# RESEARCH BASED APPROACH TO CAPITAL STRUCTURE-Pharmaceutical Sector

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## PREFACE

The capital structure of a company is the mixture of stock, debt, and hybrid securities that it employs to fund its assets for long-term investment decisions in order to optimize the firm's value. Thus, capital structure decisions are among the most crucial for any business since they impact the business's worth. Traditionally, corporate finance entails three critical considerations. There are three types of capital budgeting decisions: capital structure decisions, capital budgeting decisions, and working capital management decisions. Considering essential and essentially permanent long-term funding of a business is one of these three capital structure considerations. Moreover finance is the lifeblood of businesses. Financial management tasks include investment decisions, financing decisions, and dividend decisions to meet financial management objectives such as wealth maximization and shareholder value creation. Despite a plethora of studies focused on the most important drivers of capital structure, there is still disagreement over which factors have a major impact on a firm's capital structure. The capital structure of a company refers to the many choices it has for funding its assets. A company's capital structure is a specific mixture of debt, stock, and other forms of money that it employs to fund its long-term assets. The primary distinction in capital structure is that between debt and equity.

This book is presented in five chapters followed by annexures and bibliography.

Chapter 1: This chapter is about introduction to pharmaceutical industry of india and Gujarat as well. The chapter also introduces to theoretical framework of capital structure. The theories of capital structure referred are the trade-off theory, the agency theory, the signalling theory, the pecking order theory, contracting cost theory.

Chapter 2: This chapter is about literature review. In this chapter the literature is sufficiently reviewed. The researcher has reviewed more than 200 research papers, 9 books and sufficient number of articles and other resources like online articles, websites

etc. The researcher has done satisfactory amount of literature review which is amptly reflected in the chapter.

Chapter 3: This chapter is about research methodology. In this study, researcher has considered the following variables: Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio. The CR and the working capital ratio are used throughout this study to assess a firm's liquidity. In this study to calculate growth opportunities, sales growth is used, which is determined by subtracting current-year sales from previous-year sales and dividing the result by previous-year sales. Researchers employs the effective tax rate, which is computed as the ratio of taxes paid to earnings before taxes. The firm size has been identified using log of sales. Asset structure of companies have been identified using the ratio of fixed assets to total assets. Profitability has been assessed by employing earning after tax to net sales. Asset utilization ratio is computed in this study by dividing sales by total asset. Debt equity ratio shows the relation between total liabilities and total equity. The inventory turnover ratio is the number of times a company has sold and replenished its inventory over a specific amount of time has been found. Debtors turnover have been calculated using the debtor, bills receivable and sales, while creditors ratio have been found using the creditors, Bills payable and credit purchase of companies. Cash, bank and other marketable securities to net sales is considered in study.

The study consists of primary and secondary data. The researcher has taken Convenience snowball technique for primary data and descriptive research design has been employed for secondary data. The researcher has tried to understand the variables affecting capital structure, the impact of capital structure variables on profitability.

The researcher has extracted data from reputed databases viz Capitaline and Prowess. Multiple Regression Analysis technique was used to study the relationship of independent variables with dependent variable. SPSS tool has been used by researcher for analysis of data. The researcher has tested eleven hypothesis of research.

Chapter 4: This chapter is about data analysis and Interpretation. The researcher has divided data in two parts. The companies having turnover of Rs. 1000 crore or more and less than Rs. 1000 crore. The analysis has been done by using tables of coefficients, ANOVA and Descriptive statistics. The table 1 and 4 depicts the standardised regression co-efficients of independent variables with associated values. Table 2 and Table 5 depicts F-test while table 3 and table 6 provides mean and standard deviation. The researcher has also made a comparative analysis of all variables of both parts. The analyses and interpretation of primary data are depicted from table 7 to table 11. The primary data reliability test has been conducted using chronbach Alpha.

Chapter 5: The thesis end with chapter number five which is Major findings, Future Research Direction and Conclusion. Which includes major findings from primary as well as secondary data. The future research direction is also mention in this chapter.

## ACKNOWLEDGEMENT

Achievement or accomplishment of a task always depends on the commitment of an individual, and the help and support of others complementing it. A comprehensive book on Research Based Approach to Capital Structure - Pharmaceutical Sector cannot be written without the guidance of experts in the field. We gratefully acknowledge their help which was of immense use.

Our whole hearted and deepest thanks go to our parents and family members, who have given us everything and from whom we have learned the value of life, the meaning of hard work and perseverance.

We also take this opportunity to the known and unknown friends and researchers who contributed one or the other way in this endeavor. Last but not the least without the blessings of the god almighty this attempt would not have seen the light of the day. We sincerely acknowledge everyone mentioned above for their immeasurable contribution for our efforts.

Dr. Ashwin H. Parwani Dr. Ashvin R. Dave Dr. Ashish B. Joshi

## Table of Contents

Preface Acknowledgement Table of Contents		IV-VI VII VIII-IX			
			CHAPTERS	CHAPTER NAME	PAGE NO.
			CHAPTER-1	INTRODUCTION	1 - 4
	1.1.0 Overview of Pharmaceutical Industry of India				
	1.2.0 Overview of Pharmaceutical Industry of Gujarat				
	1.3.0 Theoretical framework of Capital Structure				
	1.4.0 Theories Of Capital Structure				
	1.4.1 The Trade-off Theory 1.4.2 The Agency Theory				
	1.4.3 The Signalling Theory				
	1.4.4 The Pecking order Theory				
	1.4.5 Contracting Cost Theory				
CHAPTER- 2	LITERATURE REVIEW	5 - 26			
	2.1.0 Literature Review	0 20			
CHAPTER- 3		27 - 34			
	3.1.0 Focus				
	3.2.0 Variables				
	3.2.1 Current Ratio				
	3.2.2 Sales Growth Ratio				
	3.2.3 Effective Tax Rate				
	3.2.4 Firm Size				
	3.2.5 Asset Structure				
	3.2.6 Profitability				
	3.2.7 Asset Utilization Ratio				
	3.2.8 Debt Equity Ratio				
	3.2.9 Inventory Ratio				
	3.2.10 Debtor Ratio				
	3.2.11 Creditor Ratio				
	3.2.12 Cash, Bank and other Marketable Securities/Sales				
	3.3.0 Research Design				
	<ul><li>3.4.0 Research Objective</li><li>3.5.0 Period of Study</li></ul>				
	3.6.0 Data Collection				
	3.6.1 Criteria				
	3.6.2 Type and Nature of Data				
	3.6.3 Data Collection tools				
	3.7.0 Data Analysis				
	3.8.0 Hypothesis of the Study				
	· · · ·				

#### CHAPTER- 4 DATA ANALYSIS AND INTERPRETATION

- 4.1.1 Part A- Results and discussions of Companies having turnover Above Rs.1000 crore.
- 4.1.1 Part B Results and discussions of Companies having turnover below Rs.1000 crore.
- 4.2.0 Comparative analysis of Part A and Part B
- 4.3.0 Analysis and Interpretation of Primary Data

#### CHAPTER- 5 MAJOR FINDINGS, FUTURE RESEARCH 46 – 62 DIRECTION AND CONCLUSION

- 5.1.0 Findings from Secondary Data
- 5.2.0 Findings from Primary Data
- 5.3.0 Future Research Direction
- 5.4.0 Conclusion

35-45

#### CHAPTER - 1

#### INTRODUCTION

#### 1.1.0 Overview of Pharmaceutical Industry of India

The Indian pharmaceutical industry supplies more than half of the world's demand fordifferent vaccines, 40% of generic demand in the United States, and 25% of all medications in the United Kingdom. India supplies the world's second-largest share of pharmaceutical andbiotech workers. The domestic market is anticipated to triple in the next decade, according to the Indian Economic Survey 2021. The domestic pharmaceutical industry in India is predicted to be around US\$ 41 billion in 2021, rising to US\$ 65 billion by 2024 and expected to reach US\$ 120-130 billion by 2030.

Globally, India ranks third in terms of pharmaceutical output by volume and fourteenth in terms of value. The domestic pharmaceutical sector is comprised of 3,000 pharmaceutical firms and nearly 10,500 production units.Indian medicines are sold to over 200 nations worldwide, with the United States being the most important market. Generic pharmaceuticals account for 20% of worldwide export volume, making the country the world's largest exporter of generic pharmaceutical exports were US\$ 16.28 billion, comprising bulk medicines, intermediates, drug formulations, biologicals, Ayush& herbal goods, and surgicals. In FY21, India's medicine and pharmaceutical exports were US\$ 22.15 billion (until February 2021). The medical device business in India has been developing at a rate of 15.2 percent per year and is anticipated to reach \$8.16 billion by 2020 and \$25 billion by 2025.

The Government's Department of Pharmaceuticals' 'Pharma Vision 2020' seeks to make Indiaa significant centre for end-to-end drug research. Between April 2000 and December 2020, the Indian medicines and pharmaceuticals sector received a total of US\$ 17.75 billion in FDI inflows. To achieve self-sufficiency and reduce reliance on imports for the country's essential bulk drugs, the Department of Pharmaceuticals launched a PLI scheme to promote domestic manufacturing by establishing greenfield plants with minimal domestic value addition in four distinct "Target Segments" with a total outlay of Rs. 6,940 crore (US\$ 951.27 million) from FY21 to FY30.

The Ministry of Health and Family Welfare has been allotted Rs. 73,932 crore (US\$ 10.35 billion) in the Union Budget 2021-22, while the Department of Health Research has been allotted Rs. 2,663 crore (US\$ 365.68 billion). The 'National Health Mission' received Rs. 37,130 crore (US\$ 5.10 billion) from the government. The Prime Minister's AatmanirbharSwasth Bharat Yojana has been given Rs. 64,180 crore (US\$ 8.80 billion) for a six-year period. The Ministry of AYUSH received Rs. 2,970 crore (US\$ 407.84 million), an increase from Rs. 2,122 crore (US\$ 291.39 million).By 2023, India intends to establish a fundof roughly Rs. 1 lakh crore (US\$ 1.3 billion) to assist firms in manufacturing pharmaceutical ingredients in India.

#### 1.2.0 Overview of Pharmaceutical Industry of Gujarat

Gujarat has a significant number of small and medium production units and is a powerful pharmaceutical manufacturing center. The rich supply base of active pharmaceutical ingredients has drawn many international players to set up facilities in Gujarat, such as Wyeth, Sanofi-Aventis and Abbott. Around Ahmedabad, Baroda, and Vapi, there are several pharma clusters. More than 300 major projects in the sector have already been approved, while more than 100 are in the process of being implemented.

About 3,500 medication processing units exist. Several existing firms, such as Torrent Pharma, ZydusCadila, Alembic Pharma, Sun Pharma and Dishman Pharmaceuticals, have operations in

major pharmaceutical markets around the world. India's only chemical port terminal with a capacity of 3 million metric tonnes is also housed in Gujarat.

This could make Gujarat a good sourcing center for global pharmaceutical firms, which is an imperative for economic growth and state development to ensure strict adherence to pollution control requirements in the chemical industry. The turnover of Gujarat's pharmaceutical firms around RS.12000 to 14000 crore per year, one third of which is for exports.

Pharmaceutical has emerged as one of the Indian industry's leading industries with the domestic sector displaying unparalleled market turnover growth hitting Rs 1.4 lakh crore (US\$ 20.03 billion) in 2019, up 9.8 percent y-o-y from Rs 129,015 crore (US\$ 18.12 billion) in 2018. Thanks to the increase in pharmaceutical outsourcing and the restructuring of a highly fragmented market, the Indian pharmaceutical industry is expected to show double- digit growth in the near future.

In Gujarat, by purchasing foreign companies and properties, the industry has clearly pushed toward export-led growth and followed the inorganic path. Through acquisitions of foreign assets or pushing export-led market growth models, pharmaceutical companies in Gujarat have dramatically developed and taken steps towards globalization, reflected in Gujarat's growing share of Indian pharma exports as well as industry turnover.42 per cent of India's pharmaceutical turnover and 22 per cent of exports are regulated by the Gujarat.

Any business needs money to develop, to expand and also to thrive. Significant expenditures for heavy equipment and research and development are borne in the pharmaceutical field, as these two are the center of the business. This industry needs a massive amount of money, which is usually used to purchase large-scale and valuable yet expensive machinery. There are two sources of collecting funds that are used for the purpose set out above. It is possible to raise funds either through venture capital or public debt. If the share capital and public debt combination is followed by the company, we may claim the company is a leveraged company. So this mixture is significant from the point of view of financing the capital structure.

#### **1.3.0** Theoretical framework of Capital Structure

The capital structure of a company is the mixture of stock, debt, and hybrid securities that it employs to fund its assets for long-term investment decisions in order to optimize the firm's value. Thus, capital structure decisions are among the most crucial for any business since they impact the business's worth. Traditionally, corporate finance entails three critical considerations. There are three types of capital budgeting decisions: capital structure decisions, capital budgeting decisions, and working capital management decisions. Considering essential and essentially permanent long-term funding of a business is one of these three capital structure considerations. Moreover finance is the lifeblood of businesses. Financial management tasks include investment decisions, financing decisions, and dividend decisions to meet financial management objectives such as wealth maximization and shareholder value creation. Despite a plethora of studies focused on the most important drivers of capital structure, there is still disagreement over which factors have a major impact on a firm's capital structure. The capital structure of a company refers to the many choices it has for funding its assets. A company's capital structure is a specific mixture of debt, stock, and other forms of money that it employs to fund its long-term assets. The primary distinction in capital structure is that between debt and equity. Gearing or leverages are used to calculate the proportion of loan funding. There are several elements that influence a company's capital structure, and a company should push itself to identify what its finest, or best, combination of funding is. Capital structure should be assessed in terms of its influence on the firm's value. In other words, the optimal capital structure is a mixture of debt and equity that maximizes the firm's value. The capital structure of a firm affects its value by influencing either its projected earnings or its cost of capital, or

both.Several experts have described the theoretical link between capital structure, total cost of capital (k), and firm valuation, including Modigliani and Miller (1958)[1], Gordon Donaldson (1961)[108] and Jensen and Meckling (1976)[109].

