ANALZING RELATIONSHIP BETWEEN FINANCIAL LEVERAGE AND FIRMS PERFORMANCE: A COMPARATIVE STUDY OF PAKISTANI CEMENT AND INDIAN CEMENT FIRMS

By
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Thesis Title: **Analyzing Relationship between Financial Leverage and Firms Performance: A Comparative Study of Pakistani Cement and Indian Cement Firms.**

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ANALYZING RELATIONSHIP BETWEEN FINANCIAL LEVERAGE AND FIRMS PERFORMANCE: A COMPARATIVE STUDY OF PAKISTANI CEMENT AND INDIAN CEMENT FIRMS

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ABSTRACT

Title: Analyzing Relationship between Financial Leverage and Firms Performance: A Comparative Study of Pakistani Cement and Indian Cement Firms

The main objective of the current research study is to investigate the impact of financial leverage on profitability of cement firms of Pakistan and India. In this regards the relevant literature has been viewed and the research objectives are determined research questions has been raised and hypothesis has been developed. The methodology of research consists of quantitative nature using deductive approach. The population includes the cement firms of Pakistan and India listed companies. The sample includes 15 cement companies from each country which were selected randomly. The data was secondary and panel which was analysed using fixed effect, random effect model but Hausman test and Breusch pagan test recommend the pooled regression model to be the appropriate model for current study thus only pooled regression results are reported. The results show that leverage has negative impact on Pakistani cement firms and positive impact on Indian firms. It is recommended based on results that Pakistani companies should reduce the amount of financial leverage while Indian firms should increase the financial leverage in order to boost their profitability.

Keywords: *Financial leverage, Profitability, Pakistan cements firms, Indian cement firms.*

DECLARTOIN

I, Muhammad Sohail declare that no portion of my research work mentioned to in the research thesis has been submitted for any other degree or qualification of this or in any other university or institute.

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Date: December, 2019

DEDICATION

This research thesis is dedicated to my parents, my teachers, and especially to my beloved Father, who is the real source of inspiration to me and his prayers and love enable me to do something valuable in my life. I also dedicate this research to my other family members who provide a sound environment for the compilation of this work. No doubt due to the special blessing of ALLAH and support and prayers of my parents today I am able to compile my research study.

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Thank you all very much!

ABSTRACT

The main objective of the current research study is to investigate the impact of financial leverage on profitability of cement firms of Pakistan and India. In this regards the relevant literature has been viewed and the research objectives are determined research questions has been raised and hypothesis has been developed. The methodology of research consists of quantitative nature using deductive approach. The population includes the cement firms of Pakistan and India listed companies. The sample includes 15 cement companies from each country which were selected randomly. The data was secondary and panel which was analysed using fixed effect random effect model but Hausman test and Breusch pagan test recommend the pooled regression model to be the appropriate model for current study thus only pooled regression results are reported. The results show that leverage has negative impact on Pakistani cement firms and positive impact on Indian firms. It is recommended based on results that Pakistani companies should reduce the amount of financial leverage while Indian firms should increase the financial leverage in order to boost their profitability.

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CHAPTER 1

1. INTRODUCTION

1.1 Capital Structure and Financial Leverage

The researchers identified a lot of factors that can influence the profitability of firms positively and also negatively. But the factor financial leverage is the most influential factor that influences the profitability of firms negatively and also in some cases positively. The factor financial leverage has main role in formulating capital structure of a firm; that's why the company's manager focuses on financial leverage during the formulation of capital structure. When the mangers decide to formulate capital structure then they make some amalgamation of debt and equity financing, in which the mangers need the right amalgamation of debt and equity (Wiles, Crow, & Pain, H, 2011). The company with high financial leverage will pay more fixed amount and the company with less or zero debt financing will not face the payments in fixed amount. If a company wants to rely totally on equity financing then that company will be free of fixed cost, because when a company is just doing equity financing then that firm is just liable to pay to shareholders in case of earning. In this position the company has no financial leverage, so if no financial leverage then company will not face the fixed payment which is called interest rate amount of borrowed money (Silverman, (2013).

The companies should focus on its capital structure to make an optimal capital structure and arrange its capital from right sources and in right portions. Most of the firms take loans from the lenders and through that loan the firms increase their sales volume and later it becomes a cause of higher earnings for the firms. So that borrowed portion of total capital is known as financial leverage, due to which companies are liable to pay a fixed amount which is in real the interest amount. The financial leverage portion in total capital can be measured by total debt to total assets ratio. This ratio also shows the level of capital structure Rehman, Fatima, & Ahmad, 2012). If the company uses more debt financing then that firm will pay more interest amount to lenders and if a company uses less debt financing and more equity financing then that company will pay less

amount of interest from its earning portion, but in higher debt financing the company will pay more with a higher interest rate because increasing of bankruptcy chances of the company (Silverman, D 2013). So that more payments with higher interest rate lead to decrease the company's earning. Because at the start the debt financing can increase the profit for the company because of the tax shield but with increasing the debt financing of a company the bankruptcy chances increase, so when the bankruptcy chance of the company increase then the lender will give loan on higher rate of interest because of higher risk and that higher interest rate become cause of higher cost of capital Myers, (2001). In case of higher economic growth the more debt financing can give benefit to the company, because in higher economic growth the company can increase its sales by more debt financing and that more sales automatically increase the company's profitability. But in case of economic recession the debt financing can become cause of less profitability for firm, because in economic recession the more debt financing can affect company's profitability inversely. In this case the company face the low cash flow problem, because in economic recession the company's unable to sale more, so sometimes the company unable to pay its fixed cost or interest amount (Rehman, Fatima, & Ahmad, M. 2012).

Every organization needs finances to support and/or to increase their sales. There are two major types of sources of finance that are accessible to companies; these are debt and equity. The mixture of these two sources is referred to as capital structure. Financial managers are more concerned with the level of debt and equity to use for their operations. Managers are keen to have an optimal level of debt and equity to maximize the value of their company, minimize the cost of capital (debt and equity) and maximize firms' performance and profitability Malmendier, & Tate, 2004).

More specifically, a mix of company's debt (long-term debt and specific short-term debt) and equity (common and preferred stocks), generally alluded to as the firm capital structure, determines the way how companies utilizes its activities and developments by various sources of finance. Debt are collected in issuing of binds and long term note payables whereas equity can be gained by the mean of stocks and retained earnings. Stocks are of two types one is common stock and other is preferred stocks. Beside this working capital are also knows as a part of capital structure.

A lot of studies conducted in past and they identified the relationship of financial leverage and profitability. The authors (Myers, 1948; Miller, 1977) identified the relationship of financial

leverage with profitability of company and they argued that firm with more debt financing can increase its profit because of less tax payment, but financial risk will be there if the firm increases its debt financing. They further argued that debt financing is useful for firm because the company know about its fixed payment, so when the company knows about its fixed payments then the company can make plans efficiently about their future projects. (Larry and Stulz 1995) argued that financial leverage provide help to firm for more earning than the before tax interest rate. It means that with debt financing the company able to earn more than the cost of interest rate. In case if a company can't cover its interest mount with its earning then the debt financing has a negative impact on profitability but if the earning is greater than its interest amount then it means the debt financing has a positive impact on profitability (Titman, & Wessels, 1988).

As would be explained in detail (in an incoming section on literature review), the Modigliani and Miller's theory of irrelevance helped emerged a number of theories regarding various bases of capital structure. These theories, which predominantly include Pecking order theory, Static trade-off theory, Agency theory and Signalling theory, present differing views regarding optimal mix of various components of debt and equity in varied situations. However, the mix of debt and equity is generally represented by estimated leverage L, wherein L is estimated as a ratio of debt (D) to total assets (TA): L = D / TA; or as a ratio of debt (D) to equity (E): L = D / E; for this study, we are adopting the second measure of financial leverage, that is: L=D / E.

1.2 Financial Leverage, Firm Performance and Relevant Theories

Interest on debt are considered as fixed cost and reduced against revenue. Thus, a loan may have ability for generating more income without investment of the equity Neuman, (2003). Equity is directly related to the dividend payment so by rising the equity dividend payment must be increasing and cannot be reduced against earning. However, while high leverage might be favourable for increasing revenues more than causing reduction of revenues due to interest expense, it is also the base for making cash flow issues in recession times because in recession period our sales are not adequate to cover interest expenses. Whereas additionally, debt provides tax shield, its interest-expense increases may also go to a level where it nullifies all net revenues and causes pushing the firm towards bankruptcy. This is what is covered mostly under the Static Trade-off theory of capital structure (Rahman, A., Zulfiqar, B., & Mustafa, 2007).

Conversely, the Pecking order theory of capital structure advocates that the firm performance or profitability demands that internal funds, which are readily available, be given preference to be spent first, followed by debt as such funds are cheaper relative to the raising of fresh equity; and then if funds are still needed, firms should go for new equity as a last resort.

Firm profitability, according to Agency theory, also depends upon when agency costs are at their lowest. Agency costs are referred to those costs which occur when Agents (managers) differ from their Principals (shareholders) in evaluating funding new projects. Shareholders and managers even differently view the managers' going for raising equity versus their opting for debt; managers' going for raising equity is conceived as negative sign regarding firm' financial position versus their actions for raising debt which is signalled as positive sign of firm financial status Modigliani, & Miller, 1958). Hence, signalling theory of capital structure may be used to raise the value of firm's stocks.

1.3 PROBLEM STATEMENT

For any company the factor financial leverage has more importance during formulating their capital structure, and companies need to design appropriate capital structure. The most appropriate capital structure relies on the nature of the business and it can be change with situation, because sometimes more debt financing gives more benefits to firm and sometimes it become cause of lower profitability or bankruptcy. The basic aim which focus researcher to this study was finding a connection between financial leverage and company profitability by determination of significance level. As there are any theories and previous literature which reveals various consequences of leverage on performance. Some theories that states there is no significant relationship between leverage and financial performance while other theories state positive and there are theories and literature which suggests of negative relationship. Leverage are found to have effects on financial performance is mixed and there is no consensus developed on what is the exact impact and extent of leverage on fiscal performance of business. Further to compare the effect of leverage on profitability of both Pakistani and Indian cement industry to analyze the impact in two different economies, in order to have a clear understanding of leverage effect.

1.4 Research Theme: Research Questions and Objectives

Research theme

The theories relating to financial leverage discussed in the preceding section prescribe certain conditions if observed would cause firms yield desirable performance. However, we are interested to analyse actual data and find out what actual empirical association lies between leverage and business performance in Pakistani and Indian cement firms. Data on listed companies lately issued by the State Bank of Pakistan (SBP) and Bombay Stock Exchange (BSE) for period 2012 to 2016 provide a good chance for carrying out stated research. Among industries, cement industry is a good industry for analysing as it consists of the largest numbers of firm, more than 150 in number.

The research will particularly pursue the following specific research questions and objectives.

1.5 Research Objectives

1. To understand the existing levels of financial leverage and firms' profitability in Pakistan and Indian cement industries?
2. To examine the nature of relationship existing between financial leverage and firms' profitability in cement sector of Pakistan and India?
3. To analyse the impact of leverage on profitability in cement industry of Pakistan and India

1.6 Research Questions

1. What are the existing levels of financial leverage and firms' profitability in Pakistan and Indian cement industries?
2. What is the nature of relationship existing between financial leverage and firms' profitability in cement sector of Pakistan and India?
3. Does leverage impact profitability differently in cement industry of Pakistan and India?

1.7 Significance of The Study

The importance of research is that it contributes to the previous literature regarding association between financial leverage and selected business performance of cement industry of Pakistan and India which can help the mangers of Pakistani and Indian firms and especially the owners of cement companies, because these results is totally based on the real data of cement sector of Pakistan. On other hand this study also can help the researchers who have concern related to the same issue, and they can also use it as literature or guideline for their future studies

1.8 Scope of The Study

This research is totally related to the effect of financial leverage on business profitability of cement industry of Pakistan and India and is restricted its self to just cement industry of Pakistan and India, because the sectors different in nature from each other, so may the one sector results differ from other sector results. Further the results of the study will be applicable only to economic and financial environment from 2012 to 2016. The results will not be applied on the time period before 2012 and after 2016.

1.9 Organization of The Study

The remaining part of this study is based on the relevant literature about the concern study which is chapter 2, and chapter 3 is research methodology which includes sample size, Model specification and description about all included variables which are included in study, chapter 4 consist of analysis on results and chapter 5 provided conclusion about whole study.

Chapter 2

2. Literature Review

2. Literature Review and Theoretical Framework

This chapter includes literature review on capital structure, theoretical framework and conceptual framework of this study. First section includes detail information of previous authors and publication. Different theories related to our topic are integrated in this section and finally we present conceptual framework which is based on literature review and theoretical framework.

Asia is a region that faces significant challenges in terms of the development of your financial systems. First, because of the ability to channel savings towards the productive financing and investment and, secondly, the ability to be inclusive in terms of financial services and the segmentation of government and consumers. In that meaning, a growth of fiscal system in the region would be one that managed to account of the great structural heterogeneity that characterizes it, that is, being able to provide instruments according to the different contexts, player, resources and coverage. Therefore, a primary requirement to meet this challenge is the existence of enough instruments and mechanisms for saving and financing.

The data available from Economic Commission for Latin America and the Caribbean (ECLAC) (2017) for the period 2000-2016 show that, in the developing economies, on mean, private business debt as a percentage of GDP increased since the end of 2008. From 2008 to 2016, the correlation between debt of business and GDP went from 76.5% to 142.5% in these economies. In contrast, in the developed economies, the private sector's debt GDP has barely changed during this period (from 163.6% in 2008 to 165.0% in 2016).

Since the global financial crisis, the growth of global liquidity has slowed down markedly, which is due, in part, to the process of deleveraging and contraction of assets of international banks. Combination of global liquidity has changed, and the bond market has acquired a greater preponderance as a source of financing. In Latin America, the non-financial corporate sector has

resorted to a greater extent to issues in the bond market. This global financial panorama poses problems important for these economies. A first drawback related to stability global financial is to determine if global banks will be satisfied with their current level of profitability or if they will look for new strategies to increase it. One second problem is understanding the transmission mechanism between interest rates, the price of bonds and exchange rates, something very important in the era when federal revenue is arranging to decline in balance sheet. An economic process starts by Bank loan can different from the process started from changing in bond prices and interest rates. For example, it is important to evaluate the intimation of business leverage for the producing industry, its relationship with the performance and investment dynamics (ECLAC, 2017).

However, in the area of financial markets, greater volatility is observed in a context that continues to present important economic and geopolitical risks. After years of inexhaustible liquidity in global financial markets and access to credit with low rates, fretfulness about the date of a first increment of the reference loan fee by the Federal Reserve of the United States and of the dates and qualities of the consequent additions. The impact that could generate the rise in rates in financial markets is not evident. It is linked, on the one hand, to increase in the cost of financial resources in international markets because of the lower availability of liquidity globally. European Central Bank and the Bank of Japan are two important liquidity providers and would not be able to compensate for drop in liquidity due to rise in the rates of the Member States United. With regard to internal factors, a significant fact has been the process of Deceleration of needs guided by the fall in investment. The commitment of Gross arrangement of capital to growth, according to ECLAC (2017), has been decreasing gradually since 2011 and accelerated its fall from the second quarter of 2013.

During 2014, gross fixed capital development registered a contraction at the regional level of 2.0%. In the first quarter of 2015, the fall in the investment rate continues, with a negative contribution close to 0.3 percentage points of GDP to the growth of the domestic demand. The dynamics of the investment is worrisome because of its negative effects, only on the dynamics of the economic process, but also on the volume for growth of medium and long term.

