# Factors Affecting Enterprise Risk Management: An Empirical Evidence from Financial Firms in Pakistan

The Journal of Educational Paradigms 2021, Vol. 03(02) 198-204 © 2021 THACRS ISSN (Print): 2709-202X ISSN (Online): 2709-2038 DOI:10.47609/0302052021

# Syeda Zain Fatima<sup>1</sup>, Muhammad Mustafa<sup>2</sup> Abstract

This study aims to examine the factors of enterprise risk management of financial firms in Pakistan. For this study, financial firms from Pakistan have been selected. Annual data is taken, ranging from 2013-2021. This study uses panel data regression analysis approach with other estimation techniques. For the sample of this study, 15 financial firms listed on the stock exchange have been taken. Enterprise risk management as a dependent variable was selected as the Tobin q measure, while three independent variables were selected for different companies. A Hausman test suggested that the random-effect model is suitable because it also has time-varying and time-constant variables. The result shows the appropriate facts regarding the hypothesis of variables like capital opacity, the stock price of volatility, and return on equity. With the help of this study, an effort has been made to explore the factors affecting enterprise risk management. The findings of this study are beneficial for a policymaker, manager, economic agents, shareholders, and other stakeholders to control for risk factors. However, variables include capital opacity, Stock price volatility (SPV), and the positive and statistically significant effects on risk.

Keywords: Enterprises, Risk management, Capital opacity, return on equity, stock price volatility

## Introduction

The risk has different degrees from business to business, company to company, and organization to organization. The fundamental risk is dealing with a loss by a large group of people affects. Anything that affects your business's long-term plans is a risk. There are different types of risks with different results suggestions, but management faces difficulties or challenges and makes the best arrangements to deal with different types and levels of risk. James Jam defines risk management as a broad and well-organized structure for various types of risk, for example, credit, market, operational, economic and capital risk, to maximize the value of the business (Bedard, Hoitash, & Yezegel, 2013).

Similarly, Enterprise Risk Management (ERM), a current business world concept, finally this methodology is used for risk management. Today an ERM methodology is mainly used during the audit (Choi, Ye, Zhao, & Luo, 2016).

At many events, presentations on corporate risk management topics are presented for risk awareness and the level of risk measurements. The seminars on the subject are held to clarify meaning and understand the strategy, current cases of direction and focal points in this domain. Universities offer Enterprise Risk Management courses, such as Columbia University, Metropolitan College of Boston University and St John's University. Most companies hire and contract ERM specialists for risk measurement, control and management (Lechner & Gatzert 2017). From the diverse academic journals, the distinctive definitions, depictions, history, ideas, and inception of big enterprise risk management are examined and incorporated into the thesis for more elucidation in this work (Bromiley, McShane, Nair, & Rustambekov, 2014).

Casualty Actuarial Society (CAS) in 2001 defined enterprise risk management as "the procedure coordinated by companies to recognize, handle, grow and track risks from all due to short term increase of companies and the long-term value of shareholders". Dickinson defined ERM in 2001 as an organized and holistic system facing an organization to manage the entire risk. Enterprise risk management is designed to enable companies to execute the risk scope in an inclusive, holistic approach. International Standard for Organization (ISO)31000 also defined risk management means related activities to compose an association that is confronting. Risk and Insurance Management Society (RIMS) in 2011 said that ERM is an arranged business guideline with the help of the motivation through the firms by tending to finish assortment of its risk and running the aggregate impact of those risks as a reliable risk portfolio (Fraser, One, & Simkins, 2007).

ERM is a broad process; in this process, the managers examine the collection of all enterprise risks. The main plan of ERM was to make sure about the risks taken by companies and within a company's risk desires, and these risks are managed comprehensively. Those who support ERM argue if the implementation of ERM is proper, in return, the Enterprise risk management can be benefited shareholders due to the lower stock volatility and higher stock value. Enterprise Risk Management (ERM) is an advanced term that tries to deal with identifying and controlling a portfolio of the risks faced by the organization (Ahmed & Manab, 2016).