#### **1.4.0 THEORIES OF CAPITAL STRUCTRE**

#### **1.4.1** The Trade-Off Theory

Managers strive to measure the benefits of interests tax deductions against the current value of the prospective expenses of a financial meltdown.(Myers, 2001)[110]. This concept came from (Kraus and Litzenberger's,1973)[111] study, which formally combined the interest tax shields debt - related and the consequences of financial hardship into a state preferential mode. The theory of trade-off, as per view of(Chakraborty, 2010)[112], legal and administrative fees spent by a bankrupt firm are examples of direct costs of bankruptcy. The indirect expenses, on the other hand, are related to the loss in the firm's market value as a result of the firm's failure to fulfil its loan commitments.

According to most research, Businesses with a higher proportion of non-debt tax shelters have a higher proportion of debt in their capital structure.

#### **1.4.2** The Agency Theory

Myers (1977) mentions potential agency cost of debt. He observes that when a firm is on the verge of collapse, there is little motivation for shareholders to spend more stock money, even if projects with a positive NPV are available. This is due to the fact that the value produced by the projects will predominantly benefit the loan holders. As a result, large debt may prevent value-added investments from being made. [127].

According to Stulz (1990), debt payments can have an impact on shareholders both favourably and adversely. Loan payments, on the other hand, require managers to pay interest, which decreases the danger of capital investments [128].

#### **1.4.3** The Signalling Theory

The signalling theory arose as a result of information asymmetry between company management.as well as stockholders Managers will issue stock if they feel their companies are undervalued. Debt is issued first, with equity coming in as a last resort. If, on the other hand, management believes that their firm is expensive, they will first issue shares. Ross (1977) created the signalling hypothesis, which states that if management has inside knowledge, its financing decisions would communicate that understanding to the markets. The hypothetical premise that debt grows may have an influence on leverage, indicate that management are optimistic about future profitability. Managers enter into debt arrangements to commit to making interest expenses in the future. Insolvency may come from failure to repay the debt. This offers the confidence in the market that the company will be able to pay its debts [137].

Smith (1986) experimentally examines the signalling hypothesis and discovers a 3% drop in the share price of businesses that announce fresh stock offerings. In contrast, there was a minimal drop in share values following the announcement of debt issuances. Furthermore, debt rises were related with a 14 percent increase in share price returns for debt for equity substitutes.

Businesses whose earnings rose the next year are classified as undervalued, whereas firms whose earnings dropped the next year are classified as overpriced, according to Barclay, Smith, and Watts (1995) [135]. They discover a substantial relationship between Debt and unexpected earnings.

#### **1.4.4** The Pecking Order Theory

This theory was proposed by Majluf [101] by proving that Investors frequently view a share issuance adversely. This is due to the fact that management likes to issue shares when they are

expensive. Simply expressed, the pecking order hypothesis posits that a company should issue debt rather than equity in order to avoid the information repercussions of new share issuance. This estimate is based on the managers' belief that their company's stocks are undervalued.

This is because management tends to issue shares when they are pricey. Simply expressed, the pecking order hypothesis posits that a company should issue debt rather than equity in order to avoid the information repercussions of new share issuance. This estimate is based on the managers' belief that their firm's stocks are undervalued. When the firm's cash reserves run out, it may issue debt. When issuing more debt no longer makes sense, stock might be offered as a last resort funding option.

Seifert and Gonenc (2010) regress net debt problems for companies in 23 emerging market nations on a financial deficit variable. They come to the conclusion that pecking order financing is common only in emerging economies with knowledge asymmetry and increased agency costs. The study provides credence to the idea because market circumstances have an impact on financial management practices in which companies operate[142]. Furthermore, (Bessler and Drobetz, 2011) explore the influence of information asymmetry on company funding decisions, and come to the conclusion that asymmetry of information is the primary driver of dynamical pecking order behaviours. It has been demonstrated that the chance of issuing equity increases with fewer knowledge asymmetries [143].

According to the facts mentioned, the evidence on the pecking order hypothesis appears to be mixed, owing to the technique employed and the fact that finance decisions are influenced by a range of factors, each of which has a varied impact on capital structure.

#### **1.4.5** Contracting Cost Theory

The contracting cost hypotheses are based on Myers' suggestion of an underinvestment problem (1977)[127]. The underinvestment problem is shown by the fact that due to the danger of default, heavily indebted organisations are more likely to forego financing options. This problem is exacerbated by the rising equity expenses associated with enterprises at danger of default. This might result in financially challenged businesses passing up both finance and investment opportunities. According to the contractual cost hypothesis, organisations whose worth is mostly constituted of the current value of intangible investment opportunities will choose lower debt ratios. This conservative approach to debt issuance is utilised to reduce the negative consequences of the underinvestment problem. Large established organisations with fewer investment opportunities, on the other hand, will favour high debt ratios because to the lower likelihood of financial crisis charges.

Despite the data presented about Debt-equity structure theories, (Barclay - Smith, 1999) suggest that no model exists that successfully examines for three reasons, the numerous conflicting capital structure theories. To begin off, given current methodologies, it is difficult to reject one hypothesis in favour of another. To put it another way, the ideologies do not conflict one another [114]. In actuality, (Fama and French, 2005)[150] discover that every one of the pecking and trade-off theories has some validity to it when it comes to analysing financing decisions. Second, many elements that impact the optimal capital structure are difficult to quantify. For example, determining managers' private knowledge is difficult, especially when evaluating the signalling hypothesis. Finally, rather than a precise mathematical calculation, theories of optimum capital structure end in a qualitative forecast, making them less trustworthy than asset price models.

#### CHAPTER - 2

#### Literature Review

#### 2.1.0 LITERATURE REVIEW

(Modigliani and Miller, 1958) can be traced back to the debate on deciding the optimal financial structure and valuation of businesses, who argued in their study that the value of the company is self-determining of the capital structure and that the value of an unlevered company is equivalent to that of a leveraged company. The study was focused on the premise that taxes were missing [1]. This presumption was found unrealistic and (Modigliani and Miller, 1963) took tax into account in their subsequent analysis and assumed that the valuation of a leveraged firm was greater than the value of an unlevered firm owing to the tax shield on debt as a consideration, and that this value was equal to the value of the tax shield [2]. Subsequently, (Miller, 1977) updated their previous 1963 study and introduced the influence of personal taxes. Personal taxation, tax on income from owning stock and tax on income on debt securities, is split into two groups [3]. Modigliani and Miller (1977) defined some special cases in this analysis, where gain from leveraging becomes zero, giving the original (1958) finding. Their findings thus suggest the presence at the macro level of an ideal capital structure, but not at the micro level[3]. (April Bhattacharjee, Mihir Dash, 2018) suggest that in Indian pharmaceutical firms, financial leverage is mainly calculated by two factors: it is positively related to the Non-Debt Tax Shield and to profitability. The Non-Debt Tax Shield was 130 and was found to be favourably linked to financial leverage, indicating that pharmaceutical firms favour debt as a funding option with an enhanced tax benefit on debt financing. The Static Trade-Off hypothesis is also endorsed by this. Profitability, on the other hand, has been shown to be adversely correlated with financial leverage. This may be due to the nature of the industry: the pharmaceutical industry is a highly economically oriented, capital-intensive industry that is regulated by multiple environmental restrictions, so businesses try to reduce their interest costs as their performance increases [4]. (Rajesh Tiwari, 2014) has examined the correlation between the capital structure and dividend strategy with the share price in the pharmaceutical business, Cipla. The secondary data is used for the analysis. The data were derived from financial records. The analysis also analyses the financials of Cipla. The performance of the company has increased steadily in the previous three years. The liquidity status of the company is secure. The organization employs less debt in its financial structure. This suggests reduced financial burden and an incentive to use the debt resources for growth programs. It was found that there is no meaningful association between capital structure and market price. The results are consistent with the Modigliani and Miller method of irrelevance of capital structure and divined strategy for the market price of a company[5]. (M. Abdoli, A. Pourkazemi, 2013) explores the separate and parallel function and effects of the emphasis and form of ownership on the generated shareholder value (CSV) of companies registered on the Tehran Stock Exchange, as wellas the capital structure (TSE). Among the companies registered on the Iran-Tehran Stock Exchange during the period 2008-2011, the statistical community under study consists of 95 businesses other than investment and financial intermediation companies. Easy and multivariate approaches were applied to assess the research hypothesis. Stepwise simulation has been applied to analyse the impact and interpretation of the most independent variables. The study results revealed a direct and substantial linear association between the variables, including the capital structure and form of ownership, as well as an opposite and relevant relationship between the concentration of ownership and the CSV. Inaddition, the study of the ownership structure including two variables of ownership concentration and form on the CSV has resulted in some findings comparable to what was stated with regard to the variables including the concentration and type of ownership. On the other hand, the findings obtained by analyzing the effects on the CSV of two variables of the ownership structure and the capital structure suggest that the impact of the ownership structure was on the generated shareholder value rather than on the capital structure [7]. (Abdullah, Abdulkader M.A., 2005) discusses the determinants of the capital structure in general and the corporate debt-maturity determinants in particular for the 56 companies listed in Saudi Arabia. The research was structured to test a variety of theories on the determinants of capital structure and debt maturity in order to achieve this aim. The effects of profitability, growth potential, asset maturity, scale, liquidity and age is linked to those hypotheses. It was found that the total debt ratio was strongly and substantially related to the percentage increase in total assets and to the liquidity and asset structure. The vector of growth opportunities was found to be positively and significantly linked to long- term debt and to short-term debt, and was negatively and significantly related. It was found that the association between asset maturity and long-term debt was negative and substantial. Therefore, the theory that the maturity of debt declines as the proportion of growth potential increases is not supported. Size was shown to be related to long-term debtpositively and significantly, and to short-term debt negatively and significantly, meaning that larger businesses borrow in the long term and small firms borrow in the short-term. On the various forms of debt, viability and age liquidity tended to have little statistical meaning. The implications of these observations have been discussed and possible avenues for study have been proposed [8].

(Akinyomi, Oladele John Olagunju, Adebayo, 2013) uses a descriptive study design to analyze the determinants of the capital structure in Nigeria. The population included 86 manufacturing companies listed on the Nigerian Stock Exchange. Using the easy random sampling process, the survey firms were chosen. Secondary data derived from the annual accounts of 24 randomly chosen industrial companies over a span of 10 years resulted in observations of 240 firms each year. The results of the regression analysis showed that, on the one hand, leverage (a capital structure measure) has a negative relationship withbusiness size and tax, and, on the other hand, a positive relationship with asset tangibility, profitability and expansion. However, the essential relationship is formed only with asset tangibility and business size. It is proposed that parallel experiments be carried out in different fields for prospective researchers [9]. (M. Alipour, M. Mohammadi, H. Derakhshan, 2015) examines determinants of Iranian firms' financial structure. The most critical factors influencing the option of capital structure of manufacturing companies listed on the Tehran Stock Exchange Iran during 2003-2007 was investigated using pooled ordinary least squares and panel econometric approaches such as fixed effects and random effects. The study findings indicate that factors such as the size of the business, financial stability, asset structure, profitability, liquidity, expansion, risk and state ownership have an impact on all capital structure measures of Iranian companies. Short-term debt has been found to be a significant means of funding for Iranian companies. The conclusions of the present thesis are consistent with certain hypotheses of capital structure. The findings typically offer proof that emerging markets are affected by the five hypotheses discussed. Because of the nature of an unfavourable firm's profitability and financial structure, prior investing in a company, investors must consider the structure of capital. This research has laid some groundwork for examining the determinants of Iranian firms' capital structure on which a more comprehensive appraisal may be focused. In addition, the analytical outcomes will aid business administrators in making optimal choices on the capital structure. A theoretical model to illustrate the process of how the ownership arrangement influences debt servicing is presented in this article [10]. (K. Alkhatib, 2012) has examined the determinants of listed firms' leverage. 121 listed firms on the Jordanian Stock Exchange were included in the research survey, extended from 2007 to 2010. The survey represented the manufacturing and utility industries, while the research omitted the finance industry. The regression model was used for data analysis; the explanatory variables consisted of firm liquidity, growth rate, profit, size, and tangibility, while the leverage ratio was the independent variable. The findings indicate that no statistically relevant relationship exists for both the manufacturing and utility industries. The

findings for the manufacturing sector, when the two industries were divided, showed that liquidity and tangibly have a significant leverage relationship, while the results for the services sector indicated that the growth rate, liquidity and tangibility have a significant leverage relationship [11]. (B. Al-Najjar, P. Taylor, 2008) seeks to examine the largely under- researched relationship in an emerging market between ownership structure and capital structure. It is also one of the first experiments using a panel data approach to apply both single and reduced-form equation approaches. The research uses econometrics simulation using both single equations and reduces panel data equation models. The findings indicate that Jordanian businesses adopt the same capital structure determinants that prevail in mature economies, particularly profit, firm size, rate of growth, market-to-book ratio, asset tangibility, and solvency. In addition, it is observed that the composition of institutional ownership is defined by: the structure of properties, business risk (BR), growth potential and group size. Finally, the findings indicate that the tangibility of properties, business size, growth potential and BR are perceived to be mutual determinants of the composition of ownership and capital structure. The realistic consequence of the analysis is that as they make their investment choices, buyers and managers should understand both the capital structure and the ownership structure [12].

