial calculators.

It is surprising that students are still learning TVM with tables when it is considered that no volume of tables has been published in over twenty years. This paper explores the justifications presented by accounting faculty for the continued use of time value tables in the classroom. The challenges of moving to an academic environment where TVM is taught without tables are discussed. Suggestions are presented for moving to a calculator-based teaching environment.

ONLINE VS. LECTURE CLASS: PERFORMANCE EVALUATION BASED ON DIFFERENT TYPE OF QUESTIONS

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INTRODUCTION

Recently, most universities have offered many online courses. At the same time, good learning assistance tools such as WebCT and Blackboard have been developed. In particular, the flexibility of online courses has contributed to their popularity. Researchers have studiedwhether there has been the same learning effect in online class as in the lecture class. Most studies on online learning have focused on the differences between online and lecture classes by using overall exam performances. But no research has studied the performance difference on the different types of questions on the exams in online and lecture classes.

PURPOSE OF STUDY

This study evaluates the performance between online and lecture classes for exams based on the different types of questions such as multiple choice, classification, essay, and computation.

> The Institute for Higher Education Policy (IHEP) in 1999 stated: *A substantial portion of research on distance learning has been conducted to demonstrate no significant difference in achievement levels between groups of distance and traditional learners. However, there is wide variance of achievement and attitudes within the groups, which indicates that learners have a variety of different characteristics. The factors influencing theses differences could include gender, age, educational experience, motivation, and others*.

Therefore, we do further analysis for the online class performance based on age, gender, and motivation factors.

PROFILE OF STUDENTS

In the spring quarters on 2003 and 2004, undergraduate managerial accounting courses were offered based on online and lecture classes. There were 29 students in online class and 27 in lecture

class in 2003 while 26 online and 24 lecture in 2004. Information for students in both classes in 2004 is provided in Table 1.

Table 1
Summary Profile of Students

	Online Class	Lecture Class
Average GPA:	3.2	2.9
Average Age:	29.3	28.2
Average Distance (Mileage): (From Home to School)	46.7	17.3
Gender: Male:	9(35%)	14(58%)
Female:	17(65%)	10(42%)
Average Working Hours per Week:	35.0	27.6
Marital Status: Married	11(40%)	10(42%)
Single	17(60%)	14(58%)

As shown in Table 1, it is noted that the average distance from home to school in online class is much bigger than that in the lecture class. Other factors look not much different.

ANALYSIS AND RESULTS

For both classes, Blackboard was used as a learning assistance tool and lecture notes for each chapter were developed by Powerpoint. Also, the same text book was used. Three exams were required in both online and lecture classes. Over two years, the same exams were given to both classes on the campus except non MC questions had slight variation in different years. All exams were proctored and graded by the same instructor. For performance evaluation based on different type of questions, only the first and second exams were included because the third exam included only multiple choice questions.

In this study, performance is evaluated based on the different types of questions such as MC, classification, essay, and problem solving. In 2003, the first exam consisted of 20 MC questions (60 points) and four non MC problems; P1: essay (8 points), P2: cost classification (10 points), P3: computation (12 points), and P4: computation (10 points) based on 100 points. The second exam consisted of 20 MC questions (60 points) and four non MC problems; P1: cost classification (10 points), P2: cost allocation (10 points), P3: computation (10 points), and P4: computation (10 points) based on 100 points. In 2004, the first exam consisted of 20 MC questions (60 points) and four non MC problems; P1: essay (10 points), P2: cost classification (10 points), P3: cost classification (10 points), and P4: computation (10 points) based on 100 points. The second exam consisted of 20 MC questions (60 points) and four non MC problems; P1: computation (10 points), P2: cost classification (10 points), P3: computation (10 points), and P4: essay (10 points) based on 100 points. Descriptive statistics of performances of multiple choice (MC) and non MC questions are shown in Table 3.

Table 3
Summary of Descriptive Statistics for MC and non MC Questions

	Exam I			Exam II		
	Multiple Choice Mean(SD)	Non MC Questions Mean(SD)	Total Mean(SD)	Multiple Choice Mean(SD)	Non MC Questions Mean(SD)	Total Mean(SD)
Online (03)	50.1(7.8)	29.5(9.6)	79.6(15.4)	42.5(7.9)	19.3 (8.3)	61.2(15.1)
Lecture (03)	49.1(7.5)	30.7(9.2)	79.0(15.0)	45.2(8.8)	20.5(10.2)	64.3(18.0)
Online (04)	43.8(9.2)	30.1(6.2)	73.6(11.2)	45.3(7.1)	25.4(8.5)	71.1(13.4)
Lecture (04)	46.2(6.2)	31.5(6.2)	77.7(11.1)	47.3(5.8)	23.3(8.5)	72.1(12.6)

In 2003, the overall performance of Exam I of the online class was better than that of the lecture class. However, the performance of non MC questions of Exam I of lecture class was slightly better than that of the online class. For Exam II, the overall performance of the lecture class was consistently better than that of the online class. In 2004, the performance of lecture class was consistently better than that of online class except the non MC questions of Exam II. For comparative analysis, *t* test was performed on each type of questions for both exams. For the lecture and online classes, there are no statistically significant differences for the performances for MC and non MC type of questions on both exams. For further analysis, the performance of both online and lecture classes based on each question of non MC questions is evaluated. The results are shown in Table 4.

