CAPITAL STRUCTURE AND FIRM CHARACTERISTICS: EMPIRICAL EVIDENCE FROM PAKISTAN

Submitted by

Muhammad Usman Zahid

MPhil/EAF/PIDE/13/2014

Supervised by

Dr. Ahsan-ul-Haq Satti

(Assistant Professor of the Department of Economics and Finance)

A dissertation submitted to the Pakistan Institute of Development Economics, Islamabad in partial fulfillment of the requirement of the degree of Master of Philosophy in Economics and Finance.

Department of Finance & Economics

Pakistan Institute of Development Economics (PIDE)
Islamabad, Pakistan

2018

PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS, ISLAMABAD

CERTIFICATE

This is to certify that this thesis entitled **"Capital Structure and Firm Characteristics: Empirical Evidence From Pakistan"** submitted by **Mr. Muhammad Usman Zahid** is accepted in its present form by the Department of Economics and Finance, Pakistan Institute of Development Economics (PIDE) Islamabad as satisfying the requirements for partial fulfillment of the Degree of Master of Philosophy in Economics and Finance.

Supervisor:

Dr. Ahsan ul Haq
Assistant Professor
PIDE,
Islamabad.

Internal Examiner:

Dr. Mehmood Khalid
Senior Research Economist,
PIDE
Islamabad.

External Examiner:

Dr. Abdul Rashid
Associate Professor,
IIUI,
Islamabad.

Head, Department of Economics and Finance:

Dr. Hasan Muhammad Mohsin
PIDE,
Islamabad.

Dedicated to

My Parents

ACKNOWLEDGMENT

Writing an M.Phil. Thesis is a major undertaking and is impossible with proper support and guidance. Foremost, I present my gratitude to the greatest Allah for providing the strength and guidance to me during this thesis. Without Him, I would not have had the wisdom or the physical ability to do so.

I would like to acknowledge the guidance and support of my supervisor, Dr. Ahsan-ul-Haq Satti and expresses my deepest gratitude to him. His skill of providing the right kind of guidance at the right time is what made my whole journey interesting and challenging. The wealth of knowledge I have acquired through his esteemed supervision is what I wish for every student to have.

My friends have also been a great source support for me. Without their support and patience, this thesis would have been a distant dream.

At the end, I would also like to thank PIDE or giving me this opportunity and making the whole study program student friendly and enriching.

Muhammad Usman Zahid

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The research study has been carried out to identify the relationship between firm's characteristics and capital structure. The study has been made using panel data procedure for a sample of 334 listed firms on Pakistan stock exchange during 2004-2014. The study uses three dependent variables total debt ratio, short-term debt ratio and long-term debt ratio and eight independent variables; growth, tangibility, profitability, cost of debt, tax rate, liquidity, size, and debt service capacity. The results indicate that all the three models with dependent variables; total debt ratio, short-term debt ratio and long-term debt ratio and independent variables; growth, tangibility, profitability, cost of debt, tax rate, liquidity, size, and debt service capacity have significant relationship. Moreover, the nature of the nexus between the variables in all three models is consistent with the previous studies.

Key words: Capital Structure, Listed Companies, Corporate finances

CHAPTER 1

INTRODUCTION

1.1. Background of the Study

For more than four decades, capital structure has been a mystery for corporations who have been continually struggling with it. Enterprises with non-predictable and changeable cash flow streams have not been able to sustain the contraction and unable to develop sufficient liquidity during credit growth. Practitioners and academics have been challenged to seek the most favorable capital structure by introducing a suitable blend of equity and debt to fund the investments and operations of a business.

To finance the assets, numerous companies use a composite of equity finance and debt which has been referred as a capital structure of a firm. There are some equity financed companies without any debt finance while others have different proportions of both. To choose either debt finance or equity finance or to make a decision to use both in different proportions in business is known as financial decisions. (WACC) Weighted average cost of capital has a direct link with financial choices. Noticeable change occurs in WACC when changes are made in a financial mix and thus altering the wealth of a shareholder. Or we can say, modification in the capital structure must guarantee the maximum shareholder's wealth or company's value and minimum WACC.

Optimal structure of a capital can't be achieved as it is purely a myth. There isn't any path or recognized formula in the entire finance literature to create the best proportion of equity finance and debt. As once in 2001 Myers said, "There is no universal theory of the debt-equity choice and no reason to expect one". Optimal mix

differs from situation to situation, area to area and organization to organization. However, it may be conditional. Hunt for an optimum financial blend is actually a search of least WACC because it increases the firm's value and decreases shareholder's wealth.

Apparently, the pioneers in examining the capital structure's effects were Miller and Modigliani. Keeping in mind the conditions of an ideal market, they come to the conclusion that the capital structure of the firm does not change the firm's value. Therefore, they named that theory in 1958 as "irrelevance theory of capital structure." The theory was reexamined in 1963 by Miller and Modigliani. They relaxed the ideal conditions of the perfect market and introduced the aspect of a tax by proposing that corporations should use the debt as much as they want so that they can pursue capital structure that is targeted. Hence, by the efforts of different researchers over the years, further advancement with new elements is achieved, such as the information asymmetry (Majluf and Myers, 1984), bankruptcy costs (Titman, 1984 and Stieglitz, 1972), taxes (Miller, 1977), (Miller and Modigliani, 1963) and the agency costs (Myers, 1977 and Meckling & Jensen, 1976). Researchers have also taken great interest in examining individuals' personal taxes, alongside corporate taxation. In the USA, the tax legislation that determined the value of the firm was distinguished in three tax rates in 1977 by Miller. These three tax rates are 1) the rate of the tax that is enforced on the dividend's income. 2) tax rate that is imposed on the interest inflow's income, 3) the corporate tax rate. According to Miller, if we compare the firm's value with other two, it depends on the tax rate's relative height. According to many other theories the company's value is affected by the capital structure of a company. However, above theories can be separated into two different groups. Either it is a pecking-order hypothesis in which they say that there isn't any clear-cut

targeted capital structure or static trade-off theory proposes that they predict the existence of each company's ratio of an optimal equity-debt.

The theory's optimal solution is illustrated by a static trade-off model which explains the agency cost trade off or we can say a trade-off between the costs of financial distress and a tax shield (bankruptcy cost). This theory states that capital structure that you desire can only be achieved when on the additional debts, the financial distress costs presents marginal value and it becomes equivalent to additional debt of tax shield's marginal present value. Contrary wise, in 1984, Majluf and Myers proposes in the pecking-order theory that there isn't any ideal capital structure. The information asymmetries effect of a corporation among outsiders and insiders are described in this theory. The theory states that for financing, organizations strive for a privileged order. Regarding external funds, organizations give preference to retained earnings (internal financing) then as a substitute of equity, owing to deficiency of resources which are internally produced, it uses debt financing. So it means that the companies with high profits owe low debts in comparison to those firms who make low profits but are high in debts. Therefore, there are two forms of equity the external one (at the bottom of the pecking order) and the internal one (at the top of the pecking order) instead of clear-cut optimal leverage. Conclusively, there are numerous theories which are conditional and they tend to achieve the capital structure's determination from various aspects.

