INTEGRATING EFFECT OF CORPORATE GOVERNANCE, CORPORATE DIVERSIFICATION AND EARNINGS MANAGEMENT ON FIRM PERFORMANCE: EMPIRICAL EVIDENCE FROM PAKISTAN

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DEDICATION

I dedicate this work to my beloved sons Ahmad Mujtaba and Muhammad Abubakar

ABSTRACT

This study examines the impact of corporate governance practices, capital management, corporate diversification and earnings management on firm performance in the financial sector of Pakistan. For the purpose, the study incorporates a sample of 91 listed Pakistani financial firms for the period from 2005 to 2015. Data of the variables was collected manually from annual reports of the listed financial institutions. Study in hand is incorporates seven elements of corporate governance to develop Corporate Governance Index (CGI). These seven elements include: board size, audit committee size, inside director, independent directors, non-executive directors, CEO's duality and board of directors meetings. Specifically, research objectives are (i) to identify the impact of CGI on the financial performance of the firm (ii) to examine the effectiveness of corporate diversification on a firm's performance (iii) to ascertain the effect of earnings management on a firm's performance of financial sector (iv) to investigate the impact of capital management on a firm's performance in the financial sector (v) to examine the impact of firm size on firm performance.

Contributions of the study are first, corporate diversification with the combination of capital management, CGI and its impact on performance has never been studied earlier.

In addition the selection of the financial sector for the investigation of corporate governance practices and diversification is another distinctive point of the study in hand. Considerable work is done in the manufacturing sector of Pakistan regarding corporate governance compliance but the financial sector is totally ignored. Financial sector as a whole has been ignored by researchers regarding corporate governance and corporate diversification whereas, post-global financial crisis the importance of financial institutions have emerged, and researchers have noticed the importance of this segment. Thirdly, this study has considered the impact of the Basel policies on firm performance and lastly the study investigated

the role of global financial crisis in shaping the governance mechanism. To achieve the objectives Random effect and fixed effect have been applied for analysis but to avoid the problem of endogeneity, a dynamic generalized moment model (GMM) and diagnostic tests have also been used to obtain the results. Results show that when an organization has a strong corporate governance structure it leaves less room for directors and managers to apply manipulative earnings management techniques. It is seen that globally diversified firms have better investment opportunities compared to their counterparts; it sends a message among the investors that the firm is growing which helps the firm to flourish financially. Capital management shows a weak link with the firm's performance as it bounds the financial firms to maintain a minimum reserve that restricts them from further investment.

Corporate governance index has a significantly positive impact on performance therefore, policy makers should upgrade the standards and codes of governance. Regulatory authority should improve the level of compliance with strong legal enforcement. According to the findings of accruals, policy makers should focus on sound internal controls through rigorous audits because it decreases manipulation of earnings management and makes it transparent through periodic information disclosure.

The study provides an insight to the policy makers that they should focus on increasing the capacity of borrowing from financial institutions during financial distress. Lastly, it is recommended that policy makers in the financial institutions should focus on diversification strategy to gain the confidence of investors and other stakeholders. Global diversification brings the foreign investments therefore; financial institutions should grow their businesses in foreign countries to enhance their capital growth and the Government should also facilitate the financial sector for global diversification as well.

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LIST OF ABBREVIATIONS

OECD	Organization for Economic Co-operation and Development
FCIC	Financial Crisis Inquiry Commission
CEO	Chief executive officer
CIPE	Center for International Private Enterprise
ICAP	Institute of Chartered Accountants of Pakistan
PICG	Pakistan Institute of Corporate Governance
SECP	Securities and Exchange Commission of Pakistan
PSEs	Pakistan Public sector enterprises
SOEs	State Owned Enterprise
BOD	Board of directors
USA	United states America
UK	United Kingdom
WGI	World Governance Index
GDP	Gross domestic Production
LTCM	Long-term capital management
RQ	Research Question
TMT	Top Management Teams
COB	Chair of Board

CFO	Chief Financial Officer
HR	Human Resource
LIFO	Last in first out
FIFO	First in first out
R & D	Research and development
BCBS	Basel Committee on Banking Supervision
IRB	institutional review board
NPV	Net present value
ROE	Returns on equity
ROA	Returns on assets
IPO	Initial public offerings
LLP	Loan loss provisions
NPL	Non-Performing Loans
CBN	Central Bank of Nigeria
FSR	Financial System Review
CAR	Capital adequacy ratio
MNE’s	Multinational enterprises
PLS	Partial Least Square
EPS	Earnings per share
MCB	Muslim commercial bank
NBP	National bank of Punjab
KSE	Karachi Stock Exchange
NCO	Net charge off
CLRM	classical linear regression Model

BLUE	Best Linear Unbiased Estimates
OLS	Ordinary least square
DLS	Direct Least-Squares
GLS	Generalized least squares
GMM	Generalized Method of Moment
Pop.	Population
CGI	Corporate governance index
BE	Book value of equity
DIS	Discretionary accruals
NDA	Non-Discretionary accruals
OSR	Outstanding ratio
TQ	Tobin's Q
NPL	Non-performing loans
BFI	Borrowing from financial institutions
CM	Capital management
TD	Total Debts
LG	Local Global diversification
ROI	Return on investment

CHAPTER 1

INTODUCTION

1.1 Background of study

Report of World Bank and Financial Crisis Inquiry Commission (2002; 2011) found that the weak the corporate governance structure is the main reason of the highly publicized collapse of manufacturing and non-manufacturing firms including Lehman Brothers, Enron, Global Crossing, Tyco, and Adelphia. Another report by Sarbanes-Oxley Act and OECD (2002; 2009) believe that week governance mechanism is one of the foremost reasons for the failure of Lehman Brothers, Enron, Global Crossing, Tyco and Adelphia. Therefore it's concluded that the sound corporate governance mechanism of companies helps to prevent failure and financial crisis.

In developing economies accelerating demand of capital and resources for enterprises has also boomed the importance of governance mechanism. According to the report of FCIC (2011), the bankruptcy of investment bank Lehman Brother is also one of the reasons of financial crisis 2008 and poor governance structure led it toward bankruptcy.

In the global context, rules and regulations vary countries to country on the basis of political, social, and economic conditions. Therefore some regions are implementing those defined codes in the form of law but others are taking them as social norms or guidelines. Black et al., (2006) explain that a well-defined system of governance protects the rights and wealth of

shareholders. Corporate governance is defined as a set of mechanisms to govern a firm by developing its policies, values, and customs and managing its employees.

Minichilli et al., (2012); O'Shannassy & Leenders (2016); Zhou et al., (2017) concluded that corporate governance is a person/process/mechanism that directs, monitors, and controls corporations and firms. Corporate governance protects shareholders' rights and enhances a firm's performance in various aspects, therefore, is becoming an important topic for researchers in developed and developing countries. Governance practices and structure vary in both economies (i.e. emerged and emerging). In developed countries, the regulatory and institutional framework is well established but developing countries are facing growing macroeconomic problems (i.e. economic condition, political instability, overvalued exchange rate, and social context). Hence, the governance practices of firms in developing countries are quite different. Overall CEOs' duality and performance, board composition, fake information disclosure, relationship with shareholders are major challenges of corporate governance structure that is affecting firms' performance irrespective of any economy (Pham et al., 2015).

In early 2000 or late a large number of countries had defined their own set of rules and regulations or corporate governance codes. The well-defined corporate governance framework is a key to make excellent performance in the financial sector and to build a trustworthy relationship with shareholders and stakeholders of the corporation. Corporate governance provides processes/framework of all economic measures. Researchers and policymakers believe that a sound corporate governance mechanism is crucial for economic growth, financial market stability, and effective development (Liu et al., 2017).

Asian countries have considered corporate governance as a significant topic of research after the Asian financial crisis in 1997/98. Therefore, after that financial disaster

Emerging economies of Asia have been changed their governance structure and defined corporate governance codes. Financial and non-financial disclosure was one of the important issues for instability of firms (Dallas, 2012; Shayan-Nia et al., 2017; Liu et al., 2017).

In recent years corporate governance is improving in emerging economies but still, there is a cushion remaining in developing countries including Pakistan. Sound corporate governance supports a firm's financial position during economic shocks and financial distress. Outside ownership concentration and accounting disclosure are also important indicators of corporate governance; enhance the firm performance and provide support during crises. In recent years corporate governance is becoming an important topic but some specific channels and issues are still under observation (Strenger et al., 2012; Zhou et al., 2017; Attay, 2018).

The frequency of corporate scandals is growing with the passage of time (Bhasin, 2013). Developed countries have a greater financial capacity to absorb such disasters/shocks as compared to developing countries. Therefore emerging economies should enhance their ability by improving their governance structure to absorb such shocks. The financial sector is the backbone of any economy; hence efficiently run banks provide safer cushions by affective allocation and mobilization of funds. It helps to minimize the cost of capital and increase capital production.

The framework of corporate governance in financial institutions i.e. banking sector is akin to firms to some extent. Financial institutions provide liquidity, secure liabilities of depositors, recycle assets, and efficient risk management. Commercial banks require a more comprehensive and sound corporate governance framework because of given complex functions and roles. Internal controls, norms, and ethical values have much importance in the

banking sector to preserve the shareholders' wealth. Banks that have a well-established governance structure and sound internal control are prudent and efficient in directing their resources Akhtar (2006).

In Pakistan corporate sector and financial markets continue to evolve therefore, it's' required frequent monitoring of the governance framework of corporations in order to keep pace with global standards. Hence, in 2006 Center for International Private Enterprise (CIPE) suggested to Pakistan Institute of Corporate Governance (PICG) and the Institute of Chartered Accountants of Pakistan (ICAP) for the revision of the existing status of governance mechanism presented in 2002. In 2012 Securities and Exchange Commission of Pakistan (SECP) announced revised codes of corporate governance for all firms irrespective of listed and unlisted on the Pakistan stock exchange. Transparency and disclosure, succession planning, and human resource policies are the main focused points of new codes.

In Pakistan Public sector enterprises (PSEs) and State-owned enterprises (SOEs) are facing losses. In 2012 an official report from the Ministry of Finance revealed that eight major SOEs got more than 3.5 billion dollars financial support from the federal government because of losses. According to the Ministry of Finance poor operational efficiency, weak corporate governance and lack of information transparency and disclosure were major reasons for the poor performance of PSEs and SOEs (CIPE, 2012). Emerging economies of Asia including Pakistan are growing faster and facing challenges and risks in their financial systems. In 2007 banking sector is classified as a highly profitable and growing sector of Pakistan because of the turnaround and the growth of this sector is going remarkable and unexpected. In the same year assets of the baking industry have increased by more than 60 billion dollars Akhtar (2007).

Akhtar (2008) concludes that any kind of financial crisis (i.e. currency, economic, banking or liquidity) resulted in adverse economic conditions and massive banking and financial losses. Aftermaths of financial crises do not just affect the same region but also affect other economies adversely as well. Financial stability is one of the foremost precautionary steps against these crises. A stable financial system provides secure growth of the different segments, a smooth financial intermediation process, and appropriate transmission of monetary policies. Financial stability also controls/reinforces price stability in the long run. Kim (2018) stated that Price instability/inflation misguides the real return of securities/investment projects. Efficient allocation of savings to investment opportunities provides the grounds for financial stability.

Islamic financial institutions are becoming a sound source of wealth creation in the entire world. Trust of investors and profit maximization are key objectives of these firms. Therefore, relevant information disclosure and defined standards of quality are foremost elements for Islamic financial institutions. Hence, corporate governance is becoming necessitated for the success of Shariah-based or Islamic financial institutions locally and internationally (Akhtar, 2006).

Corporate governance is termed as the set of practices or a mechanism to monitor and control the internal and external activities of an organization. It spells out the rights and obligations of each and every stakeholder of a firm including shareholders, investors, customers, society, employees and etc. It also differentiates the responsibilities of each participant like CEOs, BOD's, owners, and agents. Sufficient work is done in developed economies (including China, USA, UK, and Germany, etc.) for the compliance of governance practices (Rehman & Mangla, 2010). The World Bank has developed the World Governance Index (WGI) to evaluate corporations' performance of various countries based on the defined law,

rules, and regulations. According to the evaluation of that index, Germany is performing with best practices of corporate governance but Bangladesh is the worst in the same case. In recent years the financial sector has played an important part in the financial development of Pakistan. Sound corporate governance asserts a substantial effect on firms' performance and shareholders' wealth. Therefore, Pakistan spelled out the codes of corporate governance in March 2002 and compliance with those codes are compulsory for all listed firms of the three stock exchanges. In 2004, the Pakistan Institute of Corporate Governance in private-public partnership has been established by SECP (Rehman & Mangla, 2010).

In emerging economies there is a strong dependency of market valuation on board composition and independent directors, 40% share price is increased by 50 % independent outside directors in Korea. The economic condition of Pakistan including GDP growth, ration investment to GDP, and productivity growth are all dependent on external financed. All these factors and financial crisis including Asian/Russian/LTCM and now Euro crisis increase the significance of studies on corporate governance (Akhtar & Kalsoom, 2012). The Arrow Debreu model delineates the relationship of corporate performance with all production factors but at the same time, it has ignored the impact of corporate behavior, corporate diversification, earnings management, and internal controls. Cross divisional correlation among investment opportunities is a significant measure of corporate diversification through Tobin's Q. The recent collapse of companies resulting from partial accounting manipulation has also developed an argument in terms of sound corporate governance practices (Ebrahim, 2007).

While discussing earnings manipulation, Rahman et al., (2013) concluded that managers use earnings management as a tactic to formulate cosmetic statements of earnings to attract shareholders. Manipulation in the earnings is used as a strategy to boost the volume

of the disclosed part of earnings. Hence, that manipulated figures of statements have the probability to match with set targets that are presented to stakeholders. Ashbaugh et al., (2004) determined that sound corporate governance attributes along with practices may be used as an instrument to replace agency cost through effective checking and supervision of manager's activities and limiting the opportunistic behavior of such individuals.

Management can hide actual facts of earnings and can avoid reporting losses per annum as well (e.g. Enron) (Burgstahler & Eames, 2003; Beyer et al., 2010). Manipulated earnings management provides an opportunity to managers to expropriate profitable project of the company for self-stakes (Jensen & Meckling, 1979; Fama, 1980). Financial performance-based incentives motivate management to present a façade picture of earnings for their self-interest by compromising on corporate governance attributes like internal audit quality and committee, board independence, and CEO Duality. Agency theory is an imperative construct in understanding financial reporting incentives (Almilia, 2009). Agency theory holds that, in the existence of information asymmetries, Managers are concerned about accounting choices that benefit them to enhance efficiency and effectiveness in terms of cost and operations (Islam et al., 2011). Furthermore, (González & García-Meca, 2014) also concluded that the probability of opportunistic behavior escalation in the presence of a weedy governance mechanism, ultimately distressing the quality of reported earnings to reducing investors' buoyancy in financial reports. Diversification increases the line of business that may cause agency problems due to complex management structure. Lewellen (1971) demonstrates that corporate diversification is beneficial for shareholders because it enhances a firm's value. Chen et al., (2018) conclude that diversification with sound internal control minimizes the risk that enhances a firm's performance as compared to a portfolio of specialized firms.

Tobin's q presents firms' value that is a foremost measure of a firm's diversification. Earnings management is dependent on the firm's operating performance but it's (firm's performance) dependent on corporate strategies and diversification (Yoon and Miller, 2002; Chung et al., 2005; Lin & Fu, 2017; Ducassy & Guyot, 2017; Rebecca et al., 2017). Diversification itself does not abolish a firm's value but it diminishes the monitoring and control mechanism because of expansion. Corporate diversification has a negative association with equity ownership and most firms avoid diversification because of financial distress/instability, management, and employees' turnover, and external corporate control threats (Graham et al., 2002; Farooqi et al., 2014; Volkov & Smith, 2015). Financial institutes transfer capital/money from the surplus unit (but don't has investment opportunities) to the deficit unit that has investment opportunities. Therefore, the financial sector has a significant role to retain financial stability (Li et al., 2009).

Khanchel & Seboui (2011) compared industrial diversification with global diversification and concluded that global diversification is negatively affected corporate governance and earnings management because of the complicated structure of organizations. Therefore, it decreases firms' performance and shareholders' wealth as well. Sound corporate governance is based on crucial controls for the development and stability of the economy and equity market to attract foreign suppliers for financing, technology, and access to the international market. Corporate governance is not a new topic of research in the context of Pakistan. Very limited research has been conducted post-Asian financial crisis of 1997-1998, and it became a significant topic of research after the world financial crisis in 2008.

Summary of few prior studies in context Pakistan on this topic is discussed further: Nishat et al. (2004); Mir and Nishat (2004); Nishat and Shaheen (2007) explicated the relationship between corporate governance and firm performance of non-financial the sector of Pakistan. A study conducted by Mehar (2005) explained the association of corporate governance with the dividend policy of all manufacturing firms which are listed in Pakistan. Javid and Iqbal (2008) while discussing the industrial sector of Pakistan concluded an association of corporate governance practices and financial performance. Later, Shah et al., (2009) also found an association between dividend policy and corporate governance in the manufacturing sector of Pakistan. They also highlighted the effect of governance mechanism on the cost of equity amongst manufacturing firms of Pakistan.

More studies Rehman et al., (2010) conducted in the manufacturing sector and concluded that corporate governance has a negative relationship with the cost of equity. Afza and Mirza (2011) stated a sound relationship among firm size, the board size, individual ownership, and dividend policy of the industrial sector of Pakistan. Afza and Mirza (2011) explicated the importance of the relationship between and dividend policy and governance structure of the manufacturing sector of Pakistan. In 2011 Azam et al., (2011) has also investigated the influence of corporate governance structure on firms' financial performance in Pakistan. Further, Tariq and Abbas (2013) concluded weak firm performance due to the absence of an effective governance structure.

Study in hand is distinct from previously mentioned literature in two major ways. Firstly, the above-mentioned studies were conducted in the manufacturing sector. Although some of those studies have analyzed the impact of corporate governed practices on the financial performance of firms very few studies with smaller sample selection are conducted on

the banking sector of Pakistan. The financial sector of Pakistan as an entire sample unit is still neglected by researchers. Second, corporate governance practices have an impact on earnings management and capital management. That is why in this study we have examined the integrated impact of governance-related variables along with the control variables to study the impact on the financial sector's firm performance of Pakistan.

1.2 Theoretical backgrounds

A sound corporate governance mechanism is all about sound monitoring and control to gain and maintain shareholders' trust. There are many theories in the support of governance structure but the most relevant are discussed in this study. Agency theory is the most significant theory that explains the concept of corporate governance. It highlights the issues relevant to the principal and agent. Later on, it also provides the solution to the agency problem through the corporate governance structure. Signaling theory is a further extension of agency theory. It explains that information disclosure disseminates a positive signal of the company in the market.

Pecking order theory manages the funds of a firm. In pecking order theory firm should increase/manage its fund internally to minimize the cost of finance. Stewardship theory is the opposite of the above-mentioned theories. According to stewardship theory managers are responsible and internally motivated personals of the firm. Therefore, they manage operational activities in a better way. In the last resource dependence theory (It is described that external resources of a firm affect the organizational behavior) and signaling theory are discussed.

1.2.1 Agency theory

Corporate governance structure provides practices, processes, and rules to balance stakeholders' interest. Stakeholders consisted of Shareholders, customers, management, employees, financier, community, and government. The foremost elements of stakeholders are shareholders and management for the smooth operations of a corporation. Therefore, the relationship of shareholder and management play a vital role in corporate governance mechanism. Agency theory discusses the principle-agent problems and provides remedies accordingly. Agency theory provides a sound structure for separate ownership and control system of a firm (Berle and Means, 1991). Large numbers of shareholders with the small size of shares, create major issues in the organization. Hence, in this situation, shareholders are unable to monitor or control managerial issues and decision-making. Therefore, separate and professional management handles all relevant decisions and problems. This separation of ownership and control in terms of shareholders and management creates a critical dispute that is called agency problem (principal-agent problem). The contractual Relationship among principals (shareholders) and agents (managers) is called the agency relationship. According to this contractual relationship, agents perform jobs and take some managerial decisions on the behalf of shareholders against some decided amount of salary (Jensen, 1986).

Presumed dishonesty in this procedure is called an agency problem. The agency problem is defined as "when shareholders find it difficult to insuring that their amount is not expropriated or invested on unappealing projects" (Shleifer and Vishny, 1997). Discrimination between stakes of shareholders and agent is called agency problem. There are two forms of agency problem; first, separation of ownership and control as a whole. Shareholders do not take part in managerial decision-making. Therefore, they take decisions according to their

own stakes/interest. Second, block shareholders take managerial decisions and minority shareholders are called principals in that case (Shleifer and Vishny, 1997).

In the same situation block shareholders take advantage and expropriate minority shareholders because minority shareholders have fewer voting rights (Shleifer and Vishny, 1997). The solution of agency problems required a cost that is called agency cost. Agency cost consisted of three different categories (i) residual cost (ii) monitoring cost (iii) bonding cost. In conclusion, sound corporate governance practices implications should decrease agency costs. The firm value increases by decreasing monitoring cost, residual cost, and bonding cost (Fama, 1980).

1.2.2 Pecking order theory

Asymmetrical information among shareholders, managers, and creditors is the foundation of pecking order theory. The crust of this was described by Myers and Majluf, (1984), according to the major shareholders and managers have better information about investment projects privately. They anticipate future returns in a better way as compared to creditors or investors. Pecking order theory suggests the firm prefers internally funded projects over externally funded ones. In pecking orders, theory debt financing is more preferable over equity financing. In addition Myers (1984) concluded that the Debt of equity financing selection is dependent on information asymmetric, as creditors are less informed about credit worth and shareholders do not believe the positive intentions of managers.

Akerlof (1970) explained that adverse selection of financing creates an ex-ante problem. The selection of debt or equity financing is not only dependent on short-term cost and benefit analysis but it’s also dependent on the corporate governance structure as well. Sound

corporate governance decreases the cost of capital and leads the organization toward profits and growth and also increases the firm value as well. Therefore, Myers (1984) sound corporate governance resolves the principal-agent problems and makes the transparent information disclosure to shareholders and agents as well.

1.2.3 Stewardship Theory

The substitute of earlier discussed agency theory is stewardship theory. According to agency theory managers get benefits and work for their own interest with shareholders' wealth but stewardship theory undertakes that managers of the firm are responsible stewards of shareholders' wealth and work for the benefits of the firm. Nicholson & Kiel (2007) stated that according to stewardship theory managers are responsible teams. Therefore, Aguilera and Jakson (2010) concluded that managers should have the sole authority to take managerial decisions and run a business because they are responsible stewards of firms' resources.

Stewardship theory is based on few assumptions about managers. First, they have better insight because of long experience with the same firm therefore they can take better decisions than external executives. Second, managers have all internal and in-depth information to make sound managerial decisions (Donaldson & Davis, 1991). In conclusion, stewardship theory supports the empowerment of managers. They must have the rights to take managerial and quick decisions to make operations smooth. According to this theory, independent decision-making of managers can run operations more efficiently and effectively.

1.2.4 Resource dependence theory

Corporate governance is not about just board size or board composition but a sound corporate governance structure also provides the solution of every issue regarding operational and non-operational activities of the firm (Haniffa & Hudaib, 2006). Resource management is also a significant activity performed by the non-executive director. Sound experience, professional advice, knowledge, access to information, and strong links with internal and external stakeholders are some foremost element for resource management (Nicholson & Kiel, 2007). Efficient and effective resource management enhances a firm's financial performance along with its non-financial efficiency and helps to increases firms' value.

1.2.5 Signal Theory

According to Signal theory, accounting numbers are important for the stakeholders specifically the investors. In the capital market, investors use accounting figures to carry the financial analysis of a company and hence make a decision on the basis of the analysis that is conducted based upon such numbers. Signal theory assumes that accounting figures need to be genuine along with the correct tool for signaling market trends as they enable investors to assess the firm real value. Earnings management, therefore, results in information irregularity between investors and managers of the company. On the other hand, managers use accrual or real activities for decision making or actions, which are not recognized by the users of financial statements hence they possess information that is not known by the users of those financial statements (Wu & Xu, 2005).

1.3 Problem Statement

The debate on the importance of corporate governance arises after the collapses of corporations like Enron, WorldCom, etc. So far extensive literature has been done on the

non-financial sector. The collapse of the Lehman Brothers that became the cause of the global financial crisis in 2008 has started the discussion on the importance of governance mechanisms in the financial sector. In the light of this discussion problem statement of the study is:

"To what extent corporate governance index, corporate diversification, and earnings management have integrating effect on firm performance".

1.4 Purpose of the research

The subject of corporate governance is attaining a persistent prominence as the veracity of financial reporting has been a steady concern for the regulators and practitioners, which attained the importance specifically after corporate accounting scandals of well-respected companies like Lehman Brothers, Enron, WorldCom, and Xeronx, (Gordon, 2002; Lyke & Jickling, 2002; Barnshaw, 2010; Pacot et al., 2013).

Week corporate governance structure was one of the foremost explanations of the failure of big giants such as the Lehman Brothers, Enron, WorldCom, and Tyco. The faith of investors was shaken due to the poor/inefficient corporate governance mechanism implemented. Hence to restore the confidence of shareholders; government around the world is trying to strengthen governance framework which enhances transparency and accountability were proposed in Sarbanes Oxley Accord, 2002; also it is discussed in World Bank, 2002 and OECD, 2009).

This study addresses few questions including; significant components of rigorous corporate governance, integrating effect of corporate diversification and earning management on the performance of the firms with the provision of the paramount financial sector's corporate governance in Pakistan. The foremost objective of this study is to check the role of

Pakistani codes of corporate governance (2002) assisted to enhance the performance of the financial sector of Pakistan. The main focus or aim of our study is to delineate the integrating impact of control the mechanism, corporate diversification, and earnings management on financial sector's firm performance in the Pakistani context.

Furthermore, it is specifying the linkage of diversification with earnings management which is related to information disclosure, transparency, and shareholders' value. There are basic three purposes of this study. The first and foremost purpose is to inculcate the contemporary dimensions of corporate governance and spell out its impact on the economy through firms' performance. In developing economies the paramount research is done on agency theory (conflict of principle and agent) and few researchers have considered other governance issues but just in the manufacturing industry, but the financial sector is entirely ignored by them. However, the financial sector is the backbone of an economy because it provides support to absorb financial shocks/disasters. Developed countries have an explicit governance framework, therefore, available literature of those countries is not applicable in Pakistan. There are significant differences among structure, institutions, rules, and regulations between both kinds of economies (Ghosh, 2006). Therefore, this study is focusing on the financial institutions of Pakistan.

Second, same like other developing countries earnings management and corporate governance in Pakistan are alluring. The economic health of a corporate can be portrayed through earnings presented in reports. Earnings are said benefits on a stock that enhances the attractiveness of that stock among shareholders. It helps to sustain consistent earnings hence apt earnings management is significant to avoid losses and decrease in earnings (Charoenwong & Jiraporn, 2009). World Bank (2002) presented a report on corporate governance in

Pakistan and stated that governance structure is almost common in all Pakistani firms and CEOs to manipulate earnings management for the attraction of shareholders. Sound corporate governance provides comprehensive information disclosure and transparency to stakeholders. Another focus of this thesis is to investigate the integrating effect of the internal control mechanism and earnings management on a firm's financial performance along with its non-financial performance. Therefore, the study argues whether sound corporate governance can control the manipulation of earnings management? The attempt to answer these questions would be an important contribution of this study.

Last, there is no study so far available in the Pakistani context (as per the author's knowledge) explaining the relationship of corporate diversification, firm performance, and valuation. Enough literature is available in emerged economies about the impact of industrial and global diversification on a firm's performance, firm valuation, and shareholders' wealth. Corporate diversification is also crucial for earnings management and governance structure because of the complex management structure. Therefore, the study in hand will explain the impact of corporate diversification on firm performance with help of corporate governance and earnings management.