Table 4
Summary of Descriptive Statistics for Non MC Questions

	Exam I				Exam II			
	P1	P2	P3	P4	P1	P2	P3	P4
Online (03)	7.0(1.7)	8.3(2.2)	8.1(5.0)	7.2(3.6)	8.1(1.4)	3.3(3.4)	4.6 (3.6)	3.3(3.0)
Lecture (03)	6.4(2.5)	8.3(2.3)	8.6(4.5)	7.5(3.5)	8.2(1.6)	4.1(3.9)	4.6 (4.0)	4.0(3.3)
Online (04)	7.4(2.3)	7.7(1.8)	7.7(1.4)	7.0(4.0)	7.1(4.3)	8.7(1.2)	3.7(3.0)	6.3(2.8)
Lecture(04)	7.5(2.5)	7.9(1.4)	8.0(1.7)	8.1(3.1)	6.6(4.8)	8.4(1.6)	3.5(2.7)	6.4(2.5)

In 2003, the performance of each question of the lecture class was better than that of the online class except P1 (essay) of Exam I. In 2004, it is noted that the performances of P1(essay), P2(cost classification) and P3(cost classification) of Exam II of online class were better than those of lecture class.

The problem in this study is that the sample size is not large enough. We expect that the larger sample size would provide more reliable analysis results. Before aggregating the two years' data of on online class, t test was performed to determine whether annual data over two years are different. The result showed that two groups over years were not statistically different. Therefore, the online classes in 2003 and 2004 were aggregated. As IHEP suggested in 1991, we attempted to investigate whether age, gender, and motivation factors affected the performance of the online class students. Therefore, the aggregated data are subdivided into two groups based on age; young vs. old groups, gender; male vs. female groups, and marital status; single vs. married groups. Based on the age of 26, online class students are classified into two groups – young and old groups. We assume that married students have a stronger motivation for their study because they feel more responsibility for supporting their family. Therefore, marital status was used as a surrogate variable for motivation measurement.

For the comparative analysis, t test was done for the whole exam performance for two groups based on age, gender, and marital status. Based on the age factor, for Exam I the young group's performance is better than that of old group's one while for Exam II, the result is opposite. But for either case, there is no statistically significant difference for the performance between the young and old groups. Based on the gender factor, male students' performances of Exam I and Exam II are better than those of female students. The gender factor difference for Exam I is not statistically while the difference for Exam II is statistically significant at the 10% level. Based on the marital status factor, performance of married students is consistently better than that of single students. The difference for Exam I is statistically significant at the 10% level while the difference for Exam II is not statistically significant. Therefore, we concluded that in this study, gender and marital status factors partially affected the exam performance while the age factor did not.

Table 5
Online Class Performance Based on Age, Gender, & Marital Status Factors

		Exam I	Exam II
Age Factor	N	Mean (SD)	Mean (SD)
Young Group	23	78.0(12.3)	63.3(14.4)
Old Group	28	76.5(17.4)	68.3(15.9)
Gender Factor	N		
Female Group	22	74.9(14.8)	61.7(15.5)
Male Group	29	79.0(15.5)	69.4(14.5)
Marital Status Factor			
Single Group	28	74.1(16.7)	64.1(16.3)
Married Group	23	81.0(12.6)	68.5(14.0)

CONCLUSION AND FUTURE STUDY

In this study, the performance of the online class is compared to that of the lecture class. The result shows that performance in the lecture class is generally better than that in the online class, but the difference is not statistically significant. For different types of questions, gender and marital status factors partially affected the exam performance while the age factor did not. However, the small sample size limits the interpretation. Therefore, future studies will include more samples and use more sophisticated research methodology such as ANOVA and Discriminant Analysis.

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IMPLICATIONS OF CHANGES IN TAX RATES FOR FIRM DEBT LEVELS: EVIDENCE FROM THE 1986 TAX REFORM ACT

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ABSTRACT

Many models have been developed to value firms and determine optimal capital structures for firms. Among the most famous of these models is developed in Miller (1977). The work of Miller (1977) has been extended by many authors. One extension of the work by Miller(1977) is Jalbert (2002) who develops and tests valuations equations for firms that are subject to pass-through taxation and for firms that are subject to double taxation using a differing set of assumptions than was employed by Miller (1977). This work is extended by Jalbert and Dukes (2003) who examine the implications of a zero percent tax rate on dividend income. In this paper, we extend this line of work by explicitly modeling the change in capital structure expected from a change in tax regimes. The equations are analyzed and tested by examining the changes in capital structure that occurred around the 1986 Tax Reform Act which reduced ordinary income tax rates, raised capital gains tax rates and reduced corporate tax rates. These changes in tax rates are expected to increase the gain from leverage for Pass-Through Taxation firms relative to Double Taxation firms. The data consists of two samples of paired C-corporations, which are subject to double taxation and Master Limited Partnerships, which are subject to pass-through taxation. The results show that firms change their capital structures in predictable ways when tax rates change. Specifically, debt levels in Pass-Through Taxation firms increased substantially around the 1986 Tax Reform Act while debt levels remained relatively constant for double taxation firms.