Precisely, the emphasis of this research is on the purpose of factors that influences capital structure. Array of hypothesis and factors are being tested that genuinely affects the list of all the organizations in Pakistan Stock Exchange. Moreover, it has also observed how various factors affects the capital structure of a

company and also future forecasts of the listed companies while keeping in mind the above factors and influences.

1.2. Justification of the Study

Extensive studies have been done on developed market's framework. However, more research on this issue of developed markets of evolving economies with a diverse and modified set of modeling still needs attention. Researchers have also debated about the factors that influence the capital structure and how they have been greatly determined by numerous elements (Lima 2009; Shah & Hijazi, 2005; Deesomsak, Paudyal & Pescetto, 2004; Rajan & Zingles, 1995; Myers, 1977 and 1984). In this study, incorporation of diverse variables is taken in to consideration to examine the impact and extent of influence in a modified model. Consequently, to know about the national listed company's behavior, Pakistan has to be taken as an exceptional case. The emergence of markets in Pakistan is the key motivation to revisit some specific factors of capital structure. The research trails the studies context of Shah & Hijazi (2005) and Shah & Khan (2007) that used tangibility, size of a company, profitability and production of a company as helpful factors to decide the leverage's degree.

1.3. Research Objective of the Study

- The primary objective of the study is to explore the relationship between firm's characteristics and the capital structure by employ three different models/specifications for results comprehensiveness.

- The secondary objective is to identify the nature of relationship between firm's characteristics and the capital structure considering the current results are consistent with previous studies.

1.4. Research Hypothesis

Hypothesis-1

H_0 There is no relationship among firm's characteristics and capital structure.

H_1 There is relationship among firm's characteristics and capital structure.

Hypothesis-2

H_0 Nature of relationship between firm's characteristics and the capital structure are not consistent with previous studies.

H_1 Nature of relationship between firm's characteristics and the capital structure are consistent with previous studies.

1.5. Research Significance

This research work is of great importance for academics and practitioners alike. It has been carried out in a very simple way. Researches have been done on a same topic but in established markets. However, the research in emerging markets with a diverse and modified set of modeling still needs attention. Pakistan needs to be studied with an improved composition of research model in order to know about the company's behavior at present. The study is purely based on nature of association between the variables dealt in capital structure and firm's characteristics among listed firms. The research shows the practical and an applicable philosophy to those who desires to get a knowledge about this topic. The research has also helped firm managers to make the financing decisions easily. Last but not the least even creditors in order to fund firms, are also able to get benefit by reducing their risk.

CHAPTER 2

LITERATURE REVIEW

2.1 Theoretical Concepts

To recognize an importance of shareholder returns and how the capital structure affects and determines it, various studies have been done. Miller and Modigliani's paper has given the start to the further research and studies of capital structure. In 1958, the theorem of MM on the capital structure has been proposed by Merton Miller and Franco Modigliani and it has laid the basis for upcoming school of thoughts on corporate finance & capital structure.

Merton Miller and Franco Modigliani have assembled organizations keeping in mind the risky factors. Firms with same kind of pattern of returns are placed in the same group. According to the first proposition of MM, in order to capitalize the expected return, in the optimal or ideal capital market, the capital structure cannot determine the value of a firm, and according to the risk class it is determined by the suitable usage of discount rate. So the theory states that the required equity's return rate is equal to the company's mean cost of capital, and has no dependence on the capital structure.

According to the second proposition of MM, the company's debt to equity ratio goes into a direct relation with a cost of equity of that company. So because of the enhanced risk for equity holders in a leveraged company and also because of the linear relationship the increase in equity's required rate of return will automatically increase the equity-debt ratio thus assuming a perfect market.

MM's third proposition talks about the dividend payments and the value of a company. According to this proposition sometimes, the dividend policy is unable to

affect the company's value. Or we can say that two firms having equal assets, same risk class and the structure of liability can never be affected by the different dividend policies and this won't even make any difference in the value of a market.

Here are some principles that have laid the base of the theory and these are also valid under all conditions or assumptions of both worlds, either the one where taxes are applied or the world which is free of taxes. In the world where taxes are applied, because of the enhanced debt financing use, the company's value will increase. However, in a scenario of a world free of taxes with a greater usage of debt in a capital structure, the company's value will not increase. As tax deductible expenditure is an interest so the increase is equal to the shield tax on the interest charges.

Originally, the application of the propositions by MM is related to the choices of the firm's proportion of equity and debt. Yet, afterwards, these have been also applicable to firm mix, risk management, debt maturity or spinning off i.e. creating a separately new company out of the already existing firm.

The capital structure's trade-off theory inclines to compensate advantages of tax borrowing with the financial cost distress. The capital structure's model of bankruptcy, presented by Litzenberger and Kraus in 1973 has focused on the vital importance and advantage of tax shield. After the firm's ratio of optimal debt the tax shield's cumulative advantages will be lesser than the expected bankruptcy cost. According to the aforementioned theory, a firm would gain a high profit if it has a strong desire to achieve the debt with great proportion so that the firm's assets could be financed and this would only be accelerated when there is a sufficiently high rate of corporate tax to produce an attractive option for high debt. The firm's nature of assets that it brings on the balance sheet has also affected the cost of financial distress.

The MM theorem that was presented in 2003 is now capable of rationalizing a variety of differences present in a capital structure. However, it is not able to focus on various prosperous firms that are in no debt at all.

In 1982, Hart and Grossman suggested that the shareholders and non-owner managers' conflict in the agency are reduced because of the enrollment of capital structure's debt. This theory highlights the bankruptcy cost in primarily a debt-financed firm and verifies that in place of preferring their own benefits or concentrating on salaries, managers would be desirous of investing in investment projects that are worthwhile. When the manager starts using more benefits, the bankruptcy charges rise. So they start to concentrate on high-quality decisions for investments and would take steps to reduce or totally stop taking benefits or perks.

In 1984, Myers proposed a Pecking Order Theory which has been quite competing and has also been used later in many other pieces of research and studies conducted by Goyal and Frank in 2003, French and Fama in 2002 and by Myers and Sunder in 1999. In one of his studies about how the capital structure works in a large corporation, Donaldson has stated that the funds generated internally are more favored than the externally generated funds. By this, we can get a hint that before the Myers theory was proposed the pecking order was already been in use. According to Pecking Order Theory, with adequate retained earnings, firms choose to finance new investments and if more external funds are required they prefer equity financing over the use of debt financing. So it can be stated that more leveraged companies may produce less profit. It is because of the higher external financing amount required instead of choosing a comparatively high debt/equity ratio. Thus, according to this theory the next preference or the one to come in order after the retained earnings are debt so that the investment projects of a firm can be funded.

