Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan

By

Sana Khan

MSBA-AS18-003

Supervisor Name:

Dr. Hassan Raza

A research thesis submitted to the Department of Management Sciences, National University of Modern Languages, Islamabad in partial fulfillment of the requirements for the degree of

Masters of Science in Business Administration
(Finance)

DEPARTMENT OF MANAGEMENT SCIENCES

NATIONAL UNIVERSITY OF MODERN LANGUAGES

ISLAMABAD

DECEMBER 2019

DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Management Sciences.

Thesis Title: 'Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan"

Submitted By: SANA KHAN **Registration No: MSBA-WS18-ID003**

Master of Science in Business Administration

Management Sciences

Name of Supervisor: _____

Signature of Supervisor

Name of Dean (MS): _____

Signature of Dean (MS)

Name of Director General: _____

Signature of Director General

CANDIDATE DECLARATION FORM

I ……

Daughter of ……..

Registration No ……

Discipline Management Sciences

Candidate of Master of Science in Business Administration (MSBA) at the National University of Modern Languages do hereby declare that the thesis (Title) **"Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan"**

Submitted by me in partial fulfillment of MSBA degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of degree, the work may be cancelled and the degree revoked.

_____

Signature of Candidate

.

ABSTRACT

This study analyzed the firm and industry specific determinants of the capital structure of Pakistani firms.. This study took the firms specific variables of tangibility, size, Tobin q, M/B and industry specific variables of risk, GDP contribution, growth rate while the leverage as the dependent variables. This study has selected the population of the non-financial Pakistani firms, in order to analyze the impact of the firm as well industry-specific determinants on the firm's structure of capital. Sample size for this research comprises on the data of the non-financial firms of the Pakistan. Multiple industries will be taken as sample whose data is available from 2004 to 2017. But during data gathering and downloading of financial reports of these companies, this research successfully obtained 62 firms ranging from 2004 to 2017 which is considered sufficient. Data has been collected from the financial reports and the companies profiles listed on the PSX for the period 2004 to 2017. The results of this study indicate that tangibility and leverage have significant and positive relationship. Growth rate is positively significant relationship with leverage. There is the negatively insignificant relationship between GDP and leverage. Tobin q is negatively significant with the leverage. Risk is negatively and insignificantly related with leverage. There is significantly positive relationship between M/b ratio and leverage.

Keywords: Capital structure, Size, Growth, Tobin q, Tangibility, PSX, Leverage

Table of Contents

ACKNOWLEDGEMENTS

All the praises are for the Allah Almighty; the most beneficent and the most merciful; who granted man with knowledge. All salutations are upon the Prophet (P.B.U.H.) whose teachings enlighten my thought and thrive my ambitions.

I am extremely grateful to my parents Mr. & Mrs. KHAN MUHAMMAD. My whole academic career till now would have not been possible without the love and support of my family, who believed in me blindly and they kept me going and were the force behind me.

I also sincerely wish to express my profound gratitude and appreciation to my supervisor Dr. Hassan Raza who have provided invaluable instructions, mentorship and encouragement throughout the thesis journey. May Allah bless him.

SANA KHAN

Chapter 1

Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan

1. Introduction:

1.1 Background of the study:

Capital structure is a structure of the debt to equity (for simplicity termed as D/E) in a proportions of equity, debt, retained earnings, long-term loans, debentures and other funds. The company's financial structure and the assets structure should not be confused with respect to the structure of capital of company. Financial structure comprises on debt (short-term + long-term) as well equity of shareholders; in other words the overall left hand side of comprehensive statement of assets and liabilities and structure of the debt to equity consist of the shareholders equity as well long-term debt. The company's structure of capital is a component of the financial structure of the business but in the financial management some professionals argue that short-term borrowing is also be the part of structure of capital of the company. In these lines, there is similarity in these two conditions; structure of capital and the financial structure. The structure of capital is therefore not similar to the financial structure, as it is the component of the financial structure. So the term structure of capital only includes the debt as well equity of the company while the financial structure is included as total net worth of the company which is shareholder equity, all debts includes (short-term or else long-term) of the company. Structure of capital is essential to increase the company's value because a sound structure of capital helps to raise the price of the market shares and stock rates because of the high share prices contributing to rise in the value of the company.

An optimal structure of capital makes a firm capable to utilize the existing funds completely because an appropriate designed structure of capital determines financial requirements of the firm and raises funds for that proportion from different sources to make the best possible use of these funds. An optimal capital structure makes management enable to raise the profit for the company in the way of high return on the equity holders for instance by raising earning per share

but this can be done through the mechanism of equity trading mechanism i.e by raising the proportion of the debt to equity in the structure of capital which is the low-cost source of debt to equity.

One of the big unresolved issue in finance is appropriateness of structure of capital since the emergence of structure of capital irrelevance theory(Modigliani & Miller 1958). The search for an optimal structure of capital got much attention (Harris & Raviv, 1991; Mackay & Phillips, 2005; Myers, 1984), which results the emergence of multiple other capital structure theories like theory of pecking-order. This hypothesis is developed by Myers and Majluf and this theory depends on asymmetric information and where manager of the firms have better knowledge than outsider's due to the information asymmetric impact on the external and internal financing and the selection on the debt and firm's equity. Theory of static trade off says on the choice of capital structure and gave the thought that the how much employ the level of debt as well level of equity that leads to balancing the firm's costs and firm's benefits. Bird and hand theory as a counterpoint to the dividend irrelevance theory and explains that investors seek to pay high dividend so, they control the high market price. Market timing theory says how a company in an economy decides whether to finance in investments through debt or equity and this type of theory is a trading strategy that how to move in or out of the financial markets. Agency cost theory says it is internal expense of the company that arises due to the actions of the agent and also arises due to the core inefficiencies, disruption and shareholder's conflicts and others (Baker & Wurgler, 2002; Bie & Haan, 2007; Hovakimian, 2006; Jensen & Meckling, 1976; Jenter, 2005; Kayhan & Titman, 2007; Welch, 2004). Multiple studies investigated the relationship between the structure of capital and its influence on the company's performance where the relationship varies with respect to firm, industry and country wise. According to our research, a question arises whether the firms will fulfill their financial obligations through debt or through equity, it is most important to know because it affects on the structure of the debt to equity, cost of the debt to equity and firms value.

Several studies can be seen in supporting of firm specific factors for determining of the structure of capital, but opponents of these studies argue that these factors do not affect the debt to equity phenomena but that of industry specific factors(Ahsan, Wang, Qureshi, Ahsan, & Wang, 2016; Bancel & Mittoo, 2004; De Jong, Kabir, & Nguyen, 2008). Although these arguments are against

the discussion of pecking-order and trade-off and agency-theory arguments, which states that firms specific variables are also important to investigate for determining the structure of capital of the firms. Moreover, depending on the theoretical lens, the results of the firm's specific determinants may be positive and negative. Most of the studies analyzed different factors for determining these phenomena, major factors at firm level are risk, opportunities for growth, earning of the companies, firm size, and its tangible assets. The agency theory indicate that there is a negative relationship between growth opportunities and the debt structure of the firm, while the pecking-order hypotheses suggest this relationship as positive. Agency theory provides their argument to support their relationship as the relationship between the debt adjustments in the long run and the opportunist behavior make this relationship as negative. They also argue that when the company is on the growth stage, and there are many positive NPV investments, then shareholders are less concerned on debt taking behaviors of the managers, and debt may contribute to the investment problems in the end (Stulz, 1990).

According to Myers and Majluf (1984),if prices are overestimated then executives tend to issue new stocks, enabling mature shareholders to benefit. Conscious of this option, inexperienced investors may require a concession to on the price of the stock to purchase it. Managers therefore keep away from issuing new stock, although this choice may lead companies to forget about the profitable investments.

Therefore, Myers (1984) indicates that firms wishing to decrease asymmetric information expenses prefer financing resources. In this sense, company would tend to preference for retained earnings in the first place, then low and high risk debt and new equity as the last option. Firms with excellent investing possibilities other than lacking in internal cash flow could therefore turn to debt to finance their project initially, thus providing strong leverage for such leverage. On the other hand, Autore and Kovacs (2010) demonstrate that even under circumstances of high asymmetric information, companies can issue new equity because such asymmetric is smaller than the most recent past. Another study Khan, Jan, & Khan, (2015) this study investigates the determinants of the capital structure of the cement industry in Pakistan. Regression technique is used in this research to determine the relationship between variables. This study analyzed and found that there is a inverse relationship between firm size and firm growth. This study showed that the previous studies showed the different results related to

Pakistani cement industry. This study says that the leverage and the size of the firm have the negative relationship because when the firm size is big than firm utilizes the less debt. But the finding of this study is conflicting with the STOT, because this theory says that the firm size and the leverage have a positive relationship with each other.

A basic distinction between agency theory's assumptions and the theory of pecking order may partly simplify the different projections about the impact of growth opportunities on the firm's leverage. The agency theory imagines that manager's take action opportunistically and logically, attempting to raise their personal usefulness at the cost of the shareholder's fund. In this situation, leverage control their actions, firms make little investment possibilities also strong free cash flow to boost debt utilization. On the other hand, the pecking-order hypotheses completely imply that executives are reasonable, but not essentially opportunistic.

Therefore, debt would have the dissimilar disciplinary impact because agency theory anticipates in the maturity stage. The previous studies examine even if the connection among growth possibilities and leverage is negative or positive in the contentious context. A positive relationship between debt to equity and growth-possibilities is explained by pecking-order-theory while negative relationship is supported by the agency-theory. The pecking-order-theory by (Myers and Majluf, 1984; Myers, 1984) stated in conditions of asymmetric market behavior, internal funding may be the first resort, while the debt come next to it. In this context, Titman & Wessel (1988) indicated that significant determinant of structure of capital is profitability of the as it represents the quantity of income that can be retained by the company. Thus, Fama & French (2002) indicate that leverage would be adversely correlated with profitability in a straightforward model of pecking order by keeping the constant level of investment. Debt will increase as the need for investment exceeds than retaining income. Although profitability is often viewed as determinant of structure of capital, Shyam-Sunder & Myers (1999) suggest more direct approach to testing the pecking order hypotheses as well as support the theory, as opposed to the previous studies showing evidence that pecking order does not hold (Frank & Goyal, 2003; Leary & Roberts, 2010).

Many studies on structure of capital shows that leverage get affected by the industry specific factors in same way among firms in any country (Booth, Aivazian, & Demirguc-kunt, 2001; Fan, Titman, & Twite, 2012; Li & Islam, 2019; Moosa & Li, 2012; Psillaki & Daskalakis, 2009). But

some studies disagrees that the variables of industry specific vary in the form of importance, extent and sign, so the business atmosphere, Industrial system and competition, are essential as an option of structure of capital of the firm (Mackay and Phillips, 2005). For data analysis use panel regression with industry specific dummies, due to this type of data analysis the variables of firm specific have similar coefficient value. Therefore, the probability of statistically significant results increases for the longitudinal data as well as panel data, hence, it is suggested that additional study is required to know the effects of the factors of the industry specific the selection of structure of capital of the firm. Previous studies followed the idea of De Jong et al., (2008) to eliminate restrictions for stable analysis in order to know the effects of industry-specific factors on the company's structure of capital. By following the approach of (De Jong et al., 2008) the aim of study was to examine the direct as well indirect effects of industry specific factors on the structure of capital. Study further explains the factors of the industry specific where the average industry rate of growth as well market risk are the factors to demonstrate the changes in the structure of capital across industries. Further, in the previous study take to examine the industry specific factors who have the indirect impact on the company's capital structure as well factors of the industry specific effects on the forming of firm specific factors like study find that in the industry growth the firms debt to equity ratio is positively linked to industry growth rate measured by m/b leverage ratio. Different studies can also be traced using factors of industry specific in this regard. The firm's specific factors, affects the industrial structure of capital. Study finds that in across industries only the firm size factor which has reliable and significant effect on the structure of capital. Conversely study finds other factors for instance profitability, M/B and Tang have not the constant and significant effects on the structure of the debt to equity. Further the statistical method as well shows that variables of firm specific are not similar in across industry.

Past literature also indicates that industry specific factors are also one of the most important determinants that explain dissimilarity in the structure of the debt to equity. Proponents like Scott & Martin, (1975) indicated in their work that different industries tend to have different debt to equity ratios, like mining industry have the lower debt to equity ratio than the aerospace industry companies which found to have the highest debt to equity. Hall, Hutchinson, & Michaelas (2000) focused on the specific factors of firm as a determinant of structure of capital and concluded that some specific factors of the firm explain the fluctuation in debt to equity

more than others. So they suggested to more research in this regard, providing more comprehensive evidence. In the same lines,(Mackay & Phillips, 2005) argued that factors of the industry specific are very helpful in explaining the patterns of structure of capital, and concluded that this is mainly due to the different risk associated to each industry, or the technology or such other factors. Miao (2005) represents in his theoretical modeling paper the same results and get the knowledge that those firms who perform in these industries linked with fixed operating cost, high bankruptcy, risky technology and high technological growth tend to have less leveraged.

Smith, Chen, & Anderson (2014) recommend that each characteristic of industry gives the justification when changes occur in the firm's structure of capital in across industries. In short, we can be able to say that the factors of the industry specific effect on the structure of the debt to equity of the firm. While the industry specific factors have a direct effect on the structure of capital of the firm because competitive changes and economic characteristics of industry take part in a role to influence on the format of financial statement and operating strategies in industry (Wahlen, Baginski, & Bradshaw, 2011).Like we take example of banks where the leverage ratio is greater than the other industries. Whereas, characteristics of industry specific have indirect effect on development of structure of capital of company because each industry has different business features that impact on the operating behavior of firm. For instance it's usually assumed that the companies in those industries have incentive competition is associated to the low level of profitability they take less leverage. In addition firms operating in those industries where they have the fast technological growth are related to low proportion of fixed assets that lead to low leverage ratio. And those firms in mature industries are related to low growth opportunities that show the positive relationship with the leverage ratio.

1.2 Problem Statement:

The main objective of manager of the firm is the increase of shareholder's wealth and there are multiple ways to achieve this but one way is the selection of an optimal structure of capital (Myers, 1984). Studies also indicated that this selection is totally based on the firm's specific characteristics as well as its industry specific characteristics (Leary and Roberts, 2005). Previous research can be seen as a fundamental financial selection on the structure of capital and its impact on the financial performance of the firm but the undeveloped structure of capital lead to the value of the company decreases and cost of the company increases, as the result indicates to

cost of the debt to equity increases but the thoughtful and developed structure of capital creates value for the company (Modigliani & Miller, 1958).There are the number of theories that create value for the company especially after the theory of Modigliani and Miller's in 1958. This theory creates the frequent benefit but the gap still exist from both the theoretically and empirically. The previous research of Abor, (2005) results exposed that short-term-debt to total assets and ROE of the firms of Ghana Stock Exchange is positively related with each other. Previous literature concludes that findings that are linked with profitability and structure of capital conflicting that leads to conduct the further research So, research gap is generated by these conflicts that need to be filled and investigating the oil marketing companies listed on the Ghana Stock Exchange is valuable (Abdul, 2012; Abor, 2007, 2008; Amidu, 2007; Awunyo-vitor & Badu, 2012; Boadi, Antwi, & Lartey, 2013; Boadi & Li, 2015; Gatsi & Akoto, 2010; Sbeti & Moosa, 2012) and Chandrasekharan, (2012) have explained the use of debt that effects on the overall performance of the firm. The basic purpose of current study is to examine the firms and industry specific determinants of structure of capital for both long-term as well as short-term leverage. This study leads to a major discussion that any variation occurs in the industry as well as firms specific characteristics also effects the variation occurs in the structure of capital of the firm. Nowadays, a problem is usually faced to decide on a best optimal structure of capital; many studies are done in the past and still need to pay more attention.

1.3 Research objective:

This study is planned to illustrate the patterns and trends of financing the structure of capital of Pakistani firms. The objective of this research is to examine:

- The relationship between the firm specific determinants of structure of capital.
- The relationship of industry specific determinants of structure of capital.
- The relationship of firm specific determinants of long-term and short-term structure of capital of the Pakistani firms.
- The relationship of industry specific determinants of long-term and short-term structure of capital of the Pakistani firms.

1.4 Research question:

- What are the industry specific determinants of structure of capital?
- What are the firm specific determinants of structure of capital?
- What is the level of leverage that can generate the best optimal structure of capital?
- How to examine the relationship between long-term as well as short-term structure of capital of different firms in different industries?

1.5 Significance of the study:

The current study analyzes the impact of firm's specific and industry specific factors on the overall leverage as well as long-term and short-term leverages. Significantly the more the leverage in the structure of capital that develop better the performance of the firm but the over amount of debt may lead to bankruptcy, for that reason it is essential to identify to factors of structure of capital to provide the best mix of the debt to equity. The lack of compromise to meet the criteria on the optimal structure of capital in manufacturing industry provoked us to perform this research. This study help the corporate manager of different industries to select the relevant structure of capital and consider the variation across different other industries as well as firm. This study also helps the investors for the selection of firms on the basic of industry as well as leverage capacity.

1.6 Organization of the study:

This dissertation starts from chapter 1, which starts from introduction of the firm specific characteristics and industry specific characteristics and their impact on the capital structure of the organization. This chapter also discusses the problem statement, significance of the study and research questions and objective of the study. The second chapter discusses about the litrature review of almost all the theories of capital structure and it also discusses about the determinant of firm specific and industry specific factors. The chapter three discusses about the data descriptive, correlation and panel regression. In chapter 4, results of the study are presented while in chapter 5, conclusion and recommendations of the study are given.

Chapter 2

Literature review:

There are multiple studies by (Ahsan et al., 2016) which focus on the structure of the debt to equity in developing economies and accepted in the perspective of the firm specific. This research takes to examine the firm, industry and country specific variables together particularly for the developing countries. The first study in Pakistan used to take the micro and macro level variables on the structure of capital with unlimited unbalanced panel data included the 13375 firm's year observation of 1972 to 2010.

This study in Pakistan finds the relationship of specific variables of the firm and leverage on the listed non financial firm and acquire that the variables of firm specific have significant effect on the leverage of the firm but variables of industry and country specific take part in the role in explaining the firm's leverage behavior. Mostly firms in Pakistan prefer to rely on retained earnings for financing rather than to go with the debt and when debt is required to older and developed firms. These firms are implementing to follow the two theories of structure of capital e.g theory of trade off and pecking order. In addition these firms in Pakistan adopt the leverage attitude of their related industries according to business ownership and government prescribed manner for instance when inflation increases in country then the domestic firm decreases their total debt level and their foreign corresponding item's adjust their debt level in the similar way. Although the domestic firms considered the profitability of the industry as a target or a benchmark but the financial firm they use to take the asset tangibility to reduce the uncertainty linked with fragile authorized institutions, deep seated socioeconomic collusive networks, corporate governance corruption and political interference.

According to the policy makers, it helps to make the business environment efficient at the national and international level and develop that mechanism of corporate governance includes financial as well non-financial companies and regulatory bodies in Pakistan that lead to making stronger legal system of Pakistan. When these reforms came into existence that leads to develop the sustainable balance in the debt to equity market in Pakistan. In this study the findings on inflation are different through theoretically and empirically evidence. This study illustrates significant inflation for the cause of this partnership and low average corporate

profitability. Controlling the inflation of Pakistan will not only support the prejudiced political agenda as well as debt to equity markets.

The simple view on the principle of trade off has the benefit of value trading between the rate of bankruptcy and debt hobby tax shield. Trade-off-theory hypotheses say that the great mix of debt to equity is the one where, as an example financial distress, the interest tax shield benefit reduces the associated cost. Accordingly to (Modigliani and Miller, 1963; Modigliani & Miller, 1958), the leverage as well as interest tax guard have the direct relationship. But there researcher's factor that the corporations take such debt until hobby tax safety stabilizes its associated value. Therefore, the relationship among hobby tax shield and leverage is expected U structured (Miller, 1977). Multiple research says to measure the tax defends researcher used tax payment/ gross income or tax payment/ income earlier than taxes. So, the susceptible relationship locate multiple studies (Rajan & Zingales, 1995) or no longer significant (Chen & Strange, 2005).

In Pakistan, a research examines the insignificant relationship in the sector of chemical (Qureshi, Imdadullah, & Ahsan, 2012) but on the other hand, study explores the both positive as well negative significant relationship between short-term debt as well long-term debt (Sheikh & Qureshi, 2014). In addition (Dhaliwal, Heitzman, & Li, 2006; Gomariz & Ballesta, 2014) present the chances of bankruptcy uses the Altman's Z score. While the non-debt-tax shield involves the depreciation and investment tax credit commonly alternative the tax shield of interest. According to the firms when firm takes the high level of non-debt they use the lesser the financing through debt (DeAngelo & Masulis, 1980). Empirically investigate the depreciation expense/total assets to calculate the non debt by researchers that in this research already adopted and the results through empirically for the non debt are questionable because they point toward the favorable relationship in transitional economies (Bayrakdaroglu, Ege, & Yazici, 2013; Delcoure, 2007), insignificant relationship for Americans (Titman & Wessel, 1988) and Pakistani firm's (Qureshi et al., 2012; M. A. Qureshi, 2009; Sheikh & Wang, 2011).

In Pakistan the previous studies consider the alternative depletion of long-term-debt (Sheikh & Qureshi, 2014). Management and shareholders when involve in the agency conflicts than the resources of the firm will be existing in the non productive use but these conflicts arises among management and shareholders when management uses the firm resources for their personal interest. These collisions lie on the critical condition when the free cash flow of the firm that will

use either to payout dividend to shareholders or will retain for the future projects. So, the debt is the best option to decrease the available free cash flow for management to get involve in reducing activities (Jensen & Meckling, 1976). In previous studies the researcher gets the value of agency conflicts by ratio of expense which is equal to operating expense/sales and the ratio of asset utilization which is equal to sales/ total assets (Pantzalis & Park, 2014). This study is taken to measure the agency cost by operating expense/sales.