Every kind of risk is not considered a good thing, but somehow those organizations that use ERM want to decide which risks to take and which to avoid and moderate (Pagach & Warr, 2010). In recent years, a major increase related to professional awareness of ERM; limited literature has documented ERM and ERM effect on firm performance (Lin, MacMinn, Tian, & Yu, 2017).

The business scandals and deception were surrounded by the reasons for organizations to successfully apply the risk management process. These firms collapse due to unawareness of

<sup>&</sup>lt;sup>12</sup> UCP business School, Faculty of management studies, Corresponding author: <u>zainfatima512@gmail.com</u>

risk management and business control. Business power and risk management were consistent and mutually dependent. Although it was factual that many organizations started using ERM as a strategic tool for management. The Conference Board found this tool. Furthermore, in global corporate and credit rating process has introduced S and P in Enterprise risk management analysis (Mikes & Kaplan, 2015).

ERM is based on the 4 pillars of management (Planning, Organizing, Leading and Controlling), directing the firm actions taken to minimize the effect on a firm's capital and earnings. The concept of ERM was introduced in the mids-1990's and emerged in corporations as a management function of ERM has a systematic and streamlined approach to managing a company's overall risk. In the 1940s and early 1950s, the roots of risk management were a proper part of the decision-making process within the organization. There are previous risk management activities with the ERM model, which have recently been incorporated. (Quon, Zeghal, & Maingot, 2012).

Before twenty years, risk management was not considered a serious and necessary part of the organization. An executive's approach to risk generally determines it. Recently, handling risk is becoming basic attention. The capability to recognize risks or adapt to the increasingly varying company environment and the significant achievement aspects for organizations. Management attention to finding risks by reacting to manage the diverse ways of controlling risk. None of these ways were immoral; however, their focuses were imperfect and split (Janor & Hamid, 2017). Therefore, the demand to capably recognize and react to diverse risks emerged in several companies' implementation of holistic risk management procedures.

The proper concept of ERM was introduced in the mid-1990s and emerged in corporations as management functions. ERM has organized and incorporated the way to manage the total risk that the company faces. ERM is one way that avoids the conventional base of risk (Pagach & Warr 2011).

It was a comprehensive way of identifying potential risks an organization would confront or choosing a suitable reaction that equals the organization's risk demand. Implementing an ERM can raise risk consciousness in a company and, after improving decision-making capability, is well-known to maximize the company's value. Despite the advantages of enterprise risk management execution, many companies have yet to implement it, according to Beasley. On the other hand, risk activities managed by a single individual may decrease earnings instability by reducing the chances of losses. There was possible dependence among risks beyond actions that may go unobserved in the 'silo' risk organization form (Lechner & Gatzert, 2018).

While ERM gave an arrangement that unites a portfolio of risk management actions into one incorporated structure that facilitated the classification of such dependence (Lechner and Gatzert 2017), meanwhile, risk activities managed by an individual were able to unstable and decrease earnings as of a detailed source just like Interest Rate Risk (IRR), etc. But ERM policy decreases instability by avoiding aggregate of risk diagonally diverse sources. An additional cause of the value of ERM programs occurred due to improved information regarding an organization's risk profile

(Nocco and Stulz). Outsiders were also facing further complexity regarding assessing the organization's risk profile and financial strength that were extremely financially or working difficult.

ERM allows these financially unclear organizations to inform strangers of their risk summary and also provides an indicator of their obligation to risk organization. Through better risk management exposures, ERM is expected to decrease the predictable costs of narrow inspection and outside capital (Jonek-Kowalska, 2018).

The Financial industries of Pakistan have grown nationally as well as internationally. Due to new entrants of local and foreign firms, businesses and organizations face strong and tight scrutiny from the regulatory authorities, especially the Security Exchange Commission of Pakistan (SECP) and State Bank of Pakistan (SBP). This change in the financial industries of Pakistan is new, and increased implementation of information technology and improved business environment can be ascribed to the advancement of the firms. With the selection of data innovation and new systems of operation, the level of risk faced by these industries has reached a worrying level, and there is a need to adopt companywide ERM policies (Nasir N, 2018).

