## Allied Academies International Conference

Jacksonville, FL April 11-14, 2007

## Academy of Commercial Banking and Finance

# PROCEEDINGS

Volume 7, Number 1

2007

## **Table of Contents**

CONSUMER PERCEPTIONS OF BANKS IN MUTUAL FUND RETAILING
MEASURING CREDIT RISK: DOES COMPLEXITY MATTER?
DUAL CLASS SHARES AND A PASSIVE INVESTMENT STRATEGY
INTERNET BANKING: GOLD MINE OR MONEY PIT?
THE ALTMAN Z-SCORE REVISITED

#### Peggy Choong, Niagara University pmc@niagara.edu

#### ABSTRACT

Mutual funds are the fastest growing category of household financial assets. Employer funded retirement funds apart, mutual funds can be purchased from a variety of channels namely, financial planners, banks, full-service brokers, discount brokers, insurance agents and directly from fund companies. Competition among channel members for new influx of monies into the funds from existing and new investors is keen. Banks have made significant inroads into this lucrative industry. They have also remained one of the most "trusted and respected of financial intermediaries." However, the total percentage of mutual funds bought through banks remains low compared to those purchased from other channels of distribution such as full service brokers and discount brokers. Banks have invested significantly in their marketing efforts, yet most consumers have not been persuaded to purchase mutual funds from their bankers. The purpose of this paper is to investigate the perceptions of consumers about the five channels of distribution for mutual funds namely fullservice broker, bank, financial planner, insurance agent and discount broker. Perceptual Maps are developed to compare how bank customers perceive them as well as other distribution channels. Very importantly, it also maps how non-bank customers perceive banks as well as other distribution channels. This serves to highlight the current weakness of banks and points to directions they should take to claim ownership of their desired position in the market place.

## MEASURING CREDIT RISK: DOES COMPLEXITY MATTER?

#### Kurt R. Jesswein, Sam Houston State University Kurt.Jesswein@shsu.edu

#### ABSTRACT

This paper examines the issue of how to measure a company's ability to meet its external financing commitments. Success in this area is critical for businesses extending credit and is a topic of considerable interest yet with varied coverage in classrooms and business training rooms. A major component is finding an appropriate metric with which to evaluate the creditworthiness of borrowers. Given the level of importance placed on the topic in the world of credit and in academia, one finds a plethora of approaches with little consensus among them.

We review a variety of approaches to measure current and future liquidity and creditworthiness. Initial tests determine the relative strengths and weaknesses of the approaches with recommendations provided on how to best evaluate the topic, both in the classroom and in the practitioners' world. Of particular interest is the calculation of the various coverage ratios designed to measure the borrower's ability to meet its current and future financial obligations.

Results indicate that many of the key financial ratios used seem to follow very similar tracks. Extensive variations among the different formulations of the ratios appear to offer little additional insights. We are left with a call to solidify or refine the most straightforward approaches to evaluating credit as it appears that a simpler set of information to work with would allow for better analysis of the underlying reasons for any deviations or any volatility in said numbers.

## DUAL CLASS SHARES AND A PASSIVE INVESTMENT STRATEGY

#### Christopher J. Marquette, University of Pittsburgh at Greensburg Cjm29+@pitt.edu Thomas G. E. Williams, Fayetteville State University tgewilliams@uncfsu.edu

#### ABSTRACT

Several previous studies of firms with two classes of shares find a price premium for the class with superior voting rights over the restricted voting rights shares. There is also some evidence that the premium changes over time and is related to the likelihood of a contested takeover attempt. These findings may have different implications for passive and active investors in these firms. Our investigation reveals that for passive, buy-and-hold investors, restricted voting shares dominate superior voting shares in mean-variance space. We find that investors can achieve a higher return with restricted vote shares than superior vote shares with no increase in stand-alone or portfolio risk.

#### INTRODUCTION

Though not as prevalent in the U.S. as in foreign markets, a number of U.S. firms have two classes of shares of stock with different voting rights. The existence of these firms provides a unique opportunity to assess the value of a corporate vote and to explore the factors that affect this value, given that both classes of shares are identical in their financial characteristics and differ only in voting rights. Researchers such as Lease, McConnell & Mikkelson (1983, 1984), Levy (1982), DeAngelo & DeAngelo (1985), Jog & Riding (1986), Megginson (1990), Foerster & Porter (1993), and Chung & Kim (1999) document that the superior vote shares sell at a higher price than the restricted vote shares with the price premium being the value of the vote to the marginal investor.

In this study, we concentrate on the passive investor. These investors are individuals or institutions who either use buy-and-hold strategies or whose buying and selling activities are dictated by the cash flows into and out of their portfolios and not fluctuations in stock prices. These investors do not use their shares' votes and buy and sell their shares independent of control contests, so the vote has no value to them. Therefore, these investors should gravitate toward restricted vote shares when investing in firms with dual class shares to avoid paying the premium associated with the vote. These investors can receive the same direct cash flow benefits for a lower price by buying the restricted vote shares.