In 1984, Kim, Bradley and Jarrell, in their research have stated that leverage has a substantial along with a negative association with expenditures on advertising, R

and D investments and instability in earnings. Moreover, they stated that leverage has a linear relationship with a non-tax shield. Lastly, they concluded that grouping of industry is also a related factor in making a decision of a capital structure.

In 1995, Zingles and Rajan have examined that how various changing factors affect the capital structure. This includes profitability, market to book ratio, sales of a firm and presence of assets. The relationship with all these changing factors was important and they summarized that debt is directly connected with sales made by the company and the assets' tangibility. However, it has an indirect relationship with a company's profitability and market to book value.

In 2001, Booth et al has examined some of the selected firms of developing countries in order to analyze that whether the capital structure theory is applicable across the globe and to see whether all the variable affects the same or has some relevance in both underdeveloped and developed countries and this has been proven correct that regardless of the fact that a country is underdeveloped or developed one, in capital structure decisions the similar changeable factors/ variables have the same impact or relevance. However, few steady changes across many countries worldwide has also been observed by which we can expect that the variables that are country-specific also have a great significance. These factors are growing stage of the capital market, Gross Domestic Product growth and rates of inflation. These observing has greatly supported the theory of pecking order and it has stated that firms having low debt ratio are likely to generate more profit, regardless of the ratio calculation methods.

In 2003, Brealy and Myers have stated propositions and the very first one out of it presented a result that was highly generalized. Rather than trading off between equity and debt, it can be applied to any selected substitute of financing instrument. For example, Miller and Modigliani propose that the debt obtained whether its long term or short term does not affect the company's value. So, MM states that the

individuals that acquire debt have a greater cost because of imperfections of the market and for some of the investors it can be riskier as well. Because of that, a specific group of investors in a desire to purchase leveraged firm's shares even gets ready to pay a premium. Many traditionalists claim that firms must purchase if they want to achieve the profit from that premium. Barealy and Myers in 2003 have stated that the reason mentioned above has some fault. According to them, there might still be some investors who are willing to take interest in the leveraged firm's equity; however, it is also important that they characterize an unsatisfied demand. Because of a larger availability of leveraged companies in a market, they worry for uncertainties about investor's satisfaction. Moreover, if the managers of finance observe some unsatisfied demand and fulfill it by providing some substituted instruments of finance, the Miller and Modigliani theory is violated. However, they incline themselves toward Miller and Modigliani theory as they feel that realizing such demands which are unsatisfied and for which innovative securities are required isn't a simple job.

As not even one condition is fulfilled in reality so these results do not seem relevant, but as this Milers and Modigliani's theory laid the capital structure's importance so it has become a curriculum's part of corporate finance. It highlights the factors affecting and determining the structure of the optimal finance. Keeping in mind the importance of capital structure's role in defining the capital cost, and the violation of the theory's assumptions by Modigliani and Miller, many studies have been carried out to find out the factors affecting and determining the firm's equity and debt mix.

French and Fama in 2002 have observed that the ratios of debt slowly head towards a definite level of the target. Or it can be said that long-term means or the capital structure at an optimum level is achieved only after a significant time period.

In 2003, Brealy and Myers have stated propositions and the very first one out of it presented a result that was highly generalized. Rather than trading off between

equity and debt, it can be applied to any selected substitute of financing instrument. For example, Miller and Modigliani propose that the debt obtained whether its long term or short term does not affect the company's value. So, MM states that the individuals that acquire debt have a greater cost because of imperfections of the market and for some of the investors it can be riskier as well. Because of that, a specific group of investors in a desire to purchase leveraged firm's shares even gets ready to pay a premium. Many traditionalists claim that firms must purchase if they want to achieve the profit from that premium. Barealy and Myers in 2003 have stated that the reason mentioned above has some fault. According to them, there might still be some investors who are willing to take interest in the leveraged firm's equity; however, it is also important that they characterize an unsatisfied demand. Because of a larger availability of leveraged companies in a market, they worry for uncertainties about investor's satisfaction. Moreover, if the managers of finance observe some unsatisfied demand and fulfill it by providing some substituted instruments of finance, the Miller and Modigliani theory is violated. However, they incline themselves toward Miller and Modigliani theory as they feel that realizing such demands which are unsatisfied and for which innovative securities are required isn't a simple job.

As not even one condition is fulfilled in reality so these results do not seem relevant, but as this Milers and Modigliani's theory laid the capital structure's importance so it has become a curriculum's part of corporate finance. It highlights the factors affecting and determining the structure of the optimal finance. Keeping in mind the importance of capital structure's role in defining the capital cost, and the violation of the theory's assumptions by Modigliani and Miller, many studies have been carried out to find out the factors affecting and determining the firm's equity and debt mix.

In 2005, Roberts and Leary have proposed that companies react because an additional issue of equity crashes an equity price. It slowly takes the actual leverage to the specific level of a target within a time period of two to four years. Moreover,

instead of indifference in management to capital structure, optimizing strategies are affecting the unceasing effects of the sheer crash of equity price on leverage.

In 2006, Zhao and Chen have observed that market to reserve value which is taken as an indicator of growth and the leverage has an indirect association of the firms with a relatively high market to book value. The firms with a comparatively low value of the market to reserve ratio have a direct relationship with leverage. Even though in the analysis of regression, the market to book value is normally used as a growth indicator for opportunities of a company but it is not simple to make decisions related to the influence of the opportunities of growth on leverage by means of this process.

2.2 Studies from Pakistan

Rahman in 1990 from Pakistan researched on sizes and firms as factors influencing the decision of a capital structure and the outcomes exposed that the industries in Tobacco and other Engineering firms are greatly organized and highly equipped.

Hijazi and Shah (2005) have led a study on the firms functioning in Pakistan and are also nonfinancial have a direct link to company's leverage and the firm's size. Through this, it can be specified that with large use of debt, company's resort is also larger. Leverage has an indirect relation with Growth's annual increase or decrease in the total number of assets. Moreover, it was noticed that leverage is positively interrelated with profit earned.

In 2006, Azid and Qureshi have stated that desirability for debt financing has been seen in the government sector of Pakistan due to the low standards of accountability, the striking bank offers for financing and questionable corporate governance in comparison with the dominant private zone.