Therefore, the effects of indebtedness pose greater dynamism in the erosion of the resources and greater functionality in the development of the operation, if it is carried to the process operational levels at the strategic level, which highlights the need to generate a diagnosis of the problem that

allows companies to make appropriate decisions. The Indebtedness has always been a strategy that contains a significant level of risk in the coverage of acquired debts. However, your benefit or not, will depend on good measure of its analysis and interpretation, and the deployment of the operation and generation of intelligence strategies that lead to a change in the trend of indebtedness (Cepal, 2015).

This situation indicates that the productivity of the firms in relation to their levels of indebtedness is not improving, and that, on the contrary, it can become an obstacle for the development of them. The companies analysed do not make their decisions operation based solely on market dynamics, leverage is a decisive factor in production decision making and maximization, which also has an impact on the decisions of all the agents of an economy, producers or consumers.

Now, it is precisely the effect that the indebtedness introduces on the profitability of own capital, the necessary condition for "leveraging" to occur amplifier ", in which the return on speculations is more noteworthy than the enthusiasm of obligations. In this sense, financial leverage, from the perspective of the analysis of profitability, relates to the influence of utilization of debt in the structure financial information on the return on equity if it is based on a certain economic profitability (Ayer & Chocce, 2016).

Leverage is measuring tool of the indebtedness of firm in relationship with its assets. It consists in the utilization of debt to expand increase the predicted profitability of own capital. It is a tool which measures the association between long term debt and its own capital. Therefore, it is thinking about as a technical tool, as well as an administrator's ability to use the cost for the financial interest for increasing profits which arises due to change in operating profit of business.

In summary, it should be understood by Financial Leverage, as the utilization of funds gathered from credit at high fixed cost, to increase net profits from a business. According to Ayer & Chocce (2016, pp. 29-30) you can find three types of Financial appeasement. Positive financial leverage is the one in which funds are collected by productive loans, when the rate of return reaches to assets of firm and is more than the interest expense of funds. Negative leverage is the collection of the funds by unproductive loans, when rate of return reaches to company assets and is less than the interest expenses of funds. Whereas neutral leverage is the collection of funds from both productive and un productive loans, when the rate of return reaches to asset of the firm and is equal to the interest expense of funds.

On financial leverage you can find some jobs like those of Sullivan (1974), whose hypothesis was about the use or not of leverage in powerful companies; Melcher, Rush and Winn (1976) whose objective was to explore the reasons for financial leverage in relation to the concentration indices of the industry; Opler and Titman (1994), who studied the effect that leveraging Financial has about corporate performance; Miao's (2005), who built a theoretical framework to represent the association of capital structure to the dynamics of the industry; and Jeremias (2008), whose work showed that competitive intensity acts as a substitute for debt.

On the other hand, Bhagat and Welch (1995), explore how the leverage affects aspects such as investment in corporate research and development in the United States, Canada, Great Britain, Europe and Japan; O'Brien (2003), studies the implications for capital structure when a company develops an innovation strategy; Singh and Faircloth (2005), uses this same variable (investment in research and development) as a reference for long-term investment; Majumdar (2016) evaluated the association of debt in capital structure of firms to the dynamics of broadband and the adoption of digital technology in the United States.

Other specific studies on financial leverage have been carried out with the objective to determine its impact in specific sectors of companies, such as Rollo (2011) and Ayre & Chocce (2016) that analyse financial leverage in companies in the sector tourist, textile, lithographic, metalworking, chemical and construction, respectively.

In other cases, leverage is taken as a variable of analysis in more studies wide that analyse productivity and profitability in companies. Specifically, Some studies, such as the one conducted by Beck, Levine, & Loayza (2000), find an important impact of credit on technical change, suggesting that banks acts as key part in the management and monitoring of firms in the real sector, and argue that the Credit influences more about technical change than about saving and investment amounts. Do not However, Rioja & Valev (2004) point out that while this is the case in the countries developed, the greatest effect occurs on investment in the countries of economies emerging at the firm level, few studies analyse the effects of financial variables about production. In the case of Ecuador, for example, Jaramillo & Schiantarelli (1997) study the effect of the maturity structure of the debt and the leverage of the firm on the dynamics of production. With respect to the maturity of the debt, the authors argue that access to long-term credit improves the firm's productivity that offers the possibility of having better technologies.

However, when short-term credits are accompanied by continuous monitoring, can also be incentivize firms to reduce inefficiencies and increase productivity. The effect of leverage on productivity is also ambiguous: it may imply financial pressure that leads the firm to be more efficient, but the biggest Leverage can also incentivize shareholders to demand less effort in favour of efficiency, since they know that they will obtain a smaller proportion of the utilities Through estimates of increased production functions at the firm level Jaramillo & Schiantarelli (1997) find a positive impact of long-term debt about productivity of business, while financial leverage does not significant.

Using also micro-data, Nucci, Pozzolo, & Schivardi (2005) analyse the association of financial structure of business to its productivity. The regressions of the Total productivity of the factors against the leverage of the firm are realized through of instrumental variables techniques. Author states that there is negative association between fiscal leverage and productivity: firms with lower leverage are in average more productive.

To explain this relationship, the authors find evidence that the firms that slightly depends as a medium of finance tends to show a higher proportion of intangible assets, which induces them to carry out more activities innovative. This innovation is translated into greater productivity. That is, a signature with less financial leverage tends to lead more innovative projects which It has positive effects on its production. (Banrep, 2006). The authors conclude that their result is supported by the theories of financial structure based on costs of bankruptcy and conflicts of interest between shareholders and lenders, since these theories they predict that less leveraged firms tend to own more intangible assets and they show a better performance of their productivity.

In general, studies on debt at the firm level concentrate on its effect on the investment, and in a few cases, productivity. But even on said variable, there is no consensus around the sign of the effect of the debt: the relationship can be negative, since the greater leverage decreases the collateral and increases the premium demanded by the lenders. In this same line, increases in debt can also increase the probability of bankruptcy which in turn increases the cost of indebtedness given the higher risk Credit restrictions may apply for companies in this situation, which negatively affects the investment since there are fewer resources available for financing.

However, the relationship can also be positive, because the high indebtedness of the firms acts as a credit history and as a good sign for intermediaries' financial resources, expanding access to

resources. In several countries the effects of debt about investment are negative, while others are of leverage an investment in whole sector.

A deterioration in productivity can lead to low economic growth and in business terms, a drop in this means an increase in production costs and a fall in competitiveness (Bitran & Chang, 2014). These authors clarify that the productivity is a measure of production efficiency, that is, the efficiency with which the activity of converting an input into a product or service is developed. (Bloom et al, 2010) state that companies in developing countries have a low level of labour productivity. It was evident in countries such as Brazil, Colombia and Ecuador, which employees sell three times less than in the United Kingdom, United States and France. Other works carried out to study this phenomenon have had different approaches. This behaviour is also attributed to infrastructure problems, informality, regulation and trade policies while other authors focus on the practices of management, financial constraints and the process of delegating decisions (Bloom et al., 2010).

The Asian region has made significant progress in terms of growth, levels of education, health and poverty, but has not been able to take advantage of this behaviour to improve the indexes of social mobility and inequality.

2.1 Empirical studies

2.1.1 Empirical studies in general

Simerly and Mingfang, (2002) tried a different approach to find validity of researches on capital structure settlement. The capital structure decisions are very critical for managers because the capital structure of a business is composed of equity securities and debt. Capital structure shows a long-term commitment for business. The old approach of the managers was to maximize their returns, but today's competitive environment has changed the thinking of the managers as well as of the investors. The investors today are more interested in analysing long-term fiscal performance of the business before investing in its capital structure.

Taking more debt to finance the projects of the firm may hurt the profitability of the organization for a longer time period as debt encourages spending more than one can afford along with increasing the risk for the firm in the future. Managers not only need to maintain the good financial performance of their firm but also to make it competitive to compete in their industry for

a longer period and so to make investors interested in making investment in the capital structure of the business.

This study is considered as challenging to traditional concepts of capital structure of business. The main reason behind why the world's economy is moving towards global economy is that the industries are adopting dynamic changes and because of these changes, the future of the firms which richly rely on the debt for financing their projects will be in danger. Due to these dynamic changes, managers need to take quick and effective decisions; managers need to take maximum advantage of the available resources to compete in the competitive environment. Those who take time to fix or to adapt the dynamic changes are the one who will struggle to maintain their pace to keep up their performance.

Allan N. Berger and Emilia Bonaccorsi (2002) in their study paper, focused on adoption of new methods and techniques to test agency theory and its implications on the banking sector. The findings of this study are that the leverage has an effect on agency costs which on the other hand affects the performance of the firm to support this view, they used an approach to witness the firms' performances under the same exogenous circumstances.

The authors concluded that increasing the level of leverage of the firm results in decreasing the agency cost because it helps to motivate the managers to work with the positive attitude to improve firms' performance. The findings are consistent in their local banking industry. High leverage or lesser equity capital ratio are in relation with high profits and all else equal. The findings of this paper are that with every percent growth in the leverage tends to 10% growth in actual profits. The results are persistent under difference specification changes including different measures of performance different efficiency measurement methods and different time period periods (1990s and 1980s). The association between leverage and performance may be reversed when the leverage gets too high.

Frank and Goyal in their study, (2005) tried to study the behaviour of firms towards the use of debt in their capital structure. The study focused on how business uses its sources for financing operations and what are the optimum ways firms should follow while financing their operations. The study figured out that the factors which turn the behaviour of firms towards the use of debt are taxes, bankruptcy, transaction costs and agency conflicts. Whereas, the importance of other factors remains open for debate.

To support the claim, Frank and Goyal presented several facts as evidence, but those facts are to apply differently on large firms, small firms and private firms. The reason is that the nature of these types of firms is different; large firms' uses corporate bonds and retained earnings to finance their operations, small firms' uses equity actively while private firms rely on their retained earnings and heavy debt. The study criticizes that there is yet a model to be presented to account for the stylized facts presented in the following paper.

The trade-off theory is of the view that taxes and bankruptcy costs are the reason for encouraging firms to use debt for financing their activities because these factors influence firms to use debt for financing instead of equity. Whereas, the pecking order theory advocates that adverse selection is the reason for using debt by firms. The trade-off theory despite faced some criticism, still managed to hold a strong position in capital structure decision making. Trade off theory has an improved version which is known as dynamic trade off theory. Dynamic trade off theory broadly emphasizes the concept that business sets their targets for the increasing of its value and by having deviations from its target's effects business in worst way. There are a lot of studies to understand the use of debt at different level, but persistently lack of a unifying model been a problem.

Ong and Boon, (2011) investigate the financial crises of 2007-2008 and explains the association of capital structure to business profitability prior to and during the issue. 49 construction companies were used for this research, chosen companies are listed in Bursa Malaysia from 2005-2008. The data from 2005-2006 was used to measure the association before crises, while the data from 2007-2008 was used to measure the association during the crises. These companies are categorized into mainly 3 categories, as big, medium and small companies rely on its capital. The analysed data is employed time series-cross section. Pooled regression model was utilized for this research to test the influence of capital structure to business performance. Method of ordinary least square was also used to reduce the inaccuracy between regression line.

The study concludes that there is association of capital structure to business performance and it also have been witnessed that there is no association between the examined variables. The finding of the research is, return on capital, debt equity market value, long term debt and earnings per share have impact on capital structure are recorded for big companies. Medium companies shows that there is only operation margin which have impact on the capital structure, while long term debt to common equity directly impact the corporate performance. In case of small

construction companies, only earning per share have significant association with capital structure and debt to capital directly impact the performance of the companies.

Since Miller's (1977), there is witnessed some issues about the apparently low debt of companies regarding the considerable advantages of tax. Beginning with the rabbit part of stew, various researches has endeavoured to measure the cost of bankruptcy. The direct costs of bankruptcy are frequently little. Maksimovic and Phillips (1998) determine that the assets are regularly rearranged amongst companies, thus, the cost of bankruptcy may not be high. Whereas, the indirect cost of bankruptcy is liable to be much higher, (Titman, 1984) however, they have been difficult to evaluate. A late endeavour at assessing the cost of bankruptcy FINDS that for a sample of 31 exceedingly leveraged transactions, the cost of bankruptcy is somewhere around 10 to 23 percent of the value of the company.

Coming to the horse side of the stew, Graham (2000) measures the tax rate capacities to decide how actively a company utilizes debt. The finding of his research was that a major number of companies are shockingly moderate in utilizing their debt. Besides, the companies picked for this study are giant and profitable. These firms would confront low financial trouble and may have levered more.

Debt conservative is also been an open issue to debate. It has been studied from different behavioural point of views. Behaviourists contend that overconfidence is one important factor which deviate the managers from rationality. Hackbarth (2004) examined different situations which resulted in that rational manager utilizes debt financing carefully, whereas, the overconfident managers are reported to choose higher debt. Malmandier and Tate (2004) also conducted an experiment, finds that to cover financing deficits, overconfident CEOs rely on raising the debt as compared with the other CEOs.

Kale et al, (2007) utilized panel data to know about the association of leverage to productivity of the business and the position of debt. They recorded positive association of leverage to the productivity at lower level of leverage, however, increasing level of debt presents opposite view of their findings. The reason for this negative connection is that the increasing level of debt stretched financial distress in the company which impact the performance of the employees and consequently the profitability of the company declines.

Some researcher also deduced in their research that companies which relocate its earnings on behalf of relying on outer channels for capital to earn more profit in contradiction to business

which depend on external sources of capital which grow their level of debt (Titman and Wassels, 1988). The value of a company can be portrayed by the price of its shares. Companies with high stock prices prioritize to equity rather than taking debt which helps them to control their debt. Wald (1999) also contended that there is negative impact of debt to asset ratio and its profitability of the company.

Sheel (1994) in his paper upheld the negative association between debt to asset ratio and the past performance of the companies in terms of profitability. He utilized cross sectional regression technique to interpret the behaviour of leverage two different sectors of different nature. The discoveries of his study are persistent considering all the determinants of debt aside from the size of the company. Eunju and SooCheong (2005) also investigated the association the profitability of the company, the level of debt and the size of the company. Basically, they investigated the capital structure of a company with two hypotheses. The initial hypothesis of their study was that a company witness higher profitability if it limits its use of financial leverage. The study argued that the higher level of financial leverage consequently results in huge payment of interest and thus which compromises the profitability of the company. The second hypothesis of this study was; higher level of financial leverage results in increasing the risk for the company and its performance.

Mandelker and Rhee (1984) clarified that the most beneficial companies in numerous commercial enterprises regularly have the least ratio of financial leverage. Most of the literature of capital structure follows trade-off theory which sets the preference of using internal sources of funding followed by the external sources which includes debt and common stock as the last priority. The study concluded that the company should select the ideal level of capital structure including debt and equity considering all the benefits and troubles.

Murphy (1968) studied the financing culture of Chinese listed business, which concluded that the leverage of the business is negatively proportional to the profitability of the company. Income, dividends and the value of the company is positively affected by the high rate of return and all these variables are directly affected by the financial leverage of the company. Another study by Gupta (1969) explains a different view of debt supporting the signalling theory of capital structure. According to Gupta, managers use debt to encourage the trust of potential investors by making them believe that company is expecting positive cash inflows in future. Debt also helps to show the confidence of the manager to pay off the principal as well as the interest. The study

suggested that the managers may issue equity when it is overvalued, since; they have the better real time picture of the market and the value of the company. Amsaveni (2009) contends that there is negative impact of leverage on the growth of the business. The reason for this relation between the two factors is either the company does not value the growth or not have identified due to the financial distress are due to high level of debt.