(Anshu Handoo and Kapil Sharma, 2014) has examined the financial behavior of the 870 listed Indian companies for a period of 10 years from 2001 to 2010 and concluded that managing capital structure is like a balancing act between financial flexibility and fiscal discipline which has far outweighs any tax benefits for most large companies unless their debt is extremely low ,also added that mature companies which are having stable and predicatable cash flow as well as limited investment opportunities should have more debt in their capital structure [13]. (Shrabanti Pal, 2014) has studied the relationship between the independent variables (tangibility, size, business risk, growth opportunity, profitability and non-debt tax shield) and dependent variable (leverage) by using tool of regression analysis of the 37 listed Indian steel companies for a period of 10 years since 2003 to 2012 and found that tangibility, non-debt tax shield and growth opportunity have positive relation with leverage, while size, profitability and business risk have negative relation with leverage but the result is not statistically significant [14].(T. Velnampy& J. Aloy Niresh, 2012) has investigated the relationship between the capital structure and profitability of 10 listed Srilanka's Banks from 2002 to 2009 by using descriptive statistics and and correlation analysis and found that there is negative association between capital structure and profitability, while positive association between debt to equity and return on equity and also added that banks are highly geared institutions [15]. (Patrik Bauer, 2004) has analysed the capital structure of listed companies in the Czech Republic of 74 companies listed on the Prague Stock Exchange within the period from 2000 to 2001 and concluded that Czech enterprises have moderate leverage when evaluated in book value, but high leverage when measured in market price, also leverage of Czech listed firms is positively correlated with size and result confirms that firms with higher future growth opportunities should use more equity financing [16].

(Sangeeta Mittal, Lavina Kumari, 2015) has investigated the relationship between financial leverage and capital structure determinants of four top Indian Automotive Industry firms, including Tata Motors Ltd, Mahindra and Mahindra Ltd, Maruti Suzuki India Ltd, and Hero MotoCorp Ltd. from 2005-2014 by researching liquidity, scale, profitability, growth rate, and tangibility determinants. Multiple regression and correlation are the statistical instruments used in this study. An interrelation matrix was also created to pick an independent variable. The study results shows that the positive relationship between independent variable(s) and leverage is growth rate, and liquidity and profitability are negative relationships with leverage. For all these variables, the p value is less than 0.05, which indicates that all the relationships at level .05 are important. In evaluating the capitalstructure of the automotive industry, all the remaining factors used in the present analysis turned out to be statistically negligible [17].(A. Sakr, A.

Bedeir, 2019) explores the determinants of the capital structure of Egyptian publicly listed nonfinancial companies at the business level. The research explores the determinants of Egyptian firms' capital structure at the company level, using data from 62 publicly traded companies' financial statements from 2003 to 2016. The research looks at whether Egypt's capital structure choices obey the assumptions of Trade-Off Theory, Pecking Order Theory, or Agency Cost Theory. The empirical data helps one to believe that the Trade-Offand Pecking Order Theories are the most likely to understand the financial actions of Egyptian firms' capital structure decisions, while the agency cost theory has no support [18]. (SushmaVerma, SamikShome, Aakrutipatel, 2021) investigates the impact of internal variables on the financing decisions of small and medium-sized firms (SMEs). It also investigates the financing practises of listed SMEs in India to see if the financing patterns of listed SMEs adhere to known corporate finance theories for which 113 SMEs listed on National stock exchange of India are studied for a period from 2014 to 2018. The panel data regression method is used. The propensity score matching method was used to identify the control group. Qualitative data has been gathered from bank employees and promoters of listed SMEs. The researchers finds that listed SMEs generate current liabilities first, then usetotal reserves. Following that, they search for short- and longterm borrowings for additional financial possibilities. There is no discernible difference in the funding patterns of listed SMEs and their non-listed counterparts [19].

(Omer Brav, 2009) has examined financing behaviour of public and private firms of united kingdom for the period 1993 to 2003. The database used for the study was Financial Analysis Made Easy (FAME). The findings of the paper were that in nations where the stock market lacks sufficient liquidity, underwriters refuse to certify, and minority rights are unprotected, the importance of control and information asymmetry will be greater hence public enterprises' financial policies will resemble those of private enterprises [20]. (ApostolosDasilas, Nicolas Papasyriopoulos, 2015) has examined the connection between corporate governance, credit ratings, and the capital structure of small-to-medium-sized companies (SMEs) and major Greek listed corporations during period 2005 to 2010. The researchers have found that panel regression analysis demonstrates that corporate governance frameworks and credit ratings are important components of the capital structure of Greek listed enterprises, particularly during the crisis era(2008-10). The variables studied were size, profitability, asset structure and growth opportunities. Researchers found that the impact of corporate governance factors on the capital structure of SMEs is less pronounced when compared to big enterprises. This is due to the active participation of owners in the administration of SMEs, which decreases the need for shareholders to fund the expense of monitoring agents [21]. (Saibalghosh, 2015) examines the interrelationships among independent variables leverage, debt maturity and source of debt of publicly listed 1557 manufacturing firms of India for the period 1996 to 2012. The dependent variables in the study are firm size, Bargaining power, Tangible, tax, NDTS, ROA, Volatility, Dividend, Research and development expenses to Sales, torbin's Q, free cash flow, probability of bankruptcy, non-promoter banks' shareholding in the firm, public debt dummy, Banker on board dummy, Number of bankers on a firm's board. According to the research, these three factors are interconnected, with one likely to complement or substitute the other. We find that the effect of leverage on debt maturity is greatest for businesses that do not have close ties with banks when we disaggregate businesses based on ownership and board representation. Furthermore, the lack of a seat on the firm's board makes it harder for banks to exert control over the firm's operations [22]. (Kathleen M. Kahle and Kuldeep Shastri, 2005) examines the relationship between a firm's capital structure and the tax benefits realised from the exercise of stock options. The variables taken in the study are tax, size, profitability, growth collateral value of assets, Non debt tax shields from operations and uniqueness The sample consists of 599 companies, with 286 companies receiving no tax advantages as a result of option exercise and 313 companies receiving tax advantages. The researchers discovered that both longer-term and

shorter- term debt ratios are inversely associated to the extent of advantages in taxes.For changes in short-term leverage, such a relationship does not exist. Finally, enterprises having option- related tax advantages prefer to issue stock, with the net amount of stock issued growing as the tax advantages increase [23]. (Mohamad H. Mohamad, 1995) investigates the Malaysian enterprises' capital structure from 1986 to 1990. The variables taken for the study are Equity to total assets, Debt to total assets ratio, Debt to equity ratio, return on investments. A review of capital structure behaviour in the Malaysian financial market suggests that there are parallels between developed and less developed financial markets in terms of the impact of businesses' capital structure. A firm's and industry class, in particular, have an important effect in defining a firm's capital structure. Malaysian enterprises' financial structures varies significantly between industries. Profits are more likely to be higher in highly leveraged enterprises than in less leveraged ones. When profitsfall, such companies are more likely to take individual actions such as asset restructuring [24]. (Neha Poddar, Manish Mittal, 2014) has examined the determinants of Indian steel companies for the period 1997-2011. The variables studied are profitability, liquidity, company size, interest coverage ratio for the companies Tata Steel, Steel Authority of India, Hindustan Zinc, Bhushan Steel and Ahmedabad Steel applying panel data analysis techniques. The findings were bigger businesses are more prone to employ debt as a result, a positive relationship between business size and leverage is predicted. Profitable companies with modest growth rates will have an abnormally low leverage ratio in comparison to the industry norm. An unprofitable business in the same industry, on the other hand, will end up with a relatively high leverage ratio. The liquidity ratio may have opposing impacts on the firm's capital structure choices. First, organisations with greater liquidity ratios may have larger debt ratios. The liquidity slope coefficient has a negative and statistically significant outcome. The interest coverage ratio's slope coefficient is negative and statistically significant [25].(Chandra Shekarmishra, 2011) investigated the link between capital structure variables and leverage from public sector industrial entities in India during deregulation for the period of five years from 2006 to 2010. The variables considered in the study are non-debt tax shield, tax, age , uniqueness, asset tangibility, growth, size, earnings volatility and profitability. Sample size was 48. The findings were discovered using the regression approach, and five factors were shown to be adversely associated, including profitability, growth, earning capacity, and non-debt tax shield and uniqueness Other factors that have been found to be positively connected include tax, tangibility, size, and age [26].

(Arvin Gosh, Francis cai, Wenhui li, 2000) investigated the effects of capital structure factors on leverage. The factors analysed include asset size, asset growth, non-debt tax shield, fixed asset ratio, profit margin, R&D expense, advertisement expenditure, selling expense, and company risk. A sample of 319 enterprises from 19 sectors were analysed over 10 years between 1982 and 1992 using the ordinary least square approach, and it was discovered that four factors are statistically significant, namely asset growth, fixed asset ratio, R&D spending, and advertisement spending [27]. (Titman and Wessel, 1988) investigated how debt ratios affect a business's growth rate, volatility, non-debt tax shielding, profitability, collateral value of assets, industry categorization, business size, and originality. The factor analytical methodology was utilised to analyse the data across an eight-year period, from 1974 to 1982, with a sample size of 105 manufacturing enterprises. Thus, it is determined that the firm's uniqueness is adversely related, the firm's liquidityhas a low debt ratio, the debt ratio is adversely associated to size, and other factors are not relevant [28].

(Davis, 1987) examined has enlarged Deanglo and Masulis'(1980) hypothetical study on corporation tax and degree of debt utilising the research done for Canadian enterprises between 1966 and 1982 with 115 enterprises, utilising cross sectional analysis. He has determined that the non-debt tax shield and leverage have a beneficial link [29]. (Yu Shang, 2018) investigated the EVA of new energy shipping companies, utilising variables such as total debt to assets

ratio (DAR), Economic Value Added (EVA), Earnings Per Share (EPS), and Return on Equity (ROE) from 2010 to 2015, employing various toolssuch as Covariance analysis tests, regression analysis data stationary analysis, and F-test of Model Setting and discovered that EVA has a negative connection with capital structure, which does alter capital structure, and the effect of variable capital structure is postponed by approximately one year. Also added that EVA does not describe capital structure construction any better than EPS and ROE variables. It indicates that corporations will consider enterprise profitability whenever making financing decisions, but enterprise profitability is not the primary concern [30]. (Laban N. Njoroge, Dr. Tabitha Nasieku, 2016) studied the profitability, liquidity, tangibility of assets, growth, and size of the company to investigate the determinants of capital structures for Internet Service Providersin Kenya. The samples were collected between 2009 and 2013. The data was analysed using regression analysis, and it was discovered that profitability, asset tangibility, and growth significantly influence capital structure decisions, but liquidity and company size adversely influenced capital structure decisions. The research also advised that enterprises consider profitability when deciding on their capital structure since they will benefit greatly from the tax shelter. When making finance selections, the company should also evaluate its asset structure [31]. (Shumaila Bashir, Abdul Ghafoor Awan, 2016) examined the financial modalities of eight textile businesses registered in Pakistan during 2009 to 2013. They analysed criteria such as asset tangibility, profitability, business size, growth potential, liquidity, and leverage. To interpret the data, a regression model was used. It was discovered that growth has a good relationship with leverage. The size of the business was discovered to be an important determinant in the capital structure, and it had a negative relationship with the leverage of enterprises in Pakistan's textile sector [32]. (Khaldoun M. Al-Qaisi, Al Hareth M. Abu Husain, 2014) researched the determinants influencing long- term debt structure in industrial enterprises listed on the Amman Stock Exchange For the period from 2000 to 2010 for ten years. Profitability, asset tangibility, non-debt tax, growth, and business age are among the variables considered for this study. It was discovered that the firm's expansion and non-debt tax had no effect on capital structure.