The gap in the research, the firms' literature tends to the psychological required to proactively relieve the financial fiascos that can significantly damage partners coming about because of interruptions in exceptionally incorporated financial management and reporting systems. The study extant the financial emergencies and catastrophes yet has not offered psychologically moderating future financial emergencies and fiascos because of problematic financial revealing.

# LITERATURE

To identify the ERM's importance, objectives and implementation, this research started with an assessment of the brief history and concept of ERM in the introduction section. Now, in the second part, the academic literature was discussed. Historically, Risks are of different kinds, so different kinds of risks can separately be managed by the organization. A risk is an event that cannot be eliminated by definition and by nature. Even though risk and uncertainty are used reciprocally, there is a difference between them. Uncertainty exists whenever one does not know what will occur in the future.

Risk is the uncertainty that has the potential of a loss. Conventionally when anyone talked related to risk management, what approaches in mind were rather an insurance, broker or auditor. Job related to the risk expert was not only to minimize the negative impact to its lower level. It's also worried about the negative collisions of risk exposures (Pagach & Warr, 2010). While the dynamics of the market & organization environments are increasingly varying in every industry, it becomes tough for firms to design the correct way for their constant achievement. One basic problem for businesses in today's competitive world is risk management.

TRM pays attention to entity risks accessible in the companies along a silo-based angle. On the other hand, this point of view has undergone excessive development, and companies examine risk management from a comprehensive perspective (Gordon, Lawrence, & Tseng, 2009). This comprehensive perspective of controlling risk in firms is generally referred to as ERM. Now the organizational environment and companies have turned more risk conscious. This might be an effect of business authority indignity, inappropriate financial administration cases, and terrorist attacks danger for companies. Therefore, ERM has emerged in recent years (Tekathen & Dechow, 2013).

The ERM focuses on both sides of risk may be positive and negative. While it is beginning, ERM has increased a huge drive in the literature, and many researchers have provided the way factors manipulate firms to implement ERM. Risk management is the main interest of any company's deliberate management. Risks were obtained for achieving the activities or objectives helpfully in every portfolio related to the entire activities available in the firm. An appropriate increase in risk organization was finding the risks and their explanation (Soin & Collier, 2013).

The outcome must be increasing the firm's value. It improves the probability of achievement than failure through a time of risk identification. It was the element of several firms' strategies to maintain the history, current and future actions for risk involvement and its avoidance. Associations not in risk management must investigate it via senior management in their managerial way of life. This management determination assists the policy that explains functional and strategic objectives, managing over responsibility firm broad and employees accountable for the risk management part of their job description (Pagach & Warr, 2011).

Hence, the most important challenge for that firm to implement ERM was establishing that management decision, just not via senior managers, other than business managers around an organization, to obtain accurate risk-return tradeoff. Because of occurring, risk estimation for projects should be executed, at the slightest originally, on a decentralized center by the project planners in the business units. A centralized assessment of the riskreturn tradeoff of individual projects would lead to corporate gridlock (Jonek-Kowalska, 2018).

Following Nocco and Stulz (2006), the theory related to this research was a risk-return theory. The broad feature of the firm's risk collection was planned to make value for organizations by enhancing their risk/return tradeoff. As a result, produces long-term competitive advantages for those corporations that identity, manage and monitor risks individually. Risk-return tradeoff might with no trouble know "ability to sleep at night test". As a few groups can manage the same financial skydiving without batting an eye, they further were scared to go up the financial steps lacking protected control. Deciding the quantity of risk, you can obtain through others' comfort and your investments is very important (Callahan & Soileau, 2017).

Thus, the firm must choose a good management panel that fits the existing business. After that, in choosing among the various members of the board to be selected, stakeholders must consider the current business situation and ERM leadership, which highlights features of major risks that need active initiative. A detailed literature review from earlier studies was collected. The literature review paid attention to the definitions, effects, implementations and their relationship to the adoption of the ERM

process in the firm. Especially control variables relationship among implementation of ERM (Oliva, 2016).