In 2007, Kanwar has proposed the structure of capital for the sugar industry of Pakistan. He has observed an important capital structure's link with the company's size, market to book value, assets tangibility and assets return. Still, it's relation to the rate of tax was not so important and it has also be founded that the firms located in larger and much-developed provinces have larger debt shares in the capital structure.

Khan and Shah in 2007 have listed the firms in Pakistan which are non-financial in the time period of 1994-2002 and then observed the influence of volatile earnings, non-debt tax, profit, size, growth and tangibility in the decisions taken for capital structure. The outcome of this research, founded on joint regression, supported the theory of trade-off with regards to tangibility. On the other hand, outcomes for the depreciation and volatile earnings are not linked to the theory of trade-off. The growth outcomes set the ground for agency theory; however, the theory of pecking order was confirmed by profitability. The leverage and the size of the company's relationship were stated as unimportant.

In 2008, Rafiq et al. observed the structure of the capital of the firms that came under chemical industry and stated that equity financing is mostly chosen by these kinds of chemical companies.

Mahmud et al. in 2009 conducted a research in which he focused to find that the influencing elements that determined changes in the capital structure of Japan, Pakistan and Malaysia. Through this research, a great aspect of a relationship between per capita Gross National Product and capital structure got revealed as in the high rate of economic growth takes rise in debt (long-term). However, the outcomes were different in case of Pakistan, where inefficiency in operations and high leverage would enhance the bankruptcy chances for the firms in Pakistan. Through the above results it was concluded that in Japan and Malaysia, the important factor of credit was leading rate of lending. Moreover, the results showed that capital structure has influenced in all of these countries by the liberalization of finance.

In 2011, Hussain and Afza studied the capital structure's factors for various companies like electrical goods, cable, automobile and engineering. For leverage indicator, debt to assets ratio was chosen as an independent variable while others like non-debt tax shield, taxes, debt cost, assets tangibility, liquidity, profitability and company size were considered as dependent variables. Practically results had shown that accumulated earnings to fund the growth were preferred by the considerable depreciation allowances and sound liquidity. The debt was the other choice for growth financing and the last one was the equity financing. So these outcomes assisted the pecking order and trade-off theories.

2.3 Other Empirical Evidences

In 2012, Tamulyte has done a research on the influences of capital structure determinants of Russia and Baltic States (Latvia, Estonia, and Lithuania). Russia and Baltic states are those countries where evolution started with a planned market economy in 1990. During the study variables (Micro and Macro) in the time period of 2002 to 2008 it was observed that the influencing factors of the capital structure are similar to the most extent however, there few differences still exist in firms. During these years from 2002 to 2008, the average total leverage in both states, Russia and The Baltic States was almost same with an average of 19.6 percent of total leverage and when compared to the west or European countries the leverages are quite less than theirs. Total liabilities consist of the same proportions of both the short-term debt and the long-term debt. In total liabilities of Russia and Lithuania took an important part in case of long term debt and this long term debt is of so much significance in both Russia and Lithuania as it is tangible assets. This kind of tangible assets requires being updated and renovated time to time. Firms of Lithuania and Estonia actually finance due to their financial necessities through the trade credits that are easily available and are highly profitable. In a company related models or especially in long term leverage model, the only exceptional and influential factor was tangibility. However, in short term leverage models and in Baltic States, liquidity is a significant

determinant. The theory proposes that companies with less liquidity do not want to enhance debts and has a tendency to get lesser risks by achieving more trade credits and short term debt. Further, the long term debt is much expensive than the trade credits or debt that is shorter in term. Russian and Lithuanian companies follow footprints of pecking order theory in a way that in it the profitability is of a great significance when firms have a tendency to fulfill their financial needs by using their internally produced funds first. Newly generated firms are inclined towards taking more debt in Lithuanian and Latvian firms and age is also an influencing factor here. It is because of the deficiency of funds produced internally and inability to point out a problem to equity in stock exchange.

In 2009, Frank et al. paper emphasizes the comparative importance of the list of American companies (1950 – 2003) and influential determinants that influence the decision of these companies' capital structure. Expected inflation, median firm's leverage, records of assets and firm's tangibility are the most stable determinants for explicating leverage of the market and it retains positive influence on leverage. But the profits and the market ratio of book assets have a negative impact on it. Moreover, we observed that the companies with lower leverage are dividend paying companies and even when we consider the book leverage same thing happens i.e. low leverage. Market/book ratio, an effect of the size of the firm and the inflation effect are not dependable in case of book leverage.

Media and Fitim in 2009 have done research on 30 unlisted and 32 listed firms of Macedonia in almost 3 years of time. Practical outcomes related to the leverage a in compliance with hypothetical details given in earlier researches the theory base financial market's agency cost which was in doubt because it was in its early sta development. Firms desire to finance equity or they are inclined to use funds generated internally. Listed Macedonian firms relatively have a lower usag than the unlisted ones. In listed firms of Macedonia, company's growt shield tax, firm's size and firm's tangibility has no dependence on the

capital structure. However, non-debt shield tax and size of a company does not influence capital structure's decision in unlisted firms. In 2009, Caspedes et.al stated the company's behavior including seven countries in Latin America. They observed that companies occupying ownership favored finance equity because of the greater cost of bankruptcy and lesser shield tax.

In 2008, Jong et al. observed that bond market growth and other country related determinants like a right of the creditor's protection and GDP growth rate were in relevance to the ratio of equity debt. Even though various researchers have done research on the firms in developed countries and on their characteristics determining the preference of equity and debt, but a very small number of researches have been done in underdeveloped countries.

An investigation has been carried in 2007 by Amidu on the subtleties affecting the factors of Ghana bank's capital structure. Total debts/total capital (leverage), long term total debt/total capital (debt ratio long term) and total debt short term/ capital (debt ratio short term) are dependable factors mentioned in this research paper. Other variables that can be explained are growing sales, firm's size or tax, the structure of assets, risk and profitability. According to the "regression line model" used in this study, the outcome was an indirect link between leverage and profitability. The further results of the studies demonstrate that the level of internal finance increases with the increase in profits.

In 2007, Eriotis et al have collected samples of 129 listed companies of Greek and have led research by the procedure of panel data. With regards to various explanatory theories, characteristics of the firm are examined as the capital structure's factors. Through the results of the research, the proposition that came out is that the ratio of debt is dependent on firm's ratio of interest coverage, firm's growth, firm's size and quick ratio of the company. However, those companies are also very eminent, who are using more than half of the false variables to maintain their debt

ratio. The research outcomes prove that an indirect relation exists between company's growth and company's debt ratio, however, a positive relation exists among firm's size, the ratio of interest coverage and quick ratio. But those firms whose debt ratio increases from 50 percent in relation to those whose ratio of debt ranges below 50 percent, there comes a delineation in the structure of capital.

