## CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD



# Impact of Corporate Governance on Cost of Capital: Moderating Role of Foreign Ownership

by

Shahzad Gul

A thesis submitted in partial fulfillment for the degree of Master of Science

in the

Faculty of Management & Social Sciences Department of Management Sciences

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### CERTIFICATE OF APPROVAL

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## Abstract

The purpose of this study is to examine the impact of corporate governance on cost of capital: moderating role of foreign ownership. The 108 listed non-financial firm's annual data, ranging from 2011 to 2017, is extracted from annual reports. The Board of directors characteristics were consist on board independence, board size, and board meetings while the audit committee characteristics were consist on audit committee independence, audit committee size, and audit committee meetings and managerial ownership taken as independent variable and foreign ownership were used as a moderator and leverage (debt to asset ratio) was used as control variable. The dependent variable cost of capital were measured with weighted average cost of capital. Panel data regression model being applied with different techniques and common effect model finally selected for interpretations. The statistical findings of the study indicate that there is significant relationship between corporate governance mechanisms and weighted average cost of capital. In some extent foreign ownership moderating the relationship between corporate governance mechanisms and cost of capital. All non-financial firms should increase the environment of foreign ownership in Pakistan for better cost of capital adjustment.

Keywords: Cost of Capital, Corporate Governance, Board of Directors Characteristics, Audit Committee Characteristics, Managerial Ownership, Foreign Ownership Moderator, Leverage.

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# Abbreviations

ACI	Audit Committee Independence
ACM	Audit Committee Meetings
ACS	Audit Committee Size
BODI	Board of Director Independence
BODM	Board of Director Meetings
BODS	Board of Director Size
COD	Cost of Debt
COE	Cost of Equity
FO	Foreign Ownership
$\mathbf{LEV}$	Leverage
MO	Managerial Ownership
PSX	Pakistan Stock Exchange
WACC	Weighted Average Cost of Capital

## Chapter 1

# Introduction

## **1.1** Background of the Study

In a recent era, non-financial firms rapidly growing in all sectors including manufacturing and service industry of emerging economy such as Pakistan. In the whole world many firms engaged in financial integration due to the business globalization and information technology advancement. There are many challenges for every firm to manage the capital for running the operation of the business, so how company's top management like board of director handle cost of capital. In the firm inside and outside many scandals, frauds and scam happened in past so every firm elect the audit committee for controlling these issues regarding to the capital and ownership structure. In the past very few firms allow the ownership to foreign investors but in recent days due to the emerging economy of Pakistan, many firms try to make the partnership with foreign investors. According to these challenges, purpose of present research is to describe the impact of corporate governance determinants such as board of director, audit committee and managerial ownership on cost of capital. Another objective of investigation is to find the moderation effect of foreign ownership among these independent variables and dependent variable cost of capital.

The main concern of the study is to explore the influence of corporate governance on cost of capital and further working on equity cost and debt cost influenced through by the internal corporate governance in Pakistani non-financing firms recognized on Pakistan Stock Exchange. Cost of equity is the risk premium settled through the depositor for the investment invested in the firm. The risk premium is examined on the basis of many transactions including examined through the quality of knowledge gathered by investors in decision making procedures. Such knowledge can be gathered from many bases where the financial statements creating the one of the major references. If studied from the fundamental purpose of the financial statements is to deliver knowledge relating to the financial situation, financial achievements, cash flow which is helpful for worker of the report in economic decision making. If the financial reporting procedure runs ideally, financial statements could be a suitable base of knowledge for investors to create investing decision making. If the financial reporting fairly prepared then output of firm will be helpful for every stakeholder and present study findings also depend on data fairness that is reported in financial reports.

According to Modigliani and Miller (1958), how much cost of capital required to any company in the world and which financial resources are used to get assets in which revenues are uncertain and which fund could be acquired by many different investors, pure equity, pure debt source. A company's capital structure contains all outstanding capital funds and amount of surplus, as well as longer period credit capital. cost of capital of any company is different from country to country extensively. The best capital structure are offer adequate capital for effective and profitable operational process, a high rate of return to the investors at a lower rate of financial uncertainty and lower reduction of control. It provides profitable source for extending the part of borrowings in the company's cost of capital, because borrowed financial cost maybe gains more than their interest charges.

The present research estimates the selections of cost of capital in Pakistani non-financial industries are affected by the corporate governance determinants, many types of corporate governance determinants that influence the decisions of management while extrication ownership and control. The cost of capital decision has an significant one subsequently the profit of a firm is openly influenced through which these decisions by (Achchuthan et al., 2013). According to Velnampy and Niresh (2012), an effective collection and usage of fund single basic determinant of the company's financial strategy. According to Colombage (2007), examines that the presence of a good established capital market, financial channel, corporate governance and the authorized estimate presented through country assistance the efficiency of debt. Cost of capital dropped by the owner or investor is said to a equity cost and debt cost, the cost component of the debt taken from the creditor reffered to as the cost of debt by (Ross et al., 2008).

According to Cadbury (1992), explain corporate governance "its a arrangement by which firms are directed and controlled". It is focused with the responsibilities and duties of a firms board of directors members to effectively run the company and their association with its stakeholders and other investors cluster Pass (2004). According to Spanos (2005), for the expansion of economic such as corporate governance play a significant role, as better practice internal corporate governance bodies minimizing the risks for investors, creates way of new investment and increases the profitability of the firms. The concept of corporate governance grows time to time in Pakistani corporations and it is a basic element for developing economic market.

According to, Shleifer and Vishny (1997) corporate governance manage with different sources in such a provider of finance to companies promise themselves of taking a reward on their investment and deposit. According to the previous explanation the initial aim of corporate governance is to safe attention of investors and owners of the firm. In present research work the significance of the internal corporate governance is emphasized, when the concern of the shareholders is protected, then it will provide a positive or effective variation in the profitability of the company. Numerous empirical investigations have been conducted, all these proven the presence of an association among corporate governance and firms' financial position. When the discussion of developing and developed market, the explanation of corporate governance is examining that this is different for different countries.

Numerous empirical investigation has directed to determine the connection among corporate governance and a firm financing performance in the worldwide.

Therefore, in the same cause very lower studies have been conducted in context of Pakistan. According the very important area of huge corporations like corporate governance sector in the developing countries like Pakistan is a better implementation for the improvement of good corporate culture, but in the developed countries not new thing. However, several investigations conducted on corporate governance being a comparative research. Main contribution in this attention given by (Ali, 2018), he directed the study on the comparative investigation among developing country like Pakistan and developed country like United State. The important aspect in reducing knowledge asymmetry is corporate governance; in more the major elements that are the purposes of corporate governance like as internal management, supervision of strategic policies. The one element is to be established in the presentation of financial statements that deliver final knowledge so that among administration and others the same relative knowledge quality. As a consequence, that the financial statements such as list of the manager's performance created by the management then the pattern of provision is exposed to minimize struggle of interest.

The problem associated to the cost of capital practice are not fresh they emerged with the very basic of the major companies, but these problems has consider high consideration after the collapse of major established firms in USA, the UK, and Australia Ali (2018). Despite being developing nations, capital structure and corporate governance problems influence Asian countries including the Pakistan. Cost of capital is a never final issue in the business community, however, administration require to impose high penalties to prevent firms whose engaging in capital structure practices reffered by (Rahman et al., 2016). Investigations shows that capital structure is a major issue and still big focus between accounting researchers like (Kallunki and Martikainen, 1999) and (Saleem et al., 2016).

All the steps to reduces the cost of capital practices and to expand financial reporting fairness have not yet attained their aims by (Abdul Rahman and Haneem Mohamed Ali, 2006). However, the Security Exchange Commissions of many countries in the globe have studied this problem and consider that capital structure mechanisms in many thrilling cases controls to the financial reporting frauds

such as Enron, Merck & WorldCom by (Tehranian et al., 2006). It's proved that between the era of financial disasters, numerous companies involved in aggressive capital structure mechanisms by (Johl et al., 2007).

Therefore logical suggestions and steps have been established and taken to regulate the cost of capital mechanisms, the financial accounting scandals have not removed and thus have continued a greater issue in accounting mechanisms from previous two decades said by Mollik et al. (2013); Norwani et al. (2011). From the beginning of the Enron collapse, some account related scandals has recognized over all globe Vladu and Cuzdriorean (2013). Holding in the thinking memory the above situation, in developed countries like USA and Australia strained on financial statement quality, and its developments to the better suitable rules by (Baxter and Cotter, 2009; Lin and Hwang, 2010).

According to Bhagat and Bolton (2009), it was also estimated that corporate governance practices will improve corporate governance that will support in constraining cost of capital mechanisms. Correspondingly, due to ineffectiveness of corporate governance practice, (Tsamenyi and Uddin, 2008), criticized the world bank for encouraging the establishment of an Anglo-American corporate governance framework in emerging economics such as Pakistan. According (Haniffa and Hudaib, 2006), also opposite the Pakistani code of conduct on corporate governance. However, the opinions in respect and against the corporate governance all over the globe are contrasting and lack of consistency, in such that requires further research to determine the corporate governance programs on cost of capital.

## **1.2** Supporting Theory

#### 1.2.1 Agency Theory

Cost of debt could be explained as the cost that firms acquire when attaining the external financing for the investors or other debt suppliers. The most common measure for the debt cost to be investigated in previous researches said to a yield spread by Anderson et al. (2004). The yield spread is basic concept of weighted

average debt profit to maturity in surplus of the time frame equal to treasury yield. Cost of debt is the interest that companies paid on their greater time period bonds. In other hand the part of capital in which a firm pay amount on debt cost is known as cost of debt. It is also suggested that if this knowledge is not avail than interest paid on the long period borrow funding are to be used as a measurement for the debt cost. Therefore, debt financing is sometime performed with the rate on risk free bonds.

According to (Ali Shah and Butt, 2009), Numerous investigations have analyzed to explain the association among the debt cost and better quality of corporate governance for developing the framework in such that prove the indication of a negative connection among the corporate body determinants. The good superiority of corporate governance performed in a company; minimum cost will be the debt financing. In this study explore the connection among internal corporate governance determinants & debt financing with the help of agency theory. In this study researcher were explore the connection of internal corporate governance determinants with debt financing, so study take the support of agency theoretical point of view. The agency theory investigates the conflicting interests of agents and the contractual association's development in order to reducing the cost that are linked with a position of delegated decisions. This theory investigates the cost and loss of reputation related with this separation and offering basic sources to solve the fundamental financial choices and build up new contractual associations to reduce those costs and losses of value by (Donaldson and Davis, 1991).

According to the concepts of agency theory, the sources of expert management format, in such a departure of ownership and management maybe final agency differences that are produced with inadequate work struggle of management treating in advantages choosing contributions with the help of one preference. The reasons of these efforts, a company maybe fails to reduce its standard, conversely with the help of these reasons one could be increase the individual own fund and consumption by Berger and Di Patti (2006). On the other side, the conflict among borrowers and investors like (shareholders) are the moral hazards. Agency theory recommends that knowledge asymmetry and moral hazard will be higher for medium companies by (Chittenden et al., 1996). Conflict among investors and creditors may arise because they perform diverse claims on the company debt finance policy.

### 1.3 Gap Analysis

The association among the corporate governance mechanisms and cost of capital has been broadly determined in established and growing marketing industries. Mostly previous studies used the foreign ownership as exogenous variable in their research work (Ali Shah and Butt, 2009). Therefore, no significant research has been done in respect of Pakistan such as foreign ownership as moderator between corporate governance and cost of capital. In the past many investigations found that significant role of audit committee size with cost of capital or firm performance (Zraiq and Fadzil, 2018). But in the past studies some missing findings regarding to the audit committee so now this research work adding two new proxies such as independent committee and committee meetings for the improvement of clear findings. (García Martín and Herrero, 2018), found that board size significant relation with firm capital, these findings provide an incomplete information about board of director significant role with cost of capital. So, in this study added a board meetings and board independency for fairness and clear relationship of board of director and cost of capital. Before 2011 mostly studies found that results of three to five years of data (Nor et al., 2018), mostly studies in the previous investigations rely on the single non-financial sector like cement or textile but recent study focus on the whole non-financial sector with including of 19 industries. In this study also given a equal chance to every industry with stratified random sampling for the fairness of findings.

### **1.4 Problem Statement**

Due to globalization many challenges and issues are facing to a small size and large size firms in the modern world. After the establishment of new government in Pakistan 2018, there are many issues raised by a government according to economic growth and debt burden of Pakistan, every political party has own policies and procedures, and if they come in government then they will apply new rule and regulations on the firms listed in SECP and Stock Exchange. So according to the new policies regarding interest rate and tax rates however, the company's corporate governance bodies like board of directors' members and audit committee members handle these specific challenges and its impact on cost of capital of the company in Pakistan such as developing country. However, the top decision-making board, to make strategies and policies for retaining the cost of capital regarding debt and equity holder requirement.

According to Tshipa et al. (2017) rising concern in the study of connection among internal corporate governance determinants and cost of capital, there have been different judgments from these studies, and generally the diverse outcomes are a finding of investigations and comparison of these findings on the fundamental analysis of different time period. In the sense of audit committee members, the significance of the efficiency of audit committees members has raised in the wake of the economic scandals that happened in the last two eras and can be discussed in further by (Zraiq and Fadzil, 2018). According to the composition of board researcher can study on the board meeting held in a year and its affect on cost of capital or company performance by (Singhal, 2014). However, world financial crises, in corporate governance have created the many problems.