In the mid-1990s, an ERM proper concept was introduced and emerged in an organization as a management function. ERM has an efficient and combined way to manage the total risk an organization faces. Moreover, the Committee of Sponsoring Organization in 2004 suggested the basics of ERM, which were related to the internal environment, also provided discipline or structure. It was based on the further 7 components of the framework, including the tasks of the board of directors (BOD) and the role played by the organizational culture (Fraser & Simkins, 2016). COSO defined ERM as: "A procedure exaggerated by a person, panel of executive, the management or further workforce, useful in policymaking and around an activity, intended to recognize possible actions that could change the entity, and control risk to inside its risk desire, to give logical declaration concerning the success of entity goals".

As small was known about phases of ERM execution and aspects related to the hold or elimination of ERM in a firm, this study especially focused on the execution of determinants of ERM engagement factors. Pakistani companies have been unsuccessful and far away from the rest of the developed world in ERM development. Aggravated by many companies' financial exposure of indignity, organizations and shareholders require better omitting main risks. There was rising significance in the amount that a firm executes ERM.

The concept of ERM, its origins and its conceptual foundation were introduced in his paper. ERM is a core and fresh term for a risk management portfolio exposure to market risks. As a comparatively fresh field of system, ERM has rapidly in use on a figure of diverse terms. This might guide to uncertainty regarding ERM, and it might emerge that they were talked about regarding diverse things. Some texts or publications have initiated and discussed corporate risk management, strategic risk management, business risk management, incorporated risk management, comprehensive risk management, and enterprise-broad risk management (Florio & Leoni, 2017).

#### **Theoretical Background**

The basis of this research will be focused on the theory of enterprise risk management. Enterprise Risk Management is a broad method; in this method, the managers examine the collection of all risks facing the enterprise. The main plan of ERM is to ensure about the risks taken by companies and within a company's risk desires, and these risks are managed comprehensively. Those who support ERM argue that if ERM implementation is proper, Enterprise risk management can be gained from reduced stock volatility and higher stock value for shareholders.

ERM is an advanced technique that tries to recognize and control a portfolio of the risks faced by the organization. Every kind of risk is not considered good, but somehow those organizations that use ERM want to decide which risks should be accepted and which should be avoided and moderated. In recent years, a major increase in professional awareness of ERM can be seen. Minor research has been presented on ERM and in specific effects on firm performance (Meulbroek 2002; Beasley, Clune, & Hermanson 2005).



#### Figure 1: Theoretical Framework

The population of the study consists of all financial firms in Pakistan. The sample of this analysis is focused on Pakistani finance firms. Only those companies whose information is easily accessible will be selected. The criteria for choosing a sample will be convenience sampling. The sample size comprises 15 financial firms in Pakistan whose information will be easily available. The period of data collection will be 2013 - 2021. Data collected for this research is secondary. The data is available from the websites of each financial firm annual reports downloaded from all selected financial firms, the state bank of Pakistan website, and the Pakistan Stock Exchange's official websites. The time covered for this study is nine years, 2013-2021.

The most accepted method usually used in the study of panel data is fixed-effect regression analysis and random effect regression analysis. To test the result of the variable, the fixed effect technique is used when variables alter with time. When the association is examined between the independent variables, the fixed effect regression model is used inside an entity.

For this study, the equation is:

 $Y_{it} = \beta_n + (X_{it}) + A_i + u_{it} \dots Eq. (1)$ 

 $Y_{it}$ : Dependent variable, I show entity, and T shows time

 $X_{it}$ : Independent variable  $\beta_n$ : Coefficient

 $u_{it}$ : Error term

The equation for the fixed effect model of this research is as follows:

 $ERM_{it} = \beta_0 + \beta_1 CO_{it} + \beta_2 SPV_{it} + \beta_3 ROE_{it} + \beta_4 FLEV_{it} + \beta_5 SIZE_{it} + \beta_6 SLACK_{it} + e_{it}..$ Eq. (2)

Enterprise Risk Management (ERM) dependent variable used Tobin's Q as a controlled variable Lechner & Gatzert (2017) separate the relationship between the ERM and Tobin's Q.