This research provides managers with a analytical foundation to determine the expected change in firm value associated with a tax rate change. The work also provides insights to managers about the extent to which their capital structures should be adjusted in response to a tax rate change. This research is also useful for policy makers who set tax rates. By examining the changes in the gain from leverage associated with various tax schemes and setting tax rates accordingly, policymakers can encourage the uses of preferable sources of financing in the economy. If there is a public utility to be gained from a certain aggregate financing scheme in firms, this research will help identify that scheme so that policy makers set tax rates in such a manner to encourage firms to finance themselves in the appropriate pattern.

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CROSS BORDER STOCK MARKET EFFICIENCY: STOCKHOLM VERSUS U.S. STOCK PRICES

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ABSTRACT

In this paper we examine the relative efficiency of the U.S. and Swedish Stock Exchanges. A number stocks are cross-listed on United States Exchanges and the Swedish Stock Exchange. Casual observation suggests that pricing differences exist on identical securities between the Stockholm Stock Exchange and United States Stock Exchanges. In this paper we examine these perceived price disparities as a test of market efficiency and to determine if an arbitrage opportunity exists. We compare the prices of these firms at near-simultaneous trading times. The data for this study are nine firms that are traded on both a U.S. stock exchange and the Stockholm Stock Exchange. Daily opening and closing stock price data was collected for each of these firms from both the Stockholm and U.S. stock exchanges. Data on the corresponding daily exchange rates was incorporated to make a direct comparison of prices. The data was synchronized by time and adjusted to reflect to differences in share magnitude.

We find evidence of a lack of efficiency in these relative markets. Specifically, we find statistically significant pricing differences between the prices in the U.S. and the prices in Stockholm for six of the nine firms examined in the study indicating a potential arbitrage opportunity and an inefficient market. We find that the pricing differences are reduced after 2003. We conduct a Granger Causality test to determine the existence and direction of causality in the series. We find that there is a feedback relationship between the U.S. price and the Stockholm price for eight of the nine series examined. Where a feedback relationship is not present, the results indicate that the U.S. market granger causes the Stockholm market.

Like some prior market efficiency studies, the analysis here is limited by less than perfectly synchronized data. While intraday data could potentially provide more closely synchronized analysis, such data was not available to the authors. As such, this study might be extended by incorporating intraday data to more precisely synchronize the data observations.

THE ASSOCIATION BETWEEN THE FIRM'S MONOPOLY POWER AND THE EARNINGS RESPONSE COEFFICIENT

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ABSTRACT

The determinant of cross-sectional and/or inter-temporal variations of the earnings response coefficient (hereafter, ERC in short) has been investigated in quite a few previous studies (e.g., Kormendi and Lipe, 1987; Collins and Kothari, 1989; Easton and Zmijewski, 1989; Dhaliwal, Lee and Fargher, 1991; Dhaliwal and Reynolds, 1994; Ahmed, 1994; Kallapur, 1994; Choi and Jeter, 1992; Biddle and Seow, 1991; Teets, 1992; Collins and Salatka, 1993; Bandyopadbyay, 1994). The determinants of the ERC identified in previous studies are characteristics of the firm's earnings generating process, systematic risk of common stock, firm size, the default risk, growth opportunity, cost structure, dividend payout ratio, audit opinion, industry, and interest rates. However, the effect of a firm's monopoly power on the ERC has not been extensively investigated, so far. Thus, the purpose of this study is to examine the effect of a firm's monopoly power on the ERC using Korean capital market data.

Using a firm valuation model that explicitly incorporates the degree of monopoly power in its product markets (Thomadakis, 1976; Subrahmanyan and Thomadakis, 1980), we demonstrate that the ERC is positively related to the firm's monopoly power. This theoretical prediction is empirically tested by comparing ERC's between the firms designated as market-dominant enterprises by the Monopoly Regulation and Fair Trade Act and the other firms. To the extent that designation as a market-dominant enterprise is an appropriate proxy for the degree of monopoly power, we expect the ERC's of the designated firms to be higher than those of the non-designated firms.

MONOPOLY POWER AND EARNINGS RESPONSE COEFFICIENT

By combining a discounted cash flow model and a model that incorporates the degree of monopoly power in the valuation of a firm, we develop a valuation model that describes a functional relationship between the monopoly power and the ERC.

In a two period world, a firm's value at time 0 (V_0) can be described as follow.

$$V_0 = k_1 Q_1 + \frac{nE_0(p_1 Q_1 - c_1 Q_1)}{1 + K_1} + \frac{nE_0(p_2 Q_2 - c_2 Q_2)}{(1 + K_1)(1 + K_2)} \text{.....(1)}$$

Where p_t = the price of a unit of product in period t;
Q_t = the quantity of output chosen by a firm in period t;
K_t = the risk-adjusted expected return for a firm in period t;
k_1 = the actual risk-adjusted return for a firm in period 1;
n = the measure of a firm's monopoly power, $0 \leq n \leq 1$.

Abnormal returns or excess returns for the first period (AR_1) are computed by the difference between realized returns (R_1) and expected returns (ER_1) as follows:

$$AR_1 = R_1 - ER_1 = \frac{V_1 - V_0 + D_1}{V_0} - \frac{E_0(V_1) - V_0}{V_0}$$

Where D_1 = the dividend paid to stockholders after deducting investments for the second period from the realized cash flows in period one.