To examine the good corporate governance arisen related to the same period for the ownership and administration of corporate bodies were divided, and the assessment of agency concepts setting for these types of situations in company. Such as the famed baby must call for his mother's consideration, mostly firms required decent corporate governance but just when the small investors starting to cry out (after bearing a huge loss due to corporate issues) did managers and professionals forms go to giving the formal concern to establishing and verifying additionally elaborating practices of corporate governance by (Ali Shah and Butt, 2009). The use of the firm's financial statements and corporate governance mechanism is a general issue all over the world. In the emerging market region such in Pakistan, mostly with the increasing number of corporate gossips and defaults, cost of capital availability has create a main concern by (Jamaludin et al., 2015).

## 1.5 Research Questions

This research will answer the following questions:

#### **Research Question 1**

Does corporate governance mechanism influence the cost of capital in non-financial firms?

#### **Research Question 2**

Does foreign ownership alters the relationship between corporate governance mechanism and cost of capital in non-financial firms?

#### **Research Question 3**

Does corporate governance mechanism influence the cost of equity in non-financial firms?

#### **Research Question 4**

Whether foreign ownership alters the relationship between corporate governance mechanism and cost of equity in non-financial firms?

#### **Research Question 5**

Does corporate governance mechanism influence the cost of debt in non-financial firms?

#### **Research Question 6**

Is foreign ownership alters the relationship between corporate governance mechanism and cost of debt in non-financial firms?

## 1.6 Objectives for this Study

The objective of this study is to explore the association among internal corporate governance practices (which support the organization for acquisition and sustaining the confidence of the investment by public shareholders) and cost of capital. Also check the impact of internal corporate governance mechanism on cost of capital such as support the company for growing and diversify. The following objectives derived in this study:

#### **Research Objective 1**

To examine the empirically impact of corporate governance mechanisms on cost of capital in non-financial firms.

#### **Research Objective 2**

To determine the empirically moderation impact of foreign ownership on the relationship between corporate governance mechanisms and cost of capital in nonfinancial firms.

#### **Research Objective 3**

To examine the empirically impact of corporate governance mechanisms on cost of equity in non-financial firms.

#### **Research Objective 4**

To explore the empirically moderation impact of foreign ownership on the relationship between corporate governance mechanisms and cost of equity in non-financial firms.

#### **Research Objective 5**

To explore the empirically impact of corporate governance mechanisms on cost of debt in non-financial firms.

#### **Research Objective 6**

To determine the empirically moderation impact of foreign ownership on the relationship between corporate governance mechanisms and cost of debt in nonfinancial firms.

## 1.7 Significance of the Study

There is strong connection examined among corporate governance practices and cost of capital and also it has been measured as the appreciated area of finance. In present study try to explore the relation among corporate governance practices and firm capital measures like cost of capital. this also delivers an indication for all the companies and regulatory bodies during implicating some hazards for adopting the corporate governance rules and mechanisms. However, the research offers specific values to the company's authoritarian, some academia's, businessman's and some other relevant stakeholders in the developing countries like Pakistan.

In last two decades, due to the financial scandals like Panama leaks and money laundering in Pakistan, negative signals surfaces which leading to loss of foreign reserves. As though recently regulatory bodies took serious steps to stop such type of scams in Pakistan to retain the interest of international investors. This study shows that there is low concern of domestic firms for the foreign ownership but due to the globalization and China Pakistan Economic Corridor there is big opportunities for the non-financial firms to make a partnership and joint ventures with international investors and take a benefit of their experience. The efficiency of standing corporate governance mechanisms that expand the accountability, fairness and transparency in their boards of directors, audit committee & ownership structure. Generally corporate governance is facing the numerous issues about unprofessional attitude, fraud and fake assessment, weak internal management measurement, non-executive role of punitive measurement, some other relevant gossips and also included the regulatory & legal determinants.

Correspondingly, the impact of internal corporate governance on firm financing position that mostly lies from one country to another country, therefore, corporate governance is more significant for developing markets and less established market as in established countries, same as in depth the internal corporate governance is being perform rigorously.

The study conclusions may provide theoretical beneficial way to decision makers to increase or adapt the scope and wisdom of corporate governance determinants, supporting the expansion of a suitable corporate governance environment in the non-financial companies. The study will provide the multi theoretic concepts for improving the capital structure and policies about corporate governance practices. This is practical beneficial for the following players: stock exchange, government, practitioner, Academia and also non-financial industries regarding to the data analysis.

## 1.8 Organization of Study

The chapter first consist on introduction with theoretical background, the chapter two discussion about literature review, chapter three tells about methodology of study, chapter four results and discussion, chapter five focus on conclusion and recommendations and chapter six highlighted the references of study.

## Chapter 2

# Literature Review

### 2.1 Corporate Governance and Cost of Capital

In recent studies, research work were provide the literature on the impact of internal corporate governance mechanisms on cost of capital, cost of equity and debt cost with the help of two theories such as agency and pecking order theory. According to the procedure of corporate decision making about cost of capital has many practice by (Ayeni and Olaoye, 2015). The concept of cost of capital relying on the approach of (Modigliani and Miller, 1958). Therefore (Modigliani and Miller, 1963), lower their theoretical prospect and add that cost of capital can influence the cost of capital in non-financing sector. Due to reducing the idealistic perception that taxation factor showing the tax advantage in the type of tax pattern. However, debt cost financing reduces and on the other side profitability of the company will increasing by (Ayeni and Olaoye, 2015).

According to the study of Ali (2018), the corporate governance with the presence of ownership structure, board size, independence and audit committee independent director. In his research findings proven that ownership structure positively linked with cost of capital of the company. Therefore, many industrial units do not focus on long tenure of debt financing, there could be numerous of reasons for this country of affair. The basically it is aversion of all banking institutions will expand the long-term opportunities. The number two is the lack of financial organizations participating in long term funding. the number three as emerging country the capital market for longer period debt in the country, Presently, less than two dozen term finance certificates are being trading in the KSE during these all listed companies are will over six hundred. Under these situations, we measured it sensible to get the total debt financing numbers for evaluating the firms gearing stages.

Cost of capital is explained according to the source of a firms financial sector its activities through combination of equity, debt and hybrid securities by (Ross et al., 2008). The significant of capital structure could not be realize as any company maybe a part of stock exchange, it is a small medium enterpriser or a family business unit and capital structure choice will have an vital influence on the survival of the business entity. It is also significant to create selection related how the trading entity will be funded, as any variation in the funding will move the stock prices when it is publicized by (Myers, 1984). According to Modigliani and Miller (1958), insignificant preposition on capital structure shows that the decision among debt cost and equity cost has no material influence on a company reputation when capital markets are perfect.

In response to criticism on their fundamental work and (Modigliani and Miller, 1958) recommend that a company could use higher debt in their capital structure to avail taxation benefits related with the usage of debt financing. In recent numerous researches coming from different approaches have been finalize to show how the company financial position is influenced through its financial structure. Therefore, several investigations have concern to explain the impact of ownership structure on cost of capital by (Berger et al., 1999; Ali Shah and Butt, 2009; Ruan et al., 2011; Short et al., 2002). Previous literature offers a strong recommendations that the decisions of internal corporate governance determinants effected the capital sourcing of firms in the emerging market like Pakistan by (Al-Najjar and Hussainey, 2009; La Rocca, 2007).

In an effort to minimize the negative influence of the corporate governance practices is established that will theoretically minimize the opportunity to take benefit of its own. In shape of corporate governance on cost of equity, many investigations with moderately related consequences have been achieved and good enterprise management will minimize cost of equity by (Patro and Kanagaraj, 2016). In alternative, some other investigations such as Mc Innis (2010), (Juniarti &Natalia, 2012), research showed in Pakistan don't support the results that a good corporate governance increased and capital sourcing decreased. Therefore, the research outcomes of (Juniarti &Natalia, 2012), have flaws because they just review from firms that volunteer to contribute in good corporate governance investigations. According to the previous literature corporate governance practices significantly influence the equity financing and debt financing in non-financial firms of Pakistan.

# 2.2 Board of Directors Characteristics and Cost of Capital

Numerous descriptions were performed by several committees and firms & mostly all corporations in the world have to established code of better mechanisms on corporate governance on the foundation of committees reporting and study outcomes. For instance (Cadbury, 1992), examines corporate governance as "the system through the firms are directed and controlled". There was a focused through the responsibilities and duties of a firms board members to effectively managing the company, and their association by its investors and other partners by (Jen and Hu, 2003). It is describe as a procedure with the investors induce management to perform their own preferences, providing a level of shareholder experience that is compulsory for the financial market to operationalize the efficiency by (Rezaee, 2009).

Operative corporate governance mechanisms are significant in minimizing risk for shareholders, focusing on new investment funds and improving the profitability of firms by (Velnampy and Niresh, 2012). There was no internationally recognized setting of the corporate governance principles those are performed in board of director structure as they follow the corporate mechanisms and the legal, political and economic situations. Therefore, stated by the (Cadbury, 1992), measured board structure as an significant internal corporate governance practices, such as the outcome are improves the profitability. They set the structure of the board, ownership structure, separation of duties of CEO and Chairman, independent director's representation and audit committee characteristics setting. Past studies examined the board characteristics significantly influence the cost of capital by (Johl et al., 2015; Shukeri et al., 2012).

A significant board size has essential to the achievement of a company, the directing of the board cabinet being the greatest decision maker body in a company has the duty to provide superior strategic guideline to confirm the company's growth and maximize the return to shareholders. Therefore, board has charged with checking and punishing the top managers. According to Adams et al. (2003), a higher board size can efficiently manage the activities of the managers and delivers best capability. Equally, (Lipton and Lorsch, 1992), economic resources that great boards are less efficient likened to medium boards because some director of the company maybe neutral on the determinations of other managers. Entire literature related to board size and capital structure ratio combined results.

Managing the board member size has supposed to improve company profitability, therefore it's a no psychological limit as to the board size and empirical study has developed that the board member size has significant influence on the profitability of company. It is documented in the processing of (Anderson et al., 2004). In such states that cost of borrowing is minimum for greater board size and there are other advantages to developed for the greater boards especially in the assessment by (Jensen, 1993; Lipton and Lorsch, 1992). According to the (Pfeffer and Salancik, 1978), stated the board size of firm significantly/positively influence the cost of capital. In Pakistan the higher size of the boards were examined nineteen members in company or firm the lower board size was assumed on seven members said by (Berger et al., 1997), and extended the higher board size and gearing level connected with each other.

According to the present research higher board size, controls to low debt financing stages and that outcome in positive profitability of the companies. According to the study of (Wen et al., 2002), determined the significant positive connection among board member size and cost of capital. According to Sultana (2015), board size of the directors significantly/positively influence the capital cost of the company. Board size negatively influence the cost of capital in manufacturing firms by (Singhal, 2014). According to Kajananthan (2012), there was a significant connection among board member size and firms capital structure. Board of director size has a negative effect on cost of equity which somewhat importance discussed by (Ali Shah and Butt, 2009). Board of director size insignificantly influence the cost of capital study supported by (Singhal, 2014; Wan Mohammad et al., 2018). In previous literature some researcher finds out the significant positive impact of board member size on cost of capital and cost of equity but some researcher said that negative impact of board member size on cost of capital including equity and debt. But some research examines that there has no linkage among board size and cost of capital.

The number of the non-executive board divided on the total number of directors in a firm are perform as a proxy for independent board such as evaluation of good corporate governance. In this study identify the number of independent directors if they exist in the line of current management, any business transactions with the company and other directors who's linked with the family side. The board structure of the director's duty is to perform the independently mistakes of administration and keep management is responsible to investors for its activities. The responsibility of the directors in the board could be challenged and directors made alliance through management except than supporting the comforts of investors. According to thinking behavior, the requirement of independent board by the management was a governance uncertainty that could be sources for minimizing the investors funding and outcome. However, in this study will provide the effective outcome about the influence of board management on cost of capital and providing the more information for gaining some highlights about these problems.

According to Ahmed Sheikh and Wang (2011), examined the investigation on non-financing firms that are registered on Pakistan Stock Exchange through obtaining the data from 2004 to 2008. In this research they perceived significant and positive association among predicted factors including board member size and cost of capital framing. According to past literature by (Anderson et al., 2004; Piot and Missonier-Piera, 2007), determined that the debt financing was alternatively connected with the independent board of directors, However, (Bhojraj and Sengupta, 2003), consequences improved that bond ratio on initial debt problems were negatively linked through the portion of the independent board created through the outcasts. According to (Ashbaugh-Skaife et al., 2006), perceive that company debt financing are significantly and positively influenced by overall independent board member of the firm.

Regarding to the concept of agency theoretical views, the independent board members of the executive management to deliver their duties and responsibilities and particularly observing and managing the task. The independent board of director could be succeed by double meaning, the first one is the composition of board would involving a maximum independent non-executive board member of firm and the number two was the managing structure, chief executive officer and chairman posts would not be perform by one individual by (Allam, 2018).