Mangalam and Govindasamy (2010) interpret the association of financial leverage to profitability of the company by researching the association of leverage to earnings per share. Leverage is an essential element which effects the profitability of the business and can maximize the returns for shareholders, if handled ideally. The leverage was classified into three categories which includes operating, financial, and combined leverage. They studied the speculation of association of leverage to earnings per share. Mainly the fixed operating expense causes operating leverage, while, fixed financial costs are the main source of generating financial leverage. The company intends to earn greater return than the cost of employing financial leverage. In case, the cost of borrowing is less than the benefits or return on investment, it is said to be a favourable impact of debt on earnings per share. Whereas, the impact is unfavourable, when the acquiring limit of the company is not as much as what is expected by to lender. The study concluded that there is negatively significant association of fiscal leverage to earnings per share.

The author scrutinized the effect of the leverage, more precisely, the higher use of the debt on the profitability of the industry (Baker, 1973). The results states that the industrial profit increases with low amount of leverage utilized. Similarly, Ezeoha (2008) also concluded that the companies with higher profitability ratio depends heavily on internal sources of funding for financing their operations. Titman and Wassels (1988) tested the correlation of financial leverage to profitability of business. Authors finds that there is negative impact of fiscal leverage on the profitability of business. They further argued that, the firm with less leverage earns more as compare to the firm with high leverage, because with increasing the debt financing the cost of debt also increase which become cause of low profitability. When company's stocks price is high then that company arrange its capital from equity portion and issue new shares for to generate funds through which the company can decrease its debt level portion.

Wald (1999) main objective of research was to know about the association between the financial leverage and the profit of the business. Author includes data of different countries like Japan, France, United States, Germany, and United Kingdom. Researcher suggested that there is

negative association of financial leverage to profits of the business. Author provides strong evidence, because his study results represent five greatest markets of world.

Sheel (1994) arranged a study to observe association of financial leverage and its determinants to financial performance of corporation. The 32 companies' data were used

As sample size, which taken from two different industries, one was manufacturing sector and the second was hotel industry. The cross-sectional regression technique is used for the analysis of the study. His study results found that all financial leverage determinants have negative effect on financial performance of the firm.

Eunju and Soocheong (2005) construct an analysis to identify the connection of the factor financial leverage to profitability of firms. They used a sample size of hotel industry for the period of 1998 to 2003. Ordinary least square method is employed for study analysis. Return on equity is used as agent of profitability and considered as dependent variable whereas debt to total assets ratio is used as proxy of financial leverage which was the explanatory variable of the study. As results they found a negative effect of variable financial leverage to profit of hotel industry. They argued that, firm with less debt financing earn more as compare to the firm with higher debt financing.

Larry and Stulz (1995) examined a study for the purpose to explore the relationship amongst the debt financing and firm's return on equity. They took sample size from Ghana market for their study. Their study found that debt financing has a significantly positive effcts on return on equity of the business selected from Ghana market. They study further suggest that firm with high debt financing earn more profit as compare to that firm who use less debt financing. But this case is just possible at that time when there is economic boom, so then high debt financing can give benefits to firms.

Murphy (1968) carried out a study to explore the effects of debt financing on financial performance of Chinese listed firms. As result he found that debt financing of a company is recorded as negative significant on profitability of Chinese organizations. and the study suggested that firm with high financial leverage earn less profit and firm with high equity financing can earn more as compare to the firm with high debt financing, because firm with high debt financing is liable to pay fixed amount of interest, but on other hand the firm with equity financing is not liable to pay any fixed amount of interest. So that high fixed amount of interest become cause of low profitability for firms.

Gupta (1969) conducted a study and explored the relationship of debt financing with profitability of business. As results author observes that debt financing has positive connection with profitability of firms and further, he argued that if a company has more debt financing, so it means the investors trust on that company. He explained that if a firm have more debt financing, so it shows that the investors trust on that company, and that trust should be logical, because the company may have some future projects and the company has more growth expectations from that future projects.

When a firm have some profitable projects with less risk then they go for debt financing because they don't want to share their profit with shareholders, so that's why the investor feel confident and give loans to that firms which is considered as positive signal in market. Then that positive signal becomes cause of high growth through which firm earns more profit. And he argued that, on other hand the equity financing pass negative signal in market toward shareholders and also toward investors, because when a company go for equity financing then it means the firm has some risk projects in future and the firm want to share that risk with shareholders. This is considered as negative signal for shareholders and investors, which later become cause of low profitability, because with passing negative signal in market the price of share goes down which leads to lower profitability.

Amsaveni (2009) explored the relation amongst the factor financial leverage and profitability and found that financial leverage having negatively related with financial performance of the selected firms. The author further explained that debt financing can't reduce firm's profitability if the firm has some future known opportunities and know its future targets. He argued that if firms have known future project and investors also know about firm's project then investors will trust more, which can become cause of higher growth for the firm. But that firm who don't have any future and well-known projects then that firm can affect by debt financing.

Mangalam and Govindasamy (2010) arranged a study and explored the relationship of debt financing with profitability of seven firms which are selected from the cement sector of Indian market. The ANOVA technique is used for the study analysis. They found that debt financing has negatively significant relation with profitability of cement sector's business of India. Because when the total earning of those companies is resulted lower than the cost of interest amount. But if the total earning is greater than the cost of interest amount then its shows that debt financing are

positively related to the profit. The results of this study suggested a negative effect of debt financing on business's profitability.

Baker (1973) arranged a study and identified the relation of debt capital with profitability of firm. He used two statistical techniques for his study analysis. Two stages least square method was employed in first step and ordinary least square method was employed in second step. After applying the models, the both models' results found that debt financing have negatively related with fiscal performance of the business.

Ezeoha (2008) tested the connection between debt financing and profitability of 71 business which are listed from Nigerian market for the period of 1990 to 2006. And his study shown that the variable debt financing is found to be negatively related with variable profitability of organization listed on Nigerian market.

Abu.Tapanjeh (2006) conducted a study on the relation of profitability with different factors which can affect the profitability. He used 48 firms in his study as sample size and that 48 firms selected from Jordanian stock market for time period of 1995 to 2004. The two models are tested in his study, in first he tested those factors with ROE and in second, he tested those factors with return on investment (ROI). And explanatory variables were firm size, debt ratio and firm age and dependent variables were return on equity and return on investment. After the analysis he found that just one variable has significantly negative relationship with profitability and that one variable was debt ratio. The remaining variables had no effects on profitability of corporation of Jordan market. The author further argued that the optimal capital structure is vital for firm profitability and manager should on debt ratio at time of designing capital structure.

Researcher analyzed and explored the relationship of capital formation with profitability. As sample size he used 22 companies from Ghana market. For the analysis he sued regression analysis technique. After analysis the short-term debt are recorded as positively significant effect on profitability and long-term debt found as negatively effects on profitability. As combined the long-term and short-term debt found significantly positive associated profitability of selected firms of Ghana market (Abor, 2005).

Yoon and Jang (2005) explored the relationship amongst the debt financing and profitability of firm. The study based on sample size of different restaurants of USA for the period of 1998 to 2003. Their study found that firm size matter during formation of capital because their study suggested that small firms influence more by debt financing as compare to large firms. And

the authors further concluded that on large firms the debt financing has no significant influence large size firms. For the selected restaurants the debt financing has impact on its profitability, because of its small size.

Munene (2006) arranged a study and he explored the association of debt financing to financial performance of the business. As sample size 48 companies used in his study for the period of 1999 to 2004. The selected firms belong to Kenya market. The results of his study showed positive relationship. Nguni (2007) constructed research to recognize association of debt ratio to profit ratio of 36 firms of Kenyan market from 2000 to 2006. Data were gathered from the annual reports of the companies and analyzed by the means of correlation and regression techniques. The results were found to be significantly positive for firms, which are listed on NSE Kenya.

Kanyuru (2010) tested the relationship amongst debt ratio and financial performance of firm. As sample size he used 32 companies, which are selected from Kenya market for the time period of 2000 to 2009. The included companies are non-financial nature companies. The secondary data was gathered via annual reports of the corporation. Regression and correlation analysis is used for the study analysis. After the analysis the results showed that firm with increasing equity financing can increase its profit, because the study found a negative relation between variable debt ratio and financial performance of firm.

Arimi (2010) explored the relationship of debt financing with firm's financial performance using the sample size of 15 firms, which are listed on NSE and the firms are the combination of under industrial and allied of Kenyan market. Regression is used for the study analysis. After the analysis the results showed that debt financing is negative and significant associated with financial performance of firms. The study concluded that firms earn more from equity financing as compare to debt financing.

Opanga (2011) conducted a study to observe the relation of debt financing with different financial ratios. The data is taken from Kenyan market for the study analysis. As results states that there is a negatively significant effect of debt financing on different financial ratios of the selected firms of NSE. The author further suggested that firms should focus on debt ratio during formation of capital for a firm. He also argued that in long run the debt can decrease firm's profit.

Smith (1990) in his study observes the relation of debt financing with firm's financial performance. He used 59 companies as sample size for his study, and that companies belong to

American industry. After the analysis the result showed that debt ratio or debt financing has a significant effect on financial performance of selected firms listed on American market.

Al Khalayla (1998) examined a study for the purpose to recognize the relationship of debt financing with effectiveness of firm. As results his study found that total debt has no significant effect on effectiveness of firm. The author further argued that long term debt can decrease firm's effectiveness more in comparison to that business who adopt short term debt financing.

Gweyi, Minoo and luyali (2013) conducted a study in which they explored the determinants of leverage and effect of those determinants on leverage. They used 40 firms as sample size, which are listed on Kenyan market. The independent variables of their study were tangibility, growth rate and firm size and debt ratio is used as dependent variable in their study. The regression model is used for the data analysis in their study and the study results showed that all variables have negative and significant association with debt ratio. They explained that debt ratio is important factor in case of profitability, so the firms should give importance to the portion of debt financing and format the capital formation in optimal level.

Obradovich and Gill (2013) arranged a study find the relation of debt financing and corporate governance factors with value of firms. They used 333 companies as sample size, which are listed on American stock market, from 2009 to 2011. For data analysis the co-relational and non-experimental techniques are used is their study. As results just one factor of corporate governance found, which has negative impact on value of firms listed on American market and that one factor is larger board size. So, it means that if a firm has more board of directors then it has negative effect on firm value. And the remaining factors of corporate governance and debt financing found as positive and significant associated with firm's value of American market.

Hasanzadeh et al. (2013) conducted a study for the purpose to find the association of financial leverage with effectiveness of firm. He used sample size of different firm listed on Tehran stock exchange. The selected firms belong to cement industry of Tehran. The results signified that the variable financial leverage has no effect with effectiveness of firm. The author explained that existence of association of debt financing to effectiveness of firm can lead to reduce the firm's earning.

Akinmulegun (2012) conducted a detailed study on the relation of debt ratio and effectiveness of firm using a sample size of Nigerian market. The results showed that increase in debt can decrease the profitability of selected firms, which are listed on Nigerian stock market.

The author commented that with increasing debt level from a specific point then it can become cause of low profitability, so its support the concept of trade off theory that till a specific level the debt financing can give benefits to the firms. But after crossing that specific point then the cost of debt starts increase, which later become cause of low profitability. Alcock et al (2013) conducted a study to know about the relationship of financial leverage to performance of firms. As result the study signified that the leverage has negative effects on firm's effectiveness.

Akbarian (2013) perform a detail study on the relation of financial leverage and risk with financial performance of firm. The data is taken from Tehran stock exchange for the analysis of the study. After the analysis the study records that financial leverage and per share cash flow are significantly and negatively associated with each other. The economic risk and market risk found as positive associated with each other. At last the results signified that these all variables are positively associated with variable return on equity. Mwangi et al (2014) tested the relationship of capital formation and effectiveness of firm. For analysis he used a data of Nairobi Securities exchange as sample size. The results signified that increase in debt financing of firm decrease the profitability of that business. So, the results indicates that firms which are listed on Nairobi stock market can affected by high debt financing.

Imad Z. R. (2013) construct research on find the association of debt financing to firm's effectiveness. As sample size he used 77 firms for analysis and the data is taken from Jordanian market from 2000 to 2011. The study's results signified that total debt has a negative and significant relation with variable effectiveness of a business. Researchers suggested that long-term debt can reduce profit more as compare to short term debt in Jordanian market.

Abbasali and Esfandiar (2012) finds a significant relationship between capital formation and firm's effectiveness. They used a hug sample size of 400 firms, which are taken from Tehran stock exchange. The independent variables were firm size, growth opportunities, debt ratio, and asset turnover and assets tangibility. And return on assets were accounted as dependent variable for research. As results the independent variable debt ratio found negatively significant toward the dependent variable financial performance and the remaining all independent variables found positively significant toward the dependent variable of the firms listed on Tehran stock market. It means that the variable debt financing need focus of manager during formation of their company's capital structure.

Nima et al (2012) analyzed and find a relationship of capital formation and effectiveness of business. The short-term and long-term debts were utilized as proxy of capital formation and return on assets was utilized as agent for effectiveness of firms. Results are found to be negatively significant. Saeedi and mahmoodi (2011) arranged a analysis on the relationship of capital formation with business's financial performance. Their study's results showed positive relation of capital formation with per share earnings. But on other side the capital formation found with negative behavior toward return on assets. And they also found capital formation with no significant association with return on equity.

Onaolapo and Kajola (2010) constructed a study on the relationship of debt ratio with firm's profitability and they used a sample size of 30 firms, which are listed on Nigerian stock exchange for the period of 2001 to 2007. All firms were nonfinancial firms. Their results signified that debt ratio has negative significant impact on firm's effectiveness in Nigerian market.

Chandra kumar mangalam (2010) arranged a study of the relationship of leverage with firm's financial effectiveness and he sued Indian firms as sample for analysis of the study. He used three kinds of leverages as proxy of financial leverage and that three are operating leverage, financial leverage and combined leverage. As results his study showed that all kind of leverages show a significant relation toward earning per share and financial leverage individually show a positive and significant behavior toward earning per share. At last the author commented that according to his study results the firms with high debt financing can increase its value and can increase its profit, because he found a positive behavior of debt financing toward firm's earning per share in Indian market.

2.1.2 Empirical studies on capital structure in Pakistan

Rahman, Zulfiqar and Mustafa (2007) analysed the relationship between the capital structure and profitability of the companies listed in Islamabad stock exchange. The profitability of the companies is measured in net operating profit, while long term debt is used to measure debt ratio and to measure capital structure ratios, liability-equity ratio is used. The findings of the study revealed that the relationship between the net operating profit and debt ratio is negative, whereas, it was found that there is positive association between liability-equity ratio and net profit margin, but the results were discovered statistically insignificant. Rehman, Fatima and Ahmad (2012) also studied to figure out that whether there is an impact of financial leverage on the profitability of the

companies in Pakistan. The sample from the cement industry of Pakistan was taken to carry out this research. The study concluded that there is no significant impact of total debt on the profitability of the company. Attaullah Shah and Saif Ullah (2007) directed another empirical study on finding the determinants of capital structure. The companies used as the sample to study the relationship between the determinants of capital structure are listed in Karachi stock exchange. The study revealed that the profitability of the company was found with highest significant rate and has negative relationship with the leverage of the company.

