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The Impact of Total Risk Management on Company's Performance

Hamdu Kedir Mohammed^{a,*}, Adriana Knapkova^a

^a*Faculty of Management and Economics, Tomas Bata University, T.G Masaryka 5555, 760 01, Zlin - Czech Republic*

Abstract

Traditionally risk management used to be considered as a means to alleviate perhaps eliminate negative outcomes of exposures. However, the result of this and other empirical studies shows the ability of risk management to go beyond this and respond to market factors which are out of management control in order to control volatilities in earning which ultimately improve corporate performance. The empirical study investigates the relationship between total risk management and company's performance. The result revealed that there is a positive relationship between total risk management and company's performance in companies which have invested higher level of intellectual capital. The result of the empirical study is consistent with other studies in different economic phenomenon.

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1. Introduction

The current globalization and complex business environment leads many business to think beyond just profitability only. The domino effect of world incidences lead the future to be more dynamics and unpredictable than it was before. Factors such as perpetual perplexity and dynamics in social, political and economic environment (Luo, 1999), strong competition (White and Frame, 2004), rapid technological advancements (Baldwin and Li, 2002), and methodological changes in the value chain are among other issues urging for companies to establish strong risk management system.

The collapse of big and trust worthy public companies such as Enron and Lehman brother bank due to accounting fraud and the expansions of systematic corporate scandals were not only a shock for investors, professionals and even academicians but also creates doubt on the traditional Risk management and Internal control mechanisms.

*Corresponding author. Tel.: +420 775 1072 95

E-mail address: mohammed@utb.cz

Risk management is a process by which firms identify measure, prioritize and mitigate the adverse effect of uncertainties (Chapman and Ward, 1997). Accordingly, risk management is a systematic approach to alleviate negative consequence of any specific phenomenon. The approach that defines risk from only down perspective could leads to risk aversion.

Risk aversion can be an individualistic behavior but in business it is impossible to avoid all kinds of risk. Most risk taking activities associated with opportunities. Hence, companies need to be intelligent enough in managing their risks not only to grasp the benefit out of it but also to survive in business.

Risk management has strong inspirational effect on the major shareholders to invest more on the organization. This investment is a weapon for the company to provide better business opportunities which ultimately leads to long lasting competitive advantage. Ineffective risk management results in extra costs and costly lower tail outcomes on both the company and stockholders (Andersen, 2008).

Traditionally risk management had two broad concepts. Risk management is the management of adverse effect of risk rather than the opportunities associated with it. The other view is independent management of risks by classifying risk in to different silos (Lam, 2001 and Davenport & Bradley, 2001). For example the occurrence of one event can have a negative impact on one unit of the entity, but also be an opportunity for another unit of the organization. Traditional risk management however, manages the treat without considering the offsetting effect of the opportunity.

To the contrary to traditional risk management total risk management deals with both potential down turns and exploitation of opportunities due to dynamic phenomena (Miller and Waller, 2003). Hence, in this sense it is possible to define risk management as a systematic and practical method that attempts to holistically understand, measure, evaluate and manage entire risks faced by the company.

Though the topic of risk management is an important issue among higher level corporate executives; due to conceptual complexity of risk management, the area has not been explored enough. There are very few empirical studies that have studied the relationship of company performance and total risk management risk management, mostly depending on companies listed on very advanced and highly developed stock markets (Jafari et al, 2011).

On the other hand most articles on the area of risk management focus on measuring the effectiveness of different risk management systems by only examining risk management effectiveness in protecting down turn (Andersen, 2008). This might lead to see risk management as an end by itself, rather than taking it as a means for higher corporate performance. Therefore, this empirical study attempts to contribute in the literature by taking different economic climate which has not been tested.

1.1. Risk management concept

In recent decades the dynamicity and complexity of business environment put up the risk management issue to be the major concern of stakeholders. Risk management is the fastest growing discipline. However, the concept and concern of risk management, the practical and functional behavior of risk management and the major purpose of it, differ based on different perspectives. The concept of risk management in business and considering it as a strategic issue emerged in 19th century (Bernstein, 1996). Firm's ability to manage risk, identifying risks which are to be assumed or to be mitigated and making calculated and concrete decisions in this regard, lift up not only the strength of the firm but also the entire economic system of the country. Risk management is an effective method, applied in order to alleviate unwanted effects of exposures and earn optimum benefit from risky situations (Essinger and Rosen, 1991).