Fixed assets and firm age had a beneficial influence on capital structure, but profitability had the opposite effect [33].(Sritharan, Vinasithamby, 2014) examined the determinants of the capital structure of twenty eight Banks Finance & Insurance Companies in in Sri Lanka from the year 2008 to 2012. Tangibility, profitability, growth, liquidity and Non- debt tax shield were the variables examined . It was observed that tangibility, profitability, growth, and liquidity were negatively related to the debt ratio, while size was positively related. Non-debt tax shield was not significantly related to the debt ratio [34]. (Md. Faruk Hossain & Md. Ayub Ali, 2012), investigated the influence of 10 explanatory variables on total debt to total assets ratio, including profitability, tangibility, non-debt tax shield, size, earnings volatility, liquidity, managerial ownership, dividend payment, growth, and industry categorization. Using the OLS regression approach, resarchers examined how firm-specific variables influence capital structure decisions in a sample of 39 Bangladeshi enterprises listed on the DSE. Data were obtained from each firm's financial statements throughout a five-year period from 2003 to 2007. The fixed effect model was used in OLS regression, although the findings were influenced by autocorrelation. The autoregressive model was employed as a corrective measure of autocorrelation. According to the research, profitability, tangibility, liquidity, and management ownership all have strong negative relationships with leverage. The findings also show that leverage ratios fluctuate dramatically among Bangladeshi industries. The study also discovered that leverage is positively and substantially connected to growth and non-debt tax shield, whereas size, earnings volatility, and dividend payment were not shown to be important explanatory factors of leverage. Overall, the findings are nearly identical to those of earlier investigations [35]. (Padmini and Sivarami Reddy, 2012) examined the Capital Structure

selected Indian companies for a period eight years from April, 2002-03 to March, 2009-10 They divided the firms into three categories: (A) Better Performing Corporations (BPCs), (B) Moderately Performing Corporations (MPCs), and (C) Low Performing Corporations (LPCs). The study found that BPCs and MPCs were dependent on equity financing, whereas, LPCs were dependent on debt financing. Overall, the debt-equity balance tended to favour equity. The level of financial leverage has no positive impact on shareholder earnings. In BPCs and MPCs, interest coverage was adequate, and hence the basis for using debt was acceptable. In LPCs, however, the situation was reversed [36]. (MaryanMasnoon, 2012) investigated the capital structure of KSE-listed pharmaceutical businesses using leverage as a dependent variable. The study's time frame ranges from 2008 to 2011. The regression method is employed by taking into account six explanatory

variables: business size, tangibility, growth, earnings volatility, profitability, and tax rate. To address the issue of multicollinearity, the research was reduced to to four explanatory variables by omitting tax rate and income volatility. The study's proxies for tax include the ETR, In sales size, NP margin. It was discovered that expansion and tangibility have a positive relationship with leverage, but profitability and scale have a negative relationship. At a significance level of 10%, all four variables are statistically significant [37]. (Khalid Alkhatib, 2012) analysed the drivers of leverage of 121 Jordanian enterprises from 2007 to 2010. The industrial and service sectors were sampled, but the financial sector was left out of the research. The factors were the firm's liquidity, size, growth rate, profit, and tangibility, with the leverage ratio serving as the independent variable. The regression model was used for data analysis. [38]. (O.M. Benkato, A.F. Darrat, B. Abual-Foul, 2005) Investigate numerous key variables of business capital structure in Egypt's growing market. Over the 1997-2000 period, the sample included 43 enterprises from 13 different industries. The variables taken in study are long term leverage, short term leverage, Unlevered effective tax rate, debt tax shelter ratio, Growth opportunities, price change, cost of debt. According to the empirical findings, non-debt tax shelters are a main driver of long-term leverage, but the unlevered tax rate is the dominant factor explaining shortterm leverage. Other traditional capital structure variables, such as the market/book value ratio and capital gains (losses) from changes in company stock prices, fail to offer considerable explanatory power for either long- or short-term leveraging [39]. (Sinha, Bansal, 2013) investigate the importance of personal taxes on corporate finance decisions, as well as their impact on the corporate tax benefit of debt in Indian manufacturing enterprises. From 1989 to 2011, a combined cross section of time series data from 288 firms was used to investigate incremental financing decisions. Personal tax impacts are represented using two alternative methods: in one specification, marginal tax rates are adjusted for income tax penalties, whereas in the other, personal tax impacts are captured independently. The data reveal that the relative personal tax disadvantage of debt has a considerable influence on Indian enterprises' leveraging decisions. When personal taxes are taken into account, marginal taxes become insignificant. The study also demonstrates that the specification that considers the real impact of corporate and personal taxation outperforms the one that modifies corporate taxes to accommodate for the personal tax penalty[40]. (Pandey and Ponni, 2017) study the impact of corporate leverage on India's pharmaceutical company's viability. The investigation covers a ten-year period, from 2004-2005 to 2013-2014. The analysis relied on secondary data. 37 pharmaceutical businesseslisted on the National Stock Exchange (NSE) are selected for examination during the research period. Three independent variables are present. Operating Leverage (OL), Financial Leverage (FL), and Combined Leverage (CL), as well as three contingent variables, Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS), were employed and statistically analysed using regression and correlation analysis. The research's findings indicate that CL and OL have a significant influence on profitability (ROA, ROE, and EPS), which was chosen by the pharmaceutical sector in India during the research period [41].

(Sahu, Pandey, 2019) explores the link between debt servicing, organisational expenses, and the profitability of Indian manufacturing firms. The research aims to log the influence of debt funding on business performances in two rounds of panel data estimations. The first part of the study looks into the influence of debt on business profitability as measured by return on equity. The second phase involves the introduction of agency expenditure in order to experimentally understand the reason of such an impact. The analysis, which examined manufacturing businesses on the BSE 200 Index from 2009 to 2016, discovered that debt had a significant and negative influence on corporate outcomes. The quantity of the debt is also thought to have a positive influence on the agency's costs, as measured by 'general and administrative expenses.' Since a result, the negative impact of debt on corporate efficiency is exacerbated and verified, as debt is frequently discovered to raise the firm's agency expenses[42]. (Rani Neelam, Surendra S. Yadav, TripathyNaliniprava, 2020) analyses the factors of capital structure and enterprises' speed of adjustment (SOA) toward their goal capital structure. The research used the generalised Method of Moments (GMM) modeland two-stage least squares (TSLS) to analyse the adjustment speed versus target capital structure on a panel data set of 3,310 Indian enterprises from January 2000 to March 2018. Furthermore, the investigation employed a totally customised ordinary least square methodology to shed insight on the intricate essence of the modification process. According to GMM projections, Indian firms are transforming their capital structures at a rate of 10.38 percent each year. Similarly, the TSLS projection predicts a SOA of 15.49 percent each year. Because of the slow adjustment pace, Indian firms face greater adjustment expenses [43].

(Bajaj, Kashiramka, Shvetasingh, 2020) explores the complexity of capital structure for Chinese and Indian enterprises. If and how they modify their capital strategies to account for trade-off behaviour in light of various macro-level concerns. Between 2009 and 2018, businesses that were listed on the National Stock Exchange and the Shanghai Stock Exchange were included in the study. The Blundell and Bond (1998) system generalised technique of moments is employed due to the utilisation of complicated short panel findings. In comparison to Chinese business, Indian enterprises return to their goal debt levels at a faster rate (30 and 20 per cent, respectively). Furthermore, in the indian context, the inflation rate, bond market and stock market growth are essential elements determining leverage, but in the context of China, bond market development is crucial. These findings hold true across various conceptions of leverage as well as other business and structural control factors [44].

(Bhavna Ranjan Ahuja, 2021) studies the impact of macroeconomic conditions on the capital structure of Indian manufacturing enterprises. Over the previous ten years, from 2008-09 to 2017-18, the panel regression approach (random effects model) was applied to a survey of 1,029 categorised Indian manufacturing enterprises divided into two categories - large-size companies and mid-size companies. Long-term leverage and total leverage have been explored using two independent formulae. The findings imply that macroeconomic conditions are more relevant than short-term loans in influencing the long-term debt element of a firm's capital structure. Similarly, macroeconomic considerations are regarded as more relevant in the case of large-size organisations than in the case of mid-size organisations. Market capitalisation and leverage have a negative association, as do bank credit and leverage, although money supply and leverage have a positive association [45]. (Gurusamy, 2021) examines on the link between corporate ownership structure and capital structure of BSE-listed manufacturing businesses in India. The study comprised a study of 357 enterprises from 16 different industries conducted between 2006 and 2015. Taking into mind the data's complicated panel essence in terms of capital structure and ownership structure factors. The study uses a novel way to determining the determinants of single equation and reduced equation models. To choose the best model, the F test, the Breusch Pagan LM test, and lastly the Hausman test are utilised. When it comes to estimating the Hausman test result, the fixed effect model surpasses the other two models,

pooled OLS and random effect prediction. According to the fixed effects results, scale, risk, and profitability all have a close connection with leverage. Meanwhile, the importance of growth potential and tangibility is negligible. According to the findings, promoters' control and institutional ownership have a negative influence on leverage, but corporate ownership has a positive influence on capital structure decisions. Individual or public ownership has a negative and significant impact on capital structure, but foreign ownership has the reverse effect [46].

(Panda Ajaya Kumar, Nanda Swagatika, 2021) investigates experimentally the factors influencing the effective tax rate (ETR) of Indian manufacturing enterprises in several industries. The study also attempts to examine the sensitivity of ETR to shocks on its primary variables. The Arellano-Bond dynamic panel regression model is used in the study to identify the primary drivers of ETR, and the impulse response functions of the panel vector autoregression model are used to examine the reaction of ETR to a one standard deviation (SD) shock to its major determinants. This study indicates that in most industries, business size, profitability, growth rate, and non-debt tax shield are strongly described by ETR, while debt ratio, asset tangibility, and company age have distinct effects on ETR. In the case of the overall manufacturing industry, firm size, profitability, growth, and non- debt tax shield are favourably driving ETR, whereas asset tangibility is adversely driving ETR. ETR is not significantly influenced by interest coverage ratio (ICR) or company age. ETR is favourably connected to firm size, but responds adversely when firm size is suddenly reduced. Similarly, ETR is adversely connected to asset tangibility but responds favourably when subjected to an instant shock. Overall, ETR is more sensitive and responds considerably to shocks in company size, profitability, growth, asset tangibility, and non-debt tax shield, but the reaction to shocks in debt ratio, ICR, and firm age is extremely minor [47]. (Surbhi Gupta, Surendra S Yadav, P. K Jain, 2021) intends to investigate the effects of foreign ownership on the financing mix, using data from non- financial enterprises in the Nifty 200 index from 2007 to 2018; The information was obtained from Bloomberg (R) and Ace Equity (R). The study finds a statistically significant negative association between foreign ownership and leverage using the generalised method of moments (GMM) methodology for empirical research [48].(NavitaNathani, Jaspreetkaur, 2013) experimentally investigates the factors of capital structure and the presence of inter-industry links in Indian enterprises' capital structures. Derived from the information available, the following theoretical capital structure features were examined in this study: size, profitability, tangibility, and non-debt tax shields, as described by previous scholars. The study used a sample size of 64 businesses listed on the NSE-100, categorised them into 25 industrial categories based on market capitalization, and then used exploratory factor analysis to identify the drivers of capital structure. The study found that capital structure is not at all reliant on market capitalization, and capital gearing is the major predictor that contributes to the study [49].(Ramzi E.N Tarazi, 2013) studies the capital structure factors in one of the rising nations, as well as the influence of Thai stock market growth on the financing options of enterprises operating in this market. This study investigates the ability of capital structure factors and analyzes the leverage level of Thai firms by examining how Profitability, Firm Size, Growth Opportunities, Asset Structure, Cost of Financial Distress, and Tax Shield Effects impact total debt tototal asset ratio. The study's sample size includes 559 companies that were listed on the Thai stock market in 2012. Panel data was used to collect data during an eleven-year period, from 2001 to 2011. The findings show that, among the factors, profitability, growthpotential, asset structure, and company size play a significant role in explaining variance in Thai enterprises' overall debt ratios. Meanwhile, the tax shield effect is inversely proportional to leverage. Finally, it was discovered that the cost of financial distress had nosubstantial impact on capital structure [50]. (Abel E Ezeoha, 2011) investigates the effects of profitability on the financial leverage of enterprises functioning in an uncertain macroeconomic environment such as Nigeria for the period 1990 to 2003. Employing fixed and dynamic panel models, it discovers

convincing evidence that a firm's profitability has alarge and negative impact on its short-term debt capital, but not on its long-term debt capital. This is due to the insecurity of the Nigerian business climate and the relative inefficiencies of its financial markets, according to the report. It suggests that Nigerian enterprises may be overly reliant on short-term debt and foreign equity to fund long-term investments, a trend that has the potential to raise the cost of capital over any reasonable limit [51]. (Ashok Kumar Panigrahi, 2011) attempts to investigate the link between business size and capital structure decisions made by Indian firms. The financing patterns of 300 Indian private sector enterprises from 1999-2000 to 2007-2008, divided by area, size, age, and type, were examined to see whether financing decisions differed acrosssmall, medium, and big organisations. The study's findings shows that the need and generation of money grow in line with the company's size. In comparison to small businesses, large businesses rely more on internal capital. This might be due to bigger organisations' capacity to amass and utilise internal funds more simply and conveniently. Small enterprises rely more on external money, particularly debt, and so are more prone to go bankrupt than bigger ones. In all sizes of businesses, there is an inverse relationship between investment size and debt equity ratio. It demonstrates that equities funds affected a bigger share of investments than debt funds. It was discovered that long term debt funds had a medium level of influence in the purchase of net fixed assets in the case of small and medium sized companies, but the impact of debt funds was much greater in the case of large sized companies, and the impact of equity funds in the purchase of fixed assets was insignificant. Long-term loan sources positively affected the liquidity situation of big sized organisations rather than equity, which was not found in the case of small and medium sized enterprises[52].