Non-disclosure corporate governance practices such as independent directors and minority investors protection have been analyze has an important negative influence on a company's equity financing and capital in many emerging market like Asian countries economy by (Anderson et al., 2004; Ashbaugh et al., 2004). According to Kajananthan (2012), board meeting and partition of independency of the non-executive board of directors factors to signifying internal corporate governance mechanisms and debt portion of dependent variable to estimate the cost of capital. The past studies observe that corporate governance mechanisms had thirty four percent impact on capital cost and between the corporate governance factors board committee members has significantly/positively influence the capital sourcing of the companies. According to (Sultana, 2015), board member of the firm independency significantly/positively influence the capital sourcing to the study of (Singhal, 2014), independent board negatively linked with cost of capital in manufacturing industry. Board of director independence also negatively connected with equity financing and capital study by (Ali Shah and Butt, 2009). According to the research by (Hermalin and Weisbach, 1991; Abdul Rahman and Haneem Mohamed Ali, 2006), examined that there was no relation among cost of capital and the independent directors.

The board of the firm were settled through the board members who have abilities to decision about mostly corporate governance selections at board member meeting and applicable it after elective through the investors. The board member of the firm have characteristics like number of directors and board of director meetings are affected on company decision making and capital structure by MACN (Shafana, 2016). According to the study of (Gavrea and Stegerean, 2012; Liao et al., 2018), in the developed countries board of directors meetings significantly/positively influence the company performance. However, in the developing markets many investigations shows that board member meetings were positively linked with capital structure of the company's by (Kamardin, 2009; Saeidi et al., 2015). However some investigations determined the negative effect of the board of directors meetings on the company profitability in developed countries said by (Zattoni et al., 2015). However some investigations determined the negative impact of the board of directors meetings on the company profitability in developed countries said by (Kajananthan, 2012).

Board of directors' meetings and part of non-executive independent directors such these factors to shows the internal governing body elements and debt portion such as dependent variable to evaluate the cost of capital. The investigation examine that internal corporate governance mechanisms had influence on cost of capital and among the internal corporate supremacy factors like board meetings and also board committee has significantly/positively influenced the company capital structure. These findings analyzed by (Achchuthan et al., 2013), who studied the important mean changes in the cost of capital between the internal corporate governance determinants like board of director meetings. According to the investigation of (Kajananthan, 2012), there was a significant connection among board member of the firm meetings and firms cost of capital. These results supported to the study findings in developing countries positive relationship among board meetings and cost of capital by (Gavrea and Stegerean, 2012; Liao et al., 2018).

## 2.3 Ownership Structure and Cost of Capital

However, a minimum research work conducted on the impact of ownership structure on company cost of capital, there has been a logic that ownership structure portion can have an influence on firms cost of capital. Therefore, ownership structure has an significant part in justifying agency cost and minimizing the asymmetry knowledge among investors and debt holders or shareholder and managers analyzed by (Jensen and Meckling, 1976). Previous studies will set up the depth theoretical arguments related with the relationship among the ownership variables and company's cost of capital. The empirical evidence concerned with every kind of ownership structure is also reviewed in order to establish the relationship of these investigations.

However, important conclusions in the literature of (Fama and Jensen, 1983; Jensen and Meckling, 1976), littlely has been finalize to sufficiently shed logical focus on how managerial equity ownership were influence capital structure decision making by (Jensen and Meckling, 1976), in their similar study were the initial working to measure the ownership shareholder and cost of capital of the industries with the support of agency theory model. According to (Grossman and Hart, 1982), describes that how agency theory concepts is significant and in specific why the alternative of interest among a firms management and its shareholders are vital for an performing the capital structure of the companies. However, the research objective to contribute the logic on the results of the individualism of ownership and managerial regulator, in specific the significance of managerial equity ownership of the company's influence the capital structure decisions.

According to Butt and Hasan (2009), examine that significant positive association among managerial shareholder owners and cost of capital. According to the conclusion of investigation agency problems could be reduced and removed with the help of managerial ownership. According to the study of (Alsaeed, 2006), managerial ownership control have significantly/positively influence the financial profitability of the listed companies with oil and gas in the Stock Exchange of Nigeria. In overall, the empirical findings in previous investigations determine the combine outcomes on the association of managerial ownership to the leverage or profit in perspective of company's rely on capital structure. The research work of (Elsayed and Wahba, 2013), examined that a negative connection among the management ownership and cost of capital in the market of Egyptian listed manufacturing firms.

According to the investigation of Ruan et al. (2011), Chinese local companies and explored the non-linear association among the managerial shareholder owners and capital structure of the firm. Particularly they showed that if managerial ownership is higher than eighteen percent than forty six percent, it found that significant positive association to the debt to equity financing. In the other side managerial ownership less than eighteen percent or higher than forty six percent, the associations are negative. Subsequently, (Brailsford et al., 2002), shows that nonlinear association in Australian firms approving the inverse connection among managerial ownership and cost of capital of the company. In the research of (Short et al., 2002), United Kingdom company's, the team analyze that significant positive connection among internal corporate governance debt and managerial ownership shareholding firms. Therefore, companies with higher external shareholder disprove its positive relationship. According to the (Firth, 1995; Friend and Lang, 1988), investigations including the United State company's data in their study analysis, in inverse the investigations on United State company's finalize the significant positive connection among managerial ownership and cost of capital of the companies by (Berger et al., 1999; Kim and Sorensen, 1986).

According to Masood (2014), examined that using the debt financing in the cost of capital of the firm were to control and minimize the excessive use of management motivations and utilizing the ownership management to set the interests of management with the interests of the other investors. Therefore, it can also motivate the management to establish themselves by (Lasfer, 2006). Finding in the convergence of interest hypotheses the expansion in the management share-holding investors, their believes like supporting would be reflected in good decision

and greater company standard. According to Jensen and Meckling (1976), predicted that the additional ownership of management, minimize the agency costs. Managers like owners of the firm, sustain a part of the agency costs, such as equal to their ownership amount. The additional charge of managerial ownership, add more supporting materials and reducing the agency costs by (Rashid, 2016). Managerial ownership has an negative but somehow significant influence on the cost of capital and equity study by (Ali Shah and Butt, 2009). The managerial ownership significant impact on the cost of capital in manufacturing firms with negative consequences of (Moh'd et al., 1998; Bokpin and Arko, 2009).

# 2.4 Audit Committee Characteristics and Cost of Capital

The research examined by the Alzeban (2015); Arens et al. (2013), analyzed that audit committee significantly/positively affect the cost of capital of the firms. Internal corporate governance practices like audit committee characteristics significantly/positively influence on capital structure of the companies (Porter et al., 2008). However audit committee characteristics that are efficient and effectively ability to solve out the clashes and procedure among the retainable profitability by (Al-Sayani, 2017). In the other side, particular investigations recognized that audit committee has significantly influence the capital structure of the company (Aldamen et al., 2012; Puasa et al., 2014).

A rises in the audit committee size were extend the people self-assurance over the company's finance related gossips and responsibility of audit committees participants by (Abbott and Parker, 2000; Kalbers and Fogarty, 1993). According to Al-Najjar (2011), discovers that great audit committees are additional efficient in controlling higher management and the fairness of financial income highlights, however the performance of financing confirmations were minimized. Audit committee efficiency was raised with (Anderson et al., 2003; Beasley and Salterio, 2001). The study analysis showed that audit committee members expertise & audit committee size has a significantly influence on company profitability by (Kipkoech and Rono, 2016). According to Alsaeed (2006), audit committee size revealed significantly/negatively effect on financial position of the companies.

According to Kipkoech and Rono (2016), develop the influence of audit committee member size and skilled on company profitability among registered firms in Nairobi stock exchange in Kenya. The study is examined that agency theory, investigation was performed in company of Kenya's registered firms in the period from 2006 to 2011. Previous studies like multiple regression analysis was tested and these findings performed the audit committee member experience & committee size has significantly affect on the company profitability. In the company board unit, the audit committee size shows that audit committee member has a remarkable significantly influence the firm performance by (Xie et al., 2003).

According to the study McMullen (1996), of analyzed that audit committee member size significant positive influence the company capital structure. Greater the size effective the performance of company, greater audit committee mostly has better controlling such as major activity of an audit committee. However, there was no danger can say that audit committee member size has a positive impact above the finance related profitability of the firms by (DeZoort et al., 2002). According to Madi et al. (2014) investigation of establish a significant positive connection audit committee member size and internal corporate governance controlled discovery, involving enhanced the corporation reporting. According to Al-Mamun et al. (2014) study findings prove that there were connection among audit committee size and cost of capital and also there was no association among audit committee member size and cost of capital. Audit committee member size has no any impact on cost of capital similar findings supported by (Kipkoech and Rono, 2016).

Audit Committee Independence and Cost of Capital In the occurrence of the audit committee independent directors, according to state of Pakistan, code for corporate governance that there must be one independent director in the audit committee member. In the present research, inclusion of the number of independent members better for the arrangement of the audit committee members. It also examines that preference of the independent directors are the president of the audit committee. Owners were more inclined to believe those firms in such a part of independent directors are greater in comparative study by (Uzun et al., 2004).

According to the study of Arens et al. (2013), describe an audit committee as "a selected total individual of members of a firms board of director whose accountable to support out the auditors existing as a independent manager. Numerous audit committees contain of members of the board team who were not participant of the firm's executive managers by (Arens et al., 2013). According to past literature by (Al-Thuneibat, 2006), explain that as the audit committee were collected of the independent directors in the development. The main objective under the forming of audit committee is to extend auditing quality and reasoning of the board members. The investigation (Arens et al., 2013), describe the cluster of individuals nominated form the participants of the board members those accountable for sustaining independency of the auditor.

Audit committee independences were considered the vital for the efficient profitability of audit committee by (Baber et al., 2012). It was main focus between audit committee, academicians & practitioners, in direction to perform unethical outcome could be just deliver if it has been independent of any impact on firm performance by (Klein, 2002). In association to controlling the financial direction of administration, it is the audit committee that were prospective transfer to the investors through the highest support in sustaining the reliability of a firms financing sector cash flows. In order to achieve the task efficiently, an audit committee member would have enough material and control to rejection its tasks. Present policies input forth through the general stock exchange appealing the lower of three non-executive directors help on the audit selection and remuneration committees, recommend that the efficiency of an audit committee members concern on the scope to such as the committee is non-executive.

The study of the examined that association among independent audit committee members and a greater fairness of financial performance by (Carcello and Neal, 2000; Davidson et al., 2005; McMullen, 1996), If audit committee members structure effects the financial profitability procedure, then the internal corporate governance like debt cost were show an alternative relationship to audit committee independency by (Anderson et al., 2004). The Audit committee non-executive, he analyzes a significant positive connection among the ownership shareholding and cost of capital. Previous study means that involvement of the independent board in the administration, additional debt financing size in the cost of capital. According to Al-Mamun et al. (2014), there was a significant connection among independent committee members and cost of capital and also find out no insignificant association between audit committee independence and cost of capital in non-financial industry. According to the study of (Ali Shah and Butt, 2009), independent committee members insignificantly positive influence on equity financing in non-financial manufacturing industry. Independent directors insignificantly influence the firm performance by (Wan Mohammad et al., 2018).

According to the investigation of (Al-Mamun et al., 2014), were analyzed that consistent meetings of audit committee members provide support for minimizing the agency issues and asymmetry knowledge of a company by containing precisely and accurately inform to shareholders. Regarding to the independent audit committee and procedure of this committee were reasonable, then scams arising in a company's can be controlled by (Yunos et al., 2014). According to the research work findings of (Al-Matari et al., 2012), audit committee meetings were discover the expected audit committee directors set predicted ways but insignificantly correlated with the company profitability evaluation.

According to investigation of (Beasley et al., 2000), establish that dishonest firms through earing misstatements have lower audit committee meetings compare to the firms are honestly working. An efficient audit committee adjust numerous meeting like 24 has extra time to check the financial reporting procedures, recognize the administration uncertainty and controlling the internal control of the firms. As a consequence, company profitability rises with audit committee transactions. The initial perspective is the audit committee meeting are advantage in terms of efficient managers controlling, strategically conversation and application, for audit committee directors are working together and share their recommendations by (Vafeas, 1999).

In the consequences of the internal corporate governance determinants like audit committee meetings were constant by agency theory and therefore minimizing the chances of financial summaries by (Wan Mohammad et al., 2018). According to the study outcome of (Xie et al., 2003), analyzed that the number of audit committee meetings were negatively affect the performance of the firm in the United States companies those included in the list of Standard & Poor five hundred indexes. According to (Al-Mamun et al., 2014), hypotheses created following. Audit committee meetings significantly influence the cost of capital in non-financing sector by (Kajananthan, 2012) and also no significant connection among audit committee meetings & cost of capital. Insignificant association among board meetings & cost of capital found by (Hsu, 2007; Raghunandan et al., 1998; Abbott et al., 2004; Menon and Williams, 1994; Beasley et al., 2000).

# 2.5 Moderation Role of Foreign Ownership between Corporate Governance Mechanisms and Cost of Capital

When an individual of foreign country invested in particular firm or company that ownership of investment is referred as foreign ownership, the firm whose keep hold on 50% share that the firm bounded more than 50% shares, of its shares is called target firm, According to (Bokpin and Arko, 2009), examined that foreign owners significant positive impact on cost of capital of the company shareholders.

According to (Gedajlovic et al., 2005), previous studies findings significantly and negatively affected the cost of capital by the foreign ownership of the companies. A company desire of offering the debt or equity to finance their process could be influenced by foreign shareholders significantly. By the asymmetry information theoretically, is moderately will be greater between foreign shareholders because of language and distance (Huafang and Jianguo, 2007).