Tobin's Q can be used for calculating the stock market valuation. So, the calculation of Tobin's Q is as follows:

 $\mathbf{Q} = (\mathbf{MVE} + \mathbf{BVL})/\mathbf{BVTA}$ 

Formula for MVE, BVL and BVTA:

**MVE** = Company shares price is multiplied by the number of outstanding common stock shares.

**BVL** = By adding Current liabilities and non-current liabilities of a firm.

**BVL** = Current Liabilities + non-current liabilities

**BVTA** = Book value of the total assets of the firm.

Capital opacity is defined as the implication of opacity in financial markets for shareholder behavior, asset prices, and welfare. In times of financial distress, companies with more opaque assets may have problems liquidating these assets at their fair market value. Furthermore, firms with increasing capital opacity are often undervalued due to higher information asymmetry (Farrell & Gallagher, 2014). ERM programs can contribute to reducing this information asymmetry by communicating the risk profile and financial strength to investors and other stakeholders (Hoyt & Liebenberg, 2011). We define capital opacity as the ratio of intangible assets to the book value of total assets and assume the relationship

Capital Opacity = Intangible assets/book value of total assets.

 $H_1$ : The capital opacity has a significant effect on enterprise risk management

Like earnings and cash flow volatility, implementing a holistic risk management system can also reduce the firm's stock price volatility, as a higher stock price volatility implies that companies are faced with greater risks and consequently benefit more from the ERM system Liebenberg and Hoyt (2017). In the empirical literature, this variable is defined as the standard deviation of stock prices or stock returns (Farrell & Gallagher, 2014).

Stock price volatility: Standard deviation of stock prices or stock returns

*H*<sub>2</sub>: The Stock price volatility has a significant effect on enterprise risk management

Return on Equity (Independent Variable):

One of the previous studies suggested that the proxy for the firm profitability can be used as the return of equity (Arnold, Benford, Canada, & Sutton, 2011).

ROE = Net Income/Book Equity

**H<sub>3</sub>:** The return on equity significantly affects enterprise risk management.

Now in the Modern Era, debt is the main source of finance for companies to finance processes. The major sources of financing operations can be generated via different methods like options, futures, or other financial instruments (Farrell & Gallagher, 2014). FLEV = Book value of Liabilities/Market value of equity

# Findings

The analysis and interpretation of the data are discussed. The source of data is secondary. The data collected from available financial reports of financial firms taken from their website twenty-seven financial firms are included. Data is collected for 9 years, from 2013 to 2021. There is a need to check the assumption of CLRM before testing the regression analysis.

To check the normality of data through graphs, the histogram method is the most frequent and broad method at glance. Jarque-Bera (JB) test is used to check whether data is normal or not. If the shape of the graph is a bell, the data is normal. And result criteria about the value of the JB test are chosen with the probability value.  $H_0$ : Data normally distributed.

H<sub>0</sub>. Data normany distributed.

 $H_1$ : Data not normally distributed.

The researcher will not reject the null hypothesis if the probability value is more than the significant level of 0.05 and the data is considered normal. In this study, the data is normal because its probability value is 0.15, which is more than 0.05 as in Graph 4.1. Skewness and kurtosis value are the additional criteria to check the normality. The standard skewness value should be near zero and the kurtosis value more nearly 3.

**MVE** = Share Price Common stock share





The 2<sup>nd</sup> assumption is multicollinearity. Multicollinearity arises from the perfect linear relation between regressors. When variables have perfect linear relations, the standard error is blown up in this condition. When a multicollinearity problem is present in data, the invalid factors are estimated. High R-square, small t value and large standard error can be formed by multicollinearity. (Gujarati, 2003).

VIF method is used in this research to identify multicollinearity. If the value of VIF is more than 10, show the existence of multicollinearity in data. All variables in this study are a vital part of ERM in financial firms in Pakistan.

Table 1: Variance Inflation Factors test for multicollinearity

Variable	Coefficient variance	Uncentered VIF	Centered VIF
ROE	1.20E-06	1.071	1.044
STOCK_PRICE_VOLATILITY	0.002040	1.587	1.050
CAPITAL_OPACITY	0.001071	67.558	1.167

Table 1 demonstrate that all independent variables have no multicollinearity in this research because the value of VIF is less than 10. Two types of VIF are centered and uncentered.