1.5 Research Objectives and Questions

Report of Financial crisis inquiry commission (2011) has been presented significant reasons for the financial crisis that began in 2008. According to the given report, weak corporate governance practices are the foremost reason for failure. Therefore, the significance of the current study is that policymakers and regulators could use the findings to make modifications in regulations and policies. The current study is the next layer of investigation of

corporate governance practices, earnings management, and capital management with the combination of corporate diversification.

This study contains three main research objectives. The first objective of this research is to examine the impact of corporate governance on firm performance in the financial sector of Pakistan. Corporate diversification produces some complications in terms of internal controls and earnings management. Therefore, the second objective of our study is to scrutinize either the financial sector is managing those complications through a sound governance structure. During financial instability in the manufacturing sector, the financial sector provides the leverage to absorb those financial shocks. Hence, the third objective of the current study is to test the capacity of that leverage by adding an independent variable (i.e. capital management) and a control variable (i.e. borrowing from financial institutions).

Specifically, research objectives are stated following:

1. To identify the impact of CGI on the financial performance of the firm.
2. To examine the effectiveness of corporate diversification on a firm's performance.
3. To ascertain the effect of earnings management on a firm's performance of financial sector.
4. To investigate the impact of capital management on a firm's performance in the financial sector.
5. To examine the impact of firm size on firm performance.

This study pursues to answer six research questions aligned with research objectives. First, whether performance of financial sector is improved after compliance of Pakistani codes of corporate governance 2002. Second, whether corporate governance structure has significant contribution in financial sector of Pakistan or not. Third, does corporate diversification, a significant element for performance enhancement in financial sector of Pakistan?

Fourth, whether global diversification is more effective for financial sector or local diversification. Fifth, capital management (with integrating corporate governance practices, earnings management and corporate diversification) has any association with performance of financial sector.

This six-question comprehensively writing in the following:

RQ_1: Does the corporate governance index create an impact on the performance of financial sector?

RQ_2: Does corporate diversification assert an impact on firm performance of the financial sector?

RQ_3: Does earnings management has an impact on the financial performance of financial sector?

RQ_4: To what extent capital management has an impact on firm performance of the financial sector?

RQ_5: Does the size of the firm create an impact on its financial performance?

1.6 Summary of the contributions

Current study makes few important contributions in the exiting body of knowledge and also shed a light on this topic for policy makers and regulatory bodies. Contributions and recommendations of this study are divided into two folds based on empirical evidence. First fold highlights contribution in the existing body of knowledge. In second fold, policy implications and recommendations are explicated. To the best of our knowledge, in Pakistan it is a first study to conduct the research on whole financial sector. Corporate diversification is also another contribution of this study.

Enforcement, transparency and disclosure of information make governance structure worthwhile for corporations. It's the responsibility of regulatory framework to enforce the

compliance of governance practices in financial sector of Pakistan. Currently in Pakistan institutional bodies (i.e. Securities and Exchange Commission of Pakistan and State bank of Pakistan) are just bothering to explicate the codes of governance rather to concentrate on implementation of those codes. Hence, lack of compliance resulted in the form of crises, disasters and financial misfortunes. Furthermore to avoid these disasters institutional bodies should focused on law in practice parallel to the law in books.

1.7 Structure of the Thesis

Current study is comprised of six chapters. Purpose of chapter one is to provide in depth introduction of the study based on, background of study, relevant theories, purposes/aims of study, research questions, summary of major findings, summary of contributions, limitation of study and in last structure of thesis. Chapter two aims to present prior studies contributing in the same field of study in developed countries. Prior studies regarding developing countries including Pakistan as well present in chapter three. Chapter four delineates materials and methods regarding statistical analysis of the data. This chapter presents available sample and selected sample, methods used to conclude results and operational definitions of the variables. Empirical findings are presented in chapter five. And last chapter delineated concluding remarks of the study.

CHAPTER 2

LITERATURE REVIEW

This chapter provides the relevant literature review of specified selected variables. It examines the various dimensions of corporate governance and relevant theories. It also explains contextual studies relevant to corporate diversification and earnings management. This chapter finally highlights the effect of board structure/composition, CEO's duality and transparency and disclosure of information on firm's financial performance. Impact of sound earnings management system and corporate diversification on earnings management is also explained in this chapter. Finally it is leading to construct hypothesis of study.

In this chapter, author discussed different studies; contributed in existing literature by contributing plenty of studies on "Earning Management and Firm Performance" of financial sector as well as of non-financial sector around the globe and specifically in Pakistan. A stable financial system is necessary for the flow of funds from savers to ultimate users in an economy. The main pillars of Financial System are Financial Instruments, Financial Markets and Financial Institution.

Around the globe, there are two types of financial Systems, one is Banking-based financial system and second is non-banking-based Financial System (Financial markets) (Allen & Gale, 2002). For a good and efficient flow of funds, both financial systems (financial markets and financial institutions) should work better. In Pakistan there are two governing bodies for Financial System, one is SECP (Securities and Exchange Commission of Pakistan) and other is State Bank of Pakistan (Akhtar, 2007). In a financial system, the banks are playing very significant role for the flow and channelization of funds. A bank is a financial organization

authorized to get deposits and make loans. Banks may likewise give financial administrations, for example, wealth administration, currency trade and safe deposit boxes.

2.1 Corporate Governance

Corporate governance is not a novel idea as it is under discussion from 1990s due to the dismissals of numerous CEOs and got boost in 1997s after Asian financial crisis. In 2000s after world financial crisis researchers and practitioners are taking it on highly serious notes (Zabri et al., 2016). There is no principally general description of corporate governance; practices can be distant, law, procedures, policies and codes to check and control a corporation (Craig, 2005).

The main objective of corporate governance is to enforce the ethical activities, enhance and maintain the confidence of stakeholders by making sure the transparency and accountability of policy makers and management of the firm to escape the principal-agent problem as well. Corporate governance framework is based on two mechanisms; one is internal mechanism (i.e. Board composition, transparency, disclosure of information, audit committee, CEO's Duality and ownership parity) for the monitoring and control of internal processes of the corporations. Second one is the external mechanism (i.e. statutory audits, corporate control and stock market evaluation of corporate performance) to forecast and absorb external financial instability and disasters (Brown et al., 2011).

Coffee (1990) studies the difference in legal and functional convergence. A mechanism that enforces the rules and regulations or changes in certain rules is termed as legal convergence. On the other hand, he termed functional convergence as the market based changes that provide suitable investor's legal protection to firms or certain assets of the firm. The enforcement of these laws and regulations let minority shareholders to find safe-heaven. Shleifer and Vishny (1997) described corporate governance as rehearses to ensure returns on

investments. Another general definition of Corporate governance is a set of legal mechanism through which an organization can operate and control its' internal matters (Bebchuk and Weisbach, 2010; Brown et al., 2011).

Corporate governance comprises of two contrasting manners. One is implemented in Anglo-Saxon countries (i.e. United Kingdom and United State), That is according to the interests/needs of the shareholders (i.e. optimization of share value). In contrast second one is implemented in Germany, France, japan and other countries. That kind of governance mechanism has focused on interests/ needs of all stakeholders (i.e. shareholders, customers, employees and etc.). However, more literature is available on Anglo-Saxon capitalism as compared to stakeholders' capitalism (Allen & Gale, 2002). It is conclude that agency theory is based on economics factors and dive with monetary rewards. It enhances the performance of the firm but at time damaged the life of the employees. Therefore, a new concept is needed there that will be noneconomic in nature is called Principal-Stewardship relationship (Davis et al., 1997).

Literature represents that board of directors, audit committee size, CEOs' duality, inside directors, directors' compensation, independent directors, shareholders' rights, stock ownership, board independence, board size, non-executive directors and board of directors meetings are significant indicators of corporate governance (Brickley et al., 1997; Hermalin, 1998; Bhagat & Black, 1999; and Weisbach, 2003). Financial distress had been exerted on investors, shareholders, policy makers and managers during and after financial crisis in 2007 to 2013. A retrospective analysis highlighted two foremost reasons of financial crisis; (i) Ineffective corporate governance structure (ii) and institutions' inability to forecast and develop the prevention mechanism against financial distress conditions (Wang & Deng, 2006; Chen, 2008; Husson-Traore, 2009; Chang et al., 2009;).

2.1.1 Corporate governance index

Agency problems can be controlled with sound corporate governance (Core et al., 1999). Inefficient governance structure eradicates relationship between shareholders and management of firm. Therefore their personal stakes overtake firms' long term growth and goals (Core et al., 1999). Agency problem is one of the issues caused by the poor corporate governance. Governance mechanism is massive concept. It is encompassed many concepts; i.e. relationships with shareholders, trust and rights of shareholders, compensation plans of CEOs, rights of employees, boards' size and relevant issues, audit committee, transparency and disclosure, and directors election and etc. (Kao et al., 2004). Therefore, Gompers et al., (2003) proposed that corporate governance index by a suitable variables to scrutinize governance structure completely instead of estimating the direct components. Studies (e.g. Gompers et al., 2003; Chen et al., 2007) constructed the corporate governance index consisted of four crucial components; i.e. CEO's duality, size of the board, and individual block shareholders' holding and managerial ownership.

(Klapper & Love, 2004) elucidated the corporate governance and firms' performance link in emerging economies. They developed corporate governance index to explain the impact of corporate governance on firm performance. Board structure, managerial ownership, managerial compensation, audit committee and disclosure are the components of their governance structure. (Himmelberg et al., 1999) also developed the corporate governance index to evaluate firm performance. Managerial ownership and shareholders rights are major components of his governance index. Corporate governance index is shaped with fifty two significant features by the Al-Malkawi (2018), that index consisted on board size, managerial ownership, board structure, corporate charter issues, managerial and director compensation,

stock ownership, audit committee size, independent directors, and board of directors meetings.

Bhagat & Bolton (2008) developed an index based on seven determinants of corporate governance to measure the firm's financial performance. Foremost indicators of their index included size of the board, CEOs' duality, Board's independence, board structure and CEOs' tenure. (Silva & Leal, 2005) also constructed board specific governance index to evaluate the firm's performance. Firm's performance is explicated by numerous variables. Corporate governance is foremost determinant to shake various aspect of financial and non-financial performance of corporations. Corporate governance consist on various indicators including CEOs' duality, CEOs' compensation, board size, board structure, types of ownerships, managerial problems, managerial composition, and audit committee size and board independence etc. Ben & Zeghal (2008) included eleven elements to develop corporate governance index to elucidate firm's performance in India. Garay & Gonzalez (2008) specified the indicators of corporate governance. Different indicators of corporate governance have varied impact on firm's performance. Therefore, considering it they established corporate governance index based on seventeen elements in their study as well. After an extensive review of literature about corporate governance index and firms' performance published in context of various economies, this study is also established corporate governance index based on seven determinants included CEOs' duality, inside directors, board size, non-executive directors, audit committee size, independent directors, and board of directors meetings of corporate governance. The corporate governance index for Pakistani financial sector has not been established yet. On the contrary, corporate governance index for the industrial sector has been developed by (Shah et al., 2009).

2.1.1.1 CEO duality

Principal-Stewardship relationship is based on intrinsic motivation, team work, and high value commitment. Sound internal control is comprises of CEO's performance and internal audit committee that make employees vigilant about their duties and tasks because of strict follow ups and monitoring. Hence, it also prevents firm and stakeholders from frauds and futuristic crises; that ultimately enhance the performance of the firm (Davidson et al., 2004; DeFond et al., 2005). Board member's stock ownership and CEO chair partition has significant correlation with operating performance. CEO chair separation has positive link with firm's performance. At the same time, board independence is negatively affecting the performance (Bolton, 2008).

Board independence and board capital enhances the firm performance but CEO duality makes it poor. Outside directors have diversified knowledge and abilities to judge/monitor the managers. They also provide the counseling and advices to managers in contingent situation (Jermias & Gani, 2014). By examining how administrators and the block holding outer directors could influence the CEO's agency issues and accordingly associate with the duality of CEOs to influence the performance of the organization, this review improves understanding of the impact of CEO duality; it additionally states and amplifies the pertinence of agency theory to inquire about on the duality of CEOs (Tang, 2016).

Weisbach (1988) found that week corporate governance has become rigorous reason for resignation of large corporation's CEOs. Sound monitoring of top management's performance is one of crucial functions of board. CEOs duality (chair of board also serves as CEO) systematically cut down agency cost and reduce conflict of interest among top management and shareholders. Brickley et al., (1997) and Chen et al., (2007) also stated that communication and leadership could be stronger if these two key positions filled with same individual.

But In contrast Rechner & Dalton (1991) contend that to make monitoring more efficient, smooth and transparent than both executives must be independent. Palmon & Wald (2002) and Chen et al., (2007) argued that CEOs duality is effective decision only for small size firms. Performance of larger firms suffers because of CEOs duality.

Masulis et al., (2007) uncover that the duality of CEOs is negatively identified with the acquirer return in American organizations. Their discoveries propose that CEOs in organizations with further antitakeover provisions be likely to make fewer productive acquisitions in light of the fact that they don't confront the disciplinary risk of loss of control of the organization. They additionally found that the execution of CEO is negatively identified with the acquirer' profits. As per the World Bank (2006), most Vietnamese state-owned companies have designated their CEO, who frequently speaks to state value, as COB instantly after public listing.

Not-withstanding the recent pressure to isolate the two parts, the duality of CEO stays famous among listed organizations in Vietnam. This shows sticky administration in developing markets (Black et al., 2006). The duality of CEO has adverse and noteworthy consequences for operating performance when independent directors explanation to a little extent of a board's participation. Also, since the extent of independent directors' escalates these negative effects are moderated to the degree that they in the long run vanish and turn positive as the extent of independent directors' increments. A careful panel and a capable CEO build the board's ability therefore the reconciliation of agency theory and asset reliance contentions boosts the adequacy of the board. At the end of the day, a powerful CEO boosts the board's capacity to give precious assets to the organization, with giving guidance that would boost the organization's competitive advantage, ensuing in a positive effect on performance (Duru et al., 2016).

2.1.1.2 Board size

In literature larger board size creates the agency problem which leads to financial distress, but according to Manzaneque et al., (2016) larger board size prevents firms from financial distress. Diversity of opinion, greater access of information, sound control of management and almost accurate anticipation of market could be conceivable with larger size of board. Therefore board size is negatively related to financial distress. Shareholders' meetings, board training, board size and compensation designs are significant elements of corporate governance. Davis et al., (1997) contend that, contrary to the perspective taken by methods for corporation scholars, the past circumstances of chiefs and proprietors can likewise for all intents and purposes be adjusted.

Stewardship idea furthermore suggests that fewer pariahs should be available on a board because of the diminished requirement for a following trademark. As per stewardship expectations, board length should be littler in hover of relatives companies with intemperate phases of objective arrangement amongst proprietors and officials while when contrasted with business undertaking forecasts (Gubitta & Gianecchini, 2002). As per expectations of stewardship, the board size ought to be more modest in privately-owned companies with a surprising state of approach of destinations among proprietors and supervisors separated from the agency desires (Gubitta & Gianecchini, 2002). Then again, greater boards are given to build the level of control in family business (Corbetta & Salvato, 2004). Notwithstanding the way that agency theory recommends formal control sections that depend on rewards or educates to control administration lead, stewardship theory proposes structures of social control in context of qualities, shared points of view (O'Reilly et al., 2014).

Independent board members sufficient manage administration and diminish administration advantage (Fama, 1980; Fama and Jensen, 1983a, 1983b). From the viewpoint of

agency theory, the rule capacity of the board of executive is thusly to bring down the central specialist amongst shareholders and unidentified managers (Jensen, 1986; Fama & Jensen, 1983a).

2.1.1.3 Audit committee size

Similarly Beasley (1996) conclude that some elements of corporate governance including outside director and audit committee are useful for reduction and prevention from frauds and misconduct. Given the banks unquestionable significance for the worldwide financial framework, there are predetermined number of reviews done in connection with the effect of inspectors on the nature of banks' profits. In addition, they have considerably more constrained research to the extent of congruity of such banks with the arrangements of the Basel committee on capital adequacy requirement.

In the initial segment, analyze connection amongst inspectors and income management utilizing an example of banks from custom-based law wards and codes. In particular, authors inspected the impacts of two parts of the auditor reputation which comprises on auditor type and their specialization relevant to earnings management in the banking industry. Specifically, when authors inspect earning management by misfortune avoidance analysis just industry of auditor ability significantly affects diminishing this sort of control in the banking sector from the normal law of countries. At the point when look at profit management in the banks through meeting or competition earlier years income testing, just auditor sort significantly affects obliging this kind of control from the code of law (Magnis and Iatridis, 2017).

Finally authors concluded the effect of auditor notoriety on the degree of earnings management and capital management. The results of study were based on the pre and post

global financial crisis 2008 and also depending upon before and after Basel II. Its demonstrated by the banks of normal law countries that audit by big four audit firms provides very less room to apply manipulated profit strategies. Therefore, inspection by expert auditors/specialized audit firms force to banks for appropriate capital management procedure specifically after global financial crisis. It is also concluded by the authors that audit after global financial crisis in the banking sector of France and Germany indicates the adequate capital management through appropriate capital management techniques. In conclusion, authors concluded that notoriety auditors have no concerned about the capital management and earning management during their audit of banking sector. In this way elevated an issue of dependability of auditing administrations of high notoriety auditors associated with banking division and an uncertainty regarding financial statement of banking sector (Magnis and Iatridis, 2017).

2.1.1.4 Non-executive directors

In listed organization, individuals from the board might be named inside directors or outside directors. Whereas, such executive directors which are designated by shareholders and take part in day to day matters of the organization as CEO, CFO are termed as Inside directors. Then again, outside directors that are also known as non-executive directors, are not included in day to day matters of the organization and their essential capacity is to oversee and regulate management and to shield the interests of shareholders of the company from being dishonorably conveyed by business pioneers (O'Shannassy & Leenders, 2016).

Outside directors might be named outside independent director or other non-outside directors. Independent outside directors will be directors who have no enthusiasm for a business and meet the necessities of independent directors in view of the securities exchange commission. Other individuals which are sometimes referred as non-executive directors take

deep interest in day to day matters of organization. Hence, this cluster of non-executive (outside) directors can be classified into two that is controlling and non-controlling directors. In such perspective, the word non-controlling director allude to such directors delegated by non-controlling shareholders or barring outside directors (O'Shannassy & Leenders, 2016).

2.1.1.5 Inside directors

Boyd et al. (2011) conducted a review is given by the theory of social exchange with more customary administration speculations, for example, stewardship theory, asset reliance theory, Institutional theory, legitimate theory, agency theory and social network theory. Westphal and Zajac (2013) concluded that Multi-hypothetical study on corporate governance practices, including the reconciliation of speculations to escalate the illustrative energy of review to provide the theoretical grounds parallel to practical solutions of the complex issues regarding CEOs, CEO duality and inside directors. Lynall et al. (2003) explicated the relationship among stakeholders through stewardship theory. Stewardship theory assumed that personal of management is most reliable and honest stewards of the shareholders. In addition they have better understanding with business activities and the available circumstances and opportunities as well. Therefore, decision making authorizes to some extent must be given to these stewards. Ultimate goals of all stakeholders are to achieve ease of survival, maximize profits and optimum growth. Fama and Jensen (1983) also concluded that stewardship theory encourage the inside directors. According to the findings of their study inside directors is reliable part of human capital. Johnson et al. (1996) explained that performance of the directors (management) ultimately interlinked with board composition and hierarchical performance of the firm. Therefore, performance of inside director and outside director enhances the firms' performance. In addition agency theory complicates the processes for them.

Kroll et al. (2007) stated that stewardship theory support the managerial powers, self-satisfactions of human capital and social satisfaction of the employees. This theory also supports the operational and strategic endeavors; those describe the strong recognizable identification of human capital with the firm. It is also concluded in their review on tradeoff organization that CEOs duality (Chairmanship of CEO) and number of inside directors in the board is supportive for the firm. O'Shannassy and Leenders (2016) in an intriguing oddity, the control of the high insider ratio demonstrates that higher inside proportion helps organization to accomplish a superior key performance and monetary performance levels where there is a co-execution of low-administrator CEO. On account of co-chairmanship of the CEOs of the lower seat, the high inside manager proportion on the board can be a valuable HR approach for the association that can be controlled by the HR group with reliance on a quicker and easier path dependency.

2.1.1.6 Independent directors

Independent directors along with board composition and their relationship with governance mechanism of the organization is a well discussed phenomenon. Specifically, independent directors are always perceived as the most broadly embraced corporate governance tool to relieve irreconcilable situations amongst shareholders and supervisors (Hermalin and Weisbach, 1998). Be that as it may, if independent directors assume a compelling part in corporate governance than it would not be able to bring a conclusive results even in the United States (Coles et al., 2014; Larcker et al., 2015). A few observational reviews certainly concluded a positive association between independent directors of the organization and the financial performance (Brickley et al., 1997; Peng et al., 2015). Second, various studies have reported that the independent directors are causal in management matters, and they have no immediate connection between the board independence and performance of the firm (Kesner

et al., 1986; Klein, 1998). Such contradictory outcomes are halfway because of the way that these reviews concentrate on the supervisory impact of independent directors as a gathering on corporate performance.

Dissimilar to the board structure in the United States and other developed countries, the emerging world has two sorts of outside directors that prevails in a common organization one is known as independent director and the other is non-executive directors. Independent directors elude to directors who don't hold any position in the organization other than the director and who don't expend any association with the organization they manage, while non-executive directors are fundamentally non-controlling directors and they emphasize the rights of non-controlling shareholders. Various researchers particularly discussed the following impacts of various sorts of outside directors on official pay for performance affectability. This examination is persuaded by two patterns in the literature. To begin with, traditional agency theory contends that, because of notoriety issues, independent directors can be a powerful system of administration in the decision, checking and supervision of management groups in firms. This can thusly lessen irreconcilable situations amongst directors and shareholders, which builds the performance of organization (Fama & Jensen, 1983).

Cornett et al., (2008) concludes that institutional representation on a board helps to control an organization's profit management behavior and it increases the real performance. Schwartz-Ziv and Weisbach (2013) additionally concludes the discussion that such non-controlling shareholders who have the large ownership can shield their own interest from being seized by vast monitoring of shareholders or management by the arrangement of directors. The review analyzes the effect of various sorts of directors on the affectability of directors to compensation in Chinese undertakings non-SEOs. Results find that independent directors debilitate the affectability to pay because of their absence of independence, whereas non-

controlling directors possess a supervisory impact and may build affectability to directors' remuneration. These affiliations are balanced by the level of responsibility for non-controlling shareholders and also with the duality of shareholders and administrators.

Second, there is a lot of literature that the independent directors are obligatory and finds no immediate connection among the independence of board and the performance of the firm (Kesner et al., 1986; Klein, 1998). These contradictory outcomes are halfway because of the way that these reviews concentrate on the supervisory impact of independent directors like a gathering on corporate performance. In addition, exact reviews recommend that the discipline for independent directors which don't regard their due persistence in observing CEOs will be principally an oral feedback or a little financial fine. Only in extremely severe circumstances, for example, divulgence of significant fraudulent data disclosure to people in general, formal punitive approvals will be forced. This further decreases the supervisory motivations of the independent directors. Albeit independent directors and non-executive directors of Chinese organizations have motivating forces not to be independent, non-controlling directors can represent to a viable monitoring component.

2.2 Earnings Management

The strong and properly operating banks are persuasive engine of economic growth. Therefore, the banking sector has been of pivotal importance and focus to capture the attention of policy makers to avoid its consequence on economic growth and sustainability. This study analyzed the impact of earnings management on financial performance of banking sector of Pakistan. Keeping in view the globalization, intense competition, increased deregulation and technological innovation efficiency has become a major concern for financial sector (Dang-Thanh, 2012). Further studies revealed impact of global financial crisis (2007-2008) on financial system of almost every country. According to their research global financial

disaster in 2007-2008 has great but negative impact on financial structure of numerous countries (Quiggin, 2011). Implication of earnings management policies and practices are not enough in the financial sector but it must be more transparent as compared to non-financial sector (Grougiou et al., 2014). Bank managers record the higher figure of loan loss provision to show the balanced figure of earnings during the higher profitable period. Therefore, for survival of banking sector it is very important to evaluate their performance for competing in the market. Transparent, well-defined, organized structure with the combination of better functioning, financial institute provide the leverage to absorb those financial crisis and more of less control the impact on overall economy (Moradi-Motlagh & Babacan, 2015).

2.2.1 Definition of Earnings Management

Earnings management is defined as set of strategies of bookkeeping to manage all financial reports of the firms to attract stakeholders. Therefore, those reports must be appealing by highlighting the positive perspectives of the organization. Sound financial position and attractive budgetary position of the corporation attracts the shareholders and enhance the shareholders wealth. Many bookkeeping guidelines and standards depend on the discretion of the management. Therefore, that position of the standards provides the cushion to the management to manipulate the earnings to formulate cosmetic statement of earnings (Bergstresser & Phillippon, 2006). A few parts of this definition justify examination. To begin with, there are numerous ways that administrators can practice judgment in budgetary revealing. For instance, judgment is required to evaluate various future monetary occasions, for example, post-work benefits, conceded duties, and misfortunes from terrible obligations and resource debilitations. Supervisors should likewise pick among adequate bookkeeping strategies for detailing the same monetary exchanges, for example, the straight-line or quickened devaluation techniques or the LIFO, FIFO, or weighted-normal stock valuation techniques. Also,

administrators must exercise judgment in working capital administration, (for example, stock levels, the planning of stock shipments or buys, and receivable strategies), which influences cost allotments and net incomes. Administrators should likewise make or concede consumptions, for example, innovative work (R&D), publicizing, or support.

At last, they should choose how to structure corporate exchanges. A moment indicate note is that our definition outlines the goal of income administration as being to deceive partners (or some class of partners) about the basic financial execution of the firm. This can emerge if administrators trust that (at any rate a few) partners don't fix profit administration. It can likewise happen if administrators have entry to data that is not accessible to outside partners so that profit administration is probably not going to be straightforward to outcasts. Partners are then liable to expect (and endure) a specific measure of income administration (Stein 1989).

Earnings management is tool or a technique used by financial managers to present their financial statements better than the original position in order to attract the stakeholders of the organization. The practice of reporting earnings are the basis that how someone would interpret the meanings of earnings management which causes a difference in the definition of earnings management. Those managers who acknowledge the practice of manipulation in earnings and term it as a good practice for firm, normally explains earnings management as a tool that is being used by the accounting managers to enhance the financial figures of the company (Healy and Wahlen, 1999). Others who consider earnings management as a negative tool or technique to influence the financial performance, and obtain desired results in order to attract the stakeholders by reporting inflated or deflated figures may be doing it at the cost of shareholders wealth along with the investors (Ronen & Yaari, 2008).

Weisbenner (2000) explains in his study that earnings management is a right specified to accounts managers working in organizations in-order to exercise different accounting standards to yield optimum results and achieve certain objectives. In such regard, managers have the room to opt such procedures that allows them to report or dress their financial statements which gives them a boost to show that how well a company is performing. Various authors have been contradicting the definition of earnings management like Rosenzweig & Fischer (1994) and Shafer (2015) indicates that earnings management is one of the way how managers increase or decrease their reported earnings by using accouting techniques, and that has no impact on the long term profitability of the firm. Moreover Schipper (1989) also argues that earnings management is intentional interference by the management of the firm to the process of preparation of financial statement in order to achieve a particular earning level to impress the outside users. In this study, earnings management is distinct as the act of operations of the earnings by either reducing or adding them in order to get the benefit, either the personal benefit or the organizational benefit at the cost of either shareholders or investors.