The maximum part of foreign ownership maybe controls to debt financing as a corporate practice, however in some studies seventy five percent force firms to issuing the debt financing over the cost of equity. Moreover, companies maybe prefer debt rather than equity as they maybe get the benefit of foreign shareholders association and reputation to have easily entrance in the global capital markets, in such that were usually provide minimum cost of debt financing and however lower cost of capital. There was evidence of negative nexus among foreign ownership and cost of capital. Initially, the foreign ownership could be bringing the improvement in corporate governance profitability by managing the reputation of the company board.

According to (Oxelheim and Randøy, 2003), article shows that positive effect of foreign ownership in the firm performance of Sweden and in other hand foreign equity ownership also significantly/positively influence the performance of companies. In other side to the voluminous working related with the business processing of foreign shareholders, particular work on the internal corporate governance influence the foreign ownership is respectively and precisely.

According to the Indian study by (Khanna and Palepu, 1999), reported that a positive effect of foreign ownership on cost of capital of the non-manufacturing firms. To determine the more institutions of foreign ownership were effect on local companies, study also determining the effect of foreign ownership managers on equity cost and debt cost on the non-financial organizations registered on Pakistan Stock Exchange. In another investigations found that debt financing of the company reduces the foreign ownership rises. In Pakistani markets, the relationship among foreign ownership and company level of cost of debt is not recognized. Previous negative theoretical perceptions and the empirical literature, the present research also were try to found a significant positive connection among corporate governance and cost of capital with moderating role of foreign ownership in the non-financing manufacturing firms were recognized on Stock Exchange. According to the different past empirical evidence corporate governance is weak in Pakistan, so foreign owners want to improvement in corporate governance of non-financial firms, especially the development of legal protections for all type of ownership, its best tool for gaining the interest of foreign owners and then they will make the most potential advantages for corporate governance and cost of capital stability.

# 2.6 Control Variable

### 2.6.1 Leverage and Cost of Capital

In research studies, ration has been measured regarding to the total debt to total assets in the past study of (Rad, 2014). Relationship of leverage and cost of capital is inverse (Bozec and Bozec, 2010). Leverage as a total liabilities/total asset has a negatively/significantly influence on cost of capital, highlighting the companies that are capable to adopted more borrowings to get benefit of the debt financing tax pattern and minimize their cost of capital by (Pham et al., 2011).

In recent research investigations examining the role of domestic level elements as dimensions of company leverage by (Rajan and Zingales, 1995; Beck et al., 2008; Booth et al., 2001; De Jong et al., 2008; Antoniou et al., 2008), in any country across the limitations, high rate of interest and more complicated financial leverage policy have negatively influence the company major profitably by (Astawa et al., 2015).

The regulatory bodies of Pakistan have described an important role in differentiate the financial leverage rules and solve the economic leverage difficulties by affords low interest rate however, not even numerous firms get benefit of its opportunities but also slight and meddle business can make grow quickly. The association among the financial leverage and profitability is negatively but as the ratio of debt increase and decrease the profitability company and when the ratio of debt decreases and increase profitability of company by (Rafique, 2011). The present declaration that profitability rely on the ratio of debt financing. Economic leverage influence negatively on company profitability and its profit on the other side economical leverage don't influence on the company size and the company expansion it means that extend in economic leverage increase in profitability and income of the company and reduce in finance leverage extend in performance of the company by (Iqbal and Usman, 2018).

In recent times numerous determinants that influence on company, in previous studies many factors including financial leverage significant negative influence on company performance means high level of financial leverage decrease company performance and low economic condition increase greater performance of the companies. However, true choice of joint relation of debt and equity financing is significant for management of any company is significantly/negatively association among the economic leverage and the company performance by (Ahmad et al., 2015).

The firms whose don't uses debt money for its company objective it is overall dependency on its equity financing so they are free from any constant money and higher interest rate in which means there is no economic leverage linked with their firms. Financial leverage was calculated as total liabilities/total assets has a significantly/negatively related with cost of capital in non-financing area of Pakistan by (Al-Mamun et al., 2014). According to (Pham et al., 2011), debt to asset ratio has a negative and significant association on the cost of capital.

### 2.7 Research Framework

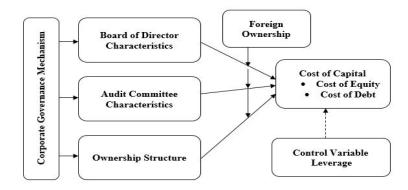


FIGURE 2.1: Research Framework

# 2.8 Hypotheses Statements

 $H_1$ . Board of director characteristics has a significant impact on cost of capital in non-financial firms.

 $H_2$ . Foreign ownership strong/weak the relationship between board of director characteristics and cost of capital in non-financial firms.

H<sub>3</sub>. Audit committee characteristics has a significant impact on cost of capital in non-financial firms.

 $H_4$ . Foreign ownership strong/weak the relationship between audit committee characteristics and cost of capital in non-financial firms.

 $H_5$ . Managerial ownership has a significant impact on cost of capital in non-financial firms.

 $H_6$ . Foreign ownership strong/weak the relationship between managerial ownership and cost of capital in non-financial firms.

# Chapter 3

# **Research Methodology**

# **3.1** Data Description

In this section shows that research methodology that were finalized to examine the study and highlighted the sources of data collection. The purpose of study was to determine the impact of corporate governance practices on cost of capital in non-financial companies. The sample size of research were 108 non-financial firms in which period from the year 2011-2017. Sample consist of numerous non-financial manufacturing industries such as: sugar, spinning, cement, chemical, miscella-neous, food & personal use, oil and gas, pharmaceutical, power and distribution, automobile, technology and communication, fertilizer, gas and ceramics, paper and board, transport, leather and tanneries, tobacco and vanaspati and allied. The reason of choosing the non-financial firms due to the capital structure is different as compare to financial firms.

Secondary data were obtained and gathered from the firm's annual financial reports and statements published on Pakistan Stock Exchange for the period of 2011 to 2017. Some missing data in annual reports about firms' specific variables that were gathered from the State Bank of Pakistan but if some type of data not available on SBP site then gathered from the company's official websites. The published documents of State Bank of Pakistan, FSA & BSA. For the examination of empirical analysis, in research work apply a descriptive analysis, correlation analysis with multicollinearity check and regression models. A descriptive analytical table shows to obtain a sample characteristic. The panel data regression is conducted on dependent variables cost of capital (COC), cost of equity (COE) and cost of debt (COD for the improvement of connection among the independent variables like board of directors, audit committee and managerial ownership with moderating role of foreign ownership and also control effect of leverage.

# 3.2 Population and Sample of Study

The population of this research work were non-financial firms that were registered on Pakistan Stock Exchange. In the research work stratified random sampling were used for the improvement of analysis and findings regarding study hypotheses. According to corporate governance goodness cost of capital improvement is mandatory for all non-financial firms those were registered on Pakistan Stock Exchange. Cost of capital is dependent variable in this study and internal corporate governance practices were independent variables (subject to control variable also). In study measure the cost of capital with weighted average cost of capital and also more working on cost of equity and cost of debt as dependent variable.

# **3.3** Sample Classification

The below **Table: 3.1**, shows that 108 firms selected from non-financial firms to make sure an equal chance for every industry. 10 sugar mills and 25 spinning mills data taken from these firms. 07 cement firms and 09 chemical firms included for data strength. 07 firms taken from the food and personal use and 06 firms taken from the oil and gas industry. 04 firms taken from the pharmaceutical and 06 power distribution industry. 06 firm from automobile and 06 from technology and communication. 04 firms from fertilizer and 04 also form glass and ceramics industry. 04 firms taken from the paper and board and 03 from transport industry. 03 leather and tanneries and 02 from tobacco industry takes for data strength in data collection. 02 firms have been taken from the vanaspati and allied.

Industry	No. of Companies
Sugar	10
Spinning Mill	25
Cement	7
Chemical	9
Food and Personal Use	7
oil and gas	6
Pharmaceutical	4
Power and Distribution	6
Automobile	6
Technology and Communication	6
Fertilizer	4
Glass and Ceramics	4
Paper and Board	4
Transport	3
Leather and Tanneries	3
Tobacco	2
Vanaspati and Allied	2
Total	108

TABLE 3.1: Sample Classification

# 3.4 Estimation Method

The study were used ordinary least square method to check the influence of corporate governance mechanism on cost of capital of non-financial companies registered on Pakistan Stock Exchange. Multiple regression approaches will be using in this study; also fixed effect and random effect model were used to find out the strength of the above-mentioned hypotheses. Different test were used in this study; multicollinearity check (variance inflation factor). Model selection is on the basis of two criterion; likelihood ratio and Hausman test in this study.

# 3.5 Model Selection Test

### 3.5.1 Likelihood Test

Here,

Null hypothesis: Common effect is more appropriate

Alternate hypothesis: Fixed effect is more appropriate In above Table 3.2, shows

TABLE $3.2$ : I	Likelihood	Test
-----------------	------------	------

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.812011	( / /	0.0014
Cross-section Chi-square	94.793081	29	0.0000

the significant of the cross-section Chi-square with p-value 0.000 and now fixed effect model can be applied.

### 3.5.2 Hausman Test

Here,

Null hypothesis: Random effect is more appropriate

Alternate hypothesis: Fixed effect is more appropriate

TABLE 3.3: Hausman Test

Correlated Random Effects - Hausman Test Test cross-section random effects

Test Summary	Chi-Sq. Statis-	Chi-Sq. d.f.	Prob.
	tic		
Cross-section random	17.854242	15	0.2704

The purpose of testing the hausman test is to clear that possibility of fixed effect or random effect model with condition that if p value were significant (< than 5% confidence interval) then it can apply fixed effect model but if p value were greater than 5% then the study were apply random effect model and vice versa in case when p value not significant. In this study hausman test suggest study were accept null hypothesis in which random effect model were more appropriate for regression analysis. Both the above redundant and hausman test were suggested the random effect model were more appropriate for final interpretations but likelihood test suggest fixed effect model were more appropriate.

# 3.6 Measurement of Variables

### 3.6.1 Dependent Variable

#### **Cost of Capital**

Weighted average cost of capital refers to the cost that a firm has to pay to get the total capital. Cost of capital actually described that how much total combination of equity and debt amount in which company exist. Cost of capital were dependent variable in the study to check the influence of corporate governance practices as independent variables. A very key component of wealth creation is CoC. Practitioners and investigators with the help of optimal capital structure link cost of capital with shareholders wealth and cost of capital (Afkhami Rad, 2014).

Weighted average cost of capital were most generally applied technique of cost of capital calculation in real world so far (Massari et al., 2008). Weighted average cost of capital were the collection of cost of capital of equity and debt. Due to these advantage of Weighted average cost of capital has one of the basic concepts in corporate finance (Farber et al., 2007). Weighted average cost of capital were used as proxy for the measurement of cost of capital of firms (Bozec and Bozec, 2010). According to Massari et al. (2008), still Weighted average cost of capital approach were widely used all around the world in research.

Measurement if as follows:

WACC = Kd Rd + Ke Re (1-Tax Rate)

Equation of Weighted average cost of capital was used equity financing and debt financing. Where, Rd represent cost of debt on the company's outstanding debt and Re denote cost of equity. Kd and Ke were weights of debt and equity respectively. Weights of debts were the ratio of debt to debt plus equity. Weight of equity were considered as ratio of equity to debt plus equity. Tc represent rate of tax on company income. Standard treatment is (1-Tax Rate) in this equation to which shows interest payments deduction. However, cost of debt were reduce (Afkhami Rad, 2014).

#### Cost of Equity

A firm cost of equity shows that return of market strains in exchange for retaining the asset and bearing the hazard of ownership. Cost of equity is what equity owners expect the company to earn for them, expected growth in retained earnings plus expected growth in equity. According to (Massari et al., 2008), in the study cost of equity taken from the measurement: WACC = Kd Rd + Ke Re (1-Tax Rate), therefore Ke were the measurement of cost of equity.

#### Cost of Debt

The amount of the company pay on its debts is known as cost of debt. When interest will be paid on the long term borrowing so it's known as a proxy for the cost of debt. according to the study cost of debt (Kd) is measured as (Massari et al., 2008), measurement as: WACC = Kd Rd + Ke Re (1-Tax Rate), Kd cost of debt taken out for further analysis in study.

### 3.6.2 Independent Variables

#### **Board of Directors Characteristics**

A board of directors is a group of top executives chosen to represent shareholders. The board group responsible to establish policies for corporate governance, omission and making decisions regarding to the company main issues. The study have three proxies of board of directors; the first proxy board size were measured as the number of directors on the board, the second proxy board independence were measured as independent directors divided on the total number of directors measured by (Ali Shah and Butt, 2009; Garg, 2007). The third proxy board meetings measured as the number of meetings held in a year by (Qadorah and Fadzil, 2018).

#### Audit Committee Characteristics

An audit committee is one of the main operational committees of a firm's board of directors that is in responsible of managing financial reporting and revelation. Study has three proxies of audit committee the first proxy is measured as number of independent directors on the audit committee divided by the total number of directors on the audit committee measured by (Ali Shah and Butt, 2009). The second proxy were measured as number of meetings held by audit committee members by (Al-Matari et al., 2012). Third proxy were measured as the number of members held in audit committee measured by (Al-Mamun et al., 2014).

#### **Ownership Structure**

Correspondingly, a partnership is only a business retained by two or more people that haven't filed documents to create a company or a limited obligation firm. Managerial ownership which has been assumed significant impact on firm's determinants were defined like. "the percentage of shares owned through managers. Managerial ownership were measured as logarithm of the percentage of total shares control by executive directors divided by the total number of shares (Ali Shah and Butt, 2009).