Two assumptions regarding the firm's earnings generating process are made to develop a model for abnormal returns. First, cash flows to the firm and accounting earnings (X_t) are identical (i.e., $X_t = p_t q_t - c_t q_t$). Second, the firm's earnings have time-series characteristics described by the following model:

$$E_1(X_2) - E_0(X_2) = \ddot{e}\,[X_1 - E_0(X_1)]$$

Where λ = the earnings persistent coefficient.

Then Abnormal returns or excess returns for the first period (AR_1) can be described as follow:

$$AR_1 = \left[1 + \frac{n\lambda}{1 + R_f + \beta[E(R_m) - R_f]}\right] \frac{X_1 - E_0(X_1)}{V_0} \text{.....(2)}$$

It is obvious from equation (2) that the impact of n on the ERC (the bracket term) is, ceteris paribus:

$$\frac{\partial ERC}{\partial n} > 0$$

This comparative static result indicates that the ERC is a positive function of the firm's monopoly power (n) in its product markets.

HYPOTHESIS AND RESEARCH DESIGN

The analytical results in the preceding section suggest, among other things, that the a firm's monopoly power is positively related to the ERC. As a surrogate for the firm's monopoly power, the firm's designation as a market-dominant enterprise by the *Monopoly Regulation and Fair Trade Act* is used. If a firm is designated as such, the firm (hereafter, designated firm) has a higher degree of monopoly power relative to other firms that are not designated (hereafter, non-designated firms). A testable hypothesis for the positive relationship between the ERC and the firm's monopoly power derived herefrom would be,

> Hypothesis: Earnings response coefficients of designated firms are higher than those of non-designated firms.

To test the hypothesis that ERC's of designated firms be higher than those of non-designated firms, we estimated the following regression model:

$$CAR_{it} = a + bUE_{it} + \phi D_{it} UE_{it} + e_{it} \ldots\ldots\ldots (3)$$

Where CAR_{it} = the cumulative abnormal returns of firm i for year *t*.
UE_{it} = the unexpected earnings for firm *i* in year *t*,
D_{it} = the dummy variable which takes a value of one if firm *i* is a designated firm in year *t*, or zero if otherwise.

SAMPLE SELECTION AND EMPIRICAL RESULTS

The sample firms examined in this study are Korean firms listed on the Korean Stock Exchange as of December 31, 1992. To be included in the sample, the firm must satisfy the following criteria: (1) Sufficient accounting data including net income and equity are available over the study period (1981-1992); (2) Monthly security returns data are available from January 1981 to December 1992; (3) Firms in banking and finance industry are excluded. The above selection criteria yielded a sample of 144 firms.

We estimate equation (3) for the designated firms and the non-designated firms, as well as total sample. The ERC for the designated firms is 1.159, while that of non-designated firms is 0.408. The regression coefficient (ϕ) of $D_{it}UE_{it}$ in equation (3) are positive as predicted and statistically different from zero at the significance level of 0.05, supporting the Hypothesis.

In sum, the empirical result of this study support that hypothesis that The ERC is positively related the firm's monopoly power.

CONCLUSIONS

The purpose of this paper is to examine whether a firm's monopoly power has a systematic impact on the ERC. From analytical results, we derive a theoretical prediction that the ERC is a positive function of the firm's monopoly power in its product markets.

Using a sample of 144 Korean firms listed in the Korean Stock Exchange during the period from1986 to 1992, we empirically test this theoretical prediction. A firm's monopoly power is measured by whether or not the firm is designated as a market-dominant enterprise by the Monopoly Regulation and Fair Trade Act.

The empirical results are generally consistent with the theoretical prediction. Specifically, the ERC is higher for the designated firms than for the non-designated firms. This result is robust across different methods and samples.

Reference will be provided upon request.

BRAND VALUE AND THE REPRESENTATIONAL FAITHFULNESS OF BALANCE SHEETS

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ABSTRACT

This study examines the impact of brand value on the representational faithfulness of balance sheets. The results of this research reveal that brand value is significant in explaining variations in the price to book value ratios over and above the explanatory power of variables that are typically thought to be related to price to book value differentials. These results suggest that assets of firms with significant brand value may be underreported on the firms' balance sheets. Accordingly, if the representational faithfulness of balance sheets is to be enhanced, accounting standards should consider including reliable measures of intangible assets (especially for high brand value firms) in balance sheets.