(Pradeepta Sethi and Ranjit Tiwari, 2016) investigate the drivers of capital structure in order to have a better understanding of the financial decisions that Indian manufacturing enterprises must make. The data for the analysis is derived from the Centre for Monitoring Indian Economy's COSPI manufacturing index (CMIE). Our sample consists of an imbalanced panel of 1077 companies from 2000-01 to 2012-13. Researchers use system- GMM to investigate various factors influencing company leverage decisions in India. According to the study's findings, characteristics like as profitability, size, growth, tangibility, non-debt tax shields, distinctiveness, and signal may all impact the choice of optimal capital structure. In the case of Indian manufacturing enterprises, they also discover the presence of both pecking order theory and static trade-off theory. The resulting results are robust across various leverage proxies [53]. (Ingrid MihaelaDragotă, Victor Dragotă, Laura ObrejaBrașoveanu, AndreeaSemenescu, 2008) investigates the disparities in funding strategies for the Romanian companies mentioned corporations that take into account economic areas They are financing their assets with equity, commercial debt, and, lastly, financial debt, in that sequence. There are, however, some discrepancies across sectors as well as between book and market values. The four variables employed in the model (tangible assets, size, profitability, and market-to-book ratio) are significant when the drivers of capital structure are examined using OLS regression. Furthermore, the link between capital structure and business profitability for Romanian listed shares from 1997 to 2005 was examined using Granger regression (1969). Financial returns are not caused by capital structure, according to Granger [54].(Jean-Laurent Viviani, 2008)[55] describe the leverage of French corporations in the wine business Various capital structure theories are examined in order to provide testable hypotheses about the debt levels of French wine producers. The data utilised in this study were acquired from the Plimsoll database between 2000 and 2003 for 410 companies. The variables studies are size, Asset structure(tangibility), Asset structure (liquidity), profitability, risk (volitality, risk (asset turnover), Growth, Non-debt tax Shield, Age . the findings were no statistically significant negative difference for long term or total debt, while short term debt ratio is lower [55]. (MihaelaDragotã, AndreeaSemenescu, 2008) explains capital structure and its drivers is a

valuable method for both Romanian and international investors, as well as for businesses. Companies listed on the Bucharest Stock Exchange from 1997 to 2005 were included in the sample. Romanian listed firms employed a funding programme based on pecking order theory principles rather than signalling theory concepts. The evolution of macroeconomic indices (inflation, interest rate, economic growth) as well as corporate governance issues heavily impact microeconomic financing decisions [56]. (TendaiGwatidzo and KaluOjah, 2009) We analyse corporate capital structure in Africa using a panel of listed businesses from Ghana(1998- 2004), Kenya(2000-2004), Nigeria(1999-2003), South Africa(1990-2004), and Zimbabwe(1991-1995), with a focus on the extent to which business characteristics and crosscountry institutional variables influence how businesses obtain capital. The variables used in study are profitability, size, asset tangibility, age, and leverage. The findings of the study were profitability is negatively connected to leverage, meaning that more profitable African enterprises prefer to finance their activities with retained earnings before contemplating borrowing. tangibility of assets is negatively related to debt for most sample countries [57].(Amer Azlan Abdul Jamal, RosleMohidin, Lim Thien Sang, ZatulKaramah A.B.U, 2011) investigates the capital structure determinants of different aggregate businesses listed on the Bursa Malaysia in the trade and services sector. Its purpose is to explore the factors that impact organisations' decisions to employ leverage as a source of finance. The variables taken for study are leverage, profitability, liquidity, firm size, tangibility and growth opportunity. Regression analysis was used to examine data spanning the years 1997 to 2006. This study's findings reveal that organisations' financing decisions are influenced by growth potential, liquidity, and tangibility. However, profitability and business size do not appear to have a substantial impact on their capital structure selection [58]. (Avanish Kumar Kr Shukla, 2012) has analysed the capital structure different sectors listed in Security Exchange Board of India, Mumbai. The current study used an OLS regression approach to uncover the primary factors of capital structure. The determinants are chosen using two famous capital structure theories, static tradeoff theory and pecking order theory. Annual reports from 55 firms listed on the Indian stock exchange were collected for the following six years, from 2006 to 2011. There were 330 observations in all. OLS regression for panel data with cross section random effect is performed using two equations: total debt to market value of firms and long term debt to market value of enterprises. The variables taken for study are agency cost, free cash flow, tax, non debt tax shield, profitability, size, colletral value of asset, bankruptcy cost. The analysis demonstrates that agency costs have a negative influence on the total debt ratio of Indian enterprises. Tax rates are only positive for long-term debt, whereas non-debt tax shields are negative for overall debt ratio. In evaluating leverage ratios, bankruptcy and profitability have no significant impact, however business size has a considerable influence on total and long-term debt ratios. Firm size has a significant impact on long-term debt ratios. Only total debt ratio is positively influenced by collateral amount of assets, whereas industry characteristic has been demonstrated to be a key driver of debt ratio [59].(Gurnam Singh Rasoolpur, 2012) using a panel data methodology, the current work offers an empirical attempt to explore the drivers of capital structure in developing nations using a case study of the Indian business sector. Although an exploratory endeavour, the current analysis is confined to 298 of the top 500 manufacturing enterprises chosen on the basis of turnover for the fiscal year 2004-2005, which spans a period of eleven years beginning in 1995-96 and ending in 2005-06. It is discovered that the earning rate, cash flow coverage ratio, size (total assets), asset growth, non-debt tax shield, dividend payout ratio, and operating leverage had little impact on the capital structure of the Indian corporate sector throughout the study period [60]. (Marina Balboa, José Martí-Pellón and Álvaro Tresierra-Tanaka, 2012) examines changes in capital structure behaviour in a sample of Spanish venture capital (VC)-backed firms that may emerge following a VC investment as a result of the certification impact offered by VC investors. Our findings demonstrate that variables such as tangibility, size, and profitability have changed significantly. In terms of tangibility and size, the

Dr. Ashwin H. Parwani, Dr. Ashvin R. Dave and Dr. Ashish B. Joshi

presence of an external investor alleviates the requirement for neither physical assets nor a huge scale in order to get further loan funding. Concerning the influence on profitability, investments made after the first VC investment have an impact on short-term profitability, but this condition is unrelated to the limited access to external loans. Researchers discovered that VC investors help unlisted developing firms by attracting additional long-term sources of funding to sustain their growth [61]. (MondherKouki ,Hatem Ben Said, 2012) investigates the theoretical and empirical determinants of firm capital structure selection The role of capital market imperfections in explaining firm leverage is emphasised here, using the tradeoff, pecking order, and market timing theories. Our research is based on a sample of 244 French publicly traded firms from 1997 to 2007. The variables taken for the study are Book leverage, market value (ML) of the debt ratio, firm size, tangibility, profitability, Growth opportunities, Non-debt tax shield, Bankruptcy risk, Funding gap, Timing the market, free cash flow Ratio, Ratio of concentration of ownership (HH), and managerial ownership ratio. The empirical findings indicate complementarity between the tradeoff theory and the finance deficit variable, but market circumstances had no discernible influence on debt ratio. Market timing, whether basic or prolonged, is also unconfirmed. The presence of a dynamic adjustment process to a target level is confirmed by the significance of the lagged leverage ratio in all experiments [62]. (SaylaSowat Siddiqui, 2012) investigates the relative impact of eight factors in the capital structure decisions of Non-bank Financial Institutions in Bangladesh. Existing empirical research on capital structure has mostly focused on industrialised nations. Papers on rising economies frequently group multiple nations together. The Bangladesh Financial Market is expanding at an exponential rate, necessitating more research in this area. The study investigates new parameters and uses a wider data set than previous research on Bangladesh. Researchers used data from 24 businesses from 2006 to 2008, independent of listing status. The goal of this study is to expand on prior research on the Bangladeshi capital market and model all of the significant factors influencing capital structure decisions of Bangladeshi NBFIs. The variables studied are Debt Service Coverage, Liquidity Ratio, Tangibility Ratio, Profitability Ratio, Growth Rate, Operating Leverage, Firm Size, Age. It is discovered that debt service coverage, liquidity ratio, growth rate, operating leverage, company size, and firm age all have substantial impact on he leverage structure selected by NBFIs in Bangladesh [63].

(B.T. Matemilola, A.N. Bany-Ariffin, Carl B. McGowan, 2013), intends to examine the impact of unobservable firm-specific impacts on a capital structure model. The sample is made up of South African companies that are listed on the Johannesburg Stock Exchange(JSE). The Bloomberg data base is used to gather the data sources for the analysis. We set several constraints in order to obtain the final sample. First, from 2004 to 2009, researchers used the 100 biggest listed corporations on the JSE. All of the top 100 publicly traded companies considered in this analysis have complete data for all of the years covered by this analysis. As a result, the data form a balanced panel. Second, because financial businesses' financial statements differ considerably from those of non-financial enterprises, they are omitted from the research. Third, because their debt ratios are often greater than those of other non-financial enterprises, regulated enterprises are removed from the analysis. The research compares the relevance of unobservable firm-specific effects in a fixed effects model that includes unobservable effects to a pooled ordinary leastsquares model that removes unobservable effects using the restricted least squares approach. The variables taken for the study are total debt, long term debt, fixed assets, net profit, size, market price-to-book ratio, non-debt tax shield. The results show that models with unobservable firm-specific effects are accurately defined [64]. (Brahmadev Panda, Siba Prasad Mohapatra, Samson Moharana, 2013) investigate the capital structure and drivers of the Indian steel industry. The 66 sample steel businesses had an average debt share of 68 percent in their capital structure, indicating that they are heavily debt oriented. As a result, we attempted to determine which are the elements that have a key role in explaining the capital structure. In this study, we included eight independent factors i.e asset structure, Profitability, Growth Opportunities, Size, Uniqueness, Business risk, Non- debt Tax Shields, Liquidity from previous research and used correlation analysis, multiple regression, and stepwise regression approaches to examine the debt ratio's dependence on independent factors. Following the trend of trade off theory, researcher discovered that just three variables, such as profitability, growth, and risk, had a substantial influence on the debt ratio of these steel businesses [65].

(NiloufarRezaieNejada and ShaistaWasiuzzamanb, 2013) has examined the capital structure of companies listed on Bursa Malaysia sample of seven sectors and 65 industries. Data of 177 companies and 1,062 firm-year observations from the Main Market of the Bursa Malaysia is taken for study from the period 2005 to 2010. The variables taken for the study were Growth Opportunities Profitability, Risk, Size, Tangibility, Ownership, Board Size, Non Debt tax shield, Age, Firm Liquidity, Dividend and Tax. The datademonstrate the significant influence of growth possibilities, profitability, size, ownership, dividend, and industry leverage on the capital structure of the business. Risk, tangibility, Non-Debt Tax Shields, firm age, tax, industry liquidity, and industry concentration are found to have a 5% significance level on debt levels, whereas risk, tangibility, Non-Debt Tax Shields, firm age, tax, industry liquidity, and industry concentration are found to have an insignificant impact on debt levels. The findings also indicate the major explanatory power of firm-level characteristics, which are followed by industry-level features [66]. (VusaniMoyo, Hendrik Wolmarans, Leon Brümmer, 2013) examines the link between leverage and the firm's important financial performance characteristics using a sample of 49 manufacturing, 24 mining, and 23 retail enterprises listed on the Johannesburg Stock Exchange between 2005 and 2010. The variables taken in the study are Cash flow from operations, Capital expenditure, Asset tangibility, Firm size, Firm growth, Financial distress, liquidity, price earning ratio, ordinary share price, retention rate, firm profitability, economic value added(EVA), Book to debt ratio, market to debt ratio. Leverage is directly proportional to Cash flow. This conforms to the trade-off (TO) and agency theories. Capital spending is associated to leverage in a positive way, but asset tangibility and retention rate are associated to leverage in a negative one. These data support the pecking order theory's validity. Leverage is inversely connected to liquidity and financial hardship. Leverage rises in tandem with profitability, as predicted by the TO theory. The fact that share price is strongly connected with leverage verifies the market timing argument. The result that economic value added (EVA) is positively connected with leverage refutes the TO theory. The sample's real speed of adjustment is 64.20 percent for the book-to-debtratio and 28.11 percent for the market-to-debt ratio [67]. (Elisabete S. Vieira, 2014) examines capital structure in the context of Portuguese listed family enterprises from 1999 to 2010. The variables taken in the study are Debt, fixed assets, cash, market-to-book ratio, risk, profitability, Age, non-debt tax shield board independence, Firm Size, operating return on assets, the sales growth, natural logarithm of the number of employees in the firm and the cost of debt, ratio between current liabilities and total debt, ratio between financial debt (bank loans and bonds) and total assets, equity divided by the total assets Using a panel data methodology, we discover that family-controlled enterprises vary from non- family-controlled enterprises in a number of ways. Family businesses employ more debt than non-family businesses and have fewer independent directors. Furthermore, they use debt to finance new initiatives and are sensitive to the cost of debt in crisis situations, whereas non-family enterprises with larger amounts of cash use less debt. Overall, we discover a negative link between profitability, non-debt tax shelter, and debt, as well as a positive link between company age and debt [68]. (J.Choi, Yoo, Kim and Jae-Jun, 2014) examined the capital structure determinants of 43 Korean listed construction businesses from 2000 to 2010 employing Multiple regression analysis. The variables used for the study are company size, leverage ratio, profitability, Asset tangibility, Time Dummy, non-debt tax shields, liquidity,