In the empirical perspective, plenty of studies have been done related to earning management, firm performance, impact of different factors on firm performance like capital structure of seasonal equity offerings, non-financial sector, financial sector, and acquiring firms etc. But the objective of this study is to examine the impact of earning management on firm performance in Pakistan.

2.2.2 Earnings Management Practices

Company earnings is a measure of performance of the company for the particular accounting period which is computed as the difference between revenue generated and the expenses incurred in earnings for the period. For various reasons, managers of the companies

tend to intervene into the process of calculating the earnings by manipulating the figures to be reported for their own benefit or in order to ensure that the report shows a better performance on earnings for the period. According to Healy and Wahlen (1999), earnings management takes place when a finance manager working in a company decides to use judgment in financial reporting by restructuring the accounting transactions in order to alter the financial report with the aim of either misleading the stakeholders about actual economic performance of the firm or to influence contractual outcomes such as bonus which depends on the reported figures on financial reports.

2.2.3 Classification of Earnings Management

The manipulation of earnings in the organization can be conducted in different ways which are categorized or classified into two, the accrual management by the use of accrual accounting and the actual manipulation of real activities in the company.

2.2.3.1 Accruals Management

Accruals is an accounting concept of recording entry as a cost or revenue, requires certain conditions of being charged in the books of accounts when the actual benefit is met, on contrary to when the cost is received. It is one the standards of generally accepted accounting principle (GAAP), which many managers adopt to report their earnings either to report high or low earnings of the firm (Dechow & Skinner, 2000). The underlying operations in a business are not the part of accrual management rather it incorporates the selection of accounting methods to be taken for various activities of the firm. Therefore, accrual portion of earnings management provides certain powers to managers in order to determine the profit of the company upon certain intervals. The manipulation of results can obviously create information asymmetry between the managers of the company and its stakeholders. For this purpose, two kinds of strategies are used, i.e. real activities management and accruals-based

discretion. A combination of these can also be used for manipulation of accounting numbers. Most of the previous studies conducted on earnings management have concentrated on manipulation through accruals (see for instance Kamran & Shah, 2014; Latif & Abdullah, 2015). However, recent research studies have disclosed that objective of earnings manipulation is also achieved through real activities, i.e., it may consider such procedures that may not get along with the standard procedures. This issue has attained almost no importance in Pakistan, and studies being done in this area of work are very few in number.

2.2.3.2 Real activity Management

Past studies suggest that accrual earnings management is not the only way for manipulating earnings; rather managers can also change the firms' real activities for altering earnings. These activities may include structuring operating activities, timings, investment and financing decisions etc. Moreover, real earnings manipulation has also been observed to have increased significantly in the recent years, and firms are also transferring intentions from accrual-based to real earnings management (Osma & Young, 2009; Gunny, 2010; Cohen et al., 2011). In terms of corporate governance and its impact on audit quality, there is extensive literature that elicits opportunistic earnings management which lies upon accrual earnings management. Concept of accrual based earnings management is different than real earnings management in cost and significance. Accounting concept where transactions are charged in ex-post form is the foundation of accrual earnings management, whereas, recording of transactions over the period is the base line of real earnings management. In addition, segregation of real earnings management from accrual based earnings management is a difficult subject to handle. Thus both types experience different impacts of corporate governance on them. Therefore, the current research tries to bridge this gap by investigating the role of corporate

governance indicators (board composition and ownership structure) with audit quality in mitigating the earnings manipulation (measured by both accrual and real earnings management).

2.2.4 Earnings Management Tool

There are several tools which are used in earnings management. According to Francis (2001) the tools can be classified into five categories, the accounting attitude of managers, selection and changing of accounting principles, accrual management, and transfer pricing and real economic decisions.

2.2.4.1 Accounting attitude of managers

This involves the attitude of managers towards accounting transactions. It involves different decisions such as the timing of sales records, reduction of the value of inventories and equipment's by managers which cannot be understood or recognized by users as well as other decision which aim at managing earnings (Francis, 2001).

2.2.4.2 Selection and changing of accounting principles

There are different general accepted accounting principles GAAP which can be used in the recording and preparation of financial statements. Managers are allowed to choose different methods of their choice to record the transaction and advised to maintain the selected methods. Some example includes the formula for charging depreciation on assets, firm can use straight line, reducing balance or any other method, likewise firm can use FIFO or average method to account for inventories. The switching from one methods to the other, though is not done frequently can have impact on earnings reported (Francis, 2001).

2.2.4.3 Accruals Management

This is a traditional tools used by managers which is not observable by the users of financial statements.

Transfer Pricing

This is method is more applied by multinational companies which operate in more than one country with either subsidiaries or branches. Apart from the earnings, the companies also transfer the incomes between the two countries by exchanging the goods and services (Francis, 2001).

Real Economic decisions

This involves decisions made by managers on the use of resources of the organization such cash payments for pension's plans, advertisement expenses, paying bonus to managers and research and development investments (Francis (2001).

2.2.5 Incentives to Earnings Management

One of the key questions which has been asked by different authors is on incentives that make managers to be involved in earnings management. Previous literature has documented some reasons for earnings management, starting from early studies Bhat (1996) gave earning management a positive face by indicating that it is linked to the attempts geared to enhance shareholders value and maximize executive compensation through income smoothing and earnings management. Contrary to Bhat (1996), Healy and Wahlen (1999) indicated that earning management is window dressing of financial statements which is done by managers of the firms with aim of increasing their managerial compensation and job security, avoiding debt covenants violation, decreasing regulatory costs or increasing the regulatory benefits. According to Chang & Sun, (2008) managers involve themselves in earnings management as a results of two incentives, first is due to listing motives during the initial public offerings, seasonal equity offerings, mergers or management buoyant plans, second is due to desire to increase management compensation, debt agreement and/or job security and lastly

is to take advantages of laws and regulations of the country. This view of the earning management incentives is also shared by Cornet et al., (2009) and Shah et al., (2009) who also indicate that managers seek to enhance their wealth and bonus through earnings management.

2.3 Capital Management

Starting phase of a business needs capital to purchase all assets and finance its all operations. Hence company can raise capital by issuing shares and through debts. Therefore company should use and manage capital in such a way that return on capital should be maximum and ultimately in this way the value of firm and wealth of shareholders would be maximized.

Capital structure plays very important part in capital management. A framework that is being used in organizations to analyze the mixture of debt and equity to solve the needs of financing is called capital structure. In this phenomenon, a company uses its common stock and preferred stock structure along with debts to generate the needed funds for the organization. Since, financing decisions are very integral for financing and investing events, therefore, a critical analyses of this topic has been a vital part of finance research and literature. Leverage is one the most crucial factor that may affect the financial performance of the firm. Modigliani and Miller (1958) for the first time laid the foundation of this concept by stating that in a perfect world the corporate valuation shares no bonds with the capital structure being acquired by the firm.

A perfect capital market assumes these prepositions that market is frictionless, all market participants have homogeneous information, no participant can affect the price of security and firm's financing & investment decision is fixed. But in reality these prepositions are impossible, therefore, it is very difficult to endure the concept that how firms generate

funds to meet the needs of their operations and investments. Modigliani and Miller's theorem is regarded as a great contribution in the field of investment in finance.

After Modigliani-Miller theorem, some of new theories have been emerged for the explanation of a firm's choice of capital structure. For this, the trade-off theory is introduced in which firm choose capital by a trade-off between risks and return of debt. Trade-off theory explains the concept of tax shield. Due to debt's interest tax becomes low because interest is an admissible expense. But this advantage is good to this extent when tax shield is more than default risk because due to excess debt default risk can increase. Some of the studies (Smith & Watts 1992; Hovakimian et al., 2001; Fama & French 2002) also supported this work. After that a new theory Agency cost theory was introduced. Agency cost theory is linked to the trade-off theory as one of the major cost factors consists of agency costs. Jensen & Meckling (1976) founded this theory and defined it as agency relationship inside a firm is a contract in which the principal hires an agent to perform some services on his behalf. The theory suggests that choosing optimal capital structure may decrease conflicts and hence agency costs. Myers (1984) developed pecking order theory also called information asymmetry theory. According to this theory, a firm prefers to finance new investment first internally with retained earnings; second if internal funding is not available, it prefers to finance its operations through debt and thirdly firms issue new shares to meet their financing needs. The previous discussion was about the capital management of non-financial sector. But in financial sector capital is combination of debt capital and equity capital. Therefore bank should allocate capital to assets in such a way that return on capital should be maximized. Furthermore, the capital of bank is subcategorized in economic capital and regulatory capital. Economic capital is defined as capital required remaining solvent in unexpected losses and regulatory capital needed for bank's regulation.

2.3.1 Bank's Financial Risk and Capital Management

Banks confront monetary dangers (Market Risk, Credit Risk and Operational Risk), which is also known as Pillar 1 risk gotten from Basel II. Banks ought to subsequently keep up cash-flow to moderate these risks. In Pakistan, there are two capital necessities for banks to seek this risk for pillar 1. The first is the Minimum Capital Requirement and the second is Capital Adequacy Ratio. These assets are basically cushions for banks for financial risks. Banks keep up administrative capital and arrangements to meet expected and sudden misfortunes. Subsequently, capital and administrative arrangements assume an essential part in overseeing capital. Different reviews have been done on arrangements as capital management. Particular provisions and general provisions diminish value by their impact on retained earnings (Ahmed et al., 1999). Ahmed et al., (1999) found that general provisions incorporate administrative capital other than value; a bank may create more broad arrangements to safeguard its aggregate regulatory capital base.

2.3.1.1 Basel Committee on Banking Supervision (BCBS)

The Basel Committee on Banking Supervision is a board made by the Governors of the Central Banks of the Group of Ten nations in 1974, which tries to enhance the supervisory orders that national banks or comparative experts force on discount and retail banks. The BCBS is a universal discussion where individuals could participate on managing account supervision. The Committee sets up rules for banking policy guidelines for part and non-part nations and helps the experts in actualizing their recommendations. Despite the fact that the Committee itself has no better expert over governments and national banks than which it makes suggestions, its rules are generally taken after and very much considered in the universal group of national banks and finance committee (Ahmed et al., 1999).

2.3.1.2 Basel I

The BCBS expects to improve monetary adjust by method for upgrading supervisory data and the nature of banking supervision worldwide. Basel I used to be the essential accord. It changed into issued in 1988 and concentrated especially on credit peril with the guide of growing a bank resource sort machine. Basel I is a settled of worldwide banking regulations set forth by methods for the Basel Committee on money related establishment Supervision (BCBS) that units out the negligible capital necessities of monetary organizations with the objective of limiting credit risk. Banks that work universally is required to safeguard a base sum (eight %) of capital based absolutely on a percent of risk weighted resources. Capital adequacy alludes to the amount of capital kept up by utilizing vault establishments to splash up unforeseen misfortunes (Bouvatier and Lepetit 2008).

A budgetary establishment's capital base is the whole of its level 1 and level 2 capitals less any derivations. Underneath Basel I, all banks utilize institutionalized risk weights to compute the capital prerequisite. The Basel Accord necessitate that the proportion of a budgetary organization's capital to risk-weighted property (called the danger basically based capital proportion) be no less than eight%. Different reviews had been completed on capital control underneath Basel I system (Ahmed et al., 1999). Shrieves and Dahl (2003) tried regardless of whether banks with surplus administrative capital or more normal profits set apart a piece of those surpluses to cover future credit score misfortunes underneath the Basle Accord. They utilized an example of banks sooner or later of a time of monetary pressure, 1989–1996 and took 607 pooled time arrangement and move-sectional perceptions. They found that eastern banks blast provisions when their administrative capital proportions make strides. Beatty et al., (1995) researched how banks manage the planning and estimation of exchanges

and collections to acquire essential capital, duty, and profits objectives. They utilized a specimen of a hundred forty five enormous banks over the span of length 1985 to 1989. They found that additions from incidental resource income are not utilized to control profits, nor is resolved together with alternate decisions. The outcomes for incidental resource deals are delicate to the detail utilized.

Ahmed et al., (1999) inspected the 1990 trade in capital adequacy rules to build more noteworthy intense trial of capital and earnings control impacts on monetary organization contract misfortune provisions. They utilized a specimen of 113 bank ensuring associations with yearly data at some phase in the length 1986-1995. They discovered solid help for the speculation that loan misfortune provisions are utilized for capital management. In addition, they confirmed that loan misfortune provisions are adversely connected with both future income changes. (Shrieves & Dahl, 2003; Anandarajan et al., 2007; Fonseca & González, 2008) bolstered this work.

Beatty et al., (1995) inspected the relationship among home loan misfortune provisions and capital sooner than the fresh out of the box new capital approaches. They found that normal future misfortunes may be secured through provisions, while surprising future misfortunes could be secured by methods for capital. On the other hand, over the span of monetary downturns provisions blast because of the reality defaults are more extensive unfurl all through the money related establishment's loaning business endeavor.

Bikker & Metzemakers (2005) inspected and watched that banks supports should be reestablished every single through downturn that implies that less profit are to be needed to supplement current capital, no doubt compelling banks to decrease loaning through utilizing bank level actualities from 29 OECD universal areas. Laeven and Majnoni (2003) tried the

effect of credit risk on administrative provisions of banks and watched that banks may likewise have underneath arrangement at some phase in interims of money related extension.

2.3.1.3 Basel II

After that Basel II posted in 2004. Basel II is a moment worldwide banking administrative accord this is based on three noteworthy columns: least capital necessities, administrative supervision and market subject. Insignificant capital necessities play the greatest basic position in Basel II and commit banks to keep negligible capital proportions of administrative capital over risk weighted resources. Since banking regulations eminently various among countries sooner than the presentation of Basel accords, a brought together structure of Basel I and, at last, Basel II helped countries lighten uneasiness over administrative aggressiveness and radically exceptional national capital necessities for banks. The guideline contrast among Basel II and Basel I is that Basel II contains credit risk of things held through monetary foundations to decide administrative capital proportions. Administrative supervision is the second one mainstay of Basel II that gives the structure to nationwide administrative bodies to adapt to various sorts of perils, for example, systemic risk, liquidity shot and criminal threats (Magnis & Iatridis, 2017). The market field column offers different revelation necessities for banks' possibility exposures, risk assessment strategies and capital adequacy, which can be gainful for clients of monetary articulations. Basel II partitions the qualified administrative capital of a bank into three levels. The higher the level, the less subordinated securities a monetary establishment is approved to incorporate into it. Every level should be of certain insignificant rate of the whole administrative capital and is utilized as a numerator inside the figuring of administrative capital proportions. Level 1 capital is the strictest meaning of administrative capital this is subordinate to all extraordinary capital contraptions, and comprises of shareholders' reasonableness, unveiled stores, held earnings and beyond any doubt current

capital units. Level 2 is Tier 1 instruments in addition to different diverse bank holds, half breed units, and medium-and extensive day and age subordinated loans. Level three incorporates Tier 2 or more fast term subordinated loans the guideline advancement of Basel II in evaluation to Basel I is that it thinks about the credit score of property in making sense of danger weights. Better credit score rating, the lessening risk weight. Different researches were done on capital management underneath Basel II (Magnis & Iatridis, 2017).

Ahmed et al., (1999) examined on capital adequacy proportions underneath Basel I and Basel II. He utilized bookkeeping records from (2005–2012) banks in Europe and the USA and watched that inside the length before the Basel I credit score foundations controlled capital adequacy proportions through the stores for loan misfortunes. with regards to the provisions of the Basle I and particularly these of the Basle II, the stores for loan misfortunes are not shrouded in Tier I however are a little extent of Tier II, subsequently changes in the provisions for loan misfortunes will haven't any impact on capital adequacy proportions and also verified that Basle II is stricter in regards to the capital adequacy proportions.

Magnis & Iatridis (2017) tried sorts of control: earnings and capital management (or capital adequacy management) in banks, the utilization of a worldwide example of banks from four global areas (USA, joined kingdom, Germany and France), which in couples have a place in typical money related frameworks (two ordinary direction nations and two code control nations). They found that one of kind parts of inspector notoriety as per financial gadget restrict the inspiration of directors for income control. Also they inspected the levels of the income and capital management in banks by means of separating our reviews period inside the pre Basle II administration and distribute Basle II administration and found that inside the submit Basle II length the banks as indicated by monetary framework confine earnings and capital adequacy control.

2.3.1.4 Basel III

The Basel Committee on Banking Supervision posted the essential model of Basel III in late 2009, giving banks around three years to fulfill all necessities. Basel III transformed into posted in response of overall money related Crises 2007-2008. Basel III is a piece of the relentless endeavor to enhance the banking administrative system. It expands on the Basel I and Basel II records, and looks to upgrade the banking region's capability to adapt to financial strain, improve chance management, and enhance the banks' straightforwardness. The purpose of enthusiasm of Basel III is to encourage additional flexibility on the individual budgetary establishment organize while in transit to diminish the risk of machine-broad stuns. Basel III acquired more tightly capital necessities complexity to Basel I and Basel II. Banks' administrative capital is part into Tier 1 and Tier 2, while Tier 1 is subdivided into regular value Tier 1 and additional Tier 1 capital. The qualification is imperative since security gadgets covered in Tier 1 capital have the best level of subordination. Not surprising reasonableness Tier 1 capital comprises of decency instruments that have optional profits and no adulthood, even as extra Tier 1 capital joins securities which are subordinated to greatest subordinated. Level 2 capital comprises of unsecured subordinated debt with a true adulthood of no less than five years. Assorted research had been executed on capital management underneath Basel III. Cummings & Durrani (2016) concentrated the effect of the Basel Accord capital necessities at the home loan misfortune provisioning practices of Australian banks. They checks regardless of whether the selection of the IRB system has extended the slant for banks to secure arrangements towards predetermination financial assessment misfortunes. Based on quarterly information for twenty three banks are working in Australia from September 2003 to December 2012. They found that (i) banks affect provisions in uncertainty of future loaning effect (ii) banks allocate a bit of surplus capital above legitimate essentials to pre-

sponsor future assessment disasters through provisions (iii) banks disseminate a touch of better wage for the practically identical reason. The provisioning conduct of banks demonstrates that they join forward-pursuing indications of crediting augmentation as a fragment of their assessment of default risk. In addition they found that banks allot higher provisions while their probability on a very basic level based capital extents and benefits are higher than normal and adjust provisions downwards amidst times while these signs are weaker. In assessment to past overviews that thought on bank provisioning hones underneath accounting guidelines for offering a clarification to the market (Kim & Kross, 1998; Hasan & Wall, 2004). Beatty et al., (2002) watched that straightforwardly recorded banks utilize wisdom of their credit adversity provisions to avoid indicating little decreases in benefits in the America.

2.4 Corporate Diversification

Diversification can be mainly treated as the strategy of a corporate to enter its operation into a new market with the production that is not the part of corporation's activities (Barney & Hesterly, 2006). Diversification steps were taken by many firms in last two decades. Merging wave also started to rise with this diversification. This merger and diversification give rise to the firm operations and new values in the market. Now the trend is moving the directions towards the documenting of profit towards the specialization (Barney & Hesterly, 2006). The latest view about the diversification is that if the business is diversified it decreases the firm value (Opler et al., 2001). Diversification can create many costs (Stulz, 1999). Diversification and the value of the firm is a significant topic of discussion in the research is of management (Stulz 2009). Literature is found with many ways to describe the relation of the diversification and the firm performance. From 1970 -2007 many researches are found with the prove relation. Managers are of the great concern with the diversification

decision of the firm. The reason is that they get benefited through diversification on the behalf of the shareholders interest (Montgomery, 1994; Sohl et al. 2020).

Many argue that manager is interested as his power and authority increases because of the diversification of the firm. The reason for this intention of the manager decisions is to secure their own future as there will be operation a firm will involve more they will get secure (Shleifer & Vishny, 2003). Second thing that can be found through the literature is that through diversification firm find the power in the market to reboot its activities; therefore firm gains the market value (Tirole, 2003). Closer look towards the empirical research for diversification impact shows that economically, it is very fruitful for the firms to diversify the businesses. But the trend of this positive significance changes when the research enters into first decade of the 21st century. It was found that the diversification of the business is not a good decision as it impact negatively on the value of the shareholder. This wave of the negative impact was actually started in late 80's and 90's.

In addition many researches like Montgomry 1994; Comment & Jarrel 1995 & Servais 2004 and many more, showed the negative impact of diversification on the value market of the firm. As described earlier that the shareholder reduced by the value of the shares due to diversification so as the value of the firm. Specialization in a single field is better than the inefficiency of many fields. Business that are diversified lose their specialty and hence become less and inefficient productive (Healey, 2006). The second wave of this view tells that the diversification of a business means that the firms are getting less productive in their performance and lose the real value (Megginson, 2004). Hence, this inefficiency leads the business towards the inefficient capital allocation therefore the capital utility also decreases because of wrong allocation.

This wrong allocation then has other negative effects on the firm as the inefficient allocation reduces the NPV (Berger, 2002). Therefore the NPV leads to negative when the investment into the new projects increases (Shin, 2001). Subsidizing will get the cross relation in case of diversification (Rajan et al., 2000). As NPV gets negative in case of over-investments that reveals a cost shortage and long run investment decreases. Third stage of the literature regarding diversification impact on firm level of productivity is again towards the first stage. The theoretical as well as empirical frame of research showed nothing with negative impact on the firm performance and nothing had linked with the capital inefficiency (Gomes & Livdan, 2004). When a firm is facing the distress situation then through diversification it can regain the optimal level of production (Fluck et al., 2005; Setianto, 2020).

The poor performance of the firm can be robust by the search of new opportunities of producing something else (Gomes & Livdan, 2004). In the same period the diversification of the business is considered to be discounting the productivity cost namely "diversification discount" (Akbulut & Matsusaka, 2005). Final stage of the prescribed is with the concept of dependency of discount diversity that was used in early 1990's. In early literature this discounted diversification was used to measure with the Tobin's Q like Fluck & Lynch, 1999 and others. But in final stage the measures were changed with new models and the concept of the discount and cross section, panel data converted into the different sources of data collection. Therefore in each age of research history the earning management and diversification is considered to be different reasons. Early literature shows that it is because of the enhancing the performance of the firm but third generation opposes the idea by view that it is just to look different in the market (Stulz, 2009). Hence for the discussion is on the diversification but there is another debate related to it. When there is diversification there is reason of earning management that impact on the firm performance. Many studies we can find in the literature

talks about the impact of earning management on the firm value. Managers are the bodies that can choose the decision for the future growth of the firm and diversification is one of the examples of those decisions. There might be three shapes of diversification. The effect of diversification and management decision can have a strong, normal or weak impact on the firm. Similarly in his study also mention three effects of earning management through diversification on the firm performance. Firms accelerate the value by introduction of the new activities and when it goes out of the particular industry.

Mostly the involvement of the management activities in other activities it is taken as to increase in the firm income and refers to more investments (Healy and Whalen, 1999). Therefore the theme of the diversification tend to turn towards over production that have a negative impact on the ROA, ROE etc. as the cost goes up (Anjum et al., 2012). But again the reverse action is found in the literature as it was in early literature concept. Once again the researchers take discounted diversification in their studies. The evidence is provided for the diversification discount in leverage firms when performance in many industries values their performance measurement (Reeb & Mansi, 2013). Similarly the new researcher also found that the diversification of the business has a positive effect on the stock exchange (Akbulut & Matsuska, 2010). Despite the diversification discount diversified corporates are the topic of interest for the researchers. Corporate diversification focus on the industrial diversification is also controversial. If the diversification is in the relative industry then it has a discounted effect e.g., diversification of the industrial banking in insurance as well as in commercial banking. They have a continue discount in diversification (Laeven & Levine, 2007).

Similar fact was found on the US financial industry's diversification (Schmid & walter, 2012). Stiroh, 2012 uses the data of the US financial firm and reached at the same result of consistency of discounted effect of the diversification (Stiroh, 2012). In recent research,

the study of larger banks of the different countries evidence were found against the discounted effect of diversification, indeed it was found that the diversification do not reduce the firm level but enhance it. Systematic risk of the firms that diversified in other financial industries decreases then the firms that do not diversify. Although there is controversy regarding the relative study but most of the literature support it and the diversification of the corporate is considered to be necessary and wise step to run the firms efficiently specially in the situations when the particulate activity has a downfall (Kuppuswamy et al., 2014).

2.5 Firm's performance

The reason for existence of a firm is to earn maximum profits. It is reflected by firm's performance therefore it has become crucial topic for researchers, economists, financiers, investors, legal practitioners, and business operators. Inefficient corporate governance creates complication in operations that is finally leads weak performance of manufacturing firms (He et al., 2015).

Zagorchev & Gao, (2015) conclude that Sound corporate governance is negatively related to excessive risk taking and has positive association with performance of financial institutions in U.S. Governance practices are associated with higher Tobin's Q and less non-performing assets. Sound governance also has positive relationship with smooth income by contribution to higher provisions and reserves for loan/asset losses of financial institutions. Andreou et al., (2014) found those elements of corporate governance structure including inside ownership, board size, and presence of committees, CEO duality and figure of directors performing as a board members in other firms as well. These determinants of corporate governance have sound impact on financial decisions taken by management and firm performance.

Board of director is a great center of attention for shareholders. It builds the trust and confidences of them on the organization and separates the ownership from the management of the company and resolves the agency issues.

Corporate governance is a significant determinant of the firm performance and financial decisions. Ownership structure, board structure and CEO's are three major dimensions of the governance mechanism of a corporation. Sound corporate governance is required for maximum firm performance (Hoechle et al., 2012; Duchin & Sosyura, 2013). In Canadian firms the Board Shareholder Confidence Index focuses on the board of directors. It considers as a best measurer of governance practices there. Therefore in Canada structure and performance of board of directors has an impact on performance.

In contrast Zhang et al., (2015) conclude that board interdependence decrease the ownership concentration that has positive impact on the firm performance. But it varies with the type of organization. Private sector organizations highly dependent on board independency as compared to state-owned organizations. Weak corporate governance makes the controls weak on employees. It also affects the monitoring process negatively that ultimately make employees comfortable towards frauds and undue relaxations during working hours. Therefore poor performance of the employees' leads the poor performance of the organization (Chen et al., 2015). Firm performance doesn't depend on the efficiency of individual mechanism but on the efficiency of corporate governance system. Corporate governance mechanism is effective for operating and market variables of firm performance. Effective corporate governance controls the biased decisions of the manager that has positive impact on operation performance as well as on firm value (Bhagat and Black, 2000; Shleifer and Vishny, 2003; Gompers et al., 2003; Brown and Caylor, 2004; Bebchuk et al., 2004; Wu et al., 2020).

2.6 Corporate governance and firm's performance

Bhagat and Black (2000) identified five factors of Board structure and process including board size, presence of a corporate governance committee, quality of the audit committee, outside directors, and busy directors. The presence of audit committee, board independence and separation of CEO's and chairperson are significant elements of sound corporate governance structure. It prevents firms from manipulation of the earnings management, increase the transparency of information and positively enhance the performance of the organization.

The authors found that high quality accounting standards and sound corporate governance practices may increase the flow of foreign direct investments in emerging economies. However there is no defined mechanism of governance that may motivate the managers to optimize the share value (Bonazzi & Islam, 2007). At the point when senior administration candidates are inadequately supplied, the CEO duality structure, alongside thorough development, helps the organization use existing initiative aptitude, the advantages of which exceed the potential agency cost of CEO duality. The aftereffects of this review underline that institutional components ought to be incorporated into explore on corporate governance and performance in developing markets (Pham et al., 2015). Duties and obligation of independent directors in china are highly affected by the decisions of senior management. They are very concerned about their orders in the corporations and it's obligatory to satisfy their supervisory and observing capacities (Ye & Zhang, 2011).