CHURCH AT PIERCE CREEK V. COMMISSIONER: ALTAR CALL FOR D.C. CIRCUIT COURT OF APPEALS

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ABSTRACT

Only once since 1954 has a church had its tax-exempt status revoked for violating I.R.C. Sec. 501(c)(3)'s prohibition on publishing or distributing statements in opposition to a candidate for public office. Following a 1992 church tax examination by the IRS, the Church at Pierce Creek's tax-exemption was revoked in early 1995 for newspaper advertisements referencing then-Governor Bill Clinton's views on homosexuality and abortion among other things, deemed by the tribunal as "prohibited intervention in a political campaign". The United States Court of Appeals for the D.C. Circuit upheld the D.C. District Courts' ruling that the revocation was within the IRS's statutory authority. Although most new non-profit organizations are required to apply for advanced recognition of Section 501(c)(3) status under I.R.C. Sec. 508(a), churches are automatically exempt from taxation by virtue of I.R.C. Sec.508(c)(1)(A). The Court, in upholding the Church's revocation, indicated that no law precluded the Church from "reapplying for a prospective determination of its tax-exempt status…provided, of course, that it renounces future involvement in political campaigns". (341 U.S. App. D.C. 166). By so holding, the Court has placed a burden upon churches and their members not provided for in the Code. Since churches are automatically deemed Sec. 501(c)(3) organizations, there are no punitive measures that can be taken against them under the current statutory scheme. The Court, in overstepping its bounds, has usurped the legislative process and established a chilling restriction on religious liberty, notwithstanding their casual assurance that the "revocation is likely to be more symbolic than substantial". (341 U.S. App. D.C. 166).

OPTIMIZING THE INITIATION OF SOCIAL SECURITY BENEFITS

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ABSTRACT

As the members of the "Baby Boomer" generation near retirement age, the timing of the actual date of retirement becomes a more immediate concern to them. The purpose of this study is to examine how mortality considerations and the long-term level of Social Security benefits influence the retirement timing decision.

This research examines the decision individuals face when determining the age at which to begin receiving their Social Security benefits. If the drawing of benefits is started prior to "full-retirement" age, the level of benefits an individual draws is permanently reduced. Furthermore, if the retiree continues to work and have earned income, the Social Security benefits are potentially subject to an earned income offset that can reduce those benefit payments. If benefits are delayed past "full-retirement" age, the level of benefits grows at set rates that are a function of the retiree's year of birth. Ceteris paribus, delaying retirement may be very beneficial especially to individuals with longer than average life expectancies.

So how does the individual decide when is the optimal time to initiate the drawing of Social Security benefits? By taking into consideration taxes, whether the individual chooses to continue working, and several different approaches to life expectancy, we have ascertained the means by which an individual can make the decision that maximizes the Social Security benefits that will be drawn by that person. It is demonstrated that for persons with life expectancies that equal or exceed an "average" expectancy, it is almost universally better to delay the drawing of benefits until age 70.

PERFORMANCE AND HEDGING WITH INTERNATIONAL STOCKS OVER THE LAST THIRTEEN YEARS

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ABSTRACT

This study will look at international stock prices over the last thirteen years. The quarterly data of a number of stock indicator series will be examined. Earlier studies have shown that international stocks do tend to have momentum. If this is so, especially during the down markets over the last three years, it should be possible to earn attractive returns by creating a hedging portfolio by going long with the countries that show momentum over the last quarter and by shorting those countries that show a momentum in the opposite direction. This strategy should lead to a close to risk-free investment with a minimal initial investment. This study should be useful to portfolio managers that follow a relatively active portfolio management strategy. A similar analysis will subsequently be conducted using semiannual and annual rebalancing.

ARE BANK LOANS "SPECIAL"? AN EMPIRICAL ANALYSIS OF CORPORATE DEBT OWNERSHIP

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ABSTRACT

Recent empirical work documents the systematic link between "bank debt" use and firm-level proxies for an attenuated informational environment and monitoring need. In much of this research, however, practical considerations of data availability preclude a clear distinction between "private debt" and "bank debt". In the rare instance when such a distinction is made, only long term bank debt can reliably be measured. Furthermore, empirical work on the subject focuses almost exclusively on firms in developed economies, especially the United States. The present paper seeks to contribute to the literature on the ownership structure of corporate debt in two ways. First, in its empirical treatment of corporate debt ownership, it distinguishes clearly between "bank debt", "private non-bank debt" and "public debt". Second, it studies the use of bank and other private debt by firms in an atypical institutional setting, one in which financial markets are in transition from a highly regulated regime to a substantially more liberal environment.

The results pertaining to the use of private debt are broadly consistent with those documented for the United States; firms with greater information asymmetries exhibit a greater dependence on private debt. When private debt is partitioned into bank debt and private non-bank debt, the results are mixed. Firms that have greater potential asset substitution problems seem to rely more on bank financing, but certain proxies of information asymmetry are significant in the bank debt equation while others are significant in the non-bank private debt equation. On balance, the sample banks appear to specialize in ex-post monitoring, while simultaneously exhibiting some conservatism in their lending activity.

CORE COMPETENCIES AND FINANCIAL FOUNDATIONS

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ABSTRACT

Business graduates should be prepared for future job positions in terms of knowledge, skills, and abilities. Unfortunately, feedback from employers of recent graduates and from the graduates themselves indicates that business students need to develop improved skills in the use of financial tools. Weber State University finance faculty designed a program to focus student effort on the development of these fundamental skills. After instituting the program, data about the students will be collected and analyzed.