The empirical results are consistent with the hypothesis that for passive investors, restricted vote shares dominate superior vote shares in mean-variance space. We find that long-term average annual returns for restricted vote shares are approximately 1% higher than their superior vote counterparts in a sample of all U.S. firms that had dual classes of stock with different voting rights at some point between 1994 and 2005. The standard deviation of the returns and the betas for the restricted vote shares are not higher than they are for the superior vote shares. In a world where investor objectives are defined in a two-parameter space, these results indicate that restricted vote shares.

#### SAMPLE SELECTION

Our sample covers the period 1994 through 2005 because that is the period that disclosure statements are readily available on the EDGAR website. We search the CRSP database to identify firms that had multiple classes of shares of stock at any time between 1994 and 2005. We search the U.S. Securities and Exchange Commission's EDGAR website for proxy statements and annual reports of these firms to determine the nature of the dual class shares.

We classify our sample into three sub-samples according to the nature of the voting and financial characteristics of the two classes. The first sub-sample we define as the "Pure" sample is composed of firms where one class of shares has a voting right, the other does not and the financial characteristics are the same for both classes. The second sub-sample, the "Differential Vote" sample comprises firms where the classes have identical financial characteristics and both classes have voting rights, but it is evident that the voting rights of one class are superior to that of the other. The third sub-sample is defined as the "Financial Difference" sample and includes firms where the classes have differential voting rights and different but consistent financial characteristics, i.e., their claims are on the same cash flows and there is a direct relation between the two classes' entitlement. For the Financial Difference sample we develop a "parity" relation to be used when comparing price data for the two classes.

#### RESULTS

For the full sample, the mean price ratio of superior vote shares to restricted vote shares is 1.117, which is significant at the 1% level. This figure represents an 11.7% higher average price for the superior vote class shares. This price premium is more than twice the average premium found by Lease, McConnell & Mikkelson (1983) and more in line with the 13% premium documented by Megginson (1990) for British firms and 12% by Rydqvist (1996) for Swedish firms. However, the price ratios for the sub-samples suggest that this difference in magnitude is driven primarily by the Financial Difference firms, which are excluded from the sample Lease, McConnell & Mikkelson use in their study. The premium for the Pure sub-sample is 8.3% and for the Vote Difference sub-sample is 6.8% (both significant at the 1% level), which are much more in line with the results reported by Lease, Mkkelson & McConnell for a comparable sample.

The higher price premium of 37% for the Financial Difference sample is counter-intuitive since, of the twelve firms in this sample, only one firm (Greif) had a superior vote class with preferential financial treatment. We attribute this peculiar result to the inexact specification of the parity condition and look to the annual returns for a clearer picture. Another potential explanation is a correlation between the existence of preferred dividends for the restricted class and factors that affect the value of the vote, such as concentrated ownership and managerial perquisites.

The mean difference in annual return between the restricted vote shares and the superior vote shares is positive and significant at the 5% level. This finding indicates that the restricted vote shares in our sample outperform the superior vote shares by an average of 1.1% per year. This difference in returns does not appear to be driven by the firms in any one of the sub-samples. The difference in returns between superior vote and restricted vote shares is in contrast with the findings of Foerster & Porter (1993), who examine a sample of firms that trade on the Toronto Stock Exchange using a different methodology. They find no difference in mean time-series returns between the share classes in 35 of the 36 firms in their dual class sample. However, they do not look at the sample mean, which is what would be relevant to a passive investor who is holding a portfolio.

In the final step of the analysis we examine the risk characteristics of the two classes of shares. If the risks of the restricted vote shares are at least equivalent to that of the superior vote shares, we can conclude that the restricted vote shares dominate the superior vote shares, since the restricted vote shares offer a higher rate of return. We use both the standard deviation of returns and

beta for each class of shares for each firm during the period, which both classes are traded as our measures of risk. The risk of the two classes of shares is equivalent as measured by both standard deviation and beta.

It is likely that the difference in the long-run returns between the two classes is due to a liquidity premium associated with the restricted vote shares. To explore this possibility, we examine three different measures of liquidity, bid-ask spread, trading volume and dollar volume of shares traded. For all three of the measures of liquidity, volume of shares traded, relative volume of shares traded and dollar volume of shares traded, restricted vote shares have a significantly higher level of liquidity for the full sample and for each of the sub-samples. We therefore conclude that the restricted vote shares are at least as liquid as the superior vote shares and it is unlikely that the higher returns for the restricted vote shares are due to a liquidity premium.