### 3.6.3 Moderating Variable

#### Foreign Ownership

Foreign ownership has a control of a company by individuals who were not peoples of that domestic country or by firms whose head office outside that country. Logarithm of the percentage of foreign ownership to the foreign investors, individuals or companies measured by (Tamimi and Al-Fayoumi, 2011).

### 3.6.4 Control Variable

#### Leverage

Leverage is the (debt to asset ratio) that a business hold to purchase more economic resources. Leverage is working to stop consuming too much equity to fund processes. An extreme amount of economic leverage raises the hazard of failure, since it made more tough to refund debt amount. Leverage were measured as debt to asset ratio (Total Liabilities/Total Assets) by (Pham et al., 2011).

Debt to asset ratio were used as control variable among corporate governance and cost of capital because every firm want to minimize its debt burden in assets total volume, so impossible to make higher equity financing for total assets without efficient role of board of directors. If corporate bodies of the firm make effective and successful decision making for asset management with equity financing then firm minimize the pressure of debt in total assets for the firm.

### 3.7 Model Specification

In the study were used panel regression model for exploring the influence of corporate governance determinants on cost of capital in non-financial companies. Numerous investigators used diverse variable for corporate governance dimensions. According to previous literature there is so controversial to choose the best elements of corporate governance between investigators.

However, inside the researcher point of view no consensus on corporate level variables for the prediction of corporate governance for investigation. Every individual investigator use different corporate governance dimensions, so it's very tough to decide what type of corporate governance variables were best as mechanisms of corporate governance in the occurrence of past literature and findings.

The study were selected the Board of directors three determinant's (board size, board independence, board meetings), audit committee three characteristics (audit committee size, audit committee independence, audit committee meetings), ownership structure included (managerial ownership & foreign ownership as moderator) and leverage as control variable. The analysis were econometrically three equations for panel data regression models for dependent variables so written as follows:

The above model  $WACC_{(i,t)}$  indicate that i represent the sample and t represent the time period, WACC (weighted average cost of capital) is to measure the dependent variable Cost of Capital.  $\beta_o$  was used as constant and coefficient having a marginal effect on cost of capital, while  $\mu$  is the standard error in the model. The coefficients of independent variables are from  $\beta_1$  to  $\beta_7$  while BODI (board of director independence), BODS (board of director size), BODM (board of director meetings), ACI (audit committee independence), ACS (audit committee size), ACM (audit committee meetings), LMO (natural log of managerial ownership) are included as independent variables and  $\beta_9$  to  $\beta_1 5$  are interaction terms with role of moderating variable foreign ownership and  $\beta_8$  is LEV (leverage) is included in this study as control variable. In order to good explanation of the required relationship in the study has been used the descriptive statistics by using the Excel Spread sheet data of almost 108 non-financial companies registered in Pakistan Stock Exchange. The model shows that interaction term LFO (natural log of foreign ownership) as a moderator shows that weak or strong relationship between independent and dependent variables;  $WACC_{(i,t)}$  (weighted average cost of capital),  $COE_{(i,t)}$  (cost of equity) is second dependent variable and $COD_{(i,t)}$ indicates that cost of debt is third dependent variable.

## **3.8** Description of Variables

Variable Name	Abbreviation	n Measurement	Source
Cost of capi- tal	COC	Weighted average cost of capital.	(Massari et al., 2008).
Cost of eq- uity	COE	Total cost of shareholder eq- uity	(Massari et al., 2008).
Cost of debt	COD	Total cost of debt.	
Board size	BS	Number of mem- bers on the board.	(Singhal, 2014; Sultana, 2015; Wan Mohammad et al., 2018).
Board inde- pendence	BI	Independent directors/ to- tal number of Directors	(Abdul Rahman & Haneem Mohamed Ali, 2006; Ahmed Sheikh & Wang, 2011; Hermalin & Weisbach, 1991).
Board meet- ings	ВМ	Number of meet- ings	(Gavrea & Stegerean, 2012; Liao et al., 2018).

#### TABLE 3.4: Description of Variables

Audit com- mittee size	ACS	Total member of audit committee.	(Kipkoech & Rono, 2016; Wan Mohammad et al., 2018).
Audit com- mittee inde- pendence	ACI	Number of inde- pendent direc- tors/total number of audit commit- tee members.	(Al-Mamun et al., 2014; Kipkoech & Rono, 2016).
Audit com- mittee meeting	ACM	Number of general meetings in a year by audit commit- tee members.	(Abbott et al., 2004; Al-Mamun et al., 2014; Beasley et al., 2000; Hsu, 2007; Menon & Williams, 1994; Raghu- nandan et al., 1998).
Foreign own- ership	FO	Percentage of for- eign owners in the company.	(Gedajlovic et al., 2005).
Managerial Ownership	МО	Percentage of managerial own- ership in the company.	(Moh'd et al., 1998) and (Bokpin & Arko, 2009).
Leverage	LEV	(TL/TA) is used to control for the effect of leverage.	

# Chapter 4

# **Results and Discussion**

# 4.1 Descriptive Statistics

The descriptive statistics Table 4.1, explains behavior of data about all variables of the research model from the period of 2011 to 2017. Descriptive statistics of corporate governance and cost of capital were separately explained. Data behavior were studied to explore its accuracy before performing other statistical tests. Descriptive statistics shows that general behavior of the data, including the dependent, independent, moderator and control variable. The descriptive statistics test shows summary of data that include average value (mean), lower value in the data set (minimum), higher value in data set (maximum) and measurement of dispersion (standard deviation). The mean value tells about average of data, standard deviation tells about spread and measure of dispersion in the value of the data from the mean, standard deviation and mean has low due to the used as separately. Minimum and maximum tells about current series of data. In table dependent variable weighted average cost of capital explained as how much mean value its shows that average combination of debt and equity after paying taxation by 108 non-financial firms in Pakistan. In this table also explained that cost of capital minimum and maximum capital strength from all selected firms in which year any firms hold maximum capital and minimum capital and also shows that higher difference with standard deviation value. In descriptive statistics table also explained that cost of equity and debt average cost of 108 firms during 2011 to 2017. In this table independent variable (corporate governance mechanisms) have been discussed regarding their mean, minimum and maximum strength of data and also explained that higher difference with standard deviation relying in 2011 to 2017. In this table also explained that moderating variable existence in data with mean, minimum, maximum and standard deviation. Mean value tells about the average value of foreign ownership in Pakistani shareholding structure of non-financial firms between area 2011 to 2017. Descriptive statistics also explained that lowest and highest percentage of foreign ownership in any year by 108 non-financial firms. In this table also described that average value of leverage (debt to asset ratio in firms), lower and higher value of debt to asset ratio and difference among thesis value have been explained with standard deviation in non-financial firms.

Variables	Mean	Maximum	Minimum	Std. Dev.
WACC	0.2059	0.9247	0.0001	0.1664
COE	0.6179	0.9989	0.0002	0.2761
COD	0.3412	0.9909	0.0001	0.2798
BODI	0.1774	0.7143	0.0667	0.1038
BODS	8.2024	16.0000	3.0000	1.7156
BODM	5.2553	19.0000	2.0000	1.8305
ACI	0.3126	0.8000	0.1429	0.1083
ACS	3.5027	7.0000	2.0000	0.7763
ACM	4.1799	8.0000	2.0000	0.5680
MO	26.6935	83.5245	0.0002	25.5240
FO	6.4891	67.4400	0.0040	13.7371
LEV	0.4900	0.8305	0.0037	0.1939

TABLE 4.1: Descriptive Statistics

In **Table 4.1**, description about study variables has been explained. The mean value of WACC (weighted average cost of capital) is (0.20592) it describes the average non-financial firms having 20.59% weighted average cost of capital with

16.64% of standard deviation. The minimum value is (0.00010) and maximum value (0.92470). The reason of higher fluctuation in minimum and maximum value of WACC is up and down in equity financing and debt financing in non-financing firm of Pakistan. The mean value of cost of equity (COE) is (0.61791) it describes the average non-financial firms having 61.7% cost of equity with 27.61% of standard deviation. The minimum value is (0.00010) and maximum value (0.99892). The reason of higher fluctuation in minimum and maximum value in cost of equity is difference capital structure of every firm some firms having greater equity financing and some low equity financing. The mean value of cost of debt (COD) is (0.34118) it describes the average non-financial firms having 34.18% cost of debt with 27.97% of standard deviation. The minimum value is (0.00010) and maximum value in cost of debt is difference in capital structure of every firm some firms having maximum value in cost of debt is difference in capital structure of every firm some firms having maximum value in cost of debt is difference in capital structure of every firm some firms having maximum value in cost of debt is difference in capital structure of every firm some firms having greater debt cost and some lower debt cost.

The average range of board of director independence (BODI) is 0.17740 which mean average non-financial firms having 17.74% independent directors in the board and standard deviation is 0.1037., minimum value 0.0667 and maximum value 0.7143. The board of director size average value is 8.20 which mean average non-financial firms having 8 members in board and standard deviation is 1.715, minimum value 3 and maximum 16. The board of director meeting average value is 5.25 which mean average non-financial firms having 5% members in board and standard deviation is 1.83, minimum value 2 and maximum 19.

The sample mean value of audit committee independence (ACI) is 0.3126 which means average non-financial firms having 31% independent director in the board and standard deviation is 0.1083, minimum value 0.1429 and maximum .8000. The average range of audit committee size (ACS) is 3.50 which means that average value of non-financial firms having 3% total audit committee members in the board and standard deviation is 0.7763, minimum value 2 and maximum value 7. The average range of audit committee meetings (ACM) is 4.17 which means that average value of non-financial firms having 4% independent directors in the board and standard deviation is 0.5680, minimum value 2 and maximum value

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8. The sample mean value of managerial ownership (MO) is 26.69 which means that average value of non-financial firms having 26% management ownership in the ownership structure and standard deviation is 25.52, minimum value 0.0002 and maximum value is 83.52. The fluctuation in management ownership is due the mostly firms in Pakistan owns by family ownership so less concern to give ownership to management or employees. The sample mean value of foreign ownership (FO) is 6.48 which means that average value of non-financial firms having 6% foreign owners in the ownership structure and standard deviation is 13.73, minimum value 0.0040 and maximum value is 67.44. The higher fluctuation in the foreign ownership is depend on country because in Pakistan mostly family own firms and they less concern on foreign owners but higher value represents some multinational firms owned by under the mostly foreign ownership. The sample mean value of leverage (LEV) is 0.4900 which show that average range of nonfinancial firms having 49% firm growth in the firm's assets and standard deviation is 0.1939, minimum value is 0.0037 and maximum value is 0.8305. The greater fluctuation in the leverage depend on firm financial strategies how they manage the debt ratio. Some firm concern debt to equity ratio but some focus on debt to asset ratio same as this study.

## 4.2 Correlation Analysis

Correlation analysis showed to determine the relationship between cost of capital and corporate governance practices. In our study also examine the potential multicollinearity problem. Multicollinearity problem check with the formula (VIF=1/1-Adjusted R-squared). According to the formula all values of VIF below from 3, so according to the standard value of VIF all values of VIF less than 10 so there was no multicollinearity problem in research model. In below Table 4.2, examined the correlation analysis among all corporate governance practices and dependent variables. To check the strength of relationship among variables with direction of positive and negative measured through correlation matrix. The range for correlation analysis is (-1 to +1) which shows that correlation between variables. If value 0 then value shows that negative relationship and if positive then shows that positive relationship among variables. (+1, -1) shows the perfect correlation among variables. The interpretation of the correlation analysis given in Table:4.2:

	WACC	COE	COD	BODI	BODS	BODM	ACI	ACS	ACM	мо	FO
WACC	1.00										
COE	0.43	1.00									
COD	-0.30	-0.47	1.00								
BODI	0.03	0.06	0.39	1.00							
BODS	0.19	-0.09	0.04	0.17	1.00						
BODM	-0.04	-0.34	0.31	0.16	-0.04	1.00					
ACI	-0.21	-0.23	0.24	0.27	0.21	0.38	1.00				
ACS	0.29	0.23	-0.04	0.22	0.35	-0.27	-0.38	1.00			
ACM	0.12	0.08	0.06	0.13	0.63	0.00	0.09	0.29	1.00		
MO	-0.13	-0.06	0.11	-0.27	-0.40	0.29	-0.03	-0.15	-0.31	1.00	
FO	0.33	0.21	-0.08	-0.12	-0.15	-0.03	-0.10	0.16	-0.16	0.02	1.00
LEV	-0.16	-0.64	0.69	0.15	0.27	0.36	0.22	-0.12	0.26	-0.03	-0.34

 TABLE 4.2: Correlation Matrix

In Table 4.2, correlation analysis analyzed no multicollinearity issues in panel data of 7 years non-financial sector because values relay below the 0.7 correlation outcomes described the significant correlations all the values has below 0.7.

In **Table: 4.2**, correlation analysis indicates that cost of equity (COE) coefficient value 0.43 positively linked with weighted average cost of capital (WACC). The high correlation shows that both indicators were dependent variables and measurement of these both mostly similar data so these were highly correlated each other. The coefficient value of cost of debt (COD) -0.30 indicate negatively correlation. The value shows negative correlation among cost of debt and weighted average cost of capital, due to the lower debt financing in non-financial firms. The coefficient value -0.47 shows that negative correlation among cost of debt and cost of equity. Mostly firms lower concern on debt financing and mostly rely on equity financing so due to the lower concern both variable negatively correlated.