INTRODUCTION

Business graduates should be prepared for future job positions in terms of knowledge, skills, and abilities. Based on the feedback from employers of recent graduates and from the graduates themselves, business students need to develop improved skills in the use of financial tools. Weber State University finance faculty designed a program to focus student effort on the development of these fundamental skills. All students enrolled in the survey finance course, required of all business majors, will have to demonstrate competence in nine fundamental areas. The fundamental areas of focus are:

1) Accounting and Taxes
2) Financial Analysis
3) Financial Statistics / Regression
4) Time Value of Money
5) Security Valuation
6) Weighted Average Cost of Capital
7) Capital Budgeting Decision Rules
8) Cash Flow Estimation
9) Cash Budgeting

Each faculty member has been asked to emphasize these nine areas of competence in teaching the course. In addition, students will be informed that they would have to demonstrate competence in each of these nine areas. A standardized quiz bank has been developed with nine quizzes that focus on these nine areas and that further emphasize the importance of following instructions carefully and of precision in calculations.

At the start of the semester, students will be given a detailed study guide indicating problems from the text to focus on in developing their financial skills. Three versions of each of the nine quizzes will be developed. The first version will be available immediately after each instructor has finished covering the appropriate material. In the next class section, students will be given written feedback indicating whether they passed the quiz and specifying any errors made, the chance to examine the quiz in the finance tutoring room, and the opportunity to be tutored on the material. The second version of the quiz will be made available in the following week and again feedback will be provided. Tutoring will be available throughout the semester. If students are unable to pass either the first or second version of the quiz, they will have to wait until finals week to take the third version. This strategy is intended to encourage the students to prepare for and complete the quizzes early.

DATA

The performance of students in two survey of finance classes will be recorded throughout the semester. Information on individual performance on the quizzes and in the course, tutoring hours used, and performance by quiz will be recorded. The data collected will include:

1. Number of hours of tutoring received, both by week and by student.
2. Number of attempts required to pass each quiz and average number to pass all nine quizzes.
3. Overall grade earned in the course.
4. Individual demographic information, as appropriate.

A combination of the student's data and the quizzes' break down will be assessed to identify challenging topics. These areas will be further evaluated.

Out-of-Class Assistance

Each instructor will emphasize the nine core competency areas in class. In addition to the instructor, a finance tutor will be available on a daily basis and by appointment

Analysis of General Quiz Performance

Each quiz will be examined to identify problem areas, defined as the areas that the students struggle with the most. Each core competency will be further examined by class to differentiate between the teaching methods of the instructors and the students' abilities to apply the material.

Analysis of Quiz Performance Segmented by Class Performance

The next step will be to examine quiz performance partitioned by class performance. A priori, we expect that "A" students will demonstrate competence in all nine areas, passing all the quizzes using fewer attempts and less tutoring time. In contrast, we expect "B" students to require more attempts, to pass fewer quizzes, and to require more tutoring time. We expect "C" students

to need more attempts, to pass fewer quizzes and to require still more tutoring time. Finally, at the extreme, we expect "failing" students to struggle significantly more, to pass fewer quizzes, and to need more tutoring time but to probably use less tutoring time.

CONCLUSION

Students need to be better prepared for the job market upon exiting college. One possible way to achieve this improved preparation is to identify core competency areas and to require that students develop skills in these areas.

INVESTOR RISK AVERSION AND THE WEEKEND EFFECT: THE BASICS

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ABSTRACT

This paper provides an explanation of the continued persistence of the weekend effect. Using the non-holiday Wednesday closings of 1968 as a benchmark, it is postulated that negative Monday returns can be explained by risk averse investors reacting to the arrival of new information.

INTRODUCTION

It is well documented that stock returns, on average, are statistically lower on Monday. Yet there is little consensus on the explanations for this phenomenon. This paper pursues two objectives. First, to provide additional theoretical insight into the empirical persistence of the weekend effect, and secondly, using the non-holiday Wednesday closings of 1968, examine the underlying liquidity and information dissemination processes and thereby isolate factors driving the weekend effect. Of particular interest is the employment of pre-1986 daily liquidity and information data from the Center of Research in Security Prices (CRSP).

During the second half of 1968, the NYSE and the AMEX were closed on twenty-three Wednesdays due to a backlog of paperwork. These closings offer a unique opportunity to analyze the anomalous behavior of the market surrounding non-trading hours. The twenty-three closed Wednesdays were non-trading, regular business days with full information flow in the market, whereas weekends represent non-trading, non-business days with reduced information flow. By using cross-sectional data this study observes several determinants of information flow and market liquidity related to individual security prices.

Differences in information processing are usually explained using three different hypotheses, (French & Roll, 1986). First, public information is more likely to arrive during normal business hours. Second, private information affects prices throughout the trading day. Third, noise caused by trading may induce pricing errors. In light of these three hypotheses, the 1968 Wednesday closings represent normal business days when no information, public or private, can be absorbed into the market. While weekends are non-trading days with information absorption into the market not being possible, they are also non-business days with less information flow available for absorption. Weekends are non-trading, non-business days, whereas the twenty-three closed Wednesdays are non-trading, regular business days. Also, interestingly, for the 1968 closed Wednesdays, there is no trading noise to induce pricing errors.