Studies also reported that, there is a direct relationship between management and equity holders with the leverage due to conflicts between agencies, according to a study in Pakistan (Qureshi et al., 2012). While rights of management lessen the agency conflicts bring into the line of their interest with shareholders. Previous study says that the those firm who has the higher the managerial ownership may lead to lesser the agency conflicts and due to this the firm takes less in borrowing (Bathala, Moon, & Rao, 1994).

Some studies indicate that they find an indirect relationship (Bathala et al., 1994). On the other side, in a study (Leland & Pyle, 1977) investigates that leverage and management has positive relationship with each other. In addition to evaluating the company's financial results, the company owner has the strong observing mechanism during the process (Ramalingegowda & Yu, 2012). According to the (Bathala et al., 1994; Jensen & Meckling, 1976) the firm's who have higher firm's ownership may have lesser the agency problems and due to this lead to less debt borrowed.

Many studies like(Al- Najjar & Taylor, 2008) used the natural logarithm of multiple shares those are held by firm's investor's and the level of ownership of the organizations (Al-Najjar & Taylor, 2008; Tong & Ning, 2004) as proxies for ownership structure, there is a relationship between s ownership of the company and structure of capital of the company. By taking in to the consideration the lack of data on the factor of the ownership structure over the extended study period related to the effect of foreign ownership on asymmetry ownership (Choi, Lam, Sami, & Zhou, 2013), the study categorize the firms ownership structure either foreign ownership or domestic ownership.

Furthermore, the agency conflicts arises between debt holders and equity holders when debt holder appears to have limited liability for the equity holders, that's why they are going to invest in highly risky ventures and equity holder's take their money from the profits of these ventures

while debt holder's deal with loss. Because the company is more likely to invest in highly risky ventures at the detriment of the debt holders so, the leverage and growth have the direct relationship (Jensen & Meckling, 1976; Myers, 1977).

A research in turkey (Bayrakdaroglu et al., 2013)showed in the results that growth and leverage have the significant positive relationship by using as a growth measure the percentage change in total assets. For intermediary economies studies by (J. Chen & Strange, 2005; Delcoure, 2007; Titman & Wessel, 1988), as well in Pakistan (Sheikh & Wang, 2011) outcomes are insignificant. In addition to the risk of the business is measured by earning volatility (Al-Najjar & Taylor, 2008; Delcoure, 2007). Studies also use to take the earning volatility to calculate the change in percentage of net profit before tax/ total assets.

Many researchers say that best level of the firm's leverage may reduce the function of earning volatility (Titman & Wessel, 1988). On the other hand they explain that investors find higher volatility to be higher risk and need higher interest rates. As a result, this type of firms takes less in debt. While, the theory of assets substitution says when the firms have limited in liability they should invest in those projects where the risk is high. Profit from these ventures should make money for equity holders as well loss for the holders of the debt (Jensen & Meckling, 1976). There is therefore the leverage and corporate risk has positive relationship with each other. In Pakistan the experimental study (Qureshi et al., 2012) and transitional economy (Delcoure, 2007) says there adverse relationship but the research in china (J. Chen & Strange, 2005) says the relationship between risk and leverage is positive.

The basic idea of the pecking order hypotheses put forward that companies should first preference to internal funding, secondly for the debt and the last one is the issuing new equity to finance the projects. The highly profitable and liquidate firm's have the more internal funding sources that contribute to negative liquidity -leverage relationship (Myers and Majluf, 1984) present/past profitability (Fama & French, 2002).But the theory of trade-off-theory indicates that those firms that involve in high profitability and highly liquidate may have less risk and issue lesser the debt. Therefore, trade-off hypotheses suggested that liquidity of debt to equity and leverage has a direct relationship. Many studies (Bayrakdaroglu et al., 2013; Bokpin, 2009; Ganguli, 2013)take to examine the profitability like ROA as well(Al- Najjar & Taylor, 2008; Bokpin, 2009) take to examine the ROE return on equity(Al- Najjar & Taylor, 2008; Bokpin,

2009). But a few studies (Mazur, 2007; Sheikh & Qureshi, 2014)used to measure profitability by ratio of (income divided by sales).

By calculating the value of the ROA by net profit before tax/ total assets, it is the proxy for the retained earnings divided by total assets and profitability for the previous profitability. There are multiple proxies that use to show the liquidity, for instance working debt to equity divided by total assets, current assets divided by current liability, net cash flow divided by total assets and others. Studies say that we take the current assets/current liabilities to calculate the liquidity. Generally, experimental evidences (Delcoure, 2007; Mazur, 2007) as well (Qureshi et al., 2012)shows that the profitability and liquidity related to pecking order theory. Many companies utilize to take huge amount of tangible assets as a security to increase the level of debt at a lesser rate of interest. That's why the study says that there is the direct relationship between tangibility/ security value as well the company's debt level. Many experimental previous studies used to measure the tangibility by net fixed assets divided by total assets and used to calculate the collateral value by gross fixed assets (cost) divided by total assets. In developed countries many studies find the empirically direct relationship (Rajan & Zingales, 1995; Titman & Wessel, 1988) .So, the firm's in developing countries have the factor of lack of governance and incompetent legal system that leads to weak collateral value by tangible assets and that's why find the inverse relationship in this perspective, evidence from Poland (Mazur, 2007) and from Pakistan (Qureshi et al., 2012; Sheikh & Wang, 2011) evidence it.

Although the study according to the Pakistani perspective shows the combination of inverse and direct relationship of different industries or sectors with leverage (Qureshi, 2009;Sheikh & Qureshi, 2014). In addition the big companies have more tangible assets as compare to small firm's that's why the creditors think that the huge companies are less risky due to the their diversification. As a result, leverage and size of the company have positive relationship with each other. On the other side, the studies also says that that the large firm have better cash flows than small firm's because they do not rely on external funding for financing that's why inverse relationship exist between leverage and company's size (Rajan & Zingales, 1995).

Many studies says in order to determine the value of the company's size the researchers utilized the natural logarithm of total assets. There are the evidences of the positive relationship in turkey between firm size and leverage (Bayrakdaroglu et al., 2013), in Pakistan (Qureshi et al., 2012; Sheikh & Wang, 2011)nine transition economies (Jõeveer, 2013). But many other studies fin the

positive as well negative relationship between sectors with leverage in the Pakistan (Qureshi, 2009; Sheikh & Qureshi, 2014).

When firm's gather the knowledge about market and the market power of the different previous year the theories put forward the concept of policy that how the resources influence on the structure of the debt to equity. The theory of pecking order says that those mature firms who have market power and knowledge about the market also have the capacity to fulfill their needs with internal funding than new entrants firms.

As a result, the theory of pecking-order says that there is a negative relationship between company's leverage and age of the company. On the other side, the trade-off-theory theory says that the mature firm's has more market information, higher market power, higher prestige that's why these firm's can borrow without problems at the low interest rates. As a result, leverage and the company's age found direct relationship. In order mostly studies used the natural logarithm to calculate the age of the firm (J. Chen & Strange, 2005; Rocca, Rocca, & Cariola, 2011).

A Chinese research find that company's leverage and company's age are directly related with each other (J. Chen & Strange, 2005)and the same study in Pakistan says that firm's age and firm's leverage have the inverse relationship (Qureshi et al., 2012). The firm's from dissimilar industries shows inter-industry heterogeneity for the reason that the there are different industry factors like competition, technological differences, product dissimilarity, risk and many others. These industry factors effects on the leverage behavior of the company and the company belongs to same industry have more same financial attitude than the firm's from the different industries (Bradley, Jarrell, & Kim, 1984) empirical studies also investigate (Jõeveer, 2013)also in Pakistan (Qureshi, 2009).

Trade off theory suggests an organization should have the optimal leverage level and that level of leverage relying on the characteristics of that industry or sector to which it belongs to. While, the pecking-order theory has not gave the verdict of fixed effects of industry. The study says that the data of the research does not depend on the attributes of the inter industry heterogeneity therefore, the categories of different firm's from different industries to help us to know about the corporate leverage attitude towards fixed effects of the inter industry. The study used to take the average industry leverage as a target level of the leverage (Jõeveer, 2013) and also used for average profitability of industry to find the relationship between company's leverage and profitability of the industry concerned.

Some studies indicate that the inflation is a societal sick that effects on the interest cost. So, unexpected inflation is more risky than the expected inflation as a result it can change the revenues a wealth allocation (Fischer, 1981).

The uncertainty of the inflation increase the instability of the firm's price structure may lead to increasing the instability of sales, earnings and cash flow and these instabilities can increase the company's business risk. As a result, firm's preferred to issue equity as a debt comparison to avoid the future debt nonpayment and also avoid bankruptcy chances. A study found a negative relationship between leverage and uncertainty about inflation (Hatzinikolaou, Katsimbris, & Noulas, 2002).

Additionally theory of trade- off also says that leverage and interest tax shield have the direct relationship (Modigliani & Miller, 1958), due to this the rate of inflation and leverage have direct relationship because have the reason of the tax deduction on debt. Many studies show different outcomes about the leverage-inflation relationship (Bokpin, 2009; Jõeveer, 2013).

The world development indicator database is used as an inflation proxy and the effects of the exchange rates on corporate related business risk, also affects corporate borrowing cost. Mostly the firm's takes loan from banks and banks not only have the database related to their customer but also the business atmosphere in which the business runs. So, the banks being quick to respond to that point and the trends of exchange rate exposure of firm might be a sign of the loan pricing (Diamond, 1984; James, 1987). For instance the home currency depreciate influence negatively on the importing firm's and reduces the chances of on time loan repayments and it is similar with exporting firm's when domestic currency appreciates. Many domestic firm's import their plant and exporting their product. As a result, the country exchange rate affected by the firm's investment, operations and financing cash flow.

When economic growth increase than also the corporate growth opportunities increases that leads to earn more profits. The firms are in the growth stage they need the external financing and accordingly, the trade off theory the profitable firm's takes loan on low interest rates and according to this argument the economic growth and leverage have favorable relationship. But according to the pecking-order hypothesis, companies like better to save their financial slacks in terms of internal funds and unused debt capacity. There any profits to the company mean no extra debt burden and so there is a negative relationship between these two as well as the growth opportunity to that firm.

Past litrature (De Jong et al., 2008)also reported a positive relationship between growth in the economy and the debt structure as well (Bokpin, 2009) reported negative relationship between economic growth and leverage. Some studies in Pakistan used GDP growth of the country as a proxy for capturing the economic growth of the country. In addition, studies argue that in a country the fixed debt to equity development and high infrastructure is a sign of good business environment where study use the debt to equity ratio and the capital formation to GDP. Governance value is suggestive asymmetric information and agency conflicts of the firms (Giannetti, 2003) and officially permitted arguments for businesses. Therefore, governance may be the significant component of the corporate leverage. Studies says that the good governance highly effects on the choice of structure of capital (De Jong et al., 2008; Giannetti, 2003). Accordingly to the worldwide Governance indicator the Governance system of Pakistan is not good because a study in Pakistan says that the politically connected firm borrows more than 45 percent and its default rate is more than 50 percent (Khwaja & Mian, 2005).So, on the major issue of corruption in Pakistan has yet to resolve and every elected Government failed to control on corruption in their tenures. The previous study says that it is observed that the unpredictable changes in Government forms and policies during the study period of 1972-2010 and they also understand the corporate leverage attitude in this period.

Masnoon & Saeed, (2014) finds the structure of capital determinants by taking the sample of 10 KSE listed automotive companies and panel data are used in the research. Previous research finds the five variables and effect of these variables on the structure of capital by regression test including profitability, size, liquidity, tangibility and earning variability. In the research they found that there are no variable is strongly correlated by conducting the multi co linearity test. Then the regression test carried out and found that profitability and liquidity had significant negative influence on the structure of capital of the company; on the other hand, the company's size and tangibility of the company have been done a negative insignificant influence on the structure of the debt to equity and the last variable earning variability had insignificant positive influence on the structure of the debt to equity.

Several research has been finished to describe the factors that have an effect on the shape of the debt to equity and as well locate determinants of company precisely that influence on the structure of the debt to equity. Gaud et al., (2003) performed research at the shape of the debt to

equity of Swiss agencies with the aid of taking the sample data of 106 indexed businesses on Swiss stock trade and in their research the variables are profitability, boom, tangibility risk as well corporation's length and the findings indicate that the company's size and tangibility have a wonderful leverage dating, while boom and profitability have poor relationship. Chen (2003) explores structure of capital determinants, including statistics from 88 public indexed Chinese organizations, and this studies showed big variations among Chinese corporations and other companies in structure of capital due to the fact Companies in china depend extra on borrowing (quick term) than borrowing (longer term) and financial ruin and incomes volatility didn't find to be huge. Song, (2005) also conduct look at on structure of capital determinants at the Swedish companies with the aid of taking facts of 6000 corporations, the three leverage ratios in this analysis include mainly debt-ratios (short-term), (Long-term) and (general debt) and outcomes of every calculation are different. The variables of tangibility, profitability, size are related to all three ratios; and the income volatility. The effects of his observer indicated that relationship among tangibility in addition to non-debt-tax protection has a nice relation with long-term-debt and poor dating with the quick-term-debt. Same courting may be seen with the organization length.

Different authors e.g Shah & Khan (2007), Rafique (2011), Masnoon & Anwar (2012), conduct an study on determinants of the debt to equity on KSE-Pakistan. Their results indicated a negative relationship between the company's profits and its structure of capital in almost all industries.

Eriotis et al., (2007) also worked on the structure of capital on the Greek's firms listed on the (Athens stock exchange). Their results indicated that debt to equity is also negative related the growth, interest coverage ratio and liquidity of the firms, while positive related to the asset size. This previous research (Hua Hsu & Yu Hsu, 2011) finds the influence of financial decisions on the firm's structure of capital. Sample is based on five countries from Singapore, Korea, Taiwan, Hong Kong, and Japan etc. The two stages are introduced by this previous study. We used profitability variables in the first phase, market-book ratio, tangibility and leverage deficit and target adjustments were used in second phase.

In the results of this research found that the firms in Singapore and Hong Kong obey them theories of trade-off-theory as well pecking-order in the financing decisions of firms, While in Korea and Japan partially follow the theory of pecking order , theory of market timing as well

fully follow the theory of trade -off. Taiwan country firms follow partly the market timing theory. As a result, the researcher concludes that the trade off theory is more used in Asian countries than other hypothesis in the financing decisions of the company's structure of capital.

Pertiwi &Anggono (2013) finds the optimal structure of debt to equity focus on the beverages and food industry of Indonesia. The researchers compute the optimal structure of capital from different leverage ratios including the number of years by the means of WACC and finds that ratio of the debt can be none (zero) due to various causes like in food as well beverage industry they have the higher rate of turnover, many companies have negative earnings so they not go with the debt, sometimes the equity cost is high and adding of debt may cause to raise the WACC.

Akinyomi & Olagunju, (2013) examined on the determinants of the structure of capital at the twenty four companies indexed at the Nigerian stock alternate as a sample size and the result of this observe confirmed that there is a bad relationship among leverage of the enterprise and size of the organization and tax while tangibility, profitability as well boom have the wonderful dating with leverage. Jensen (2013) executed a take a look at at the shape of capital determinants on 106 businesses as a pattern size on Danish listed companies and the outcomes confirmed from this research that finding are associated with trade- off concept as examine to pecking- order hypothesis. A previous look at conducted at the earnings control, shape of capital and responsibility for institutional surroundings (An, et al. 2013). In his research consist of the 25,798 organizations from numerous countries at some stage in the period of 1989-2009. The courting between earnings management and corporate leverage is superb on this report. This look at says debt and the institutional environment may be external useful resource for reducing the cost of free coins flows to the commercial enterprise and relying on the institutional environment is less luxurious as c debt.

Muthama, et al. (2013) performed an empirical analysis of macroeconomic effects on the listed company's structure of capital in Kenya. This study says macroeconomic factors have the strong impact on the structure of capital, GDP growth rate has both the negative as well positive effects; positive with the debt-ratio of long -term, negative with the debt-ratio of total debt and short-term-debt. Further this study says inflation has the negative relationship with the debt-ratio of short-term, interest has the positive relationship with long-term-debt-ratio and total debt-ratio, and negative relationship with short-term-debt-ratio. Šarlija & Harc (2012) this research

performed on the impact of liquidity on the structure of the debt to equity including sample size of 1058 firms and find that leverage and liquidity have the negative relationship.

Baah-acquah, Freeman, & Ellis, (2017) this study showed the partial stable results in terms of positive net profit margin relationship and not statistically significant in 1970 many studies (Miller, 1977) and early on 2000s (Hovakimian, Opler, & Titman, 2001) these researchers empirically showed in their researches that the those firms who have highly profitable firms have the significant and positive relationship with net profit margin and debt.

Empirical information from this study (Friend & Lang, 1988) says that 948 firms of America during the period from 1979-1983 were included. This study reveals that structure of capital and firms profitability have significant positive relationship with each other. In addition, a argument is generated in the favor of the agency cost theory which implies that relying on short-term borrowing as well long-term borrowing to fund the in investment will create the conflict between the shareholders interest as well the interest of the management Fama & French (1998) showed in their research that the leverage never lead to get the advantage from tax opposite to the Modigliani and Miller theory, While agency theory says higher borrowing create the conflicts between the interest of management and share holders and generally, the relationship of long-term debt with profitability can be negative. However, this study says that financing from debt has a negative impact on the business profitability. Lara & Mesquita (2003) this study finds the results that the profitability as well the debt-ratio of long-term has negative relationship with each other including the seventy Brazil companies during the period of 1995-2001. The independent variables are in this study (short-term-debt to total debt to equity), (long-term-debt to total debt to equity) as well (total debt to total debt to equity) while dependent variables are ROA and NPM. This study concludes that Ghana stock exchange-listed Oil marketing companies have a negative impact on the profitability measured by ROA, ROE and NPM. Therefore, this study concludes that less leverage against the agency issue may be acceptable among the Ghana stock exchange listed Oil marketing firms in the theory of the Agency. Consequently, the company's structure of capital and profitability calculated by ROA, ROE and NPM are contrary to expectations associated to the agency theory.

The primary objective of every firm is the profit (Bayeh, 2013). A robust debt to equity investment is essential to become a profitable organization. Profit is usually a long- term goal that measures the product's profit and industry's profit as well as the growth of the market.

Similar revenues against the associated cost and the only expense against the revenue are found, certain costs that played a role in generating these revenues. A firm should make a profit to carry on the business and continue the growth over the time of long period and lessen the debt to equity investment leads to make profit fail and if this condition makes longer that leads to finish the existence of the firm. There is the number of factors that affects on the profitability of the firm and their affect differs in conditions of short and longer term. By identifying these factors will make a help in handling a business enterprise. In the end, the essential role of the firm's manager is to make better and get better the economic results of the firm (Singh, 2013).

According to Graham's (2004) the advantage of debt is concluded by the profitability and total debt has an inverse relationship with each other. Multiple studies by (Abdul, 2012; Awunyo-vitor & Badu, 2012) also found the same results. In addition the results from this research are conflicting with (Kouki, 2012) and Empirically, proof is required by Kaumbuthu (2011) says that ROE and structure of capital have a negative relationship with each other. Kouki, (2012) finds that company's profitability and debt to assets ratio have significantly negative relationship with each other. Many studies particularly propose a positive relationship between firms performance and firms structure of capital (Abor, 2005) ; (Hall et al., 2004). Research on Karachi stock exchange listed companies (Umar *et al.*'s ,2012)shows a positive relationship between leverage and performance of the company.

Khan, Jan, & Khan, (2015) examines the structure of capital determinants of the cement industry in Pakistan. In this study data is collected during the period from 2004 to 2009 and take the sixteen samples of firms for the study analysis. In this analysis, the regression methodology is used to figure out the variables relationship. This study analyzed and found an inverse relationship between firm size and firm growth. This study showed that the previous studies showed different results related to Pakistani cement industry. This study says that the leverage and firm size have the negative relationship because when firm size is big than firm utilizes the less debt. But the conclusion of this study is contradictory with the STOT, because this theory notes that company's size and company's leverage have a positive relationship with each other.

2.1Theories of structure of capital:

2.1.1 Theory of Modigliani and Miller:

Modigliani & Miller (1958)**,** research in his study that the firm's value does not related on the choice of structure of the debt to equity either firm goes with debt or with equity. The Modigliani & Miller theory depend on some strong assumptions, following are there 1- There is no brokege cost 2- No taxes 3- No cost of bankruptcy 4- All the investors have the same knowledge.When these assumptions come true then accorning to the Modigliani & Miller the company's value does not affect on the firm's structure of capital. Firm's make its structure of capital all from the equity all from the debt or make out from the combination of both the debt as well equity. When firm isssue equity to general public then the brokerage cost is higher than the debits that's why the brokerage cost effects on the company WCCA. The Modigliani & Miller theorem works under the great maket condition, where there is no liquidation cost, no taxes, dafault free rate and same inforation is available to all investors. The Modigliani & Miller set the two sggestions; first suggestion says that firm's value does not rely on the company's structure of capital and second suggestion says that charge of equity for a debt financing firm is similar with the equity cost for non debt financing firm.