The board of director independence (BODI) coefficient value 0.03 described that significant & positive connection among board independent director and weighted average cost of capital. In the next coefficient value of (BODI) 0.06 which shows

that board of director independence significantly/positively linked with cost of equity, the coefficient value of (BODI) 0.39 shows that significant & positive connection among board of director independence and cost of debt. In the next section board of director size (BODS) coefficient value 0.19 described that significant & positive link among board of director size and weighted average cost of capital. The coefficient value -0.019 explains that board of director size significantly & negatively correlated with cost of equity. The coefficient value 0.04 shows that significant/negatively correlation among board of director size and cost of debt. The coefficient value 0.17 shows that board of director size significantly/positively correlated with board of director independence. In the next section board of director meetings (BODM) coefficient value -0.04 which shows that significant/negative correlation among board meetings and weighted average cost of capital. the coefficient value -0.34 shows that board meetings significantly/negatively linked with cost of equity. The coefficient value 0.31 which shows that significant/positive correlation among board meetings and cost of debt. The coefficient value 0.16 shows that board meetings significantly/positively correlated with board independence. The coefficient value -0.04 which explains that significant/negative correlation among board meetings and board size.

In the next section audit committee independence (ACI) coefficient value -0.21 which explains that significant/negative correlation among audit committee independence and weighted average cost of capital. The coefficient value -0.23 shows that audit committee independence significantly/negatively correlated with cost of equity. The coefficient value 0.24 which described that significant/positive correlation among audit committee independence and cost of debt. The coefficient value 0.27 shows that audit committee independence significantly/positively linked with board independence. The coefficient value 0.21 which described that significant/positively linked with board independence. The coefficient value 0.21 which described that significantly/positively linked with board size. The coefficient value 0.38 shows that audit committee independence significantly/positively linked with board meetings. In this next section audit committee size (ACS) coefficient value 0.29 which shows that significant/positive correlation among audit committee size and weighted average cost of capital. The coefficient value 0.23

shows that audit committee size significantly/positively linked with cost of equity. The coefficient value -0.04 which shows that significant/negative connection among audit committee size and cost of debt. The coefficient value 0.22 shows that audit committee size significantly/positively linked with board independence. The coefficient value 0.35 which described that significant/positive correlation among audit committee size and board size. The coefficient value -0.27 described that audit committee size significantly/negatively linked with board meetings. The coefficient value -0.38 shows that audit committee size significantly/negatively linked with audit committee independence.

In this next section audit committee meetings (ACM) coefficient value 0.12 which shows that significant/positive connection among audit committee meetings and weighted average cost of capital. The coefficient value 0.08 explain that audit committee meetings significantly/positively correlated with cost of equity. The coefficient value 0.06 which shows that significant/positive correlation among audit committee meetings and cost of debt. The coefficient value 0.13 shows that audit committee meetings significantly/positively linked with board independence. The coefficient value 0.63 which shows that significant/positive correlation among audit committee meetings and board size. The coefficient value 0.00 explains that audit committee meetings no any relation with board meetings. The coefficient value 0.09 shows that audit committee meetings significantly/positively correlated with audit committee independence. The coefficient value 0.29 explains that audit committee meetings significantly/positively correlated with audit committee significantly/positively correlated with audit committee independence.

In this next section managerial ownership (MO) coefficient value -0.13 which explains that significant/negative correlation among management ownership and weighted average cost of capital. The coefficient value -0.06 shows that management ownership significantly/negatively correlated with cost of equity. The coefficient value 0.11 which shows that significant/positive connection among management ownership and cost of debt. The coefficient value -0.27 shows that management ownership significantly/negatively linked with board independence. The coefficient value -0.40 which shows that significant/negative connection among management ownership and board size. The coefficient value 0.29 described that management ownership significantly/positively linked with board meetings. The coefficient value -0.03 described that management ownership significantly/negatively linked with audit committee independence. The coefficient value -0.15 shows that management ownership significantly/negatively linked with audit committee size. The coefficient value -0.31 shows that management ownership significantly/negatively linked with audit committee meetings.

In this next section foreign ownership (FO) coefficient value 0.33 which shows that significant/positive connection among foreign ownership and weighted average cost of capital. The coefficient value 0.21 shows that foreign ownership significantly/positively linked with cost of equity. The coefficient value -0.08 which shows that significant/negative correlation among foreign ownership and cost of debt. The coefficient value -0.12 explains that foreign ownership significantly/negatively linked with board independence. The coefficient value -0.15 which shows that significant/negative connection among foreign ownership and board size. The coefficient value -0.03 explains that foreign ownership significantly & negatively linked with board meetings. The coefficient value -0.10 shows that foreign ownership negatively connected with audit committee independence. The coefficient value 0.16 shows that foreign ownership significantly/positively linked with audit committee size. The coefficient value -0.16 described that positive correlation among foreign ownership and audit committee meetings. The coefficient value 0.02 shows that foreign ownership significantly/positively linked with management ownership.

In this next section leverage (LEV) coefficient value -0.16 which shows that significant/negative correlation among leverage and weighted average cost of capital. The coefficient value -0.64 explains that leverage significantly/negatively linked with cost of equity. The coefficient value 0.69 which shows that significant/positive connection among leverage and cost of debt. The coefficient value -0.15 explains that leverage significantly/negatively linked with board independence. The coefficient value 0.27 which shows that significant/positive connection among leverage and board size. The coefficient value 0.36 explains that leverage significantly/positively linked with board meetings. The coefficient value -0.22 shows that leverage significantly/negatively linked with audit committee independence. The coefficient value 0.12 shows that leverage significantly/positively linked with audit committee size. The coefficient value -0.26 shows that leverage significant-ly/positively linked with audit committee meetings. The coefficient value -0.03 shows that leverage significantly/negatively linked with management ownership. The coefficient value -0.34 explains that leverage significantly/negatively correlated with foreign ownership.

## 4.3 Panel Regression Analysis

In Table 4.3, panel regression analysis has been described the effect of corporate governance practices with moderating role of foreign ownership on cost of capital. However, study found that direct and indirect effect of independent variables board of director characteristics, audit committee characteristics and managerial ownership with different proxies. The study has been found that direct significant/positive or negative role of independent directors, board size and board meetings for adjusting the cost of capital in non-financing industry of Pakistan. In the next, study also found that direct significant/positive or negative role of audit committee independence, audit committee size and audit committee meetings for adjusting the cost of capital in non-financial sector of Pakistan. In the next, study found that significant/positive or negative role of managerial ownership for adjusting the cost of capital in non-financing industry of Pakistan. In the next, study found that significant/positive or negative indirect role of interaction term foreign ownership among independent variables and dependent variable. In the interaction term foreign ownership, research work finds out the combine effect of foreign ownership plus independent variable individually. Regarding to the direction of likelihood ratio test fixed model were suitable for the final interpretation. According to hausman test and redundant test suggested the random effect model were more suitable for the final interpretation. The fixed model and random effect model R-square and p values were mostly insignificant and unaccepted range then model

was not finalized for further analysis but if not in accepted range then common effect model were applied.

### 4.3.1 Fixed Effect Model

According to direction of likelihood test study were applied the fixed effect model to check the effect of corporate governance mechanism on cost of capital with moderating role of foreign ownership.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.5227	0.5516	0.9476	0.3490
BODI	1.1249	0.6496	1.7316	*0.0911
BODS	0.0433	0.0561	0.7730	0.4440
BODM	-0.0697	0.0340	-2.0521	**0.0467
ACI	-0.7107	0.4298	-1.6537	0.1060
ACS	0.0044	0.0993	0.0442	0.9650
$\mathbf{ACM}$	-0.0570	0.0641	-0.8884	0.3796
MO	-0.0090	0.0497	-0.1813	0.8571
$\mathbf{LEV}$	-0.1604	0.1821	-0.8812	0.3835
FO*BODI	-0.3494	0.2916	-1.1982	0.2379
FO*BODS	-0.0086	0.0134	-0.6470	0.5213
FO*BODM	0.0045	0.0122	0.3666	0.7159
FO*ACI	0.1696	0.1465	1.1577	0.2538
FO*ACS	0.0042	0.0234	0.1805	0.8577
FO*ACM	0.0043	0.0266	0.1619	0.8722
FO*MO	0.0006	0.0010	0.5601	0.5785
R-squared	0.8040	Akaike info criterion		-1.1564
Adjusted R-squared	0.5834	Schwarz criterion		0.1564
F-statistic	3.6453			
$\operatorname{Prob}(\operatorname{F-statistic})$	0.0000			

TABLE 4.3: Fixed Effect Model

In the **Table 4.3**, the outcome of the cost of capital and corporate governance mechanism including interaction term foreign ownership while using the panel regression analysis with fixed effect model. A linear panel data model with the helping of non-financial firms' fixed effect to examine the results were used. All the coefficient of independent and interaction terms including control variables are mostly insignificant association with dependent variable, except four variables whose were significant. The value of  $\mathbb{R}^2 = 0.80$  which shows that 80% fluctuation in firm cost of capital due to the independent, moderator and control variable correspondingly. In other word firms weighted average cost of capital is 80% described by the state independent variables collectively. According to the outcome of random effect model were mostly p values were insignificant so in this study didn't apply fixed effect model for further discussion.

### 4.3.2 Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.6061	0.2438	2.4865	0.0153
BODI	0.1592	0.2718	0.5855	0.5601
BODS	0.0228	0.0167	1.3702	0.1750
BODM	-0.0025	0.0168	-0.1470	0.8836
ACI	-0.3934	0.2242	-1.7552	*0.0836
ACS	-0.0319	0.0329	-0.9688	0.3360
$\mathbf{ACM}$	-0.0825	0.0492	-1.6773	*0.0979
MO	-0.0182	0.0092	-1.9740	*0.0523
$\operatorname{LEV}$	-0.0609	0.1172	-0.5196	0.6050
FO*BODI	-0.1523	0.1177	-1.2941	0.1999
FO*BODS	-0.0228	0.0069	-3.2826	***0.0016
FO*BODM	0.0114	0.0076	1.5025	0.1375
FO*ACI	0.0788	0.0819	0.9620	0.3394
FO*ACS	0.0204	0.0105	1.9475	*0.0555
FO*ACM	0.0176	0.0186	0.9448	0.3480
FO*MO	-0.0074	0.0038	-1.9311	*0.0575
R-squared	0.3115			
Adjusted R-squa	ared 0.1640			
<b>F-statistic</b>	2.1116			
Prob(F-statistic)	) 0.0190			

 TABLE 4.4: Random Effect Model

According to the direction of hausman test study were applied random effect model to check the random impact of corporate governance practices on cost of capital with moderating role of foreign ownership. The table were examining the impact of independent variables on dependent variable.

In the **Table 4.4**, the outcome of the cost of capital and corporate governance mechanism including interaction term foreign ownership while using the panel regression analysis. A linear panel data model with the helping of non-financial firms' random effect to examine the results were used. All the coefficient of independent and interaction terms including control variables were mostly insignificant association with dependent variable, except two variables whose were significant. The value of  $R^2 = (0.3115)$  which shows that 31% fluctuation in firms cost of capital due to the independent, moderator and control variable correspondingly. In other word firms weighted average cost of capital is 31% described through the state independent variables collectively. The outcome of the random effect model were mostly p values were insignificant so in this study didn't apply random effect model. The study has been applied first model that is common effect model for further interpretation and discussion in our study.

### 4.3.3 Corporate Governance and Cost of Capital

In **Table: 4.5**, explains the impact of corporate governance mechanisms on cost of capital with moderating role of foreign ownership. First section shows that direct impact of board of director characteristics, audit committee characteristics and managerial ownership on WACC with controlling effect of leverage (debt to asset ration). In section two shows the moderating role of foreign ownership with every independent variable. In below table corporate governance mechanisms has been explained with direct and indirect impact on dependent variable cost of capital. In the first table shows that board of direct characteristics impact individually on capital of the firm. In next POLS model has been discussed direct impact of audit committee characteristics on capital of the firms and in next POLS model has been described that managerial ownership impact on capital of the firms directly. In next POLS model has been described that managerial ownership impact on capital of the firms directly. In next POLS model has been described that managerial ownership impact on capital of the firms directly. In next POLS model has been described that managerial ownership impact on capital of the firms directly. In next POLS model has been described that moderation role of foreign ownership among the relationship between corporate governance mechanisms and capital the firms individually.

Dependent Variable: WACC						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.6508	0.2377	2.7386	0.0078		
BODI	-0.0504	0.2340	-0.2153	0.8302		
BODS	0.0216	0.0140	1.5421	0.1276		
BODM	0.0156	0.0154	1.0087	0.3166		
ACI	-0.4137	0.1909	-2.1665	**0.0337		
ACS	-0.0231	0.0272	-0.8514	0.3975		
$\mathbf{ACM}$	-0.1075	0.0573	-1.8763	*0.0648		
$\mathbf{MO}$	-0.0187	0.0069	-2.7085	**0.0085		
$\operatorname{LEV}$	-0.1120	0.1085	-1.0318	0.3057		
FO*BODI	-0.1674	0.1027	-1.6295	0.1077		
FO*BODS	-0.0209	0.0070	-2.9902	**0.0038		
FO*BODM	0.0173	0.0074	2.3500	**0.0216		
FO*ACI	0.0153	0.0769	0.1990	0.8428		
FO*ACS	0.0174	0.0089	1.9521	*0.0549		
FO*ACM	0.0141	0.0183	0.7715	0.4430		
FO*MO	-0.0062	0.0032	-1.9353	*0.0570		
R-squared	0.3525	Akaike info	criterion	-0.6593		
Adjusted R-squared	0.2137	Schwarz	criterion	-0.2027		
<b>F-statistic</b>	2.5405					
Prob(F-statistic)	0.0046					

 TABLE 4.5:
 Common Effect Model

Note: The table depicts the results for linear panel data regression model with using the firms and 7 years fixed effects. The dependent variable is the WACC (weighted average cost of capital) and the independent variables are mechanisms of corporate governance. In further statistically significant level is 1%, 5% and 10 percent respectively.

