

## **Impact of the Risk Management and Corporate Governance on Firm Performance: Evidence From Pakistan**

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**Abstract:** *The objective of this paper is to examine the relationship between risk management, corporate governance and financial performance of firms listed at Pakistan stock exchange for the period 2013-2017. Our study sample consists of three important sectors of the Pakistan such as financial, industrial and services sector. The dependent variables are firm performance that is measured by ROA and ROE, while independent variables are liquidity risks, credit risk; operational risk and the moderator variable corporate governance have been used in this study. The results show that liquidity risk has a negative significant impact on ROA; it means that if liquidity risk increased profitability decrease and also liquidity risk negatively associated with ROE. However, in financial sector operational risk has a positive significant relationship, but when added corporate governance as moderator, there is a negative significant association with financial performance. Credit risk is negatively associated with ROA and ROE; it means that increase in credit risk decrease the profitability and poor firms' performance. In our results other than financial sector liquidity risk has a negative relationship with ROA and ROE it means that increase in liquidity risk decrease the firm performance.*

**Keywords:** *Credit risk, Corporate Governance and financial performance*

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### **I. Introduction**

Profit maximization is the main object of every business organization with minimum resources and manage their business by reducing the risk in the way of earning in the business and make market value and market share and they faced and manage different types of risks in accordance with the business nature like in financial business credit risk management is very important factor that should be balanced and shareholders income should be maximized. The comfort of the financial system plays a vital role in the economy because it can disorder the economic growth (Das and Ghosh, 2007). The financial performance is the capability of the company to create new capital from operational activities over a specified period of time and is measured by net income and cash generated from operations (Aktan and Bulut, 2008).

When financial and banking crises came to the world in the 1980s and 1990s, new risk management banking techniques emerged. They can manage and manage the different types of risks that must be identified before. The risks most exposed to the Bank's risk are: credit risk, interest rate risk, liquidity risk, market risk, exchange rate risk and debt payment risk.

Financial Institutions are the backbone and core of each economy. Inadequate banking systems can affect general economic execution and performance, and may even prompt a far-reaching budgetary crisis. As per the International settlement bank 2002, the risk of credit is the main wellspring of the instable monetary system in banking division. The worldwide finance issue is only the latest case of where unstable administration has vastly affected numerous economies. Accordingly, the International settlements bank 2002, demonstrated that to achieve appropriate credit risk administration frameworks, banks ought to legitimately recognize, measure, screen, and mitigate credit risk. Proper estimation of credit risk gives establishments for creating, checking and controlling instruments to oversee credit risk.

Benedikt et al., (2007) examine the impact of credit risk management strategies on performance US banks and discovered that advanced credit risk management methods helped to keep the credit level at their targets. They also evidence that the overall productivity enhance the effects of modern risk management procedures which add a theoretical contribution in literature.

The credit risk is most important type of risk that banks face, as the major earning of banks are commercial activities of banks. For this reason, the credit risk management has a significant impact on banks profitability (Li and Zou, 2014). In general, banks offer financial services in a variety of forms, including

issuing money, depositing, lending, processing transactions and creating credit (Campbell, 2007). Thusly, estimating risk of credit in banking frameworks is of indispensable worry for the whole scope of stakeholders of the bank, not slightest controllers.

The credit function of banks improves the capacity of financial investor to abuse wanted beneficial ventures. Credit creation is the primary income producing movement of banks (Kargi, 2011). However, it suffers banks to credit risk. The Basel Committee on Banking Supervision (2001) characterized credit risk as the likelihood of losing the outstanding loan incompletely or absolutely, because of credit risk. Credit risk is an inner determinant of bank executive performance. The higher the submission of a bank to credit risk, the higher the possibility of the banks to financial crisis experience and vice versa. Among different dangers borne by banks, credit risk assumes an imperative part of the profitability of bank since an expansive lump of banks' income collects from loans for which premium is determined. However, interest risk is specifically connected to credit risk inferring that higher the interest risk tends to increment in credit risk.

In this paper, we add the following risk management components such as, liquidity risk, credit risk and operational risk and examine their impact on the firm's performance and also see the moderating impact of the corporate governance that enhance the relationship.