The major component of liquidity reflected in market data, and addressed in this study is daily volume. (Karpov, 1987) provides a comprehensive review of the work related to the price/volume relationship through 1986. Most studies find a positive correlation between price change and volume. Other studies look at the NYSE intraday bid-ask spread as a measure of

volatility. (Keim & Stambaugh, 1984) hypothesize, test, and reject the hypothesis that market makers transacting at the bid (ask) price with disproportionate frequency at the market close on certain days of the week could induce low (high) returns on those days. They indicate that bid-ask effects can be discounted as an important contributor to high pre-holiday returns. However, holidays, while representing non-trading days, often represent non-business days. Holidays, being non-business days, do not have the same information flows as do the non-trading, regular business closed Wednesdays of 1968. (Madhavan, 1992) explains wider spreads with variation in the cost of adverse selection. (Lee, Mucklow & Ready, 1993) document the relationship between the intraday width of bid-ask spreads for NYSE stocks and reported earnings, which reflects information flow occurring only on business days. Further evidence of a day-of-the-week effect for bid-ask spreads is provided by (Chordia, Roll & Subrahmanyam, 2001). These authors find that, for a sample of NYSE stocks, liquidity declines on Friday and spreads increase "dramatically" during down markets but decline only slightly during up markets.

A conclusive body of literature demonstrates that seasonal return patterns for equity securities vary by firm size. (Rogalski, 1984) finds significant differences in post-holiday return by weekday and firm size. (Keim & Stambaugh, 1984) indicate that the weekend effects generate significant premiums that accrue to small firms on Fridays.

Some research incorporates the 1968 Wednesday closings and/or the weekend effect in volume and volatility studies. (French & Roll, 1986) and others show that returns are more volatile during exchange trading hours than during non-trading hours. In addition, French and Roll argue that private information dissemination is the principle factor behind high trading-time variances. (Jain & Joh, 1988) report that average volume across the days of the week (and for each hour) are significantly different. Average daily trading volume is lowest on Monday, increases from Monday to Wednesday, and then declines on Thursday and Friday. (Ross, 1989) argues that "in an arbitrage-free economy, the volatility of prices is directly related to the rate of flow of information to the market." (Pettengill, 1989) tests whether the weekend effect is a closed market effect by examining the difference between the mean returns on the trading days prior to exchange holidays and on ordinary days. He finds no significant difference between Wednesday closings and regular trading days. (Houston & Ryngaert, 1992) look at volume and volatility patterns for weeks with Wednesday closings. They report that Wednesday closings did not affect weekly volume or weekly volatility. However, they argue that volume and variance are shifted between periods within the weeks with reduced trading hours. This is consistent with reduced trading, temporarily and simultaneously, reducing the transmission of private information into traded market prices. (Steeley, 2001) finds that a day-of-the-week effect exists for market returns in the UK and is related to the arrival time and nature of new information. Although some of these works include an examination of the 1968 Wednesday closings, none provide a tested explanatory link between non-trading, regular business day influences and liquidity and information flow. This can be attributed in part to the, heretofore, unavailable necessary data.

Premise

Stock returns on Monday are lower than other days. Why? There is no clear consensus. With a cursory review, there appears to be no consistent and logical reason for Monday to be any

different than other days except for the fact that the market is closed over the weekend. However, market closure in and of itself should make no difference. The premise here is that if the market is closed, and there is no new information arriving, then the price should not change. If there is new information, then the market should react in the following ways:

1) Good News: The spread should increase slightly as analysts try to determine the new "correct" price. If nothing else, the Ask price should increase. The volume should also go up as traders try to react to the information. Return should increase as investors react to the news.

2) Bad News: The market reaction should be the same as above but in the opposite direction for the spread. Volume should go up as investors try to dump the stock. Finally, returns should decrease for obvious reasons.

3) Ambiguous Information: The spread should increase substantially while analysts try to assess the impact on firm price. Volume should increase substantially as some traders believe the information to be good and others believe it to be bad and try to make a profit by trading accordingly. If investors are risk neutral, the price will remain unchanged provided the information is truly ambiguous as the number of traders who believe the price will increase and those that believe that it will decrease should be the same. However, if participants in the market are risk averse, they will be more inclined to attempt to protect themselves from loss rather than attempt to profit on the information thus causing a decrease, or at a minimum no change, in price.

Even with a conservative assumption that there are equal amounts of good, bad, and ambiguous information coming to the market after closure on Friday and over the weekend, one should see a low return, increased volatility, and increased liquidity (volume) on Monday. A preponderance of past research supports this conclusion. Therefore, if the arrival of information is the driving factor for Monday returns, then there should be the same effects on Thursday after a Wednesday close. In fact, the "closed-Wednesday-Thursday effect" should be more pronounced since there is information dissemination of a full, active business day.

DATA AND METHODOLOGY

The hypothesis is that differences in daily returns can be explained by liquidity and information flow. Inferences are made using daily firm-specific data drawn from the Center of Research in Security Prices (CRSP) files. Included are all firms whose stock was continuously traded on the NYSE and/or the AMEX from the beginning of 1968 to the middle of 1969.

The applied methodology addresses the return-liquidity-information issue with a two approach process. In Approach I, ordinary least squares (OLS) analysis is performed for the test-period, consisting of the twenty-three weeks with closed Wednesdays in 1968, and addresses return, dispersion, and volume differences between days of the week with particular attention given to Thursdays that follow closed Wednesdays. Approach II addresses differences between days of the week for return, dispersion, and volume measures tested over two time periods: 1) the pre-test period (January 1968 through June 1968) and 2) the test-period (the twenty-three weeks with closed Wednesdays in 1968); and across two firm groups: 1) Small Firms: Decile 1, the lowest capitalized firms, and 2) Large Firms: Decile 10, the highest capitalized firms.