Effective Risk management aimed at providing reasonable assurance as to the achievement of company's objectives and helps the company in achieving its financial targets. Effective risk management continuously assesses and identifies risks and reduces surprises that affect the organization. So that, effective and integrated risk management is part and parcel of good organizational governance (Pezier, 2002). On the other hand risk management activity includes providing executives and personnel at different levels of the organization with continuous, relevant and reliable information, and designing practical frameworks and systems to establish the risk management decisions on solid ground. However, the aim of risk management is not limited only to minimizing risks and risky situations. Rather, having the fact in mind that business is always associated with exposures, the aim of effective risk management is also to maintain balance between risk and return. This enables the risk management process to be both defensive

and offensive. Thus, risk management needs to be among the top corporate strategic objectives and it must be managers' permanent concern to balance between risk and opportunities associated with risks (Andersen, 2008).

1.2. Risk management and company performance

Effective and integrated risk management system must improve the performance of the company. To implement effective risk management it needs huge resource mobilization. Hence, company expects better improvement in performance resulted from the risk management system employed (Pagach and Warr 2011).

It is obvious that effective risk management enhance the company's understanding of exposures that are expected to potentially challenge the firm and treating risk as an opportunity than as a threat only. Thus, integrated and effective risk management expected to support a sound decision making, which ultimately improve company's performance by improving the precision in balancing the tradeoff between risk and expected return (Gehner, 2008). The better the organization understand its inherent risks the greater confidence it will develop in order to pursue opportunities. The effectiveness of risk management improves accountability among stakeholders; thereby enhance effectiveness of corporate governance and strategic competitive advantages. Thus, integrating risk management activities and documentation of the risk management process could have greater contribution in the identification of business opportunities and facilitates the distribution of knowledge and best practices. Ultimately, integrated and effective risk management expected to lead to sustainable resource allocation to improve the performance of the organization. In general, Andersen, (2008) summarizes the benefits of effective and integrated risk management in three ways as follows:

1.2.1. Availability of capital at a lesser required rate of return

Regardless of the difference in the argument, effective risk management minimizes the probability of bankruptcy and reduces the cost of acquiring capital. Effective risk management expected to stabilize earnings. A stable earning keeps the organization to be prompt enough to repay claims timely which is an indication of a lower company and market risk. This makes easy for the company to access borrowing at a lesser interest rate. A lower volatility of earning may create higher external demand on the company's shares. Potential investors may be encouraged to invest in the company's projects due to the promising facts of less volatility in earning.

These all facts potentially lead to lower average cost of capital. Thus, the company can get both debt and equity capital at a lesser expense. The lower average cost of capital on the other turn also results in good company performance. Therefore, it is expected that effective risk management leads to stability in earning and lowering average cost of capital, which ultimately associated with greater company performance.

1.2.2. Transaction cost

Poor risk management could jeopardize the company's relationship with its stakeholders. Company's day to day operations are related with its customers, suppliers and other partners. They all are external and the company has little control on them. The failer in risk management could severely affect the perception of these important elements. This results in higher contractual costs with its stakeholders. Suppliers and customers may engage in negative bargaining process in every transaction that could ultimately increase transaction costs with them.

Companies needs to give appropriate concern for improving risk management system in order to satisfy their counter parts such as customers and suppliers there by, a fair and win-win commercial engagement could be reached with all company's counter parts.

1.2.3. Company's Specific Asset

Stability in earning also motivates major shareholders to invest more on the company, believing stability in earning would mean a lesser likelihood of bankruptcy and would results in higher expected future dividend and capital gain.

Major shareholders could lose their confidence and not willing to provide long-term commitment with the company if the company does not manage its risk properly and shows bankruptcy risk indicators. Company's specific assets are the immediate sources to finance company's profitable projects. Hence, inappropriate management of risk could divert this asset and could result in loss of future potential opportunities.

Effective risk Management expected to persuades company's own shareholders to invest more on company's specific assets. The resource could be utilized in improving production line and technological advancement that could directly and/or indirectly boosts company's performance. On the other hand the proper management of risk also persuades company's customers, employees, suppliers and other stakeholders to invest more on company's specific assets. This investment is valuable and a foundation for company's growth and enhancing competitive advantage.

In general, integrated and effective risk management enhances company's performance in three dimensions. First, the positive signal of stability in earning facilitates external sources of finance at a lower required rate of return. Second, it facilitates the lower and non-bargaining counter party transaction, thereby reduce costs of transactions. Finally, it boosts company's own shareholders confidence to invest more on the company and motivate company's employees, customers and suppliers for more commitment with the company.