### **Problem statement**

Risk management is remaining problem within organization for maximization the income of the shareholders. Corporate governance plays a moderating role in between risk management and firm's performance.

### **Research Objectives**

Our study has following research objectives,'

- (1) To discuss the relationship between risk management and firm performance.
- (2) To discuss the moderating impact of the corporate governance between risk management and firm's performance.

The rest of the paper consists of four sections including introduction, section II provide the existing literature related to topics and section III discussed the methodology which is used in this study. The last section discussed the findings and conclusion of study.

## **II. Literature Review**

The management of a company's short-term assets and liabilities plays a vital role in the accomplishment of the company objectives. The campiness with bright future expectations and strong bottom lines always stay solvent without good liquidity management (Jose et al., 1996). In relation to Moss and Stine (1993), a practical way to assess the liquidity of firms is the cash flow pattern. This cash flow pattern measures the delay between the cash payments related to the purchase of stocks and the receipt of customer receivables. Traditional liquidity measures the current rate and the rapid rate is valuable liquidity indicators (Hutchison et al., 2007). The liquidity management can be defined as the planning and control of cash flow to meet day-to-day managers' daily commitments (Collis and Jarvis, 2000).

The risk is a natural component that always be presents in the business activities and society. It is a condition that creates uncertain potential events that can manage the loss / gain chance and the success of financial institutions (Crowe, 2009). Therefore, a well established risk management practices (RMPs) help to reduce exposure by bank risks. Effective risk management is recognized by academics, practitioners and regulators as one of the cornerstones of bank management and acknowledges the need for a comprehensive approach to deal with this reality and bank risk management.

Credit risk shows up when a financial establishment is expecting an installment that has been legally concurred between the organization and the counterparty and the obligors can't – or as it were defaults – to satisfy their commitments. Credit risk likewise started additionally when there is a change or underestimation in the rating of the counterparty. Liquidity is the ability of a bank to finance its asset growth and fulfill its obligations on condition that losses cannot be met (Basel Banking Audit Committee, 2008). Liquidity inadequacies of banks can be aspect to a funding liquidity risk that arising from sudden and unexpected liquidity needs arising from maturity mismatches and / or probabilities between inputs and outputs.

### **Risk Management.**

Liquidity risk is the possibility that the bank cannot meet its obligations in a timely manner (Drehmann and Nikolaou, 2009). This risk may adversely affect both the bank's earnings and capital, thus ensuring that there should be a sufficient funding to meet the future demands of providers and borrowers at a reasonable cost that becomes the most important priority of a bank's administration. Maturity transformation of short-term deposits to long-term loans makes banks open to liquidity risk naturally (Basel Banking Audit Committee,

2008). Market liquidity risk indicates that it is not appropriate to sell assets in or near the fair value of assets and to sell in a small market; a price drop may occur (Brunnermeier and Pedersen 2009).

### **Credit Risk**

Under credit risk counterparty will neglect to make installments on its commitments as per the concurred terms. The conventional banking business in light of loaning operations is viewed as a credit risk business since the bank's capacity to limit credit risk is the source of its benefit. The fundamental cause of credit risk is that the account holders don't regard the due dates of their duties that exist in the terms of an agreement. Truth be told, credit chance exists when the partners can't perform and decide their commitments on the settled date. The net income and the share of the market of the offers are still in a zone of vulnerability in light of this sort of risk. The religious limitation on the utilization of regular credit risk reduction apparatuses, for example, derivatives of credit are likely to expand credit risk. Though, the business partnership sort of agreements amongst banks and borrowers can diminish credit risk, but enhances the unfriendly determination issue, and encourages healthier comprehension of borrowers' financial soundness (Errico and Farahbaksh, 1998).

Credit risk can cause insolvency of the bank, which thus may inversely influence a bank's development prospects and its focused ability (How et al (2005). Powerless credit risk administration practices and poor quality of credit keep on being an overwhelming reason for bank disappointments and crises of banking around the world. Credit risk is, in light of the fact that the business visionary (obligor) does not give adequate data to the financier on the real bank profit. This is known as "capital impairment risk" as the business person has no legally binding commitment towards the financier (Ariffin (2009).

