ORIGINAL ARTICLES

Risk Management in firms & company and Industries

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ABSTRACT

Backed by industrial organization theory, it is believed that firms with high individual market shares and firms operating in industries where output is concentrated to a few sellers and entry barriers are high can to some extent insulate their operations from general market risk. This article explores the effect of disclosure on risk management policies. Following recent theory on risk management, with market imperfections, risk management creates value by reducing the volatility of the cash flows. Those risk policies are conditioned by actual disclosure rules that reduce information asymmetry between managers and shareholders, providing a comprehensive view of the firm. However, disclosure gives different accounting choices, hence affecting the decision making process of managers. The purpose of this article is to establish if managers adapt their actual risk policy to disclosure rules.

Key words: Risk management, Capital markets, Evidence on Risk Taking

Introduction

In existing literature surrounding asset pricing theory continuous attempts have been made to explain patterns of expected stock returns to investors. Several theories rely on a conventional positive relationship between risk and return implying that higher average returns can only be earned with a higher risk exposure. Investors can limit their exposure to firm-specific risk by diversifying their portfolio of investments and therefore only systematic risk should be rewarded with higher expected return. Sharpe (1964), Lintner (1965) and Black (1972) initiated the Capital Asset Pricing Model (CAPM) one of the earliest and most well-known models to describe the relationship between systematic risk and expected returns.

2-Background:

Healy and Palepu (2001) points out the importance of disclosure to solve information asymmetry in the capital markets. Information asymmetry and incentive problems are problematic in capital markets in terms of achieving an efficient allocation of resources. In addition, Barnes (2001) states that financial reporting cannot have a neutral role in the economy; it significantly affects the decision making process of individuals. As a result, any reporting rule will have consequences in the decision making process of 2 investors. As such, accounting standards should limit large disturbances in the pricing of future contracts. The number of corporate mergers and acquisitions around the world has increased dramatically the last two decades, both in number of transactions and in total value.( F.L. Pryor,2001). The reasons behind mergers and acquisitions (M&As) are several, among them to reduce costs, capture new technology, enter new markets or to create synergies with existing business functions. Companies proudly announce M&As as great possibilities that will take the businesses to a new level, but it is not often mentioned that a large part of such activities fail to bring value to the buyer. Common estimates say that only about half of the total transactions are portable to the buyer that the total earnings of all M&A activity average to zero (Bruner, 2002)

3. Capital markets:

The intention of this section is to give an overview of the dynamics of capital markets and describe the different forces that constantly revise existing asset pricing theory. The renowned risk-return relationship has proven to be ambiguous and highly dependent on underlying assumptions about efficiency and rationality. Up to
this day, there is no general agreement as to how the level of systematic risk and the resulting expected returns of a stock ought to be estimated. Throughout the years, focus has been directed towards a variety of factors in order to completely explain stock returns. In some research these factors are claimed to be proxies for systematic risk, in other research it is concluded that differentials in stock returns do not only reflect systematic risk but rather is a consequence of investor behavior. Before it is viable to consider to what extent industry structure variables may incorporate risk, it is essential to outline some major characteristics of the capital market.

3.1 Dynamics of the efficient capital market:

Theoretically, if the market is efficient, any existing information that could be used to predict stock performance should already be reflected in stock prices. As soon as there is any new information indicating that a stock is underpriced and therefore offers a profit opportunity, investors flock to buy the stock and immediately bid up its price to a fair level, where only returns that commensurate with the systematic risk of the stock can be expected. Even though there are theories explaining the relationship between risk and expected return in efficient, rational capital markets there is no existing theory about the levels of risk that should be found in the actual marketplace. It can be observed that prices of assets in the capital market fluctuate due to corporate news and overall macroeconomic events but since there is no theory about the frequency and magnitude of such events no “natural” level of risk can be quantified. Even though empirical approaches use proxies for sources of market risk, none of the proposed factors in existing models can be identified as hedging a specific source of uncertainty (Bodi, Kane and Marcus 2008). The same holds for industry structure features. Even though it has been argued that certain structural factors of an industry can be justified as proxies for sources of market risk, it is not indefinite which sources these factors may represent. Adding to the problem is the fact that expected returns are not directly observable – only realized rates of returns occurring after the events can be measured. As a consequence, existing asset pricing theories model expected returns and estimate risk levels that investors actually anticipated from historical data in order to predict the relationship between expected returns and risk in the future (Bodi, Kane and Marcus 2008). This will be the method applied in this study to investigate the relationship between industry structure, systematic risk and expected return.