Likewise, it is also concluded in other study that in Chinese context independent director has solid maintain smooth relationships with senior management to secure their job, because they are highly dependent on top management to retain their jobs. Therefore, independent directors are associated with controlling shareholders or CEO to sort out the matters

of stockholders. Since, they are somehow interdependent, therefore, it would be hard to think of CEOs when different issues and remunerations are offered to them (Du-Plessis et al., 2012, Islam et al. 2019).

Through agency theory, boss is inclined to search for after their individual particular objectives to the weight of shareholders by temperance of the portion among ownership and control (Jensen and Meckling, 1976). With the rising of independent directors, this issue can be lit up in light of the way that they can add to diminish the utilization of circumlocutory inclinations organization (Brickley and James, 1987) and incite better review structures (Saleh et al., 2005). In addition, the augmentation of independent directors in the board can ensure the interests of shareholders (Ramdani and Witteloostuijn, 2009) and have superior to anything expected stock price returns (Denis et al., 2002).

Coles et al., (2014) scrutinized that the independent directors those are inducted prior the CEO control have more concern and motivation to monitor viability as compared the regular measure of board independence. Vietnam shows an extraordinary system for concentrate the duality of CEOs, as the CEO's duality has profound social, political and institutional extraction here, instead of being simply an immaculate business decision. The financial structures of an economy begin to a limited extent from the structures with which its economy started (Bebchuk & Weisbach, 2010).

Sound and smooth Relationship among investors, board members, shareholders and company’s management is developed, monitor and maintained by effective and efficient corporate governance structure. There are many models of corporate governance mechanism but primary purpose is to provide the transparent in formation to facilitate and built trust of shareholders (Chen et al., 2007).

The duality of authority might be advantageous relying upon the states of the lack of initiative assets and institutional moves that are very susceptible to sociopolitical impact in business (Peng et al., 2003). The outcome is enduring with the review on corporate governance in family-run endeavors in Norway (Mishra et al., 2001). Past reviews have demonstrated that there is a contention for issues of board independence among analysts. A few specialists have found that the independence of the governing body can offer advantages to organizations (Ramdani and Witteloostuijn, 2009), while some disagree (Haniffa and Hudaib, 2006; Chen et al., 2006; Conger and Lawler, 2009). As indicated by Nahar Abdullah (2004), independent directors can incorporate self-rule into the board and put in to the varying characteristics of directors' bowed and specialist. Independent directors can quiet agency issues and check organization's close self-attention (Rhodes, 2007).

Lakhal (2005) establish that there is an optimistic yet slight relationship among the board size and the firm’s performance. Shukeri et al., (2012) demonstrated that the board size positively impacted the affiliation's entrance on resources (ROA). Eisenberg et al., (1998) besides found a non-positive association between board size and the profitability while utilizing a case of pretty much nothing and medium-sized firms. As appeared by Fama (1980), independent directors were contracted to guarantee that resistance with insiders stimulate activities strong with boosting shareholder regard. Chen and Jaggi, (2001) concluded that independent directors are moreover profitable in watching board activities and enhancing the straight forwardness of corporate boards, as they have redesigned the affiliation's consistence with introduction necessities.

***H_1*: Corporate governance index is positively associated with firms’ performance.**

2.7 Earnings management and firm's performance

Earnings Management have attracted many researchers in different part of the world, hence several studies have been conducted in this area and have provided mixed findings regarding the practices, the motivation and the impact of earnings management to the firm performance and the stakeholders of the firms. Late reviews archive those organizations directing prepared value offerings encounter poor stock cost and profit execution in the post-offering period. The poor stock value execution of firms that raise capital through prepared value offerings is one of the critical irregularities of budgetary markets. Lakonishok et al., (1994) found that organizations that have encountered high profit development and deals development, or excitement stocks, at first have a tendency to have high valuations, yet perform ineffectively in this manner. Dechow et al., (1996) reports that the share trading system at first exaggerates firms that have abnormal amounts of bookkeeping gatherings yet in this way brings down its valuation of these organizations.

A recent study such as Gill et al., (2013) have scrutinized the link among earnings management and the manufacturing firm's value in India. The authors of this study have employed the Jones accrual model to estimate the earnings management whereas the firm's value and performance of Indian manufacturing firms were estimated by employing different ratios such as; debt to asset ratio, total asset to market value and Tobin Q, current ratio to measure leverage, market value and liquidity, respectively. The findings of this study showed that the earnings management is of greater practice and has sturdy effect on firm's rate of return. Additionally, the authors of this study also found that the market reduces the equity prices in response to the manager's attitude towards earning management or there self-motives but this study focuses on the examination of the effect of earning management on firm performance with combination of other variables in Pakistan.

In assessing the effect of earning management to the users of financial statement, Chang and Shiva (2010) examined the effect of earning management on the prediction ability of earnings. The findings of the study show that, when managers involve in earnings management, the users of financial statement lose their ability to predict the earnings of the firm in the future. Apart from earning management, previous studies have also examined the relationship between the information contained in the financial statement and the market value of the firm. Relationship between accounting information and market value of the firms listed at Milan Stock Exchange. The findings of the study show that, discretionary accruals, non-discretionary accrual and operating cash flows have different value relevance. Other studies have examined the impact IFRS adoption the quality of the accounting figures in the financial statement. The findings of such studies have reported that IFRS adoption result into improved quality of financial statement of the firms (Nichols & Wahlen, 2004; Suwardi, 2005; Iatridis, 2010).

The review by Chiraz and Anis (2013) inspected the connection between profit administration and execution of French IPO organizations. The discoveries of the review demonstrate that organizations with forceful profit administration in the IPO procedure have a tendency to experience the ill effects of accordingly poor returns and to delist for execution. The review additionally revealed that, no proof was found to propose that the level of beginning return is adversely identified with optional current collections. The review by Izadinia et al., (2014) analyzed the connection between income administration and social duty of the organizations recorded at Tehran Stock trade. The discoveries of the review demonstrate nearness of negative connection between income administration and corporate social obligation however budgetary execution of the firm was found to have positive association with

profit administration while association duty was observed to be adversely related with income administration.

Other studies on earnings management such as, Raoli, (2013) have examined whether the mangers support the market valuation of the firm by examining their engagement level in earnings management for financial market of a particular country i.e. Italy. However, to measure the earnings management and firm value, the total accruals and the market to book ratios were employed respectively and the results indicated positive link among these two variables in Italy. Gong et al., (2008) evaluated the association between earnings management and performance of the acquiring firms in the country. The study used accumulated abnormal return as the measure of performance while earnings management was measured using discretionary accrual basing on Jones revised model of 1991. The findings of the study show those firms, which acquire shares, manipulate earnings as compared to firm, which acquire by cash especially preceding the acquisition announcement date. Moreover, the existence of the negative link among earnings management and the firm's performance is confirmed.

Goel (2014) conducted an analysis impact of capital structure on productivity of human capital in listed general segmented banking sector of India for span of 2008-2012. The aim of the study was to examine the association among accounting performance (return on assets, return on equity, earnings per share and capital structure), market performance and productivity of human capital. Conclusion of the study mentioned positive relationship between productivity of human capital and capital structure. Further to authenticate the results author measure the productivity of human capital through bookkeeping gages (i.e. Return on Equity, Return on Assets and Earnings per Share). (Goel, 2014) yet this review concentrates on to decide the effect of procuring administration on firm execution in emerging economy.

In spite of firm performance in terms of financial or market, shareholders are more concerned about earnings per share and wealth of shareholders. Therefore to measure the gainfulness of the shareholders earnings per share is also evaluated during the measure of financial performance of the firm (Tudose, 2012).

As indicated by Goel (2014) Return on value (i.e. assets, investment and equity) is utilized to estimate the company's productivity. It's the combination of the wealth collected equity and debts management. Therefore that model is also analyzing the benefits/profit of firm getting by shareholders. Likewise Zeitun & Tian (2007); Margaritis & Psillaki (2010); Abbadi & Abu-Rub (2012); Al-Taani (2013) also used the return on value as the determinants of productivity and firms performance to evaluate the monetary position of the firm.

Hassan & Ahmed (2012) conducted a research study in Nigeria that was generalized by them on Pakistani context as well. Study was conducted to examine the association among corporate governance and earnings management on firm financial performance. Discretionary accrual is used as the proxy of earnings management and measured by the jones discretionary accrual model. Authors employed the ordinary least square to analyses the impact of earning management and corporate governance on financial performance of the firm. According to the results of report corporate governance has positive impact on performance in the presence of transparent earnings management. Moreover Eka Putri (2013) also conducted the same nature study in Indonesia. But he analyzed the effect of earnings management on value relevance in Indonesian stock exchange. Parallely he also examined association of earning management with book value. Positive relationship is concluded among earnings management, value relevance and book value. In addition another study on earnings management with respect of firm size conducted has been by the Llukani, (2013). Albanian Market was the used as unit of analysis. By following the same pattern of the prevision studies,

discretionary accrual was employed to estimate the extent of earnings management. Modified jones model was capitalized to examine discretionary accruals. Finally conclusion stated that firm size has no impact on earning management. Another study conducted by the Dimitropoulos & Asteriou (2009) on earnings management and firm performance in emerging countries. Both Discretionary accrual and non-discretionary accrual have been taken as the proxy of earnings management. Purpose of the study was to analyze the effect of financial ration and earnings management on earnings per share. Six different financial ratios were selected to analyze the results. Study reflected that earnings management has also impact on financial ratios of the firm. Therefore earnings management has direct and also indirect impact through financial ratios on earnings per share.

Hence, different past reviews have inspected the connection among income administration and different factors of the firm. The loan loss provision is considered very important tool in reducing the risk of customer's failure to pay their liabilities to the bank. It is found that loan loss provision has negative asocial with the performance and profitability (Mustafa et al., 2012). Loan Loss Provision is a policy that is followed by commercial banks in which some money set aside (reserve) which is used to protect the financial position of banks in the terms of performance and profitability (Beatty & Liao, 2009).

According to Kanagaretnam et al., (2010), the basic purpose of Loan Loss Provision is to provide information about the futuristic condition of banks. Over the period of 2001-2010, Caporale et al., (2015), examined the determinants of loan loss provision for 400 Italian banks. The non-discretionary components are found as the main drivers of LLP in Italian banks. According to Caporale et al., (2015), negative association with the collaboration of loans which can reduce the risk of future loss There is another study which examined the positive association of LLP with profit before tax over the period of 2003-2012 that Sri

Lankan use LLP to smooth earnings. By controlling the other well-known determinants, impact of LLP on Bank Profitability in Pakistan was also examined by (Tahir et al., 2014). The study found the following evidence by using the return on equity and return on asset as proxy for the profitability but the negative relationship between the LLP and profitability is found, it can be said that when LLP is high it decreases the profitability and financial stability of banks. Moreover, negative relationship is found between profitability and deposits but the positive relationship is found between advances and return on assets and firm size and return on assets (Alhadab & Alsahawneh, 2016).

According to Moehrle et al., (2009) if provisions are sound measure of credit risk then whole spectrum of expected losses of credit must be covered by loan loss provisions. According to the results if loan loss provision is the measure of credit risk then it must be able to maintain the quality of loan portfolios of the firm. Abreu and Mendes (2010) analyzed the results of loan and profitability and concluded that there is a positive relationship between optimum loan management and firm performance.

***H_{2a}*: There is a positive relationship between discretionary accruals and firm performance.**

***H_{2b}*: There is a positive association between non-discretionary accruals and firm performance.**

***H_{2c}*: Non-performing loan is positively associated with firm performance.**

2.8 Capital Management and Firm performance

In the economic development process, banks play very important role. In the previous studies economists mostly focused on the banking sector to evaluate its contribution in the economic development of country. The researchers conducted studies and highlighted the circumstances when banks actively participate in the innovations and future growth by funding productive investment and they also recognized the importance of banking sector in the

economic growth. It has been analyzed that banks responses passively to economic growth. In the emerging economies, banks have great importance as many studies examined the relationship between economic growth and efficiency of bank intermediation.

Miller and Noulas (1997) and Ramlall (2009) certified that the credit risk is negatively identified with the profitability of banks. This negative affiliation determines that expansion in loans raises the credit risk which creates liquidity issues. The deficiency of funds consolidated with the absence of credit value hampers the growth and profitability of banks. According to Akhtar (2007) commercial banks are the financial institutions acting as mediator between two group of customers, one group which needs money to invest in a project and other group have the funds seek to maintain and develop. These banks are very helpful for those who are in need to set up their enterprises by receiving and collecting the money from individuals who want to make saving and provide the collected amount where it is needed. Banks are financing the agriculture sector, industrial sector, trade activities, and other banking services and even to individuals through long-term and short-term loans. Hassan and Bashir (2003) and Smith et al., (2003) found the negative relationship between the high loan ratio and profitability.

Vong and Chan (2009) conducted a research on a sample of five banks working in similar condition to analyze the determinants of bank profitability. The outcomes proposed that the progression of loans (credit to asset proportion) does not necessarily increase the profitability. Because of the aggressive credit market situation and the progressive cuts in financing cost, the interest spread, i.e. the essential determinant of profitability, move towards getting to be smaller. A smaller spread with higher loan losses prompt lower level of profitability and that is the reason why interest rate spread along with alternate characteristics of the loan matter more than their size. Similarly, Naceur and Goaied (2001) suggested that the

components that affected the bank of Tunisia's performance in midst of 1980-1995. In this respect, the authors confirm that the top creating banks are the ones those push to show signs of change by getting more skilled work and capital efficiency, higher levels of deposit accounts contrasted with their assets and lastly, those who have possess the ability to reinforce their equity for the banks performance.

The GFC that was initially propagated in 2007, is an instance of that had turned out severely if the banking framework does not admire the interaction of risk and growth (Dell'Ariccia & Marquez 2006; Gorton, 2009; Demyanyk & Van Hemert, 2011). Starting late, non-performing loans have been for the most part inspected in literature and numerous authorities have concentrated on the driving factors of Non-Performing Loans (NPL's) and have acquired amount results (Hoggarth et al., 2005; Vogiazas & Nikolaidou, 2011; Bofondi & Ropele, 2011; Louzis et al., 2012; Klein, 2013; Messai and Jouini, 2013). The greater part of the earlier reviews have indicated two noteworthy groupings of these driving factors or determinants: bank related measures (i.e. size or capitalization, efficiency and funding level) and macroeconomic measures (Inflation rate, GDP, investment and unemployment rates). The issue was already examined.

Messai and Jouini (2013) concentrated the driving factors of non-performing loans in Spanish, Italian and Greek banks, and clearly the level of eccentric obligations increments when the unemployment rate and the true blue loan cost rise and decay when the Gross Domestic Product (GDP), advancement rate and return of bank resources fall. Prior to the cash related crisis there was a basic credit development. Due to financial crisis, the pattern was turn around and led the banks to be less eager to loan. This has prompted a scholarly concentrate on bank lending process (Micco & Panizza, 2006; Olokoyo, 2011; Swamy & Sreejesh,

2013; Ladime et al., 2013). The key driving factors or determinants underlined in these studies are bank related variables, for example, size or capitalization and macro-economic factors, for example, GDP and money related strategy (Ladime et al., 2013).

In banking industry, capital management is commonly guided by the central bank to alleviate bank dissolvability issues (Bernauer & Koubi, 2009). With management of capital adequacy, it is acknowledged that its incidents and store its business operations (Barrios & Blanco, 2000; Bernauer & Koubi, 2009). Security of investors' funds remains the critical stress of bank controllers around the world. It is in such a way, capital management winds up perceivably suitable and essential. Capital adequacy management suggests the measure of significant capital and different securities which a bank holds as against the probability of bank frustration. The Bank of International Settlements is a joint venture between the United States. The Basel Capital Growth Fund is an excellent alternative to the capital market.

The Basel Accord has divided the capital of bank into two types i.e., (1) the core capital comprising of stockholders' equity and un-appropriated profit; (2) auxiliary capital, comprising of globally accepted preferred shares and corporate bonds. According to the regulations of Basel accord the supplementary capital (Tier II capital) should not be greater than fifty percent of total bank capital and must be less than four percent of risky assets held by the respective bank. Four types of the risky assets are used to determine the weights of these assets. These four, in determining risk-weighted assets, types are weighted differently based on the risk exposure. The treasury securities are generally considered as risk free assets. Therefore, zero percent weight is assigned to them; short-range recourses of bank are given 20 percent weightage, collateral securities such as mortgage and pledge are weighted at 50 percent and remaining assets are weighted at 100 percent. Since its inception in 1998, the risk based Basel Accord system is condemned by the researchers and the practitioners across

the globe for the "subjective" parameters. For instance the compulsion of 8 percent capital allocated to risky assets. These shortcomings paved the way for adoption of Basle II accord to address the critical issues/criticisms. The Central Bank of Nigeria (CBN) reviewed the Tier I capital and increased the capital base from a minimum of 2 billion to 25 billion. The shortcomings of some banks which are performing below par were evident by their liquidity position with the CBN, huge incidents of NPL's, resource constraints, poor management etc.

Further, the massive decline of the exchange rate of Nigeria, the current echelon of bank capital has become insufficient to fulfill the local and global realities of the pecuniary system. The concept of capital management is based on changing the financial mix of any organization to ensure liquidity and avoid any probable financial loss to be faced by the banking industry. The capital management offers a good opportunity to increase the performance of business organization. It stimulates the business executives to achieve greater performance. Further, the recapitalization process is followed by most of the organizations for restructuring its current financial mix to cope up with the accrued/anticipated losses caused by the diversification.

The sufficient availability of financial resources facilitates the recapitalization process as it helps to increasing the minimum paid-up capital of the individual bank. Therefore, banks can carry out their operation efficiently with their customers. Therefore, it helps the banks to avoid financial distress. Besides many aspects and task of the bank capital it acts as a buffer against the losses caused by many uncertainties; it's this aspect helps to avoid and protect the creditors and depositors from losses on the operating liquidation stage.

Graham (1996) focused that if the depositors are to grow the capital then this should be done alongside. Also that management disciplines have an effect on capital which in turn

helps in avoiding over-trading. Also Graham (1996) analyzed that capital management system has a significant impact on bank capital costs and profitability. Essential capital ratios assist in setting up the profit targets of bank, also capital adequacy impacts the bank cost of capital and other fund costs. Keeping other factors constant, high capital adequacy ratios affect the bank's competitive and growth potential. Taking into account the effect of essential capital ratios, if bank is not able to meet these thresholds then it affects its ability to perform its primary function of money creation.

Umoh (2004) analyzed that banks need capital for the same purpose as the other businesses do; with the difference that banks deal with other people's money. Nwankwo (1991) key elements of capital common in the banking system of all countries; are the market judgment of capital, banks profitability and bank's capacity to compete. Bank's capital plays a significant role in the economy, as the need for capital adequacy for liquidation is a significant issue globally. period between 1952-1975 the failure of most banks was undercapitalization; the Bank of International Settlement stresses capital is one significant constrain for assessing the tenacity and lapse of equity values depend for bank's net future earnings. He further argued that sufficient capital (total assets less the liabilities) is required to maintain the public confidence.

Abreu and Mendes (2010) stated a positive relation of loan ratio and profitability. Hassan & Bashir (2003) and Smith et al., (2003) found negative relation of high loan ratio with profits whereas the later study compares the impact of non-loan earning assets and heavy reliance on loan to the overall profitability of the banks. Vong (2005) conducted his study on analyzing the impact of loan-to-total asset ratio with profitability and found that because of the competitive credit market in interest rate the determinant of profitability gets limited.

Also lower interest rate spread along with high loan loss leads to decreased profits. In conclusion of the study, he found that higher return of assets for large banks than smaller ones. However, in case of inexorable bankruptcy Bras and Andrews (2003), observed that capital adequacy and equity capital assure the depositors, creditors and investors against the losses; these two variables (capital adequacy and equity capital) are into consideration by the credit rating agencies for analyzing bank's credit-worthiness. Soyemi et al., (2013), observed that banks play a pivotal role of financial mediator in the economy i.e., they get the finances from those having in excess and provide it those who are in shortage of funds; thus facilitating trade and capital formation.

A number of studies on literature have concluded that capital strength ratio result in better bank rating; indicating that banks with well-established capitalization tend to get better bank FSRs (Poon and Firth, 2005; Pasiouras & Kosmidou, 2007; Poon et al., 2012). In the recent periods, the difficulties and crisis faced by the banking sector can be well managed through appropriate capital management. Beatty and Lioa (2009) focused on how the commercial banks policy for capital management was applied that is they used to set-a-side a certain value as reserve to deal or cover any loan defaults to protect the bank's status in terms of prosperity and equity capital.

The key part of capital management is to gauge about the bank's prospect (Kanagaretnam et al., 2010); diminishment in assessment by earning management and administrative capital Van-Roy (2008) management of both pay and earnings volatility (Norden & Stoian, 2013); and maintaining a strategic distance from vacillations which happen in risk-weighted assets that thus influence the bank's risk and profitability (Norden & Stoian, 2013). Bouvatier and Lepetit (2008) arranged capital management into optional components (to cover the normal

misfortunes because of credit defaults and premium) and optional components (planned by bank's management to accomplish objectives).

Chisti et al., (2013) found that index administrative establishments' utilization is the measure of cash that act a shield for banks against excess leverage and bankruptcy. It's identified capital adequacy ratio (CAR) as a measure of monetary soundness of a bank to avoid any calamity. Kabir and Dey (2012) defined the bank's ratio in-terms of current liability to risk weighted assets. And studied that capital adequacy of commercial banks can be measured through net worth protection, return on equity, capital adequacy ratio etc. Chisti et al., (2013) stated that capital adequacy of a firm reflects banks capacity to expand its business and to cope up with any misfortune like bankruptcy; and also its ability to meet the time liabilities and risks including credit risk, liquidation risk, market risk etc.

Ataullah et al., (2004) conducted a similar study on business banks working in India and Pakistan in the midst of 1988-1998. It was observed that loan-based model, the effectiveness score was substantially higher than the income-based model. Banks of both nations need to enhance their efficiency. In Pakistan, the central bank (SBP) has the status of a commitment to direct banks' capitalization as a strategy for facilitating their dissolvability issues (Brash, 2001; Bernauer and Koubi, 2005). For Pakistan and India, Ataullah et al., (2004) conducted a correlational study on their respective commercial banks for the period 1988-1998; found that efficiency element in loan-based model is more than for income based model and concluded that both countries needed to improve their level of efficiency.

Chen et al., (2010) observed that total deposits are equivalent to time deposits, demand deposits and exchange deposits. Tynys (2012) studied that demand deposits are such placement funds allowing the investor to withdraw without informing within seven days of

deposit with no restriction on number of transaction for the investor; also known as checking deposit.

Manawaduge et al., (2011) made a review on capital structure and firm performance in developing business sector in Sri Lanka. Obligation capital in the presence of solid contention is a significant element of the SriLankan organization to get back there operations but has adverse impact on the performance of the firms. It is also reviewed by him concentrates on to decide the effect of gaining administration on firm execution in Pakistan.

It is inspected in the later reviews that substantial loans are not profitable for the banks when contrasted with the non-loan resources. The positive connection amongst size and profitability is found by (Pilloff & Rhoades 2002). Chirwa (2003) decided the connection between market structure and profitability of business banks in Malawi by using time series information amid 1970 and 1994. The long-run connection was found amongst profitability and concentration, capital asset proportion, loan asset proportion and request deposit proportion. Performing as financial intermediaries banks collect capital by owners' funds, share capital and through reserves. Unlike other manufacturing firm profits of banks are depending upon the ratio of assets and liability and also on the volatility and liquidity of the assets.

Banks are a major contributor to the development and change of the economy. To ensure the openness of funds at whatever time, in order to meet the needs and demands. It is essential to ensure that the bank is in a position to secure its financial position (Yudistira, 2003). This development as indicated by Soludo, (2005) will make the customer conviction by securing the deposits of record holders. In the course of his affirmation, Soludo (2005) clears up the essential for recapitalization. Capital base of banks with the motivation behind sustaining and joining the banking structure. The essential for the bank's switch ascends off

the beaten path banks acknowledge fundamental part in any country's financial development and progress.

Salim and Yadav (2012) observed that capital is needed for improving and structuring the financial resources along with enhancement of fund size of the organization. He found that such a deficiency was because of deterioration of assets, fraud and under provisioning however it can be controlled by the new funds towards working capital. Further he analyzed that higher the capital base a bank has, more it will have the capacity to handle the calamity. In short, capital adequacy affects the bank’s performance positively.

Naceur (2003) used data of Tunisia banks between the periods 1980-2000; providing statistics and decomposition of banks in terms if interest margin and profitability through regression analysis. In this research, he discovered a positive relation of loans on bank’s profitability and negative relation of size (along with its coefficients) on profitability; however the results of the study reflect only scale inefficiencies. Naceur and Goaied (2001) focused their study on the elements that influenced the Tunisian’s bank performance during 1980-1995. They examined that leading developing banks are the ones that are successful in getting best labor, capital productivity, greater number of deposit account in comparison to assets and strength in the equity required for bank’s performance. Chirwa (2003) observed the relation of market structure and its impact of the bank’s profitability amid 1970-1994; for commercial banks in Malawi through time series data and found the positive long-term relationship for the said variables of the research. Hassan & Bashir (2003) analyzed the elements of Islamic banks between the periods of 1993-1998 across Middle Eastern counties.

A large number of internal and external factors were taken into consideration for profitability and efficiencies forecast keeping the macro-economic environment, situation for financial markets constant to observe how the high leverage and heavy loans to asset ratio

influence the profitability. The bank's equity capital is the only source that protects it from the risk of insolvency because whenever a bank faces any calamity then the potential losses are written-off against the equity capital available.

H_{3a}: There is an association between capital management and firm performance.

H_{3b}: Borrowing from financial institution is negatively associated with firm performance.

2.9 Diversification and Firm Performance

The term 'diversification' has been defined in a variety of ways in different researches (Reed & Luffman, 1986). Therefore it may have different meanings under different situations according to the interests of the researchers. However there is a need for defining diversification in a way so that it can be managerially valid as well as theoretically sound. Diversification has been defined by some researchers in terms of the variety of products and services as well as markets (Berry, 2003). Whereas, in other researches, it is defined in terms of various means and methods that are available to a firm in order to achieve growth and eliminate the risk factors (Hoskisson and Hitt, 1990). In general terms, diversification means the expansion of the business lines operated by a firm, and this diversification may be related or unrelated (Reed & Luffman, 1986). However, leverage impacts negatively on the large firm's performance when the firm itself is not able to recognize the market opportunities available for its growth. This leads large firms to exhibit poor performance (Aivazian Ge & Qiu, 2005).

Denis et al., (2002) based their study on the Global Diversification Strategy. According to that study, this strategy is responsible for creating shareholder's value. Putting differently, performance of a firm is related to diversification and the strategy of diversification is related to the size of the firm. It was basically contended by Doukas and Kan (2006) that worldwide diversification has related costs that outweigh benefits and therefore this strategy is harmful for the firm as well as for the shareholder's wealth. Bandyopadhyay (2010) the

composition of credit portfolios was analyzed in India, for the public sector large and medium sized banks.

The major diversification strategy, according to Mulwa (2013), involves transferring a business operation from its existing base to a distinct separate business either through expansion or acquisition. For a firm to be considered diversified, it needs to conglomerate two or more of its activities into its operations, or else the firm can also move from one locality to another.