1.3. Risk management process

A risk management process is encompasses all company's rules and frameworks for the identification, analysis, assessment, control and response of all potential exposures as well as the benchmarking of the profitability and efficiency of any measures taken (AS/NZS, 2004). The practice of risk management greatly differ depending on the situation and the process is also has different meaning for different people.

2. Research Objective

The main objective of this study is to evaluate the impact of total risk management on the performance of company's listed in Prague stock Exchange. More specifically,

1. To investigate performance relationship with total risk management
2. To examine the effect of risk management on the performance of company's which have significant investment on intellectual capital.

3. Research Hypothesis

Total risk management reduces organizational surprises and loss by allowing managers to effectively identify events that cause such surprises and volatilities (Hoyt and Liebenberg, 2008). Hence, it enables the organization to stabilize its earnings and enhance company's performance. Accordingly, stability in profit results in reduction in business risk, which positively affects the going concern of the business. It will also produce a positive outcome by reducing the cost of capital by encouraging investors to invest in the company at a lesser required rate of return. Moreover, existing shareholders would benefit from an enhancement in dividend and capital gain as a result of reduction in the probability of bankruptcy risk. Thus, the first hypothesis is as follows:

H1: There is a positive and meaningful relationship between total risk management and company's performance.

Intellectual capital plays vital role in corporate value creation in most case. Intellectual capital is human capital. In most case it is source of strong competitive advantage as investment in intellectual capital motivates innovation in the organization. It is believed that any excess market value above the book value is essentially resulted from human capital (Milost, 2007). Thus, the relationship between market value and book value of the organization's asset are expressed interims of market to book ratio. This ratio indicates the future value creation potential of the firm. Hence, having human capital and knowledge base economy is also an important precondition for going concern of the firm (Boekestein, 2006). Effective total risk management could persuade major stakeholders to improve there long term commitment with the organization by enhancing company's performance in improving intellectual capital (Manuel, 2007). Thus, the second hypothesis is as follows:

H2: There is a positive relationship between total risk management and company's performance in companies having greater intellectual capital.

4. Research Methodology

The empirical study is based on companies listed in Prague stock exchange. Currently there are 15 companies in Prague stock exchange and 12 of them are included in this study. Six years annual company reports have been gathered in order to investigate the relationship between total risk management and company's performance. The data used in this study are extracted from the financial statements and notes of the companies from 2009 to 2014. Moreover, market data of the companies are also included. Companies with incomplete records have been excluded from the study.

Table 1. Description of study variables

Variables	Description	Type	Source
Performance	Net income (loss) over shareholders' equity (ROE)	Dependent	
Total Risk Management	Standard deviation of yearly sales over standard deviation of economic returns	Independent	Andersen, 2008
Intellectual Capital	Market value of outstanding stock over book value of the firm	Independent	Andersen, 2008
Firm Size	Natural Logarithm of total asset	Control	Andersen, 2008 Pagach and Warr 2011
Financial Leverage	Long term debt over total Equity	Control	Andersen, 2008 Pagach and Warr 2011

To test the hypothesis the study used hierarchical linear regression model. Performance is dependent variable which is measured interims of return on equity. Total risk management measured interims of the standard deviation of average sales over the standard deviation of economic returns in terms of ROE and ROA is a dependent variable which regressed against performance to examine whether they have significant relationship or not. Performance has also been regressed against intellectual capital which is also an independent variable and measured in terms of market to book ratio. Firm size which in this case natural Logarithm of total asset could potential affect the performance of the company thereby, included as control variable. Similarly financial leverage could affect the performance of the company as it is resulted from long term debt comment; hence it is also included as control variable. There were no multicollinearity problems has been found and VIF factors are less than 3.8.

5. Result and Discussion

The mean of the firms' size which was represented by the natural logarithm of total assets was 15.9 and median was 15.1 with a standard deviation of 1.99. Natural logarithms of total assets for the sample were ranged from 13.9 to 20.2. Besides, summary of test statistic shows that the mean of return on equity which is performance measure in this case is 22.4% percent with the standard deviation of 23.6% percent. This reveals as there was high variation in performance among listed companies. Beside, for the study sample ROE was ranged in between -15.8 percent to 14.9 percent. The mean financial leverage of companies was 45 percent. This means that more than 45 percent of the companies' asset is financed by long term debts.