growth opportunities. The empirical study concentrated on variations in the coefficient of the predictors based on the quantiles of the leverage ratios of the engineering firms under investigation. The empirical research discovered that the amount of a company's non-debt tax shield is positively connected to leverage among construction enterprises, but profitability, growth, asset tangibility, and liquidity are adversely connected to leverage. The study's major findings are as follows: 1) construction companies followed the static tradeoff theory in terms of size: 2) non-debt tax shields had only a minor impact on construction companies' capitalstructure decisions; and 3) non- debt tax shields had no effect on construction companies' capital-structure decisions. 3) Construction firms were discovered to follow the pecking order hypothesis in terms of profitability. 4) The sign of asset tangibility was assessed to be the inverse of that reported in prior investigations [69]. (Saeed Fathi, FarzanehGhandehari, SayyedYa'ghoubShirangi, 2014) investigates the determinants of capital structure in listed businesses on selected developing-country stock markets and the Tehran stock exchange, as well as the implications of these variables on chosen stock exchanges with Iran. Data for this study were gathered from 24 selected stock exchanges in developed countries, totaling 6516 enterprises, including 82 from Iran. The determinants of capital structure are investigated at the business and nation levels in this study. Profitability, distance from bankruptcy, size, and tangible assets are analysed at the business level, and stock market development and GDP growth are analysed at the national level. Compustat Global Vantage database, World Bank databases, and Tadbirpardaz software are used to collect data. Panel Regression is utilised for analysis, as are Excel and EViews 6, as well as F and t test statistics. The findings of a study conducted at the level of emerging nations demonstrate that, with the exception of Equity market development, economic growth, proximity from insolvency, and other factors all have a significant impact on capital structure. On the Tehran Stock Exchange, the distance from bankruptcy and tangible assets have a substantial association with capital structure This document allows for comparison, benchmarking, and identifying strengths and shortcomings, and the results may be utilised to define corporate finance plans and objectives[70]. (Agha Jahanzeb, Norkhairu, Hafiz Bajuri and Aisha Ghori, 2015) examined the relationship between market power and capital structure. This research will also give a rational explanation for the elements influencing capital structure. This research examined 176 non-financial Pakistani firms registered on the Karachi Stock Exchange between 2003 and 2012. The variables taken in study are size, tangibility, profitability, dividend payout, liquidity. Capital structure has been investigated from a different angle by looking at its relationship with market power. Market power and capital structure have been found to have a strong and favourable relationship. Size and liquidity were notably negative with relation to capital structure, although profitability and dividend payout remained considerably positive [71]. (Andrzej cwynar, Wiktorcwynar, Robert dankiewicz, 2015) examined 34 empirical research aiming at studying the capital structure determinants in companies operating in Poland to see how stable the financing patterns were over time (2001-2012). The variables taken for the study are Profitability, size, growth opportunities, tangibility(asset structure), Non The following research questions, which form the objectives of the article, specifically motivated researchers in conducting the survey: (1) Which factors – country- or firm-specific – are more important in understanding leverage in Poland, (2) Which hypothesis – trade-off or pecking order – is more popular in Poland and (3) What impact does the optimal capital structure noti on have in Poland? findings reveal that financing patterns have changed significantly over the previous 20 years, as seen by a progressive increase in debt ratios, with short-term debt playing a larger role, and a decline in the impact of countryspecific determinants (especially in large-sized, listed firms). With the exception of tangibility, the indications of the associations between leverage and the important firm-specific characteristics wererather steady through the investigated period. These findings provide further credence to pecking order theory, with the target capital structure playing only a minor

influence [72]. (Abdul Razak Abdul Hadi, Shadi Ali Hamad & Tulus Suryanto, 2016) examine the capital structure

Determinants for Palestine Stock Exchange (PEX) and Egypt Stock Exchange (EGX). Within the framework of capital structure theories, this study uses Generalized Method of Moments (GMM,1982) as an estimation model employing quarterly panel data analysis during the observed period from 2008 till 2012. The variables taken for the study are debt to equity ratio, CR, cash flow, size, bankruptcy risks and costs, liquidity, tangibility, non-debt tax shield, profitability, growth. According to GMM's test results, all of the analysed factors show a substantial association with leverage. Liquidity, non-debt tax shield, profitability, scale, and expansion all have a negative value. The Egyptian businesses have a distinct pattern. Except for growth, current assets, debt ratio, and liquidity all respond favourably to leverage. The additional factors in Egyptian companies that were investigated were found to be not significant [73]. (Ntoung A. T. Lious, Huarte G. Cecilio, Puime G. Felix, 2016) examines that tangibility, size, volatility, profitability, non-debt tax shield, development potential, and industry influence are characteristics that define a company's capital structure using yearly data from 77 non-financial enterprises in Spain before to and after the financial crisis. The results reveal that leverage is related to size, non-debt tax shield, and industry effect in a positive and statistically significant way. Our findings show that profitability, growth potential, and volatility are all adversely and statistically related to the debt difficulties on these public companies' balance sheets. With regards to the 2008 financial crisis, researchers evaluate whether these findings are compatible with empirical data presented in previous research. Furthermore, the cost of financial hardship was significant during the 2008 financial crisis, thus when size is employed as a proxy for the likelihood of bankruptcy, a negative association is unavoidable. Finally, as a result of overseas investors' scepticism and the weakening Spanish economy, the bulk of publicly traded companies have become more reliant on equity financing [74].(Tendai Gwatidzo, Miracle Ntuli, Mthokozisi Mlilo, 2016) use a quantile regression methodology to explore the influence of capital structure variables on leverage using data from 239 publicly traded South African companies from 1996 to 2010. The variables taken for the study are Profitability, tangibility, size, taxation, volatility, growth ,and age. The key contribution of this study is to evaluate the influence of the predictor factors throughout the leverage distribution. Is it true that the impact of a capital structure determinant varies depending on the amount of leverage? Our findings reveal that the relevance of leverage determinants did not vary with leverage, with the exception of asset tangibility and age, which rose with leverage. This is a significant finding because it implies that research that estimate the correlates of leverage at the mean are still relevant and acceptable in the situation of South Africa. Age and taxation has Negative relation with leverage while Risk has positive relation with leverage [75].

(Lui's Pacheco, Fernando Tavares, 2017) examines the capital structure determinants of small and medium businesses (SMEs) in the hospitality industry and how they affect their Debt levels. The authors investigate the capital structure determinants between 2004 and 2013 using panel data technique and a sample of 43 Portuguese hotels. The trade-off theory and the Pecking Order theory are used to assess the amount of indebtedness in the research. The hospitality industry was chosen due to its importance in the Portuguese economy and the fact that it has received little research. In addition to overall debt, the authors contribute to the body of knowledge by examining the disparities between short- and long-term debt. Profitability, assets tangibility, firm dimension, total liquidity, and risk are major determinants determining the capital structure of hospitality industry SMEs, according to the findings, but growth, other tax benefits, and age are not. As a result of these findings, researchers may infer that the Tradeoff and Pecking Order theories should not be used in isolation to describe the capital structure of SMEs in the hospitality industry [76]. (Mazila Md-Yusuf, 2017) investigates the capital structure of shari'ah-compliantMalaysian Small and Medium Enterprise (SME) businesses listed

Dr. Ashwin H. Parwani, Dr. Ashvin R. Dave and Dr. Ashish B. Joshi

on the Bursa Malaysia. The study's goal is to discover the elements that influence SME shari'ahcompliant enterprises' capital structure, as well as the link between these factors and capital structure. From 2005 to 2014, 18 small and medium-sized shariah-compliant businesses were studied. The debt ratio was employed as a proxy for capital structure, and the determining factors in this study were the firm's age, asset tangibility, liquidity, profitability, growth rate, and taxes payment. The findings revealed that the age of the business, the company's asset tangibility, and the business's liquidity are the characteristics that impacted the capital structure of the SME shari'ah compliant enterprises using the pooled ordinary least square (POLS) multiple regression estimate. The findings also revealed that the debt ratio of SME shari'ah compliant enterprises listed on the Bursa Malaysia has a favourable link. On the other side, there is a negative association between asset tangibility, growth rate, taxes payment, and debt ratio of a corporation [77]. (Mehmet Kenan TERZIOĞLU, 2017) By concentrating on the Turkish banking industry, investigate the causes of capital structure and establish whether capital structure theories have the potential to describe the banking sector structure. Despite the fact that there have been several research on establishing the capital structure of the banking industry throughout the world, these research have been restricted for the Turkish banking industry. Furthermore, because studies in this area in Turkey are typically focused on static models, this paper contributes to filling the gap in the banking sector's capital structure literature in Turkey by employing a dynamic model structure in which the form of the mechanism that generated the data in previous periods is significant. The capital structure of banks is examined in this study, as well as their asset Structure, size, non-debt tax shield, profit, tax level, liquidity, and cost of borrowing. It is discovered that debt ratio and asset structure have a negative association. Because the liquidity ratio is a measure of risk, banks with a high liquidity ratio are better equipped to take on short-term obligations, resulting in a positive correlation between their liquidity and debt ratios. Size and bankruptcy are projected to have a negative association, indicating that size and capital structure have a positive association. This positive association suggests that when banks increase in size, they will resort to higher amounts of foreign resources and will have fewer difficulties collecting funding. A negative relationship is seen between the debt- equity ratio and profitability. The tax has a favourable and considerable influence on capital structure, according to the findings. Higher depreciation rates are associated with less growth choices in investment portfolios and a higher proportion of tangible assets, implying a positive relationship [78].

(Mursalim, Mallisa M., Kusuma H., 2017) Investigate the factors of capital structure in Indonesia, Malaysia, and Thailand. Profitability, business size, growth potential, volatility, gross domestic product (GDP rate), inflation rate, and corporate governance are all explored variables in this study. For the period 2008-2012, the leverage behaviour of 94 Indonesian enterprises, 153 Malaysian businesses, and 74 Thai enterprises was investigated using route analysis of two-multiple regressions. The findings reveal that profitability, business size, and volatility all play significant and consistent roles in explaining capital structure variance. The variance of the capital structure is influenced by variables such as growth potential, gross domestic product, inflation rate, and corporate governance in general. Furthermore, the financial structure of a company was linked to its success in a substantial way [79].

(Antonio ZorattoSanvicente, Adriana BruscatoBortoluzzo, Mauricio MesquitaBortoluzzo, 2017) The determinants of capital structure are discussed in this study, with an emphasis on both publicly-owned and privately-owned enterprises. We used yearly financial statement data from over 1,000 publicly and privately held Brazilian companies from 2012 to 2015. The variables used in the study are gross debt, dividend payout, Total asset turnover ,operating cash flow, current liquidity ratio, operating margin, size, intangibility, proxy for positive net present value investment opportunities, proportion of short-term debt

This allows us to utilise financial statements in accordance with the current IFRS system. The technique considers the interdependency of debt and dividend policies, which has been dentified in the literature on capital structure and dividend policies. We also consider the Fact that both debt and dividend policies may be utilised to alleviate agency difficulties, and that agency difficulties can influence capital structure and dividend policy decisions. The firm's inverted asset turnover ratio is used as a proxy for the agency cost of equity. Our empirical technique incorporates debt and dividend policies, as well as agency costs, as dependent variables, resulting in a system of three equations that are evaluated using the generalised technique of moments (GMM). We find that both payout and past debt levels are positive and substantial drivers of debt levels, but that their importance varies across privately-owned and publiclyowned enterprises. Furthermore, several common capital structure variables are relevant for one group: privately-owned enterprises (cash flow), publicly-owned businesses (intangibility), but not for the other, highlighting the need of evaluating such businesses separately [80]. (Abdul Razak Abdul Hadi, Raja Rehan, Sehrish Zafar, Mudeer Ahmed Khattak, 2018) analyses the influence of asset value, capital assets, financial assets, revenues, return on capital, and profits per share on capital structure (firm-specific variables). List Bursa Malaysia-listed companies The Modigliani- Miller Theory, Trade-off Theory, and Pecking Order Theory are all tested in this study. The research is extensive, since it includes all industries listed on the Bursa Malaysia (both financial and non-financial sectors). Over a twelve-year span, from 2005 to 2016, 558 listed businesses from all segments of the Bursa Malaysia primary market were examined. The method is based on a static forecasting model. The base-line analysis is performed using pooled OLS. The debt-to-equity ratio, which represents the firm's capital structure, is used as a dependent variable. Total assets, current assets, sales, and profits per share are all significant in understanding a firm's capital structure, according to the empirical findings [81]. (MounaAmraoui, YeJianmu, KenzaBouarara, 2018) The research uses a panel regression technique to analyse the impact of capital structure on company performance in Morocco. Based on the results of the Haussmann test, fixed effects fit the first model better, hence they were used to analyse capital structure determinants in Moroccan enterprises. The yearly data was gathered from the Moroccan capital market authority and the official website of the Casablanca stock exchange, and it includes 52 Moroccan firms during an eight-year period from 2009 to 2016. The variables taken for the study are Debt ratio, Return on asset, Return on equity, Asset tangibility ratio, size, growth, liquidity, gross domestic product, Interest loan rate. The findings of this study show that out of seven factors, four are more significant: return on asset, asset tangibility, size, and liquidity, all of which have a negative influence, with the exception of size, which has a positive influence. As a result, the major drivers of capital structure in Morocco are firm-specific Characteristics, and the choice of leverage varies by industry and activity [82]. (Raymond Chia TsunSiung, 2018) study the link between a company's financial success and the capital structure it chooses based on automotive companies listed on the KLSE, SGX, SET, and IDX from 2001 to 2016. In order to address the following two questions, researchers used unbalanced panel data from the quarterly data of 66 publicly traded automobile businesses from four countries: Are the capital structures of automotive manufacturers in the four nations similar to capital structures previously documented in the literature? Do country-specific characteristics influence the automobile firm's financing decision? For company financial performance, we used two alternative proxies (return on asset andreturn on equity). Researchers include firm-specific characteristics such as size, tangibility, liquidity, revenue growth, and country-specific factors such as the national currency's volatility versus the dollar, GDP growth, inflation, and country financial depth. Researchers study reveals that the ROA has a considerable impact on the overall debt ratio of automotive businesses in the four ASEAN nations, although this is not the case with the ROE, and the sign of the ROA is not the same as the sign of the ROE. The other firm factors have a mixed correlation, providing inconclusive evidence supporting both pecking order theory and