In the **Table: 4.5**, corporate governance mechanisms and cost of capital have been explained. To determining the relationship of corporate governance mechanism and its influence on cost of capital with moderating role of foreign ownership, the common effect model is used for the hypothesis's improvement. The above table is included dependent variable cost of capital and independent variables board of director proxies (board independence, board of director size, board of director meetings), audit committee proxies (audit committee independence, audit committee size, audit committee meetings), moderating variable foreign ownership and control variable leverage. The above Table 4.5 shows that value of  $\mathbb{R}^2$  (0.3525) in the model which includes corporate governance mechanisms shows only 35% cost of capital examined through the independent variables, in other words variation in weighted average cost of capital due to the corporate governance mechanisms. Moreover, the R-squared value build a suitable source for the model of corporate governance and cost of capital.

Board of director characteristics has a significant impact on cost of capital in non-financial firms. In above model BODI (board independence), BODS (board size) and BODM (Board meetings) found insignificant regarding to the standard required level of (p>0.05). According to these values' board of director characteristics insignificantly influence the cost of capital in non-financial sector. Similar result findings in the previous study of (Hermalin and Weisbach, 1991; Abdul Rahman and Haneem Mohamed Ali, 2006; Singhal, 2014; Wan Mohammad et al., 2018). Our result found insignificant impact of board of directors on cost of capital.

Foreign ownership alters the association among board of director characteristics and cost of capital in non-financing sector. In above model board independence & board meetings with interaction term of (FO\*BODI) found insignificant regarding to the standard required level of (p>0.05) but board size and board meetings interaction terms significant regarding to the standard required level of (p<0.05) with coefficient beta value of interaction term (FO\*BODS) is ( $\beta$ = -0.0209) and (FO\*BODM) is ( $\beta$ = 0.0173).

According to this value foreign ownership weaken the association among board of director size and cost of capital in non-financial sector and foreign ownership strengthen the relationship between board meetings and cost of capital. According to the combine impact of interaction term foreign ownership and board of directors characteristics on cost of capital were special because foreign ownership weak the association among board size and cost of capital but strengthen the relationship between board meetings and cost of capital and insignificant impact of board independence. Foreign ownership significantly alters the connection between board of director characteristics and cost of capital so, hypothesis 2 has been accepted. Audit committee has a significant effect on cost of capital in non-financial firms. In above model ACI (audit committee independence) found statistically significant at level of (p<0.05) with coefficient value ( $\beta$ =-0.4137). ACM (audit committee meetings) found significant regarding to the standard required level of (p<0.05) with coefficient value ( $\beta$ =-0.1075). ACS (audit committee size) found insignificant regarding to the standard required level of (p>0.05). Foreign ownership no any relationship between board size and cost of capital.

According to these values' audit committee significantly influence the cost of capital in non-financial firms. So, there is no direct influence of audit committee on cost of capital in non-financial sector. In this research work has been analyze that audit committee no any direct effect on cost of capital. In the past studies were found that same results by (Al-Mamun et al., 2014; Kajananthan, 2012; Kipkoech and Rono, 2016). Audit committee significantly influence the cost of capital in non-financial firms, so hypothesis 3 has been accepted.

Foreign ownership alters the connection among Audit committee and cost of capital in non-financial firms. In above model audit committee independence with interaction term of (FO) found insignificant regarding to the standard required level of (p>0.05) but audit committee size significant regarding to the standard required level of (p<0.05) with coefficient beta value of interaction term (FO\*ACS) is ( $\beta$ = 0.0174) and audit committee meetings interaction term (FO\*ACM) insignificant regarding to the standard required level of (p>0.05).

According to these values foreign ownership strengthens the association between audit committee size/audit and cost of capital in non-financial firms. The study has been found that significant/positive moderation effect of foreign ownership among audit committee and cost of capital in non-financing sector of Pakistan. Foreign ownership significantly alters the connection between board of director characteristics and cost of capital so, hypothesis 4 has been accepted.

Managerial ownership has a significant impact on cost of capital in non-financial firms. In above model MO (managerial ownership) found significant regarding to the standard required level of (p<0.05) with coefficient beta value ( $\beta$ = -0.0187). the study has been found that managerial ownership direct and significant negative

affected the cost of capital in non-financing sector of Pakistan. Similar findings in the past studies have been found by (Moh'd et al., 1998; Bokpin and Arko, 2009). Management ownership significantly influence the cost of capital in non-financial firms, so hypothesis 5 has been rejected.

Foreign ownership alters the connection among management ownership and cost of capital in non-financial firms. In above model interaction term (FO\*MO) (p<0.05), found statistically significant with coefficient value ( $\beta$ = -0.0062). According to significant value of interaction term foreign ownership weaken the relationship between managerial ownership and cost of capital in non-financing sector of Pakistan.

However, study findings show that non-financial sector in Pakistan no need of foreign ownership in for management shareholding structure. Foreign ownership has no significantly alters the connection between managerial ownership and cost of capital so, hypothesis 6 has been accepted. The debt to asset ratio leverage don't found a insignificant impact on cost of capital its mean no controlling role of leverage for above model in this study.

### 4.3.4 Corporate Governance and Cost of Equity

In **Table: 4.6**, explains impact of corporate governance mechanisms on cost of equity with moderating role of foreign ownership. In section two shows the moderating role of foreign ownership with every exogenous variable. In the first table shows that board of direct characteristics impact individually on equity amount of the firm. In next POLS model has been discussed direct impact of audit committee characteristics on equity amount of the firms and in next POLS model has been described that managerial ownership impact on equity amount of the firms directly. In next POLS model has been described controlling role of debt to asset ratio (leverage) on entire model of equity cost. In next POLS model has been described that moderation role of foreign ownership among the relationship between exogenous variable and equity cost the firms individually.

Dependent Variable: COE						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.7775	0.2632	2.9538	0.0041		
BODI	0.4016	0.2649	1.5160	0.1336		
BODS	-0.0120	0.0152	-0.7891	0.4325		
BODM	-0.0138	0.0173	-0.7975	0.4276		
ACI	-0.2552	0.2213	-1.1532	0.2523		
ACS	0.0043	0.0313	0.1364	0.8919		
$\mathbf{ACM}$	0.0741	0.0611	1.2132	0.2287		
MO	-0.0122	0.0072	-1.6826	*0.0965		
$\operatorname{LEV}$	-0.5043	0.1275	-3.9538	***0.0002		
FO*BODI	0.0953	0.1138	0.8370	0.4051		
FO*BODS	-0.0116	0.0077	-1.5020	0.1371		
FO*BODM	0.0112	0.0078	1.4407	0.1537		
FO*ACI	0.0466	0.0895	0.5211	0.6038		
FO*ACS	0.0211	0.0100	2.1036	**0.0386		
FO*ACM	-0.0187	0.0198	-0.9468	0.3467		
FO*MO	0.0031	0.0033	0.9417	0.3492		
R-squared	0.4262	Akaike info	criterion	-0.3547		
Adjusted R-squared	0.3158	Schwarz cri	terion	0.0782		
F-statistic	3.8619					
Prob(F-statistic)	0.0000					

 TABLE 4.6:
 Common Effect Model

The **Table: 4.6**, determines the impact of corporate governance mechanisms on cost of equity and also check the moderation effect of foreign ownership in non-financial sector of Pakistan. The above regression model shows that value of  $\mathbb{R}^2$  (0.4262) in the model which includes corporate governance mechanisms shows only 42% cost of equity examined through the independent variables. Moreover, the R-squared value build a suitable source for the model of corporate governance and cost of equity.

Board of director characteristics has a significant influence on cost of equity in non-financial firms. In above model BODI (board independence), BODM (board meetings) and BODS (board size) found insignificant regarding to the standard required level of (p>0.05. According to these values just' board of director characteristics no any direct impact on cost of equity in non-financial firms. Foreign

ownership alters the association among board of director and cost of equity in nonfinancial firms. In above model board independence, board size and board meetings with interaction term of (FO\*BODI), (FO\*BODS) and (FO\*BODM) found insignificant regarding to the standard required level of (p>0.05 after adding the moderation effect of foreign ownership. According to these values there is no need of moderator foreign ownership between board of director and cost of equity in non-financial sector.

Audit committee characteristics has a significant impact on cost of equity in non-financial firms. In above model ACI (audit committee independence), ACS (audit committee size) and ACM (audit committee meetings). According to these value' audit committee insignificant influence on cost of equity in non-financial firms its mean no any direct impact of audit committee on cost of equity in non-financial firms. Foreign ownership alters the association among audit committee and cost of equity in non-financial sector. In above model interaction term (FO\*ACI) and (FO\*ACM) found insignificant regarding to the standard required level of (p>0.05). (FO\*ACS) audit committee size interaction term significant with coefficient value ( $\beta$ = 0.0211). this value shows that foreign ownership alters the relationship between audit committee size and cost of capital. According to these values no need of foreign ownership as moderator among audit committee and cost of equity in non-financial sector.

Managerial ownership has a significant influence on cost of equity in non-financial firms. In above model MO (managerial ownership) found significant regarding to the standard required level of (p<0.05) with coefficient beta value ( $\beta$ = -0.0122). According to these values' managerial ownership significantly/negatively affect the cost of equity in non-financial firms. Foreign ownership alters the relation between managerial ownership and cost of capital in non-financial firms. In above model interaction term (FO\*MO) (p>0.05), found insignificant. According to insignificant value of interaction term shows that there is no need of moderator of foreign ownership among managerial ownership and cost of equity in non-financial firms.

#### 4.3.5 Corporate Governance and Cost of Debt

In **Table: 4.7**, explains the impact of corporate governance mechanisms on cost of debt with moderating role of foreign ownership. First section shows that direct impact of board of director characteristics, audit committee characteristics and managerial ownership on WACC with controlling effect of leverage (debt to asset ration). In section two shows the moderating role of foreign ownership with every independent variable.

Dependent Variable: COD				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.2913	0.2663	1.0937	0.2778
BODI	1.0404	0.2496	4.1678	***0.0001
BODS	-0.0006	0.0149	-0.0399	0.9683
BODM	-0.0218	0.0162	-1.3451	0.1829
ACI	-0.1277	0.2115	-0.6035	0.5481
ACS	-0.0546	0.0323	-1.6945	*0.0946
$\mathbf{ACM}$	-0.0346	0.0629	-0.5502	0.5839
MO	0.0231	0.0066	3.4890	***0.0008
$\mathbf{LEV}$	0.7792	0.1266	6.1538	***0.0000
FO*BODI	0.1142	0.1119	1.0208	0.3108
FO*BODS	-0.0131	0.0082	-1.5971	0.1147
FO*BODM	0.0111	0.0079	1.4015	0.1654
FO*ACI	0.0095	0.0880	0.1079	0.9144
FO*ACS	0.0070	0.0113	0.6193	0.5377
FO*ACM	0.0013	0.0218	0.0617	0.9510
FO*MO	-0.0014	0.0032	-0.4276	0.6702
R-squared	0.6615	Akaike info criterion		-0.5339
Adjusted R-squared	0.5900	Schwarz criterion		-0.0804
<b>F-statistic</b>	9.2497			
Prob(F-statistic)	0.0000			

 TABLE 4.7: Common Effect Model

The **Table: 4.7**, determines the impact of corporate governance practices on cost of debt and also check the moderation effect of foreign ownership in non-financial firms of Pakistan. The above table shows that value of  $\mathbb{R}^2$  (0.6615) in the model which includes corporate governance mechanisms shows only 66% cost of debt

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examined through these independent governance mechanisms. Moreover, the R-squared value build a suitable source for the model of corporate governance and cost of debt financing.

Board of director characteristics has a significant impact on cost of debt in non-financial firms. In above model BODI (board independence) found significant regarding to the standard required level of (p<0.05) with coefficient beta value ( $\beta$ = 1.0404). BODS (board size) and BODM (board meetings) found insignificant regarding to the standard required level of (p>0.05). According to these values just' board of director independence significantly/positively influence the cost of debt in non-financial sector but board size and board meetings insignificantly influence the cost of debt in non-financial sector. Foreign ownership alters the association among board of director and cost of debt in non-financial sector. In above model board independence (FO\*BODI), (FO\*BODS) and (FO\*BODM) found insignificant regarding to the standard required level of (p>0.05). According to these values there is no need of moderator foreign ownership between board of director and cost of debt in non-financial firms.