In 2005, Strebulaev and Kurshev have done an instinctive research regarding capital structure and the size of a company. It was found that practically both of them are positively and strongly related to each other. Through this research, one of the gaps has been removed and that is whether a constantly changing structure of capital can reveal the relationship between leverage and cross-sectional size of the firm. The existence of fixed cost for external financing is a dynamic force that makes infrequent rearrangement and yields wedge among different firm's sizes. There are four different company size effects found during the search that affects leverage. At refinancing time companies that are small tends to choose greater leverage but they have to wait for so long before the refinancing goes to the low leverage level. So it is been proved that size of the firm has a negative relation with leverage and vice versa.

Holmes and Cassar in 2003 conducted another research based on pecking order theory and trade off theory. The outcome of this research revealed that firm's debt-equity ratio is influenced by the firm's growth, its profitability and company's structure of assets. Firm's debt financing is not greatly affected by company's risk and size. However, the outcome is supporting the theories of agency cost, pecking order and trade-off. The results verified that these theories can be applied to all firm sizes, large, medium or small and mainly the research was conducted on Australian firms.

In 2002, Anderson discovered that choice of the firm for liquidity holding depends upon the relation between firm's growth and capital structure. Through this research that is based on sets of two-panel data, it was found that the high level of liquid assets depends on greater debts level. First panel data consist of listed

companies in the UK and the second one was comprised of listed companies of Belgium. However, the outcomes of the research on the companies of both countries showed the positive link between asset holdings and leverage.

In 1991, Raviv an Harris proposed that all the aforementioned theories supported the fact that size of firm, growth, tax shields and fixed assets help in increasing the leverage however, product's uniqueness, profit, bankruptcy, development and research costs, volatility and advertising cost tends to decrease the leverage. Wessels and Titman in 1988 proved that the outcome does not support the influence it has on the ratio of debt that happens with non-debt tax shields, growth in future, value cost and volatility.

In 1984, Bradley et al. combines an innovative matching theory casing 851 companies and which was based on optimal structure of capital. Non debt tax shield cost of agency, bankruptcy (financial distress cost), income bond, and personal positive taxes. Non debt tax shield and expected financial distress cost are not linked directly to the leverage of the optimum firm. According to this theory, variations in earnings of the company are inversely proportional to the leverage of the optimal firm when the expected cost in financial distress is important. From this theory many outcomes arise and the very first one is that 54 percent of the changes occurring in the leverage ratio of the company are greatly influenced by the existence of strong influence of a firm. The company's volatility explains inter and intra both changes occurring in the ratio of company's leverage and is also an inverse factor of company's leverage. Others like advertising cost or research and development expenditure also have negative relation with leverage. All the outcomes of this research are consistent. However, one of the outcome has contradicted the theory which is that amount of the non-debt tax shields is directly linked with the leverage of a company but in the theory it was proposed that both debt and non-debt tax shields are substitutes of each other and can be replaced.

In 1963, Miller and Modigliani stated that in the presence of corporate taxes, more and more debt finance should be used by the companies so that they can enhance the value of firm by increasing the interest tax shield. Both of them were hesitant while stating that in the ideal condition or perfect condition of market, the capital structure is insignificant, separated by the finance market without tax, similar expectations and no cost of transaction. On contrary to this there are many other works based on the imperfections of market that proposes that decisions of the capital structure are related because they greatly influence the wealth of shareholders.

2.4 Research Gap

Researchers have been debated on the factors that influence the capital structure for year and have determined numerous factors (Lima 2009; Shah & Hijazi, 2005; Deesomsak, Paudyal & Pescetto, 2004; Rajan & Zingles, 1995; Myers, 1977 and 1984). In this study, incorporation of diverse variables is taken in to consideration to examine the impact and degree of influence in a modified model. Consequently, to know about the national listed company's behavior, Pakistan has to be taken as an exceptional case. The emergence of markets in Pakistan is the key motivation to revisit some specific but new factors of capital structure. Extensive studies have been done on developed market's framework. However, more research on this issue in emerging economies with diverse and modified set of modeling still needs consideration.

CHAPTER 3

DATA AND METHODOLOGY

In this section of data and methodology, we have discussed data's type, data's source, size of the sample, description of variables both independent and dependent accompanying econometric tests and proper proxies.

For this study, panel data study will be used. From the secondary source, all of the variables data have been taken, for example, yearly financial reports. 344 firms listed on Pakistan Stock Exchange have been selected from diverse manufacturing sectors including automobiles, industrial engineering, cement, general industrials, oil & gas, food, pharmaceutical, personal goods, construction & materials and household.

3.1 Research Variables

3.1.1 Dependent Variables

Total debt ratio (TDR): A financial ratio that tells the company's assets percentage that are provided with the use of debt. Ratio can be calculated by dividing total debt to total assets.

$$TDR = \frac{Total\ Debt}{Total\ Assets}$$

Long term debt ratio (LTDR): A financial ratio that specifies the portion of a company's assets that is funded from long-term debt. The value (LTDR) varies from company to company. It is a healthier benchmark for contrasting with other industry peers. Long-term debt ratio is calculated by dividing long term debt to total assets.

$$LTDR = \frac{Long - Term\ Debt}{Total\ Assets}$$

Short term debt ratio (STDR): Short-term debt is a descriptive financial head shown in the company's balance sheet that includes any debt or repayments incurred that is payable within one year. The ratio is computed by dividing short-term debt to total assets.

$$STDR = \frac{Short - term\ Debt}{Total\ Assets}$$

3.1.2 Independent Variables

Profitability (PROF): Profitability means economic benefit that is realized when the revenue amount achieved from a business activity exceeds the costs, expenditure and taxes mandatory to withstand the activity. Profits can or cannot be spent on the business. Profitability ratio can be computed by dividing operating profit (EBIT) to total assets.

$$PROF = \frac{EBIT}{Total\ Assets}$$

Growth (GROW): Growth includes capacity new products, expansion plans, mergers and acquisitions, maintenance, and replacement of prevailing assets. Firms with high growth options decrease debt liability in their capital structure over a period of time. The proxy for growth factor can also be the percentage change of assets.

$$GROW = \%\Delta\ in\ Assets$$

Assets tangibility (TAN): Asset tangibility states all kinds of tangible assets for instance land, building and machines etc. that hold some amount of debt capacity. The formula for asset tangibility is the ratio of net fixed assets to total assets.

$$TAN = \frac{Fixed\ Assets}{Total\ Assets}$$

Cost of debt (COD): COD is the effective rate that a business pays on its existing debt. It can be computed either before or after-tax yields. The cost of debt can be measured by using interest before tax to long term debt.

$$COD = \frac{Interest\ Before\ Tax}{Long - term\ Debt}$$

Size (SIZE): The possibility of defaults for big organizations is less in comparison with smaller ones. Big organizations are more diversified and encompass more stable cash flow stream. Default risk is relatively low for big organizations. The proxy used for firm's size is the natural logarithm of its total assets.