2.1.2 Agency theory by (Jensen and Macklin's):

Jensen & Meckling (1976) showed that according to agency theory there is a correlation between the shareholder and the agent of the firm's manager. Accordingly, the agency theory says that some problems can take place among stock holders and firm's manager and the boss does not fully claim on the firm's management. Another issue is among the shareholders and debt holders that to give more preference to shareholders as compare to debt holders. Therefore, agency theory says the relationship of agent and firm's manager is to keep away is the problem between firm's shareholder and firm's manager but the boss should make decisions that not only effort for the interest of the shareholders but also work for the overall firm including the interest of all the stockholders and must pay some benefits to agent to perform their responsibilities with good interest.

Jensen & Meckling (1976), proposed that the contrasting commitment if the mangers against debt holders and shareholders would result in achieving the optimal leverage level in the

structure of capital by reducing the agency costs. They suggests that the firms ownership manager increase to support the interest of the firms manager with the owners or to use of leverage must motivated to control managers. Jensen (1986) showed that agency problems relate with the free cash flows. He proposed that these issues can be resolve by raise the stake of the company's manger or by increase the level of leverage in structure of capital, so decrease the amount of free cash that is accessible to firm's manager.

2.1.3 Theory of trade off:

Trade off theory explained the benefits receive from the debt financing and the cost which is paying on the debt financing. The Modigliani & Miller explained the tax benefit in their research.

A firm pay interest on debt financing and the firms show this interest as an expense in their income statement which is tax deductable epense. For that reason, many companies go with the debt financing to increase the debt to equity of the company. At this stage there is a correlation of debt financial and benefits is positive. To aviod the debt financing those firm have the high level of the high level of tangible assets and provide the security to debt holders against those tangible assets. But when the default situation came into the existence then the firm use their tangible assets in order to cover the insolvency cost but usually the insolvency risk is higher for the samll firms as compare to larger firms.

2.1.4 Static trade off theory:

This hypothesis suggested that the nonexistence of the optimal structure of capital and posit that firms establish their target level of leverage and then working towards it. This theory supports to concept of how much the debt and equity will be used by measuring the financial benefits and costs. It recognizes advantages of leverage financing, leverage tax advantage, as well as the leverage financing cost, financial distress along with the bankruptcy cost of leverage. Balancing the expense and leverage of financing the static trade-off-theory structure of capital theory assumes that the firm must agree on equity as well debt financing. But it should be recognize that firm cannot constantly decrease the overall cost of the debt to equity by utilizing the leverage. So, it would not be beneficial to use leverage more, but the mixture of (debt and equity) decreases the average cost of the firm's debt to equity as well increase the price of the market

share. But this has been done by many scholars with many critiques, many scholar believe that it causes disputes between creditors and shareholders, the negative relationship between profitability and leverage has also been (Titman & Wessel, 1988).

2.1.5 Signaling theory:

This on theory tells about the signaling mechanism based on the information symmetry. But sometimes the same information does not available to all investors at that time when they invest. This theory says that at the industry level the financial decisions are the signals send to investors when have an information to attract the investors. When a firm announce dividend it a good signal for the investors and when affirm issue debt it means the firms is gives investors a signal that firm is in good condition, and if the firm issuing debt higher than the limit then these are symptoms of insolvency but when a firm issue share then it is a signal to the investor that the firm is not in good condition which means that firm want to share its loss with the investors then investors will not purchase the firm shares.

2.1 6 Theory of pecking order:

Accordingly Myers and Majluf, (1984) , have a preference to raise equity in the last choice for financing. So, a firm uses to take very firstly its internal sources e.g retained earnings, if the firm requirement is still not fulfill then the firm use to take debt financing and in the last choice is to raise equity when more finance is needed. But there are alternative factors where the firm can get the finance. In 1984 MM not agree that if a firm stables its liquid financial sources like marketable securities, cash and do not issue the new securities then definitely a firm can only use its retained earnings to finance the project.

The model's primary assumption is that the firms won't have the desired structure of capital, but following the pecking order enhances the funding options to generate the top of the order internal funds, next to followed the debt issue and equity financing is final choice. Myers and Majluf, (1984) recognized that this theory based on the costs generated from (asymmetric information) between the market and managers, and the premise that the fresh securities were issued for trading-off theory costs and debt financing benefits. The retained earnings cost as well cost of new issue of share both includes in the cost of equity and leverage cost is low-priced than the cost of both these two equity sources. Taking into the consideration that the cost of new issues as

well retained earnings may cheaper in latter because the personal taxes paid on the distributed earnings by the shareholders whereas, zero tax are paid on retained earnings and no flotation costs incurred when earnings are retained.

Consequently, it is prefer to retained earnings from the two sources of the equity funds. Practically it has been found that the internal financing is prefer by the firms and if funds are internally not enough to fulfill the investment criteria then firm go with the financing externally, issue initially safest security. They initiate debt, then feasible hybrid securities, for instance convertible debentures, and then equity as their last resort. For instance many other theories Modigliani and Miller theory, agency theory, pecking order that helps explain the studies.

The Miller provides idea for further work on the structure of capital. Now a day's researchers are very keen for finding the many other factors in order to acquire the best level for the industry.

A similar model does not suit to all the firms or cannot implement on all the firms for the structure of capital because the there the reason of economic changes, political changes, asymmetric information and many more etc.

Sheikh & Wang (2011), conducted a research on the determinants of structure of capital by taking over the manufacturing industry 160 Pakistani firms between 2003 to 2007. This study used the panel data approach and concluded that liquidity and profitability have negative correlation with leverage. On the other side, the relationship between non debt tax, growth as well leverage is not a significant.

When we talk about the public and private sector, it found that the public sector and the private sector have a not similar structure of capital. Dewaelheyns & Hulle (2009) studied that the firms of the private sector does not depend on the only internal financing but also they use to take the finance from the external sources that's why the conflict arises on the decision. Whereas the private firms somehow use to take the debt financing because the businesses of the private firms are spread out time by time in the world, firm's form the private sector pursue the pecking order hypothesis, which suggested that the internal financing is sufficient to achieve our objectives and to fulfill our financial needs of the firm.

Gropp & Heider (2009), investigate that banks structure of capital making on the central outcome from the empirical analysis on the non financial company's structure of capital. This study takes the holding firms and commercial banks from the sixteen countries during the period

of 1991-2004. This study focus on the most important scheduled financial firms and taken a concern to reduce the survivorship bias.

Rafiq et al (2008), this study carried out between 1993 and 2004conducted on the determinants of the structure of capital of Pakistan's chemical industry. This research concludes that company's profitability and company's leverage has a negative correlation, while tangibility, growth and non tax debt shield have a positive correlation with the company's leverage.

Shah & Khan (2007), conducted a research on Karachi stock exchange listed companies. In this research the dummy variable regression analysis is used. Six descriptive variables used for the analysis as well the leverage ratios and their effects on it. There are the main four variables used in this research but the researcher added two more variables of earning volatility and non tax protection. The results of this study were significant for tangibility and the other factors unsuccessfully walk off with the results of theories. This study concludes that both the hypotheses of firm profitability and firm growth are accepted and this study also passes the findings the theory of agency and theory of pecking order of structure of capital.

Saeed (2007), conducted a research in the Pakistan on the energy sector by taking the sample of the energy sector firms and performed his research with the help the theories of structure of capital theories like theory of pecking-order, agency as well trade-off-theory. The variables of this research are profitability, firm size, ownership structure, non debt tax shield, earning volatility, industry effect, cash holding, and growth and the results are found using a pooled model of regression followed by theories of pecking-order as well trade-off-theory.

Hijazi & Tariq (2006) performed a study on the Pakistan's cement industry determinants of the structure of capital. In this study researchers used the pool regression model and use to take the sixteen firms and concluded that both tangibility as well firm's growth have a positive relationship with the firm's leverage, while firm size and profitability have a negative relationship with the firm's leverage.

Shah & Hijazi (2004) worked on the debt equity of the firm by taking firm size, firm growth, and tangibility and firm profits as independent variables on Pakistani non-financial firms. Their results indicate a positive and insignificant relationship of debt with tangibility, size was positive and significant, and asset growth was significantly positive, while profits were negative but strong relationship between debts.

One of the major work on firm and industry specific variables can be seen by Degryse, Goeij, & Kappert, (2012). The results of this study support the pecking-order hypotheses of structure of capital specifically for the firm specific variables. The basic reason behind the phenomena is that SME's use their profits to write off their debts than that of external funding, which clearly support the pecking-order hypotheses. Authors also discusses that the profits effects the short-term funding but not the long-term funding. For industry specific variables, intra and inter heterogeneity resulted as significant contributor for the determination of the structure of capital which also support the trade-off hypotheses as well as pecking-order hypotheses.

One of the major work on firm and industry specific variables can be seen by (Degryse, Goeij, & Kappert, 2012). The results of this study support the pecking-order hypotheses of structure of capital specifically for the firm specific variables. The small medium enterprises take to use the profits to decrease the debt level, so the small and medium sized enterprises also tend to use internal funding as compare to external funding and results of this study have shown that this is in line with the hypotheses of pecking-order. In addition, the profits especially affects on the short-term loan, while the growth of assets affects only on the long-term loan. According to the theory of pecking order, this recommends that after taking the internal funds the next option is the long-term loan for the small medium enterprises. The short-term-debt can be easily amortized because it is more expensive. The results of this study specify that both the intra and inter industry heterogeneity are essential drivers of the structure of capital relevant to both the theories of (trade-off-theory theory as well pecking-order) of structure of capital. In this research, analysis says that the inter industry affects showed that various industries disclose various degrees of leverage depending on the theory of trade-off-theory. The firm characteristics usually influence on each industry with the theory of pecking order, as results of intra industry showed that firm showed dissimilarity after controlling for firm characteristics. For that reason it implies the industry's level of competition of the industry, the degree of conflicts between agencies and the technological heterogeneity used are critical drivers of structure of capital. More in-depth study is necessary for future research.

Another study in china Huang & Song, (n.d.) to work out how to function on the financial structure of the company in other countries. While china's economy continues to change from a command economy to a market based economy, the majority listed companies are the controlling shareholders, those factors that affect on companies leverage in other countries also affects the

leverage of the Chinese companies in a same way. Especially, the leverage calculated by the debt-ratios of (long-term, total-debt as well total liability) raises with the size of the company and reduces with profitability. The findings from this study shows that the tangibility has a positive impact on long-term debt-ratio and those companies who have undergone rapid sales growth rate must have the high level of leverage whereas, those firms who have bright growth opportunities appears to have less level of leverage. In this study, the question arises why the relationship between explanatory variables and attitude of leverage towards Chinese companies is same with the other countries? One of the explanations is that, in the perspective of corporate governance, the listed Chinese companies are the good part of the economy because they obey they basic law and regulations of the market economy. In the market the state ownership companies also follow the market economy rules so; it is advantageous to list the ownership state enterprises even if the state leaves its controlling entitlement. The arrangement of company's ownership structure influences on the composition of the company's structure of capital. These types of companies with higher state shareholding and lower institutional shareholding may result in total liability ratio being reduced. While it is not economically significant, this study says we prefer those companies with B- or H- shares because they have substantial economically significant high level of leverage relative to those companies that are without B- or H- shares. This study says that we have not found the significant connection between leverage and management shareholding. This is may be attributed to the shareholding of management because it is very low; the management of all shareholding including directors, top management as well supervisors is only 17% the average value of the 1035 companies.

The results are often transportable to china in developed countries, with the Chinese companies having the different characteristics that affect the company's structure of capital. Firstly, conduct of General Accepted Accounting Principles worldwide differs as well precise compare of structure of capital of different countries is not possible, so we have clear facts the Chinese companies continue to have lower debt-ratio of long-term, lower total liabilities as well higher shareholders equity compared to their counterparts in developed countries like the France, UK, Italy US, Germany, Japan, France and developing countries like Pakistan, India, Turkey. Secondly, Chinese companies rely on the high external funding rates, particularly high equity financing level compared to other developed countries. Third, as compare to other countries, the

gap between quasi-market value and leverage book-value is too high in china. The leverage market value is typically too low in china as opposed to the leverage book value.

Chandrasekharan, (2012) conducted research on listed companies in Nigeria; with the dependent variables, the three out of five explanatory variables are significant while the other two variables, including profitability and tangibility are insignificant. The coefficient of two explanatory variables firm size and firm age are measured as negative in this study and both are significant with 1%. While the variables of profitability, growth and tangibility tend to be positive coefficient, with only firm growth that is significant with the other two explanatory variables of 5% not significant. The complete conclusion showed as a final point that all the explanatory variables set collectively explain dependent capable of 54% specified by the adjusted R2. In the same way, the results from the F statistics reveal that the model is best fitted and significant with the 1%. This work gives insight into predictor variables that significant influence in describing the dependent variables of the companies listed in Nigeria. The institution established the point of view such as, security and exchange commission, Nigerian central bank, federal Inland Revenue services, and others, these institutions will create a corporate governance code that that helps to reduce the problem of debt and equity financing. The findings also contribute to development of financial policy guidelines that reduce the financial risk in different firms, based on structure of capital's determinants perspective. Similarly, based on the results of this study and the model used in this report, the debt policy and equity policy in Nigeria were formulated on the basis of increase the wealth of shareholder as well raise the firm's value. The results should be relevant toward security exchange commission in issuing outside the guiding principles for the source of funding that lead to make better the market economic activities and economy as well. This study therefore suggested implementing debt financing decision, must setup food beverages and tobacco companies and accurately calculating variables such as firm size, age, growth, profitability and tangibility.

When we concept the modern theory of structure of capital, it is derived from the seminal paper (Modigliani & Miller, 1958) which presents many set of theories and claims that the effects of funding on the valuation of the company value is negligible in its first pre-position. Researchers in the Modigliani and Miller proposals researcher's postulate that there would be arbitration opportunities in the ideal debt to equity market that gave the company's interest based on the

company's structure of capital. The researchers De Anglo and Masulis proposed this theory of trade off in 1990, modified this idea. The theory of the organization based on the work of the (Jensen & Meckling, 1976)was the that improved empirically. They postulated that the company's benefit should determine the structure of capital; this is the cost of conflict of interest. Multiple studies by, Adesola (2009) and Kajola (2008) refer to the structure of capital in Nigeria, but their findings do not align with the common characteristics of the structure of capital of the Nigerian firms. Multiple studies such as Pandey, (2001) acknowledged the variety of determinants of the structure of capital including tangibility, firm size, firm growth, profitability and firm age.

2.2 Tangibility:

It is a well known option that if debt is available for the use when there is the durable assets are available as security (Wedig, Sloan, Hassan, & Morrisey, 1988). Therefore, bank borrowing is advised to depend on whether lending through tangible assets could be secure (Berger & Udell, 1998; Storey, 1994)**.** Multiple studies find a positive long-term debt to asset structure relationship while finding a negative relationship between short- term debt and asset structure (Cassar & Holmes, 2003; Chittenden, Hall, & Hutchinson, 1996; G. C. Hall et al., 2004; Jordan, Lowe, & Taylor, 1998; Wijst & Thurik, 1993). Paulo Esperança, Matias Gama, & Azzim Gulamhussen, (2003) , found that long-term debt and short-term debt have a positive relationship with arrangement of assets. Marsh, (1982) also studied that those companies with a small number of fixed assets they issue more equity with the same, (MacKie-Mason ,1990) claimed that if companies have the large share of tangible assets they rely more on debt. Booth et al., (2001) found that a positive correlation between debt financing and measurable fixed assets, due to the maturity nature of the leverage. From this, the leverage and tangibility of assets are supposed to have positive significant relationship for Nigerian companies.

2.3 Firm size:

The company's size is one of the determinants of the company's structure of capital. Studies indicate that the larger companies have more likely to expand therefore these firms have little earnings variance because of this they are able to accept the high debt-ratios (Castanias, 1983; Titman & Wessel, 1988; Wald, 1999). While, it is more difficult for small companies to assess

the asymmetry information with lenders, they embrace the low debt-ratio (Castanias, 1983). The larger firms get more lenders rapidly as judge against to the smaller firms, decreases the agency costs related to debt. So, larger tend to have high leverage. A further justification for the small firms tend to have low debt-ratio when the bankruptcy costs is opposite to firm size function (Titman & Wessel, 1988).

The economy of scale in the cost of bankruptcy is commonly understood. Therefore, small companies face higher costs of bankruptcy judged against to the larger firms facing low bankruptcy cost (Prasad, Green, & Murinde, 2001). Castanias (1983) studied that if the fixed proportion of the default cost is enormous then the overall default cost per dollar of leverage for large companies could be small and slowly increase. The fact that these companies are associated with large firms could be taken as evidence that Kim and Sorensen (1986), Cosh and Hughes (1994) are less at risk, argued that the smaller companies should use the less leverage on time if the operational risk is related to the company's size inversely. Empirically, structure of capital and size of the company has a positive relationship with each other. Several studies have shown a positive relationship between the company's leverage and size of the company (Akhtar & Oliver, 2009) (Al-Sakran, 2001) (Barton, Hill, & Sundaram, 1989) (Friend & Lang, 1988). The results of these studies show that the smaller firms are expected to relying more on equity funding as compare to the big companies are expected to relying more on the debt issue than on stock.

A Ghanaian study by (Aryeetey et al. 1994) shows that the small business companies are facing the higher credit problems as opposed t to large firms. The findings of this study indicate that the rate at which the big companies apply for the loan was higher than to the smaller firms as they apply for a loan at lower rate. Bigsten et al., (2000) the results of this study show 64 percent of micro-enterprises, 42 percent of small firms, 21 percent of medium sized businesses, whereas only larger firms show a limitation of 10 percent. Some studies reported that there is a negative relationship between the assets size of the firm and its short-term debt to share holder equity but positive relationship between the asset size of the firm and its long-term debt structure (Cassar & Holmes, 2003; Hall et al., 2004; Paulo Esperança et al., 2003).

Several previous studies showed the negative relationship between the company's short-term debt-ratio and company's size (Chittenden et al., 1996; Michaelas, Chittenden, & Poutziouris, 1999). According to (Titman & Wessel,) research, the small companies rely more on short -term

funding as oppose to the large counterparts in their study because small companies seems to have the high transaction cost when issuing long-term equity or long-term debt. They also added that this attitude can be influence by borrowing the high level of short-term due to small firm risk. These companies are highly sensitive to temporary economic recession compared to larger, higher leverage firms. Nigerian companies are expected to have a positive relationship between firm leverage and firm size.

2.4 Growth:

The company's growth is known as a high demand for the company's internal funds and command the company to borrow (G. C. Hall et al., 2004). The high growth companies therefore used to take relatively high debt-ratios(Marsh, 1982) . But (Heshmati, 2001) says that small companies they intense more on ownership, high growth companies rely more on external funding and have a high leverage. Aryeetey *et al*. (1994) stated that growing companies relying more on the external funding; while it is not easy to determine if finance is causing growth or loss or both. Since companies are undergoing several stages of growth stages of growth including micro, small, medium and large enterprises, it is also possible that funding source will be shift. Firstly According to (Aryeetey, 1998) ,the companies from internal source to external source (Aryeetey, 1998).Therefore, the future growth and previous growth degree have a relationship with each other.

There is positive relationship between leverage and future opportunities; in particular short-term debt but (Michaelas et al., 1999) disagree with this statement. They disagree with statement that when a company issue short-term loan as a substitute of long-term loan, the agency troubles and financing cost would decreases. According to Myers (1977), found by the analysis that companies with the opportunities of growth, these companies have the little proportion of debt in their structure of capital. It is due to the conflicts of interest for the assets between equity holders and debt holders that give companies the opportunity to take advantage of future growth. In addition the researcher argument those opportunities for growth might create moral hazard situations and business entrepreneurs on the small scale have a benefit to take risk to grow up.

Advantage of growth if does not understand by the lenders then they will only get their amount of loan resultant in agency problem. This will be the symbol of the high cost of the long-term-debts high cost that can be reduced by the utilization the short-term-debt. Empirically, there are

the number of arguments related to the relationship between the company's leverage level and the rate of growth but the evidence gives the impression that provide nothing in this regard. Several studies says (Barton et al., 1989; Kester, 1986; Titman & Wessel, 1988) sales growth and firm leverage have a positive relationship.

Cassar & Holmes (2003) and Hall et al. (2004) found in their research that short-term as well long-term leverage ratios have positive relationship with firm growth, Whereas (Chittenden et al., 1996; Jordan et al., 1998; Paulo Esperança et al., 2003) indicated in their studies the mixed results. Usually, those firms who pay less in dividends will maintain more income for future investments. Therefore, these companies rely more on internal funding and less on the external funding or debt funding. While it is expected that those companies that pay the high dividend will rely on external funding to meet the growth opportunities requirements. The planned data structure should calculate growth as improvement in the percentage of net total assets.

2.5 Tobin q:

In the years 1976, 1986 and 1988 (McConnell & Servaes, 1995) analyze the large pattern of non-economic United States groups. They cut up their sample into two categories every year, just like the classes of much less growth possibilities and high increase opportunities. The consequences of the previous examine says that the company debt to equity profitability is negatively related to the enterprise's leverage be a sign of by means of high Tobin q for the agencies with robust growth possibilities as well positively related to the leverage be a signal of by low Tobin q for companies with poor growth opportunities however their findings are reliable with the concept that leverage contributes to under investment and decreases the company's value, and claims that debt reduces overinvestment and will increase the business enterprise's value.

According to Lang et al., (1996) carried out a take a look at on a big pattern of United States manufacturing agencies during the duration of 1970- 1989 and determined that debt and subsequent funding have a strong negative correlation, but handiest with Tobin q beneath one for firms with poor boom opportunities. Once again, their effects are dependable with the idea that leverage in terrible ventures reduces funding opportunities. To address the above-mentioned problem of endogenous that leverage might be a proxy for possibilities Lang et al., (1996),it is necessary to differentiate between the impact of leverage on growth in its core enterprise and that of its none core business. In the report they argue that if leverage is a proxy for increase

opportunities, it ought to have a much greater suggested constructional effect on the investment in the organization's core phase than in non-core phase, indicating that leverage isn't simply a proxy for opportunities for boom.