Ahmed et al. (2011) tried to know about the trends of capital structure in the food & personal care industry. The data used to analyse for the study is of 16 firms of 8 years by using pooled regression. The study investigates 6 variables; which includes firm size, tangibility of asses, profitability, growth, tax rates and earning volatility, as the determinants of leverage. The results were found that only two variables that is size and growth have significantly positive impact on the leverage of food & personal care industry.

Different studies conclude that the factors of capital structure which changes with changing industry due to different traits of unlike organization. Simple regression has been used to expose the financing behaviour of firms in the following industry. Moreover, the problem of multi-co-linearity has also been dealt in this study.

In this study, a sample of 16 firms of food & personal care industry of Pakistan has been analysed to assess the influence of the determinants of capital structure in the following sector. The results show that among 6 variables, only 2 variables (growth and size) affect the capital structure in this sector as both is witnessed having positive effect on leverage.

Bhatti and Majeed (2010) tested the relation of the variable financial leverage with variable profitability. and the selected a sample size from different industries for analysis and the included industries were communication, engineering, cement and Chemicals etc. and their data is based on both secondary and primary data which is collected from different sources like direct interview, annual reports of companies and different research articles. They used MS Excel for the analysis of the study. As results they found that financial leverage has negative effect on profitability of firms selected from different industries of Pakistan. The authors furthers argued that the firms with high leverage will face high systematic risk, which can affect the profitability.

Amjed (2007) arranged a study and explored the relationship of capital structure with firm's profitability. He used 100 firms as sample size from textile sector of Pakistan and data is collected

via annual reports of organizations listed on Pakistan stock market. For the analysis of the study he used linear regression model as statistical technique. As result he found that long term debt has a significant negative relation with firm's profitability and short-term debt has a significant positive relation with profitability of selected firms. the author further argued that the relationship of short-term debt and profitability support the concept of trade off theory, because according to trade off theory the debt can give benefits to firm but till a specific limit and after that debt increase the risk for firm, which mean short term debt can give benefits to the firms. The results about long term debt and profitability of this study support the concept of picking order theory, because according to picking order theory the firm should use its internal source for capital as compare to debt, so it means long term debt can affect firm's profitability negatively. His study also found that long term and short-term debt as combined has no significant impact on business's financial performance due to variance in attributes of both kinds of debts.

Akhtar et al. (2012) examined a study to find the relation of debt ratio with shareholders return. The 20 companies sample size is used his study and that companies selected from the Pakistan fuel and energy sector. As results his study signified that financial leverage positively significant association with effectiveness of selected firms. The author commented that the firms of Pakistan fuel and energy sector earn more with high debt financing, but the firms still need to maintain their optimal capital formations.

Rehman (2013) conducted a detail study for to find the relation of financial leverage with firm's effectiveness. As sample size he used all listed firms of sugar industry in Pakistan. As results his study signified that the variable debt ratio positively associated with variables sale growth and return on assets. On other hand the variable debt ratio found as negative associated with variable per share earnings, dividends and net income. At last the author commented that the results about debt ratio and per share earning support the concept of trade off theory, because according to the tradeoff theory when a firm exceeds a specific level of debt then its profit start decrease because of increasing the cost of debt. Mean with increasing debt financing the cost of debt also increases because of increasing bankruptcy chances for the company. Khan (2012) conducted a study on the relation of debt financing with firm's effectiveness and as sample he used Pakistani firms. As results the study showed that the variable debt financing is negatively associated with variable firm's effectiveness. He commented that long term debt can has more impact on firm's performance than short term debt financing.

Aasia (2011) examined a study on the relationship of debt financing with dividend policy. Pakistani firms are used as sample size in this study. Dividend per share is used as dependent variable in this study, and independent variable of this study were debt ratio, change in earnings and dividend yield. As results the study signified that debt ratio has no significant association with variable dividend per share. But on other side the dividend yield found with positive behavior toward dividend per share.

2.2 Theoretical Framework

2.2.1 Theories about capital structure

1. Modigliani and Miller (1958); capital structure irrelevance proposition

Before Franco Modigliani and Merton Miller (1958) presented their capital theory of irrelevance proposition, there it was found none of commonly established theory of capital structure. Modigliani and Miller argued that under certain assumptions, the value of the company will not be affected by the level of debt and equity it uses to support their operations. The assumptions of the following theory were; that there are no taxes, company faces no danger of bankruptcy cost, the borrowing cost remains the same for both investors and company, debt does not affect the net profit before interest and tax.

The capital structure irrelevance theory starts by accepting that the company has some specific arrangement of expected money flow. At the point when the company picks a specific amount of debt and equity to finance its resources, all that it does is to isolate the money flows among investors. As an empirical proposal, the Modigliani and Miller's irrelevance proposition is difficult to test.

2. Modigliani and Miller (1963)

Modigliani and Miller (1963) untied the assumption that there are no corporate taxes. Interest is considered as an expense to the company and consequently it is tax deductible. Modigliani and Miller realized the effect of tax on company's capital structure and suggested that a company should use maximum amount of debt to increase its tax shield. They reasoned that due to beneficial behaviour of interest outgoing, a company should use maximum level of debt. Then again, this hypothesis did not take into account the bankruptcy costs related with debt, but

companies do face bankruptcy costs in real world and these costs can be very high. At the point when the expense of interest occurred to the company, it pays less tax to the government and therefore more profit is accessible to distribute among the shareholders, as the payment of interest expense acts as a shield to sustain more profit to the company.

3. Trade-off theory

This theory refers that while adjusting the expenses with the benefits, a firm evaluates that what extent of leverage along with the equity ought to make a capital structure arrangement (Trade-off theory, 1977). This theory proposes that the company needs to take benefits of the of leverage and also take advantage of the predicted cost of bankruptcy.

At the point when the company utilizes debt in its capital structure as a result it gets advantage of favourable tax treatment, yet then again, an excessive amount of use of debt can consequently leads towards the bankruptcy cost. This theory is known as trade-off theory of leverage in light of the fact that the company needs to exchange amongst the benefits of debt financing and costs of debt financing.

Basically, the original version of trade-off theory was the result of the debate over the Modigliani and Miller's capital structure irrelevance proposition. With the addition of corporate tax in the irrelevance proposition (Modigliani and Miller, 1963) and initiate advantage for debt in employing as safe side for profit from taxes. To avoid the extreme situation of 100% debt financing, a compensating cost of debt is required. The noticeable runner is bankruptcy cost. Kraus and Litzen berger (1973) give an exemplary explanation of the hypothesis that ideal leverage reflects a trade-off between the cost of debt and the deadweight bankruptcy cost. As indicated by Myers (1984), a company that pursue the trade-off hypothesis sets a target leverage ratio and afterward steadily movies towards the target. The target is controlled by adjusting debt tax shield against the cost of bankruptcy.

4. Dynamic trade-off theory

An improved version of trade-off theory is known as dynamic trade-off theory. According to dynamic trade-off theory, a company is said to display target adjustment behaviour if the company has a target level of leverage and if deviations from that target are step by step separated over time. Developing models that perceive the part of time requires determining various angles that are regularly disregarded in a single period model. In a dynamic model, the right financing

choice normally relies upon the financing margin that the company suspects in the following period. Some companies hope to pay-out reserves in the following period, while others hope to raise funds. In the event that funds are to be raised, they may take the type of debt of equity. More specifically, a company carries out a mixture of these actions.

5. Pecking order theory

The pecking order theory originates from Myers (1984), the theory argues that adverse selection infers that retained earnings are superior to the use of debt and debt is better than the use of equity. According to this theory, a company is said to pursue a pecking order if it favour internal to external funding and debt to equity if external funding is employed. Most companies hold some inward supports (retained earnings and short-term investments) even when increasing outside funds.

Another obstacle for the definition is that at what level is equity introduced? The initial understanding recommends after the first initial public offering (IPO), equity ought to never to be issued if for some reasons the debt has become unachievable. This prompts the thought of a debt capacity. The debt capacity serves to restrain the limit the amount of debt inside the pecking order and to take into consideration the utilization of equity. Clearly, this raises the issue of defining the debt capacity.

6. Adverse selection

According to Myers and Majluf (1984) and Myers (1984) this theory is known as inspiration for the pecking order is adverse selection. The main aim behind this theory is that the shareholders and managers of the company know the genuine estimation of the company's assets and development opportunities whereas outside stakeholder only presume these values. When the manager offers their stocks in the market, then the outside speculators inquires as to why the manager will do as such. According to Cadsby et al. (1990), in different scenarios, the managers are pleased to offer their company's overvalued stocks in the market, whereas, the managers of an undervalued company are witnessed to be reluctant.

Dybvig and Zender (1991) demonstrate that appropriately planned administrative payment contracts are found to be helpful in resolution of adverse selection issues. Moreover, the administrative payment contracts are barely witnessed to be linked with the value of the company;

they are usually bound with the value of the equity. Viswanath (1993) take into account the universe with more and more time periods and the findings were that the outcomes rely on how the uncertainties of one and second periods are inter-connected.

Halov and Heider (2004) argue that the standard pecking order is a special case of adverse selection. At the point when there is adverse selection about the value of the company, companies like to circulate debt rather than opting to issue equity and apply standard pecking order model. On the other hand, when the flow of asymmetric information is about the danger of the risk, adverse selection claim to apply for debt but the companies like to issue equity over debt. Therefore, in case of adverse selection, the preference of using debt over equity or equity over debt depends upon the asymmetric information problem concerns value or risk.

7. Agency theory

The consideration that the managers lean towards internal resources for funding their operations than external resources is obviously old (Butters, 1949). It was the traditional believe was that if the manager wants to go for external financing instead of internal financing, the manager needs to disclose the details of the project to external investors, which will expose them for investor's checking like banks, which is an unlikely situation for the managers. Therefore, managers have a liking to use retained earnings over external financing; however, there is no immediate expectation about the relative utilization of debt against equity while looking for external financing. These thoughts were consequently created into agency theories with Jensen and Meckling (1976) being a noticeable contribution.

Agency theory represents critical issues in corporate governance in financial and non-financial sectors. Taking apart the ownership of the company and control in an efficiently managed company may result in manager's deficient work exertion, picking inputs or yields that suit their own choices, or else neglecting to expand the value of the company. As a result, the agency costs of outside proprietorship equate the lost value from managers by utilizing their own utility, instead of the value of the firm.

Agency theory recommends that the decision regarding capital structure may reduce these agency costs. Following the agency cost hypothesis, high level of leverage or a low equity ratio decreases the agency costs and builds the value of the company by motivating the managers to work in the benefit of shareholders. Higher level of leverage may influence the managers and decreases agency costs through the risk of liquidation, which directly causes threats to the

managers in terms of salaries, status, incentives, etc (Grossman and Hart 1992, Williams, 1987), and through pressure to generate profits to pay interest costs (Jensen 1986). Higher level of leverage can increase disputes among the shareholder and manager concerning the decision of capital structure (Myers, 1977) and the conditions to which the firm is liquidated (Harris and Raviv, 1990).

An investigative forecast of this sort of models is that increasing the level of leverage ratio results in lowering agency costs external equity and enhance company's performance, all else held equal. On the other hand, when the influence of leverage turns out to be moderately high, it further financial troubles to the company. Another impact which is created by the use of debt is the risk of bankruptcy. The risk of bankruptcy to the company restricts the manager to operate the business in a profitable way. The lenders have legitimate right to take the company to the court in case they don't respect the claims of lenders. The risk of losing their jobs pressurizes managers to run business profitably and prevent them from exploiting the resources of the company.

8. Signalling theory

According to signalling theory, a company wants to go for external finances or debt financing to run their business operations. Therefore, if this information is open out in the market, it could affect the performance of company's outstanding shares in the market. As a result of this, the company may confront either positive or negative performance of their outstanding share. When the company acquire debt, it is clear that the payment of the debt will be paid on the principal with the interest, which shows trustworthy economic position of the company.

This theory suggests that debt financing is recognized as positive sign in the business sector rather than equity financing. A company chooses debt financing only when its future prospects are bright and it can pay off its debt and thus, the company does not want to share the future benefits by floating new equity in the market. A company only choose equity financing when the future cash inflows of the company are not looking bright. So, the managers choose equity financing to share the risk with the new stockholders rather than increasing risk by acquiring more debt. Similarly, when the management issues new stock to the market, the financial experts assume that the new issued stock is overvalued in light of which the company is issuing new stock. Therefore, the declaration of debt financing is taken as positive signal in the market.

The contention for the presence of ideal level of debt financing has been open for debate from a long time. Different researches have been conducted to view whether the idea of optimal level of debt financing is realistic. The level of debt is considered optimal where it minimizes the cost of debt and boost up the value of the company. For that reason, the decision of capital structure make huge impact on the success of the company, which is why, the decision on selecting an optimal level of capital structure, remains a riddle. (Rao, Al-yahyaee and Syed, 2007).

According to Myers (2001), there is no generally acknowledged hypothesis of debt financing. In any case, he agrees that there are numerous CONDITIONAL hypotheses which have been accepted. Many researches value the importance of trade-off theory which takes the effects of taxes and cost of bankruptcy into the matter (Frank and Goyal, 2009). According to Myer (2001), companies look for that optimal level of leverage that adjusts the favourable treatment of taxes against the expected cost of bankruptcy. Some other theories on the capital structure have also been proposed. Berger, Ofek and Yermack (2012) emphasized that presently there are hypothetical contentions and some empirical evidence that indicates the likelihood that the managers can be well-established, and consequently they may diverge from picking the ideal debt financing. The contention is referred to as managerial entrenchment theory, which recommends that entrenchment thoughts may drive the managers to take debt financing past the ideal point, so as to blow up the voting power of their equity stakes and decrease the likelihood of hostile takeovers.

2.3 Expected Theoretical Association of Financial Leverage to Profitability:

According the past empirical studies there is mixed results regarding association of financial leverage to profitability and results are varying because of different industries nature and different countries situations. But the majority of results suggested a negatively significant association of financial leverage to profitability, like the studies of (Bhatti and Majeed 2010), (Onaolapo and Kajola 2010), (Saeedi and mahmoodi 2011), (Nima et al 2012), (Imad Z. R. 2013), (Mwangi et al 2014), (Akbarian 2013) and (Alcock et al 2013) etc.

The theoretical background also founds that debt financing is negatively related to the profitability, because most of theories stats negative relation between these two factors, like trade of theory stats that when a firm exceeds a specific level of debt then debt financing will increase cost of capital.

The same concept gives the picking order theory, because picking order theory suggested that arrange funds from internal sources if firm want to avoid high cost of capital, which prove that debt financing can increase the cost of capital.

So, the most of the past studies and theories suggested that financial leverage has significant negative relationship with profitability.

2.4 The Choice of Debt or *Equity* as A Source of Business Financing

According to Modigliani-Miller , the financial structure of the company (that is, the liability and equity) is irrelevant to the value of the company. To the extent that the value of a company depends on its ability to generate *cash flows*, and the generation of *cash flows* depends on the investments that the company would have made (that is, its assets), It is irrelevant that a company finances itself with debt or *equity* capital . However, these authors formulate this hypothesis on the basis of a world (which they recognize is not ours) in which there are no transaction costs, information asymmetries, taxes or bankruptcy costs. Therefore, when these variables were introduced into the model, Modigliani-Miller's conclusions could be altered and, therefore, the value of the company could be affected by the design of its financial structure.

Indeed, as numerous studies - some, even by the same authors - have shown in later years, there are several factors that can cause, to certain levels (mainly defined by the risk of bankruptcy), the use of debt increases the value of the company, mainly as a result of the tax benefits of the debt and the information asymmetries existing in the market.