Liquidity (LIQ): Liquidity means the ability to convert an asset into cash right away. It expresses the financial strength or weakness of the business. It can also be termed as "marketability". Liquidity is computed by dividing the current assets to the current liabilities.

$$LIQ = \frac{Current\ Assets}{Current\ Liabilites}$$

Tax rate (TAXR): A rate levied on the organization's profits by government. Different rates are used for different profits levels. Tax rate can be computed for each corporation by dividing its tax provision to profit before tax.

$$TAXR = \frac{Tax\ Provision}{Profit\ Before\ Tax}$$

- **Debt serving capacity (DSC):** Debt service capacity means that a business can meet its interest obligation even if EBIT experiences a considerable drop. In other words, the greater the debt coverage, the higher will be the debt component in the financial structure of the company. So, the capability of a company's borrowing will

be directly proportional to its capability to honor its fixed payment obligation. Proxy relating to debt serving capacity is the ratio between EBIT to total interest.

$$DSC = \frac{EBIT}{Total\ Interest}$$

3.2 Econometric Model

To explain the explicit relationship between variables econometric model is used. It is kind of rough image of some situation in economic reality. The aim of this research is to identify the elements taken into consideration by companies in order to take decision in financial matters. The research hypothesis mentioned above can be better analyzed by describing the research purposes in three econometric models. The sample size consists of 334 listed firms on Pakistan Stock Exchange, including automobiles, industrial engineering, oil & gas, general industrials, food, cement, personal goods, construction & materials, pharmaceutical and household and they all were selected from various sectors of manufacturing. There are three variables that are dependent i.e. long-term debt, short-term debt, total debt and eight variables that are independent i.e. profitability or growth, tangibility, size, debt cost, liquidity, tax rate, service ratio of debt. Purpose has been bifurcated into models as under:

3.2.1 Model 1: Listed Firms and Total Debt: To identify the impact of each independent variable while raising total debt.

$$TDR_{it} = \alpha + \beta_{1it}GROW + \beta_{2it}PROF + \beta_{3it}SIZE + \beta_{4it}TAN + \beta_{5it}TAXR + \beta_{6it}LIQ + \beta_{7it}COD + \beta_{8it}DSC + \mu_{it}$$

3.2.2 Model 2: Listed Firms and Short-Term Debt: To identify the impact of each independent variable while raising short-term debt.

$$STDR_{it} = \alpha + \beta_{1it}GROW + \beta_{2it}PROF + \beta_{3it}SIZE + \beta_{4it}TAN + \beta_{5it}TAXR + \beta_{6it}LIQ + \beta_{7it}COD + \beta_{8it}DSC + \mu_{it}$$

3.2.3 Model 3: Listed Firms and Long-Term Debt: To identify the impact of each independent variable while raising long-term debt.

$$LTDR_{it} = \alpha + \beta_{1it}GROW + \beta_{2it}PROF + \beta_{3it}SIZE + \beta_{4it}TAN + \beta_{5it}TAXR + \beta_{6it}LIQ + \beta_{7it}COD + \beta_{8it}DSC + \mu_{it}$$

Before moving towards the analysis of data we will do descriptive analysis. Three main models are included in first generation panel data econometrics. The researcher will get a balanced coefficient matrix and the model will be known as a classical linear model if a constant term is used in an original model, therefore this analyzing method is considered as pool least square. Moreover, the effects will be given importance only if the results have cross-sectional heterogeneity. Two of the models comprise these effects. Firstly, here comes a random effects model that assesses the coefficient matrix and proposes that variables that are independent have no relation with individual effects. However, the other model is fixed effects model in which there is a variation in cross-sectional heterogeneity or in other words it's not constant. But these individual elements are restricted with time. In order to find the best model to be applied Haussmann (1978) test will be used.

CHAPTER 4

RESULTS AND DISCUSSION

This section of the research work describes descriptive statistics summary, regression analysis and discussion of the results. Firstly, descriptive analysis has been carried out in order to illustrate the indispensable features of the data in a research work. It unfolds an approximate picture of data by presenting quantitative descriptions in a manageable structure. It presents the data in a more meaningful way, which allows simpler interpretation of the data. In descriptive analysis, standard features have been taken i.e. mean, standard deviation, minimum and maximum.

4.1 Descriptive Analysis

Table 4.1: Descriptive Analysis

Variables	Obs.	Mean	Std. Dev.	Min	Max
TDR	3674	10.0119	8.5340	0.6491	18.9362
LTDR	3674	4.4389	5.6146	0.1356	11.9406
STDR	3674	5.8514	6.5487	0.5250	18.7090
PROF	3674	0.2911	0.8098	-0.1313	2.8449
GROW	3674	0.3078	0.3385	0.0657	1.2592
TAN	3674	0.5759	0.0312	0.5261	0.6156
SZ	3674	14.5118	0.1869	14.0814	14.7447
LIQ	3674	2.2263	0.9678	1.2914	4.3020
COD	3674	2.3867	2.7329	0.4205	10.1869
TAXR	3674	0.3393	0.4341	-0.1777	1.5229
DSC	3674	-45.2867	97.5142	-248.8034	60.9837

According to the results of descriptive analysis, 3674 observations have been used in a sample 334 listed firms. Mean values shows the center the data for all variables. Standard deviation shows the spread of data from its mean value. Higher the value of standard deviation, higher will be the spread of the data from its mean. In the above result standard deviation, most of the observations spread are within 3 standard deviations on each side of the mean so; it may be termed as normal spread.

Above table shows that there are negative values at minimum values representing that some companies have operated with losses during the period 2004-2014.

4.2 Regression Analysis

Regression analysis tells how one attribute varies quantitatively as another changes one unit. It is performed based on the calculation and evaluation of the regression coefficients. Regression analysis is an important tool to identify the existence of relationship and its nature among variables. In order to estimate the effects of the independent variables on the dependent, we consider the two different econometric approaches as discussed in the previous chapter.

In panel data analysis, cross-sections combined with time series data so there might be the effects of cross-section on each firm. To deal with this, two approaches fixed and random effects are used. In random effects model, there are three assumptions regarding cross-sectional effects. A first assumption is the existence of individual or group effects, second assumptions is that those effects are uncorrelated with the predictors and the third assumption is that the effects can be formulated. If we relax the last two assumptions/restrictions, it will be termed as fixed effects model.