Table 2. Result of descriptive statistics

Variable	Mean	Std. Dev.	1	2	3	4	5	6
ROE	.2245835	.2360149	1.0000					
ROA	.0123617	.1077193	-0.3855	1.0000				
LEV	.4528716	.9584312	-0.7148	0.4033	1.0000			
SIZ	15.92634	1.994262	-0.4680	0.3254	0.1727	1.0000		
RME	-	-	0.1338	0.2285	0.1741	0.4287	1.0000	
RMA	-	-	0.0927	0.2183	0.1906	0.4879	0.9897	1.0000
MTB	12.00008	21.40491	0.1366	0.2245	0.3173	-0.2538	0.0460	0.0689

Source: Structured review of financial statements and own computations

RMB=Total Risk Management as measure in ROE

RMA=Total Risk Management as measured in ROA

The correlation between the explanatory variable and performance has been presented in order to show the association. Correlation does not tell us the cause and effect relation, but it can definitely indicate the degree of linear association between two variables (Brooks, 2008). Pearson product moment of correlation coefficient was used to test the association between performance and other explanatory variables. The correlation matrix shows that Return on Equity positively correlated with total risk management as measured in both ROE (RME) and ROA (RMA) and market to book ratio. This indicates companies which have effective risk management tend to have positive performance as well as high investment in intellectual capital could associate with positive performance.

Table 3. Result of regression model

Variables	Model I	Model II	Model III
C	0.872*	1.259***	0.897**
Size	-0.31	0.52**	-0.375**
Leverage	0.693**	-0.737**	-0.271
Market to Book	0.131**	0.113	-0.065
Total Risk Management	-	0.491**	0.362**
MTB_TRM	-	-	0.579**
R ²	64.90%	84.30%	93.10%
Adj.R ²	51.70%	75.30%	87.40%
Model (ANOVA P-Value)	0.032	0.006	0.032
F-stat	0.032	0.052	0.002

Source: Structured review of financial statements and own computations

Performance measured in ROE

The second regression model shows the relationship between total risk management and ROE. Accordingly, the model significantly explains their relationship with ANOVA P-Value of 0.032. Independently total risk management has significant and positive relationship with performance measure. Model III (P-Value of 0.032) reveals the interaction between intellectual capital and total risk management and company performance have significant and positive relationship. Moreover Model I (P-Value of 0.006) show intellectual capital (market to book) and performance has significant and positive relationship. Leverage has statistically significant and negative relation with performance. Though the relationship between total risk management measured in terms of return on asset (ROA) has positive relationship with performance as measured in ROA, the result is not statistically significant.

6. Conclusion

The study investigates the relationship between total risk management and company performance. The result of regression analysis shows there is a positive and significant relationship between total risk management and company performance. Hence, the first hypotheses which stated as *performance and total risk management have meaningful and positive relationship* should be accepted. Traditional approach to risk management is highly concentrated on defensive side. The defensive approach manifested by limiting the concept and practice of risk management only in protecting the company from down turn or hazards. This result is in line with Anderson, 2008. Companies need to see risk management not only from defensive approach, but also as a key success factor for sustainability of earnings and improvement in overall performance of the business. Effective risk management has direct implication on the earning performance of the company. The second hypothesis is also acceptable as the result shows positive outcome in performance in the companies which have higher investment in intellectual capital.

The results of this study are concurrent with Andersen, 2008, which investigate the relationship between performance and total risk management based on large US-based firms. Similar results have also been found by Jafari

et al. 2011. Based on companies listed in Tehran Stock Exchange, they have found that a positive and significant relationship between total risk management and company's performance. The result in this study implies the consistency of the premise under different geographic, political and economic climates. To the contrary to the above mentioned studies the relationship between performance and total risk management as measured by ROA has not been found to be statistically insignificant in this study.

On the other hand most studies on the relationship between enterprise wide risk management and companies performance shows a positive relation between performance and effectiveness of holistic risk management. Hoyt and Liebenberg (2011), using Tobin's Q, as a standard proxy to estimate the effect of enterprise wide risk management on firm value, they conclude that there is positive relationship between firm value and implementation of ERM. Gordon et al. (2009) investigate the effect of holistic risk management on firm's performance. They argued that the relation of holistic risk management and firm's performance is dependent upon the approach on five firm-specific factors; environmental uncertainty, industry competition, firm complexity, firm size, and board of directors' monitoring. They also found that there is a positive relationship between ERM and firm's performance.

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