### **Corporate governance**

The term 'corporate governance' has many definitions. Many academics, researchers and organizations have paid great attention to the corporate governance period. According to the OECD (2005), corporate governance is made up of procedures and processes that are guided and monitored by the company. The corporate governance structure defines the distribution of rights and tasks among various company participants, including the board of directors, managers, shareholders and other stakeholders, and sets out decision-making rules and procedures. Similarly, corporate governance is defined by Gillan and Starks (1998) as a set of regulations and rules and as factors regulating company processes. Berndt and Leibfried (2007) define group processes, laws and policies that affect the direction of a firm's firm. The code of corporate governance in Pakistan established in 2002 that is greatest reforms to improve the standard in Pakistan. Reforms are made on board composition and auditor presence. Cheema (2003) conducted research work on corporate governance in Pakistan. According to Cheema (2003) Pakistan code of corporate governance is same as the other countries.

Anandarajah (2004) discusses the issue of corporate governance, the activities carried out to increase equity and transparency in public shareholding companies

The world has witnessed a great financial disturbance in recent years, which has led many of the big companies to go bankrupt. Moreover, beneficiaries and investors have become unreliable about the credibility of global financial markets and the financial information of companies. As a result, there has been an increase in corporate governance focus in capital markets both in underdeveloped countries and in developed countries in order to restore lost confidence (EbuHaija, 2012). In this framework, the need for corporate governance stems from the conflict between potential inside and outside of a company. Sometimes this conflict involves asymmetric information that allows the management to reach personal and selfish goals that are contrary to the objectives of the company. Al-Neccar (2010) states that the administration may function to fulfil its own interests, but this can harm the rights of shareholders.

In recent years, many institutions and researchers have concentrated on corporate governance issues (Akhtaruddin, 2005). This intensified focus emphasized that institutional governance practices attach importance to restoring investors' confidence in financial markets as well as the crisis experienced in the late 1990s (Azman & Kamaluddin, 2012). Accordingly, various organizations have assisted in the adoption and implementation of effective good corporate governance principles. These include the World Bank, the IMF, the OECD and the United Nations Trade Representative. These organizations aim to improve the role of governments and firms in Eastern Europe through the application of codes of conduct and the adoption and implementation of effective corporate governance principles (McGee, 2012).

In today's environments corporate governance is major issue in business (Yuksel, 2008). Good corporate governance, based on OECD principles, should provide incentives and prizes appropriate to the board and management to oversee the interests of the company and its shareholders for effective monitoring and efficient use of resources. A corporate governance system that is effective in a company and in the economy, can contribute to the level of confidence required for market performance. Therefore, the capital cost is low and companies need to use their resources efficiently (OECD, 2004, El-Neccir, 2010). In the timing of financial reports, scheduling is often discussed in the OECD, corporate governance principles. Explanation and

transparency are explained in the Principles; For example, the principle states that it is important to ensure that the corporate governance system provides appropriate and precise disclosures of all substances related to the company, including financial status, ownership, presentation and incorporation of the company's management (Aktas and Kargyn, 2011).

Research on corporate governance is motivated by the agency theory that companies use corporate governance mechanisms to control opportunistic behaviour of managers and reduce agency problems (Yunos, 2011). Effective corporate governance structures will improve the monitoring of management and reduce the occurrence of mismanagement or misreporting and timeless financial reporting processes. According to some research (Afify, 2009; Shukeri & Nelson, 2011) and others (Cohen et al., 2004; Kali & Omri, 2011) argue that it provides quality financial reporting processes among the most important functions of the corporate governance system. Cohen et al. (2004) argues that financial reporting on corporate governance has become a key factor in the preparation of the preparation point and financial reports.

Beltratti and Stulz (2012) investigate the relationship between corporate governance and bank performance during credit crisis by using data of 98 international banks. They argue that the banks they use to maximize their shareholder wealth are deemed to have risen to the risks that the shareholder has created rich but are expensive due to unexpected consequences when risks are expected.