Structure of capital pecking order principle has shown that a profitable business is much more likely to rely on the internal sources than on outside resources. In other words, the enterprise first desires to collect inner funds. The second choice is external funding. This approach that the profitable company will use in order to take the much less amount of debt (Myers and Majluf, 1984). The successful organizations have publicity to retain profits and these corporations counting on them in evaluation to counting on outside assets. Murinde et al. (2004) analyze retention as the primary supply of funding. Barton et al., (1989); Titman & Wessel, (1988) percentage the same view that companies with better income that the higher-earning corporations need to maintain relatively low debt-ratios so that they might generate price range internally.

The evidence from the preceding studies appeared to be empirically regularly with the idea of the pecking order. The negative dating between structure of capital and profitability has been discovered in numerous studies (Barton et al., 1989; Chittenden et al., 1996; Friend & Lang, 1988; Jordan et al., 1998; Mishra & Mcconaughy, 1999; Shyam-Sunder & Myers, 1999; Wijst & Thurik, 1993;). Cassar & Holmes, (2003;) Hall et al., (2004); Paulo Esperança et al., (2003) also discovered that long-time period debt-ratio and short-time period debt-ratio have a bad profitability dating.

Petersen A. & Rajan G.(1994) discovered that profitability and debt-ratio have a fine relationship. Multiple authors Antoniou, Guney, & Paudyal, (2002); Bevan & Danbolt, (2002); Rajan & Zingales, (1995); Titman & Wessel, (1988) relates their paintings to pecking order theory in evolved countries. Al-Sakran, (2001); Booth et al., (2001); J. J. Chen, (2004); Pandey, (2001), determined a terrible dating in developing countries between leverage ratios and profitability. Therefore, researchers proposed that courting among profitability and leverage might be bad on the idea of the pecking order theory. They have a look at concluded that it's far expected that the efficiency and competitiveness of the Nigerian tobacco and food, beverages firms will have extensive terrible courting among leverage and profitability.

2.6 GDP growth rate:

According to the study of Hailegebreal & Wang, (2018) the other factors of firm specific recognized in the earlier studies of structure of capital, there are the many country level factors that influence on the structure of capital for instance like the factor of GDP growth rate, interest rate as well inflation rate which have major effect on the companies leverage. The factor of GDP growth rate effects on the company's structure of capital analyze by several researches carried and found the mixed results. The empirical results found that real economic growth tends to increase the firm long-term debt and overall debt-ratio, when (Booth et al. 2001) conducted a research on developing countries debt to equity's structure. Likewise, Korajczyk & Levy (2003) examined the optimal structure of capital, financial constraints and macroeconomic conditions and found that 12-51 percent report for macro economic conditions of time series variation of the financing decision of firms leverage. The influence of the rate of GDP growth on the structure of capital and the negative relationship between GDP growth rate and leverage of Nepalese firms is found by a study conducted on the Nepalese firms to examine the macroeconomic variables (Gajurel 2005). Cook & Tang (2008), stated that in the good states firms adjust target leverage more rapidly than in the weak states.

GDP is often used as the best measure of economic measure of the country. Samuelson & Nordhaus, (2010) says in their study that Gross Domestic Product is the market value of all the final goods and services produced in an economy during a specific period of time. The inconsistent results of relationship between GDP growth rate and capital structure also showed by the empirical evidences. De Jong et al., (2008) this study showed a positive correlation between leverage and GDP growth rate while, Demirgus-Kunt and Maksimovicy (2008) found in their study that GDP growth rate have negative effects on the firms leverage. Further in the study, the results of hypothesis showed that GDP is statistically significant factor for Indonesian and Malaysian firms. So, the negative sign of GDP coefficient for Indonesian firms and positive sign for Malaysian firms. The previous study results say that in negative relationship between GDP with capital structure was same as the work done by Demirgus-Kunt and Maksimovicy (2008).

2.7 Market-book ratio:

To give an idea about the growth opportunities of the companies, the Market-book ratio is mostly used. Therefore firms may not to obtain high debt in order to save funds for the future investments (Flannery & Rangan, 2006) which may affect on the choice of the target. Li & Islam (2019), market-book ratio measure different companies by overall market debt to equityization to book value of equity. During the period of 1999-2012, empirically the mean and median value of the leverage and the firm specific factors of the twenty industries were investigated in study. The mean value of long-term book ratio is 36.9 percent and the market leverage ratio is 22.5 percent is found in the study. On the other hand the median value of the long-term book ratio is 21.9% and market leverage ratio is 12.8%. Further this previous study finds that the leverage ratios differ significant in across industries. For instance the 10.6% is the median book-leverage ratio of energy industry, 61.2% is the highest median book-leverage ratio in food and staple retailing industry. This previous study shows that they observe firm characteristics for each industry, that the industry of house and personal product has the highest median ratio of market-book whereas, the industry of transportation has the lowest ratio of market-book. Furthermore the empirical results showed that it is not surprising that the transportation industry has the high median value of asset tangibility but the energy industry is low.

The theory of market timing suggests that the debt market conditions and stock performance plays essential part to determine the company's structure of debt to equity. The financing decisions of companies is relying on the current situations of debt as well equity markets and they will issue equity or debt based on the market which look more attractive (Baker & Wurgler, 2002). It is the argument that the company's preference is to issue the equity in boom market period and at low price repurchasing the equity, So it is the belief that the firms value relate to its market price may affect on the real corporate financial policy (Baker & Wurgler, 2002; Bie & Haan, 2007; Kayhan & Titman, 2007). The structure of capital is therefore collective results of previous attempts at equity market timings. The debt to book ratio has a negative association as an indicator of market timing for leverage ratios. Market timing theory prediction is stable at the expense of opposite selection specify in the pecking order hypotheses (Baker & Wurgler, 2002; Bie & Haan, 2007; Hovakimian, 2006).

2.8 Risk:

Baxter, (1967) argued that the high leverage is linked with the risk that leads to increase the cost of the firm's debt to equity. Excessive amount of leverage may increase the chances of bankruptcy so; this also increases the risk of overall earnings. While, that real cost appears that is connected with the bankruptcy and high debt may decrease the overall firm's value. It is not predicted that the effect of the ruin risk will be linear with the leverage dependence. If leverage level is too low and the company is more reliant on leverage, the significant effect on the risk of bankruptcy is not predicted. When there is a significant level of leverage in the structure of the debt to equity so, any increment in the level of leverage is expected to have strong impact on the debt to equity costs. Also the risk of ruin becomes more and more important as the level of financial leverage rises. As a result the interest rate on leverage will rise slowly, if at all, with debt, if there is less reliance on debt, but the interest rate may begin to rise rapidly, then the structure of capital becomes more risky. However, the company's ability to recognize the flexibility that will depend on the net operating earnings variance. So, those business they have the reasonably stable income streams have the less chances of ruin, they may explore it attractive to depend highly on the debt financing. Some companies with volatile income streams (utilities) are less to imagine the fixed charge on the debt interest and may find the average debt to equity cost begin to rise with the debt even when it is rational to rely on leverage. On the other side the existence of corporate tax that views the benefit as deductible expense and implies that the profit helps to decrease the cost of the corporate debt to equity. This previous study showed when firm depend on debt is less then tax affect is dominate but when the leverage increase then risk becomes more important.

Kim et al. (2007) investigates the factors that influence the systematic risk of US restaurant firms. This study used the data during the period of 1999-2003 and examined the six factors leverage, profitability operational efficiency, growth, liquidity and size. Further, Kim et al. (2007) examine the effects of these six factors on systematic risk and found that firm's profitability decreases and leverage increases the firm's systematic risk, whereas the other four factors have insignificant effect. When this study observes the quick service restaurants the similar factors profitability and leverage showed the significant impact. So, when the study used to take the data from full service restaurants then find only the profitability showed to be significant determinant of beta (Risk).

2.9Family concentration:

Anderson & Reeb, (2003) stated that equity holding company founders and their families show an essential and major form of ownership in publicly traded companies of US. The 500 firms among S&P , where the firms from family owned showed the 1/3 of the firms, report for more than 18 percent of firms equity and they have stay their stakes on average for more than 78 years. Family ownership showed the holding of a dedicated, long-term and intense investors who potentially has many benefits and remedies related to atomistic diversify shareholders.

The concentrated nature of family holding and families past existence in firm recommend that these investors have the power and force to follow the risk decreasing strategies with the help of corporate diversification and decreasing leverage levels. Opposite to the moral hazard hypothesis, the study found the valid proof that founding family ownership is linked with less corporate diversification. The analysis of this study suggests that leverage varies little between nonfamily firms and family firms. Further this stud analyze and showed that family firms have risk profile same with the nonfamily firms and these exist in the wide range of business and industries. Because these firms are consistent in diversification strategies so, these firm are more valuable than non family firms.

This study says that if family ownership effects on the decision of firm diversification, then we think likely that same family characteristics will obvious in the financing policies of firms. Especially, the family firms can lessen the firm risk by utilizing the financing forms with the less chances of default that recommends the high dependence on the equity financing. Previous empirical studies work17 showed that the ownership dispersion and firms leverage have a positive relationship. In addition, Michael Jensen18 create an argument that concentrated ownership decreases the cost of agency of free flows and can make the high level of cash in family firms So, allowing the firms to depend lesser on the leverage as financing. As a result, be expecting that family firms will utilize to take significantly a smaller amount of debt as compare to non family firms.

Different studies by Mara Faccio, Larry Lang, & Leslie Young(19) showed that controlling families have a high benefits to appropriate the wealth from minority shareholders and that benefits are become more powerful when families highly effect on its ownership rights. This previous studies says that in East Asia the family ownership firms makes rigorous agency conflicts with firms other shareholders holders due to the when family control is more than the

cash flow rights. 20 families make the use of their power in two ways: by holing the CEO position or by retaining the representation on BOD. As a result, be expecting that family expropriation (high diversification and less leverage) must be high when family board has the more ownership rights or any one family member have the rights of CEO.

In the Czech Republic the determinants of the shape of capital of medium to large size automobile groups was investigated **(**Pinková, 2012) and tangibility, size, profitability and liquidity had been identified as 4 critical factors. Size is bad in terms of overall debt as nicely quick-term debt, but is favorably connected to long time period debt. The determinants of the shape of capital of tangibility and leverage is related undoubtedly in all instances, profitability and total debt as nicely as short-term debt is positively related however profitability as properly long-term-debt is negatively related. While the factors of liquidity and leverage are linked negatively in all kingdom of affairs but the growth is the best variable which showed insignificant. The results verified that on the choice of financial leverage the determinants of the structure of capital play crucial role. The variations have been identified between long-time ratios as properly brief time period ratios in four cases. The examiner finds the contrary effect of long- time period as well short- term debt by the use of the overall debt-ratio. The findings are not surely point towards that absolute validity of any of these hypotheses of the structure of capital. In a few cases, both the theories of (pecking order as nicely trade-off-theory) generally tend to be relevant for know-how Czech automobile company's share of capital. In forming the structure of capital, the theoretical and empirical studies confer with those unique traits of companies take part in the critical role. Such factors, however, aren't the most effective variables that can have an effect on choices of funding. However, such factors are not the handiest variables that may have an effect on the selections of funding. Future research must include quantitative studies into the behavior of the management. The findings also specify that enterprise specifics have an effect on the choice of structure of capital. In addition, the effect of inter-industry variations on the choice of structure of capital could be considered.

Jani & Bhatt, (2015) showed that the corporations from the provider quarter depend greater on the equity and less on debt, conversely within the manufacturing firms. In India agencies opt for the inner source of investment or equity financing in accordance to the rule of thumb of least resistance it's tending to raise the equity as a financing means. Therefore first desire is for inner budget and while it is not enough then debt is issued and when it isn't reasonable to difficulty

more debt than the issuance of equity be present .But the board does not choose to equity debt to fairness as a funding source. This examine showed that financing sample of pharma area companies in India help to the pecking order hypotheses (Myers and Majluf, 1984). This gives a subtle signal related to the corporate behavior of the Indian corporations and observed that they depend greater on internal budget apart from external sources of funding.

A examine located the relationship between profitability and structure of capital of the Ghanaian listed groups in the course of the period of 2005-2009 (Addae, Nyarko-Baasi, & Hughes, 2013). This finding and analysis of this previously have a look have been accuracy of information getting from the Ghana Stock Exchange and utilized the regression model. The consequences of this look at have been shown that profitability as well short-term-debt have sizeable superb dating with each different and the same results discovered from the enterprise region degree; from food & liquids enterprise, pharmaceutical enterprise, banking and finance but the other industries well-known shows the different effects.

Statistically consequences famous that the long-term debt as well profitability have the poor relationships. The handiest one enterprise of producing showed identical results with enterprise degree and the opposite industries statistically showed the connection among long-term-debt as nicely profitability is insignificant. Finally, on the overall enterprise degree the consequences found out that there may be statistically substantial poor relationship between general debt and profitability; as proper outcomes from the food, mining and beverages industries are similar. But for the pharmaceutical enterprise outcomes showed that general debt and profitability have large tremendous courting as compare to other industries.

As a whole, the consequences of this observe show that the Ghanaian agencies relying greater short-term-debt than on long-term-debt. This is the clear depiction of undeveloped nature of Ghanaian long-term debt to fairness market as compare to the advanced countries as an example Germany, France, Canada, Japan, America, UK. So, this study says in Ghanaian on the enterprise zone degree the 42% from all the industries are dependent on short-term-debt. Conversely, study showed that 3 industries named insurance, Agro processing, pharmaceutical depending greater on equity than debt funding. The effects recommended making use of the exchange off theory on Ghanaian listed firms and no evidence for the company theory or pecking order concept at some stage in the take a look at length.

(Nejad, 2015) explores the leverage effect of determinants of firm. Industry and United States stage in Malaysia throughout 2005-2010 period. This look at reveals that a large portion of the structure of capital changes because of the organization's inherent characteristics, whilst the industry and United States of America characteristics liable for changes in the structure of capital 3.62percent and 0.23percent. This observer has multiple boundaries that provide the bottom of the future hard work. Titman & Wessel (1988), understood that to locate the tremendous dimension insignificant attributes can carry many mistakes in every take a look at. In this examine the variables selected on the premise of the prior studies that result in carry some errors in analysis. In Malaysia the bulk industries consist of much less than 10 corporations. Industry indexes may additionally strongly impact on those companies who join or depart the industry over the time in these sorts of industries (Sibilvok, 2009). But the possibilities of these biases not to take within the have a look at. The interactive impact of variables, distinct functional structures and the elements of nonlinearity no longer considered as nicely.

Sheikh & Wang, (2011) carried out a look at on the structure of capital determinants of the one hundred sixty Pakistani manufacturing groups listed on KSE period of 2003 to 2007. The have a look at is achieved via using the strategies of econometric panel techniques which include pooled OLS, fixed effects and random effects. This leverage ratio is used to degree the leverage of the organization; the debt is contained in the quick-time period as well long-time period debt-ratios. While the broad definition of the structure of capital applies exclusively to long-term leverage, it is also short-time period leverage due to the fact the considerable component of short-term-debt is included into the organization's total debt included inside the take a look at. The empirical analysis of the look at suggests that liquidity, profitability and leverage ratios have the terrible correlation. This end result is consequently associated with the principle of the pecking order as contrast to the predictions of the principle of change-off-principle. The agency's length is related undoubtedly with the leverage ratio. Such effects help organization size dimension as an inverse indicator for financial disaster chances. Where the debt-ratio is negatively correlated with the volatility of profits this is connected to the trade-off concept idea. Tangibility and debt-ratio has a negative correlation , but this finding is contrary to the prediction of alternate off theory; therefore aid with the implications of the idea of employer that indicates those firms who are with much less collateralize assets can pick out the excessive degree of the leverage to restrict managers consumptions of perquisites.

In addition, the bad significant impact of liquidity on leverage ratio specifies that organizations retained too much liquidity that allows to inspire managers to utilize the high level of the ideal stage of perquisites. As a consequence, companies with much less collateralize belongings may use more leverage to restrict opportunistic movements of managers. Conflicting findings are determined at the non debt tax guard indicator, but the model of overall and random effects model apprehend this variable with the bad sign, however the model of fixed effect version did not accept it and there may be insignificant relationship among boom possibilities and leverage ratio.

This take a look at concludes that the difference between debt-ratio of short-time period as proper long-term can also restrict the explanatory energy of the western settings structure of capital. The consequences confirmed that these fashions are assisting know-how the organization's financing mind-set in Pakistan.

Hailegebreal & Wang, (2018) carried out a research on the capital structure of the corporation and check the impact of determinants of the structure of capital of the 254 indexed non economic corporations of thirteen African countries. This study used the 16 yr Panel records in the course of the period of 2000-2015 and sources of information of this look at are world governance indicators, global monetary development database, doing business, World Bank progress indicator records base. This examiner uses descriptive statistics accompanied by means of correlation analysis and OLS regression. This study outcomes helps to teach the trade-off the concept as proper pecking order idea.

A take a look at on the African corporations investigated that the factors organization particular of Non debt tax protection, profitability, monetary misery and asset tangibility has study results at the business enterprise's structure of capital. This take a look at also concludes the corporate tax charge, banking zone development, lending interest fee and GDP boom charge are the highly sizeable u . S . unique determinants of the structure of capital of the non economic firms in Africa. In African companies this study found that the guideline of regulation is the robust determinant of the structure of capital from the legal system indexes. Based on the level of growth of the stock marketplace and banking zone, this take a look at classified the level of countries is lower, middle and top. As the category of lower US degree has the lower suggest score of the improvement inventory market and banking sector while, the counties classify as

higher stage means have the excessive score for the development of the stock market and banking sector, the center-level way the rating for banking sector and the improvement of inventory marketplace are between the top and decrease categories.

A favorable connection would verify the principle of trade-off-concept and a damaging connection would confirm the pecking order. Previous observer says that the ratio among operating earnings and overall property is profitability. For the equal reason, an adverse connection among leverage and distance from financial ruin is also predicted by using the exchange off hypothesis. As a result, financially appropriate business (i.E with low possibility of financial disaster) has a tendency to have lower debt prices. Byoun (2008) unearths evidence to aid this speculation that decrease the organisation leverage, more the Altman Z score used as a proxy for financial disaster distance. The enterprise size is also a completely usual determinant in studies into the structure of capital. . Titman & Wessel (1988), state that bigger companies can be greater diversity, making them less liable to the hazard of bankruptcy. Larger businesses also can had better debt ability as a feature of long.

However, larger firms are usually extra visible tend to have better costs of debt and might also issue extra leverage, allowing them to unfold the issuance cost (Byoun, 2008). Rajan & Zingales (1995), however suggest that this connection can also be horrific. They declare that there are liable to be lower asymmetric data troubles in larger. Therefore larger business may also trouble new stock (i.E decrease leverage) with none reduction in market value. Once again, they have got the two possible outcomes backed with the aid of awesome theoretical views with the aid of inspecting the relationship business enterprise's long and enterprise's leverage.

A favorable connection demonstrates the importance of diversification and promotes inside the inverse courting the characteristic of (statistics asymmetry). The look at makes use of the sales logarithm as a proxy for size. Finally, tangibility plays a foremost part within the structure of capital, as existing belongings collateral elements generally tend to have a high leverage. In this manner, the observer assessments the hypothesis of a good connection among leverage and tangibility. Because tangible property may be invoked as collateral for a special debt as counseled by using Titman & Wessel (1988), the borrower is pressured to use the funds in a predetermined project, thereby decreasing the incentive to expect excessive risk. Almeida and Campello (2007) confirmed that tangibility is essential when the corporation is financially

limited and therefore has confined get entry to external resources. But tangibility is less essential whilst organizations are unconstrained, according to Almeida and Campello (2007) outcomes. In this previous look at tangibility is presented as the ratio of fixed assets to finish belongings.

High profit volatility may result in severe monetary distress, making reasonably-priced leverage rates greater attractive. According to Ferri and Jones (1979), business in a specified industry tends to reveal the same business hazard trends because they produce the same products, rely on the same techniques, have professional equal hard work as proper raw material expenses. In this sense, we can expect that an enterprise that aggregates those riskier agencies also have the decrease common leverage simply as the riskier firms display lower leverage. So, we count on that the greater the dynamism of the enterprise decreased the leverage of the firm.

If we generalize the predictions about the impact to an aggregate industry of profitability on leverage, again it would not be feasible to identify relationship between the leverage and the munificence of the industry. This is due to two theoretical streams competing in their predictions about the impact of profitability on leverage at the firm level. As mentioned previously, the theory of pecking order acknowledges a adverse connection between leverage and profitability, while the theory of trade off supports a favorable connection. In this sense, the studies tested that whether there is favorable or negative connection between firm leverage and industry munificence. Expanding the theories of firm-level structure of capital to the industry-level, would confirm positive relationship with pecking order theory while the theory of agency indicates the negative relationship. There is no structure of capital study regard as industry munificence as a leverage determinant according to our knowledge. In both cases, an ultimate favorable sign indicates that magnificence enhances the influence of growth opportunities and profitability to assess small (high) leverage while negative (positive) effects of growth and profitability on the leverage point.