Dr. Ashwin H. Parwani, Dr. Ashvin R. Dave and Dr. Ashish B. Joshi

trade-off theory [83]. (Ardita Bylo, Serkan Cankaya, 2019) Using a panel of 30 non-financial organisations registered on the Zagreb Stock Exchange, Belgrade Stock Exchange, and Macedonian Stock Exchange between 2012 and 2017, examine the drivers of capital structure of enterprises in the Western Balkans (WBs). The variables taken in the study are Leverage, Shortterm Debt to Assets, Long-term Debt to Assets, company size, Growth opportunities, taxes, Non debt tax shield, tangibility, profitability, business risk, Asset utilisation and liquidity. The leverage ratio is calculated as a result of the features of the company. According to the findings, businesses in the WBs rely on short-term debt more than long-term debt. Liquidity, profitability, and tax have a considerable negative influence on both leverage and the short-term debt ratio. The development potential of these enterprises, as well as their previous level, have a major beneficial impact on the long-term debt ratio. theory. According to the findings of this empirical study, enterprises in the WBs follow the pecking order. These findings appear to be comparable to those of earlier studies on emerging and transitional economies of this type [84]. (Maheswari K, Gayathri J, 2019) investigates the occurrence of cross-industry variability in capital structure variables for domestic manufacturing enterprises in India. Domestic enterprises in the construction, engineering, FMCG, metal, and textiles sectors were examined for this purpose. The data was analysed using the Ordinary Least Square Model across a ten-year

Period, from January 1, 2009 to December 31, 2018. The variables studies are Debt equity ratio, profitability, liquidity, return on capital employed, return on assets, size, tangibility, Non debt tax shield, Business risk, Audit committee, and Board. The findings are None of the determinants are strongly connected with Debt Equity Ratio, according to the Audit Committee. For enterprises in the Construction and Engineering Sector, only the return on capital employed is a relevant driver. FMCG and Textiles are the most significant factors of debt equity ratio among the other industries. For FMCG firms, debt-equity ratio is inversely connected with business risk. Liquidity is adversely connected with debt-equity ratio in all industries except Engineering and Textiles. Non-debt tax shield is inversely connected with building and engineering. Except for the construction and metals industries, profitability is inversely connected. Return on Capital Employed is positively connected in the construction industry alone. Only the FMCG and Metals industries have a positive connection with Return on Assets. For the construction and textile industries alone, company size was inversely associated. With the exception of the FMCG industry, tangibility is adversely connected with debt-equity ratio. For the construction and engineering industry, the correlation results for the Audit Committee and Board variables are contradictory [85]. (Muhammad Yar Khan, Anam Javeed, Wajid Khan, 2019) analyses how conventional and Islamic banks choose their capital structures, as well as the factors that influence their capital structure selections. From 2004 to 2014, data was taken from the annual reports of KSE indexed firms. The variables taken for the study are Book leverage, Profitability, Bank size, Tangibility, growth, Earnings and Volatility.In order to achieve the results, the ordinary least square (OLS) method is used. According to the findings of the study, conventional banks are more leveraged than Islamic banks. Furthermore, conventional banks are larger in size and have a higher degree of profitability than Islamic banks. In compared to conventional banks, Islamic banks have a higher level of fixed operational resources. The findings reveal that book leverage is negatively related to profitability and tangibility, but that bank size has a substantial relationship with book leverage in Islamic banks. Profitability, growth, and tangibility, on the other hand, are adversely associated to book leverage, but bank size has a beneficial influence on traditional banks' capital structure decisions. The influence of earnings volatility on capital structure decisions is negligible. These findings suggest that banks should have a better grasp of bank-specific elements that will aid them in determining the capital structure of these institutions.

(Rehan R., Abdul Hadi A.R., 2019)investigated the capital structure of public listed Shariah and non-Shariah corporations in Bursa Malaysia From 2005 to 2016. Net assets, capital assets,

financial assets, volumes, return on capital, and profits per share are the six debt equity components studied. Using the Generalized Method of Moments (GMM) to deploy a dynamic estimating model on these six capital structure determinants. The significant role of this lag dependent variable suggests the importance of dynamic capital structure in explaining variations in capital structure of public listed companies in Malaysia. Similarly, the importance of current assets and fixed assets suggests that Trade- Off theory is relevant in analysing a firm's capital structure decision. The relevance of dynamic capital structure in explaining changes in capital structure of public listed businesses in Malaysia is suggested by the important impact of this lag dependent variable. Similarly, the importance of current assets and fixed assets suggests that Trade-Off theory is relevant in analysing a firm's capital structure decision. Non-Shariah enterprises outperform their Islamic counterparts in terms of profitability and overall asset value [86].(SamalKokeyeva, 2019) to investigate the impact of traditional firm-factor factors on the capital structure of small and medium-sized businesses (SMEs). To that purpose, researchers looked at small and medium-sized businesses in Kazakhstan across all industries. Researchers explore the drivers of capital structure for non-financial SMEs in Kazakhstan using panel data methodologies. The influence of important factors such as asset tangibility, size, growth, profitability, and tax rate on SMEs is investigated in this study. This research was guided by the trade-off theory and the capital structure pecking order theory. Except for growth, the results demonstrate a substantial link between capital structure and independent factors. The effect of asset tangibility and growth on short- and long-term debt ratios is in the opposite direction, demonstrating that they have an impact on debt maturity structure as well as total debt levels. Effective tax rate is positively related with debt [87]. (Satriyo Budi Cahyono and Arvinder Singh Chawla, 2019) examines the firm-specific factors that drive leverage determination in Indonesian mining companies. The goal of this research is to see if the leading capital structure theories can explain the links between debt ratios and determinants. The leverages are measured in three ways: total, long-term, and short-term debt ratios. Tangibility, flexibility, liquidity, profitability, business size, sales growth, retained earnings, free cash flow, and business age are among the variables. From 2010 to 2015, balanced panel data from 22 sample businesses were used to examine the link between those three levers and nine factors. The findings show that tangibility has a positive impact on long-term leverage, financial flexibility has a positive impact on total and long-term leverage, liquidity has a negative impact on total and short-term debt, firm size has a positive impact on long-term leverage but a negative impact on short-term debt, and retained earnings has a negative impact on total and long- term leverage, Free cash flow has a favourable impact on short-term leverage, while firm age has a positive impact on short-term debt. In short, these linkages support capital structure theories' applicability across Indonesian mining businesses [88].

(Shalini R, Mahua Biswas, 2019) Analyses the most important elements particular to firms that have an influence on the capital structure of 416 businesses from 14 industrial sectors included in the S&P BSE 500 for a period of 19 years, from 2000 to 2018. To further understand the impact of certain variables on capital structure, a multi regression model is utilised. The variables taken for the study are total debt to assets ratio, growth, tangibility,Non debt tax shield(depreciation to total assets ratio), Profitability, selling costs to sales, tax provision to PBT ratio and variance in operating profit. Four explanatory factors, including business size, tax paid, depreciation to total assets ratio, and profitability ratio, are statistically significant capital structure determinants, according to the study [89]. (Nader Alber, Iman S. Youssef, 2020) analyses the capital structure of Egypt and three other countries, Turkey, Brazil, and Argentina from 2005 to 2015. The variables taken for the study are profitability, firm size, tangibility, volatility, GDP growth, inflation and stock market development. This article examines the factors that influence capital structure in Egyptian listed non-financial enterprises, as well as how capital structure decisions in three other nations that are ahead of Egypt in terms of

economic growth, differ. In the regressions for four countries utilising the GMM estimation method, profitability was the only variable consistently highly significant with a negative coefficient. The results for other factors were inconsistent. Due to supply constraints on bank lending and demand constraints on consumer borrowing, the findings suggest that Egyptian enterprises are not too indebted on average [90]. (SautmaRonniBasana, Tiffany Tandarto, and Christina Soehono, 2020) identify the elements that influence the capital structure composition of a property and a real estate firm. All property and real estate companies listed on the Indonesia Stock Exchange from 2013 to 2018 are included in this study's demographic. The variables taken for the study are Profitability, growth, Non debt tax shield, liquidity, the collateral value of asset, business risk and company's size.Until 2019, there are 48 firms on the list. A stratum test is used in the data analysis. The company's performance, profitability influencing capital structure, growth that does not affect capital structure, nondebt tax shield impacting capital structure, and liquidity do not affect capital structure are among the findings of this study. The collateral value of assets effects capital structure in the case of a company's risk; nevertheless, the capital structure is unaffected by business risk. The capital structure is unaffected by the size of the firm in terms of its features[91].

There are several experiments carried out on 'capital structure, cost of capital and Firm's worth' and books published on it. Each has distinct elements to reveal, but the essence remains more or less the same. All attempts to explain his thoughts until, ultimately, the conclusion that has been reflected is that the company's capital structure has no basic model. It ranges from sector to business, from businesses to companies within the industry, with the organization from time to time. It is also not necessary to evaluate the company's acceptable normal capital structure for the entirety of its existence. It is dependent on several variables that are not constant and constantly it needs some attention on them. Researchers have sought to explore some of the work on the capital structure for multiple businesses in different sectors and how it impacts the value of the company.

Inamdar Satish, in his book 'Financial Management' mentions that it is important to consider certain basic principles which militate with each other in order to consider the proper pattern of the capital structure. He gave the principle of providing proper weighting to cost principle, risk principle, control principle, flexibility principle and timing principle. In order to understand the long-term requirement of funds, the above criteria should be taken into consideration and then an acceptable combination of equity and debt should be finalized [94].

Dr. R. P. Rustagi[95], in his book 'Financial Management-theory, concepts and problems', offered a very clear understanding of all the problems of capital structure and all the theories of capital structure. He clarified each and every part of the company's financial structure, capital costs and valuation. He notes that the company's worth depends on the company's earnings and the company's earnings rely on the company's expenditure option. The company's earnings are capitalized at a rate equal to the cost of capital in order to calculate the company's worth. The company's valuation thus relies on two fundamental considerations, i.e., the company's valuation be influenced by adjusting the balance of capital? Is there a system of capital that could be considered the ideal structure of capital?

Van Horne James C. [100], in his book financial management and policy mentions "how does the financial planner, in fact, decide the best capital structure for a given company? Our issue is with how to deal with the formidable problem of deciding an acceptable structure of resources. Different methods of analysis are possible in this respect, but none of the methods are fully satisfactory. However, taken together, they have the financial analyst with enough evidence to make a sound decision. There can be no misconception that the financial officer will calculate the exact amount of leverage that maximizes the share price. Rather, in line with the goal of optimizing the share price, he should attempt tocalculate the estimated proportion of debt to be used.

Gitman, Lawrence J.[95], in his book 'Principles of Managerial Finance', says that the theory of the structure of capital is closely linked to the capital expense of the business. Many disputes are found in the financial literature on whether a 'optimal' capital structure exists. The controversy started in the late 1950s, and the dispute has not yet been settled. A conventional approach is claimed to be taken by thinkers who claim the existence of an ideal capital system, while those who assume that a capital structure should not leave are considered proponents of the M and M approach.

Shah Paresh P.[97], in his book, 'financial management' says that A change in the funding mix can influence the value of a company and its cost of capital. In this case, there are distinct views available. So one should go through them and decide on his concern's acceptable capital structure.

Kishore Ravi M.[96], in his book, 'Financial Management', says that The optimal level is the mix of debt and equity that adds to the company's worth being maximised. The decision on the capital structure is critical for the company; the optimal capital structure minimizes the total capital expense of the company and maximizes the company's value. As the interest on loans is tax free, the use of debt funds in the capital system raises EPS. This will lead to a spike in the share price. Yet higher amounts of debt funds in the capital system tend to higher credit risk, leading to higher capital costs and a decrease in the share price of the company's shares. The company should then aim to try to achieve and preserve the desired capital structure while keeping the company's goal of optimizing value in mind.

Pandey I.M.[92], in his book, 'Essentials of Financial Management' says that in practice, the definition of an ideal capital structure is an impressive one. And one's got to look beyond the theory. In terms of capital structure, there are major differences within markets and between firms within a market. Because a variety of factors affect a company'sdecision on the capital structure, the judgement of the individual making the decision on the capital structure plays a critical role. Two related firms may have distinct capital structures in their judgment of the importance of different variables, whether the decision- makers vary. A fully theoretical model could not be able to manage all those considerations that influence the decision on the capital structure in practice adequately. These variables are strongly psychological, nuanced and qualitative and do not necessarily suit the agreed theory, since the financial markets are not flawless and the decision must be made at imperfect risk and experience. Through multiple viewpoints, financial structure may be measured. He provided the meaning of 'FRICT'. Flexibility, risk, income, control and timing, in other words. When deciding the capital structure, these variables should be held in mind.