According to our initial findings, there was a contradictory results relating to liquidity variable. The fixed effects model accepts this variable but random effects model does not. This kind of controversial outcome leads to further analysis. As it has already been discussed that random effects model assumes the effects are uncorrelated with the predictors. Hence, it results in inconsistency might be due to omitted variables that does not happen in fixed effects models as it includes the individual effects as provided by the sample. For this, Hausman test is needed to see whether or not the individual effects are uncorrelated. In the present analysis, while using

Hausman test the result is significant. Hence, accepting the alternate hypothesis by choosing fixed effects model, as the best model in the present situation.

Table 4.2: Results of Regression Analysis for Listed Companies on PSE.

Listed Companies on PSE			
Variables	**Short-term Debt Ratio**	**Long-term Debt Ratio**	**Total Debt Ratio**
PROF	-1.437 (0.0000)	-0.1112 (0.0000)	-1.2874 (0.0000)
GROW	-19.324 (0.0000)	24.1223 (0.0000)	3.5075 (0.0000)
TAN	-139.6381 (0.0000)	-67.177 (0.0000)	-203.8178 (0.0000)
SZ	-33.0003 (0.0000)	28.0931 (0.0000)	-6.3777 (0.0000)
LIQ	-0.0057 (0.9640)	-2.3907 (0.0000)	-2.2575 (0.0000)
COD	3.8890 (0.0000)	3.1367 (0.0000)	0.8928 (0.0000)
TAXR	-7.6336 (0.0000)	-0.5708 (0.0000)	-7.9915 (0.0000)
DSC	0.0281 (0.0000)	0.01197 (0.0000)	0.0165 (0.0000)
CONS	562.7196 (0.0000)	-369.0463 (0.0000)	213.3001 (0.0000)
R^2 (Overall)	0.9076	0.9963	0.9415
Prob>F	0.0000	0.0000	0.0000

PROF: Profitability; GROW: Growth; TAN: Assets tangibility; SZ: Size; COD: Cost of debt; LIQ: Liquidity; TAXR: Tax rate; DSC: Debt serving capacity.
The table reflects standardized coefficients and values in parentheses represent P-values. Level of significance is 5%.

The above table is a summary of all the three models. Table includes coefficient values of all the research variables along with probability values (in round brackets). The above predicted values not only show the relationship with the dependent variable but also the nature of their association. The most important and paramount thing in the analysis is, all the variables are highly significant in confidence level of 5 per cent. R square value is also noteworthy. Overall R square value of model one tells that independent variable explains more than 90 percent of the size in short-term debt ratio while model two and three show 99 and 94 percent respectively. Overall power of the model is represented by Prob>F which is also very significant.

4.3 Discussion of Results

Under this heading, findings of the analysis have been analyzed in the light of theoretical and empirical evidences. Let's start with first variable growth. As per Myers (1977) view; later on Onofrei, Tudose, Durdureanu & Anton (2015) explaining the agency cost theory, companies having high growth chances are more likely to use equity financing as high levered company is probably pass up lucrative investment chances. Huang and Song (2002) favoring the view of Myers (1977) claim that such investments transfer wealth from owners to debt holders. Hence, a negative relation with leverage and growth is predicted. Another instance of having such a negative relation is that according to Rajan and Zingales (1995), theory forecasts that firms having high market to book ratios have greater costs of financial distress. On the other hand, firms having high growth chances, whose estimation purely depends on expected earnings and intangible assets, do not seemingly finance their projects by allotting debt as they have high cost of financial distress and in the event of bankruptcy; their intangible assets have no value. Under these conditions, firms avoid to issue equity because much of the value created by investment would be used to offset the creditors' position (underinvestment problem). Pecking order theory proposes a positive association between leverage and growth, acknowledging that capital structure originates from asymmetric information accessible to investors and managers. The theory works on the assumption that managers are rational, but not certainly opportunistic (Kayo and Kimura, 2011). In the present analysis, short-term debt ratio results are consistent with Huang and Song (2002), Myers (1977) and Rajan and Zingales (1995). In case of long-term debt and total debt ratios results are consistent with (Kayo and Kimura, 2011), Alves and Ferreia (2011) and Fama and French (2002).

Second Variable is profitability. Theoretically, no consistent predictions are present on the effects of profitability on leverage. According to trade-off theory, companies with higher level of profits have higher level of leverage as they have more earnings for tax shield. In the view of pecking order theory, firms prefer internal financing to external financing. So, more profitable companies have lower leverage as they have a lower need for external financing. Results of current study are consistent with (Huang – Song, 2002), (Booth et al., 2001), (Titman – Wessels, 1988), (Friend – Lang, 1988), (Kester, 1986) and (Rajan – Zingales, 1995).

Third variable is size. As per the theoretical view, relationship between size and leverage is ambiguous. According to Rajan and Zingales (1995) big firms are more diversified and possess small chance of failure. If this is the situation then size has a positive influence on debt supply. In other words, size can have negative effect if it serves as a proxy for the information the outside financiers possess who may change their preference towards equity rather than debt. Long-term debt ratio results are consistent with Rajan and Zingales (1995), Song (2002), and Friend and Lang (1988) while short-term debt ratio and total debt ratio results are consistent with (Kester, 1986), (Kim – Sorensen, 1986) and (Titman – Wessels, 1988).

Fourth variable is tangibility. Generally, there exist a positive relation among tangibility and leverage. It is because of firms having huge share of fixed assets also possess increased level of borrowing. Numerous studies like Titman and Wessels (1988), Rajan and Zingales (1995), and Booth et al (2001) show a positive relation among tangibility and leverage. Tangibility is predominantly significant if the company is facing financial constraints, limiting its access to outside resources then tangibility is less important. As a result of ample tangible assets, companies also have to record higher provisions of depreciation funds creating a boost in available funds

for internal financing. In the current particular case, there is a negative relationship between asset tangibility and leverage in all the three models. Results are consistent with Almeida and Campello (2007) and Alves and Ferreia (2011),

Fifth variable is tax rate. As per trade-off theory, a higher tax rate uses more debt and hence has higher leverage as it possess more earnings for tax shield. Fama and French (1998) say that debt has not net benefits. Even MacKie-Mason (1990) claims the same that tax is important in financing decisions but empirically little support is found. The results of all three models of the present study are consistent with MacKie-Mason (1990) and Fama and French (1998) studies.

Sixth variable is cost of debt. It is said that like common equity, cost of debt is positively associated to leverage; higher the use of debt financing, greater will be the cost of debt (Gapenski, 1987). Results are consistent with Gapenski (1987).