In another study, it was established that when a firm has two or more sources of financing available to gain funds from, it is considered to be diversified (Mulwa, 2013). The impact of diversification on the performance of firm has remained a focus of many researches since decades, but this concept is still subject to more study. The diversification impact has been analyzed with respect to profitability and risk. The literature indicates that the effect diversification exercises on a firm's performance are dependent upon many factors and various perspectives and strategies. Some studies found out that diversification of a firm with other related businesses decrease the shareholder's value and have a negative impact on the performance of the firm. Another important factor, that has been the subject of concern in various studies, is the management's decision concerning the extent to which a firm should diversify. Keeping aside the advantages of diversification, it is also important to realize the specific risks that are associated with it. Hence, it is observed that business diversification impacts firm's performance in one way or the other. In case of the banking sector, diversification is done functionally. This is achieved by combining activities such as security trading, commercial banking, insurance and other financial services etc. (Baele et al., 2007). Another option includes forming a conglomerate of banks through groups of banks or bank holding companies (Kahloul and Hallara, 2010). Ebrahim and Hasan (2008) defined the concept of

bank diversification as the strategy of expanding the banking operations into new financial services and products that must be different from the traditional intermediation activities. Thus, bank diversification is the conglomeration of a variety of banking activities, assets and liabilities and income sources in the banking operations. The banking sector has undergone various huge diversification levels in the entire world. These changes were initiated as a result of deregulation and liberalization of the banking industry since last two decades. The reason for this diversification is because of the competitive pressure that the non-bank institutions have exerted upon entering the banking industry. Another reason is the reducing cost efficiencies and resulting decrease in profit margins, which were previously linked with the intermediation business. For overcoming these pressures, banks have resolved to diversification strategies. This subject is the major concern to be addressed in this research. The literature regarding diversification in the banking sector has examined the advantages and disadvantages that are linked to adopting this kind of strategy for future growth. It has been observed that the positive outcome of the strategy of revenue diversification is generally dependent upon the utilization of economies of scale that is the consequence of the mutual production of various financial services (Teece et al., 1997). It is also connected with cross-selling of a variety of financial services as well as selling of traditional services based upon lending (Herring & Santomero, 1990). Other researchers have identified that the minimization of information asymmetry (Diamond, 1984; Stein, 2003), the development of capital markets internally (Stein, 2003) and the reduction in the agency costs associated with management decisions (Bailey & Stulz, 1990) are the factors that will consequently contribute in generating potential positive outcomes of diversification.

However, on the flip side, there are also some drawbacks of the impact of diversification on firm's performance that have been identified by various researchers (Mazur &

Zhang, 2015). Bailey & Stulz (1990) found that diversification can enhance agency related problems that may spur out between the shareholders and corporate insiders, whereas Rajan et al., (2000) established that the increase in the size along with scope of the activities of a bank generates another cost that is called as the 'cost of complexity'. This cost can overweigh the benefits that are expected to be achieved. Moreover, geographic diversity is also seen to enhance efficiency of diversification strategy (Berger et al., 1999).

It stabilizes the idiosyncratic risk (Diamond, 1984) as well as the reduction in agency costs along with boosting the corporate valuations. On the other hand, theories regarding the concept of corporate governance presented by Jensen and Meckling (1976) suggested that if it is found to be difficult by the small shareholders to control and monitor the corporations that are dispersed geographically, then there is a greater tendency for the corporate insiders to take advantage of diversification benefits. Moreover, whenever a bank goes for geographic expansions, higher risks are generated that the intermediaries are bound to forego the profit-able customers in order to manage and eliminate the risks (Salas & Saurina, 2002). Since the last century, it has been observed that Diversification is adopted as the most important strat-egy for many firms globally. According to Gomes and Livdan (2004), diversification allows the firms to discover markets and increase their growth opportunities.

Furthermore, firms use diversification strategy to minimize the risk (Montgomery, 1994).

In 2009, Daud et al. explained that the accounting measures on the performance of the firms are led by diversification and these measures of performance do really affect the leverage level of the firm. It was also observed by Lloyd & Jahera (1994) that a sample of large firms, who are well diversifies, shows a better performance. Therefore, researchers are well aware of the importance of the impact of diversification strategy on firm's performance

and thus, vast amount of literature is available in this regard. Another study by Chaneta (2000) also emphasized on the importance of diversification and concluded that those firms usually find this strategy attractive who decide to operate itself out of the growth and profit related opportunities.

It was stated by Mayer and Whittington (2003) that there is a negative relationship between the firm's size and leverage with the performance of the firm. Gassenheimer & Keep (1995) concluded that earlier it was found that the firm's size positively impacts the performance of the firms, as bigger the size easier it will be to achieve economies of scale and resultantly the Return on Assets (ROA) will be managed more effectively. It was also explained by Ahn et al., (2006) that while considering the capital structure of the large diversified firms, leverage is not a matter of concern because large firms has the capacity of growing in future.

The overall performance of a diversified firm is also affected by the risk to which such a firm is exposed. It states that if the size of a firm is large enough, it is able to utilize its slack resources more effectively and efficiently. It is additionally inspected that under foreign competition, the business firms can diversify effectively by leveraging their resources (Grossman, 2003; Bowen & Wiersema, 2005). Firms diversify their resources, the foreign competition will naturally diminishing and it will bring about diminishing the components that are in charge of making business related risk. Qian et al., (2010) clarified the association amongst leverage and risk relationship through clarifying foreign competition. When geographic diversification was adopted by multinational enterprises (MNE's), they had to face a fierce foreign competition so their performance went relatively poor. This is because in case

of geographic diversification, the leverage is decreased and consequently the firm's performance is affected. This is contrary to regional diversification where leverage as well as firm's performance is increased.

It is less demanding to deal with the risk portfolio for the diversified firms, yet this may prompt annihilation of the shareholder's wealth, in procedure of influencing the leverage of the firm (Chen et al., 2010). Higher leverage implies higher proportion of assets. This will connect with the association's capacity towards asset management amid the times of questionable financial marketability (Devereux & Yetman, 2010).

Global diversification strategy is explained by Denis et al., (2002) to contribute towards creating shareholder's value. Stating differently, it is established that diversification is seen to affect the performance. However it has been criticized by Doukas and Kan (2006), who stated that global diversification, damages the value of a firm and also has a negative impact on the shareholder's wealth. Thus, the costs outweigh the benefits. However, those firms who are greater in size can enjoy the benefits and advantages of global diversification, as they are able to achieve economies of scale and thus their costs are automatically reduced. Diversification has been one of the important subjects of concern in finance literature. Diversification strategy is also crucial for the banking industry and other financial institutions. Diversification by banks means diversifying the credit portfolio in order to enhance the performance of the banks and reduce the risk that its credit portfolio is exposed to. Therefore, we find a variety of studies in literature that focuses on determining the impact of diversification on bank's performance. One of the initial important studies conducted on finding the impact of diversification on bank's credit portfolio was undertaken by (Acharya et al., 2002). These researchers analyzed that in case of Italian banks; the returns are reduced by both in-

dustrial as well as sector-wise diversification and produced riskier loans. Another study conducted with regard to the German banks also concluded that diversification leads to a reduction in bank returns, even when the risk is controlled (Hayden et al., 2007). However just in a few cases, a positive relationship between the bank's performance and diversification was discovered, and this was for industrial diversification and high-risk banks. Kamp et al., 2007 examined the German banking sector to find that whether the banks go for diversification of their loan portfolios or emphasize on specific industries. The research found out that majority of the German banks goes for an increase in diversification of their loan portfolios.

David & Dionne (2005) studied this relationship for banks in Sweden, and investigated that how the Swedish banks manage their loan portfolios and use the diversification strategy. The concept of income diversification has been examined by Busch & Kick (2009) in the banking sector of Germany. Bank's diversification will affect the bank's own behavior of risk taking for competing with the non-diversified banks. Thus showing that diversification of a bank will impact the conditions of risk taking for the competitors as well. Hayden et al., (2007) concluded that asset diversification is positively associated with bank performance whereas loan diversification is associated negatively with bank performance. Similarly, Cotugno & Stefanelli (2012) established that product diversification has a positive association with bank's performance. Similar results were found for geographical diversification as well. In case of the US banks, diversification is seen to increase the capacity of banks and the banking system to lend, but it is not seen to increase the capacity to generate more profits and reduce the risks for the individual banks. For small community banks, the relationship was examined by Stiroh (2004). He explored the diversification benefits and the link between the increasing dependence on interest free income and also the instability of bank's

profits and revenues. The results of his study provided evidence that this transformation provides greater diversification benefits in the form of stable revenue and profit generation. For banks of *Canada,* this study was conducted by D'Souza and Lai (2004), who measured efficiency of the Big Five chartered banks of Canada and came up concluding that banks performance is seen to reduce over time in a systematic manner. Boeve et al., (2010) analyzed that the cooperative and saving banks of Germany have seen that if their monitoring ability increase with specific industry specialization, then it is found that sectorial specialization generally results in better monitoring quality, especially when it is regarded as a case for cooperative banks.

Geographic diversification is found to be linked with the company's value enhancement and risk reduction held by banks. Similarly, this kind of diversification is also connected or associated with increased distance between bank and its branches and the reduction in value and increase in risk for a firm (Deng & Elyasiani, 2008).

Tabak et al., (2011) examined the Brazilian sector of banking and assessed that the banks in Brazil diversify their credit portfolio and concentrate themselves. These choices to diversify impact their performance and risk exposure. They also found that the loan portfolios in the banking sector of Brazil are more concentrated as compared to those of the other developed countries e.g. Italy, US and Germany. Sectorial diversification was further analyzed by Bebczuk and Galindo (2008). Their research covered Argentine banking sector and they suggested that banks which are larger in size are more likely to benefit from diversification than smaller banks and this kind of diversification seems to be more benefiting for them during the recession time of business cycle.

Activities of securitization are also seen to be positively associated with loan portfolio diversification (Cabiles, 2012). Moreover, the variations in the status of business diversifications were studied by Berry-Stolzle et al., (2012). The results indicated risk considerations do not drive the extent of diversification. This means that business lines that are more volatile do not diversify significantly.

As shown by Barnes and Brown (2006), the risk, size, leverage and other related parts influence the diversification with the performance of the firm as demonstrated by concentrated the UK base affiliations. Qian et al., (2008) contend that the risk adverse supervisors have the fear of losing their occupations and in this way confine the enterprises from diversification. Past reviews on diversification and performance relationship clarified blended findings.

It is conclude by Qian et al., (2010) while considering the case of multinational enterprises (MNE's). Their study found out that although the size of the multinational firms of U.S is greater than other MNE's around the globe, yet when the U.S firms go for global diversification, their ROA is found to be considerably declined. Conversely, for moderately diversified MNE's, the similar relationship turns out to be positive for them.

The globally diversified businesses are usually exposed to low risk because they are in practice of effective portfolio management (Doukas & Kan, 2006). It is important for the management to analyze that whether it would be favorable for them to diversify their assets during the risky business situation, or not. Some theories are also presented by Carrieri et al., (2004) in this regard. Their theories explained the connection that risk factors have with performance of the firms, with respect to the diversification strategy. Moderate level of diversification has been observed to be less beneficial because of the investment's risk sensitivity (Matusik & Fitza, 2012). This kind of portfolio made for efficient management of resources

will make it possible for the firm to execute their actions smoothly and get considerable return from their investments. Thus diversification will enable the firm to allocate resources efficiently and manage the risks (Lehmann & Modest, 2005). The importance of diversification portfolios for risky asset management is also highlighted by (Chateauneuf and Lakhnati, 2007).

In geographic diversification, an increase in firm's performance will lead towards decreased leverage while in case of regional diversification better performance means more diversification by the firm. It is easier for the diversified firms to manage their risk portfolio but in this process of portfolio management, the shareholder's wealth might be put at stake (Chen et al., 2010). During times of unstable financial marketability, this situation will correlate with the firm's asset management (Devereux & Yetman, 2010).

The impact of revenue diversification was also examined on the performance of the banks by (Sanya & Wolfe, 2011). It was discovered by them that the insolvency risk is reduced by the firm's decision to diversify and consequently it results in profitability enhancement. This examination was observed for the banking sector of countries including France, Italy, United Kingdom, United States and Germany (Buch et al., 2010). In terms of revenue, for evaluating the extent to which diversification is implemented by a firm, income based measures are adopted. It was found that for diminishing overestimation risk, it is required to disaggregate the fee income according to the various kinds of activities (Brighi and Venturelli, 2014).

Arora and Kaur (2009) research analyzed the importance of various internal factors that determine diversification of banks in India. Does diversification having huge effect on the firm performance or not as for Pakistan? In this paper, our standard concentration of research is to discover the effect of diversification system on the affiliations who works in

Pakistan in light of market trickiness here, so we are penniless down whether diversification structure will perfect for Pakistani firms or not?

Menon and Subrmanian (2008) studied the relationship of diversification with risk factors. They established that there exists a correlation among the risk factors and diversification and those managers are responsible for reviewing this correlational impact on firm's performance. This will make them able to identify the level of risk they are exposed to while utilizing their resources effectively in different projects. This relationship between financial leverage and risk and argued that while managing the risk, excess of financial leverage is essential. Daud et al., (2009) portrayed that diversification will drives accounting measures of performance of the firms. In the interim, the market measures of performance are especially touchy to the level of leverage in the firm.

H_{4a}: There is a positive association between diversification and firm performance.

2.10 Firm size

The distribution of firm sizes inside the international's economies seems to be remarkably homogeneous and stable across different international locations in addition to across time. Different reviews Bottazzi et al., (2008); Dinlersoz and MacDonald (2009) found that appropriation is just worldwide in segments or firms of various ages - which may include an advancing procedure or a self-sorted out criticality framework in accordance with average advancements in the business life cycle. Albeit global contrasts additionally reflect contrasts in political frameworks and culture, local variety can highlight what really makes the rise of the dissemination of the power law and its specific frame.

Numerous researchers (Mandelbrot and Hudson, 2010) have speculated that free scale conveyance fundamentally represents to a sort of self-association; whether it shows a proce-

dure prompts to converge against a dispersion by a basic transition or something else; a procedure that most likely outcomes from advancing instruments in the hidden framework. In concurrence with the literature, exhibitors have been focused in the vicinity of 2.0 and 2.5 (with some deviant qualities) for the size appropriation of the firm measured regarding capital and gross profits and somewhat higher for the size of ventures in the quantity of representatives. Since the literature shows extend from 1.4 to 3.7, doubtlessly the slightest unexpected part, the least scope of examples is inadequate in China (Heinrich and Dai, 2016).

The size of the bank additionally positively influences the profitability of banks. In another review the positive connection between bank size and profitability was found by (Ramlall, 2009; Sufian, 2009). Advance, Demirguc-Kunt and Maksimovic (1999) broke down the expansion in profitability is specifically connected with the size of banks in light of the fact that bigger banks have more noteworthy access to the capital. In the wake of meeting the fundamental limits, the banks can use additional funds by advancing loans to the general population/organizations which have deficiency of funds. This practice expands the income as well as the profitability of particular banks. In addition, the specialists contended that size of bank is needy upon the economies of scale; subsequently the greater banks are more profitable than the littler banks. Be that as it may, the experimental outcomes recommend negative relationship between the size of bank and its profitability (Spathis et al., 2002; Kosmidou & Zopounidis, 2008). Biswas and Koufopoulos (2013) conducted a study and found that bigger the bank in terms of size of equity the more significant its role will be in the economy and thus the chances of default also decrease. Barnes and Brown (2006) were of the opinion that the size of a firm is strongly associated with the level of investment.

***H_{5a}*: There is a positive association between firm size and firm performance.**

***H_{5b}*: There is a negative association between total debts and firm performance.**

2.11 Literature Review in Context of Pakistan

Corporate governance is not a novel topic in Pakistani context. Number of studies has been done regarding corporate governance and firm performance. But all studies have been concluded regarding relationship of corporate governance and firm performance in manufacturing sector of Pakistan. Few studies have been done on banks but whole financial sector is neglected by researchers. Therefore current section of chapter three represents previous Pakistani studies regarding corporate governance, capital management, corporate diversification, earnings management and firm performance.

2.11.1 Corporate governance and Firm performance

Haider et al., (2015) led a review in Pakistan to test the connection among corporate governance practices and firm's financial performance in Shariah based (Islamic) bank's segment and identified a positive link between the corporate governance and financial performance of Shariah-based banking sectors. Burki and Ahmed (2007) led a review to look at the dynamic effects of the bank governance on the business banks with particular focus on their performance in Pakistan and identified financial changes enhance banking area performance.

Another review was directed by Rehmans, and Mangla (2010) on corporate governance and performance and found a huge part of corporate governance in the performance of banking division of Pakistan it is possible that it is conventional or Islamic. And, finished up there is an unmistakable sign that the nearness of Sharia board influences the return on equity and specialized proficiency of banking area. Sher et al., (2015) dissected and analyze the financial performance of MCB Bank Ltd and National Bank of Pakistan and discovered extensive change in financial performance by banks in both open and private segments. Fur-

thermore, the discoveries of the investigation of financial proclamations of both banks likewise demonstrate that MCB had used their benefits all the more productively and successfully when contrasted with NBP. Jizi et al. (2014) reports that corporate governance significantly influences the firm's performance in the presence of other control variables like audit quality and corporate social responsibility. It further says that a large independent board and more directors serve in the well interest of shareholders of the firm that is taken a fundamental pillar in board composition as a tool of corporate governance mechanism. Rehman and Ahmad, (2008) investigated the significant determinants of a bank segment by a customer in the banking industry of Pakistan. The discoveries of the review uncover that the most vital factors impacting customers' decision are customer administrations, accommodation, on live banking offices and over all bank conditions. Another review was done in Pakistan by Inam and Mukhtar (2014).

They attempted to examine the effect of corporate governance on deciding variables of performance in banking sector of Pakistan. They found that there is strong relationship of corporate governance and determinants of banking division performance. Aftereffects of this review demonstrated that banks with great corporate governance indicate better performance when contrasted with banks having less corporate governance. Abbas et al., (2013) conducted a research on percentage of ownership and firm performance in manufacturing sector of Pakistan. Authors concluded that larger percentage of ownership in the form of shares hold by shareholders have impact and stance on firm performance. Return on assets and return on equity were the determinants of performance in this study. Shareholders with certain figure of share are more influential in the decision making of organization. Despite the fact when percentage of shares goes beyond the 50 percent they loss their impact in corporation. Ghaffar (2014) explained the significance of corporate governance practices in Shariah-based banks

of Pakistan. Author also explicated the link between corporate governance practices and performance of Islamic banks. Therefore, it is concluded that the corporate governance structure possess significantly sound effect on profitability of Islamic banks operating in Pakistan. Sound governance structure influences the firm performance positively.

Chughtai and Tahir (2015) directed a review to examine the impacts of corporate governance on hierarchical performance by taking a contextual investigation of banking area of Pakistan. The general outcomes demonstrate that corporate governance has noteworthy connection with bank performance. Tariq et al., (2014) presumed that precise corporate governance rehearses in the banking segment have positive effect on the performance of the banks. They additionally found a positive effect of continuous holding of director's board meeting on the performance bank and support of non-executive director in leading body of director would build the proficiency of the board.

Ahmad et al., (2014) portrayed a positive effect of board size and board structure on the performance of the banks in Pakistan. They additionally clarified that banks with huge board size has negative effect on the performance of the banks in opposition to this interest of a greater amount of non-executive directors in the board have positive effect on the performance of the banks in Pakistan. Malik et al., (2014) inferred that the expansive size of the board in the banks expanded the performance of banks in Pakistan. They likewise presumed that bigger size of the board convey more to upgrade bank profitability.

2.11.2 Earning Management and Firm Performance

Safi and Shehzadi (2015) directed an exploration to analyze the effect of earnings management on the firm performance in Pakistan and found the earnings management has significant positive effect on ROA. The outcomes proposed that family dominated firms pervasive in Pakistan empower controlling shareholders checking the supervisors and limiting

them from utilizing out of line earnings management practices. Tabassum et al., (2013) inspected the effect of real earning management on financial performance in Pakistan and found that earnings management significantly and negatively influences financial performance. Naveed et al., (2012) inspected the effect of earnings management on the profitability of the non-financial recorded organizations of Pakistan. Outcomes demonstrated that the Earnings Management has negative effect on the profitability of the organizations. Another review by Anjum et al., (2012) gave prove that there is negative connection between earnings management and profitability in the case of Pakistan.

2.11.3 Capital Management and Financial Performance

Mujahid et al., (2014) conducted a review to analyze the effect of capital structure on bank performance and found a positive relationship between factors of capital structure and performance of banking industry. Another review by Akhtar et al., (2016) broke down the impact of capital structure on performance of banking sector of Pakistan and found that there are positive significant relationships amongst performance and capital structure. Zafar (2016) conducted look into on banking sectors that a permit by state bank of Pakistan demonstrate that there are positive relationship amongst performance and capital structure.

Saeed and Gull (2013) conducted an examination in Pakistan to discover the relationship between capital structure and performance of Pakistani banks and found a positive relationship between determinants of capital structure and performance of banking industry. Kausar et al., (2014) analyzed the effect of capital structure decision on firm performance of the Pakistan firms and found that there is a negative significant relationship between capital structure and firm performance. Sheik et al., (2017) conducted a comparison between Islamic and conventional banks of Pakistan to capital structure. Financial sector of Pakistan has its own standardizes policies to develop capital structure. These policies are quite different from

the non-financial sector. Therefore in this study authors have found the determinants of the selection of capital structure in the banking sector of Pakistan. In their comparative study, they concluded that in conventional banks earnings instability and firm size have positive but profitability has negative relationship with book leverage. On the other hand, profitability, bank size and tangibility affect capital structure decision of Islamic commercial banks. Profitability and substantial quality are negatively while bank size is positively identified with book leverage of the Islamic banks.

Sultan et al., (2016) researched the effect of bank relationship on the effect of capital structure and found that the capital structure is significantly affected by number of banking relationship a firm is maintaining. Researcher concluded the ideal number of banking relationship is expected to keep up a specific capital structure proportion and at last the performance as the interest rates in developing nations, for example, Pakistan are very higher than those of developed ones. Tahir et al., (2016) researched the real determinants of debt to equity blend in banking sector of Pakistan. Aftereffects of the review showed that different inward (bank particular) and outer (industry particular) factors are contributing towards a definitive determination of leverage decision of the organizations.

Kanwal and Nadeem (2013) examined the effect of macroeconomic factors on profitability of open constrained commercial banks in Pakistan. The exact discoveries showed a strong positive relationship of real interest rate with return on assets, return on equity and equity multiplier. Secondly, GDP is found to have an insignificant positive impact on return on assets; however an insignificant negative effect on return on equity and equity multiplier. By and large, the selected macroeconomic factors are found to negligibly affect earnings of commercial banks.

By using the penal data of 15 banks over the period of time 2001-2009, Mustafa et al., (2012) examined the effects of loan loss provisions on the performance of Pakistan. They also find the negative association between profitability and LLP. The positive relationship is found between advances and profitability and negative association is found between performance of banks and lack of political stability.

2.11.4 Corporate diversification and Firm performance

Sindhu et al., (2014) directed a research on Pakistani firms in a sample of 8 diversified and 8 undiversified recorded firms of KSE-100 index and found that there is no multicollinearity between the diversified and undiversified firm. Analyst concluded diversified firm are more risky than the undiversified firms; nonetheless, the diversified firms have higher use than undiversified key firms. Sajid et al., (2016) research the connection between corporate diversification and firm performance in a developing country. The discoveries of the review showed that an altered u-formed relationship existed as performance expanded up to a specific level because of the related diversification system and afterward it tumbled down definitely.

Iqbal et al., (2012) directed an examination on corporate diversification and firm performance and found that there is no positive connection amongst diversification and firms' performance. Analyst closed all firms are performing similarly whether they are exceedingly diversified firms, diversified firms or less diversified firms with respect to their return and risk dimensions.

Afza et al., (2008) explored the connection amongst diversification and a firm's financial performance in the case of Pakistan and found that the non-diversified firms performed superior to the diversified firms. Qureshi et al., (2012) broke down the way of relationship that exists amongst diversification and capital structure and additionally profitability in Pakistan

and found that at whatever point significant, the relationship is related with more prominent measure of obligation held by the firms.

2.12 Summary of Literature Review

In this chapter, firstly we discuss the concept of corporate governance and related literature review, through explaining that corporate governance is used as a legal mechanism in order to control and operate the organization internal matters (Bebchuk and Weisbach, 2010; Brown et al., 2011). Secondly, we discuss multiple factors like CEOs' duality, inside directors, audit committee size, board of directors, shareholders' rights, directors' compensation, stock ownership, independent directors, board size, board independence, non-executive directors and board of directors' meetings that are used a major indicator of the corporate governance (Brickley et al., 1997; Hermalin, 1998; Bhagat & Black, 1999; and Weisbach, 2003). However, some authors explain the role of CEO duality through arguing that CEO duality put adverse consequence especially on the operating performance when independent director's explanation to a little extent of a board's participation. Thirdly, we discuss the literature that are directly or indirectly link to our study like, Westphal and Zajac (2013) explore the corporate governance practices and provide the theoretical grounds parallel to practical solutions of the complex issues regarding CEOs, CEO duality and inside directors. Similarly, Mujahid et al., (2014) conducted a review to analyze the effect of capital structure on bank performance, Akhtar et al., (2016) broke down the impact of capital structure on performance of banking sector of Pakistan, Zafar (2016) conducted look into on banking sectors that a permit by state bank of Pakistan.

Saeed and Gull (2013) conducted an examination in Pakistan to discover the relationship between capital structure and performance of Pakistani banks, Kausar et al., (2014) analyzed the effect of capital structure decision on firm performance of the Pakistan firms.

However, Sheik et al., (2017) conducted a comparison between Islamic and conventional banks of Pakistan to capital structure. Fourthly, we explain the financial sector of Pakistan which have its own policies in order to develop capital structure, thus in this study, author try to explore the determinants of the selection of capital structure in Pakistani banking sector. They found the evidence that in conventional banks earnings instability and firm size have positive, but profitability has negative relationship with book leverage. In contrast, bank size, profitability and tangibility put significant impact on the capital structure of Islamic commercial banks. Similarly, Tahir et al., (2016) study the real determinants of debt to equity mixture especially in Pakistani banking sector, Kanwal and Nadeem (2013) explore the impact of macroeconomic factors on Pakistani commercial banks and they found strong positive relationship between real interest rate with return on equity, return on asset and equity multiplier and they also found insignificant positive impact of GDP on return on asset. Mustafa et al., (2012) investigate the effect of loan loss provision on performance of Pakistan and find negative relation between LLP and profitability and also found positive association among profitability and advances and on the other hand find negative relationship political stability and banking performance. However, Sajid et al., (2016) study the link between firm performance and corporate diversification in a developing countries and found altered u-formed association among them. In addition, Iqbal et al., (2012) examined the relationship between firm performance and corporate diversification and find no possitve association between firm performance and corporate diversification. Similarly, Afza et al., (2008) study the connection between firm financial performance and diversification in Pakistani firms and found non-diversified firm perform better as compared to diversified firms, Qureshi et al., (2012) further categorize the relationship among capital structure and diversification and find that significant relationship exists between them. . This chapter provide better understanding of various

dimensions of corporate governance and relevant theories. It also explains contextual studies relevant to corporate diversification and earnings management. It also highlights the effect of board structure/composition, CEO's duality and transparency and disclosure of information on firm's financial performance. Impact of sound earnings management system and corporate diversification on earnings management is also explained in this chapter.

The above extensive literature review is concluded here with defining research design of this study. This is an explanatory research which is conducted on the financial sector of Pakistan along with the purpose of testing hypothesis, built after this review of literature. Current study is including the data of years hence based on longitudinal time horizon.

CHAPTER 3

DATA AND METHODOLOGY

Chapter two examined historical background of corporate governance, capital management, earnings management, corporate diversification and firms' performance. Therefore, relevant theories have been reviewed to evident hypothesis developed among variables. Consequently, this chapter provides the intimations to statistical analysis for current study. Therefore chapter three discusses the material and methods to identifying significance of relationship among variables. These variables included corporate governance, earnings management, capital management, corporate diversification and firm performance.