In the first place, it has been pointed out that the fact that the debt is subsidized by the State makes it possible to reduce the cost of capital of the companies (that is, the average cost demanded by investors to invest in the company). Consequently, companies may have greater investment possibilities and, therefore, their value will be increased. Secondly, and through pecking order

theory , we know that companies usually prefer the use of debt over capital as a result of the information asymmetries between shareholders (real or potential) and administrators.

Indeed, the market perceives the use of debt positively, because it is assumed that if the *insiders* - aware of the company's financial situation - did not believe in the company's future capacity to generate cash flows, they would probably not assume new commitments of payment. In contrast, the use of capital (when companies announce a capital increase) usually has a negative effect on the market. In this case, and as a consequence, again, of the information asymmetries existing in the market, investors might believe that the administrators do not trust the company's ability to generate future cash flows (the existence of shareholders, unlike of the existence of creditors, does not imply any periodic commitment of payments that may endanger the financial situation of the company); or because the company's shares are overvalued (otherwise, they would not be interested in attracting new shareholders, as is usually the case in issuing shares in the stock markets); or because, finally, as a result of the company's lack of capacity to generate future cash flows, the company has not been able to obtain credit at reasonable conditions.

Thirdly, the use of debt allows reducing agency costs between shareholders and administrators, especially in companies with dispersed capital in which there are asymmetries of information, collective action problems and rationally passive behavior of shareholders. The idea is that, when the company is forced to make periodic payments to the bondholders, the administrators cannot allocate the funds generated by the activity of the company for other purposes or, of course, to keep them and, especially if the creditor is an investor institutional, you probably enjoy economies of scale that allow this control activity at a very low cost. Therefore, the issuance of debt improves the corporate governance of the company.

The risk of bankruptcy as limits to the assumption of debt

Debt, therefore, generates benefits for the company. But, since there are no free meals, it also generates a significant cost: it increases the risk of insolvency of the company and, therefore, generates a series of direct or indirect costs that, ultimately, can reduce the value of the company, to the detriment of shareholders, creditors and, ultimately, the system. For this reason, (trade-*off theory)* , the use of debt will be desirable only if the benefits of the debt do not exceed the costs (measured in expected value) that could result in an eventual insolvency situation. Consequently, the greater or lesser use of debt will depend, to a large extent, on the greater or lesser confidence of a company in generating cash flows. If a company relies on its ability to generate *cash flows, it* will have incentives to issue new debt. If, on the other hand, you have uncertainties about your ability to generate sufficient cash flows to meet debt service even in stress scenarios, you will have incentives to reduce your debt levels, given that bankruptcy costs (measured in expected value) may exceed the benefits granted by the debt.

The incongruities of the legislator in favouring debt and equity

As mentioned, the legislator favours the use of the debt because it allows to deduct as expenses the interests that the company pays to the creditors in the Corporation Tax. In the opposite direction and unlike what happens in other countries of our environment such as Belgium, the legislator does not allow deducting payments that the company makes to shareholders (for example, dividends). Therefore, tax regulations encourage companies to borrow instead of increasing capital.

This effect of tax rules contrasts with the fact that, at the same time, Company Law (especially in continental Europe) encourages the capitalization of companies because, logically, better capitalization reduces the risks for creditors of dealing with that company For example, in all continental rights there are rules on minimum capital and rules on withholding funds in the

company of an imperative nature under the slogan "capitalize or dissolve". These rules can erect barriers to entry for entrepreneurship and business creation (without granting, however, effective guardianship to creditors) and those that force recapitalization or dissolution and hold managers accountable for social debts they can expel from the market. to viable companies that are going through a temporary situation of losses (as it happens, paradoxically, with almost all *start-ups*).

But the most relevant incongruity is that of financial regulators. That is, the bodies that establish the solvency requirements of credit institutions. Thus, the Basel rules require increasing capital requirements and, at the same time, the tax benefits of the debt (which we remember most of the financial structure of a credit institution) are maintained by national legislators. . For this reason, there have been no authorized voices criticizing the tax deductibility of the debt , or the lack of tax deductibility of the payments that the corporations make to the shareholders .

The necessary suppression of the tax benefits of the debt

It would seem that the coherent legal policy would be one that seeks to promote, through both norms, the maximization of the company's value. And, in this sense, it would seem desirable to suppress the tax benefits of the debt for several reasons.

In the first place, the abolition of tax incentives of the debt would contribute to the fact that, without the need for mandatory rules and, sometimes, inefficient , the companies were more capitalized, as happened in Belgium after the homogenization of the tax treatment of the debt and the *equity* . Consequently, not only would the social creditors be better protected (if this were, indeed, the purpose of the corporate legislator) but also, in the field of financial institutions, the levels of indebtedness and potential negative externalities would be reduced generated by the insolvency of a credit institution.

Secondly, and unlike the granting of tax benefits to *equity* (as would be the case in the Belgian case), reducing the tax benefits of the debt would increase tax collection without, however, an increase in the tax rate. (nominal) of the corporate tax, which would foreseeably be more harmful to the Spanish business fabric. In any case, this measure could be of a transitory nature and, when the Spanish economy returned to the levels of growth prior to the crisis, the deductibility of the interests of the debt could be allowed again or, where appropriate, exclusively allow this deductibility to companies unquoted or non-financial entity, as a result of the lower systemic risk and externalities that would generate the potential insolvency situation of these latter entities, as well as their greater difficulties in the search for financing.

Thirdly, the suppression of external incentives for the election of debt or *equity would* cause that, according to the company's own needs, or the valuation that the market makes of its financing decisions, companies will opt for the mode of financing that Better suit your interests. In this way, a scenario would be created that, to a certain extent, would imply a greater approximation to the assumptions made by Modigliani-Miller, in order to assess, in a natural way, which source of financing is more desirable (which may not be homogeneous for each company or sector).

Finally, and in a particularly relevant way in Spain, where the debt is especially banking, the elimination of the tax incentives of the debt could lead to less dependence on bank financing and even an improvement in the bank lending culture. As we have shown in previous works, Spanish financial institutions do not usually grant credit based on the debtor's ability to generate cash flows but simply on the debtor's ability to provide guarantees (mainly personal or mortgage). This culture of bank lending may make perfect sense in relation to consumer credit but, in loans to companies, it generates inefficiencies in the system because it encourages companies to reduce their investment in research, development, innovation and other intangible assets that They are not very

suitable to serve as guarantees (especially, taking into account the absence of a modern regulation of movable guarantees in Spain). On the contrary and for the same reasons, it can generate an overinvestment problem, that is, that the entities finance investment projects with a negative net present value but for which the borrower can offer real guarantees. This inefficient culture of bank lending also reduces the incentives that creditors should naturally have to control and monitor the debtor's corporate governance. Ultimately, suppressing tax incentives on debt (including banking) could improve the efficiency of business credit markets as a result of the increased competition that credit institutions could have in the "market" of business financing.

2.5 Conceptual Framework and Hypothesis

2.6 Research Hypothesis

H_1: There is statistically significant relationship between financial leverage and firms' profitability.

H_2: The size of firm has significant impact on firm profitability

H_3: The growth of firm has significant impact on firm profitability

CHAPTER 03

3. RESEARCH METHODOLOGY

The theme of this chapter is to describe the philosophical assumptions on which this research is based and to present research strategies and apply empirical techniques. This chapter describes and characterized the limitation and scope design and classifies research among the research traditions in information systems.

3.1 Understanding the Research Process

Research onion was created by Saunders et al. (2007). This delineates the means that should be considered when building up a research strategy. Outwardly, every onion layer describes extra and more data of the research procedure (Saunders et al., 2007). Research onion gives successful advancement in the improvement of research techniques and approaches. The benefit lies in adaptability to virtually any research method and can be used in different contexts (Bryman, 2012).

3.2 Research Philosophy

Research philosophies refer to a set of beliefs about the nature of reality under study (Bryman, 2012). This is the definition that underlies knowledge. Assumptions made by a research philosophy provide reasons for doing research (Flick, 2011). The research philosophy can vary in how best to achieve research goals (Goddard and Melville, 2004). Research philosophy are selected on the basis of analysis of the study in research (May 2011). It is of great important to understand research philosophy before proceeding to next layer because it makes us base for the research and study depends on it.

Positivism and constructivism are considered as the two major ontological frameworks (Monette et al., 2005). This framework can be defined varyingly (e.g. empirically and thinking), but basic assumptions are generally similar (Bryman, 2012). Positivism does not depend on the reality of the reality. In practice, this is almost certainly the case between the subjects (Newman, 1998). On

the other hand, constructivism shows that the natural meaning of social events is created by each observer or group (A-stlundet al., 2011). In this philosophy, people cannot accept that these observations will not be interpreted in the same way as the participants and that the main approach is to explore the differences in the understanding of the participants.

Apart from the inherent differences among these two practices, researchers do not need to form inherent beliefs. One philosophy was not intrinsically better from the other, although researchers might prefer (Podsakoff et al., 2012). Philosophy only gives reasons for research methodology. The methodology must be informed about the nature of the observed phenomenon. The current study wound be conducted in lights of objectivism philosophy with positivists eyes as epistemological scheme of study

3.3 Deductive Approach

Deductive approach develops hypotheses or hypotheses based on existing theories, then formulates a research approach to test them (Silverman, 2013). This type of approach is more suitable for the context in which the research project relates to analysing the compliance of known knowledge with expectations rely on past research (Wiles et al., 2011). This method can therefore be known as very well adapted to the positivist philosophical view, which makes it possible to form hypotheses and to test statistically the expected results with the degree of probability received (Snieder & Larner, 2009). Nonetheless, the deductive methodology can likewise be use with subjective research strategy, in spite of the fact that, for this situation, the desires for existing research are defined uniquely in contrast to the test hypothesis (Saunders et al., 2007). Deductive methodology is ordered by improvement from expansive to explicit: general hypotheses and learning bases are first settled and explicit information got from the research procedure is then tried (Kothari, 2004).

3.4 The Quantitative Approach

This is a type of method which includes quantitative data (Flick, 2011). There are numerous statistical standards regarding procedure validity, such as the number of the respondents who need

to achieve significant statistical results (Goddard & Melville, 2004). The focus of this research is based on positivist philosophy, but can be used to investigate several other social factors. This procedure can be used most probably in cases where many respondents are available and data can be measured effectively using quantitative tools of techniques and where statistical methods of analysis are available (May 2011).

3.5 Research Strategy

Research strategy is the way in which researchers intend to do work (Saunders et al., 2007). This strategy can include a number of different ways, such as experimental research, activity research, case study research, surveys, interviews, or systematic literature reviews. Experimental researches refer to a strategy for creating a research process which examines experimental results beside expected results (Saunders et al., 2007). This could be utilized in each and every fields of study, and several factors that make sense which are usually included (Saunders et al., 2007). The association between these factors is examined and is considered contrary to results. Research activities have been defined as practical approaches to specific research problems in community practice (Bryman, 2012). This involves checking practices to ensure that they are in accordance with the better process. It expects to take part in intelligent practice and in an orderly procedure wherein experts and expert experience can be assessed this sort of research is general among callings, for example, nursing or training where specialists can assess manners by which they can improves their expert comprehension and approach (Wiles et al., 2011).

3.6 Data Collection and Analysis

Methodological approach guided us about the collection and analysis of the data sets which can be employed in research study (Bryman, 2012). The method which is used at this stage contributes considerably to the study of overall validity and reliability (Saunders et al., 2007). Regardless of the method used in project, the data type's collection can be divided into two types: primary and the other were secondary.

3.6.1 Secondary Data

Newman, 1998 defined secondary data are data from other researchers' studies or opinions. Just like, the findings of research publication for literature review, a data may be secondary data due to already having available information which are was already converted from raw form to processed form by someone else. Analysis of statistical research are a type of such data type (Kothari, 2004). The best practical example of data types are Newspapers because it can be both depending on the basis of journalist existence.

3.6.2 Data Collection Sources

Collection of the Data is the critical stage for any research study. The collection of data for the study depends on the methodological approach (Bryman, 2012). For a specific research study, a researcher typically needs different resources to collect his or her data. In terms of design, this can be different, and their interpretation can be complicated. However, it is essential that each source collects the appropriate data. The secondary data method will be used for this research and this data will be collected from the official corporate website and official websites of the Pakistan Stock Exchange.

3.7 Research Design

The design of the study is a description of how the research process will be completed. This is a framework that includes considerations which led to the adoption of the appropriate methodology, the method of selection of respondents and methods for data analysis (Flick, 2011). There is numerous characteristic designs of research, namely exploratory, descriptive and explanatory. The design of the descriptive survey should reflect the experience of the respondents. Therefore, descriptive research design is used in the current study.

3.8 Population and Sample

Statistics should be related and considered to the context in which they operate. The conception of population and the sample should be understood as meaningful conclusions. Population is a

collection of individuals, activities or objects that have general characteristics in attitudes and at certain times. Some fundamental characteristic of the population is homogeneity, quantity space and time (Bryman, 2012).

Samples are processes in which the scholars or researchers choose a specific unit, person or organization from the entire population to study samples, as well as obtain quantitative results and information from the quantitative samples. Sample size is the part of population which is selected for testing and analysis of the study. In a quantitative study, the sample size taken from population is important for determining the sequence of results, so the size of the sample should be large enough to obtain reliable results (Flick, 2011) In this current research study, the target group is all corporations listed on the Pakistan-Pakistan Stock Exchange (PSX) and Similarly all the organization which is listed in the National Stock Exchange of India (NSE). And the sample size of the current research study is top 15 companies, randomly selected in both Pakistan and India.

3.8.1 Sampling Techniques

The sampling method is a way of choosing the right sample size for a wider study (Bryman, 2012). In this research, random sampling techniques is employed due to having random samples represent individuals in a larger population randomly selected. whereas, it may guide to random dispersion that can mean a significant inclination resulting from random sampling (Neuman, 2003). For example, random sampling might produce more males than females in the specified sample or may also have an unequal distribution at any age. Therefore, random sampling technique was selected for the current study of research.

3.9 Statistical Tools

3.9.1 Descriptive Statistics

In descriptive statistics the research only describes the data state as it is through parameters such as mean, median, mode, frequency distribution and other statistical measures. In descriptive statistics, what needs to be presented is:

1. Measures of Central Tendency: The measure of data concentration that is often used is the frequency distribution. This statistical measure is suitable for nominal data and ordinal data (categorical data). While the mean is a measure of data concentration suitable for continuous data. Another descriptive measure for concentration of data is the median (middle value) and mode (the most frequently occurring value).

2. Measures of Spread: The measure of data deployment that is often used is standard deviation. The size of this data deployment is suitable for numerical or continuous data. While for categorical data, the range value is a suitable size.

3.9.2 Correlation

Correlation and regression both have a very close relationship. Each regression must have correlation, but the correlation is not necessarily followed by regression. Correlation is one of the systematic methods in measurements used to discover the connection between two quantitative factors. The relationship of these two factors can happen because of a causal relationship or can likewise happen because of possibility. Two factors are said to relate if changes in a single variable will be trailed by changes in different factors routinely a similar way (positive correlation) or inverse (negative correlation). In Mathematics, correlation is a proportion of how firmly two factors change in connection to one another.