Seventh variable is liquidity. Eriotis, Vasiliou & Ventoura-Neokosmidi (2007) show that there exist a negative association between liquidity and leverage because more debt the company utilizes the greater will be the liabilities and less assets will remain subsequently paying off the liabilities. A firm uses more assets means that it is generating more internal inflows which can further be used in investment and operating activities. Lipson and Mortal (2009), if a negative relation confirms in the model it means that firm is following the "pecking order" financing pattern. In the present analysis, firms are following pecking order financing pattern in all three models. Results are consistent with Eriotis, Vasiliou & Ventoura-Neokosmidi (2007) and Lipson and Mortal (2009).

Eighth variable is Debt serving capacity. Yadav (2014) claim that higher the level of debt coverage, the greater will be like hood of companies having a higher

level of debt components. The firm's borrowing capacity is directly proportional to its capacity to release its permanent obligations. The results of all three models of the present study are consistent with Yadav (2014).

4.4 Research Limitations

The aim of this research work is to be as extensive as possible. The study has included more companies as compared to previous researches but still the research work is limited to manufacturing sector of Pakistan. Due to non-availability of appropriate data of other sectors it is very difficult to include all of them in one study. In other words, the fewer number of companies listed at PSE as compared to a developed market is an inherent limitation that this study has faced. Many firm's characteristics have also been ignored due to unavailability of data.

level of debt components. The firm's borrowing capacity is directly proportional to its capacity to release its permanent obligations. The results of all three models of the present study are consistent with Yadav (2014).

4.4 Research Limitations

The aim of this research work is to be as extensive as possible. The study has included more companies as compared to previous researches but still the research work is limited to manufacturing sector of Pakistan. Due to non-availability of appropriate data of other sectors it is very difficult to include all of them in one study. In other words, the fewer number of companies listed at PSE as compared to a developed market is an inherent limitation that this study has faced. Many firm's characteristics have also been ignored due to unavailability of data.

CHAPTER 5

CONCLUSION

Results provide a better understanding of financing behavior in national listed firms during 2004-2014. All the 3 models with dependent variables; total debt ratio, short-term debt ratio and long-term debt ratio and independent variables; growth, tangibility, profitability, cost of debt, tax rate, liquidity, size, and debt service capacity represent significant relationship.

Summing up the results, in short-term debt ratio model, growth has negative relation while in case of long-term debt ratio and total debt ratio relation is positive. Profitability variable shows a negative relation in all three models. Size variable in the model show a positive relation in long-term debt ratio model while negative relation in total debt ratio and short-term debt ratio model. In case of tangibility and tax rate variable, there is a negative relationship of asset tangibility and tax rate with leverage in all the three models. Cost of debt and debt servicing capacity variable has positive relation with leverage. In case of liquidity, firms are following pecking order financing pattern in all three models confirming negative relation in all three models.

Management of capital structure therefore turns out to be a balancing act. The trade-off a firm makes among fiscal discipline and monetary flexibility is the paramount consideration in defining the choice of its capital structure and offsets any tax benefits, these are mostly trivial things for the big firms unless they possess a very level of low debt. Companies having foreseeable and steady money streams and additionally small investment chances must include more proportion of debt in their capital structure, as debt introduces the element of discipline via obligatory nature of deadlines and therefore, loan may act as a barrier to limit excessive spending in an

organizational context. Organizations that face high vulnerability in light of overwhelming development or ventures with recurring nature should bring small proportion of debt, so they possess enough flexibility in order to exploit investment chances or to manage undesirable events.

This present research work distinguishes itself from all the previous studies with the inclusion of crucial variables for instance cost of debt, liquidity, debt serving capacity that have not been taken in to consideration earlier in research papers specifically in the context of Pakistan.

5.1 Policy Implications

- Research implications of this study are relevant to financial managers, mutual funds managers, investors, and academia.
- Results add in the capital structure literature of emerging markets in general and Pakistan in particular.
- Finding suggests that all the three modified models apply to an emerging market like Pakistan Stock Exchange.
- This will further open future areas for the scholars' interest in capital structure of emerging economies.

5.2 Future Directions

For future directions, one can study numerous macro-economic aspects that may or may not affect the decisions of capital structure. It may include factors like development of stock market, financial distress, corporate tax, capital formation, FDI etc. Scholars having extended timeline datasets can make a good model with the inclusion of additional company specific factors for instance collateral value factor, uniqueness factor, discount rates, carry forwards, etc. Though, discussed factors are

not considered as core factors in the decisions of financial structure but these factors have been presented to have effects in former studies of developed nations. Researchers may use this research work to make robust models for further study into the determinants of capital structure for emerging economies.

REFERENCES

Almeida, H., & Campello, M. (2007). Financial constraints, asset tangibility, and corporate investment. The Review of Financial Studies, 20(5), 1429-1460.

Amidu, M. (2007). 'Determinants of Capital Structure of Banks in Ghana: an empirical approach'. Baltic Journal of Management, 2(1), 67-79.

Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. Journal of multinational financial management, 14(4), 387-405.

Eriotis, N., Vasiliou, D., & Ventoura-Neokosmidi, Z. (2007). How firm characteristics affect capital structure: an empirical study. Managerial Finance, 33(5), 321-331.

Frank, Murray, and Vidhan K.Goyal, 2009. "Capital structure decisions: Which factors are reliably important?"' Financial Management 38, 1-37.

Gapenski, L. C. (1987). An empirical study of the relationships between financial leverage and capital costs for electrical utilities (Doctoral dissertation, University of Florida).

Harris, M. and A. Raviv, 1991, "The theory of capital structure," *Journal of Finance* 46, 297-56.

Kayo, E. K., & Kimura, H. (2011). Hierarchical determinants of capital structure. Journal of Banking & Finance, 35(2), 358-371.

Lipson, M. L., & Mortal, S. (2009). Liquidity and capital structure. Journal of financial markets, 12(4), 611-644.

Miller, M.H. (1977), ''Debt and taxes'', Journal of Finance, Vol. 32, pp. 261-76.

Modigliani, F. and Miller, M. (1958). The cost of capital: A correction. American Economic Review, 48(3), 261-97.

Modigliani, F. and Miller, M. (1963), "Corporate income taxes and cost of capital: A Correction". American Economic Review, Vol. 53, pp 443-53.

Onofrei, M., Tudose, M. B., Durdureanu, C., & Anton, S. G. (2015). Determinant factors of firm leverage: An empirical analysis at Iasi county level. Procedia Economics and Finance, 20, 460-466.

Stewart C.M. (1984). 'Capital Structure Puzzle'. *The Journal of Finance*, Vol. 39, No. 3, Papers and Proceedings, Forty-Second Annual Meeting, American Finance Association, San Francisco, CA, pp. 575-592.

Titman, S. and R. Wessels, 1988, "The determinants of capital structure choice," *Journal of Finance* 43, 1-21.

Yadav, C. S. (2014). Determinants of the capital structure and financial leverage: evidence of selected Indian companies. Asia Pacific Journal of Research, 1(12), 121-130.