A traditional restrictive model approach is used that differentiates firm-specific daily returns, liquidity influences (measured as the daily number of shares traded divided by the total number of

shares outstanding), and information flow influences (daily high less the daily low divided by (daily high plus the daily low)/2) by the day of the week for the test-period.

For the purpose of detecting the impact of liquidity and information flow on security returns, the usual, straight-forward method for testing the equality of means from two samples is employed. Typical t-test methodology is used to compare daily information flow and daily liquidity differences between the Before-Closings Period and the During-Closings Period.

RESULTS

The first step in the analysis is to ascertain the pattern of returns, information arrival, and liquidity within the week. As predicted, Thursday's returns are significantly less than Friday's for all three groupings. Also, the returns for the large firm portfolio on Monday and Tuesday are less than Friday's return, but the decrease is only one fourth that observed on Thursday. Of more interest however are the liquidity (equation 2), and information flow (equation 3) results. Liquidity is significantly greater on Thursday than any other day. And in conjunction with this, information flow is greatest for all three portfolios on Thursday, and for the combined and small firm portfolios on Monday. The magnitude, as predicted, is greatest on Thursday.

Having identified the fact that returns are lower on Monday and Thursday, that information flow is larger on these days, and liquidity is greater on Thursday, the next step is to determine if there is a change in these variables as a result of the Wednesday closings. Information flow is numerically larger on all days except Thursday for all three portfolios during the before-closings period. This difference is statistically significant only for the combined portfolio and the large firm portfolio, however. In contrast, the information flow is significantly greater during the closed-Wednesday period on Thursday for all three portfolios. This result at first was rather surprising. However, assuming that there is no increase in information on any day during a Wednesday-closings week except Thursday and observing that liquidity across all days has either remained constant or increased, this result makes perfect sense. Holding all else constant, an increase in liquidity should cause the relative range (information flow) to decline. This simply puts the Thursday increases in stark contrast and shows that the open business day generates a large amount of information that must be analyzed and absorbed into the market.

A comparison of liquidity between periods shows an increase across all days for the combined portfolio and the small firm portfolio, with the largest increases occurring on Thursday. Relative daily trading volume for the combined portfolio increases by 16.2% on Monday, 16.7% on Tuesday, and 23.1% on Friday. Thursday's increase is a staggering 36.0%. As can be seen below, the small firms in the portfolio are driving these increases. The net result is an overall weekly volume that is relatively unchanged. These numbers are consistent with those of (Houston & Ryngaert, 1992). Thursday's increase is probably due to the markets' reaction to Wednesday's information as well as a general redistribution in trading patterns as investors make up for lost time.

The small firm portfolio reflects a similar pattern of increases. Volume on Monday and Tuesday increases by 19.9% and 20.4% respectively. Friday sees an increase of 27.6% and Thursday nearly doubles that of Monday and Tuesday at 38.7%. It appears that for small firms, which are followed by fewer analysts, it takes two days to sort out the meaning of any information which arrived on Wednesday.

The large firm portfolio has no change in liquidity on any day except Thursday which has a 25.0% increase. In fact, the relative volume decreased on Monday, Tuesday, and Friday, but these changes are not statistically significant. For those who believe in an efficient market this is good news. The more closely watched larger firms react very quickly to any new information.

SIGNIFICANT IMPLICATIONS

While previous studies fail to provide a consensus explanation for negative Monday returns, this study synthesizes a coherent explanation of "anomalous" Monday negative returns. The intent is to show that negative Monday returns are not anomalous, and can be explained logically based upon the degree of liquidity and information flow.

The most important result is that on Thursdays following a Wednesday market close, returns are significantly lower while information flow and liquidity are significantly larger. This indicates that risk averse traders lower the price and increase the spread when there is an increase in information coming to the market until they can process the information and/or observe the markets' reaction. It is reasonable to assume, therefore, that this reaction is not limited only to days following a normal business day with the market closed, but also on Mondays which follow information arrival over the weekend.

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A DISCUSSION OF THE TAX PREPARER'S RESPONSIBILITY TO DETECT A CLIENT'S DECEIT

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ABSTRACT

Rusty Jacobs is a tax preparer who operates as a sole practitioner in northeast North Carolina. One long time client was Forrest L. Bartlett. Bartlett operated several businesses in the area including a Mobile Home distributor. In 19XX, the Internal Revenue Service selected this mobile home business for an audit. As part of the audit, the IRS also reviewed Bartlett's personal returns. Non-reported income of approximately $900,000 was found. Because of the nonpayment of taxes, Bartlett paid interest and penalties of $211,389.47 for the three tax years ended in 1990. No IRS penalties were assessed against Jacobs as the tax preparer.

Penalties assessed against Bartlett for the three years under examination included Code Sections 6651(a)(1)-Delinquency, Section 6661(a)(1)-Negligence, Section 6661-Substantial Understatement, and Section 6662(a)-Accuracy Related. Not every penalty was assessed in each year and Bartlett did not face criminal prosecution.

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