Correlation as an analysis has various types according to its level. Several levels of correlation that have been known so far include simple correlation, partial correlation, and multiple correlation. simple correlation is a factual method that is utilized to quantify the quality of the connection between two factors and furthermore to have the option to know the state of the connection between them with quantitative outcomes. The quality of the connection between the two factors being referred to is whether the relationship is close, feeble, or not tight. While the type of the relationship is whether the type of correlation is directly positive or contrarily linear. Partial correlation is a method of measuring the closeness of a relationship (correlation) between independent variables and non-independent variables by controlling one of the independent variables to see natural correlations between uncontrolled variables. The analysis of partial correlation involves two variables. One variable that is considered influential will be controlled or fixed (as a control variable). Multiple correlation is a form of correlation used to see the

relationship between three or more variables (two or more independent variables and one dependent variable. multiple correlation is related to the inter-correlation of independent variables as well as their correlation with the dependent variable. The Pearson correlation will be employed for the purpose of knowing about direction and magnitude of connection among financial leverage, firm size, firm growth and financial performance of cement industries of Pakistan and India.

3.9.3 Regression

We use regression analysis on the off chance that we need to discover how dependent variables can be anticipated through independent variables or indicator variables, exclusively. The effect of utilizing regression analysis can be utilized to choose whether the ascent and fall of the dependent variable should be possible by raising and diminishing the condition of the independent variable or expanding the condition of the dependent variable by expanding the independent variable/and the other way around.

Regression is a measuring tool that can also be used to measure the presence or absence of correlation between variables. If we have two or more variables, it is appropriate if we want to study how the variables are related or predictable. Regression analysis studies the relationships obtained expressed in mathematical equations which state functional relationships between variables. The functional relationship between one predictor variable and one criterion variable is called simple (single) regression analysis, while functional relationships with more than one variable are called multiple regression analysis. Regression analysis is more accurate in conducting correlation analysis, because in the analysis the difficulty in showing slop (the rate of change of a variable against other variables can be determined). In order to predict the impact of financial leverage, firm size and firm growth on financial performance the regression will be used. Through regression analysis, forecasting the value of the dependent variable to the value of the independent variable is also more accurate.

Regression Equation from Y to X

Regression equation from Y to X is formulated as follows:

$$F.P = a + F.L + F.S + F.G + e$$

Where:

F.P = Financial performance

a = intercept

F.L = Financial leverage

F.S = Firm size

F.G = Firm growth

e = Error term

Chapter 4

Analysis and Findings

4. Introduction

This section of the thesis is about presentation of the main results and findings of the research. The data was of all the variables was collected from various sources. For Pakistani companies' majority of data was collected from the Pakistan stock exchange websites and the mean web sites of respective companies while for the Indian companies the data was gathered only from the data portals and annual reports of corporations under study. The objective of the current research is to analyse the impact of financial leverage on profitability of firms. In this regards the data for both countries were collected and then analysed separately. The first section reports the Pakistani data analysis while Indian firms are analysed afterward. The results, their interpretation and justification are given below.

4.1 Pakistani Analysis

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	75	1.1951	10.3402	1.263126	.0419502
Growth	75	2.0200	2.9700	2.557190	.2599120
Leverage	75	3.13	3.39	3.3062	.06954
Size	75	4.7500	5.1900	5.044905	.1313866
Valid N (listwise)	75				

The descriptive statistics table above shows the variables in first column, number of observations in second column, the variables minimum values in third column maximum value the variables have got is given in the fourth column the average value is given in mean column while the last column shows the deviation from the mean. This table just describe the variable macro image. The table shows that ROA has 210 observation and minimum value of 1.1951 while its maximum value is 10.3402. the mean value is 1.263126 which means all the firm under observations on average have 1.263126 billion of rupees returns on assets, while there are some firms who's return on assets are lower than this figure while there are some other firm who's returns on assets is greater than this figure. The standard deviation shows the variation or departure from the value to be 0.0419502. The second variable in the descriptive statistics is growth of firm which has 212 observations in the data. The growth has 2.0200 minimum value in this time span while maximum value of 2.9700. The mean value of growth is 2.557190. This mean that on average all the firms under study are having the growth rate per year of 2.557190. There are some firms whose growth rate is greater than this figure while other are having lower than this figures as well as reported by the standard deviation. The standard deviation reports that 0.25599120. The third variable in the descriptive statistics is Leverage of firm which has 212 observations in the data. The Leverage has 3.13 minimum value in this time span while maximum value of 3.39. The mean value of growth is 3.3062. This mean that on average all the firms under study are having the Leverage of 3.3062. There are some firms whose growth rate is greater than these figures while other are having lower than this figures as well as reported by the standard deviation. The standard deviation reports that 0.0695. The table shows that Size of the firm has 210 observation and minimum value of 4.75 while its maximum value is 5.19. the mean value is 5.0449 which means all the firm under

observations on average have 5.0449 Size of the firm, while there are some firms whose Size are lower than these figures while there are some other firm who's size is greater than this figures. The standard deviation shows the variation or departure from the value to be 0.13138.

Table 4.2 Correlation Matrix

		PROA	PQR	PAPTRD	PCCC
ROA	Pearson Correlation	1			
Growth	Pearson Correlation	.404**	1		
Leverage	Pearson Correlation	-.411**	-.063	1	
Size	Pearson Correlation	.181**	-.196**	.143*	1
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

The correlation table above shows the Pearson correlation among various explanatory variables and variable of interest. The correlation is said to be strong if it has value of more than .7 which means strongly significant association between the two variables. The correlation value between .3-.5 mean moderate connections amongst the two variables and correlation from .05 - .29 mean low association or week correlation between variables while the correlation value lower than 0.05 mean no correlation between variables. Further the positive and negative signs show the direction of association between variables. If the correlation has negative sign it means the two variables are negatively correlated and if one increases the other decrease and vice versa. If the correlation value does not bear any negative sign nor positive sign it means the two variables are positively

associated and it means if one variable increase so the second one as well and if one variable decreases, there other one decreases as well.

The correlation matrix above show that the correlation between growth and ROA is .404**. This result is having two stars indicating that there exist significantly strong positive association between ROA and growth of firms. This means that if the growth of firms increased it will cause the ROA of firms to increase. In other words, if the companies having more and more growth it means the business has been expended more and more or the firm is larger it will have more profitability. And it is obvious that larger firms will have larger profitability i.e. ROA and small firms will have small profitability. That's why the growth and ROA are having positive association.

The correlation matrix further reveals the association of financial leverage to ROA of firm. Correlation coefficient amongst ROA and financial leverage is -.411**. This result bearing two signs. The one is double stars which mean significant correlation of this variable with dependent variable. The other sign is negative sign which means negative association of this variable with that of dependent variable. Thus, the simple interpretation is that leverage has statistically significant negative correlation with return on assets of the corporations considered for research. This mean that leverage has an inverse effect on the profits of business in this industry. This indicates that if the leverage or debt is increased it will decrease the profitability of firms and if the leverage and debt is decreased it will increase the profit of business. This is actually due to the fact the increased debt will increase the financial distressed and increased bankruptcy risk will lead to higher required rate of return by the shareholders and higher cost of debt as well. Thus, will affect the profitability inversely that's why the association between leverage or debt and profitability is bearing negative sign.

The correlation matrix above show that the correlation between size and ROA is .181**. This result is having two stars indicating that there exist significantly strong positive association between ROA and size of firms. This means that if the size of firms increased it will cause the ROA of firms to increase. In other words, if the companies having more and more size it means the business has been expended more and more or the firm is larger it will have more profitability. And it is obvious that larger firms will have larger profitability i.e. ROA and small firms will have small profitability. That's why the size and ROA are having positive association.

Table 4.3 Regression Analysis

Table 4.3.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644[a]	.414	.406	.0323335

The model summary is the first part of regression output which reports the macro image of overall model. The regression was actually run to understand the impact level of independent variables in the model, there impact direction and magnitude of influential power of independent variable. The model summary provides the broad image of regression model. The model as whole is quite good fit. The R^2 value is .414 this means that the model explains the variation in dependent variable up to 41.4 %. This mean that 41.4% change in profitability of these companies or due to the company size, financial leverage and company growth. In simple words the profitability is 41.4% dependent on these three variables in the model. it can further be deduced that if company size, company growth and financial leverage change by 1 % it will change the profitability by 41.4 %. As the R^2

value is significant it can be inferred that model is statistically fit. The adjusted R^2 value is .406. The value of adjusted R^2 always remain lower than the value of $R^{2.}$ This is because the adjusted R^2 value reveals the true impact of all independent variables in the model while R^2 values reveals the impact of significant and insignificant variables. Thus, the adjusted R^2 value reveals the contribution of only significant variables. The adjusted R^2 .406 means that firm profitability is 40.6 % dependent on the factors included in the model. This 40.6 is the real explanation power of firm size, firm growth and financial Leverage.

Table 4.3.2 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.152	3	.051	48.604	.000[b]
	Residual	.215	206	.001		
	Total	.368	209			

a. Dependent Variable: PROA

b. Predictors: (Constant), Growth, F. Leverage, F. Size

The ANOVA table shows the overall model statistical significance. This mean that ANOVA reports shows if the model is reliable for policy matter or not. The f value and corresponding p values reports the reliability of model to be fit for policy purposes. The f value and p value depend on the researcher view about the threshold of these two measures. The natural sciences it can be very high which means model will be considered significant if it can explain major portion of the variation in dependent model but in social sciences the threshold for f value is equal to or greater than 4. This means if the f value is greater than 4 or just equal to 4 the model will be considered significant. The ANOVA table above reveals the f value of 48.604 which is far above the threshold thus it can be concluded here that the model is statistically significant, and it can be reliable for policy making purposes.

Table 4.3.3 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.408	.135		10.415	.000
	Growth	.071	.009	.441	8.111	.000
	Leverage	-.259	.033	-.430	-7.973	.000
	Size	.105	.018	.329	6.005	.000

a. Dependent Variable: PROA

The coefficients table above is having 6 columns. The first column of the table shows that variables names included in the model along with intercept or constant value. The second column shows the unstandardized betas and their corresponding standard error of estimates in the third column. The 4th column reveals the standardized betas while the fifth column shows the t values and 6th column shows the significance level or probability values of all variables in these models. The very first variable in the model is firm growth which has the unstandardized coefficient value of 0.071. This means the 7.1 % change in profitability of these firms is due to the firm's growth. In other words, if the firm growth increase by 1 % it will increase the profitability by 7.1 % and if the business growth decreased by 1 % it would also decrease the profit of 7.1 %. The t statistics for the business growth in the table above is 8.111. The t value has the threshold value of 1.96 in absolute form. This means that if the t value is less than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The negative impact normally bears the negative sign while positive impact do not bear any sign not plus neither minus. The t value is case of firm growth is greater than 1.96 and bear

no signal additionally the p value is less than 0.05. This 0.05 is the threshold of p value in order to be significant the variable must have p values of 0.05 or less than this value. In case of firm growth, the p value is less than 0.05, this means that there is a significant effect of firm growth on the profits of firms under observation. The final sentence is that firm growth has strongly significant positive relationship with the profitability of firms.

The second variable in the model is firm size which has the unstandardized coefficient value of 0.105. This means the 10.5 % change in profitability of these firms is due to the firm's growth. in other words, if the firm growth increase by 1 % it will increase the profitability by 10.5 % and if the firm growth decreased by 1 % it will decrease profit to 10.5 %. The t value for the firm growth in the table above is 6.005. The t value has the threshold value of 1.96 in absolute form. This means that if the t value is less than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The negative impact normally bears the negative sign while positive impact does not bear any sign not plus neither minus. The t value is case of firm size is greater than 1.96 and bear no signal moreover p-value lower than 0.05. This 0.05 is the threshold of p value in order to be significant the variable must have p-values of 0.05 or less than this value. In case of firm size, the p-value is lower than 0.05, this means that there is a significant effect of firm size on the profit of firms under observation. The final sentence is that firm size have strongly significant positive effects on the profitability of business.

The third variable in the model is financial leverage which has the unstandardized coefficient value of -.259. This means the 25.9 % change in profitability of these firms is due to the firm's growth. in other words, if the financial leverage increase by 1 % it will decrease the profitability by -25.9

% and if the fiscal leverage decreased by 1 % it will incline the profitability of -25.9 %. The t value for the financial leverage in the table above is -7.973. The t value has the threshold value of 1.96 in absolute form. This means that if the t-value is lower than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The negative impact normally bears the negative sign like the one we in this case while positive impact does not bear any sign not plus neither minus. The t value is case of financial leverage is greater than 1.96 and bear negative sign moreover p-value is lower than 0.05. This 0.05 is the threshold of p value in order to be significant the variable must have p values of 0.05 or less than this value. In case of fiscal leverage, the p-value is lower than 0.05, this means that there is a significant effect of financial leverage on the profits of firms under observation. The final sentence is that financial leverage has been found as strongly positively significant effects on the profitability of the business.

4.4Indian Analysis

Table 4.1 Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	75	14.32	17.12	15.0151	.93371
F. Leverage	75	11.1100	16.2100	12.126333	.9502074
F. Growth	75	5.9000	6.1500	6.031810	.0640093
F. Size	75	7.390	11.135	9.354	.8934
Valid N (list wise)	75				

The descriptive statistics table above shows the variables in first column, number of observations in second column, the variables minimum values in third column maximum value the variables

have got is given in the fourth column the average value is given in mean column while the last column shows the deviation from the mean. This table just describe the variables macro image. The table shows that ROA has 210 observation and minimum value of 14.32 while its maximum value is 17.12. the mean value is 15.0151 which means all the firm under observations on average have 15.0151 billion of rupees returns on assets, while there are some firms who's return on assets are lower than this figure while there are some other firm who's returns on assets is greater than this figure. The standard deviation shows the variation or departure from the mean value to be .93371. Another variable in the descriptive statistics is growth of firm which has 212 observations in the data. The growth has 5.9000 minimum value in this time span while maximum value of 6.1500. The mean value of growth is 6.031810. This mean that on average all the firms under study are having the growth rate per year of 6.031810. There are some firms whose growth rate is greater than this figure while other are having lower than this figures as well as reported by the standard deviation. The standard deviation reports that .0640093. The second variable in the descriptive statistics is financial Leverage of firm which has 212 observations in the data. The Leverage has 11.1100 minimum value in this time span while maximum value of 16.2100. The mean value of growth is 12.126333. This mean that on average all the firms under study are having the Leverage of 12.126333. There are some firms whose growth rate is greater than these figures while other are having lower than this figures as well as reported by the standard deviation. The standard deviation reports that .9502074. The table shows that Size of the firm has 210 observation and minimum value of 4.75 while its maximum value is 5.19. the mean value is 5.0449 which means all the firm under observations on average have 5.0449 Size of the firm, while there are some firms whose Size are lower than these figures while there are some other firm whose size is greater than this figures. The standard deviation shows the variation or departure from the value to be 0.13138.

Table 4.4.2 Correlations

		ROA	F. Leverage	F. Growth	F. Size
ROA	Pearson Correlation	1			
F. Leverage	Pearson Correlation	.696**	1		
F. Growth	Pearson Correlation	.351**	-.558**	1	
F. Size	Pearson Correlation	.287**	.181**	.169*	1
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Above table is the correlation table which reports that the Pearson correlation among various explanatory variables and variable of interest. The correlation is said to be strong if it has value of more than .7 which means strongly significant connection amongst the two variables. The value of correlation from .3 to .5 mean moderate connection among the two variables and correlation from .05 - .29 mean low association or week correlation between variables while the correlation value lower than 0.05 mean no correlation between variables. Further the positive and negative signs show the direction of relation of variables. If the correlation has negative sign it means the two variables are negatively correlated and if one increases the other decrease and vice versa. If the correlation value does not bear any negative sign nor positive sign it means the two variables are positively associated and it means if one variable increase so the second one as well and if one variable decreases, there other one decreases as well.