Further control variables included borrowing from financial institution, firm size, total assets and total deposits. This is an empirical research study therefore based on positivistic research philosophy. Statistical analysis leads it toward objectivist epistemological study. Details of this explanatory research starts with the research design, relevant econometric methodology and finally key issues are discussed in this chapter. It is categorized into four main sections. First section explicates conceptualization and operational definitions of variables. Second section bases on sample unit, size of sample, data collection, sources and specifications of data. Econometric analysis is illustrated in section three. Last section describes ethical consideration regarding data.

3.1 Conceptualization and Operationalization of Variables

3.1.1 Corporate governance

Casal (2010) is defined corporate governance as combination of standards, rules, norms, policies, principles, processes and procedures that are applied by a firm. It's not dependent on size, nature, position and condition of firm. Therefore it's the responsibility of every firm to apply/use the corporate governance codes equitable and ethical manners.

Chen et al., (2007) used the corporate governance index as a proxy measure to analyze the effectiveness and efficiency of corporate governance structure. Authors built an index based on four elements of corporate governance including board size of directors, CEOs' duality, block shareholders' holding and managements' holdings. After thoroughly reviewing the literature about corporate governance index and firms' performance published in context of several economies, the study in hand also established corporate governance index consisted on seven indicators included CEOs' duality, board size, audit committee size, non-executive directors, independent directors, inside directors and board of directors meetings. As per author's knowledge the corporate governance index in the context of Pakistan is developed just for industrial sector by (Ali Shah et al., 2009).

3.1.1.1 CEOs Duality

CEO's duality occurs when Chairman of the board (COB) at the same time perform as a CEO of corporation (Pham et al., 2015). Chair position of the board of director also occupies duties of CEO is called CEO's duality (Rechner & Dalton, 1991).

3.1.1.2 Board Size

Number of directors accumulatively defines the size of board (Blair, 1995). Size and structure of board has significant impact on corporation's performance (Yermack, 1996; Huther, 1997; Eisenberg et al., 1998; Hermalin and Weisbach, 2003; Fernández & Arrondo,

2005). Despite of it numerous researchers are still confused about the relationship of board size and firm performance. Some of those studies are defining positive impact but other showing negative relationship (Rosenstein and Wyatt, 1997; Oxelheim and Randoy, 2003; Anderson and Reeb, 2004).

3.1.1.3 Audit Committee Size

Audit committee consisted on how many numbers of auditors called the audit size. Audit committee size alone has no sound impact on performance but qualification of professionals also does matter (DeAngelo, 1981).

3.1.1.4 Non-Executive Director

Non-Executives directors are not part of executive team but members of board of directors of the firm. They make sound monitoring and participate in strategic decision making. They get remuneration against their valuable experience (Goh & Gupta, 2016). Therefore in last two decades non-executive directors have captured paramount attention of regulators to strengthen the corporate governance structure (Cadbury, 1992; Greenbury, 1995; Johnson et al., 1996; Tyson, 2003; Council, 2010).

3.1.1.5 Independent Director

Member of board of directs of a firm is called independent director but he/she has no financial relationship with that entity except remuneration. He/she holds only position of director and maintains no other relationship with the company (Zhou et al., 2017). Independent directors are mostly adopted to settle down the agency problem (Adams et al., 2010).

3.1.1.6 Inside Director

A board of director of the company also performs duties as an employee of the organization is called the inside director. A large number of inside directors boost up the agency

problem but a small number of inside directors provide the information regarding internal activities and performance of firm (Fama & Jensen, 1983; Johnson et al., 1996; Higgs, 2003).

3.1.1.7 Board of Directors meetings

Sound monitoring and control mechanism is essential to eradicate agency problem. Board of directors is imperative to structure that kind of mechanism. Frequent board of directors meetings are required to structure the sound governance mechanism against agency problem, to maintain transparency and disclosure (Adams et al., 2010).

3.2.2 Earnings Management

An earnings management is defines as: manipulation of actual financial facts/performance of firm (Klein, 2002). On the other hand Kanagaretnam et al., (2005) explicated that earning management is actually to management the firm's financial performance, therefore true position of firm can be disclose in front of stakeholders. Earnings management can be divided into two categories. One is real earning management (factual picture of financial position of company and manipulated earnings managements (modified reports of finances of company to mislead stakeholders of organization (Healy & Wahlen, 1999). Accrual base earnings management divided into two categories 1) discretionary accruals 2) non-discretionary accruals. Therefore two stages analysis is used to calculate earnings management through loan loss provision. In first stage non-discretionary part of loan loss provisions is modeled but the discretionary part is considered of the value of residual. In second stage that residual value (that representing discretionary accruals in first stage) is taken as dependent variable (Oosterbosch, 2010).

Major drawback of two stages model is, it underestimates the value of coefficient of regression in second stage (Kanagaretnam et al., 2005). Single-stage regression analysis is using in this study to mitigate above mention problem, following Kanagaretnam et al.,

(2005). Three proxies are used to calculate non-discretionary component of loan loss provisions. There proxies are: first is Loan loss allowance or reserve at the beginning of the year, second is change in non-performing loans during the year and third and last is loan charge offs during the year

3.2.2.1 Non- Discretionary Accruals

Obligatory expenses have been recorded in accounting books but have yet to be realized are called non-discretionary accruals (Oosterbosch, 2010).

3.2.2.2 Discretionary Accruals

Non-Obligatory expenses have been recorded in accounting books but have yet to be realized are called discretionary accruals (Oosterbosch, 2010).

3.2.3 Capital Management

Sum of Primary capital (mandatory convertible debt, loan loss reserve, book value of equity and perpetual preferred stock), subordinated debt and limited life preferred stock is called total capital. Earlier to 1989, it was a condition for banks to maintain primary capital more than 5% of total capital and total assets. Banks can use manipulated loan loss provision to enhance capital adequacy ratio. Prior to 1989, Banks have used net charge off (NCO) and loan loss provision (LLP) for capital management (Scholes et al., 1990). In contrary Collins et al., (1995) stated that net charge off is an important component for capital management than loan loss provision in banks. Bank increases the regulatory capital by deducting net off charge from loan loss reserve. Securities gains/losses, loan loss provisions and net charge off are managed for capital adequacy ratio Moyer (1990). Similarly another study reported that capital management is dependent on loan loss provision (LLP) and net off charges (NOC) (Beatty et al., 1995).

$$CM_{i,t} = \lambda_0 + \lambda_1 CHALLR_{i,t} + \lambda_2 MTCAP_{i,t} + \lambda_3 EBTP_{i,t} + \lambda_4 \mathit{BASELL\text{-}II}_t + \lambda_5 BCFEES_{i,t} + \lambda_6 (MTCAP * BASELL\ II)_{i,t} + \lambda_7 (EBTP * BASELL\text{-}II)_{i,t} + \lambda_8 (MTCAP * BASEL\ II * FCRISIS)_{i,t} + \lambda_9 (EBTP * BASEL\ II * FCRISIS)_{i,t} + \lambda_{10} \mathit{FCRISIS}_t + u_{i,t}$$

CHALLR Change in Real-loan Losses

MTCAP Measure of Capital Adequacy Ratio

EBTP Earnings before Taxes and Provision

BASEL-II Dummy Variable with 1 for post-crisis period and (2008-2015) 0 for pre- crisis period (2005-2007)

BCFEES Ratio of commission fee equal to weighted total assets of the bank at time t

FCRISIS Dummy variable 1 for the crisis period 2008

MTCAP ∗ BASELL II

EBTP ∗ BASELL II

MTCAP ∗ BASEL II ∗ FCRISIS

EBTP ∗ BASEL II * FCRISIS

3.2.4 Corporate diversification

Expansion of business to maximize profits and minimize risk associated with business. It's a strategy of growth that leads to enter in a new industry/market (Volkov & Smith, 2015). Type of diversification defines the value of firm. Sometime global diversification increases the value of firm and international capital for operation. During constrained domestic credit conditions, globally diversifier firms can get advantage by utilizing capital acquired in less constrained capital markets (Bartram et al., 2010). Global diversification can be defined as "minimization of risk by investing cross the border". Risk can be minimized by investing perfectly uncorrelated economies. On the other hand, to invest in the same economy but in diversified industry is called industrial diversification. Purpose of industrial diversification is also same, to minimize the risk and to optimize firm value (Volkov & Smith, 2015). In this

study corporate diversification is analyzed through binary variables. Therefore for global diversification code is 1 otherwise 0.

3.2.5 Firm performance

Financial health and stability of a firm define the firm performance (Lin & Fu, 2017). Tobin's Q, return on assets (ROA) and return on equity (ROE) are used to represent the factual market performance, current profit and future expectation (Elyasiani & Jia, 2010).

3.2.5.1 ROA

Return on assets measures the profitability of the company respective to total assets (Lin & Fu, 2017). The formula of return on assets is:

$$ROA = \text{Net Profit}/\text{Total Assets}$$

3.2.5.2 ROE

Return on equity measures the profitability of the company respective to shareholders' equity (Lin & Fu, 2017). It calculates the amount of cash generated with each dollar of shareholders' equity. Return on equity is calculated with following formula:

$$ROE = \text{Net Profit}/\ \text{Shareholders' equity}$$

3.2.5.3 Tobin's Q

Tobin's Q ratio represents the firm value (Lin & Fu, 2017), it is a measure to know either the firm is overvalued or undervalued. Q ratio is calculated with following formula:

Tobin's Q ratio =

$$\frac{\text{Book value of total assets} + \text{Market value of equity} - \text{Book value of equity}}{\text{Book value of total assets}}$$

3.2.6 Firm Size

Firm size is one of significant factors that affect capital decision (Brigham & Houston, 2001). Investors expect higher rate of return from large firm but in actual small firms

take advantage than large one. Therefore rate of return of small firm are greater than large firms (Banz, 1981).

Table 3.1: Brief Overview of variables/indicators employed in recent studies

Corporate governance	
Indicators	**Sources**
CEO's Duality	Bhagat and Bolton (2008); Dey et al. (2011); OECD, 2013; Chapple et al. (2014); Pham et al. (2015); O' Shannassy and Leenders (2016); Zhou et al. (2017)
Board Size	Bhagat and Bolton (2008); Pham et al. (2015); Manzaneque et al. (2016); Zabri et al. (2016); Zhou et al. (2017)
Inside Directors	Bhagat and Bolton (2008); Pham et al. (2015); Manzaneque et al. (2016); O' Shannassy and Leenders (2016); Zhou et al. (2017)
Independent Directors	Bhagat and Bolton (2008); Pham et al. (2015); Manzaneque et al. (2016); Zabri et al. (2016); Zhou et al. (2017)
Non-Executive directors	Bhagat and Bolton (2008); Pham et al. (2015); Manzaneque et al. (2016); Zabri et al. (2016); Zhou et al. (2017)
Audit Committee Size	Bhagat and Bolton (2008); Pham et al. (2015); Gombola et al. (2016); Magnis and Iatridis (2017)
Earnings Management	
Discretionary accruals	Farooqi et al., (2014); Gombola et al. (2016); An et al., (2016); Shayan-Nia et al., (2017); Liu et al., (2017)
Non-discretionary accruals	Farooqi et al., (2014); Gombola et al., (2016); An et al., (2016); Shayan-Nia et al., (2017); Liu et al., (2017)
Corporate governance	
Global diversification	Hann et al., (2013); Farooqi et al., (2014); Volkov and Smith, (2015)
Local/industrial diversification	Hovakimian, 2011 ; Duchin & Sosyura, 2013 ; Farooqi et al., 2014; Volkov and Smith, (2015)
Capital management	
Gombola et al., (2016); Cummings and Durrani, (2016); An et al., (2016); Magnis and Iatridis, (2017)	
Firm Performance	
ROA	Bhagat and Bolton, (2008); Farooqi et al., (2014); Pham et al., (2015); Lin and Fu, (2017); Zhou et al., (2017)
ROE	Bhagat and Bolton, (2008); Farooqi et al., (2014); Pham et al., (2015)
Tobin's Q	Bhagat and Bolton, (2008); Farooqi et al., (2014); Pham et al., (2015); O'Shannassy and Leenders, (2016); Lin and Fu, (2017); Ducassy and Guyot, (2017)
Control Variables	
Firm size	Bhagat and Bolton, (2008); Farooqi et al., (2014); Pham et al., (2015); O'Shannassy and Leenders, (2016); Agustini, (2016); Lin

	and Fu, (2017); Heinrich and Dai, (2016); Gombola et al., (2016); Zhou et al., (2017)
Total debts	Bhagat and Bolton, (2008); Farooqi et al., (2014); Pham et al., (2015); Gombola et al., (2016)

3.3 Data and Sources

Data for research is collection of values for analysis to solve research problem. Researchers can collect primary data or secondary data to find the solution of problem. Primary data is first time collected information by researcher to solve research problem.in contrast secondary data is defined as “already collected information published for some other purpose than research. Wooldridge (2009) discussed two sources of secondary information. One is internal source of data that based on internal financial and non-financial statements of organization. Second one is external source of data, based on governmental institution or other organizations i.e. governmental website, Security and Exchange commission, Census, and so on. Gujarati (2003) explained that primary data of previous research could be taken as secondary data for another research. According to Wooldridge (2009) documentaries, books, regional publications, companies’ financial or non-financial statements, annual reports, government sources, media or commercial sources and periodicals are major sources of secondary data. Secondary source of data provides unbiased information because of verification from third party who has no concern with the results of current research. Other significant benefits of secondary data are time, cost and opportunity of cross-cultural research.

Four types of variables are used in this study i.e. Dependent variables (corporate governance, earnings management and capital management), dummy variable (corporate diversification), dependent variables (firm performance) and control variables (firm size and total debts). Data of corporate governance, earnings management and firms’ performance is

collected from the annual reports of selected firms. Annual reports of firm are obtained from different websites including companies' websites, website of Karachi stock exchange. Rests of them are collected from the head office of security and exchange commission of Pakistan. Some of data of earnings management, firm performance and capital management is collected from *Balance Sheet Analyses* of State Bank of Pakistan's publication.

3.3.1 Sample frame and sample selection

582 Total firms were listed on Karachi stock exchange till December 31, 2015. Non-financial sector is presenting 78.69% of the total and remaining 21.31% is based on financial sector of Pakistan. Major portion is covered by non-financial sector therefore most of researchers are using just non-financial sector. Hence, financial sector is neglected by the research regarding governance issues and diversification problems specifically. (Butt & Hasan, 2009; Javid and Iqbal, 2010; Yasser et al., 2011; khan et al., 2013) have contributed and have done research on governance issues with respect of firm performance in Pakistan.

Above mentioned studies are done on non-financial sector of Pakistan. Table 4.2 describes the total available population for study that constitutes the financial sector of Pakistan. In addition, selected sample consists of the financial firms that were listed in Karachi stock exchange. Therefore in this study financial sector (including investment banks, commercial banks, leasing companies, mudarbah companies and insurance companies) is taken as sample unit of research.

Table 3.2: Sample selection process

Part A: Industries of All Listed Firms in KSE	*Total Firms*	*Percentage of Firms (%)*
Automobile	27	4.64
Electrical & Engineering	27	4.64
Cement	22	3.78
Chemical	37	6.36
Food and Beverages	68	11.68
Oil and Gas	16	2.75
Textile	169	29.04
Household	29	4.98
Pharmaceutical	10	1.72
Financial	124	21.31
Misc.	53	9.11
Total population	**582**	**100**

Part B: Available sample unit		
Financial Sector Firms	**Total Sample**	*Percentage of Firms (%)*
Mutual funds	08	6.25
Commercial Banks	21	16.41
Modaraba Companies	29	22.66
Insurance Companies	32	25
Investment Companies	28	21.88
Leasing Companies	10	7.81
Total available firms for sample	**128**	**100**
Less Missing data firms	**(37)**	**28.91**
Total sample firms with required available	**91**	**71.09**

Part C: Selected sampled firm		
Financial Sector Firms	**No. of firms finally samples**	*Percentage of Firms (%)*
Mutual funds	06	6.60
Commercial Banks	20	21.98
Modaraba Companies	20	21.98
Insurance Companies	21	23.08
Investment Companies	18	19.79
Leasing Companies	06	6.59
Total sample firms	**91**	**100**

Non-financial sector is not part of sample of this study because of three foremost reasons. First, Considerable amount of research is done on non-financial sector of Pakistan.

Second, capital structure of financial sector is entirely from non-financial sector that affects the firm performance (Shah et al., 2009). It's presumed that governance structure of financial firms is well defined and regulated but in actual this sector is neglected. Therefore, only financial sector of Pakistan is only the focus of study. Hence third reason of excluding non-financial sector is to remain focused on financial sector. Companies included in sample units meet two major conditions. First, those firms must be listed on Karachi stock exchange from 2006 to 2015. Second, therefore those firms must have their annual reports of these consecutive ten years. Security and exchange commission of Pakistan issues the codes of Pakistani governance in 2002. Therefore these firms must be implementing codes of corporate governance from 2002 to onward. These characteristics are relevant to panel data.

Therefore, it will allow this study to continue with panel data research. Panel data has characteristics of both data studies including cross sectional data and time series data. Therefore, it also facilitates to analyze the behavioral models (Hsiao, 1985; Gujrati, 2003). As compared to time series and cross sectional data multicollinearity issue is decreased in panel data. In contrast degree of freedom is higher in panel data because of larger number of observation in comparison of others (Gujrati, 2003; Wooldridge, 2009). Wooldridge (2009) and Ntim et al., (2015) explicated that heterogeneity in individual variable can control in panel data analysis as compared to time series and cross sectional data. Panel data has been used by (Bhagat and Bolton, 2008; Ntim et al., 2015) to study corporate governance. According to literature a sample unit consisted on 91 listed firms is considerable enough for significant contribution in research because it presents dominating part of the financial sector. Final sample of study consisted on 18 investment companies, 20 commercial banks, 06 leasing companies, 21 insurance companies, 06 mutual funds and 20 mudarbah companies. Final sample of this study is different in three ways from the prior studies conducted in Pakistan.

First, this study is considering financial sector with corporate governance variables. Very few studies are done on non-financial sector including: (Shah *et al.*, 2009; Afzal and Sehrish, 2013; Tariq and Abbas, 2013). Second, this study is considering larger sample size as compared to other studies have been done on same sector.

3.4 Research Methodology/ Econometric Analysis

Defined procedural framework to conduct a research is called research methodology. Methodology of research refers to specific techniques of collecting and analyzing the facts to find a feasible solution of a problem. Leedy (1989) explicated that research methods define a way to collect facts for meaningful purpose to get valuable results. Research regarding business management provides the solution to managerial issues and also addresses the problems regarding business activities (Saunders et al., 2003). Business research provides the assistance regarding decision making process (Zikmund, 2003). Therefore research methods are to find the appropriate techniques to solve a particular problem. Research regarding corporate governance issue in financial sector of Pakistan is in an early stage. Therefore to define the research methods regarding this study requires careful considerations.

3.4.1 Methodology for Data Analysis

Due to various reasons the study employs quantitative data for the estimation in comparison to qualitative data or a combination of both types of data. The data set is a panel data set for the estimation and discussion which is a blend of time series and cross section data. The changes in characteristic are better studied in panel data.

3.4.1.1 Random Effect Model

A variance decomposition model which is statistically linear is known as random effect model. As, it is presented that eq. (1) along with eq. (2) is the error component model

and it is also termed as random effect model. In equation (2) β is the inefficient. If we put the above mentioned eq. (2) in eq. (1) then the resultant will be more generalized and it will be much efficient than earlier. Hence, the correlation between E_{it} and E_{du} produces the issue of inconsistency. The estimators are inefficient and inconsistent in panel data. Inefficiency is concealed through Generalized Least Square fixed effect model. In order to counter the in-consistency the above equation can be estimated and each parameter act as coefficient; names of them is random or a derivation of β_o is taken as the bench mark. Further, the mean value of the entire model is represented by β_o. The differences are the treatment in the α_i, now α_i is deterministic and hence the equation below is now termed as fixed effect model. α_i is now categorized as independent characteristic intercept that is fixed. It can occur as the variable changes over time but it does for all independent variables.

3.4.1.2 Fixed Effect Model

$$Y_{it} = \alpha_p + X_{it}\beta + \varepsilon_{it} \quad \text{.......................................} (1)$$

The above equation can be expressed as

$$Y_{it} = \Sigma\alpha_j A_{ij} + X_{it}\beta + \mu_{it} \quad \text{..............................} (2)$$

A_{ij} is the dummy variable for all individuals

and $\quad i=j$

In case, all assumptions of OLS get full-filled we then apply OLS

The OLS estimator can be assessed from equation mentioned below.

$$\overline{Y}_p = \hat{\alpha}_i + \overline{X}_i \hat{\beta} \quad \text{.................} (3)$$

$$\hat{\alpha}_i = \overline{Y} - \overline{X}\beta + X_{it}\hat{\beta}$$

Put 'α_i' in eq. 1

$Y_{it} = \overline{Y}_i - \overline{X}\hat{\beta} + X_{it}\hat{\beta} + \mu_{it}$ .... (5)

$Y_{it} - \overline{Y}_I + \hat{\beta}\ (X_{it} - \overline{X}i) + \mu_{it}$

$\hat{\beta}_{FE} = [\Sigma\ (Y)_{i=1}\ \Sigma\ (Y)_{t=1}][(X_{it} - \overline{X}_i)\ (X_{it} - \overline{X}_i)]]$ .... (6)

3.4.1.3 Generalized Methods of Moment

The consider data for present study is an unbalanced panel data set, to achieve the objective current study has proposed above mentioned models namely the fixed and random effect model. In addition, according to An et al., (2016) reported that endogeneity is a common issue in corporate governance study. In order to cater this problem the study uses Generalized Methods of Moment. In order to robust the above analysis done by employing fixed effect and random effect model, therefore, this study applies GMM model.

$E\ (f(W_t\ , Z_t\ , 0))=0$

Suppose we want to estimate POP mean $\Sigma(Y)_i=1Y_i$, moment condition can become

$E\ (Y_i - \mu) = o$ .... (7)

Sample counter part

$1/N\ \Sigma(Y)_{i=}1\quad (Y_i - \mu) = o$

1 unknown

1 moment condition

This is the case of exact identification and the obtained estimator is simple

$\Sigma Y_i / N = \mu / N$ .... (8)

$\hat{\eta} = \Sigma Y_i / N$

$E\ [f\ (W_t, Z_t, \theta)\ ] = 0$

W_t is set of endogenous expenses variable

Z_t is R vector of instruments

θ is a vector of parameter

W_t-------- Y, X

Z_t --------- Z

θ ---------- β

The sample counterpart can become

$g_t(\theta) = 1/T \quad \Sigma(Y)_t{=}1$ …………….. (9)

f (W_t , Z_t, θ) =0 is not used as yet we do not know whether there is exact identification, over or under identification.

If R< k estimation not possible

Be linear or non-linear

θ can be linear or non-linear function

$Y_t = \theta_{et=}1 + e_t$

$\theta = \Sigma\ (Y_t\ ETL1)\ /\ \Sigma\ ET\text{-}1$

$E_t = Y_t - \theta\ E_{t-1}$

Minimize the quadratic form as

$\text{Min } QT\ (\theta) = \min\ [g\ T(\theta)]\ w_t\ [g\ T(\theta)]$ …………….. (10)

w_t should be the definite symmetric matrix

Choose that value of θ that minimize QT form this θ and it becomes a GMM estimator.

$$ROA_{it} = \beta_1\ BFI_{it} + \beta_2\ CGI_{it} + \beta_3 CM_{it} + \beta_4\ LG_{it} + \beta_5 DIS_{it} + \beta_6 TA_{it} + \beta_7\ TD_t + \beta_8\ NPL_{it} + \beta_9\ ROA_{it-1} + \mu_i + \varepsilon_{it} \quad \text{….. (11a)}$$

$$ROA_{it} = \beta_1\ BFI_{it} + \beta_2\ CGI_{it} + \beta_3 CM_{it} + \beta_4\ LG_{it} + \beta_5 NDA_{it} + \beta_6 TA_{it} + \beta_7\ TD_t + \beta_8\ NPL_{it} + \beta_9\ ROA_{it-1} + \mu_i + \varepsilon_{it} \quad \text{………. (11b)}$$

Eq. (1) and (2) represents the GMM model equation, where ROA_{it} is Return on Assets and $\beta_{10}\ ROA_{it-1}$ denotes the lagged variable of dependent variable (Return on Assets) for controlling the endogeneity and a list of explanatory variables are included for GMM estimations. Here μ_{it} represents the unobserved time variant firm-effect and ε_{it} is the error terms which is the sum of (μ_i is firm-specific effect and it e_{it} is error term).

Similarly, we have equation for ROE,

$$ROE_{it} = \alpha_1\ BFI_{it} + \alpha_2\ CGI_{it} + \alpha_3 CM_{it} + \alpha_4\ LG_{it} + \ \alpha_5 DIS_{it} + \alpha_6 TA_{it} + \alpha_7\ TD_{it} + \alpha_8\ NPL_{it} + \alpha_9\ ROE_{it-1} + \ \mu_i + \varepsilon_{it} \text{ ..... (12a)}$$

$$ROE_{it} = \alpha_1\ BFI_{it} + \alpha_2\ CGI_{it} + \alpha_3 CM_{it} + \alpha_4\ LG_{it} + \alpha_5 NDA_{it} + \alpha_6 TA_{it} + \alpha_7\ TD_{t} + \alpha_8\ NPL_{it} + \alpha_9\ ROE_{it-1} + \ \mu_i + \ \varepsilon_{it} \text{ .... (12b)}$$

For Tobin's Q,

$$TQ_{it} = \gamma_1\ BFI_{it} + \gamma_2\ CGI_{it} + \gamma_3 CM_{it} + \gamma_4\ LG_{it} + \ \gamma_5 DIS_{it} + \gamma_6 TA_{it} + \gamma_7\ TD_{t} + \gamma_8\ NPL_{it} + \gamma_9\ TQ_{it-1} + \ \mu_i + \ \varepsilon_{it} \text{ .... (13a)}$$

$$TQ_{it} = \gamma_1\ BFI_{it} + \gamma_2\ CGI_{it} + \gamma_3 CM_{it} + \gamma_4\ LG_{it} + \gamma_5 NDA_{it} + \gamma_6 TA_{it} + \gamma_7 TD_{t} + \gamma_8 NPL_{it} + \gamma_9\ TQ_{it-1} + \ \mu_i + \ \varepsilon_{it} \text{ .... (13b)}$$

Where,

ROA_{it-1} = Lagged-value of Return on Assets

ROE_{it-1} = Lagged-value of Return on Equity

TQ_{it-1} = Lagged-value of Tobin's Q

BFI =Borrowings from Financial Institutions

CGI = Corporate Governance Index

CM = Capital Management

LG = Used for Diversification

DIS = Discretionary Accruals

NDA = Nondiscretionary Accruals

TA = Total Assets

TD = Total Debts

NPL = Non-performing Loans

3.4.1.4 Difference in Difference Approach

Difference in difference (DID) is the most traditional and successful quasi experimental research design (Bertrand, Duflo and Mullainathan, 2004; Angrist and Pischke, 2008). DID method is specifically intended to overcome the possible uncertainties of single difference studies. The basic intuition of DID approach is to estimate the change in outcomes of treatment vs control group over two time periods, before and after the treatment. In general, control group indicates what will happen to the treatment group in the truancy of any treatment. Following regression equation will be helpful to understand single difference approach before and after treatment effect

$$y_{(i,t)} = \alpha + \beta d_t + u_{(i,t)} \quad \textbf{(1)}$$

In above equation $y_{(i,t)}$ is indication outcomes for i observations (i = N) at time t (0 or 1) and d is dummy variable that will be equal to one if (t = 1) and will be zero if (t = 0), while β denoted casual effects of treatment and u is an error term in the equation.