A study in china Chang, Chen, & Liao (2014) worked on the structure of capital of Chinese listed companies and concluded that the fundamental determinant of structure of capital could not be explain the behavior of debt equity. According to them, industry leverages, firm size, profitability, tangibility, and largest shareholding are more important determinant than others. Chang, Chou, & Huang (2014); Ebrahim, Girma, Shah, & Williams (2014); Handoo & Sharma (2014) also worked on the same determinants of structure of capitals and explained the structure

of capital by specific factors, and likewise some others (Antonczyk & Salzmann, 2014; Y.-K. Chang et al., 2014; Dang, Kim, & Shin, 2014; Danis, Rettl, & Whited, 2014; Hugonnier, Malamud, & Morellec, 2015).

The question of a company's ideal structure of capital and determinants of structure of capital has been explored in company finance literature for plenty years. A company's structure of capital is a commonplace mix of short time period, long time and fairness. Many opportunity structure of capitals can be selected by organizations. Is there a manner to divide the sources of an employer into deep and equity so as to increase the company's cost? For company financial officer, this question is critical. Nevertheless, in accordance to (Drobetz and Fix, 2003) the economic literature become not very beneficial in imparting apparent direction of optimum structure of capital. The first pupil who formulated the principle of structure of capital was Modigliani and Miller (1958). Since then, numerous students have observed the path of MM (1958) to develop a new structure of capital idea and have tried to transport far from the assumptions of MM (1958). The theory has made some proper progress in this project. Nevertheless, there is nevertheless inconclusive empirical evidence of alternative theories (Rajan & Zingales, 1995).

Many of the studies at the capital structure invalidate the MM capital irrelevance theorem. While determinants of the capital structure which can be developed at the national and global literature are extensively discussed; but tons of the work also can be seen from the developing economies inside the modern day years. As rising market, Turkey has a whole lot of unique features. Several previous research assesses the significance of organization-precise variables for SME's organisations and inspects whether or not there are huge variations in Turkish production sector amongst sub-sectors. The determinants of capital structure of the employer is investigated with the useful resource of previous research. In this analysis, however, we analyze the connection amongst structure of capital and firm-unique variables by way of the use of exquisite panel information models, expanded version with industry- particular consequences and expanded version with duration of outcomes. Consequently, explaining debt behaviors of productive agencies. Structure of capital theory starts officiated with MM theorem. They deliver unmistakable proof of their famous irrelevance MM proposal. We have verified that the organization's profitability is independent in its financial form of competitive debt to equity

markets within the absence of economic ruin value, corporate income taxes or other marketplace imperfections. The essential theories of structure of capital, which can be the trade-off-idea and pecking-order, have been developed inside the literature starting from this precept. The theory attempted to present a cause of why debt and fairness financing turned into selected (Drobetz and Fix, 2003; Bas et al., 2009).

Hypotheses of trade-off-theory and pecking-order attempt to account for the investment picks of company. The hypotheses of trade-off-principle count on that the right form of capital can be seen as a trade-off-idea between the advantages of debt funding as nicely freed from debt investment. Organizations want to establish a aim debt to equity to offset their spending and maximize marginal benefits; as this sort of structure will optimize their value (K. Acaravci, 2007). Structure of capital trade-off-idea principle implies that a goal leverage of employer is measured by the use of three competing forces like taxes, value of financial distress, and clash with agencies. Adding debt to employer's proportion of capital of an agency decreases its tax liability (company) as well enhance the cash go together with the waft after-tax to be had to finance providers. The tax safety consequently has a high fine courting with the value of the organization. Companies try to balance the tax gain of higher debt and a greater chance of financial distress (Drobetz and Fix, 2003). (Bradley et al., 1984) created a version that synthesizes optimal form of capital's cutting-edge balancing hypothesis. In this evaluation, the cross-sectional interest of average business enterprise leverage ratio's over two decades analyzed for 851 organizations within the US representing 25 two-digit SIC industries. This previous have a look at showed that the finest leverage of agencies is inversely related to the anticipated price of economic misery and a wide style of non-debt sales shields. When economic misery expenses are high, most pleasant organizational leverage is inversely associated with earnings volatility. (Titman & Wessel, 1988) proposes the fee of monetary catastrophe or agency as part of the ultimate structure of capital.

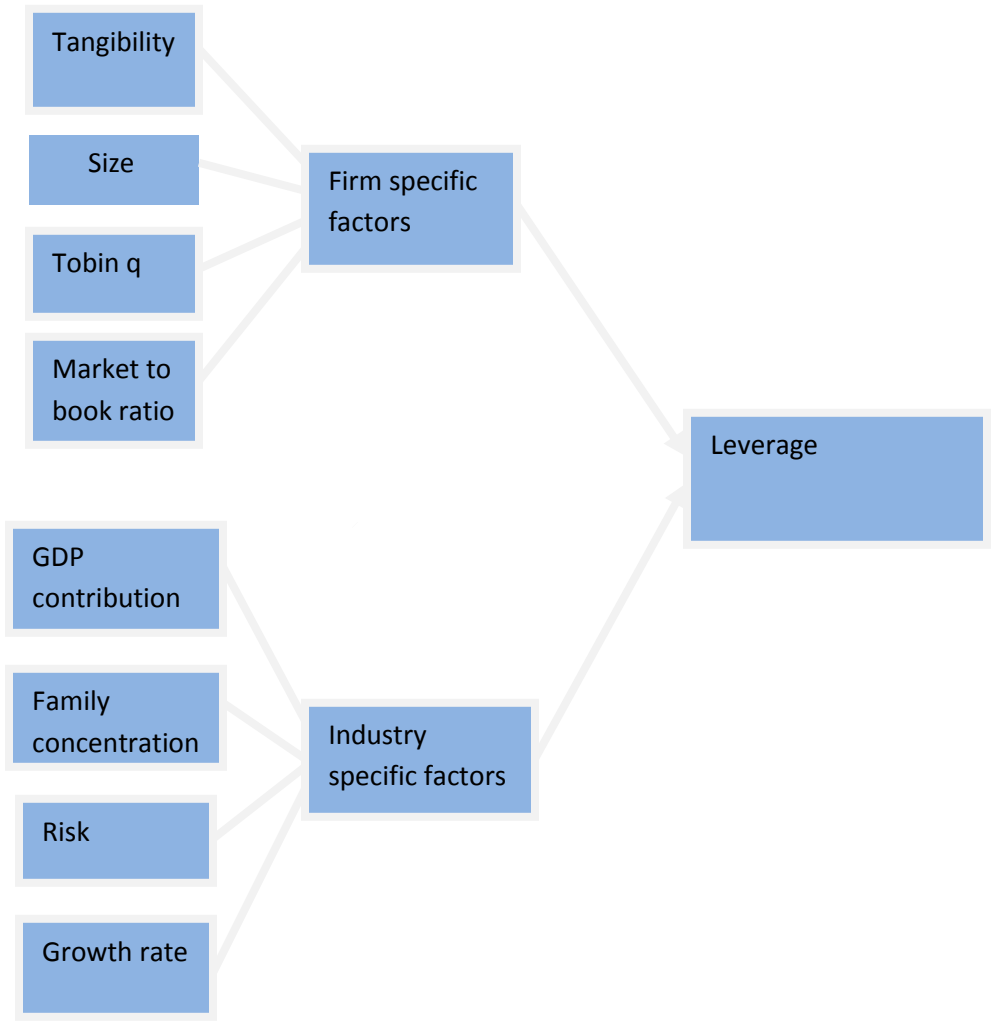
Numerous research like Kester, (1986); Rajan & Zingales, (1995); Titman & Wessel, (1988) recognized strong terrible relationships amongst debt-ratios as well past profitability. Another test Bowen et al. (1982) offer similarly proof on the relationship among leverage industries type relationships. Also empirically tested via DeAngelo & Masulis, (1980)proposals on the characteristic of non-coins tax shelters in identifying a maximum gratifying form of capital. 1800

groups within the US in the course of 1951to 1969 and nine sectors are used for the evaluation. The analysis makes up of four essential conclusion s. First, the disparity amongst meaning monetary structures inside the enterprise is statistically widespread. Next, the ranking of the insufficient economic structures of the employer confirmed statistically extensive stability at some stage in the studies of the era. Next, companies show a statistically respectable sized tendency over time periods among 5 and ten years to turn inside the path of their enterprise mean. Fourth , consistent with the speculation (DeAngelo & Masulis, 1980), the take a look at gives evidence that the volume of tax safe haven performs an critical role in figuring out the maximum useful use of debt in the structure of the debt to fairness of non –regulated organizations at the monetary level. Chen and Jiang (2001) amongst 1992 and 1997, the determinants of the selection of structure of capital for Dutch agencies was empirically tested. Empirical results provided many important insights into Dutch firm's economic conduct. The protective of non-debt tax is shown to be a very important difficulty in choosing Netherland structure of capital, each for long-term as proper short-time period leverage. The leverage appears to be appreciably decreased for companies with greater flexibility. While organization's tangibility and organization's duration are correlated with long time period debt, length is not directly related to brief-term debt and tangibility is negatively associated with brief-term debt. In fact, the findings offer proof to help the idea of trade-off-concept. On the alternative side, the speculation of pecking-order assumes that organizations prefer internal over out of doors funding and debt to equity if they issue securities. K. Acaravci, (2007) there's no well-defined fee of debt-ratio within the organization. Donaldson (1961) first suggested the precept of the pecking order but gave its formal theoretical foundation (Myers and Majluf, 1984).The pecking-order hypothesis has no specific verdict about a pinnacle of the line debt-ratio (Myers and Majluf, 1984; Myers, 1984). We define that pecking-order idea is used as an alternative model of the theory of trade-off-theory as well this concept explains why maximum profitable agencies deliver into play with debt investment because of inadequate inner finances and low-profit corporations. Unlike MM's theorem, in the structure of capital the pecking order hypotheses weighed tons much less to the tax guard as nicely the pecking order idea discusses the relationship between asymmetric facts and selections on investment and financing. Based on these records of data asymmetry, which the managers or insiders of the business enterprise have inside information about the go returned on investment possibilities of the agency, growth the

organization’s leverage to the same volume. Due to asymmetric facts and communication problems with outdoor finance agencies, financing preference obey an order, with an internal desire over out-of-doors financing as nicely debt over equity choice. This concept applies to every SME's enterprises (Bas et al., 2009).

Several research had been conducted to test the pecking order principle for instance (Fama & French, 2002; Ozkan, 2001; Shyam-Sunder & Myers, 1999). Structure of capital is measured by the price of the commercial enterprise, according to (Jensen & Meckling, 1976). The principle of the employer makes a specialty of the charges created through conflicts of hobby between owners, managers and debt holders. Disputes stand up as a result of discrepancies over an operating choice between managers and shareholders. Harris & Raviv, (1991) consider that shareholders or debt holders opt to liquidate the agency whilst mangers always decide to carry on the business of the organization. On the opposite side, (Stulz, 1990) believes that managers still decide to make investments all available funds, even though it is cheaper for shareholders to pay out cash. As a consequence, debt reduces the amount of the free coins flow to be had for beneficial payments. Structure of capital is therefore determined by collisions of hobby between domestic and foreign investors (Bas et al., 2009). Numerous empirical studies have sought to explain the elements that affecting the selection of structure of capital. Rajan & Zingales, (1995) make one of the most famous preliminary empirical studies and perceive the various systematic consequences of the organization’s share of capital inside the G-7 international locations. We determined comparable elements affecting US and other advanced countries structure of capitals, however we did now not provide an underlying principle. Booth et al.,(2001) studied the structure of company debt to equity in developing countries to determine if similar determinants existed as in advanced economies. Their main results were that a similar group of factors could provide an explanation for the structure of capital, however handiest with appreciation to the precise institutional structures of every country can be understood the continual differences between countries (J. Chen & Strange, 2005).

2.10 Theoretical frame work:



Chapter 3

Data Description and Methodology

The main purpose of this study is to examine the relationship between firm and industry specific determinants of the structure of capital within the Pakistan. This chapter elaborates the sources of data from where the data collected for this study. It explains that the data of the non financial firms of the Pakistan. Those firms who have fully completed data are picked for the working for this research. This chapter also specify about the complete measurement of the variables. The methodology of this research is employed to capture the effects of independent variables on dependent variable.

In this chapter it is discussed the methodological aspects of this research. This chapter consists on the data collection methods and the size of the sample used to conduct this research as well as the method used to quantify the variables for analyzing the hypotheses. The structure of this chapter as follows consist on the population, sampling technique, unit of analysis, sample size and data collection procedure. In section consists on the dependent and independent variables and their description which is used in this study.

3.1 Population:

In our research all the non financial firms of Pakistan is include in our population. This research includes all the sectors of the Pakistan. These sectors include Oil and Gas, cement industry, food industry, textile industry, refinery industry, steel industry etc. Non financial firm's data collected from the BSA (Balance Sheet analysis) and FSA (Financial Data Analysis) which were published by the source of SBP (State Bank of Pakistan).

3.2 Sample Technique:

In the sample technique the purposive sampling technique is used in our research. The main purpose of this study is used to search the firm and industry-specific determinants of the structure of capital in the Pakistan. The data range is from 2004 to 2017 and yearly data is used for the non financial firms in this study. Fourteen year panel data have been collected for this research from the period of 2004 to 2017. Accordingly Crisostomo, Iturriaga, vallelado (2012)

when sample size consists of both time-series as well cross-sectional then Panel data estimation technique is used.

3.3 Unit of Analysis:

Firms are used as unit of analysis in this research.

3.4 Sample size:

This study has selected the population of the non-financial Pakistani firms, in order to analyze the impact of the firm as well industry-specific determinants on the firm's structure of capital. Sample size for this research comprises on the data of the non-financial firms of the Pakistan.

Multiple industries will be taken as sample whose data is available from 2004 to 2017. But during data gathering and downloading of financial reports of these companies, this research successfully obtained 62 firms ranging from 2004 to 2017 which is considered sufficient. Data has been collected from the financial reports and the companies profiles listed on the PSX for the period 2004 to 2017.

3.5 Data Collection Methods:

All of the research is based on the secondary data. Secondary data source is used in the collection of data in our research through the published articles, journals, annual reports, SBP website, SECP website, and Opendoors.pk etc. Through the review of different papers and proper review of previous studies, where we found the related data of our research is the method of secondary data collection.

3.6 Data analysis software and statistical methods:

Univariate (Measure of Central Tendency, Measure of Dispersion) bivariate (Correlation) and Multivariate Panel data analysis will be perform on the annual data ranging from 2004 to 2017.

3.7 Research Methodology:

We follow the tradition of capital structure studies as well estimates a research model in which leverage ratio is regressed on a set of potential determinants of structure of the capital. We used to run leverage ratios as a dependent variable on least squares regression as well firm-specific

and industry-specific factors as explanatory variables on across industry in our data set as follows:

Following equations will be analyzed for data analysis:

$$Leverage_{I,t}(Debt/Equity) = \beta_0 + \beta_1 TQ_{I,t} + +\beta_2 TANG_{I,t} + \beta_3 MB_{I,t} + \beta_4\, GDPcon + \beta_5 Risk_{I,t} + \beta_6\, GR + \beta_7\, FC + \beta_8\, size + \beta_9 \sum_{T=1}^{N} Indus\_DUM + \beta_{10} \sum_{T=1}^{N} Year\_DUM + \varepsilon_{I,t}$$

In this study, few statistical tests are conducted. First we test whether firm-specific and industry-specific coefficients on across industry. Specially, the test conducted to check out whether four firm-specific coefficients Tobin Q, tangibility, M/b ratio, size and four industry-specific coefficients family concentration, GDP contribution, risk, growth rate maintain the similar value across industries in the sample as well used the dummy variables which is the numerical value used in regression analysis. The reason why we use dummy variable in my study is to represent subgroups of the sample in my study and in the research design the dummy variable is often used to distinguish different groups. By following the approach De Jong et al., (2008) we used unrestricted regression model in this study where all the coefficient are allowed to vary across industry to conduct these tests.

Study used panel least square models to analyze the impact of firm and industry specific determinants on the structure of capital and other independent variables on the non-financial Pakistani firms.

Where $Leverage_{I,t}$is the dependent variable, in this study we used only one dependent variable calculated by total debt to total assets. The independent variable in the equation are, TQ refers Tobin Q, tang refer to the tangibility of the firm, M/B ratio refers to market-book ratio, GDP concentration refers to GDP contribution, FC refers to family concentration, size, risk, growth rate. The firm specific factors are Tobin Q, tangibility, M/B ratio, size and industry specific factors family concentration, GDP contribution, Risk, Growth rate. Macroeconomic variables also used in this study. In this study yearly data is used in this study from 2004 to 2017.

3.8 Panel Data Analysis:

Panel data analysis is used when data have both cross-section and time-series is used in analysis. Time series means the collection of data at specific order and equal space for instance annually data is used during the period of 2004 to 2017 and cross section data means the data collection of the firm and individual for the specific time i.e one year data. As this study used both type of data, so panel data analysis is the most appropriate methodology.

NAME	DESCRIPTION	PROXY
TOBIN'S Q	It measure the performance of the firms over the different years by firm assets and market value of the firm	MV/TA
TANG	It measure the tangibility of the firms over the others	Plant & equipment, Net property / T.A
M/B	It measure by overall market debt to equityization to book value of equity for different firms	MARKET DEBT TO EQUITYIZATION/ TOTAL BOOK VALUE
GDP contribution	Importance to overall economy, it is an industry performing variable	Avg value of total revenue of each industry to total GDP
RISK	The beta of each industry between 2004-2017	Cov (Rind, Rm)/Var (Rm)
INDUS DUM	Industry dummies capture leverage behavior overall each industry on the basis of each year	1 for specific industry 0 for all others
YEAR DUM	It check the leverage of each firms in each year, and how it is moving from one year to other over the different industries	1 for year like 2000 and 0 for other and vice versa
Size	It tells about the size of the firm	Log (Total Assets)
Growth rate	Geometric mean of sales per growth rate of each industry	(present/past)^1/n-1
Family concentration	Family owned firm vs other	D=1 if owned by a family group, 0 otherwise

Chapter 4

RESULTS AND INTERPRETATION

The objective of the study is to investigate the industry and firm specific determinants of structure of capital for the non financial firms over the period from 2004 to 2017. The data is analyzed in advance statistical tools using Stata 14. The analysis of the study consist on the descriptive statistics, regression analysis, Unit Root Analysis, normality of residual, hausman test, and pair wise correlation.

4.1Descriptive Statistics:

The descriptive analysis of the study has been performed to see the central tendency and dispersion of all data and results are provided in the table 4.1.

Table 1: ***Descriptive Statistics for the period of 2004-2017***

Variable	Mean	Std.Dev.	Min	Max
Tangibility	.416	.224	0	.943
Size	6.779	.635	5.189	8.346
Tobin Q	.695	1.011	0	9.849
Growth rate	1.016	25.337	-1	742.196
Risk	.298	.157	0	.605
GDP contribution	.0019	.0018	0	.0102
Leverage	.486	.228	0	.893
MV/BV	1.791	4.553	-.138	95.898

So, Table 4.1 gives detail about the data of the descriptive statistics. In this study descriptive statistics is used to give explanation of the data. It contains all the dependent and independent variables that utilizes in this study. This study uses the one dependent variable that is leverage which is measured as total assets to total debt and the independent variables of tangibility can be measured as property plant and equipment to total assets, size can be measured as log into total

assets, Tobin q can be measured as MPS into share price to total assets, risk is calculated with price volatility, m/b ratio can be measured by the market debt to equityization to equity.

This table shows the value of descriptive statistics of mean, minimum, maximum and standard deviation. Mean value is the average value of the all the data values. Standard deviation measures the average distance from mean. Maximum and minimum values showed the smallest and largest values in the data. the debt to total assets has the lowest value 0 and highest value 0.893 having the average value of 0.486 while, the standard deviation value is 0.22 and the mean value of debt to total asset is 48% of total assets which shows that Pakistani firms use the debt of 48% in businesses and there is 22% deviation in the usage of debt.

Tangibility has the smallest value 0 and highest value 0.943 also has the average value of 0.416 and standard deviation value of 0.224.this table shows that the average value of the tangibility is less than average value of the size. It means that Pakistani non financial firms demand less for the tangibility of the assets. Size has the smallest value of 5.189 and extreme 8.346 with the mean value of 6.779 and standard deviation of 0.635.

Tobin q has the mean value 0.695 and standard deviation of 1.011. Tobin q shows 69% of the profitability having 0 minimum and 0.695 maximum values and the 10% of the standard deviation contributed by Tobin q.

The risk also has the 0 minimum value and 0.605 maximum value with the 0.298 mean and 0.157 standard deviation there is 15% deviation from mean in business risk of the companies

While the growth rate has the negative minimum value with the mean value of 1.016 and standard deviation of the 25.337. As well the variable of GDP contribution has the 0 minimum value and 0.0102 maximum value where the 0.0019 has the average value and 0.0018 is the standard deviation.

Market-book ratio indicates a negative minimum and 95.89 maximum value where mean is 1.791 and standard deviation is 1.791. Market-book ratio has the mean value of 1.791, standard deviation 4.553 and minimum value -.138, maximum 95.898. Usually market-book ratio is used by the investors to give an idea about the market particular stock’s value and it is used to value

the financial, real estate, insurance companies and investment trusts but it does not work healthy for those firms who have mostly intangible assets.

Among all the variables of this study the variable of risk has the minimum standard deviation value and the growth rate has the maximum standard deviation value.