The correlation matrix above show that the correlation between growth and ROA is .351**. This result is having two stars indicating that there exist significantly strong positive association between ROA and growth of firms. This means that if the growth of firms increased it will cause the ROA of firms to increase. In other words, if the companies having more and more growth it means the business has been expended more and more or the firm is larger it will have more profitability. And it is obvious that larger firms will have larger profitability i.e. ROA and small firms will have small profitability. That's why the growth and ROA are having positive association.

The correlation matrix further reveals the association of financial leverage to ROA of firm. The correlation coefficient between ROA and financial leverage is .896**. This result bearing * signs. The one is double stars which means significant correlation of this variable with dependent variable. Thus, the simple interpretation is that leverage have statistically significant positive association between the return on assets of the corporation considered in the research. This mean leverage has a direct effect on the profitability of business of the industry. This indicates that if the leverage or debt inclines it will increase the profit of business and if the leverage and debt is decreased it will decrease the profitability of firms. This is actually because of the reality that the increased debt will increase the tax shield and decrease cost of capital which will lead to lower required rate of return by the shareholders and higher profitability. Thus, will affect the profitability in positive manner that's why the association between leverage or debt and profitability is positive.

The correlation matrix above show that the correlation between size and ROA is .287**. This result is having two stars indicating that there exist significantly strong positive association between ROA and size of firms. This means that if the size of firms increased it will cause the ROA of

firms to increase. In other words, if the companies having more and more size it means the business has been expended more and more or the firm is larger it will have more profitability. And it is obvious that larger firms will have larger profitability i.e. ROA and small firms will have small profitability. That's why the size and ROA are having positive association.

Table 4.4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917[a]	.841	.838	9.22038

a. Predictors: (Constant), F. Growth, F. size, f. leverage

The model summary is the first part of regression output which reports the macro image of overall model. The regression was actually run to understand the impact level of independent variables in the model, there impact direction and magnitude of influential power of independent variable. The model summary provides the broad image of regression model. The model as whole is quite good fit. The R^2 value is .917 this means that the model explains the variation in dependent variable up to 91.7 %. This mean that 91.7% change in profitability of these companies or due to the company size, financial leverage and company growth. In simple words the profitability is 91.7% dependent on these three variables in the model. It can further be deduced that if company size, company growth and financial leverage change by 1 % it will change the profitability by 91.7 %. As the R^2 value is significant it can be inferred that model is statistically fit. The adjusted R^2 value is .841. The value of adjusted R^2 always remain lower than the value of R^2. This is because the adjusted R^2 value reveals the true impact of all independent variables in the model while R^2 values reveals the impact of significant and insignificant variables. Thus, the adjusted R^2 value reveals the contribution of only significant variables. The adjusted R^2 .841 means that firm profitability is 84.1

% dependent on the factors included in the model. This 84.1 is the real explanation power of firm size, firm growth and financial leverage.

Table 4.4.4 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	92411.409	3	30803.803	362.332	.000[b]
	Residual	17513.176	206	85.015		
	Total	109924.585	209			

a. Dependent Variable: ROA

b. Predictors: (Constant), f. growth, f. size, f. leverage

The ANOVA table shows the overall model statistical significance. This mean that ANOVA reports shows if the model is reliable for policy matter or not. The f value and corresponding p values reports the reliability of model to be fit for policy purposes. The f value and p value depend on the researcher view about the threshold of these two measures. The natural sciences it can be very high which means model will be considered significant if it can explain major portion of the variation in dependent model but in social sciences the threshold for f value is equal to or greater than 4. This means if the f value is greater than 4 or just equal to 4 the model will be considered significant. The ANOVA table above reveals the f value of 362.332 which is far above the threshold thus it can be concluded here that the model is statistically significant, and it can be reliable for policy making purposes.

Table 4.4.5 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.298	87.754		3.406	.001
	F. Growth	.463	12.721	.185	5.219	.000
	F. Size	.347	5.231	.077	2.576	.011
	F. Leverage	.539	.019	.986	9.700	.000

a. Dependent Variable: ROA

The coefficients table above is having 6 columns. The first column of the table shows that variables names included in the model along with intercept or constant value. The second column shows the unstandardized betas and their corresponding standard error of estimates in the third column. The 4th column reveals the standardized betas while the fifth column shows the t values and 6th column shows the significance level or probability values of all variables in this model. The very first variable in the model is firm growth which has the unstandardized coefficient value of .463. This means the 46.3 % change in profitability of these firms is due to the firm's growth. in other words, if the firm growth increase by 1 % it will increase the profitability by 46.3 % and if the firm growth decreased by 1 % it would decline the profit of 46.3 %. The t-value for the business growth in the table above is 5.219. The t value has the threshold value of 1.96 in absolute form. This means that if the t-value is lower than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The

negative impact normally bears the negative sign while positive impact does not bear any sign not plus neither minus. The t value is case of firm growth is greater than 1.96 and bear no signal moreover the p-value is lower than 0.05. This 0.05 is the threshold of p value in order to be significant the variable must have p values of 0.05 or less than this value. In case of firm growth, the p-value is lower than 0.05, this means that there is a significant effect of firm growth on the profit of firms under observation. The final sentence is that firm growth is strongly related to profitability of business and also found to be positively significant.

The second variable in the model is firm size which has the unstandardized coefficient value of 0.347. This means the 34.7 % change in profitability of these firms is due to the firm's growth. in other words, if the firm growth increase by 1 % it would increase the profitability by 34.7 % and if the firm growth decreased by 1 % it would decrease the profit of 34.7 %. T-value for the business growth in the table above is 2.576. The t value has the threshold value of 1.96 in absolute form. This means that if the t-value is lower than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The negative impact normally bears the negative sign while positive impact does not bear any sign not plus neither minus. The t value is case of firm size is greater than 1.96 and bear no signal moreover the p-value is lower than 0.05. This 0.05 is the threshold of p value in order to be significant the variable must have p values of 0.05 or less than this value. In case of firm size, the p-value is less than 0.05, this means that there is a significant effect of firm size on the profit of firms under observation. The final sentence is that firm size are found to be strongly and positively significant effect on the profitability of business.

The third variable in the model is financial leverage which has the unstandardized coefficient value of .539. This means the 53.9 % change in profitability of these firms is due to the firm's growth. in other words, if the financial leverage grows with 1 % it would incline the profitability by 53.9 % and if the financial leverage decreased by 1 % it will decrease the profitability of 53.9 %. The t value for the financial leverage in the table above is 27.700. The t value has the threshold value of 1.96 in absolute form. This means that if the t-value is lower than 1.96 the variables considered to be insignificant on 95% confidence level and if the value is greater than 1.96 the variable will be considered significant the negative and positive sign with t values just reveals the direction of impact either positive or negative. The negative impact normally bears the negative sign while positive do not bear any sign like the one in this case. The t value is case of financial leverage is greater than 1.96 and bear no sign additionally the p-value is lower than 0.05. This 0.05 is the threshold of p-value in order to be significant the variable must have p values of 0.05 or less than this value. Whereas the financial leverage, p-value is less than 0.05, this shows us that there is a significant effect of financial leverage on the profit of firms under observation. According to the above analysis we have enough evidence to state that there is a strong relation between financial leverage and profitability of the business, and it was also found to be statistically positive significant.

Chapter 05

5. Discussion and conclusion

5.1 Discussion

The ROA in Pakistani firm from 1.19 to 10.34 million in Pakistan cement industry the average ROA is 1.26 and deviation from this rate is only .0419. This mean that Pakistani cement firms on average earn 1.26 million rupees on average. The Indian firms ROA range from 14.32 to 17.12 million and their average Ros is 15.015 and deviation from this average is only .933. This mean that Indian firm on average earn 15 million rupees. The ROA in Indian firms is greater than Pakistan and it is due the reason of high sale volume by Indian firms and their high growth. It is more common that large organization have large sale and large sale will result in large profit so, as Pakistan is having small industry with small firms which generate small sales and small sales results in small ROA.

The previous chapter shows the results and their respective interpretation. The data analyses have been carried out and the results are transparent. The analyses are in two parts the first one is the Pakistani data and in the second section Indian data has been analysed. The descriptive statistics table in first section describes the growth rate of Pakistani cement firms, the table shows that minimum level of growth in cement sector is 2.02 million while the maximum level of growth in the same industry is 2.97 million of rupees. The average of all these firm is 2.557 and the deviation from the average is 0.2599. This mean that on average the Pakistani cement firms grow by the 2.55 million rupees. For the case of India, the minimum growth rate is 5.900 while the maximum growth rate is 6.15 million. The average growth rate in Indian cement sector is 6.0318 and deviation from this average is

0.064. This result confirms that Indian cement industry is growing more rapidly than Pakistani firms as the growth rate of Pakistan and Indian is different and India have more amount in growth than Pakistan. The reason behind this result might be the population in two countries as the India is having far more population than Pakistan due to which Indian consumption are also more than Pakistan and thus this high consumption lead to high growth of Indian firms and low growth of Pakistani firm can be attributed to low population and low consumption in Pakistan.

The correlation matrix reveals the correlation value of growth and ROA .404** in case Pakistan. This means that growth is having strongly significant effect on the ROA of Pakistani business. In other words, the growth is influential factor of ROA in Pakistan cement industry. Further the correlation value is not bearing negative sign with it which means the correlation between growth and ROA is positive. Thus, it is inferred that growth has effect on the ROA of Pakistani cement business if there is an increase in the growth of firm there must be increase in the ROA of these cement business. Whereas Indian firms, the correlation between growth and ROA is 0.351**. It is obvious that there is a strong correlation amongst the growth and ROA of Indian firms. The correlation value is having two stars which mean highly strong correlation. Further the correlation value does not bear any sign which means the correlation between growth and ROA of Indian firms is positive leading to the conclusion that growth has positive significant impact and association with ROA in Indian firms. Whereas it was also found in the case of Pakistani business but in Pakistani firms this association is a bit stronger than Indian firms. Thus, it can be stated that growth is more influential factor of boosting ROA in Pakistan than Indian firms.

The growth has positively effects on the ROA of corporation both in Pakistan and India. The reasons behind this result is obvious as the growth tends to have increase investment in business and more investment means expansion of business and as the business expends more and more it capture more share of the market which leads to more sale and more sale results in more ROA, thus it is logically acceptable that growth can have positive effects on the ROA on business. Further the literature also shows a strongly positively significant effect of growth on the ROA of business. The second thing need justification is that why growth is more influential factor in Pakistan than India. The logic behind this result is that Pakistan is having low population than India, but the cement industry of Pakistan is small industry as well. This means that off course the population is low, but this small population have some demand of cement if the industry is not sufficient to satisfy the demand of all population a small growth in this industry will cause a huge increase in its returns that's why the growth more strongly correlated with ROA in Pakistan. In India their population is very high but the cement industry is also very huge it might be hypothesized that industry production is lower than demand, but this deficiency is larger in Pakistan and low in India which leads growth to be more significant factor in Pakistan and low significant in India.

The regression results reveal the coefficient, t and p values of growth in Pakistan and India. In Pakistan the growth has coefficient value of 0.071, t-value of 8.111 and p-value of 0.000. This asserts a strongly significant and positive effect of growth on the ROA of Pakistani business. The coefficient value 0.071 means that 7.1% change in the ROA of Pakistani firms is due to change in growth of these business. It is obvious that that if the growth is inclines by 1% of the ROA of Pakistani companies increases by 7.1% and vice versa. The t value is more 1.96 means that there is a strongly significant and positive effect of growth

on ROA of Pakistani business. In case of Indian firms, In India the growth has coefficient value of .463, t-value of 5.219 and p-value of 0.000. This means that there are a strongly significant and positive effects of growth on the ROA of Indian business. The coefficient value .463 means that 46.3% change in the ROA of Indian business is due to change in growth of these business. Therefore, it is stated that if the growth is inclines by 1% the ROA of Indian companies increases by 46.3% and vice versa. The t value is more 1.96 asserting a strongly significant and positive effect of growth on ROA of Indian business. on the basis of these results **H_3** firms' growth is significantly positively correlated with firm's profitability cement sectors of Pakistan and India, can be accepted as we recorded a significantly positive effect of growth on profitability of both Pakistani and Indian cement business. But the effect is having highly significant in Pakistan than India. These results are aligning with results of Eckbo and Masulis (1992) and Eckbo and Norli (2004) who asserted that growth always reflect in capital investment and enlarge the business activities which lead to more business and economic activities on part of the large firm and thus increase the total revenue of business enterprise.

The descriptive statistics table in first section describes the Size of firm of Pakistani cement firms, the table shows that minimum level of Size of firm in cement sector is 4.750 million while the maximum level of Size of firm in the same industry is 5.1900 million of rupees. The average of all these firm is 5.044 and the deviation from the average is .1313. This mean that on average the Pakistani cement firms having size 5.044 million rupees. For the case of India, the minimum Size of firm is 7.390 while the maximum Size of firm of 11.135 million. The average Size of firm in Indian cement sector is 9.354 and deviation from this average is 0.8934. This result confirms that Indian cement industry is having large size

rapidly than Pakistani firms as the Size of firms of Pakistan and Indian is different and India have more large Size of firm than Pakistan. The reason behind this result might be the population in two countries as the India is having far more population than Pakistan due to which Indian consumption are also more than Pakistan and thus this high consumption lead to high demand and high demand satisfaction needs large Size of firm, and low Size of firm of Pakistani firm can be attributed to low population and low consumption in Pakistan.

The correlation matrix reveals the correlation value of Size of firm and ROA .181** in case of Pakistan. This means that Size of firm is having strongly significant effect on the ROA of Pakistani business. In other words, the Size of firm is influential factor of ROA in Pakistan cement industry. Further the correlation value is not bearing negative sign with it which means the correlation amongst Size of business and ROA is positive. Thus, it can be summarized that Size of firm has effect on the ROA of Pakistani cement business if there is an increase in the Size of firm of firm there must be increase in the ROA of these cement business. Whereas Indian business, the correlation among the Size of business and ROA is 0.287**. This mean that there exists a strong correlation amongst the Size of business and ROA of Indian business. The correlation value is having two stars which mean highly strong correlation. Further the correlation value does not bear any sign which means the correlation amongst Size of business and ROA of Indian business is positive leading to the conclusion that Size of firm has positive impact and related with ROA in Indian business. It was also found in case of Pakistani business but in Pakistani firms this association is a bit lower than Indian firms. Thus, it can be stated that Size of firm is more influential factor of boosting ROA in Pakistan than Indian firms.

The Size of business have positively effects on the ROA of companies both in Pakistan and India. The reasons behind this result is obvious as the Size of firm means more investment in business and more investment means expansion of business and as the business expends more and more it capture more share of the market which leads to more sale and more sale results in more ROA, thus it is logically acceptable that Size of firm ca have positive effects on the ROA of business. Further the literature also shows a strongly significant and positive effect of Size of firm on the ROA of business. The second thing need justification is that why Size of firm is more influential factor in Pakistan than India. The logic behind this result is that Pakistan is having low population than India, but the cement industry of Pakistan is small industry as well. This means that of course the population is low, but this small population have some demand of cement if the industry is not sufficient to satisfy the demand of all population a small Size of firm in this industry will cause a huge increase in its returns that's why the Size of firm more strongly correlated with ROA in Pakistan. In India there, population is very high but the cement industry is also very huge it might be hypothesized that industry production is lower than demand, but this deficiency is larger in Pakistan and low in India which leads Size of firm to be more significant factor in Pakistan and low significant in India.