3<sup>rd</sup> and most important assumption of CLRM is Autocorrelation. This assumption is associated with the error term. Autocorrelation is present when the disturbance term is not normally distributed, and serial correlation. The Durbin- Watson test is applied to check the serial correlation assumption of panel data in this research. There is no correlation in the data because the value of Durbin-Watson is 1.81935, which is between 1.5 to 2.5.

4<sup>th</sup> assumption of CLRM is Heteroscedasticity, which is a relay to residuals. If the variations in the error term have contrasted obliquely over time. Heteroscedasticity is due to the flouting of the assumption. To study the Heteroscedasticity in the data Breusch-Pagan-Godfrey test is used.

 $H_0$ : Residuls are not hetroscodostic.

 $H_1$ : Residuls are hetroscodostic.

Table 2: Breusch-Pagan-Godfrey test for Heteroskedasticity

F-statistic	49.03917	Prob. F(6,235)	0.0000
Obs*R-squared	134.5430	Prob. Chi-Square(6)	0.0000
Scaled explained SS	4696 859	Prob Chi-Square(6)	0 0000

The results are shown in Table 2 that the probability value is less than 0.05 at a level of significant 5% accepted the null hypothesis, indicating no heteroscedasticity in data.

Table 3: Descriptive Statistics Result

	TQ	ROE	SPV	CO
Mean	1.305	11.157	1.204	3.488
Median	1.000	5.575	0.961	1.097
Maximum	23.888	769.230	23.214	93.861
Minimum	0.010	-333.330	0.100	0.656
Std. Dev.	2.005	69.557	1.691	9.526
Skewness	8.095	5.916	10.619	5.950

The mean value for TO is 1.30. the highest value of TO is 23.88, and the least value is 0.01. Financial firms averagely deviated from the mean of 2.00%. On average, ROE by financial firms is 11.15% positively, with the highest value of 769.23% and the least loss of -337.5%. At the same time, the divergence of ROE by financial firms from the mean value is 69.55%. The value of the mean of CO is about 3.4%. The highest value of CO is 93.86, and the least value is 0.65. The standard deviation value shows that the average CO level varies approximately 9.5% from the mean value.

## **Results**

2.53e-16

0.373580

0.127189

0.180018

3.659112

3.760366

0.152562

This model is applied to determine the correlation between independent and dependent variables. To check the effect of independent variables (ROE, SPV, CO) on the dependent variable (ERM), applied regression analysis.

Table 4. Analysis of regression model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROE	0.0006	0.0010	0.1518	0.879
SIZE	-0.2781	4.3438	-0.0649	0.949
CO	0.5290	0.0318	16.6380	0.000
С	0.2481	0.0431	5.7475	0.000

The constant value is 0.24. By holding other factors constant, ERM will be 0.24. -0.27 is the coefficient size firms value; by a 1% increase in the size of firms, the enterprise risk management will decline to 27 percent. The size of the firms has a negative effect on ERM, indicating that the higher the ratio of firm size will decrease the firm's enterprise risk management. 0.94 is the P-value of firm size, which is more than 0.05, indicating the insignificant correlation at the level of 5% between the size of the firm and ERM. The results indicate that the correlation between ERM and firm size is negative and insignificantly. Forecasters' coefficient value of determination (R2) is 0.66, representing 66 % changes in ERM.

The coefficient value of return on equity is 0.000, which indicates that if there is a 1% increase in ROE, ERM will be increased by 0% for. It shows that return on equity and ERM had a positive relationship. 0.87 is the P-Value of Return on equity. It shows no significant relationship between ROE and ERM because the Pvalue is greater than 0.05. The level of significance is 5%. The association between ERM and ROE is insignificant and positive because the significance level is 5%.

# **Discussion of the findings**

This research is made to study the factors affecting enterprise risk management: empirical evidence from financial firms in Pakistan. In this study, ERM is measured through Tobin's Q. In contrast, factors affecting enterprise risk management are measured through capital opacity, Stock price volatility, return on equity, firm size, financial leverage and Growth opportunity. There are a total of 30 financial firms in Pakistan, out of which 26 financial firms which chosen as the final sample. Panel data regression analysis is used to study the factors affecting the ERM of Pakistan financial firms.