3.2 Predicting expected returns:

Size in terms of market equity, book-to-market value of equity and one year lagged returns are alternative explanatory factors of stock returns that will be applied, in addition to industry structure variables, in this empirical study. These factors have been scrutinized in numerous previous studies and emerged as having an impact on stock returns. Still, as we review the results of such studies in this section, it is evident that there is no consensus on how to interpret why these factors may explain stock returns. Banz (1981) initiated the prominent size-effect, stating that stocks of small firms as measured by market equity have generated higher average returns than stocks of large firms historically. One possible explanation for this is that the information about larger firms is more extended which serves to an increased willingness to hold stocks of larger firms and therefore smaller stocks come with some priced illiquidity risk. Along the same line Fama and French (1992) find that both stocks of small size and stocks with high book-to-market equity appear to earn higher average returns in the cross-section and hence they argue that size and book-to-market ratios act as proxies for some unobservable risk factors. Fundamental to this risk-based explanation of the book to market ratio is that the book-to-market ratio is an indicator of the relative prospect of a firm. This risk interpretation can be further validated by the fact that firms experiencing financial distress risk are normally associated with low levels of market equity. These findings are believed to be solely due to predictability in the risk premium, not in risk-adjusted abnormal returns. Therefore, if assets are rationally priced, the findings are consistent with an efficient market where investors are expecting and requiring higher returns for taking on higher levels of non-diversifiable economy wide risk. On the other hand, there is also evidence pointing against the existence of a rational market and the equilibrium trade-off between non-diversifiable risk and stock returns. It is suggested that differences in stock returns come as a surprise to the investor and are not always related to measures of market risk. Chopra, Lakonishok, and Ritter (1992) find that even after adjusting for the size effect and additional risk there is an economically significant overreaction effect present in the stock market. The authors state that it is unlikely that this effect can be attributed to risk measurement problems, since abnormal returns consistent with the overreaction hypothesis are also observed for short windows around announcements of quarterly earnings. Furthermore, contrary to Fama and French (1992), Lakonishok, Schleifer and Vishny (1994) find no evidence for investments in value stocks (high book-to-market ratios) to be riskier than investments in glamour stocks (low book-to-market ratios) when applying conventional risk measures. Instead they argue that the higher average returns of stocks with low book-to-market compared to those with high book-to-market values emerge due to mispricing in an inefficient market. Naive investors appear to consistently overestimate
future growth rates of glamour stocks relative to value stocks by 10 extrapolating past earnings growth too far into the future, overreacting to good or bad news or simply associating a good investment with a well-run firm irrespective of actual stock prices. If the market is efficient in the long term the overreaction by investors tend to be corrected and thereby subsequent abnormal returns will be generated by high book-to-market stocks. This view commensurate with an interpretation of the book-to-market ratio as a return determinant however the differences in returns are explained by systematic undervaluation by investors rather than differences in the fundamental risk of the stock. According to Haugen and Baker (1996) the true relation between expected return and risk is believed to be disguised due to imperfections in the patterns of realized returns caused by bias in the pricing of stocks. If stocks differ in their liquidity and if pricing is biased relative to available information, many non risk-related variables can be considered to be important in predicting cross-sectional returns. Overall relatively profitable firms tend to grow faster, at least until competitive entry into their lines of business forces profits to normal levels. Based on this assumption that currently profitable firms have greater potential for future growth, the authors use several measures of profitability as predictive factors. They find that the greater the growth potential for profits and dividends is, the greater the expected future rate of return is. If the market mistakenly price stocks with differing growth potentials, the growth potential factor payoffs are expected to be collectively positive. Haugen and Baker conclude that there is no evidence from differences in firm fundamental characteristics, or from the distribution of returns in their sample, that differences in realized returns are risk-related. The result is consistent with the plausible explanation that the predictability in returns arises from the fact that investor behavior leads to homogenous determinants of variation in expected returns. Yet another finding is that good or bad performance of stocks appears to continue over time, which is an observation that has lead to that past stock returns could be used as a potential indicator of future expected stock returns. This effect is referred to as momentum and there is some cross-sectional evidence that price momentum exists in the short-to intermediate-horizon (Bodi, Kane and Marcus 2008). Jegadeesh and Titman (2002) find that portfolio strategies that buy stocks with high returns over the previous 3-12 months and sell stocks with low returns over this same time period perform well over the succeeding 12 months. Some argue that the returns associated with momentum strategies are attributable to risk that may not have been detected with traditional asset pricing models. To the extent that high past returns may be partly due to high expected returns, the winner portfolios could potentially contain high-risk stocks that would continue to earn higher expected returns in the future. However, Jegadeesh and Titman show that cross-sectional differences in expected returns only have modest explanatory power of the momentum profits and therefore the performance of the momentum strategies are not likely justified by risk exposure, which once again implies that the investor can earn returns based on other characteristics than systematic risk exposure. (Jegadeesh et al,2002)

4-Evidence on Risk Taking and Value:

It is easy to find anecdotal evidence that risk taking pays off for some individuals and organizations. Microsoft took a risk in designing an operating system for a then nascent product the personal computer- but it paid off by making the company one of the most valuable businesses in the world. Google also took a risk when it deviated from industry practice and charged advertisers based on those who actually visited their sites (rather than on total traffic), but it resulted in financial success. The problem with anecdotal evidence is that it can be easily debunked as either luck Microsoft and Google happened to be at the right place at the right time or by providing counter examples of companies that took risks that did not pay off IBM did take a risk in entering the personal computer business in the 1980s and had little to show for this in terms of profitability and value. (Battelle, 2005)

5- A view of the companies risk management policies:

In this section the relation between disclosure rules, accounting choices and risk management is discussed. To examine this area we asked both analysts and auditors. Albeit the answers of both groups are important, more weight is given to the answers made by the auditor. Auditors are the sources used by managers when applying new accounting rules. They helped companies to implement IFRS, having a comprehensive view of what companies were doing when they followed local GAAPs and which were critical areas during the changing process. The rules regarding financial instruments and disclosure of risk were complex areas that made auditors participate in great manner in the companies’ changing process. To cover the topic, we asked auditors questions such as:( These questions were not formulated in advance but were included in the interviews.)Even though accounting and disclosure rules regarding financial instruments and disclosure of risk are constantly changing, the biggest change that companies faced was when they went from local GAAPs into IFRS. From your experience, how did risk management policies accompany this process? Do think that companies tried to adapt their risk management to those new rules? Analysts were asked questions such as: Have you perceived a change in the risk management of companies with the implementation of IFRS? These questions were not formulated in
financial instruments used for hedging such as, forward contracts to buy or sell currency or options to buy or sell currencies, were kept off balance. This means that companies did not need to report those instruments until the hedged transaction affected the income statement. In this case, the value of the transaction was incorporated at the secured rate of the financial instrument. There was no attention paid to the effects of hedging in the income statement and the balance sheet in the period between the incorporation of financial instruments as hedging instruments and the realization of the hedged transaction. After 2005, when companies began to implement IFRS, they were required to recognize financial instruments in the balance sheet with changes in the income statement or in equity. This resulted in risk management policies becoming closer to what was happening in accounting. Treasury departments, who are in charge of setting up hedging policies, used to work more independently from accounting departments that are in charge of the reporting. Since the implementation of IFRS’ requirements of disclosure, accounting managers needed to be more aware of the information that had to be reported. Now hedging policies have an effect on the balance sheet and the income statement that need to be considered and analyzed. Additionally, how these new requirements affect the market value of the company should be considered. This change also brought about a need of rethinking risk policies of the firm and how they are conveyed to the market. The auditor also commented that when companies began to apply IFRS, there was a general misunderstanding that if the companies sought to apply hedge accounting it had to be done for 100% of the forecasted flow. This generated confusion in the companies making them to change their derivative contracts for new contracts in order to try to fix them according to the standard. After this initial period and verifying that this was not that strict, companies began to change their way of seeing at hedging. Analysts perceived a change in the risk policies as well. This was perceived mainly through the requirement that companies have to disclose their risk policy. Companies have more concerns on how their hedging instruments were affecting the income statement and the balance sheet. There has also been an increase in the use of derivatives by industrial companies during the last years, this was specifically analyzed within the automotive industry but they perceived it also in for the rest of the industrial companies. The comments of the analysts and the auditor that with the changes in disclosure and accounting rules there was a change in risk management policies are in line with theory. The aim of disclosure and accounting rules is to solve the information asymmetry between managers and investors and this information asymmetry is in turn one of the market imperfections that makes risk management a value creation tool. Before the implementation of IFRS, companies had more discretion on their risk policies since there was not a requirement to disclose them and the hedging instruments were not included in the financial statements. With a change in the accounting and disclosure rules, this information asymmetry is reduced generating a reduction in the market imperfection. This results in a change in the risk policy with an increase in hedging probably as a result that now investors can see what companies are doing, and companies can show more explicitly how they creates value through hedging. Even though disclosure has improved much the available information, there are still lots of gap in the information presented by companies. This is in line with our first expectation that risk management is affected by accounting rules.

Conclusion:

As the above discussion suggests, there is considerable scope for further research to enhance our understanding of the benefits and shortcomings of consolidated risk management. Many of the key research questions involve technical issues in risk measurement and financial series modeling. While these questions are vital to understanding how to calculate a consolidated measure of risk exposure spanning all of a financial institution’s businesses and risk factors, they are not the only questions of interest. Further research into the main question of this article the economic rationale for consolidated risk management could produce findings that would be of clear use to supervisors and financial institutions. In addition, this work could provide insight into such diverse topics as the theory of the firm, the costs/benefits of diversification, the linkages among financial markets, and the impact of product and geographic deregulation. Our study presents some initial ideas, but clearly much more work needs to be done. We hope that this article can serve as a starting point for further interview.

References

Diez, Juan and Gutierrez, Javier, 2009. Graduate School Master of Science in Finance Master Degree Project, university of Gothenburg, No:91.