The regression results reveal the coefficient, t and p values of Size of firm in Pakistan and India. In Pakistan the Size of firm has coefficient value of 0.105, t-value of 6.005 and p-value of 0.000. This asserts a strongly significant and positive impact of Size of firm on the ROA of Pakistani business. The coefficient value 0.105 means that 10.5% change in the ROA of Pakistani firms is due to change in Size of firm of these businesses. In simple words it can be said that if the Size of firm is increase by 1% the ROA of Pakistani

companies increases by 10.5% and vice versa. The t value is more 1.96 means that there is a strongly significant and positive impact of Size of firm on ROA of Pakistani business. In case of Indian firms, In India the Size of firm has coefficient value of .347, t-value of 2.576 and p-value of 0.000. This asserts a strongly significant and positive effect of Size of business on the ROA of Indian business. The coefficient value .347 means that 34.7% change in the ROA of Indian firms is due to change in Size of firm of these businesses. In simple words it can be said that if the Size of firm is increase by 1% the ROA of Indian companies increases by 34.7% and vice versa. The t value is more 1.96 asserting a strongly significant and positive effects of Size of business on ROA of Indian business. on the basis of these results **H_2** firm's size has significantly positive effect on the profit of business cement industry of Pakistan and India, can be accepted as we have a significantly positive effect of Size of firm on profit of both countries cement business. But the effects are highly significant in Pakistan than India. These results are aligning with results of Cepal, (2015) who proclaimed that large organization are generate large profit due to their large resources and image in business world and large organizations are only firms that can survive in financial distress and economic slumps the scholar further asserted that larger firms are more sustainable than small firms.

The final variable in the analysis is financial leverage of business in cement sector of Pakistan and India. The descriptive statistics shows minimum value of financial leverage in Pakistani firms is 3.13 maximum value is 3.39 while the average value is 3.3062 and deviation from the average is .0695. This mean that Pakistani cement firms are using the leverage of 3.306 billion on average. In case of Indian business, the minimum value of financial leverage is 11.11 maximum value is 16.210 while mean is 12.126 and deviation

from average is .950. The descriptive statistics shows that Indian firms are using more leverage than Pakistani firms. This can be due to the reason that Indian firms are larger in size and growth. If the firm is large it will use large amount of both equity and debt thus the Indian firms are using more financial leverage than Pakistani firms.

The correlation analysis shows that leverage has correlation value of -.411**. The correlation value has two signs, the negative sign, which mean that leverage is negatively associated with ROA of Pakistani firms and the two stars which shoes significant association thus it can be concluded that in Pakistani firms the leverage has strongly significant and negative effects on the profitability of business. This mean that as the leverage increases it decreases the profitability of firms. The leverage seems to be more than the optimal limit as the trade-off theory that state that debt has tax benefit, but it has trade off in increasing the risk which increase the cost of debt and cost of equity as well. This might be the only reason of negative association between profitability and leverage of firms in case of Pakistan. In case of Indian firms, the correlation between Financial Leverage and ROA is 0.696**. This mean that there exists a strong correlation between the Financial Leverage and ROA of Indian firms. The correlation value is having two stars which mean highly strong correlation. Further the correlation value does not bear any sign which means the correlation between Financial Leverage and ROA of Indian firms is positive leading to the conclusion that Financial Leverage has positive significant impact and association with ROA in Indian firms. These results are not the same as in Pakistani context. In Indian case the leverage is having positive impact on the ROA of cement firms in India. This result reveals that Indian firms are not using debt to their optimal limit. According to the Trade-off theory the debt or leverage has on optimal limit if the firms

uses less than that limit the company loses tax shield but if uses more than that optimal limit it will increase their cost of capital and yet decrease their revenues. From the Trade-off theory lens, it can be concluded that Pakistani firms are using more than optimal limit of leverage while Indian firms are using less than optimal limit of leverage.

The regression results reveal the coefficient, t and p values of Financial Leverage in Pakistan and India. In Pakistan the Financial Leverage has coefficient value of -.259, t-value of -7.973 and p-value of 0.000. This asserts a strongly significant and negative effects of Financial Leverage on the ROA of Pakistani business. The coefficient value -.259 means that 25.9% change in the ROA of Pakistani firms is due to change in Financial Leverage of these businesses. It is obvious that if the Financial Leverage is inclined by 1% the ROA of Pakistani companies decreases by 25.9% and vice versa. The t-value is more 1.96 asserting a strongly significant and negative effects of Financial Leverage on ROA of Pakistani firms. In case of Indian business, In India the Financial Leverage has coefficient value of .539, t-value of 9.700 and p-value of 0.000. this asserts a strongly significant and positively effects of Financial Leverage on the ROA of Indian business. The coefficient value .539 means that 53.9% change in the ROA of Indian firms is due to change in Financial Leverage of these businesses. It is also stated that if the Financial Leverage is inclined by 1% the ROA of Indian companies increases by 53.9% and vice versa. The t value is more 1.96 asserting a strongly significant and positively effects of Financial Leverage on ROA of Indian business. The results show that **H_1** f leverage has significantly effect on the business's profitability in cement industry of Pakistan and India, can be accepted as we found a significantly positive effect of Financial Leverage on profitability of Indian cement firms and negatively significant effect of leverage on cement

firms of Pakistan. The results are in contrast as the leverage has positive effects on ROA of Indian cement firms and significantly negative effect on ROA of Pakistani cement business but in both cases the impact is significant. Which lead to the acceptance of H_1. These results are quite aligning with the trade-off theory that states if a company uses leverage less than the optimal limit the leverage will positively impact the profitability and if the company is using more than optimal limit it will have an adverse impact on the cost of debt and hence profitability of firms. These results and analysis are providing enough evidence for addressing the research question. The question 1 is what are the existing levels of financial leverage and firms' profitability in Pakistan and Indian cement industry? On the basis of results obtained the answer is Pakistani firms using leverage of more than optimal limit while Indian firms uses leverage of less than optimal limit. The question number 2 is What is the nature of relationship existing between financial leverage and firms' profitability in cement sector of Pakistan and India? And Does leverage impact profitability differently in cement industry of Pakistan and India? This question can be better answered as, the impact and association of leverage and profitability in Pakistan and Indian firms is not the same but different as the leverage have significantly positive effects on profitability in Indian context while it is found to be negative in Pakistani context.

5.2 Conclusion

It has been deduced with achieving the objectives of the study. The first objective was to determine empirical association of financial leverage to firm profitability in cement sectors of Pakistani and Indian sectors. It is obvious from the results of the research that leverage is associated with profitability of Pakistani firms and Indian firms. To comparatively

analyse the leverage impact in cement sectors of Pakistan and India was the second objective of this research. The leverage has negative effects on profitability of Pakistani cement business and positive effects on the Indian cement business. The third objectives were, to suggest policy prescription for the needed improvements laid on results of the current research. It has been recommended on the basis of results obtained that Pakistani firms should decrease the use of leverage as it has negative effects on the profitability of cement business. The decrease in leverage will boost the profitability and financial performance while Indian firms should increase the use of leverage as it has positive effect on the profitability of Indian cement business.

5.3 Recommendations

On the basis of current study conducted the following recommendation can be put forward:

1. The profitability of the firms is statistically significant and inversely related with the financial leverage of Pakistani firms, persuades one to recommend that financial leverage be kept as low as possible for greater profitability.
2. It is recommended that the regulatory authorities like State Bank of Pakistan (SBP) and Stock Exchange Commission of Pakistan (SECP) respectively make banking sectors and listed cement companies to observe the desirable level of financial leverage at national level.
3. The responsible institutions like State Bank, SECP, Banking sector and various Chambers and business bodies should initiate an educational campaign to make the nation literate on this matter.
4. The current study investigated the cement sector of Pakistan and India further study should focus on other sectors of both economies for confirmation of current study results.

5.4 Limitations

Current research basically relies on the effects of financial leverage on firms' profitability of cement sector of Pakistan and India and is restricted its self to just cement sector of Pakistan and India, because the sectors different in nature from each other, so may the one sector results differ from other sector results. Further the results of the study will be applicable only to economic and financial environment from 2012 to 2016. The results will not be applied on the time period before 2012 and after 2016. Further the current research has analysed the yearly data because in Pakistan companies do not publish quarterly or semi-annual data.

REFERENCES

Attaullah Shah and Saifullah Khan, Determinants of Capital Structure: Evidence from *Pakistani Panel Data*. International Review of Business Research Papers Vol. 3,

Abel Ebel Ezeoha (2008). Firm size and corporate financial leverage choice in a developing economy: Evidence from Nigeria. The *Journal of Risk Finance*, 30,

Ã–stlund, U., Kidd, L., WengstrÃ¶m, Y., & Rowa-Dewar, N. (2011). Combining qualitative and quantitative research within mixed method research designs: a methodological review. International Journal of Nursing Studies, 48(3), pp. 369-383.

Brennan, M.J. and E.S. Schwartz, 1984. Optimal Financial Policy and Firm Valuation, *Journal of Finance*,

Berger, P.G., Ofek, E. & Yermack, D.L. (2012). Managerial entrenchment and capital structure decisions, *The Journal of Finance*, 52 (4),

Bryman, A. (2012). Social research methods (5th ed.). Oxford: Oxford University Press.

Butters, J.K. 1949, Federal Income Taxation and External vs. Internal Financing, *Journal of Finance* 4,

Dybvig, P. and J. Zender, 1991. Capital structure and dividend irrelevance with asymmetric information, *Review of Financial Studies* 4,

Eunju Yoon & SooCheong Jang (2005). The effect of financial leverage on profitability and risk of restaurant firms. The Journal of *Hospitality Financial Managements*,

Eckbo, B.E. and R.W. Masulis, 1992. Adverse selection and the rights offer paradox. *Journal of Financial Economics* 32,

Frank, M.Z. & Goyal, V.K. (2009). Capital structure decisions: which factors are reliably important? *Financial Management*, 38 (1),

Flick, U. (2011). Introducing research methodology: A beginner's guide to doing a research project. London: Sage.

Goddard, W. & Melville, S. (2004). Research Methodology: An Introduction, (2nd ed.) Oxford: Blackwell Publishing.

Graham, J.R., 2000, How Big Are the Tax Benefits of Debt? *Journal of Finance* 55, Gupta M. C. (1969). The effect of size, growth and industry on the financial structure of manufacturing companies. *Journal of Finance*,

Grossman, S. J., and O. Hart, 1982. "Corporate Financial Structure and Managerial

Incentives," in J. McCall, ed.: *The Economics of Information and Uncertainty*, University of Chicago Press, Chicago.

Hackbarth, D., 2004, Managerial Traits and Capital Structure Decisions. *Working paper*, Indiana University.

Halov, N. and F. Heider, 2004, Capital Structure, Risk and Asymmetric Information. *NYU Working paper*.

Harris, M., and A. Raviv, 1990. "Capital Structure and the Informational Role of Debt," *Journal of Finance* 45

Joseph E. Murphy (1968). Effect of leverage on profitability, growth and market valuation of common stock. *Financial Analyst Journal*,

Jensen, M.C., 1986. "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers*," American Economic Review* 76

Jensen, M.C. and W.H. Meckling, 1976. Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3,

Kane, A., A.J. Marcus, and R.L. McDonald, 1984, How Big is the Tax Advantage to Debt? *Journal of Finance*,

Kale, J. R. & Shahrur, H. (2007). Corporate Capital Structure and the Characteristics of Suppliers and Customers, *Journal of Financial Economics*,

Kraus,A., and R.H. Litzenberger, 1973. A State-Preference Model of Optimal Financial Leverage, *Journal of Finance*

Kothari, C. R. (2004). Research methodology: methods and techniques. New Delhi: New Age International.

Modigliani, F. and M. H. Miller, 1958. The Cost of Capital, Corporate Finance and the Theory of Investment, *American Economic Review* 48,

Modigliani, F. and M.H. Miller. 1963, Corporate Income Taxes and the Cost of Capital:

A Correction, *American Economic Review* 53,

Myers, S.C., 1977. Determinants of corporate borrowing. Journal of Financial Economics

Myers, S.C., and Majluf, N., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13,

Maksimovic, V. and G.M. Phillips, 1998. Asset Efficiency and the Reallocation Decisions of Bankrupt Firms, *Journal of Finance* 53,

Malmendier, U. and G. Tate, 2004, CEO Over confidence and Corporate Investment, *Journal of Finance*,

Mandelker, G. & Rhee, S. (1984). The impact of the degree of operating and financial leverage on systematic risk of common stock. Journal of *financial and Quantitative Analysis, 30*,

Monette, D.R., Sullivan, T. J., & DeJong, C. R. (2005). Applied Social Research: A Tool for the Human Services, (6th ed.), London: Books Publishing.

Neuman, W. L. (2003). Social Research Methods: Qualitative and Quantitative Approaches, London: Allyn & Bacon.

Newman, I. (1998). Qualitative-quantitative research methodology: Exploring the interactive continuum. Carbondale: Southern Illinois University Press.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. Annual Review of Psychology, 63, pp.539-569.

Rao, N.V., Al-Yahyaee, K.H.M. & Syed, L.A. (2007). Capital structure and financial performance: evidence from Oman, *Indian Journal of Economics and Business*, 6

Myers, S.C. (2001). Capital structure, *The Journal of Economic Perspectives*, 15 (2),

Raheman, A., Zulfiqar, B., & Mustafa, (2007). Capital structure and profitability: case of Islamabad Stock Exchange. *International Review of Business Research Papers*, 3(5),

Rehman, W., Fatima, G., & Ahmad, M. (2012). Impact of debt structure on profitability in textile industry of Pakistan. *International Journal of Economics and Research*, 3(2),

R. Amsaveni (2009). Impact of leverage on profitability of primary aluminum industry in India. *Indian Finance Journal*, 20,

S. Chandra Kumar, Mangalam & P. Govindasamy (2010). Leverage: an analysis and its impact on profitability with reference to selected cement companies in India. Journal of *Economics, Finance and Administrative Science*, 27,

Samuel H. Baker (1973). Risk, leverage and profitability: an industry analysis. *The Review of Economic and Statistics*, 55,

Sheel, A. (1994). Determinants of capital structure choice and empirics on leverage behavior: A comparative analysis of hotel and manufacturing firms. *Hospitality Research Journal*,

Saunders, M., Lewis, P., & Thornhill, A. (2007). Research Methods for Business students, (6th ed.) London: Pearson.

Silverman, D. (2013). Doing Qualitative Research: A practical handbook. London: Sage.

Snieder R. & Larner, K. (2009). The Art of Being a Scientist: A Guide for Graduate students and their Mentors, Cambridge: Cambridge University Press.

Titman, S., and R. Wessels, 1988. "The Determinants of Capital Structure Choice," *Journal of Finance* 43:

Titman, S., 1984.The effect of capital structure on a firm's liquidation decision, *Journal of Financial Economics* 13,

Viswanath, P.V. 1993. Strategic considerations, the pecking order hypothesis, and market reactions to equity financing, *Journal of Financial and Quantitative Analysis* 28,

Wald, J. K. (1999). How firm characteristics affect capital structure: an international comparison. *Journal of Finance Research*, 22,

Williams, J., 1987. "Perquisites, Risk, and Capital Structure," *Journal of Finance* 42

Wiles, R., Crow, G., & Pain, H. (2011). Innovation in qualitative research methods: a narrative review. Qualitative Research, 11(5),