The essence of DID approach illustrates which comparisons will generate estimation, what contributes to bias and how to evaluate the design. Moreover, this approach capture other related factors by examining the results of control group that does not undergo any treatment, but it is expected to be influenced by other factors. Following equation is used to estimate DID

$$y_{(i,t)}^{z} = \alpha + \alpha_1 d_t + \alpha^1 d^z + \beta d_t^z + u_{(i,t)}^{z} \quad \textbf{(2)}$$

In above mentioned equation z is indicating two groups (z = 1 or z = 0) for treatment and control group, respectively. While d^z is dummy variable will be equal to one if z = 1 and zero if z = 0 and d_t^z is dummy variable equal to one if both z = 1 and t = 1, otherwise it will be equal to zero. β represents casual effects of treatment and is obtained by estimating DID which is equal to change in average outcomes of treatment group minus change in average outcomes of control group. In equation (2) α_1 parameter depicts how these two groups are affected over the time in the absence of any treatment. More α^1 parameter captures every time-invariant disparity in the outcomes among control and treatment groups

CHAPTER 4

RESULTS AND DISCUSSION

This chapter converse the results of the descriptive and econometric models used in the study. Specifically, this chapter focuses on two types of analysis and both will subsequently achieve two objectives each. First, it talks about the descriptive statistics that involves the mean, standard deviation, skewness and Kurtosis of all the variables considered in the study. It is to ensure the normal distribution of the data. Secondly, the study is analyzes the correlation among considered variables. It helps us to ensure the issue of multicollinearity, if there is multicollinearity among the variables we may opt different approaches to ensure that such issue does not hurt the econometric analysis. The econometric analysis is then carried in two steps. In step 1, panel regression is employed with fixed effect and random effect. Later, Hausman test is analyzed to investigate either fixed effect model is preferred or the random effect model. In step 2, generalized method of moment (GMM) is applied to verify the results and see what extent firm's specific characteristics are sensitive to the estimates results.

4.1 Descriptive Statistics & Correlation

Table 01 and table 02 shows the results of the descriptive statistics of Independent variables (Corporate governance index, Earnings management which is measured through

discretionary and non-discretionary accrual and corporate diversification) and control variables (Borrowings from financial institution, Capital management, Non-performing loan, Total debt and Total assets).

Table 4.1: Descriptive Statistics of Independent and Control Variables

	BFI	CGI	CM	LG	DIS	NDA	TA	TD	NPL
Mean	4.0685	2.1940	0.2882	0.5371	0.3910	0.6089	5.2696	5.1470	3.3769
Median	4.1800	2.2000	0.2476	1.0000	0.3411	0.6588	5.3710	5.2150	3.5555
Max.	6.1210	3.4500	0.9885	1.0000	0.9994	0.9997	6.2595	6.3306	4.7023
Min.	0.0000	0.0000	0.0018	0.0000	0.0002	0.0005	2.7536	2.1061	0.0000
Std. Dev.	0.7334	0.4521	0.2232	0.4988	0.2755	0.2755	0.5466	0.5765	0.7536
Skewness	-1.2662	-0.8380	0.9555	-0.1490	0.5161	-0.5161	-0.9931	-1.1577	-1.3279
J-B Test	43.915	38.1029	8.0513	7.4672	2.9183	2.9183	16.3756	33.5819	24.5977

The table presented above provides the descriptive statistics of considered variables. Mean value of Borrowing from financial institution is 4.06 which is very close to median value of 4.18 and not far from the maximum value of 6.12. In addition, it contains a smaller value of 0.00 which represents that sample contains a firm that has no borrowing from other financial institutions. In financial sector, borrowing from other institutions is common but financial firms with excess firms do not borrow in order to avoid the cost of debt. The maximum and minimum value of corporate governance index has the highest difference compared to other variables i.e. 3.45 with a minimum value of 0.00. It presents that our sample has diversified firms as reflected by standard deviation value of 0.45. As, the larger banks strictly follow the state bank guidelines (prudential regulations) which reflects a closed ended banking system of Pakistan. In addition, few Modaraba companies really fail to follow the corporate governance system as depicted by the minimum value of 0.0. In addition, the data of variables is mostly negatively skewed other than capital management, discretionary accrual

and corporate diversification. The kurtosis value shows the height of the distribution and overall results of the independent variables shows that the data is normally distributed.

Table 4.2: Descriptive Statistics of Dependent Variables

	ROA	ROE	TQ
Mean	0.004358	0.006119	0.280479
Median	0.004000	0.011000	0.306468
Max.	0.037000	0.050000	0.912015
Min.	-0.071000	-0.269000	0.338483
Std. Dev.	0.016387	0.033353	0.210109
Skewness	-1.618269	-4.849916	-0.948815
Observations	1001	1001	1001

The above table presents the descriptive statistics of dependent variable that is return on assets, return on equity (accounting performance) and Tobin's Q (market performance) which are the proxies to measure firm performance. It shows the mean and median value of ROA is quiet close. In addition, it is observed that minimum value of ROA is negative -0.071 that shows the sample contains a firm with a negative return on assets. A negative ROA further reflects the firms to be in financial distress. The return on equity also presents satisfactory results and shows the normal distribution of data having a maximum value of 0.05 and minimum value of -0.269. The data of Tobin's Q is normally distributed with close mean and median values of 0.280 and 0.306 respectively. The data of our variables i.e. ROA, ROE and Tobin's Q varies around its mean with a minimum deviation of 0.016, 0.033 and 0.210 respectively.

In addition, skewness of the data represents that all of our variables are negatively skewed. Moreover, the kurtosis values in descriptive statistics shows height of the bell curve. Overall, the values of descriptive statistics show that the data is normally distributed.

Table 4.3: Correlation Matrix

	BFI	CGI	CM	DIS	NDA	LG	NPL	TA	TD
BFI	1.000								
CGI	0.366	1.000							
CM	-0.154	-0.056	1.000						
DIS	-0.073	-0.065	0.169	1.000					
NDA	0.073	0.065	-0.169	-1.000	1.000				
LG	0.068	-0.059	-0.184	-0.013	0.013	1.000			
NPL	0.228	0.048	-0.143	-0.102	0.102	0.144	1.000		
TA	0.325	0.047	-0.333	-0.096	0.096	0.386	0.593	1.000	
TD	0.320	0.043	-0.326	-0.100	0.100	0.384	0.568	0.092	1.000

The correlation analysis shows that borrowing from financial institutions has weak positive relationship with most of the variables because these variables are not directly affected by borrowings except from total debt and total assets.The funds generated through debt financing will be utilized to acquire the resources of the business organization represented by assets. Therefore, the increased debt financing will increase the assets of business organization resulting in positive relationship. Moreover, the assets can be placed as collateral to acquire the secured loans resulting in higher debt financing. Return on Equity (-0.0094), Tobin's Q (-0.911) and Capital Management (-0.154) has a weak but negative relationship with Borrowing. The company has to bear fixed cost in terms of interest expense which reduces the profitability resulting in negative relationship. Moreover, the excessive debt financing raises the default risk which adversely affect the profitability of firms by reducing the operating performance.

Likewise, the trade-off theory of capital structure proposes that the choice of debt or equity financing depends upon their cost of financing i.e., if the cost of debt is more than cost of equity, companies will prefer to acquire equity financing and vice versa. Therefore, the increase in debt financing would decrease its return on equity. In addition to it, the return on equity and the capital management would also decrease. Data is negatively skewed with kurtosis greater than zero. The correlation result shows us that Corporate Governess Index has very weak and negative association with most of the variables. But the variables such as total assets (0.047) and borrowings from financial institutions (0.336) are positively related with corporate governance index, it can be due to the fact that strong corporate governance mechanism restricts the managers from excessive borrowing or under-utilization of resources. Therefore, the financial institutions easily grant loans to such firms.

Capital management, earnings management and financial performance (ROA and ROE) have a very weak but negative relationship with corporate governess index. It can be explained as the changes in corporate governance index have a negative effect on company. Better governance mechanism constrains the managers from practicing earnings management. The financial performance of firm decreases when the managers are restricted from managing the earnings upward.

Data is negatively skewed with kurtosis value more than zero. Leptokurtic distribution is the one which has the heavier tails. The correlation results show us that Capital Management has weak negative relationship with most of the variables because when return on assets (ROA) and return on equity (ROE) decreases the need for better capital management increases -0.216 and -0.215 respectively. Discretionary Accruals and Non-Performing Loans (NPL's) have negative relationship with Capital Management. The results suggest that increase in discretionary accruals and NPL's shows the inefficient management of capital. Data is negatively skewed with kurtosis greater than zero. The distribution has heavier tails and is called a leptokurtic distribution. The correlation result shows the weak relationship between discretionary part of earnings management and most of the variables because with the increase in DIS, Borrowing from Financial Institutions, ROE and need for managing the earnings decreases. But the relationship with the Non-Discretionary Accruals is strongly negatively correlated because when the DIS increases the ratio of NDA automatically decreases. Non-discretionary accruals has a weak positive relationship with the Capital Management because with the increase in Accruals the need of Capital Management increases (-0.169).

The correlation results show us Non-Discretionary Accruals has very weak positive relationship with most of the variables because with the increase in NDA, Borrowing from

Financial Institutions, ROE also increases significantly. But the relationship with the Discretionary Accruals is strongly negatively correlated because when the NDA increases the ratio of DIS automatically decreases. Non-Discretionary Accruals has a weak negative relationship with the Capital Management because with the increase in Non-Discretionary Accruals the need of Capital Management decreases. Skewness shows the negative tails of the data where the value of kurtosis is more than zero. The distribution possess a heavier tails and it is said to be a leptokurtic distribution.

Non-performing Loans have a negative relationship with ROA (-0.098), ROE (-0.114), TQ (-0.054). The increase in NPL's decreases the firm profitability measured in terms of ROA, ROE and Tobin's Q. Total Debt, Total Assets and BFI has a strong positive relationship with the NPL. When the firms are more debt dependent the NPL's increases because of the increase in credit risk. Moreover, the increased lending by the financial institutions creates the problem of recovery leading to increase in NPL's.

The local and global diversification (LG) has positive association with profitability computed by accounting based measures such as ROA and ROE. The results suggest that the diversification increases the profitability of firms. The primary reason for the diversification is to reduce the risk exposure of firms which leads to the increase in profitability. In addition, the diversification has also a weak positive association with Tobin's Q (0.010). The probable reason is that the diversified firms are able to reduce their risk which makes the management complacent and it results in reduction of their profitability. Such type of firms becomes less lucrative for the investors; hence the revenue & capital gain drop off. The diversification helps the business organizations to improve the return on investment because of the fact that the company is better off in managing its capital management. When the company has better

bargaining power it can enforce the early collection from customers and defer the payables which would strengthen their capital management and raise the profitability.

Total Debt has a strong positive relationship with all of the variables except from TQ and Capital management. This positive relationship is self-explanatory i.e., the increase in borrowings from financial institutions raises the debt financing resulting in positive association between them. Similarly, the positive association between the total debts and NPL's (0.568) is due to the fact that excessive debt financing sometimes lead to the inefficient collection of funds from customers. On the other side the negative association between the total debts and discretionary accruals is based on the control and monitoring hypothesis that increase in debt financing results in the debt covenants would restrict the managers from misappropriation of firm resources. Further, the negative association of total debts and capital management (-0.326) suggest that the inappropriate financing mix adversely affects the management of funds. The increase in leverage due to excessive debt financing makes the firms more risky. These firms become less attractive for the investors and lenders causing the shortage of funds which raises the cost of capital.

Total Assets have a strong positive relationship with most of the variables because with the increase in Total Assets the resources of business organizations increase. The literature suggests that the firms with higher resources outperform the smaller firms. The efficient utilization of these financial and real resources increases the revenue and profitability of firms. In addition to it, the available funds are reinvested in the business organizations causing the ratio of Debt or Total Debt to decrease significantly. Data is negatively skewed with kurtosis is more than zero.

Return on Assets has a positive relationship with most of the variables because with the increase in ROA, the performance measures also increases. It has negative relationship

with all types of loans because with the increase in revenue helps the firms to pay off their loans. Data is negatively skewed with kurtosis is greater than zero. The results present the distribution of a heavier tails and it is termed a leptokurtic distribution. Return on Equity has a strong positive relationship with all sorts of returns because as the profits increases all sorts of return increases. It has negative relationship with all types of loans and BFI. Negative relationship may be result of decrease in the number of shares outstanding.

Return on Equity has a strong positive relationship with diversification (LG) and Total assets (TA) 0.322 and 0.250 respectively. The results suggest that the increased diversification enhances the profitability of equity investors. Similarly, higher assets are held by the business organization, greater is their risk appetite and borrowing ability. On the other hand, the negative association of ROE with borrowings from financial institutions suggests that the cost of debt financing reduces the profitability of shareholders. Likewise, the inverse relationship of ROE and NPL represents the decrease in investor return because of the inefficient collection policy. Tobin's Q has a weak positive association with CGI and LG. The results indicate that the better governance mechanism improves the firm performance. Moreover, the diversified firms are better off in terms of profitability as compared to non-diversified firms. Likewise, Tobin's Q is positively related with Capital management because of the fact that increase in capital management is directly associated with better performance.

4.2 Empirical Results of Fixed Effect Model

The analysis is carried in two steps. In step 1 panel regression is employed with fixed effect. In step 2 generalized method of moment (GMM) is applied to verify the results. As, the hausman test supports the results of fixed effect model which are presented in GMM tables. Therefore, the study discusses the fixed effect model and compares the results with generalized method of movement.

4.2.1 Corporate Governance Index and Earnings Management on Firm Performance (ROA)

The below mentioned table presents the result of the relationship between firm financial performance measured through return on asset (ROA), corporate governance index (CGI), discretionary accruals (DIS) and control variables.

Table 4.4: Impact of C.G.I and EM on (ROA)

Panel Regression Analysis		
	Fixed Effect Model	Fixed Effect Model
Constant	0.009 (0.290)	0.011 (0.214)
BFI	0.000 (0.780)	0.000 (0.839)
CM	-0.001 (0.594)	-0.001 (0.547)
CGI	-0.002 (0.038)	-0.002 (0.026)
LG	-0.005 (0.000)	-0.005 (0.071)
DIS	0.001 (0.203)	
NDA		-0.001 (0.233)
NPL	-0.005 (0.000)	-0.005 (0.000)
TA (SIZE)	0.025 (0.010)	0.025 (0.004)
T.D	-0.022 (0.013)	-0.022 (0.006)
R-sq.	0.459	0.459
Adjusted R-sq.	0.399	0.399
F-statistic	7.589	7.589
Prob. (F-stats)	0.000	0.000
·Sq. (p-value)	100.43 (0.00)	

The Fixed Effect Model includes ROA as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

The results of fixed effect model find insignificant impact of borrowing from financial institutions (BFI) on firm's financial performance 0.00 (0.78) for both discretionary and non-discretionary accruals 0.00 (0.83) which are used as the proxy for the earnings management. This shows that the borrowing decisions do not affect the firm financial performance of financial companies in Pakistan. Financial companies fall under the umbrella of service industry which involves exchange of finance among one and another. The corporate governance index (CGI) yields an inverse but significant impact on firm accounting performance -0.002 (0.038) and -0.002 (0.026) respectively. This suggests that a corporate governance regulation in emerging market like Pakistan have been perceived in two ways one is firm's accounting performance and the other is firm's market performance, the results show that strong governance yield negative impact on firm's accounting performance because strong governance measures leave less room for the directors to play in principle-agent conflict. Moreover, our first objective the results are in-line with the studies of Linck et al. (2009), Salim et al. (2016) that a strong corporate governance structure can yield high performance. Further, the analysis reports 0.001 (0.203) which are a positive and insignificant association between firm financial performance (ROA) and discretionary accruals (DIS). The capital management (CM) has negative and insignificant impact on return on asset -0.001 (0.594).

The study also reveals that firm's diversification strategy (LG), whether local or otherwise has negative but significant impact of -0.005 on firm's financial performance. This result indicates that ownership dispersion has negative impact on the financial performance of listed companies. This might be due to the family ownership concentration and family

involvement may influence the financial performance of corporations adversely. These family members may involve in policy formulations and implementations leading to moral hazard for outside investors.

The non-performing loans (NPL) have negative and significant impact of -0.005 (0.00) on the return on asset, which rejects H_2 and these results are in line with Messai & Jouini, (2013) that also reports negative and significant association among non-performing loans and firm performance (ROA). This signifies the evidence that the greater Non-performing loan, the lower the profit of financial institutions, specifically in the financial sector. The reason is quite obvious that if the banks are inefficient in collection of loans, their financial performance will be deteriorated.

The size of financial institution has positive and statistically significant impact on the return asset because the larger banks have greater financial resources. Higher resources enable the banks to raise the advances which increase the financial performance. The negative and significant association between total debts (TD) -0.022 of the financial institutions and performance (ROA) is observed which accepts H_5 of this study. The negative and significant coefficient of total debts is inconsistent with the prediction of capital structure theory, which states that high leverage enhances the firm's performance due to the interest tax-shield (Rajan & Zingales, 1998). But the negative significant coefficient of total loans support the view that higher debt financing increases the financial burden, cost of capital and reduces the ability to enhance growth and investment chances (Jensen 1986; Bevan & Danbolt 2004).

The results of non-discretionary accruals (earnings management) with corporate governance yield quiet similar results on firm performance (ROA) i.e., if governance mechanism in an organization is strong it reduce the opportunities for finance managers to manipulate earnings. In addition, borrowings from financial institutions and capital management have

insignificant effect. This result suggests retaining the results of fixed effect models. From the table presented above, it is seen that corporate diversification, non-performing loans, size of the firm and total debts have a significant impact on firm performance (ROA). While discussing the signs of the co-efficient, it is presented that total debts and non-performing loans have negative association with firm's accounting performance (ROA). The increased level of debt financing may also increase the probability of non-performing loans which reduces the financial performance.

4.2.2 Corporate Gov. Index (CGI), Earnings Management (EM) on Firm Performance (ROE)

Table 4.5 presents the result of relationship between firm performance that is measured through return on equity (ROE) with corporate governance index (CGI), discretionary accruals (DIS) and control variables that includes; Borrowings from financial institutions (BFI), Size of the firm (TA), Total debts (TD) and Capital Management (CM).

Table 4.5: ***Impact of C.G.I and EM on (ROE)***

Panel Regression Analysis		
	Fixed Effect Model (DA)	Fixed Effect Model (NDA)
Constant	-0.078 (0.000)	-0.083 (0.000)
BFI	-0.001 (0.077)	-0.001 (0.077)
CGI	-0.000 (0.085)	-0.000 (0.085)
CM	-0.001 (0.841)	-0.001 (0.841)
DIS	-0.004 (0.213)	-
NDA	-	0.004 (0.213)
LG	0.007 (0.017)	0.007 (0.017)
NPL	-0.014 (0.000)	-0.014 (0.000)
TA (SIZE)	0.076 (0.000)	0.076 (0.000)
TD	-0.051 (0.000)	-0.051 (0.000)
R-sq.	0.360	0.360
Adj. R-sq.	0.290	0.290
F-stats	5.149	5.149
Prob. (F-stats)	0.000	0.000
·Sq. (p-value)	46.5 (0.00)	

The Fixed Effect Model includes ROE as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

The regression analysis finds insignificant (0.841) impact of capital management on return on equity which is an indicator of firm's performance. This shows capital management does not ascertain an impact on firm's performance (ROE) as explained by (Bhatia & Srivastava, 2016). Moreover, our results are not in line with Charitou et al. (2010) which explain that the top management which governs the institutions takes concern of the efficient utilization of the firm's capital. In case of the financial sector of Pakistan, it shows otherwise because of the strong prudential regulations by the state bank of Pakistan for all banking sector and non-banking financial sector as it leaves less room for the top executives. The discretionary accruals of earnings management do not have a significant impact (0.213) on the financial

performance of the financial sector of Pakistan. Due to the strict banking regulations imposed by the State bank of Pakistan, the opportunistic behavior of the managers has been restricted resulting in insignificant association. Further, it is also important to note that banking sector of Pakistan is a closed banking system as the governor of state bank of Pakistan reports to the parliament instead of the finance minister of the country.

In addition, the outcomes of this study show negative and insignificant effect of CGI on firm performance which are in-line with the findings of (Mustafa & Hamdallah, 2012), who has considered Lebanon as a sample of study. The revised code of corporate governance has focused on the empowerment and independence of board of directors to enhance the financial performance of corporations. These governance changes are a shift due to government policies, local and global financial changes (Berger et al., 2005).

A swift governance structure can forecast such changes and make policies accordingly. Borrowing from financial institutions has a negative and weak significant impact -0.001 (0.077) on return on equity which shows that equity holders does not perceive is to be good if the financial institution go for borrowing, as it would raise the amount of net expenses and directly exerts impact on the profitability of the firm. In addition, equity holders of the firm usually two types of taxes one paid by the firm before dividends and other is on the income of specific share. The company bears fixed cost in the shape of interest expenses if it decides to go for debt financing which reduces the profitability. Likewise, when the companies are heavily dependent on debt financing their financial distress increases. In this scenario, the increase in debt financing would escalate the chance of bankruptcy and decrease the financial performance. The study also revealed that firm's diversification 0.007 (0.017) has significant impact on its performance which accepts H_4 of this study. The geographical diversification helps the financial institutions to increase their customer base, leading to

higher deposits/advances and better financial performance. It is noted as a positive sign by the investors in the market. Further, size of the firm depicts a positive and significant impact on the performance of financial sector because of the capability of risk taking by large financial institutions.

These results are in accordance with the previous studies (Li et al. 2015) literature suggest that risk increases with bank's size which means larger bank tend to take more risk compared to small ones because of their higher risk appetite and hence produces greater return. It is also observed that total debts have a negative and significant impact on ROE. The negative and significant coefficient of total debts -0.051 (0.00) is inconsistent with the prediction of capital structure theory, which mentions that high leverage enhances the firm's performance due to interest tax-shield and proves the fifth hypothesis (H_5) of this study. On the other hand, it supports the view that high debts increases the financial burden on the firm, cost of capital and reduces the ability to grow and explore investment opportunities.

4.2.3 Corp. Gov. Index (CGI) and Earning Management on Firm Performance (Tobin's Q)

The below mentioned table presents the result of the relationship between firm financial performance measured through Tobin's Q, corporate governance index (CGI), discretionary accruals (DIS) and control variables. The analysis is carried out in two steps; in step 1, panel regression is applied with fixed and random effect. In step 2 generalized method of moment (GMM) is conducted to robust the analysis.

Table 4. 6: Impact of C.G.I. and EM on (Tobin's Q)

Panel Regression Analysis		
	Fixed Effect Model (DIS)	Fixed Effect Model (NDA)
Constant	2.018 (0.000)	1.998 (0.000)
BFI	-0.001 (0.824)	-0.001 (0.824)
CGI	0.087 (0.000)	0.087 (0.000)
CM	-0.089 (0.001)	-0.089 (0.001)
DIS	-0.020 (0.284)	
NDA		0.020 (0.284)
LG	0.084 (0.008)	0.084 (0.008)
NPL	-0.025 (0.012)	-0.025 (0.012)
TA (SIZE)	0.666 (0.000)	0.666 (0.000)
T.D	-0.652 (0.000)	-0.652 (0.000)
R-sq.	0.553	0.553
Adj. R-sq.	0.504	0.504
F-stats	11.34	11.34
Prob. (F-stats)	0.000	0.000
·Sq. (p-value)	80.96 (0.00)	

The Fixed Effect Model includes TQ as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

In the above table the relationship of corporate governance index on firm performance (Tobin's Q) in the presence of earnings management is presented. The analysis is carried in two steps. First, panel regression is used that constitutes fixed effect and random effect model. Second, generalized method of moment (GMM) is used to cater the problem of endogeneity and robustness of the panel regression results. The regression analysis suggests an insignificant impact of borrowings from financial institutions (BFI) 0.824 on firm performance (measured by Tobin's Q). This implies that borrowings from financial institutions do not

impact on the performance of financial institutions. Size of the firm (TA) and Total dents (TD) creates significant impact on firm performance (Tobin's Q). As, larger firms have the tendency to take risks it yields high returns. The availability of resources or asset backed securities provides confidence to investors and hence, generates positive and significant impact on firm performance.

In addition, it is reported that total debts (TD) possess an inverse direction with firm performance which means the increase in total debts brings a decline in firm performance as to the p-value is significant but the coefficient value is negative -0.652 (0.00) and accepts H_{5b} of this study. Tobin's Q in actual reflects the market value of a company, the results of our study yields a conclusion that market investors does not perceive it as a good news if the firm increases its leverage, it is also considered as a bailout package for the firm moving towards financial distress.

Arguing the systematic approach of financing the capital structure theory concludes that a firm having debt level beyond a certain level will lead to a devaluation in the market value of its share prices and unnecessary leverage of the firm. In addition, the excess debt financing increases the burden on the firm in the shape of interest payments which adversely affects the profitability of the firm. The financial institutions across the world are under tremendous pressure after the global financial crisis of 2008.

Moreover, these global financial crisis have slowed the global economy. In such a phenomenon investors take a rise in debt financing as an indication of financial distress. In the above table it is reported that total assets of a firm exerts a positive and significant impact on its performance. The financial institutions carrying more assets have the capability to take more risk compared to rest that possess less assets. It carries confidence for investors and they invest more in such financial institutions as they have capability to take risks and yields

more return. NPL shows an unfavorable results of -0.025 (0.012) which means that non-performing loans have a negative relationship with firm performance. Therefore, a rise in non-performing loans will decrease the firm performance.

Though borrowing from financial institutions and discretionary accruals yields insignificant results yet the sign of coefficients suggests a negative direction to firm performance (-0.001 and -0.020) which shows that an increase in borrowing from financial institutions negatively affects the firms performance. The discretionary accruals have a negative impact on firm's performance suggesting that the earnings manipulation done by the managers add insult to the injury.

Finally, corporate governance index 0.087 (0.00) shows a positive and significant impact on firm performance. It shows that market positively reacts to the corporate governance reforms. The corporate governance index is a composite of governance structure, audit quality and other variables. If a firm has a better corporate governance structure than it has better ability to resolve the agency problems. Hence, corporate governance index has a significant impact on firm's market performance.

4.3 Empirical Results of GMM Model

4.3.1 Corporate Gov. Index (CGI) and Earnings Management (EM) on Firm Performance (ROA)

The below mentioned table presents the result of the relationship between firm financial performance measured through return on asset (ROA), corporate governance index (CGI), discretionary accruals (DIS) and control variables.

Table 4. 7: Impact of CGI and EM on ROA

Panel Regression Analysis		
	GMM	GMM
Constant	-1.009 (0.029)	-1.746 (0.015)
ROA_{it-1}	2.410 (0.002)	2.410 (0.002)
BFI	0.015 (0.379)	0.015 (0.379)
CGI	0.026 (0.030)	0.026 (0.030)
CM	0.265 (0.001)	0.265 (0.001)
DIS	-0.737 (0.007)	-
NDA	-	-0.737 (0.007)
LG	0.036 (0.272)	0.036 (0.272)
NPL	-0.117 (0.028)	-0.117 (0.028)
TA	0.276 (0.028)	0.276 (0.028)
TD	0.001 (0.162)	0.001 (0.162)
J-statistic	0.101	0.101
Prob (J-statistic)	0.750	0.750

The Dynamic Paned GMM includes ROA as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

As discussed earlier, in stage-II panel regression and Generalized Method of Moment are employed in this research to cater the problem of endogeneity, autocorrelation. These issues are very common in corporate governance studies (Wintoki et al., 2012 and An, Li & Yu, 2016) and results of the resent study are presented in appendix table 01 that shows the problem of endogeneity in the data. In order to figure out that at what extent firm's specific char-

acteristics are sensitive to estimated results, the research employs either fixed or random effect model to retain the results.. However, the problem of endogeneity is reported which would lead to estimate Generalized Method of Moment (GMM).