#### CONCLUSIONS

Our analysis of the stock price, risk and return performance of firms with dual class shares reveals that shares with restricted voting rights dominate their superior voting rights counterparts in mean-variance space. Restricted vote shares generate higher returns than superior vote shares at no additional risk. Therefore, passive investors can achieve a higher average annual return by holding the restricted vote shares than by holding the superior vote shares without incurring additional risk on either a stand-alone or portfolio basis.

#### REFERENCES

- Chung, Kee H. and Jeong-Kuk Kim, 1999, Corporate Ownership and the Value of a Vote in an Emerging Market, *Journal of Corporate Finance*, 5, 35-54.
- DeAngelo, Harry and Linda DeAngelo, 1985, Managerial Ownership of Voting Rights: A Study of Public Corporations with Dual Classes of Common Stock, *Journal of Financial Economics*, 14, 33-69.
- Foerster, Stephen R. and David C. Porter, 1993. Dual Class Shares: Are There Returns Differences? Journal of Business & Accounting, 20(6), 893-903.
- Jog, Vijay M. and Allan L. Riding, 1986. Price Effects of Dual-Class Shares, *Financial Analysts Journal*, 58-67.
- Lease, Ronald C., John J. McConnell and Wayne Mikkelson, 1983. The Market Value of Control in Publicly Traded Corporations, *Journal of Financial Economics*, 11, 439-71.
- Lease, Ronald C., John J. McConnell and Wayne Mikkelson, 1984. The Market Value of Differential Voting Rights in Closely Held Corporations, *Journal of Business*, 57(4), 443-67.
- Levy, Haim, 1982. Economic Evaluation of Voting Power of Common Stock, *Journal of Finance* 38, 79-93.
- Megginson, William L., 1990. Restricted Voting Stock, Acquisition Premiums, and the Market Value of Corporate Control, *The Financial Review*, 25(2), 175-198.
- Rydqvist, Kristian, 1996. Takeover Bids and the Relative Prices of Shares that Differ in their Voting Rights, *Journal of Banking & Finance*, 20, 1407-1425.

Proceedings of the Academy of Commercial Banking and Finance, Volume 7, Number 1

## **INTERNET BANKING: GOLD MINE OR MONEY PIT?**

#### Paul Nelson, University of Rochester William Richmond, Western Carolina University brichmond@email.wcu.edu

#### ABSTRACT

This paper explores whether and how implementing internet banking impacts bank profits. By focusing on a single type of IT system within an industry with well documented and standardized profit, revenue, cost and input-output variable measures, we were able to perform a detailed econometric analysis of the impact of internet banking and the drivers behind increased profits. The level of analysis is most appropriate for managers, since their IT investment decisions are by nature industry and technology specific. In such, our results provide insights into the impact of other customer-oriented information systems on firm performance, especially in an environment where small and medium sized business must compete aggressively with much larger players.

The paper's key finding is that IB is a desirable opportunity for banks and that the key to success is customer adoption. At first, the benefits of internet banking do not come from lower costs as is often predicted with information technologies, but, rather, come from higher revenues driven by growth from the more lucrative customer demographic profiles. Since the fixed costs associated with internet banking through a service provider are low, our results show even low levels of customer adoption allow an expected profit increase. Cost reduction does, however, have a significant impact on profits at sufficiently high levels of consumer adoption. Once the level of internet-based transactions reaches a sufficiently large level substitution away from more costly ATM and teller-based transactions becomes feasible. Hence, profits originally increase as consumer adoption of IB grows. Profits then flatten as these adopters become less lucrative until a relatively large amount of IB usage takes place allowing operating costs to decrease and profits again to increase. It appears that internet banking, even if not well marketed to consumers, does NOT resemble a money pit. It can, however, become a small gold mine if properly and aggressively marketed.

Two secondary findings also are reported. First, whether or not a bank is an early-mover when it comes to implementing IB has no impact on its profits other than that the increased profits derived from IB are reaped over a longer period. The regional nature of most banks implies that a bank should be compared to its regional rather than national competitors when thinking about such an issue. Furthermore, since much of the benefit derived from IB is due to a deepening of the bank's relationships with its installed customer base, the importance of an early-mover advantage is secondary. Similarly, the benefits derived from IB are not found to dissipate over time. The lack of competitive pressure just mentioned again drives this finding.

## THE ALTMAN Z-SCORE REVISITED

#### Robert W. Russ, Northern Kentucky University Wendy W. Achilles, East Carolina University Alfred C. Greenfield Jr., University of Texas of the Permian Basin russr1@nku.edu

#### ABSTRACT

This study replicates and extends the research that created the Altman z-score measure of bankruptcy. To eliminate criticisms of the original study, the replication uses a large sample, data from recent years, additional statistical methods, and eliminates the matched pair design of the original study, to rescale the z-score and identify additional models. This rescaling of the z-score greatly improves the predictive power of the measure both in the short term and over a long event window. The research was extended by including additional ratios beyond the original ratios included in the z-score. A further extension tests the ability of discretionary accruals to predict bankruptcy.