### **III. Theoretical Framework**

The agency theory supports our research. The corporate governance mechanism is very important for controlling the agency problems. According to Yunas (2011) corporate governance mechanism employ the agency theory to minimize the agency conflicts. Anderson et al (2004), Yunas (2011) and Rasmussen & Schmidt (2012) describes that corporate governance including the board size board diligence and CEO duality and Audit related variables are very useful that should decrease the agency problems within organization. Millin (2004) explain that good governance decrease the agency problems and work for the best of the shareholders. The financial manager plays a key role in controlling conflicts that increase his personal income from shareholders by giving solid financial information that are useful for the organization.

According to Jensen & Mackling (1976) that the agency theory has a strong relationship between shareholders and the managers and shareholders grant their responsibility to run overall business on the behalf of the shareholders. There is no gap between them and has relationship between agent and principals' & Jensen (1993) concludes that agency theory gives the explanation of the Board of director's overview and also overview of the major shareholders and the top management. The agency theory also states that agents protect the principals and on other side provides the great incentives and benefits to their agents and spent more cost to minimize the agency costs. According to Al-Ajmi (2008) agency problems can be elaborated from the practices of the corporate governance.

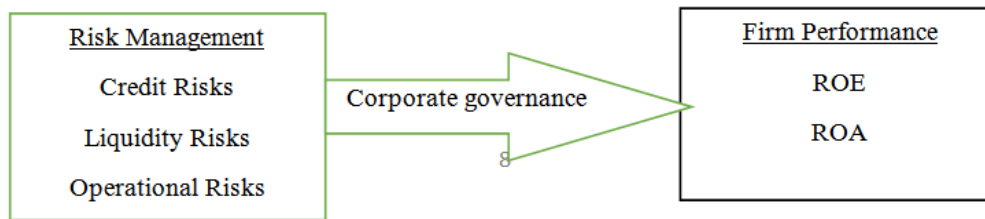
According to the internal reporting theory, the management is mostly concerned with the internal performance appraisal (Lurie and Pastena, 1975). Management tends to delay unfavourable news about the firm until it is verified as performance appraisal that compensation and is concerned with the earnings performance. For this reason, managers need more time to prepare their answers and get low performance. This argument was also used by Kost (1981, 1982) to explain the management's tendency to delay negative journalism. However, the good news is subject to less scrutiny and management tends to publish earlier than unfavourable news.

According to Dogan and Çelik (2007), internal financial reporting theory states that managers assume internal performance appraisal. If it is found that the company performance evaluation is related to profit performance, managers tend to postpone reporting bad news until the news is verified; which gives managers more time to prepare responses to criticism and improve low performance.

The theory of resource dependence reveals that organizations are primarily dependent on the external environment for resources and their activities are based on their ability to manage these resources and their ability to acquire them from the environment. In this context, the board of directors constitutes the basis for networking and contracting (Ruigrok et al., 2007). This theory supports the relationship between the board (source providers) and financial reporting quality. Moreover, the theory of resource dependence illuminates the ways in which organizations can determine the ways to connect resources with the environment and the way they connect with the environment (Pfeffer, 1972). According to the theory, the board can connect with the environment by creating important links and facilitating access to accurate and correct information through personal and professional networks (Ees & Postma, 2004).

The theory is suitable for institutional management because it suggests that effective corporate governance structures in institutions can result in the development of large resources. For example, the board may facilitate links with other institutions and board members to evaluate the company's reputation positively (Hillman & Dalziel, 2003; McGregor, 1960; Pfeffer, 1972).