Table above presents the results of the Generalized Methods of Moment (GMM) specifications of the research models. GMM estimation is employed to control endogeneity, and the GMM results accepts the first hypothesis of this study that corporate governance index (CGI) and firm performance are significantly associated at 0.026 (0.030) for both discretionary and non-discretionary accruals . The results are in line with the study of pathan et. al. (2008) which analyzes the impact of various components of corporate governance index (board size, independent directors) on firm performance for Thai banks and reports that a strict governance policies can lead an impact on firm's accounting performance (ROA). The GMM regression analysis reveals that diversification has positive and insignificant impact on firm performance 0.036 (0.272), and it supports the argument proposed in the first objective of the study. For the sake of risk, it is taken that non-interest income brings positive and significant impact on firm's accounting performance (ROA). Size of the financial institution has positive and significant 0.276 (0.028) relationship with return on asset. In case, of total assets the efficiency of their utilization is one the important aspect. Firms that possess large number of assets can back their financing and investment and hence they are more open for investments and generate more revenue. Further, only non-performing loans and discretionary/non-discretionary accruals are negatively related. These findings are consistent with the estimators of fixed effect models. The J-statistics is used to rank the instrumental variables in the GMM estimation. The J-statistics value 0.750 with an insignificant p-value of 0.101, indicates that instrument variables are valid.

In case of non-discretionary accrual, generalized method of moment is applied which has the tendency to capture the effects of endogeneity, the results of GMM estimation are also shown above. The above mentioned table clarifies that capital management along with a strong governance mechanism does have significant 0.265 (0.001) impact on firm performance (ROA) and it justifies our construction of second objective. Discretionary and non-discretionary accruals stay significant in GMM with -0.737 (0.007) each, which authenticates that tools and techniques of earnings management actually does not pay-off in profitability, and hence are negatively associated. The robust analysis of GMM validates the argument that size of firm (TA) has a significant impact on firm performance 0.276 (0.028). Moreover, the sign of coefficients are positive specifying the direct relationship between said variables.

4.3.2 Corporate Gov. Index (CGI) and Earnings Management (EM) on Firm Performance (ROE)

The below mentioned table presents the result of the relationship between firm financial performance measured through return on equity (ROE), corporate governance index (CGI), discretionary accruals (DIS) and control variables.

Table 4. 8: Impact of CGI and EM on ROE

Panel Regression Analysis		
	GMM	GMM
Constant	-1.011 (0.074)	-1.775 (0.018)
ROE_{it-1}	0.584 (0.369)	0.584 (0.369)
BFI	0.019 (0.766)	0.019 (0.766)
CGI	0.002 (0.096)	0.002 (0.096)
CM	0.321 (0.078)	0.321 (0.078)
DIS	0.764 (0.027)	
NDA		0.764 (0.027)
LG	0.002 (0.009)	0.002 (0.009)
NPL	-0.125 (0.012)	-0.125 (0.012)
TA	0.296 (0.070)	0.296 (0.070)
TD	0.141 (0.080)	0.141 (0.080)
J-statistic	0.005	0.005
ob (J-statistic)	0.939	0.939

The Dynamic Paned GMM includes ROE as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

The study employed panel regression to analyze the impact of different variables of financial performance of financial institutions. GMM estimation is used to cater the endogeneity problem which is common in the studies of corporate governance. As, this study employs panel data in consideration which can be tested as time specific and time variant. From the results it is evident that corporate governance has a weak significant impact on firm accounting performance (ROE) 0.002 (0.096), whereas earnings management (discretionary and non-discretionary accruals) has an insignificant impact on firm performance. Further, corporate diversification presents a significant results 0.002 (0.009), it is discussed above

that corporate diversification is perceived as an expansion in business. Moreover, diversification based strategy can help to increase the customer based for the firm. Therefore, firm performance increases along with corporate diversification.

Non-performing loans and total debts yield a strong significant impact on firm performance -0.125 (0.012) for both discretionary and non-discretionary accruals but in negative direction. This means that increase in debt financing and non-performing loans will decrease the performance of the firm. Debt and equity source of financing are the two types of financing to raise the money for investment. Capital structure theory concludes that rise in debt financing is a sign of expansion of the firm but the results of our study reports that increase in debt financing has a negative relationship with firm performance. Finally, it is concluded from the results that capital management 0.321 (0.078) has weak significant, however, earnings management 0.764 (0.027) has a significant impact of return on equity.

4.3.3 Corporate Gov. Index (CGI) and Earnings Management (EM) on Firm Performance (Tobin's Q)

The below mentioned table presents the result of the relationship between firm financial performance measured through Tobin's Q, corporate governance index (CGI), discretionary accruals (DIS) and control variables.

Table 4. 9: Impact of CGI and EM on Tobin's Q

Panel Regression Analysis		
	GMM	GMM
Constant	-0.439 (0.439)	-0.695 (0.444)
TQ_{it-1}	0.349 (0.008)	0.349 (0.008)
BFI	-0.123 (0.011)	-0.123 (0.011)
CGI	0.263 (0.000)	0.263 (0.000)
CM	0.155 (0.502)	0.155 (0.502)
DIS	-0.256 (0.629)	
NDA		0.256 (0.629)
LG	0.120 (0.031)	0.120 (0.031)
NPL	-0.261 (0.004)	-0.261 (0.004)
TA	0.514 (0.009)	0.514 (0.009)
TD	0.254 (0.062)	0.254 (0.062)
J-statistic	0.1781	0.1781
ob (J-statistic)	0.672	0.672

The Dynamic Paned GMM includes ROE as dependent variable, first column presents with discretionary accrual and second colum presents non-discretionary accrual, whereas, in ( ) p-value for each variable is reported

As discussed above, the present study employs Generalized Method of Moment to cater the problem of endogeneity which is a common issue inherent in the studies of Earnings management and corporate governance (An, Li & Yu, 2016). Firm's specific characteristics are sensitive to the estimated results, in order to compute that the study would incorporate fixed effect model and random effect model. From the results of GMM, it is quite evident that Borrowing from financial institution, along with non-performing loans have a statistically significant and a negative relationship -0.123 (0.011) and -0.261 (0.004) respectively. Whereas, corporate governance index, corporate diversification and size of firm has a positive and significant relationship 0.263 (0.00), 0.120 (0.031) and 0.514 (0.009) respectively

with firm's market performance that is measured through Tobin's Q which satisfies the third major objective of the study. From, the above analysis we can conclude that investors are more reactive to sound corporate governance, well managed capital and size of the firm because larger institutions with sound governance mechanism can tend to take more risk and yield higher returns. Concluding the above analysis, it can conclude that corporate governance boosts the agency cost that reduces the profit of the firm for a period of time being but it enhances the market value of the firm and hence CGI reports a significant and positive impact in case of ROE and Tobin's Q whereas the relationship of CGI and firm performance (ROA) is negatively reported. Borrowing from financial institutions has a negative impact for both accounting and market based performance of the firm. In addition, the results of endogeneity are reported in the appendix of the study.

4.3.4 Difference-in-Difference Approach for Economic Causality

Finally, this study applies latest difference-in-difference approach to test the impact evaluation of economic causality on the framework of corporate governance and earnings management after global financial crisis. It allows us to deal with the endogeneity that is caused by the omitted variables (Ping et al., 2019) and auto-correlation biases, the results obtained through difference-in-difference shows the treatment effect of legislations being brought after the global financial crisis. From the first table, it is inferred that post-financial crisis legislations have helped to increase the accounting performance of the firm (0.0081) which is more significant than overall impact of corporate governance (0.0043). Further, it shows that sound corporate governance before global financial crisis has a significant impact on firm performance (0.003) but it marginally improved post-financial crisis. Similar, results have been seen for ROE and TQ (Tobin's Q) which reflects the market performance of a company. We expect the coefficient values of difference-in-difference to be positive, and

significant. However, it is reported that legislations post-financial crisis asserts a weak impact on market performance of a company (Tobin's Q), these results further highlight the importance of capital management and its impact on firm's performance. Similar, results have been reported by Ping et al. (2019) in his study on deregulations and corporate governance of Chinese firms.

Table 4. 10: Difference-in-Difference Approach

ROA	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
dcrisis	.0081	.0025	3.24	0.001	.0130	.0031
gov	.0043	.0023	2.85	0.005	.0089	.0002
y5cgi	.0033	.0018	2.77	0.008	.0069	.0003
_cons	.0122	.0023	5.28	0.000	.0076	.0168

ROE	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
dcrisis	.0022	.0058	-0.380	.007	.0119	.0080
gov	.0190	.0047	-2.720	.004	.0127	.0059
y5cgi	.0079	.0037	-2.100	.037	.0154	.0004
_cons	.0101	.0047	2.170	.031	.0009	.0194

TQ	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]
dcrisis	.000	.0312	-0.00	0.998	-.061	.061
gov	.009	.0292	-0.33	0.741	-.067	.048
y5cgi	.016	.0232	0.70	0.483	-.029	.062
_cons	2.30	.0289	79.51	0.000	2.244	2.358

CHAPTER 5

CONCLUSION

The final chapter of the study discusses conclusion of this research thesis. Particularly, it aims to accomplish five objectives. First, the conclusion of this study will discuss the empirical findings. Policy implication is the second objective of the chapter. Third, the contributions along with policy implications of this study are discussed. Fourth, limitations of this research study are also highlighted. Finally, future research prospects are identified as well in this chapter.

Therefore, current chapter is divided into six main sections. Section one is presenting the summary of empirical findings of whole research study. Section two is comprised on findings based on Econometric Models. Section three is explicating Contributions of the study in hand. Policy implications of this study in term of body of knowledge and in practical market are explained in section four. Section five is all about to identify the limitation of this study. Those limitations could be the Future Avenue for further studies regarding same topic. In last, section six is all discussing the future perspectives for upcoming researches.

5.1 Summary of Empirical Findings

The present study discusses framework of corporate governance index, corporate diversification and earnings management along with firm specific control variables (non-performing loans, size of the firm and borrowings from financial institutions) in lights of financial sector of Pakistan. Briefly, mechanism of the study involves corporate governance index

which is computed through (Board size, Audit committee size, CEOs' duality, Non-Executive directors, Independent directors and outsider representation) and then corporate governance index with the firm performance which is computed through financial ratios i.e. ROA, ROI and Tobin's Q, it is reported that governance has significant impact on firm performance which satisfies the first objective of this study. In addition, earnings management is considered along with corporate governance index to examine the second objective and our findings conclude that discretion of managers is important for the performance of a firm.

Previous studies have extensively used discretionary accruals in their part for analysis but this thesis considers both discretionary and non-discretionary accruals. The introduction of Basel accord has enhanced the importance of financial disclosure in their financial systems. This study considers a distinctive set of variables that covers relationship of corporate governance index, earnings management, capital management, corporate diversification with firm's accounting and market performance. Specifically, it considers entire financial industry of Pakistan but due to certain limitations such as availability of data we use 90 Pakistani listed financial firms from the period 2005-2015.

This study contains three main research objectives. First objective of this research is to examine the impact of corporate governance index on firm performance in financial sector of Pakistan. Corporate diversification produces some complications in terms of internal controls and earnings management. Therefore, second objective of the study is to examine either financial sector is managing those complications through sound governance structure. During financial instability in manufacturing sector, financial sector provides the leverage to absorb those financial shocks. Hence, third objective of the current study is to examine capacity of that leverage by adding an independent variable (i.e. capital management) and a control variable (i.e. borrowing from financial institutions).

In order to reach objectives first we have analyzed the normality in data. For the purpose, descriptive statistics has been used which further explains the pattern in data along with distribution and skewness. It further allows us to simplify large amount of data in a simplified way. The reported figures show that data is normally distributed around its mean value, borrowings from financial institutions has a mean value of 4.070 which is around its median value of 4.180. Moreover, the mean and median value of corporate governance index, capital management and return on assets are very close. Consistent with (Tariq and Abbas, 2013) the standard deviation has been used which gives us more comprehensive and accurate estimation of dispersion because a single outlier in the data range can exaggerate it. The deviation value of corporate governance index is high in this case (0.892).

Over here, it is important to evaluate the degree of relationship among variables. Correlation results indicate that most of our independent variables are weak positively correlated such as corporate governance index has weak positive correlation with capital management. Whereas, in results it has a negative correlation of -0.058 with discretionary accrual (earning management). It shows that when an organization has a strong corporate governance structure it leaves less room for accounts manager to apply earnings management techniques for manipulation like cookie jar technique (where cookie jar reserves are formed in the estimation of various write-offs and expenses), big bath technique (where managers prefer to report all bad news at once such as losses etc.). In such techniques managers attempt to present earnings of the company in a way that it appears well.

A strong governance structure is a set of independent and non-executive directors; in such a scenario it becomes difficult for mangers to manipulate their earnings. Non-discretionary accruals are obligatory expenses that have to be realized but it is already charged in the books of account. This is mandatory item that has been charged in the books of account

and managers are left with less space to manage their earnings. Corporate diversification has a negative relationship with other independent variable including corporate governance index (-0.001) because the globally diversified firm may increase its pool of directors and include executive directors in their panel, the results furnish the obligation of the second objective of this study.

The presence of executive directors in a panel would affect the efficiency of corporate governance structure that's why it is showing a negative relationship with corporate diversification (global diversification). Firm performance (that is measured through ROA, ROE and Tobin's Q) presents positive relationship with corporate diversification (0.321; 0.305 and 0.089 respectively). Globally diversified firms have better investment opportunities comparative to their counterparts; it sends a message among the investors that firm is growing which helps the firm to easily finance it.

The control variables in this study are total debts, total assets and non-performing loans which presents a positive relationship with firm performance. It is further seen that there is no issue of multi-collinearity among all the independent variables. In order to test the relationship more precisely we use econometric models to see the relationship.

5.2 Findings based on Econometric Models

The econometric findings of the study that relates to defined hypothesis investigated for firms' performance in the financial sector of Pakistan, it has been presented and discussed in Chapter 5. In this section we briefly discuss those empirical findings. First, we have applied fixed effect model as it refers to coefficient estimator in a regression model. In case of fixed effect model, we enforce time independent effects for each item that can possibly correlate with regressors. Later, random effect model is applied which is a kind of hierarchical

linear model. To test the efficiency of above stated models we use Hausman test, which differentiates between fixed effect model and random effect model.

The results of Hausman test for all equations reflect that random effect model is favored under the null-hypothesis due to higher efficiency. (An et al., 2016) reports that endogeneity is a common issue in corporate governance studies. Hence, this study accommodates this issue and uses generalized methods of moment (GMM) which has the tendency to capture endogeneity.

The results of fixed effect model have emerged by regressing three different equations, keeping different dependent variables in consideration (ROA, ROE and Tobin's Q). Borrowings from financial institutions yield no significant impact on ROA and Tobin's Q but a negative weak significant impact on ROE -0.001 (0.097). Though borrowings do not create a significant impact on accounting performance but it gives an impression to stakeholders and investors that the firm's liquidity position is not well which affects the shareholder's equity and ultimately the firm's performance.

Corporate governance index has a strong significant impact on firm performance which shows that corporate governance is vital for accounting and market performance of a firm. A strong corporate governance structure is a blend of independent directors and non-executive directors with a diversified board that ensures better firm's performance. The introduction of base-II has raised minimum requirement of capital ratio. Capital management shows negative relationship with firm's performance that is because it bounds financial firms to maintain a minimum reserve that restricts them from further investment.

The results of GMM further validates the stance -0.098 (0.018) with discretionary accrual and -0.155 (0.000) with non-discretionary accruals. In addition, earnings management is used in this study which shows that financial firms doing earnings management have

no significant impact on financial firms in the presence of a strong corporate governance index. In this study, the corporate governance index has a strong impact on financial performance (ROA, ROE) and market performance (Tobin's Q) in the presence of strong corporate governance, earnings management yields no impact on firm performance.

Further, Non-performing loans and total debts have negative significant impact on firm's performance. Non-performing loans represent that firm is not converting its loans into cash which yields a negative impact on firm's performance -0.024 (0.095) and -0.014 (0.033). Total debts have a negative impact on firm's performance, which shows that if total debt increases the interest cost will rise and that would reduce earnings of firm and create an impact on dividend pay-out ratios. Finally, size of firm creates a significant impact on firm's performance, larger financial institutions have more capital to invest and that increases number of opportunities for them to invest.

5.3 Contribution and implications of the study

Current study makes few important contributions in the exiting body of knowledge and also sheds a light on this topic for policy makers and regulatory bodies. Contributions and recommendations of this study are divided into three folds based on empirical evidence. First fold highlights contribution in the existing body of knowledge. It explains the contribution in terms of theory building. In second fold, it provides the knowledge for actions or implementations. In last this study contributes by providing knowledge for policy makers.

5.3.1 Knowledge for understanding/Theory

As discussed in details in chapter one, considerable research has been done on corporate governance, earnings management and firm performance in Pakistan but all have been

conducted on manufacturing sector. Few research papers (mention in chapter one) have considered banking sector but financial sector as whole is neglected by researchers. Therefore in this study financial sector is the unit of analysis.

In the perspective of theory building, corporate diversification is also another contribution of this study because corporate diversification comes under the umbrella of management. Therefore, it is neglected to discuss in financial sectors of Pakistan. Despite of above discussion financial sector is diversifying locally as well as globally. Hence, study in hand is taking this variable as a part of research.

5.3.2 Knowledge for Actions/Practice/implication

Enforcement, transparency and disclosure of information make governance structure worthwhile for corporations. It's the responsibility of regulatory framework to enforce the compliance of governance practices in financial sector of Pakistan. Currently in Pakistan institutional bodies (i.e. Securities and Exchange Commission of Pakistan and State bank of Pakistan) are just bothering to explicate the codes of governance rather to concentrate on implementation of those codes. Hence, lack of compliance resulted in the form of crises, disasters and financial misfortunes. Furthermore to avoid these disasters institutional bodies should focused on law in practice parallel to the law in books.

5.3.3 Policy Recommendations

This section provides the policy implications and recommendations to policy makers and regulators on basis of findings of current study. First, corporate governance index has significantly positive impact on accounting and market performance measured through returns on assets, returns on equity and tobin's Q. It is recommended that policy makers should

upgrade the standards and codes of governance. It is also suggested that regulatory authority should improve level of compliance with strong legal enforcement.

In addition, author has noticed that earnings management does not have an impact on firm performance in the presence of strong corporate governance. Hence, it is recommended that strong corporate governance mechanism should be adopted in order to minimize or delineate the impact of earnings management techniques. Investors take the impact of CGI index more swiftly than it is shown in the financial books of the firm. In addition, policy makers can stay more focused on the governance structure/ mechanism and institutions must propose a better CG structure.

Second, this study reveals the positive relationship between discretionary accruals and returns on assets but negative relationship between non-discretionary accruals and returns on assets. According to the findings policy makers should focus on sound internal controls through rigorous audits. Audit quality decreases manipulation of earnings management and make it transparent through periodic information disclosure. In additions earnings management shows positive but insignificant relationship with returns on equity and tobin's Q. one of the reasons mention above is earnings management is a part of accounting performance therefore it has less impact on market performance.

Third, capital management and borrowing from financial institutions identified the leverage to absorb financial shocks or disasters. Policy makers should focus on the capacity of borrowing form financial institutions during financial distress to develop a balance. It helps the regulatory bodies to sustain the financial stability.

Fourth, corporate diversification could be in the form of local, global, related or unrelated. According to the results of this study corporate diversification has significantly pos-

itive impact on accounting performance but insignificantly positive impact on market performance. Concluding the results it is recommended that policy makers should focus the diversification. Global diversification brings the foreign investment therefore; financial institutions should grow their businesses in foreign countries to enhance their capital growth. Government should facilitate the financial sector for global diversification. In addition diversifications create complication for internal controls and earnings management because of larger and expended firm size. Therefore, in parallel policy makers and regulatory authorities should focus on the compliance of sound governance practices.

5.4 Limitation of the study

The present study has few limitations which need to be discussed. The study has considered a sample of 90 listed financial firms which is comparatively more than previous studies on financial sector. In addition, this is the first study of its kind considering the entire financial sector (Banking and Non-banking) of Pakistan. However, the initial sample considered entire 124 companies. In the second round, 34 companies have been dropped due to non-availability of the data. This study compares the industrial indicators to measure corporate governance index, earnings management and corporate diversification. Considering the non-financial sector, extensive literature is available on CGI but it is not available in the parameters of financial sector. The findings of the study could have been more aboveboard, if it had been done on a cross-country data set.

Neglecting two significant indicators including, market share: as a firm performance indicator and audit quality: as the indicator of corporate governance structure is another limitation of this study.

5.5 Future Research Avenue

Current study has few limitations because of few constraints including time and data availability. Therefore, this section highlights few prospects for further research. Future study is needed to compare the level of compliance of governance codes in financial and non-financial sector. It will elaborate the other prospects of governance and firm performance. Another future recommendation could be cross country data analysis. It will highlight the progress in the level of compliance of governance codes in developing countries. In addition further indicators of firm performance including return on investment and market share can also be the part of future research. Audit quality is neglected in this study therefore; it can be consider for the future research.

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APPENDIX

Table 01
Endogeneity Test for ROA

Dependent Variable: RESID01

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000336	0.010006	-0.033579	0.9732
BFI(-1)	-0.001096	0.001099	-0.997420	0.3192
CGI(-1)	**-0.004054**	**0.001685**	**-2.405855**	**0.0166**
CM(-1)	0.003469	0.003446	1.006618	0.3147
DIS(-1)	-0.000322	0.002639	-0.121874	0.9031
NPL(-1)	-0.000541	0.001293	-0.418383	0.6759
TA(-1)	-0.015884	0.012354	-1.285721	0.1993
TD(-1)	0.019021	0.011868	1.602701	0.1098
LG(-1)	-0.000771	0.001659	-0.464982	0.6422
R-squared	0.035979	Mean dependent var		-0.000804
Adjusted R-squared	0.016455	S.D. dependent var		0.014151
S.E. of regression	0.014034	Akaike info criterion		-5.672587
Sum squared resid	0.077801	Schwarz criterion		-5.583446
Log likelihood	1154.863	Hannan-Quinn criter.		-5.637300
F-statistic	1.842767	Durbin-Watson stat		0.989653
Prob (F-statistic)	0.067778			

Table 02
Endogeneity Test for ROI

Dependent Variable: RESID02

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	0.121738	0.034217	3.557774	0.0004
BFI(-1)	0.001470	0.003757	0.391392	0.6957
CGI(-1)	-0.003443	0.005763	-0.597522	0.5505
CM(-1)	0.019479	0.011784	1.652976	0.0991
DIS(-1)	**0.020072**	**0.009026**	**2.223825**	**0.0267**
NPL(-1)	**0.022198**	**0.004420**	**5.021913**	**0.0000**
TA(-1)	**0.215229**	**0.042246**	**5.094600**	**0.0000**
TD(-1)	**-0.263582**	**0.040585**	**-6.494513**	**0.0000**
LG(-1)	**0.030292**	**0.005673**	**5.339362**	**0.0000**

R-squared	0.231399	Mean dependent var	0.001236
Adjusted R-squared	0.215832	S.D. dependent var	0.054196
S.E. of regression	0.047992	Akaike info criterion	-3.213533
Sum squared resid	0.909783	Schwarz criterion	-3.124393
Log likelihood	658.1337	Hannan-Quinn criter.	-3.178246
F-statistic	14.86506	Durbin-Watson stat	0.984450
Prob(F-statistic)	0.000000		

Table 03

Endogeneity Test for Tobin's Q

Dependent Variable: RESID03

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.222968	0.129151	1.726414	0.0851
BFI(-1)	-0.025181	0.014180	-1.775826	0.0765
CGI(-1)	-0.012910	0.021751	-0.593537	0.5532
CM(-1)	-0.058587	0.044478	-1.317219	0.1885
DIS(-1)	**-0.072651**	**0.034068**	**-2.132536**	**0.0336**
NPL(-1)	0.000247	0.016684	0.014828	0.9882
TA(-1)	**0.345317**	**0.159456**	**2.165589**	**0.0309**
TD(-1)	**-0.364252**	**0.153186**	**-2.377836**	**0.0179**
LG(-1)	0.019860	0.021414	0.927419	0.3543

R-squared	0.049646	Mean dependent var	0.004202
Adjusted R-squared	0.030398	S.D. dependent var	0.183961
S.E. of regression	0.181143	Akaike info criterion	-0.557033
Sum squared resid	12.96107	Schwarz criterion	-0.467893
Log likelihood	121.5207	Hannan-Quinn criter.	-0.521746
F-statistic	2.579303	Durbin-Watson stat	0.633407
Prob(F-statistic)	0.009378		

Table 04:

Impact of CGI on Firm Performance (Random Effect)

RANDOM EFFECT MODEL ROA

	Panel Regression	
	Random Effect	Random Effect
Constant	-0.040 (0.000)	-0.039 (0.000)
BFI	-0.000 (0.449)	-0.000 (0.449)
CGI	-0.002 (0.029)	-0.002 (0.029)
CM	-0.005 (0.005)	-0.005 (0.005)
DIS	0.001 (0.521)	
NDA		-0.001 (0.524)
LG	0.003 (0.001)	0.003 (0.001)
NPL	-0.009 (0.000)	-0.009 (0.000)
TA	0.039 (0.000)	0.039 (0.000)
TD	-0.024 (0.000)	-0.024 (0.000)
R-sq.	0.1888	0.1884
Adj. R-sq.	0.181	0.181
F-statistic	27.976	27.976
Prob (F-stats)	0.000	0.000
Hausman Test	-	
strument rank	-	
J-statistic	-	
ob (J-statistic)	-	

Table 05:

Impact of CGI on Firm Performance (Random Effect)

RANDOM EFFECT MODEL ROE

	Panel Regression	
	Random Effect	Random Effect
Constant	-0.073 (0.000)	-0.075 (0.000)
BFI	-0.003 (0.015)	-0.003 (0.015)
CGI	0.000 (0.089)	0.000 (0.089)
CM	-0.013 (0.002)	-0.013 (0.002)
DIS	-0.002 (0.500)	
NDA		0.002 (0.500)
LG	0.014 (0.000)	0.014 (0.000)
NPL	-0.017 (0.000)	-0.017 (0.000)
TA	0.086 (0.000)	0.086 (0.000)
TD	-0.059 (0.000)	-0.059 (0.000)
R-sq.	0.213	0.213
Adj. R-sq.	0.207	0.207
F-statistic	33.490	33.490
Prob (F-stats)	0.000	0.000
Hausman Test	-	
strument rank	-	
J-statistic	-	
ob (J-statistic)	-	

Table 06:

Impact of CGI on Firm Performance (Random Effect)

RANDOM EFFECT MODEL TQ

	Panel Regression	
	Random Effect	Random Effect
Constant	2.178 (0.000)	2.158 (0.000)
BFI	-0.010 (0.210)	-0.010 (0.210)
CGI	0.078 (0.000)	0.078 (0.000)
CM	-0.112 (0.000)	-0.112 (0.000)
DIS	-0.020 (0.275)	
NDA		0.020 (0.275)
LG	0.043 (0.016)	0.043 (0.016)
NPL	-0.015 (0.108)	-0.015 (0.108)
TA	0.819 (0.000)	0.819 (0.000)
TD	-0.831 (0.000)	-0.831 (0.000)
R-sq.	0.151	0.151
Adj. R-sq.	0.145	0.145
F-statistic	22.096	22.096
Prob (F-stats)	0.000	0.000
Hausman Test	-	
strument rank	-	
J-statistic	-	
ob (J-statistic)	-	