Audit committee characteristics has a significant effect on cost of debt in nonfinancial firms. In above model ACI (audit committee independence) and ACM (audit committee meetings) found insignificant regarding to the standard required level of (p>0.05). ACS (audit committee size) found significant regarding to the standard required level of (p<0.05) with coefficient beta value ( $\beta$ = -0.0546). According to these values' audit committee size significantly/negatively influence the cost of debt in non-financial firms but audit committee independence and audit committee meetings insignificantly influence the cost of debt in non-financial firms. Foreign ownership alters the association among audit committee and cost of debt in non-financial sector. In above model interaction term (FO\*ACI), (FO\*ACS) and (FO\*ACM) found insignificant regarding to the standard required level of (p>0.05). According to these values no need of foreign ownership as moderator among audit committee and cost of debt in non-financial firms.

Managerial ownership has a significant impact on cost of debt in non-financial firms. In above model MO (managerial ownership) found significant regarding to the standard required level of (p<0.05) with coefficient beta value ( $\beta$ =0.0231). According to these values' managerial ownership significantly/positively influence the cost of debt in non-financial sector. Foreign ownership alters the connection between managerial ownership and cost of debt in non-financial firms. In above model interaction term (FO\*MO) (p>0.05), found insignificant regarding to the standard required level of significance. According to insignificant value of interaction term there is no need of moderator of foreign ownership among managerial ownership and cost of debt in non-financial sector.

## Chapter 5

# **Conclusion and Recommendation**

### 5.1 Conclusion

The study determines the influence of internal corporate governance determinants on cost of capital with moderating role of foreign ownership in non-financial companies of Pakistan as a developing economy during the 2011 to 2017. In this study try to analyze that link among internal corporate governance practices and cost of capital has been considering the valuable them in the area of finance through literature support and empirical evidence. So, the objective in the background of the research work is to analyzed either corporate governance has any meaningful impact on cost of capital in manufacturing sector of Pakistan. In this research also examined how non-financial firms were going to overcome specific issues related with corporate governance determinants.

In present study first purpose were to explore the direct influence of corporate governance practices on dependent variables and the number two purpose is to explore the moderation impact through interaction term foreign ownership on dependent variable such as cost of capital. The study investigation measures of corporate governance by getting to the extensively accepted variables such as board of director, audit committee, managerial ownership and moderation term foreign ownership. For the conformation of outcome and analysis accuracy, also included three control variables; leverage, return of assets and firm growth but in our model, leverage is fit for analysis and other two have been removed. In this study panel data analysis technique have been applied, so statistical and fundamental conclusion of this research work showed that significant connection among corporate governance mechanisms and cost of capital.

In this study panel regression model were applied, study was applied housman and likelihood ratio test so these tests suggests random model fixed effect model but, in both models, adjusted r-square were very low and mostly variables were insignificant so for the further interpretation and discussion study were applied common effect model for all further interpretations. First, of all study were found the direct impact of corporate governance practices on cost of capital. So, in the duration of board of director proxies' examinations we explore to found that value of board independence (BODI) insignificantly linked with cost of capital. In second proxy found that value of board size (BODS) were also insignificantly linked with cost of capital. In third proxy the value of board meetings (BODM) found that insignificantly/positively linked with cost of capital. So, our research found that insignificant connection among board of director meetings and cost of capital. These results supported to the study findings in developing countries significant relationship among board of director meetings and cost of capital.

In the next step of regression findings audit committee proxies examined and study has been found that value of audit committee independence (ACI) significantly related with cost of capital. Independent directors significantly influence the cost of capital. In next the value of audit committee size (ACS) found that insignificantly linked with cost of capital. Audit committee size has no any influence on cost of capital. The number three proxy audit committee meetings (ACM) also found that significantly linked with cost of capital.

In next face research analysis has been explored the third independent variable managerial ownership, (MO) found that significantly/negatively linked with cost of capital. So according to this value shows that inverse connection among management shareholding and cost of capital. according to our findings no need to non-financial firms for any foreign ownership. In the next confirmed that results accuracy is exist because control variable leverage significantly linked with cost of capital. The findings line of leverage significantly positively regarding with cost of capital when leverage have more increase in fixed assets. Corporate governance mechanism empirically examined the significant relationship with cost of capital, so first objective has been fulfilled.

In this study model also examined the impact of moderation effect through interaction term foreign ownership. First of all, we applied the moderation effect among board of directors and cost of capital. Our study analyzed value of interaction term (FO\*BODI) insignificant association among board independence and cost of capital. So foreign ownership did not moderate this relationship. In the second interaction term (FO\*BODS) and (FO\*BODM) found that significant association among board size and cost of capital. So, according to these outcomes study found that foreign ownership moderated the association among board size, board meetings and cost of capital. These values show that foreign ownership alters the relationship among board of directors' characteristics and cost of capital.

In the fourth interaction term study examined that moderation effect among audit committee and cost of capital. In this interaction term (FO\*ACI) found that insignificant association among audit committee independence and cost of capital. So, there is no moderation effect of foreign ownership among audit committee independence and cost of capital. In the fifth interaction term (FO\*ACS) found that significant connection among audit committee size and cost of capital. So, these conclusions described foreign ownership moderated the association among audit committee size and cost of capital. In the sixth interaction term (FO\*ACM) found insignificant association among audit committee meetings and cost of capital. So, study analyzed that foreign ownership don't moderated the association among audit committee meetings and cost of capital. In this study found that foreign ownership plays a vital role among audit committee members and cost of capital in non-financial firms. In the seventh interaction term examined that moderation effect among managerial ownership and cost of capital. In this interaction term (FO\*MO) found that significant association among managerial ownership and cost of capital. So, regarding to the findings foreign ownership moderated the connection among management ownership and cost of capital.

In the next section study were applied as checking the direct impact of corporate governance practices on cost of equity. So, in the duration of board of director proxies' examinations study has been explore to found that value of board independence (BODI), board size (BODS) and board meetings (BODM) insignificantly linked with cost of equity. These results show that no direct impact of board characteristics on cost of capital. In the next step in the duration of audit committee proxy's examination study has been explore to found that value of audit committee independence (ACI), audit committee meetings (ACM) and audit committee size (ACS) insignificantly linked with cost of equity. According to our research analysis only audit committee characteristics insignificantly impact of cost of equity. In next face study has been explore the third independent variable proxy examination, the value of managerial ownership (MO) found that significant negative connection with cost of equity. So according to this value shows that there is inverse connection among management ownership and cost of equity. In the next confirmed that results accuracy was existed because control variable leverage significantly linked with cost of equity.

In the research model also examined the impact of moderation effect through interaction term foreign ownership. First of all, study was applied the moderation effect among board of directors characteristics and cost of equity. The study found that value of interaction term (FO\*BODI), (FO\*BODS) and (FO\*BODM) insignificantly associated with cost of equity. So foreign ownership did not alter the connection among board of directors and cost of equity. In the fourth interaction term study examined that moderation effect among audit committee and cost of equity. In these interaction terms (FO\*ACI) and (FO\*ACM) found that insignificant association among audit committee and cost of equity. (FO\*ACS) found significant so foreign ownership the relation between audit committee size alters and cost of capital. In the seventh interaction term examined that moderation effect among ownership structure and cost of equity. In this interaction term (FO\*MO) found that insignificant association among management ownership and cost of equity. So, there is foreign ownership do not moderate the connection among managerial ownership and cost of equity.

In this section study were applied the regression model among corporate governance mechanisms and cost of debt. So, in the duration of board of director proxies' examinations study has explore to found that value of board independence (BODS) and board meetings (BODM) insignificantly linked with cost of debt. regarding to the result analysis no any direct impact of board size and board meetings on cost of debt. In third proxy found that value of board independence (BODI) significantly associated with cost of debt. So, value shows that board independent director significant/positive direct impact on cost of debt in non-financial firms. In the next step in the duration of audit committee proxy's examination study has been explore to found that value of audit committee independence (ACI) and audit committee meetings (ACM) insignificantly linked with cost of debt. The number three proxy audit committee size (ACS) found that significant/negative connection among audit committee meetings and cost of debt. So, there is audit committee meetings negatively affect the cost of debt. However, audit committee no any direct influence on cost of debt in non-financial firms. In next face study has been explored the third independent variable proxy examination, the value of managerial ownership (MO) found that significant/positive connection with cost of debt. So according to this value shows that there is managerial ownership positively influence the cost of debt. When the management shareholder knows about borrowing cost of firm then they work hard for the payment of interest of debt at time frame. So managerial ownership significant direct impact on debt financing in non-financial firms. In the next confirmed that results accuracy is exist because control variable leverage significantly linked with cost of debt.

In this study research model also examined the impact of moderation effect through interaction term foreign ownership. First of all, study has been analyzed the moderation effect among board of director characteristics and cost of debt. Study has been found that value of interaction term (FO\*BODS), (FO\*BODI) and (FO\*BODM) insignificantly linked with cost of debt. However, regarding to the study found that no significant combine effect of foreign ownership and board of director characteristics on cost of debt. In the fourth interaction term study examined that moderation effect among audit committee and cost of debt. In these interaction terms (FO\*ACI), (FO\*ACS) and (FO\*ACM) found that insignificant connection between audit committee proxies and cost of debt. So, there is no moderation effect of foreign ownership between audit committee and cost of debt. However, no need of foreign ownership between the association of audit committee and cost of debt financing in non-financial firms. In the seventh interaction term examined that moderation effect between ownership framework and cost of debt. In this interaction term (FO\*MO) found that insignificant association between managerial ownership and cost of debt. So, no need of foreign ownership among managerial ownership and cost of debt in non-financial firms.

### 5.2 Policy Recommendations

The study determined the impact of corporate governance mechanism with moderating role of foreign ownership on cost of capital. By taking as the sample of panel data approach in 108 non-financial manufacturing firms those are registered on Pakistan Stock Exchange. In the research work findings panel regression approaches for improving the influence of corporate governance practices on dependent variables. In this research work may control the meaningful contributions for manufacturing firms that creates the best corporate governance mechanisms.

The first thing kept in mind regarding to the study of cost of capital just 31% variation in in non-financial firms due to these corporate governance mechanisms. The other 69% variation influenced by other corporate governance variables like external governance, political and international laws.

Generally, corporate governance faced a many challenge about unprofessional attitude, fraud, forgery, low level of internal control measurement, non-execution of disciplinary measurement including the government policies and legal framework about corporations. Due to these measures and steps foreign ownership go down in non-financial sector of any country.

The current study encourages for the benefits for the industrial improvement by retaining the best mechanisms in corporate governance. Therefore, study provide the excellent benefits to Security Exchange Commission of Pakistan, Federal Board of Revenue and small & large size non-financial firms how they bring improvement in their capital and governance. Whereas, all other policy makers, stakeholders, that can take guidelines from this study and governmental bodies of also take a beneficial measure in governance sector. Including the board of directors, audit committee members, shareholders, foreign owners, employees and general public in non-financial firms adopt the reforms and restructuring the financial tasks regarding to the cost of capital in firm, these corporate governance measures showed a significant character for the development of industry growth.

### The Following Suggestions and Recommendations kept in Mind after thoroughly Study from Chapter one to Chapter Five:

• Study recommended to the Security Exchange Commission of Pakistan take a reasonable step for the transparency of annual reports for listed companies on Pakistan Stock Exchange because there was a many issue regarding to the financial statement analysis measurement.

• For the best improvement of corporate governance board of directors should bring a transparency, accountability and fairness in financial reporting.

• Government should take a serious step for encouraging the international investors for investment in Pakistani industry as well as promoting the foreign reserves such as China Pakistan Economic Corridor. There is great consumer market and human capital and Pakistan increase the growth of economy through foreign investment.

• In Pakistani non-financial firms' maximum family own business and very low focus on management and foreign owners. Alternative prospective of managerial and foreign ownership firms should minimized the agency problems as well as family ownership.

• To increase the accountability firms should adopted the smaller size board of director team because in larger size director team more complex and difficulties in decision making.

• To minimize the fraud and gossips in firm must kept a reasonable audit committee like smaller audit committee size, independent director and must manage a committee meeting every quarter annually.

• Must adjusted the reasonable part of equity cost and debt cost.

#### 5.3 Limitations

The best of my knowledge and efforts apply to conduct this research work in which study made a useful contribution for the academia, practitioners, governmental regulatory bodies, policy makers and non-financial firms executives; therefore, some limitation written up regarding to this study. The present research contains the 108 manufacturing firms registered on Pakistan Stock Exchange, that issues an annual report regularly regarding to the Standard of Corporate Governance recognized by SECP. In present study only internal corporate governance mechanism has been included like independently impact and dependent variable like cost of capital. The study model applies only on Pakistani non-financial firms. Finally, the results gathered from companies those are operating in Pakistan.

#### 5.4 Future Directions

Future researcher will apply the same model in other regions of different countries and their financial sector and non-financial sector. Moreover, this study adopted from Pakistan as single country so in dept research can collect data from other two or three countries a conduct a comparative analysis. In this research work have been conducted a study on some corporate governance mechanism as independent variables so in future researcher can adopt the other corporate governance mechanism like shareholders, auditors, accountability, transparency and fairness as independent variables. In this research work have been applied foreign ownership as moderator but in furthermore researcher can take family ownership and employee ownership as moderator. The cost of capital in this model has been used as a dependent variable so future researcher can take voluntary disclosures, financial distress, firm profitability and risk management as dependent variable in the same model. In this research work has been taken out the sample of 7 years of data so in future researcher can take more years of data for the fairness of study findings. In future study conducted on the emerging topic that moderating role of family ownership among the relation of external corporate governance variables and profitability of non-financial firms; a comparative study on the basis of different countries.

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