The theoretical framework is given below



**Table 01: Measurement of the variables**

Variable Name	Sign	Measurement	Reference
Board Size	BIND	Measured by total number of board of directors	Ismail et al. (2008) and Lam and Lee (2008)
Board independence	BSIZ	Measured by non-executive directors in board composition	Ismail et al. (2008), Abdel salam and Street (2007) and Afify (2009)
Board diligence	BDILIG	Measured total numbers of board meeting in one financial period	Greco (2011); Hashim & Rahman, (2010)
Ownership concentration	OCN	Ownership concentration is measured by number of person or family owned 5% or more share in total share	Ishak et al. (2010) Zureigat, (2011)
Return on asset	ROA	Net income divided by Total Asset	Appa, 1996
Return on Equity	ROE	Net income divided by total equity	Ogboi and Unuafe (2013)
Liquidity Risk	LR	Measured by liquidity ratio and calculated as the liquid asset.	Ogboi and Unuafe (2013)
Operational Risk	OR	operational risk computed as earnings before interest and tax divided by total assets	Ogboi and Unuafe (2013)
Credit Risk	CR	credit risk is measured by non-performing loan ratio	Appa, 1996

**Hypothesis**

According to the above literature we developed the following hypothesis,

H1=Liquidity risk has positive relationship with firm’s performance.

H2=Operational risk has positive relationship with firm’s performance.

H3=Credit risk has positive relationship with firm’s performance.

H4=Corporate governance has moderating the impact of risk management on bank performance.

The models of the firm’s performance are given in mathematical form are given below

$$ROA_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR + \varepsilon_{it}$$

When using the corporate governance as a moderator model are given below

$$ROA_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BIND_{it} + \beta_5 OR * BIND_{it} + \beta_6 CR * BIND_{it} + \varepsilon_{it}$$

$$ROA_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BDILIG_{it} + \beta_5 OR * BDILIG_{it} + \beta_6 CR * BDILIG_{it} + \varepsilon_{it}$$

$$ROA_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BSIZ_{it} + \beta_5 OR * BSIZ_{it} + \beta_6 CR * BSIZ_{it} + \varepsilon_{it}$$

$$ROA_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * OCN_{it} + \beta_5 OR * OCN_{it} + \beta_6 CR * OCN_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BIND_{it} + \beta_5 OR * BIND_{it} + \beta_6 CR * BIND_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BDILIG_{it} + \beta_5 OR * BDILIG_{it} + \beta_6 CR * BDILIG_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * BSIZ_{it} + \beta_5 OR * BSIZ_{it} + \beta_6 CR * BSIZ_{it} + \varepsilon_{it}$$

$$ROE_{it} = \alpha_0 + \beta_1 LR_{it} + \beta_2 OR_{it} + \beta_3 CR_{it} + \beta_4 LR * OCN_{it} + \beta_5 OR * OCN_{it} + \beta_6 CR * OCN_{it} + \varepsilon_{it}$$

In analysis of other than financial firm’s credit risk is excluded because there is minimum credit risk in services and industrial sector but credit risk includes in financial sector and comparison of financials and other sector is made in our research.

The research sample includes total 89 firm’s data 22 firms are related to financial sectors and other one from other two sector industry and services. Financial sector firm’s analysis is made separately with other

sectors and comparison with financial sector is done and that's why separate sample of financial sector is taken. In financial sector credit risk is dominant.

Data is collected from the annual reports of the firms listed in Pakistan stock exchange. Annual reports are downloaded from the websites of the SECP and website of state bank of the Pakistan.

**Table 2: Descriptive statistics of Non-Financial firms**

Variable	ROA	ROE	LR	OR	BSIZ	BDILIG	BIND	OCN
Descriptive of Non-Financial firms								
Maximum	1.537	6.411	12.914	1.537	17.000	24.000	13.000	8.000
Mean	0.073	1.027	1.425	-0.075	8.970	6.188	1.764	2.874
Minimum	-1.507	-0.971	0.000	-7.608	7.000	1.000	0.000	0.000
Descriptive of financial firms								
Maximum	0.184	0.431	12.140	0.184	13.000	17.000	9.000	7.500
Mean	0.139	0.062	0.421	0.017	8.391	6.400	1.745	2.727
Minimum	-0.717	-9.709	0.010	-0.717	7.000	1.000	0.000	0.000

In other than financial firms return on asset is with maximum value of 1.537 and with mean value of 0.073 it means that some firms are in crises due to the political situation in Pakistan and cannot earn on their assets. ROE maximum value is 6.411 with means value of 1.027 it means that companies earn 1.07 on their capital, while the liquidity ratio average value is 1.425. Board size in industries and services sector is maximum members of 17 with means of 9 members and minimum 7 members according to the code of corporate governance of Pakistan. Board meeting with maximum 24 and average of 6 and followed the code of corporate governance of at least one board meeting in each quarter. Mostly firms have independent directors in the board and ownership concentration has with maximum 8 members and with average of three.