4.2 Pairwise correlation:

Correlation analysis explains the relationship among the variables which include both dependent and independent variables. The value of the correlation coefficient ranges from -1 to +1. If the coefficient value is high it means that relationship is stronger between the variables. For correlation if the coefficient value is 1 then it is strong correlation, if the value is zero it means that there is no correlation among the variables. The sign of the coefficient gives the direction of the relationship of the variables. The positive correlation exists if there is increase or decrease in variable in similar direction but in negative coefficient one variable is increasing and the other is decreasing

Table 2: ***Pairwise correlations***

Variables	Tang	Size	Tobin q	Growth rate	Risk	GDP contribution	leverage	M/B
Tang	1.000							
Size	-.031	1.000						
Tobin q	-.054	.216*	1.000					
Growth rate	.031	-.077*	-.005	1.000				
Risk	.074*	.382*	.022	-.064	1.000			
GDP contribution	.054	.027	-.000	-.003	-.035	1.000		
Leverage	.119*	.059*	-.204*	.070*	-.064	-.139*	1.000	
M/B	.041	.186*	.723*	-.009	.005	-.025	.118*	1.000

* shows significance at the .05 level

Pair wise correlation has been performed to test the relationship between variables. A single star indicates the significant at 5% confidence interval relationship and wise versa. The study has leverage as dependent variable while tangibility, size of organization, profitability, growth, risk,

GDP contribution and m/b ratio as independent variable. In Pair wise correlation tobin q is positively and growth rate is negatively significant with size while risk is positively significant with tangibility and size. In addition leverage is positively significant with tangibility, size, growth rate and negatively significant with tobin q and GDP contribution but m/b ratio is positively significant with size, tobin q and leverage.

Leverage is positively related with tangibility, size, growth rate and m/b ratio, negatively related with tobin q, risk and GDP contribution. The relationship between independent variables also indicate that the maximum relationship is between Tobin Q and market-book value which is .723, which is still not strong that issue of multi co-linearity appears in the final regression.

4.3 Regression Analysis:

A multiple panel data regression has been performed to see whether the leverage (Debt to Total Asset) can be predicted from firms specific variables e.g tangibility, size, Tobin q, M/B and industry specific variables e.g risk, GDP contribution, growth rate. R square is a statistical measure of how close the data are fitted to regression line .The null hypothesis tested was that the multiple R^2 is equal to zero and the regression coefficient was also equal to zero. The data is screened for missing values and violations of assumptions prior to data analysis. There were no missing data as only those companies have been used in analysis which pertain data from 2004-5 to 2017-18.

4.3.1Stationary of Data:

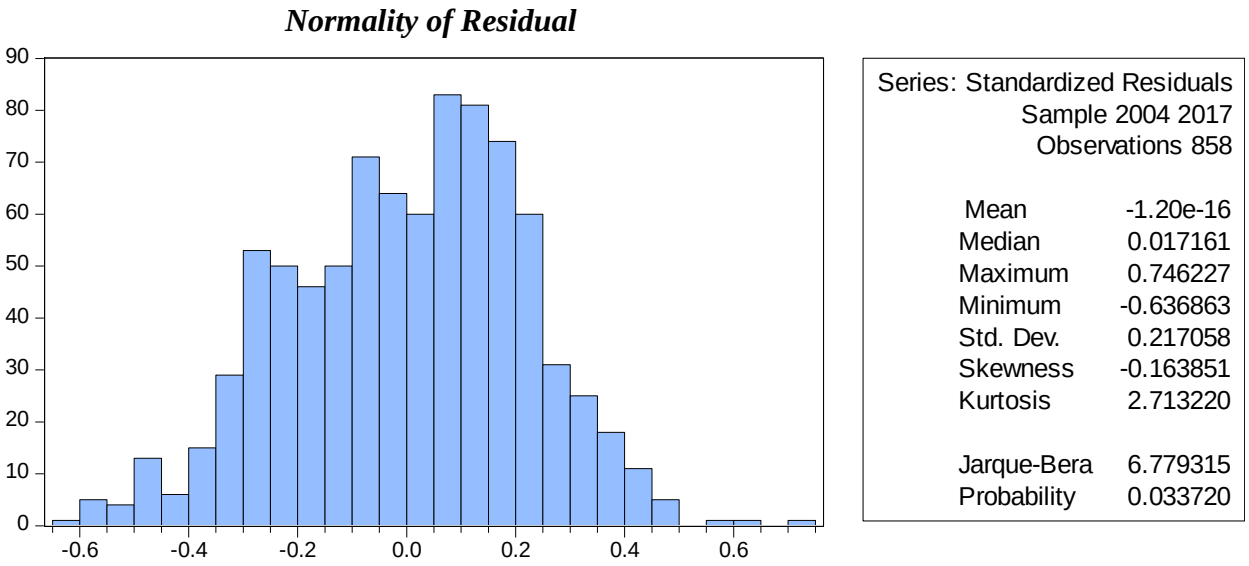
Stationary of data is tested via the examination of standardize residuals and results are reported below.

Table 3: ***Unit Root Analysis (Levin, Lin & Chu t*)***

Variable Name	Statistic	Prob.**
Debt/TA	-3.43921	.0003
GDP contribution	-5.83651	.000
Growth rate	-9.7198	.000
M/B	-5.13312	.000
Risk	-3.84234	.0001
size	-6.96971	.000
Tang	-5.27349	.000
Tobin q	-2.72521	.0032

Panel unit root is used to apply on the panel data structure because of the larger observations. Unit root is used to test the stationary of data in the time series. The null hypothesis of unit root is that there is a unit root of the data, while the alternative hypothesis is that there is stationary of the data. Results of Levin, Lin and Chu indicate that there is a stationary of the data in all variables. Results of Levin, Lin and Chu test indicate that there is stationary of the data for all the dependent and independent variables. All the dummy variables, industry and year dummies are not used to test the unit root analysis.

4.3.2 Normality of Residual



The assumption of the normality tested through examination of the standardized residuals. Through the review of the Jarque-Bera test for normality the JB = 6.7793, probability = 0.033 and skewness (-0.1638) and kurtosis (2.713) statistics suggested that normality was not reasonable assumption. But with the larger data size and panel structure indicate that these results are not regarded too important. Although the structure of the histogram is somehow normal.

4.3.4 Redundant Fixed Effect and Hausman Test

Fixed effect test is performed to test the null hypothesis that data is following the common effect pattern. For this purpose fixed redundant test is performed which provide significant results which indicate study need to see the fixed effect structure.

Table 4: ***Redundant Fixed Effects Tests & Correlated Random Effects - Hausman Test***

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.940	-59763.000	0.000
Cross-section Chi-square	575.570	59.000	0.000
Cross-section random	24.514	7.000	0.001

The hausman test is performed to see whether the panel is following fixed effect or random effect. The null hypothesis of this test is that data is following the fixed effect assumptions. To retain these assumptions, researcher is seeking for significant results. But hausman test showed the probability is 0.000 which is less than 0.05 that's why null hypothesis is rejected; the p value is the probability that the chi square statistics have 2 degrees of freedom. For the chi square the degree of freedom calculated by using the formula df= (r-1)(c-1) where c is the no of columns and r is the no. of rows and if the chi square test statistics is higher than the critical value then null hypothesis is rejected. So study has performed fixed effect test instead of random effect. In hausman test when the probability of fixed and random is same then it means we need to apply fixed effect. In this test cross-section F and cross-section chi-square that evaluates the joint significance of the cross-section effects by using the sum of squares (F test) and possible functions of the (chi square test)**.** The statistics value of cross-section F 12.940 and cross-section chi square 575.570 and associated p values strongly reject the null hypothesis that the cross-section effects are redundant.

Table 5: ***Regression results for the period of 2004- 2017***
Dependent Variable: DEBT to Total Assets
Method: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Tangibility	.129	.050	2.588	.010
Tobin Q	-.074	.010	-7.473	.000
Risk	-.107	.070	-1.517	.130
Size	.055	.024	2.249	.025
GDP Contribution	-5.094	5.147	-0.990	.323
Growth rate	.043	.008	5.301	.000

M/B	.012	.002	6.015	.000
C	.882	.163	5.424	.000
R-squared	.617			
Adjusted R-squared	.584			
F-statistic	18.658			
Prob(F-statistic)	.000			

This table shows the method of panel least square which is used to predict the performance of the dependent variables. In the research regression analysis is used to determine the line of best fit for the data set that explains the potential relationship between independent and dependent variables .This table shows the coefficient, standard error, t statistics, probability and the critical value for the variables like tangibility, size, tobin q, growth rate, risk, GDP contribution and m/b ratio. The column of coefficient is the estimate of the parameter. The standard error column is the standard deviation of the sampling distribution of the βit. The standard error indicates to likely sample variability and hence reliability. The t value is used to test the hypothesis that the coefficient is equal to zero. The probability column shows the probability that the absolute value of the actual t statistics is higher than the estimated t statistics.

In the regression statistics, the R squared is used to find out the goodness to fit and it also tells about the explanatory power of the model. R squares is used as the fraction of the variance of the dependent variable (debt to total assets) give details by the independent variables (tangibility, size, tobin q, growth rate, risk, GDP contribution and m/b). Adjusted R square is to some extent similar with R square. F test is used to test the hypothesis that none of the explanatory variable explain anything in actual. The R square is 0.617 which means 61.7% of the variance in leverage (dependent variable) is explained by all the independent variable).This is an overall measure of the strength of association and is also called the coefficient of determination. The F test is 18.658, it is statistically significant because ($P<0.001$). This indicates that significant variations of the debt to total assets (Dependent variable) are explained by the all independent variables.

The relationship between tangibility and leverage is significant and positive relationship. The **tangibility** of the firm has coefficient value of 0.129 with the p value which is equal to 0.010. (Paulo Esperança et al., 2003) and Booth et al., (2001) also found a positive relationship of asset structure with long-term-debt and short-term-debt. So these results are according to the past literature.

The **size** of the firm has the positive and significant relationship on the leverage of the firm with the slope of -0.055, p value which is equal to 0.025. It means that firm size have effect on the firms leverage. (Cassar & Holmes, 2003; G. C. Hall et al., 2004; Paulo Esperança et al., 2003) found in their researches that the firm size and long-term-debt-ratio have positive association as well. So these results are in accordance with these studies.

The tobin q has the coefficient value of -0.074, standard error with 0.011 with the p value= 0.000 which means that tobin q is negatively significant. According to (McConnell & Servaes, 1995) Previous study showed that the profitability of corporate value is negatively correlated with the leverage for the firms with strong growth opportunities indicated by high Tobin q and positively correlated with the leverage for firms with poor growth opportunities indicated by low Tobin q but their results are consistent with the assumption that leverage leads to underinvestment and decreases the value of the firm, as well as the assumption that leverage reduces overinvestment and increases the value of the firm.

The growth rate has the coefficient 0.043 with the p value=0.000 which means that growth rate is positively significant relationship with leverage. According to (Michaelas et al., 1999) disagree that leverage and future opportunities have a positive relationship, especially short-term-debt. They disagree with statement that the agency problems and financing cost decreases if a firm issue short-term loan instead of long-term loan.

Risk has the negative coefficient value -0.107 with, p value is equal to 0.130 which mean that risk is negatively insignificant. Accordingly (Baxter, 1967) It is argued that the high leverage is linked with the risk that leads to increase the cost of the firm's debt to equity. Excessive amount of leverage may increase the chances of bankruptcy so; this also increases the risk of overall earnings. While, that real cost appears that is connected with the bankruptcy and high debt may decrease the overall value of the firm. The influence of the risk of ruin is not expected to be linear with the dependence on leverage. When level of leverage is too low and the firm depends more on leverage so it is not expected the significant effect on the chances of bankruptcy.
GDP contribution has the coefficient -5.094 with the standard error is equal to 5.147, p value is equal to 0.323 which mean that it insignificant. According to, Gajurel (2005), this study is on Nepalese firms to examine the macroeconomic variables and the influence of GDP growth rate

on the structure of capital and found that there is a negative relationship between GDP growth rate and leverage of Nepalese firms.

The m/b ratio has the value of coefficient is 0.012 and p value of 0.000 which means that the variable of m/b ratio is significant. A positive sign of the coefficient shows that the one unit increase in market-book ratio that would lead to 13% increase in the firms leverage level. According to Li & Islam (2019), Market-book ratio measure by overall market debt to equityization to book value of equity for different firms. So, empirically this previous study showed the mean and median value of the leverage and the firm specific factors of the twenty industries during the period of 1999-2012. As examined that the mean value of long-term book ratio is 36.9% and the market leverage ratio is 22.5%. On the other hand the median value of the long-term book ratio is 21.9% and market leverage ratio is 12.8%. Further this previous study finds that the leverage ratios differ significant in across industries.

Table 6: *Linear Regression*

Debt/ta	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Tex	.088	.057	1.55	.121	-.023	.200	
Food	.282	.066	4.27	.000	.152	.412	***
Chem.	.079	.060	1.31	.190	-.039	.197	
Manu	.068	.060	1.13	.257	-.050	.186	
o.nonmet	.000	.	.	.	.	.	
Fuel	.029	.061	0.48	.631	-.091	.150	
Electr	.171	.077	2.21	.027	.019	.323	**
Coke	.199	.065	3.05	.002	.071	.327	***
Motor	.120	.061	1.96	.050	.000	.240	*
Other texti	-.124	.065	-1.90	.058	-.252	.004	*
Cement	.052	.059	0.89	.376	-.063	.168	
Ther services	.111	.082	1.36	.175	-.050	.272	
Sugar	-.046	.064	-.71	.475	-.172	.080	
Tang	.172	.042	4.09	.000	.089	.254	***
Size	.020	.015	1.40	.163	-.008	.049	
Tobin q	-.152	.011	-13.64	.000	-.174	-.131	***
Growth rate	.001	.000	2.30	.022	-.001	.000	**
Risk	-.119	.056	-2.12	.034	-.229	-.009	**
Gdp contribution	.000	.000	-3.36	.001	.000	.000	***
Mb	.024	.002	11.18	.000	.020	.028	***
Family	.003	.018	.16	.876	-.032	.037	

concern							
Constant	.292	.108	2.69	.007	.079	.505	***
Mean dependent var		.486					
R-squared		.317					
F-test		19.414					
Prob > F		0.000					

*** p<0.01, ** p<0.05, * p<0.1

This table shows the regression results of all previous independent variables with the new family and industry dummies. In this study leverage is dependent variable and tang, size, growth rate, Tobin q, risk GDP contribution, M/B ratio, family concentration and industrial dummies. Tangibility has the coefficient value 0.172 with the p value 0.000 it means it is positively significant (p<0.01). Size has the coefficient value 0.020 and p value is 0.163 it is insignificant. Tobin q has the negative coefficient value -0.152 and p value 0.000 it is negatively significant (p<0.01). Growth rate has the coefficient value 0.001 with the p value equal to 0.022 it means it is significant (p<0.05). Risk has the coefficient value of -0.119, p value which is equal to 0.034 which is significant (p <0.05). GDP contribution has the coefficient 0.000 and p value 0.001 which is significant because (p<0.01). M/b ratio has the coefficient 0.024 with the p value 0.000 which is significant (p<0.01). Family concentration has the coefficient 0.003 and the p value 0.876 it means it is insignificant. Textile industry has the insignificant results with the coefficient value 0.088, p 0.121. Food industry has the significant results with the coefficient value 0.282 and p value 0.000 because (p<0.01). Other industries like chemical, manufacturing, other non metallic, fuel, cement, other services, sugar has the insignificant results.

As this is discussed above, the key objective of estimating the equation is to identify the effects of firm and industry specific variables on the leverage in the Pakistan. The empirical results are showed in the tables. Primarily it is very fascinating to view that the Adjusted R^2 of the regression is 61%, implying that the employed model captures that the large portion in firm and industry specific factors can have the explanatory power on the determination of the structure of capital of the non financial firms in Pakistan.

The regression results from the tables demonstrate that multiple firm specific and industry specific factors such as tang, size, growth rate, Tobin q and M/B ratio effect on the firms leverage in the Pakistan. However, the tangibility, tobin q and M/b ratio consistently presents statistically significant impact on the leverage across all regressions, suggesting that the firms in

economically significant industries for instance chemical industries are associated with relatively high debt-ratios. Further the tobin q the proxy of the firms market performance create literally a significant impact on the leverage ratio in all regressions. These findings point toward that if the firms more expected to increase their debt level if they operate in industry with the good market performance.

The objective of this study is to examined the relationship of firm and industry specific determinants of capital structure where we examine the firm specific and industry specific determinants that effects on the Pakistani non financial firms which includes tangibility, Tobin Q, Risk, Size, GDP contribution, Growth rate, market to book ratio and found that the variable of tangibility,, Tobin Q, Size, Growth rate and market to book ratio has significant effect on the firm's capital structure while the other two variable Risk and GDP contribution has insignificant effect on the firm's capital structure. Further, empirical findings suggest that the industry specific factors have the impact on the roles of the firm specific determinant of the structure of capital. So, the empirical findings are subject to the choice of the leverage. We find that ratio's measuring firms market performance have a tendency for more explanatory power if market leverage ratio is employ as an dependent variable. The empirical data that concepts firms in industries with good market performance, tend to have superior asset quality and high growth opportunities. Further, firms in the industries that have the high risk in the businesses are related with the low tangible assets and huge size of the firm.

CHAPTER 5

CONCLUSION and RECOMMENDATION

This study is to investigate the "firm and industry specific determinants of the structure of capital: Evidence from Pakistan" on the non financial firms. For this purpose, the dependent variable has been taken as total debt to total assets, while the independent variable are tangibility which is measured as property plant and equipment to total assets, size can be measured as log into total assets, Tobin q can be measured as MPS into share price to total assets, growth rate calculated with new and old sales, risk is calculated with price volatility, m/b ratio can be measured by the market debt to equityization to equity , other variables are family concentration, GDP contribution. The data is collected from 62 non financial Pakistani firms over the period of 2004 to 2017. To quantify the firm and industry specific determinants impact on the structure of capital of the Pakistani firms, three regression models are devised. For the purpose of cause and effect analysis, study used panel data regression models.

The descriptive analysis has been performed to see the average behavior of the dependent and independent variables. The debt to total assets has the lowest value 0 and highest value 0.893 having the average value of 0.486 while, the standard deviation value is 0.22 and the mean value of debt to total asset is 48% of total assets which shows that Pakistani firms use the debt of 48% in businesses and there is 22% deviation in the usage of debt.

The correlation analysis has been performed to see the relationship between the dependent and independent variables. The results indicate that the relationship between independent variables also indicate that the maximum relationship is between Tobin Q and market-book value which is .723 and results indicate that the relationship between dependent and independent variables also indicate that the maximum relationship is between leverage and tangibility which is 0.119.

The causal relationship between leverage and other independent variable is tested using the panel analysis. The results indicate that **tangibility** and leverage is significant and positive relationship has coefficient value of 0.129 which means that if the firms are more levered they have more tangibility of the firms. It is predicted by the theory of trade off that there should be positive relationship between leverage and tangibility. Furthermore, this hypothesis proposes that the tangible assets should decreases the potential financial distress cost and increases the firms

leverage capacity, which could relate to our study results. So, someone can argue that just collateralized leverage should decreases the financial distress cost. The **size** of the firm has the positive and significant relationship on the leverage has the coefficient value 0.055. **Growth rate** is positively significant relationship with leverage has the coefficient 0.043. It means that the growth rate have affect on the firms leverage. There is the negatively insignificant relationship between **GDP** and leverage has the coefficient -5.094. **Tobin q** is negatively significant with the leverage has the coefficient value of -0.074. There is the negative relationship between Tobin q and leverage. Tobin q can be considered to measure the opportunities for the future growth. So tobin q can be defined as the debt to equityized income value from assets plus the debt to equityized value of the future investment opportunities divided by the asset replacement value. If the results based on this classification then the procedure are reliable with the results than other classification schemes. if there is the negative significant relationship between leverage and Tobin q then there will be the high growth of the firm as according to the results of the this study. **Risk** is negatively and insignificantly related with leverage has the negative coefficient value -0.107. It means that if a firm is facing high risk then it is possible they used to take the high leverage in their structure of capital but they have a strong impact that influencing on each other. According to the (Baxter, 1967) when level of leverage is too low and the firm depends more on leverage so it is not expected the significant effect on the chances of bankruptcy. When there is a significant level of leverage in structure of capital so, any increment in the level of leverage is expected to have strong effect on the cost of debt to equity. The risk of ruin therefore turns into increasingly important as the level of financial leverage increases. As a result the interest rate on leverage will increase slowly, if at all, when depend on debt is less but the rate of interest may start to increase quickly then the structure of capital becomes more risky.

There is significantly positive relationship between **M/b** ratio and leverage has the value of coefficient is 0.012. It means according to our results of the study those firms who have the high market-book ratio they issue more debt also have higher retained earnings. Different factors explained this such as the high price of the share lead to increase the market-book ratio that in turn leads to firms pick to issue more debt that will also be highly priced. Therefore Market-book ratio is one of the variable which needs to be consideration as when firms choose the target leverage ratio. Practitioners will then take into consideration of the market-book ratio when they determined to adjust leverage level either by acquiring more leverage or by issuing more equity.

This will help to enable the firm be familiar with the consequences that adopt in any of these two decision of financing on the Market-book ratio. Then the firm will be able to work within the most optimal selection of the structure of capital when faced with this choice.