With the support of the Hausman test and random effects panel regression and applied these tests.

 $H_1$ : Capital opacity has a significant impact on enterprise risk management.

The outcomes of this study associated with capital opacity are a hypothesis of this variable is accepted. After the study, CO has a positive and statistically significant impact on enterprise risk management. The capital opacity ratio positively impacts enterprise risk management, indicating that a greater ratio of capital opacity increases the enterprise risk management of firms. The helps the companies increase the capital opacity, which is comfortably applied to the ERM. In the previous literature, the Pakistan stock exchange market is not a big stock market investment behavior differs from these countries. Investors play an active role in the investment for the outcome of the capital opacity so that investors actively look after the total return from the funds so that the firms are very serious about implementing the ERM. So that is why H1 is accepted.

 $H_2$ : Stock price volatility has a significant effect on enterprise risk management.

The outcome of the study associated with the Stock price volatility is that hypothesis of the variable is accepted. The ERM implementation on SPV can reduce stock price volatility compared to greater SPV, in which firms face more risk and more advantages from the enterprise risk management. Stock price volatility has a positive effect on the ERM. So, results show that the relation between stock price volatility and enterprise risk management is significant positively.

 $H_3$ : The return on equity has an insignificant effect on enterprise risk management.

The findings of this study associated with returning on equity is that hypothesis of this variable has an insignificant relationship with ERM. There is no relationship between the ERM and ROE in implementing Pakistani firms. Due to results, the companies increase the ROE, which will not comfort in applying the enterprise risk management system. So, the results indicate that the relationship between enterprise risk management and return on equity is insignificant positively.

### Conclusion

Factors Affecting Enterprise Risk Management financial firms in Pakistan are empirically examined in this study. This research uses a sample period from 2010 - 2018. This research evaluates the hypothesis of factors that affect Enterprise risk management. For this research purpose, the firm value of enterprise risk management in the financial firms in Pakistan investigates the risk in different financial firms in Pakistan. This research has the following objectives and takes the sample from the financial firm in Pakistan. In the Hausman test, the probability value has greater than 5%. In this situation, shareholders of the financial firms' profits go high due to the high risk. In this research paper, capital opacity significantly affects enterprise risk management. When capital is high in financial firms, shareholders of the firm's profit could be high, and they must be satisfied with the capital opacity. The stock price volatility has a significant effect on enterprise risk management. With the change the price fluctuation, investment opportunities would change. With the high price of a stock, volatility for an investment opportunity means the return of investment can be higher. The financial leverage has significant for enterprise risk management. An increase in the value of the assets will be high for the shareholders' cash.

### **Recommendation and Implementations**

In this research, the enterprise risk management recommends the significant effect factors like capital opacity, stock price volatility and financial leverage of the financial firms. Other factors like firm size, slack and equity have an insignificant effect on enterprise risk management. Financial firms can explore capital opacity, stock price volatility, and financial leverage because of high risk and more return. In exploring the factors, shareholders gain more profits due to the fluctuations. Financial firms should be recommended for these factors. Full of attention, managers of the financial firm can make any decisions regarding enterprise risk management. The finance manager should take a careful and sounding look at the firm's financial matters. Furthermore, research might consider the factors that affect enterprise risk management.

## Limitations and Instructions for Future Research

The financial firm's data in this study relied on the registered and published financial statements and historical stock prices. These statements are the direction of the management. Therefore, the finding of the research affects the quality of the report in the financial statement of the financial firms of enterprise risk management. Due to this report of findings knows that financial firms face different risks taken by the financial firm management. It may be additionally ordered in two gatherings, (as first gathering be firms, or second gathering be firms enterprise risk management cannot receive undertaking risk the executives). Besides, different factors can be utilized for enterprise risk management (like International Diversification and ROA) to check the company's worth.