In Pakistan financial sector is very well developed and well managed by state bank of Pakistan. In financial sector return on asset is 0.184 with maximum value and mean value of 0.139 it means that financial sector earns 13.9% on their assets. ROE is with means value 0.062 it means that financial sector earns 6% on their equity. In financial sector risk is mitigated by applied different techniques and tools and minimizes the risk. Board size in financial sector is with maximum 13 and mean value 8 members in the board composition. Board meeting are 6 meeting during in one financial year. Independent directors in board are 2 members are hired externally.

**Table 03 Simple Regression Results without moderator for financial firms**

Variables	Financial Firms		Non-Financial Firms	
	Model 1 (ROA)	Model 2 (ROE)	Model 1 (ROA)	Model 2 (ROE)
Constant	-0.9381 (0.718)	-0.8726 (0.902)	0.3480 (0.326)	-0.8074 (0.720)
LR	-0.6367** (0.018)	-0.7604*** (0.000)	-0.1609** (0.024)	-0.0691 (0.056)
OR	0.0693*** (0.000)	0.3219*** (0.005)	-0.0168*** (0.003)	0.5647*** (0.017)
CR	-0.7654*** (0.015)	-0.0124*** (0.001)	-0.1569* (0.034)	-0.0978*** (0.000)

Note: CR= Credit Risk; LR= Liquidity Risk and OR= Operational Risk; \*\*\*= Significant at 1%, \*\* significant at 5 % & \* significant at 10 % level of significance

The results show that liquidity risk has a negative impact on ROA and ROE; it means that if liquidity risk increased profitability decrease. In financial sector, the operational risk positively influences ROA and ROE, but when adding corporate governance as moderator than it effect negatively. These findings are in relation to Boahene and Agyei (2012) and Aduda and Gitonga (2011), which show a positive relationship between credit risk and bank profitability. While Credit risk is negatively associated with ROA and ROE in both sectors which indicate that increase in credit risk decrease the profitability and firms' performance.

Moreover, the results of non- financial sector firms, the Liquidity risk is negatively associated with ROA and ROE it means that increase in liquidity risk, that decrease the firm performance. The operational risk is negatively associated when adding moderator variable corporate governance then results are changed the operational risk has no impact on the firm's performance.

**Table 04: OLS Results with Moderating Variables impact on Firms performance**

Variables	Financial Firms		Non-Financial Firms	
	Model 1 (ROA)	Model 2 (ROE)	Model 1 (ROA)	Model 2 (ROE)
LR*BIND	-0.765*** (0.008)	-9.405*** (0.001)	-2.146*** (0.016)	-1.036*** (0.005)
OR*BIND	-3.076***	-8.954***	-0.078***	-0.098***

	(0.000)	(0.006)	(0.005)	(0.007)
LR*BDILIG	-0.790*** (0.003)	-0.154 (1.012)	-3.089* (0.100)	-9.408 (1.378)
OR*BDILIG	-0.0785*** (0.000)	-0.098*** (0.000)	-0.067** (0.003)	-0.008** (0.006)
OR*BSIZ	12.789 (0.934)	16.879 (0.783)	-0.085*** (0.000)	-0.013*** (0.001)
LR*BSIZ	-4.783*** (0.002)	-8.045 (1.045)	-1.087** (0.004)	-0.832** (0.007)
LR*OCN	2.476 (3.456)	12.348 (4.921)	-2.890 (0.458)	-4.109** (0.005)
OR*OCN	8.078 (1.347)	11.091 (0.781)	-1.087*** (0.001)	-3.657** (0.013)
CR*BDILIG	-2.453* (0.105)	-0.376** (0.023)	0.1567* (0.013)	0.1096 (0.789)
CR*BIND	-0.3475*** (0.004)	-0.098 (0.008)	0.018* (0.010)	0.076 (0.182)
CR*BSIZ	-11.143* (0.101)	-8.098*** (0.009)		
CR*OCN	-0.107*** (0.008)	-0.409*** (0.010)		