Policy implications:

Leverage is an important phenomenon which still needs greater attention. The results of the study show that all the measures of the firm and industry specific determinants of the structure of capital have both the negative and positive significant and insignificant impact on the structure of capital of the sampled non financial firms but still it is need of the time to explore the firm and industry specific determinants more efficiently and effectively. The following policy implications will help out the managers of the non financial firms in multiples sectors of the economy like cement, petroleum, textile, chemical, food, manufacturing etc.This study empirically test firms specific and industry specific phenomena's to check the variations of structure of capital decisions. Empirical results of this study recommend some of the following points;

- To find the relationship, further inquiry and knowledge related to the amount of the secured level of leverage within the firms that would be needed. On the others side, tangible and liquid asset, secured or not should provide reason to less trouble when selling it in case of bankruptcy. It is a question for the forthcoming research that if the total debt is divided into secured and unsecured debt that will lead to stronger results for the secured debt. With our results, the theory of trade off assumes the positive significant relationship between tangibility and leverage. This is because the tangible assets are expected to increase the information asymmetry. By having the huge portion of the tangible assets on the balance sheet them the valuation of the company becomes easier for the stake holder because of the high degree of information symmetry. This would lead to decrease the weight being put on the ultimate signals comes from equity issuing and so, it is not risky to decrease the firm value.
- This study says that the firms must take note of their market-book ratio as well growth, size, tangibility, tobin Q, risk because they will affect on the financing decisions. All this will have a bearing on the leverage level of the companies. Therefore management will keep an eye on these variables to assist in identifying the affect that they will be on the

leverage level. It is also recommended that financiers of the firms both the debt issuer and shareholders keep an eye on the market-book ratio and other determinants of the leverage as well. This will help in to forecast probable firms leverage positions. In advance when mangers doing this in well way the potential problems of illiquidity and potential bad affects of inadequate debt to equity or over borrowing can be avoided.

- The Government should change the attitude of the financial institutions towards non financial firms so, they can provide without difficulty long-term-debt financing. Therefore, it leads to support firm's growth but also the successive expansion in the non financial firm's industries.
- Finally, this study recognizes the critical factors that might be increase the performance of the firms. This study will help to the firm's owners-mangers in aiding them to select the correct capital financing for their firms. In explaining the firm's financing behavior current findings suggest if they operate in a industry where market performance is not good that the firm's owner-managers should concentrate on internal funding rather than external funding in order to gain the most from both the capital structure practices. Although, sometimes owners-managers may overlook the opportunities to develop the value if they do not utilize debt. So the manager may get external funds with that condition if they can take full advantage of the tax advantage of debt. They should set the low target capital structure if the costs of bankruptcy are high.

References:

Abdul, G. (2012). The Relationship of Capital Structure Decisions With Firm Performance : A Study of The Engineering Sector Of Pakistan. *International Journal of Accounting and Financial Reporting*, *2*(1), 2162-3082.

Abor, J. (2005). The effect of capital structure on profitability : an empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, *6*(5), 438–445. https://doi.org/10.1108/15265940510633505

Abor, J. (2007). Debt policy and performance of SMEs Evidence from Ghanaian and South African firms. *Journal of Risk Finance*, *8*, 364–379. https://doi.org/10.1108/15265940710777315

Abor, J. (2008). *Determinants of the Capital Structure of Ghanaian Firms By*.

Addae, A. A., Nyarko-Baasi, M., & Hughes, D. (2013). The Effects of Capital Structure on Profitability of Listed Firms in Ghana. *European Journal of Business and Management*, *5*(31), 215–230.

Adesola, W. (2009). Testing static tradeoff theiry against pecking order models of capital structure in Nigerian quoted firms. *Global Journal of Social Sciences*, *8*(1), 61–76. https://doi.org/10.4314/gjss.v8i1.48883

Ahsan, T., Wang, M., Qureshi, M. A., Ahsan, T., & Wang, M. (2016). Firm , industry , and country level determinants of capital structure : evidence from Pakistan. *South Asian Journal of Global Business Research*, *5*(3), 362–384. https://doi.org/10.1108/SAJGBR-05-2015-0036.

Akhtar, S., & Oliver, B. (2009). The determinants of capital structure for Japanese multinational and domestic corporations Shumi Akhtar. *International Review of Finance*, *9*, 1–28.

Akinyomi, O. J., & Olagunju, A. (2013). Determinants of Capital Structure in Nigeria.

International Journal of Innovation and Applied Studies, *3*(4), 999–1005.

Al-Najjar, B., & Taylor, P. (2008). The relationship between capital structure and ownership structure: New evidence from Jordanian panel data. *Managerial Finance*, *34*(12), 919–933. https://doi.org/10.1108/03074350810915851.

Al-Sakran, S. A. (2001). Leverage determinants in the absence of corporate tax system: The case of non-financial publicly traded corporations in Saudi Arabia. *Managerial Finance*, *27*(10–11), 58–86. https://doi.org/10.1108/03074350110767583.

Amidu, M. (2007). Determinants of capital structure of banks in Ghana : an empirical approach. *Baltic Journal of Management*, *2*(1), 67–79. https://doi.org/10.1108/17465260710720255.

An, Z., Li, D., & Yu, J. (2013). Earnings Management , Capital Structure , and the Role of Institutional Environments.

Anderson, R. C., & Reeb, D. M. (2003). FOUNDING-FAMILY OWNERSHIP, CORPORATE DIVERSIFICATION, AND FIRM LEVERAGE. *Journal of Law and Economics*, *46*(2), 653–684.

Antonczyk, R. C., & Salzmann, A. J. (2014). Overconfidence and optimism: The effect of national culture on capital structure. *Research in International Business and Finance*, *31*(0), 132–151. https://doi.org/10.1016/j.ribaf.2013.06.005

Antoniou, A., Guney, Y., & Paudyal, K. (2002). Determinants of Corporate Capital Structure : Evidence from European Countries. *Working Paper*.

Aryeetey, E. (1998). Informal finance for private sector development in Africa. *Economic Research Papers No. 41*, 1–31.

Awunyo-vitor, D., & Badu, J. (2012). Capital Structure and Performance of Listed Banks in Ghana. *Global Journal of Human Social Sciences*, *12*(5), 1–7.

Baah-acquah, P., Freeman, E., & Ellis, E. P. (2017). Effects of Capital Structure Choice on Profitability of Oil Marketing Companies in Ghana (OMCs): Case studies of Ghana Oil

Company limited and Total Petroleum Ghana limited Effects of capital structure choice on profitability of oil marketing companies. *International Journal of Multidisciplinary Research and Development*, *4*(March), 117–122.

Baker, M., & Wurgler, J. (2002). Market Timing and Capital Structure, *LVII*(1).

Bancel, F., & Mittoo, U. R. (2004). Cross-Country Determinants of Capital Structure Choice : A Survey of European Firms. *Financial Management*, *33*(4), 103–132.

Barton, S. L., Hill, N. C., & Sundaram, S. (1989). An Empirical Test of Stakeholder Theory Predictions of Capital Structure. *Financial Management*, *18*(1), 36–44.

Bathala, C. T., Moon, K. P., & Rao, R. P. (1994). Policy , Ownership , Managerial Impact of Institutional Holdings : An Perspective. *Financial Managemen*, *23*(3), 38–50.

Baxter, N. D. (1967). LEVERAGE, RISK OF RUIN AND THE COST OF CAPITAL. *The Journal of Finance*, *22*(3), 395–403. Retrieved from http://www.jstor.org/stable/2326758

Bayeh, A. kinde. (2013). Impact of Firm Level Factors on Capital Structure: Evidence from Ethiopian Insurance Companies. *Global Journal of Management and Business Research Finance*, *13*(4), 23–29.

Bayrakdaroglu, A., Ege, I., & Yazici, N. (2013). A Panel Data Analysis of Capital Structure Determinants: Empirical Results from Turkish Capital Market. *International Journal of Economics and Finance*, *5*(4), 131–140. https://doi.org/10.5539/ijef.v5n4p131

Berger, A. N., & Udell, G. F. (1998). The economics of small business finance : The roles of private equity and debt markets in the nancial growth cycle. *Journal of Banking & Finance*, *22*, 613–673.

Bevan, A. A., & Danbolt, J. (2002). Capital Structure and its Determinants in the United Kingdom — A Decompositional Analysis. *Applied Financial Economics*, *12*, 159–170.

Bie, T. D. E., & Haan, L. E. O. D. E. (2007). Market timing and capital structure: evidence for dutch firms ∗. *De Economist*, *155*(2), 183–206. https://doi.org/10.1007/s10645-007-9054-1

Bigsten, A., Collier, P., Dercon, S., Fafchamps, M., Gauthier, B., Gunning, J. W., … Zeufack, A. (2000). Credit Constraints in Manufacturing Enterprises in Africa. *Centre for the Study of African Economies, University*(oxford).

Boadi, E. K., Antwi, S., & Lartey, V. C. (2013). The Relationship between Liquidity and Profitability of Listed Banks in Ghana. *International Journal of Business and Social Science*, *4*(3), 48–56.

Boadi, E. K., & Li, Y. (2015). Determinants of Bank Deposits in Ghana : Does Interest Rate Liberalization Matters ? *Modern Economy*, *6*(September), 990–1000.

Bokpin, G. A. (2009). Macroeconomic development and capital structure decisions of firms: Evidence from emerging market economies. *Studies in Economics and Finance*, *26*(2), 129–142. https://doi.org/10.1108/10867370910963055

Booth, L., Aivazian, V., & Demirguc-kunt, A. (2001). Capital Structures in Developing Countries. *The Journal of Finance*, *LVI*(1).

Bradley, M., Jarrell, G. A., & Kim, E. H. (1984). On the Existence of an Optimal Capital Structure : Theory and Evidence. *The Journal of Finance*, *39*(3), 857–878.

Cassar, G., & Holmes, S. (2003). Capital structure and financing of SMEs: Australian evidence. *Accounting and Finance*, *43*(2), 123–147. https://doi.org/10.1111/1467-629X.t01-1-00085

Castanias, R. (1983). Bankruptcy Risk and Optimal Capital Structure. *The Journal of Finance*, *XXXVIII*(5), 1617–1635.

Chandrasekharan. (2012). ISSN : 2278-6236. *International Journal of Advanced Research in Management and Social Sciences*, *1*(2), 108–133.

Chang, C., Chen, X., & Liao, G. (2014). What are the reliably important determinants of capital structure in china? *Pacific-Basin Finance Journal*, *30*, 87–113. https://doi.org/10.1016/j.pacfin.2014.06.001

Chang, Y.-K., Chou, R. K., & Huang, T. (2014). Corporate governance and the dynamics of

capital structure : New evidence. *Journal of Banking and Finance*, *48*(0), 374-385.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research*, *57*(March 2003), 1341–1351. https://doi.org/10.1016/S0148-2963(03)00070-5

Chen, J., & Strange, R. (2005). The Determinants of Capital Structure : Evidence from Chinese Listed companies. *Economic Change and Restructring*, *38*(December 2015), 11–35. https://doi.org/10.1007/s10644-005-4521-7

Chittenden, F., Hall, G., & Hutchinson, P. (1996). Access to Capital Small Firm Growth , Structure : Markets and Financial Review of Issues and an Empirical Investigation. *Small Business Economics*, *8*(1), 59–67.

Choi, J. J., Lam, K. C. K., Sami, H., & Zhou, H. (2013). Foreign ownership and information asymmetry. *Asia-Pacific Journal of Financial Studies*, *42*(2), 141–166. https://doi.org/10.1111/ajfs.12010

Cook, D. O., & Tang, T. (2008). Macroeconomic Conditions and Capital Structure Adjustment Speed. *Journal of Financial Economics*, (205).

Dang, V. A., Kim, M., & Shin, Y. (2014). Asymmetric Adjustment toward Optimal Capital Structure : Evidence from a Crisis. *International Review of Financial Analysis*, *33*(0), 226-242.

Danis, A., Rettl, D. A., & Whited, T. M. (2014). Refinancing , profitability , and capital structure. *Journal of Financial Economics*, *114(3)*, 424–443. https://doi.org/10.1016/j.jfineco.2014.07.010

De Jong, A., Kabir, R., & Nguyen, T. T. (2008). Capital Structure around the World : The Roles of Firm- and Country-Specific Determinants Abe de Jong , Rezaul Kabir and Thuy Thu Nguyen REPORT SERIES. *Journal of Banking and Finance*, *32*, 1954-1969.

DeAngelo, H., & Masulis, R. W. (1980). OPTIMAL CAPITAL STRUCTURE UNDER CORPORATE AND PERSONAL TAXATION. *Journal of Fmanclal Economics 8*, *8*(1), 3–29.

Degryse, H., Goeij, P. De, & Kappert, P. (2012). The impact of firm and industry characteristics on small firms ' capital structure. *Small Bus Econ*, *38*, 431–447. https://doi.org/10.1007/s11187-010-9281-8

Delcoure, N. (2007). The determinants of capital structure in transitional economies. *International Review of Economics and Finance*, *16*(3), 400–415. https://doi.org/10.1016/j.iref.2005.03.005

Dhaliwal, D., Heitzman, S., & Li, O. Z. (2006). Taxes, leverage, and the cost of equity capital. *Journal of Accounting Research*, *44*(4), 691–723. https://doi.org/10.1111/j.1475-679X.2006.00214.x

Diamond, D. W. (1984). Financial Intermediation and Delegated Monitoring. *Review of Economic Studies*, 393–414.

Ebrahim, M. S., Girma, S., Shah, M. E., & Williams, J. (2014). INCEIF (International Centre for Education in Islamic Finance) , Malaysia. *International Review of Financial Analysis*, *31*(April), 117–128.

Eriotis, N., Vasiliou, D., & Ventoura-Neokosmidi, Z. (2007). How firm characteristics affect capital structure : an empirical study. *Managerial Finance*, *33*(5), 321–331. https://doi.org/10.1108/03074350710739605

Fama, E. F., & French, K. R. (2002). Testing Trade-Off and Pecking Order Predictions About Dividends and Debt. *The Review of Financial Studies*, *15*(1), 1–33.

Fan, J. P. H., Titman, S., & Twite, G. (2012). AN INTERNATIONAL COMPARISON OF CAPITAL STRUCTURE AND DEBT MATURITY CHOICES. *Journal of Financial and Quantitative Analysis*, *47*(1), 23–56.

Fischer, S. (1981). Mwachwetts kt.Wute of Technology. *In Carnegie-Rochester Conference Series on Public Policy*, *15*, 5–42. https://doi.org/doi:10.1016/0167-2231(81)90016-6

Flannery, M. J., & Rangan, K. P. (2006). Partial Adjustment toward Target Capital Structures. *Journal of Financial Economics*, *79*(3), 469–506. https://doi.org/10.1016/j.jfineco.2005.03.004

Frank, M. Z., & Goyal, V. K. (2003). Capital Structure Decisions : Which Factors are Reliably Important ? I . Introduction.

Friend, I., & Lang, L. H. P. (1988). An Empirical Test of the Impact of Managerial Self-Interest on Corporate Capital Structure. *THE JOURNAL OF FINANCE*, *XLIII*(2), 271–281.

Gajurel, D. P. (2005). *Capital Structure Management in Nepalese Enterprises*. *Published Masters Degree Thesis, Kathmandu: Tribhuvan University, Nepal.*

Ganguli, S. K. (2013). Capital structure – does ownership structure matter ? Theory and Indian evidence. *Studies in Economics and Finance*, *30*(1), 56–72. https://doi.org/10.1108/10867371311300982

Gatsi, J. G., & Akoto, R. K. (2010). Capital Structure and Profitability in Ghnanaian Banks. *Social Science Research Net Work*, 1–69.

Gaud, P., Jani, E., Hoesli, M., & Bender, A. (2003). The capital structure of Swiss companies: an empirical analysis using dynamic panel data, (January).

Giannetti, M. (2003). "Do better institutions mitigate agency problems? Evidence from corporate finance choices." *Journal of Financial and Quantitative Analysis*, *38*(1), 185–212.

Gomariz, M. F., & Ballesta, J. P. (2014). Financial reporting quality, debt maturity and investment efficiency. *Journal of Banking and Finance*, *40*(1), 494–506. https://doi.org/10.1016/j.jbankfin.2013.07.013

Gropp, R., & Heider, F. (2009). THE DETERMINANTS OF BANK CAPITAL STRUCTURE 1 by Reint Gropp 2. *Ecb Working Paper Series*, (1096).

Hailegebreal, D., & Wang, M. (2018). Determinants of Capital Structure of African Firms : A Categorical Analysis Determinants of Capital Structure of African Firms : A Categorical Analysis. *European Journal of Business and Management*, *10*(1), 1–14.

Hall, G. C., Hutchinson, P. J., & Michaelas, N. (2004). Determinants of the Capital Structures of European SMEs. *Journal of Business Finance & Accounting*, *31*(5), 711-728.

Hall, G., Hutchinson, P., & Michaelas, N. (2000). Industry Effects on the Determinants of

Unquoted SMEs ' Capital Structure. *International Journal of the Economics of Business*, *7*, 297–312. https://doi.org/10.1080/13571510050197203

Handoo, A., & Sharma, K. (2014). ScienceDirect A study on determinants of capital structure in India. *IIMB Management Review*, *26*(3), 170–182. https://doi.org/10.1016/j.iimb.2014.07.009

Harris, M., & Raviv, A. (1991). The Theory of Capital Structure. *The Journal of Finance*. https://doi.org/10.1111/j.1540-6261.1991.tb03753.x

Hatzinikolaou, D., Katsimbris, G. M., & Noulas, A. G. (2002). Inflation uncertainty and capital structure. *International Review of Economics & Finance*, *11*(1), 45–55. https://doi.org/10.1016/s1059-0560(01)00085-5

Heshmati, A. (2001). The dynamics of capital structure: Evidence from Swedish micro and small firms. *Research in Banking and Finance*, *2*, 199–241. Retrieved from http://www.infra.kth.se/comcen/cesis/cesis/education/master/courses/1n1705/ah2.pdf

Hijazi, S. T., & Tariq, Y. Bin. (2006). Determinants of Capital Structure : A Case for the Pakistani Cement Industry. *The Lahore Journal of Economics*, *11*(1), 63–80.

Hovakimian, A. (2006). Are Observed Capital Structures Determined by Equity Market Timing ? Are Observed Capital Structures Determined by Equity Market Timing ? *Journal of Financial and Quantitative Analysis*, *41*, 221–243.

Hovakimian, A., Opler, T., & Titman, S. (2001). The Debt-Equity Choice. *The Journal of Financial and Quantitative Analysis*, *36*(1), 1–24.

Hua Hsu, K., & Yu Hsu, C. (2011). Capital structure and financing decision - Evidence from the four Asian Tigers and Japan. *African Journal of Business Management*, *5*(15), 6527–6540. https://doi.org/10.5897/AJBM11.1012

Huang, S. G. H., & Song, F. M. (n.d.). The Determinants of Capital Structure : Evidence from China The Determinants of Capital Structure : Evidence from China, (852).

Hugonnier, J., Malamud, S., & Morellec, E. (2015). Credit Market Frictions and Capital

Structure Dynamics. *Journal of Economic Theory*, *157*, 1130–1158.

James, C. (1987). SOME EVIDENCE ON THE UNIQUENESS Christopher JAMES. *Journal of Financial Economics*, *19*, 217–235.

Jani, D. R. R., & Bhatt, M. S. J. (2015). Capital Structure Determinants : A Case Study of Automobile Industry. *International Journal of Research and Analytical Reviews*, *2*(1), 67–71.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow , Corporate Finance , and Takeovers. *American Economic Review*, *76*(2), 323–329.

Jensen, & Meckling, H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, *3*, 305–360.

Jenter, D. (2005). Market Timing and Managerial Portfolio Decisions. *THE JOURNAL OF FINANCE*, *LX*(4), 1903–1949.

Jõeveer, K. (2013). Firm , country and macroeconomic determinants of capital structure : Evidence from transition economies. *Journal of Comparative Economics*, *41*, 294–308. https://doi.org/10.1016/j.jce.2012.05.001

Jordan, J., Lowe, J., & Taylor, P. (1998). Strategy and financial policy in uk small firms. *Journal of Business Finance and Accounting*, *25*(1–2), 1–27. https://doi.org/10.1111/1468-5957.00176

Kajola, S. O. (2008). Corporate governance and firm performance: the case of Nigerian Listed Firms Kajola. *European Journal of Economics, Finance and Administrative Sciences*, *14*. Retrieved from https://researchportal.port.ac.uk/portal/files/5900899/Thesis.pdf

Kayhan, A., & Titman, S. (2007). Histories and Their Capital Structures. *Journal of Financial Economics*, *83*, 1–32.

Kester, w. C. (1986). Kester CW.(1986) Capital and ownership structure: a comparison of United States and Japanese manufacturing corporations. *Financial Management*, *15*, 5–6.

Khan, I., Jan, S. U., & Khan, M. (2015). Determinant of Capital Structure : An Empirical Study

of Cement Sector of Pakistan. *Asian Journal of Management Sciences & Education*, *4*(July), 50–60.

Khwaja, A. I., & Mian, A. (2005). Do Lenders Favour Politically Connected Firms ? Rent Provision in an Emerging Financial Market. *Quaterly Journal of Economics*, *120*(4), 1371–1411.

Korajczyk, R. A., & Levy, A. (2003). Capital structure choice macroeconomic conditions and financial constraints. *Journal of Financial Economic*, *68*, 75–109.

Kouki, M. (2012). Capital Structure Determinants : New Evidence from French Panel Data Capital Structure Determinants : New Evidence from French Panel Data. *International Journal of Business and Management*, *7*(1), 214–229. https://doi.org/10.5539/ijbm.v7n1p214

Lang, L., Ofek, E., & Stulz, R. M. (1996). Leverage, investment and firm growth. *Journal of Financial Economics*, *40.*, 3–29.

Leary, M. T., & Roberts, M. R. (2005). Do Firms Rebalance Their Capital Structures ? *The Journal of Finance*, *LX*(6).

Leary, M. T., & Roberts, M. R. (2010). The pecking order , debt capacity , and information asymmetry $. *Journal of Financial Economics*, *95*(3), 332–355. https://doi.org/10.1016/j.jfineco.2009.10.009

Leland, H. E. ., & Pyle, D. H. . (1977). Informational Asymmetries , Financial Structure , and Financial Intermediation 16-18 ,. *THE JOURNAL OF FINANCE*, *32*(2), 371–387.