#### REFERENCE

- Ahmad, S., Ng, C., & McManus, A. L. (2014, December 31). Enterprise risk management (ERM) implementation: Some empirical evidence from large Australian companies. *Proceedia* - Social and Behavioral Sciences, 164(1), 541-547.
- Ahmed, I., & Manab, N. A. (2016, January). Influence of enterprise risk management framework implementation and board equity ownership on firm performance in Nigerian financial sector: An initial finding. *Journal of Business and Management*, 18(1), 61-68.
- Arena, M., Arnaboldi, M., & Azzone, G. (2010, October ). The organizational dynamics of enterprise risk management. *Accounting, Organizations and Society, 35*(7), 659-675.
- Arnold, V., Benford, V., Canada, J., & Sutton, S. G. (2011, September). The role of strategic enterprise risk management and organizational flexibility in easing new regulatory compliance. *International Journal of Accounting Information Systems*, 12(3), 171-188.
- BEDARD, J. C., HOITASH, R., & YEZEGEL, A. (2013). Enterprise risk management program quality: determinants, value relevance, and the financial crisis. *Contemporary Accounting Research*, 30(4), 1264–1295.

- Bohnert, A., Gatzert, N., Hoyt, R. E., & Lechner, P. (2017). The literature shows the relationship between enterprise risk management, value and firm characteristics. *Springer Link*, *106*(1), 311–324.
- Bromiley, P., McShane, M., Anil, N., & Rustambekov, E. (2015, August ). Enterprise risk management: Review, critique, and research directions. *Long Range Planning*, 48(4), 265-276.
- Bromiley, P., McShane, M., Nair, A., & Rustambekov, E. (2014). Enterprise risk management: review, critique, and research directions. *Long Range Planning*, 2(1), 1-12.
- Brooks, c. (2008). *Introductory econometrics for finance*. new york:Cambridge University Press.
- Brooks, C. (2008). *Introductory Econometrics for Finance*. New York: Cambridge University Press.
- Callahan, C., & Soileau, J. (2017, June). Does enterprise risk management enhance operating performance? *Advances in Accounting*, *37*(1), 122-139.
- Choi, Y., Ye, X., Zhao, L., & Luo, A. C. (2016, February). Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. *Annals of Operations Research*, 237(1), 281-300.
- Dickinson, G. (2001, July ). Enterprise risk management: Its origins and conceptual foundation. *The Geneva Papers on Risk and Insurance*, *26*(3), 360-366.
- Eckles, D. L., Hoyt, R. E., & Miller, S. M. (2014). Reprinting enterprise risk management's impact on reducing risk marginal cost: Evidence from the insurance industry. *Journal of Banking* & *Finance*, 49(1), 409–423.

- Eckles, D. L., Hoyt, R. E., & Miller, S. M. (2014, June). The impact of enterprise risk management on the marginal cost of reducing risk: Evidence from the insurance industry. *Journal of Banking & Finance*, 43(1), 247-261.
- Farrell, M., & Gallagher, R. (2014). The valuation implications of enterprise risk management maturity. *The Journal of Risk and Insurance*, 9999(9999), 1–34.
- Florio, C., & Leoni, G. (2017, January ). Enterprise risk management and firm performance: The Italian case. *The British Accounting Review*, 49(1), 56-74.
- Fraser, J. R., & Simkins, B. J. (2016, November–December). The challenges of and solutions for implementing enterprise risk management. *Business Horizons*, 59(6), 689-698.
- Fraser, J. R., One, H., & Simkins, B. J. (2007). Ten common misconceptions about enterprise risk management. *Journal of Applied Corporate Finance*, 19(4), 75-81.
- Gates, S., Nicolas, J.-L., & Walker, P. L. (2012). Enterprise risk management: A process for enhanced management and improved performance. *Journal of Management Accounting Quarterly*, 13(3), 28-38.
- Gatzert, N., & Martin, M. (2013, January). Determinants and value of enterprise risk management: empirical evidence from the literature. *SSRN Electronic Journal*, *18*(1), 10-21.
- Gatzert, N., & Martin, M. (2015). Determinants and value of enterprise risk management: Empirical evidence from the literature. *Journal of Risk Management and Insurance Review*, *18*(1), 29-53. doi:10.1111/rmir.12028