Note: CR= Credit Risk; LR= Liquidity Risk and OR= Operational Risk; \*\*\*= Significant at 1%, \*\* significant at 5 % & \* significant at 10 % level of significance

In financial sector analysis, when we add corporate governance as a moderator variable then results change, the operational risk has positive relationship with firm performance changed into negative relationship that shows increase in operational risk decrease the firm's performance. The other results has a smaller change that shows corporate governance has moderating impact between risk management and firm's performance. Liquidity risk has no impact with adding ownership concentration a corporate governance variable as a moderator and results are bitter change. This concern is according to Li and Zou (2014) point of view which show that non-performing loans / gross credits have a positive impact on the firm's profitability which is measured by ROA and ROE.

The results of non-financial sector indicate that the operational risk has positively relationship with ROE when adding moderator variable corporate governance then operational risk is negatively relationship that shows decrease operational risk can increase the firm performance.

#### IV. Conclusion and Recommendations

Our study focused on the three sectors of the Pakistan economy that includes financial, industrial and services sector. The dependent variables firm performance is measured by two ways by return on asset(ROA) and return on equity(ROE).The independent variables which are, liquidity risks are measured by liquidity ratio and calculated as the liquid asset, credit risk are measured by non-performing loan ratio and operational risk are measured by earnings before interest and tax divided by total assets and the moderator variable corporate governance(that corporate governance aspects that directly impact) has been taken.

In our results liquidity risk is negatively significant to the ROA; it means that if liquidity risk increased profitability decrease and also liquidity risk negatively associated with ROE. In financial sector operational risk is positively significant with adding moderator as corporate governance when added corporate governance it is negatively significant. Credit risk is negatively associated with ROA and ROE it means that increase in credit risk decrease the profitability and poor firms' performance. This shows that non-performing loans / gross credits have positive effects on the financial performance (ROA; ROE) of banks. These findings are according to Abdelrahim (2013); Li and Zou (2014) and Boahene and Agyei (2012) finding, that the capital adequacy ratio had no effect on credit risk management and some credit risk indicators had a positive effect on the financial performance of banks. Our results are similar to Juanjuan (2009) who found that risk management has positive impact on the firm's performance. Moreover, our results are a continuation of the work of Abiola and Olausi (2014) and are in line with Adeusi et al., (2013), which determine the impact of credit risk management on profitability.

In our results other than financial sector Liquidity risk is negatively relationship with ROA and ROE it means that increase in liquidity risk decrease the firm performance. The operational risk is negatively associated when adding moderator variable corporate governance then results are changed the operational risk has no impact on the firm's performance.

Laeven and Levine (2007) and Schmid and Walter (2009) findings show that the functional diversity of financial institutions is negatively associated with firm performance. Beltratti and Stulz (2012) also report a negative association but coefficients of this variable is negligible. According to these researchers the sample of

banks and savings institutions, it is important to note that the average and median of the loans / assets are very high, 69.69% and 71.29%.

In financial sector when adding corporate governance as a moderator variable then results changes that operational risk that is positively relationship with firm performance changed into negatively relationship that shows increase in operational risk decrease the firm's performance. The other results have a smaller change that shows corporate governance has moderation impact between risk management and firm's performance. Liquidity risk has no impact with adding ownership concentration a corporate governance variable as a moderator and results are bitter change.

Risk management is very important tools in maximizing the firm's performance. In banking sector in Pakistan state bank of Pakistan also maintain the ratios of the bank and help in maintaining the risk and also advice to make a complete department of risk in organization. The state bank of Pakistan also receives fine in order to compliance and written in state bank of Pakistan code of conduct.

Future research should be conducted on Risk management comparing to other nation like two countries risk management comparison. The corporate governance other variables board knowledge and experience and existence of the audit committee should be taken in further research. Also the ownership concentration should be taken as moderator in further research. Because in some countries organizations and bank are governed by the government then see government ownership as a moderator in risk management should be the topic of further research.

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