Li, L., & Islam, S. Z. (2019). Firm and industry specific determinants of capital structure: Evidence from the Australian market. *International Review of Economics and Finance*, *59*, 425–437. https://doi.org/10.1016/j.iref.2018.10.007.

Mackay, P., & Phillips, G. M. (2005). How Does Industry Affect Firm Financial Structure ? *Review of Financial Studies*, *18*(4), 1433–1466. https://doi.org/10.1093/rfs/hhi032.

Marsh, P. (1982). The Choice Between Equity and Debt : An Empirical Study. *THE JOURNAL*

OF FINANCE, *XXXVII*(March).

Masnoon, M., & Anwar, F. (2012). Capital Structure Determinants of KSE Listed Pharmaceutical Companies. *GMJACS*, *2*(1).

Masnoon, M., & Saeed, A. (2014). CAPITAL STRUCTURE DETERMINANTS OF KSE LISTED AUTOMOBILE COMPANIES. *European Scientific Journal*, *10*(13), 451–461.

Mazur, K. (2007). The Determinants of Capital Structure Choice : Evidence from Polish Companies. *International Advances in Economic Research*, *13*(4), 495–514. https://doi.org/10.1007/s11294-007-9114-y

McConnell, J., & Servaes, H. (1995). Equity ownership and the two faces of debt. *Journal of Financial Economics*, *39*, 131–157.

Miao, J. (2005). Optimal Capital Structure and Industry Dynamics. *The Journal of Finance*, *60*(6), 2621–2659.

Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial Policy and Capital Structure Choice in U . K . SMEs : Empirical Evidence from Company Panel Data. *Small Business Economics*, *12*, 113–130.

Miller, M. H. (1977). Journal of. *THE JOURNAL OF FINANCE*, *XXXII*(2), 261–275.

Mishra, C. S., & Mcconaughy, D. L. (1999). Founding Family Control and Capital Structure: The Risk of Loss of Control and the Aversion to Debt. *Entrepreneurial Theory and Practice*, *23*, 53–64.

Modigliani and Miller. (1963). American Economic Association Corporate Income Taxes and the Cost of Capital : A Correction. *The American Economic Review*, *53*(3), 433–443.

Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, *XLVIII*(3), 261–297.

Moosa, I., & Li, L. (2012). Firm-Specific Factors as Determinants of Capital Structure : Evidence From Indonesia. *Review of Pacific Basin Financial Markets and Policies*, *15*(2), 1–17. https://doi.org/10.1142/S021909151150007X

Muthama, C., Mbaluka, P., & Kalunda, E. (2013). An Empirical Analysis of Macro-Economic Influences on Corporate Capital Structure of Listed Companies in Kenya. *Journal of Finance and Investment Analysis*, *2*(2), 41–62.

Myers and Majluf. (1984). CORPORATE FINANCING AND INVESTMENT DECISIONS WHEN FIRMS HAVE INFORMATION THAT INVESTORS DO NOT HAVE. *Journal of Financial Economics*, *133*.

Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, *5(2)*, 147–175.

Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *39*(3), 575–592.

Nejad, N. R. (2015). Multilevel Determinants of Capital Structure : Evidence from Malaysia. *Global Business Review*, *16*(2), 199–212. https://doi.org/10.1177/0972150914564274

Ozkan, A. (2001). Determinants of Capital Structure and Adjustment to Long Run Target : Evidence from UK Company Panel Data, *28*(June 1999), 175–198.

Pandey, I. M. (2001). CAPItAL SRUCTURE AND THE FIRM CHARACTERISTICS:Evidence from An Emerging Market. *Indian Institute of Management Ahmedabad, India*.

Pantzalis, C., & Park, J. C. (2014). Agency costs and equity mispricing. *Asia-Pacific Journal of Financial Studies*, *43*(1), 89–123. https://doi.org/10.1111/ajfs.12041

Paulo Esperança, J., Matias Gama, A. P., & Azzim Gulamhussen, M. (2003). Corporate debt policy of small firms: An empirical (re)examination. *Journal of Small Business and Enterprise Development*, *10*(1), 62–80. https://doi.org/10.1108/14626000310461213

Petersen A., M., & Rajan G., R. (1994). The Benefits of Lending Relationships: Evidence from Small Business Data. *The Journal of Finance*, *49*(1), 3–37.

Pinková, P. (2012). DETERMINANTS OF CAPITAL STRUCTURE : EVIDENCE FROM THE CZECH AUTOMOTIVE INDUSTRY. *Acta Univ. Agric. et Silvic. Mendel. Brun.*, *LX*(7), 217–224.

Prasad, S., Green, C. J., & Murinde, V. (2001). Corporate Financial Structures in Developing

Economies: Evidence from a Comparative Analysis of Thai and Malay Corporations. *Finance and Development*, *35*.

Psillaki, M., & Daskalakis, N. (2009). Are the determinants of capital structure country or firm specific ? *Small Business Economics*, *33*(3), 319–333. https://doi.org/10.1007/s11187-008-9103-4

Qureshi, M. A. (2009). Does pecking order theory explain leverage behaviour in Pakistan? *Applied Financial Economics*, *19*(17), 1365–1370. https://doi.org/10.1080/09603100902817592

Qureshi, M. A., Imdadullah, M., & Ahsan, T. (2012). What determines leverage in Pakistan? A panel data analysis. *African Journal of Business Management*, *6*(3), 978–985. https://doi.org/10.5897/ajbm11.1535

Rafiq, M., Iqbal, A., & Atiq, M. (2008). The Determinants of Capital Structure of the Chemical Industry in Pakistan. *The Lahore Journal O*, *13*(1), 139–158.

Rafique, M. (2011). EFFECT OF PROFITABILITY & FINANCIAL LEVERAGE ON CAPITAL STRUCTURE: A CASE OF PAKISTAN'S AUTOMOBILE INDUSTRY. *Economics and Finance Review*, *1*(4), 50–58.

Rajan, R. G., & Zingales, L. (1995). What Do We Know About Capital Structures ? some Evidence From International Data. *The Journal of Finance*, *50*(5), 1421-1460.

Ramalingegowda, S., & Yu, Y. (2012). Institutional ownership and conservatism. *Journal of Accounting and Economics*, *53*(1–2), 98–114. https://doi.org/10.1016/j.jacceco.2011.06.004

Rocca, M. L., Rocca, T. L., & Cariola, A. (2011). Capital Structure Decisions During a Firm's Life Cycle. *Small Business Economics*, *37*(1), 107–130. https://doi.org/10.1007/s11187-009-9229-z

Saeed, A. (2007). The Determinants of Capital Structure in Energy Sector: A study of Pakistani listed firms. *Blekinge Institute of Technology School of Management SWEDEN*.

Šarlija, N., & Harc, M. (2012). The impact of liquidity on the capital structure : a case study of Croatian firms. *Business Systems Research*, *3*(1), 30–36. https://doi.org/10.2478/v10305-012-0005-1.

Sbeti, W. M., & Moosa, I. (2012). Firm-specific factors as determinants of capital structure in the absence of taxes Firm-specific factors as determinants of capital structure in the absence of taxes. *Applied Financial Economics*, *22*, 209–213. https://doi.org/10.1080/09603107.2011.610738

Scott, D. F., & Martin, J. D. (1975). INDUSTRY INFLUENCE ON FINANCIAL STRUCTURE. *Financial Management Association*, *4*(1), 67–73.

Shah, A., & Hijazi, T. (2004). The Determinants of Capital Structure of Stock Exchange-listed Firms in Pakistan. *The Pakistan Development Review*, 605–617.

Shah, A., & Khan, S. (2007). Determinants of Capital Structure : Evidence from Pakistani Panel Data. *International Review of Business Research Papers*, *3*(4), 265–282.

Sheikh, N. A., & Qureshi, M. A. (2014). Crowding-out or shying-away: Impact of corporate income tax on capital structure choice of firms in Pakistan. *Applied Financial Economics*, *24*(19), 1249–1260. https://doi.org/10.1080/09603107.2014.925053

Sheikh, N. A., & Wang, Z. (2011). Determinants of capital structure An empirical study of firms in manufacturing. *Managerial Finance*, *37*(2), 117–133. https://doi.org/10.1108/03074351111103668

Shyam-Sunder, L., & Myers, S. C. (1999). Testing Static Trade-off against Pecking Order Models of Capital Structure. *Journal of Financial Economics, 51*, 1421-1460.

Singh, G. (2013). INTERRELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY WITH SPECIAL REFERENCE TO MANUFACTURING INDUSTRY IN INDIA. *International Journal of Accounting and Financial Management Research*, *3*(3), 13–22.

Smith, D. J., Chen, J., & Anderson, H. D. (2014). The influence of firm financial position and industry characteristics on capital structure adjustment. *Accounting and Finance*, (August

2012), 1–33.

Song, H. (2005). Capital Structure Determinants An Empirical Study of Swedish Companies. *The Royal Institute of Technology Centre of Excellence for Science and Innovation Studies*, (25).

Storey, D. J. (1994). The role of legal status in influencing bank financing and new firm growth. *Applied Economics*, *26*(2), 129–136. https://doi.org/10.1080/00036849400000068

Stulz, R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, *26*, 3–27.

Titman, S., & Wessel, R. (1988). The Determinants of Capital Structure Choice. *THE JOURNAL OF FINANCE*, *XLIII*(1), 1–19.

Tong, S., & Ning, Y. (2004). Does Capital Structure Affect Institutional Investor Choices? *The Journal of Investing*, *13*(4), 53–66. https://doi.org/10.3905/joi.2004.450757

Wahlen, J. M., Baginski, S. P., & Bradshaw, M. T. (2011). *Financial Reporting , Financial Statement Analysis , and Valuation A Strategic Perspective*. *Financial Statement Analysis and Valuation* (Vol. 7 edition).

Wald, J. K. (1999). HOW FIRM CHARACTERISTICS AFFECT CAPITAL STRUCTURE: AN INTERNATIONAL COMPARISON. *The Journal of Financial Researc*, *XXII*(2), 161–187.

Wedig, G., Sloan, F. A., Hassan, M., & Morrisey, M. A. (1988). Capital Structure , Ownership , and Capital Payment Policy : The Case of Hospitals. *THE JOURNAL OF FINANCE*, *XLIII*(1), 21–40.

Welch, I. (2004). Capital Structure and Stock Returns. *Journal OfPolitical Economy*, *112*(1), 106–131.

Wijst, N. van der, & Thurik, R. (1993). Determinants of Small Firm Debt Ratios : An Analysis of Retail Panel Data. *Small Business Economics*, 55–65.

External Examiner's Report on the Thesis entitled

"Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan"

Being an external examiner, I reviewed the MSBA thesis of Ms Sana Khan, a student of the National University of Modern Languages (NUML), Islamabad. The researcher has tried to explore

- The relationship between the firm specific determinants of structure of capital.
- The relationship of industry specific determinants of structure of capital.
- The relationship of firm specific determinants of long-term and short-term structure of capital of the Pakistani firms.
- The relationship of industry specific determinants of long-term and short-term structure of capital of the Pakistani firms

Researcher has tried to find the determinants of debt to total assets using data of 62 non-financial firms from the period 2004-2017 (14 years). Researcher reports that main purpose of this study is to examine the relationship between firm and industry specific determinants of the structure of capital within the Pakistan. As panel data is used, so she tried to use proper panel data analysing methodology and finally end up with panel least squares. Researcher has also applied linear regression using number of independent variables.

.

After carefully reading the thesis, I found that the research work presented in this thesis seems sufficient for award of Master degree. Author has reviewed the literature carefully. Although there are minor problems in theoretical and empirical models and there is need to change the sequence of write up, as a whole it provides an indication of the author has done a lot of work. In general, the thesis fulfils the partial requirement for the Master degree.

Based on the above observations, I may recommend/approve the thesis for the award of MS degree if the scholar has already completed all other requirements of the award of the degree. However, I suggest the following minor changes and the author may take them into consideration for the revision.

1. Abstract of the study is missing
2. Formatting needs to be checked and page numbers are also missing
3. Research questions needs to be rephrased. These are statements not questions
4. Theoretical model is missing from the thesis
5. Independent variables are selected by hit and trial and no justification is given. Even we include more variables like that, they may also be significant. There must be some theoretical reason to include or exclude any variable from the model.
6. Model reported in section 3.7, as researcher is using panel model so it needs subscripts for time and industry/firm. Some of them are reported but other are missing. Otherwise justification is needed.
7. In sequence, after unit root analysis there should be test for fixed or random effect. Afterwards model and finally the residual analysis. But here sequence is different.
8. Table 4 is reported for Hausman test but discussion regarding it is missing
9. Table 5 reports the panel least squares. Justification for use of this model is needed
10. Table 6 reports another model using industries dummies. First of all researcher should report the grouping of firms industry wise, then she may use dummies. Also as researcher is using number of dummies, there is chance of multicollinearity and it must be checked
11. Some recommendations are not recommendations but discussion of results (first one). Also recommendations must be based on the research results rather than political statements or just news.

Dr. Iftikhar Hussain Adil
Assistant Professor
S^3H, NUST
August 8, 2020

Internal Review: The MSBA thesis titled 'Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan' written by Ms. Sana Khan fulfills the requirements of the degree program. However, some of the suggestions/recommendations are as follows;

1) The reviewer could not find the abstract of the study in the thesis report. It is reminded to the candidate to include the abstract of the study in the report.

Chapter 1

2) The first sentence of the background of the study seems not to be scholarly. It is suggested to delete/exclude it.
3) In order to avoid plagiarism, the candidate has tried to replace the words with illogical synonyms that results in the distortion of the sentences (becomes meaningless) for e.g. According to our research, a question arises whether the firms will fulfill their financial obligations through debt or through equity is gaining most '**essential**' because it affects on the structure of the debt to equity, cost of the debt to equity and firms value.
4) It is suggested to include the latest empirical literature (of last 7-8 years) (page nos are missing) e.g. Myers (1984) indicates that firms….otherwise for the theoretical evidence decades old reference is valid (date of the construction of the respective theory).
5) It is suggested to include more explanation of the problem under study (problem statement) in context of the variables, dummies and why panel regression.
6) The research questions are listed before the research objectives. Instead of using the word explore, investigate seems to be appropriate. The research questions and objectives needs to be aligned for e.g. the research objective 1 is research question 2 which creates confusion 9for the reader to better understand the relationship between the questions and objectives.

Chapter 2

7) It is suggested to start with the theoretical review of the study and then move to the empirical review of the study. In a separate section, provide the review on Pakistani Studies.

8) This chapter seems to be too long. It is suggested to balance out by briefly explaining the capital structure theories and emphasing more on the variables under study. Also, the too old literature should be excluded from the chapter.

Chapter 3

9) It is suggested to clearly explain the firm specific factors and the industry specific factors in the data as the researcher has also used the word 'macro-economic' variables in the document 'Macroeconomic variables also used in this study'

10) It is suggested to start the methodology section with some theoretical sentences.

11) It is recommended to provide the explanation of the equation (model) given in the methodology section.

Chapter 4

12) The tables provided in the chapter needs crafting for neat display.

13) In pairwise correlations, please explain the significance level of 5%, how and why the significance of the variables is checked when the correlation value between -1 and +1 itself explains the correlation of the variables under study.

14) What is multiple R^2?

15) The results indicate that there is a unit root. It is suggested to show the stationarity of the variables (1^{st} difference) in the third column (with trend or trend and intercept).

16) After employing the Hausman test, the researcher needs to explain which test of panel regression is employed to test the variables under study because of the probabilities of the fixed and the random test is same.

17) It is very difficult to understand the linear regression results displayed in table 6. In the first few rows, the variables are listed moving to the rows where the firms are listed which seems to be hotchpotch. The researcher may explain the basic intuition behind the linear regression analysis of the study and the clear explanation of the results.

18) The findings need to be supported with the empirical evidence.

Chapter 5

19) It is suggested to provide few empirical evidence supporting the findings of the study to close the thesis document.

20) It is suggested to use the word policy implications rather than recommendations.

General Comments

1) The reviewer has also given the comments within the document which is hereby attached along with the review report.

2) The overall document needs proof reading. The highlighted words/sentences within the document are few examples.

3) The page numbers are missing from the document.

Changes suggested	Changes made	Page no
Chapter 1 The reviewer could not find the abstract of the study in the thesis report. It is reminded to the candidate to include the abstract of the study in the report.	Abstract of the study added	ii
The first sentence of the background of the study seems not to be scholarly. It is suggested to delete/exclude it.	Deleted	3
Formatting needs to be checked and page numbers are also missing	Checked and also added numbering	
Research questions needs to be rephrased. These are statements not questions	Rechecked again and rephrased with the word investigation	9
In order to avoid plagiarism, the candidate has tried to replace the words with illogical synonyms that results in the distortion of the sentences (becomes meaningless) for e.g. According to our research, a question arises whether the firms will fulfill their financial obligations through debt or through equity is gaining most '**essential**' because it affects on the structure of the debt to equity, cost of the debt to equity and firms value.	Done with changes	4
It is suggested to include the latest empirical literature (of last 7-8 years) (page nos are missing) e.g. Myers (1984) indicates that firms….otherwise for the theoretical evidence decades old reference is valid (date of the construction of the respective theory).	Added latest empirical literature according to the suggestion made.	5

The research questions are listed before the research objectives. Instead of using the word explore, investigate seems to be appropriate. The research questions and objectives needs to be aligned for e.g. the research objective 1 is research question 2 which creates confusion 9for the reader to better understand the relationship between the questions and objectives.	Now in the document research objectives are listed before the research question and also word explore replaced with word investigate.	9
Chapter 2 It is suggested to start with the theoretical review of the study and then move to the empirical review of the study. In a separate section, provide the review on Pakistani Studies.	Pakistani literature is already there and both the theoretical &empirical literature is in chapter 2	11,12,14,15,18,19,22
Theoretical model is missing from the thesis	Added as suggested	49
Chapter 3 It is suggested to clearly explain the firm specific factors and the industry specific factors in the data as the researcher has also used the word 'macro-economic' variables in the document 'Macroeconomic variables also used in this study'	Done as suggested	52
It is suggested to start the methodology section with some theoretical sentences.	Done as suggested	51
It is recommended to provide the explanation of the equation (model) given in the methodology section.	Done as suggested	52
Chapter 4 The tables provided in the chapter needs crafting for neat display.	Done as suggested	

What is multiple R^2	R square and multiple R^2 are the same things in multiple regression.	60
After employing the Hausman test, the researcher needs to explain which test of panel regression is employed to test the variables under study because of the probabilities of the fixed and the random test is same.	We used to apply the fixed effect model	59
It is very difficult to understand the linear regression results displayed in table 6. In the first few rows, the variables are listed moving to the rows where the firms are listed which seems to be hotchpotch. The researcher may explain the basic intuition behind the linear regression analysis of the study and the clear explanation of the results	Done as suggested	62
Table 4 is reported for Hausman test but discussion regarding it is missing	Added	59
Table 5 reports the panel least squares. Justification for use of this model is needed	Added	60
Table 6 reports another model using industries dummies. First of all researcher should report the grouping of firms industry wise, then she may use dummies. Also as researcher is using number of dummies, there is chance of multicollinearity and it must be checked	Changed as suggested first grouping of firm industry wise then dummies	62
Chapter 5 It is suggested to use the word policy implications rather than recommendations	Changed as suggested	67

Some recommendations are not recommendations but discussion of results (first one). Also recommendations must be based on the research results rather than political statements or just news.	Changed as required and add some new suggestion	67

NATIONAL UNIVERSITY OF MODERN LANGUAGES

FACULTYOF MANAGEMENT SCIENCES

Dated: - 15-09-2020

DECISION OF THE DEFENSE COMMITTEE

MS THESIS VIVA VOCE

Name: Ms. Sana Khan

Reg. No. 323-MSBA/Ibd/S18

Programme: MSBA

Thesis Title: Firm and Industry Specific Determinants of Capital Structure: Evidence from Pakistan

Supervisor: Dr. Hassan Raza

The decision of the Viva Voce committee was:

Not approved

1. Findings of study should be aligned with objectives.
2. Regression has been run without assumptions. Moreover assumption will be run in a proper sequence.
3. Remover yearly dummies from model or give strong justification.

4. Theoretical aspect are also weak. These may be aligned with overall model.
5. In descriptive stat check outliers and adjust them accordingly.
6. Betas values may be revised in result section.
7. Research questions are not written properly. A need to rephrase them.
8. Independent variable has been chosen on hit and trial method. Give a strong logical argument why?
9. GDP or Industrial contribution to GDP required strong literature support to justify why it is included in the study.
10. Replace recommendations with policy implications.
11. Format should be as per APA style-tables, figures and references.
12. Syntax / Grammatical mistakes must be addressed.

Dr. Faid Gul

HoD MS

Prof. Dr. Naveed Akhtar

Dean FMS

copy to :

a. Supervisor
b. Student

Changes	Changes made	Page number
Findings of study should be aligned with objectives.	Done as suggested	71
Remover yearly dummies from model or give strong justification.	Justification added	58
Theoretical aspect are also weak. These may be aligned with overall model.	Theoretical model added	55
Betas values may be revised in result section.	Beta values added in result section	72,73
Research questions are not written properly. A need to rephrase them.	Done as suggested	15
GDP or Industrial contribution to GDP required strong literature support to justify why it is included in the study.	Added literature	41
Replace recommendations with policy implications.	Changed as suggested	70
Format should be as per APA style-tables, figures and references.	Changed as suggested	61,63,64
Syntax / Grammatical mistakes must be addressed.	Done	