Khan M Y and Jain P K [91], in the book,' Financial Management, text and problems, saysthat two views on the structure of capital exist. The near relationship between a firm's leverage and valuation is clearly backed by one perspective. There is an equally large body of opinion that argues that there is no effect on the resources of shareholders on the financeratio or the mixture of debt and equity and that the judgment on the financial framework is insignificant. There is nothing, in other words, like an optimal capital structure. While it is correct that the combination of funding can not impact the As decided by investment decisions, the overall operating earnings of a company will impact the share of earnings belonging to ordinary shareholders. (Stewart C.Myers, 1984) has totally contrasted debt to benefit ratio and pecking order principle views of tradeoff frame function[101].

Murillo Campello (2003) finds that debt finance has a negative effect on the development of business revenues (relative to industry) in sectors where competitors are comparatively

unleveraged during recessions, but not during booms. On the basis of his study, he has shared his views on certain subjects.

Jack Glen and Ajit Singh (2004) have been working on a contrast between capital structures and return rates in developed and emerging markets, and their results are quite positive. For their research work, they have used ratio analysis. From the years 1994 to 2000, 8,000 manufacturing firms from 44 countries were compared.

Amnon Levy and Christopher Hennessy(2007) found that managers would keep a large percentage of the equity of their business to avert agency disputes. In order to retain managerial stock shares, companies substitute debt for equity during contraction. Risk sharing increases with expanded managerial wealth during expansions, enabling the exchange of equity for debt.

Abe de Jong, RezaulKabir and Thy Thu Nguyen(2008) shows that the capital structure of a company is impacted not only by company-specific factors, but also by country-specific factors. The study demonstrates that country-specific factors can impact corporate leverage and that factors vary from country to country on the basis of the country's economic conditions.

In order to examine the capital structure, Jean J Chen (2004) conducted a survey of Chinese listed firms and drew some conclusions. Chinese businesses have numerous patterns of reaction to the changing economic environment.

Anders Kjellman and Staffan Hansen(1995) are both reviewed the few Heilsinki Stock Market companies listed. They explore whether theories of capital structure can describe current financing actions. They questioned managers if they choose an optimal mix of long-term funding or an optimal hierarchy of finance when collecting fresh funds, where the more beneficial path is chosen first, irrespective of the effect on the capital structure.

A paper was put forward by Henry Deangelo and Ronald Masulis(1980)[123]. A business leverage option model is built in the paper in which corporate and differential personal taxes exit and supply side changes by businesses enter into the determinants of equilibrium relative debt and stock rates. They also studied the MM method and the theorem of Merton Miller and provided the capital structure recommendations and results.

Erol Muzir published a study of 114 companies listed on the Istanbul Stock Exchange on the basis of a dataset of five-year financial statements from 1994 to 2003. He discusses his thesis to suggest, on a comparative basis, the validity of the three core hypotheses of capital structure-Irrelevance hypothesis, Static Trade Off theory and Pecking Order Theory. The findings provide some strong evidence showing that the effects of company size on financial results and profitability may vary based on how size growth is funded. Any debt-funded asset growth has been shown to raise risk exposure. Especially during economic downturns, preferring the theory of Static Trade Off over others.

# **CHAPTER-3**

#### **RESEARCH METHODOLOGY**

# **3.1.0 FOCUS**

**3.1.1** In the first chapter it is clearly brought out that capital structure of a company is the mixture of stock, debt, and hybrid securities that it employs to fund its assets for long-term investment decisions in order to optimize the firm's value.

**3.1.2** Naturally these aspects of capital structure involve several variables. In this study, we have considered the following variables: Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio.

# **3.2.0** Variables

# **3.2.1 CURRENT RATIO**

The influence of liquidity ratios on capital structure decisions may be varied. According to the TOT, companies should provide sufficient liquidity by obtaining debt in order to pay their commitments; hence, liquidity and capital structure must have a positive relationship. In contrast, there must be a negative relationship between liquidity and capital structure, according to POT, agency theory (AT), and FCFT. businesses with sufficient liquidity, according to these theories, have less need for external financing and borrowing. Myers and Rajan (1998) give another reason for this negative link, arguing that when the administrative costs of liquidity are high, the quantity of borrowed funds available to the business is limited by outside lenders. Eldomiaty and Azim (2008)[170] discovered that for each risk level, the CR (as a measure of liquidity) has a strong negative connection with the debt ratio. They also demonstrated that at lower risk levels, the cash ratio exhibits a negative connection with debt ratios, and these correlations validate POT. As per (Deesomsak et al., 2004)[171], there is a negative correlation between liquidity and debt ratios, and firms with high liquidity choose internal funding to external funding that have less indebtedness as a consequence; this is compatible with POT. Furthermore, several research have found an inverse link exists between solvency and debt to equity ratio. The CR and the working capital ratio are used throughout this study to assess a firm's liquidity. Divide current assets by current debts to get the CR.

 $Current Ratio = \frac{Current Assets}{Current Laiblities}$ 

# **3.2.2 SALES GROWTH RATIO**

Using pecking order reasoning, rising businesses impose a larger demand on the firm's internally generated cash. As a result, businesses with relatively fast growth will seek to issue instruments that are less susceptible to information asymmetry, i.e. short-term debt. As a result, businesses with substantially stronger growth should have more leverage (Viviani, 2008)[183] Because companies with quick growth need and can borrow more. A firm's financing, according to the AT, is a technique through which shareholders and management can solve the issue of free cash flow. Companies with better development potential, according to this theory, have more debt.Rajan and Zingales (1995)[116] concluded that when businesses with greater possibilities for development require funding, they may accomplish so by raising equity and utilising less debt in future financing choices. As a result, companies withhigh-growth potential may avoid issuing debt in the first place, and leverage is predicted to be adversely connected to growth prospects. Furthermore, the TOT shows a negative link between growth opportunities and debt ratios. Cassar and Holmes (2003)[189] discovered a substantial positive link between a

firm's growth possibilities and debt ratios, concluding that businesses with more growth potential move toward optimal capital structure faster. Furthermore, the findings of previous research investigations indicated a substantial positive link between growth opportunities and debt ratios (Amidu, 2007; Heshmati, 2001)[184,182]. Berens and Cuny (1995)[191] contended that expansion necessitates substantial equity funding and low leverage. Finally, Ooi (1999)[192] and Huang and Song (2006)[156] found that there is a negative link between growth prospects and debt ratios. Except for Australia, Deesomsak et al. (2004)[171] found a negative connection between growth opportunities and leverage. Two metrics were utilised in this study tocalculate growth opportunities. The first metric is sales growth, which is determined by subtracting current-year sales from previous-year sales and dividing the result by previous-year sales. The second metric is anticipated asset growth, which is determined by subtracting current-year assets from previous-year assets and dividing the result by previous-year assets.

# Sales Growth Ratio

=  $\frac{(Current period net sales - Prior period net sales)}{Prior Period net sales} \times 100$ 

#### **3.2.3 EFFECTIVE TAX RATE**

The tax rate is expected to have a beneficial impact on debt. A firm with a high effective corporation tax rate may need to, or may profit from, incurring additional debt in order to maximise the tax deduction for loan interest. Modigliani and Miller (1963)[2] claimed that corporations would choose debt over alternative financing methods because interest payments are tax deductible. Borrowing gains rise in proportion to the tax rate (Antoniou et al., 2008)[151],. As a result, a positive connection between the effective tax rate and debt is predicted. Furthermore, according to TOT, income tax is positively related with debt (DeAngelo and Masulis, 1980)[152]. Graham (1996) and Zimmerman (1983) revealed a significant positive correlation between a company's effective tax rate and its long-term financial leverage, implying that taxes have an impact on financial management practices. However (Antoniou et al., 2008) discovered a negative relationship between effective tax rates and debt to equity ratio, implying that the impact of this rate on capital structure is depending on the tax regulations of each country[151]. According to Huang and Song (2006), the effective tax rate and the quantity of debt in the capital structure have no relationship.Researchers employ the effective tax rate, which is computed as the ratio of taxes paid to earnings before taxes. Profits after taxes are subtracted from earnings before taxes to determine taxes paid. This variable has values ranging from 0 to 1.

 $Effective \ tax \ rate = \frac{Tax \ paid}{Profit \ before \ tax}$ 

# 3.2.4 Firm Size

The size of a company is expected to have a beneficial influence on its debt level. Abigger firm is less likely to go bankrupt and so attracts more debt. According to the TOT, debt ratios should have a positive connection with company size since larger businesses are more diversified and have lower earnings volatility, allowing them to accept greater debt ratios (Castanias, 1983; Titman and Wessels, 1988).

Firm Size = Ln of Sales

# **3.2.5 ASSET STRUCTURE**

Fixed assets are often those bought with debt that serve as collateral for creditors in the event of a firm's collapse. We may also argue that a portion of a company's debtcapacity is made up of

intangible assets, which are referred to as asset structure (Schwarz and Aronson, 1967)[178]. The shareholders of a leveraged business have an incentive to invest sub-optimally, according to agency cost theory (Titman and Wessels, 1988)[28]. According to TOT, a firm's tangibility has a favourable influence on debt level. A firm with more physical assets will need more collateral assets to service debt in the case of bankruptcy and, as a result, will be able to attractmore debt. Tangible assets may also have a negative influence on financial leverage by increasing risk through increasing operating leverage (Hutchinson and Hunter, 1995)[179]. According to Chiang et al. (2010), there is a positive link between asset structure and long-term debt ratio. Furthermore, several studies have demonstrated a favourable link between asset structure and debt ratios (Al-Najjar and Taylor, 2008; Teker et al., 2009; Deloof and Overfelt, 2008; Mitton, 2007; Heshmati, 2001; Viviani, 2008; Antoniou et al., 2008; Frank and Goyal, 2002)[12,180,159,181,182,151,183,138]. Furthermore, findings from a study of small and medium-sized businesses show a substantial positive link between asset structure and long-term debt ratio (Sogorb-Mira and How, 2005)[155]. Furthermore, some investigations have yielded dichotomous outcomes. According to Amidu (2007)[184] and Abor and Biekpe (2009)[185], asset structure is adversely related to short-term debt ratio but favourably related to long-term debt ratio. Booth et al. (2001)[186] also concluded that there is a negative link between asset structure and Overall debt ratio (leverage), while asset structure is favourably related to longtermdebt ratio. Furthermore, contrary to what TOT predicted, the findings of several additional research indicated a negative link between asset structure and debt ratios (Sheikh and Wang, 2011; Vicente-Lorente, 2001)[173,187].

 $Asset \ Structure = \frac{Fixed \ Assets}{Total \ Assets}$ 

#### **3.2.6 PROFITABILITY**

According to the TOT, businesses with higher profitability should have higher leverage and debt ratios, as these firms have a lower chance of bankruptcy and creditors are more likely to support them. According to Leland and Pyle's (1977) research, a firm's leverage as a result of information asymmetry has a substantial positive association with profitability. Several additional studies, including Chiang et al. (2010), Reinhard and Li (2010), Jordan et al. (1998), and Margaritis and Psillaki (2007), concluded that profitability and debt ratios are related. However, businesses with higher profitability have lower debt ratios, according to POT; in reality, firms with higher profitability do not require external financing and frequently utilise internal financing, thus they have less debt in their capital structure. This implies that high-profit firms will prefer to fund investments with retained earnings rather than debt. Lemmon and Zender (2010) came to the same conclusion as Lemmon and Zender (2010), namely that companies require external money for financing, that obtaining debt takes precedence over stock issue in financing decisions, and that this theory better describes company financing behaviour. Companies with higher profitability have less debt, according to Fama and French (2002), and short-term cash flows of firms are spent on paying and resolving debts. Many research studies confirm this matter. [12,20,51, 155, 156, 183, 175]. Profitability is favourably related with shortterm debt ratio and negatively associated with long-term debt ratio, according to Abor (2005). According to Chittenden et al. (1996) the lengthy debt ratio has no meaningful effect on profitability, whereas the relatively brief debt ratio does, and overall debt ratio have a negative relationship with profitability in small businesses. With the industrial sector, profitability has no significant link with debt ratio, although there is a negative relationship in large businesses, according to Al-Sakran (2001). Furthermore, the findings reveal that capital structure has little bearing on profitability (Hovakimian et al., 2004; El-Sayed Ebaid, 2009)[210,211],.Return on assets is used as a proxy for profitability in this study (defined as earningsbefore interest and tax divided by total assets).

$$Net Profit Ratio = \frac{Profit After Tax}{Net sales} \times 100$$

#### **3.2.7 ASSET UTILIZATION RATIO**

The use of debt in the capital structure results in agency expenses (Sheikh and Wang,2011)[173]. The strategic relevance of agency costs is demonstrated by the use of assets and the computed ratio. According to FCFT, the greater this ratio, the more efficient managers will be in adopting and utilising assets (Eldomiaty and Azim, 2008)[170]. This percentage is predicted to be greater based on agency expenses, and it stresses cost reduction and operational efficiency (Jermias, 2008)[212]. As a result,this ratio is predicted to have a negative connection with debt ratio, since as this ratiorises, managers' efficiency in asset utilisation rises, resulting in greater cash flow in the company; thus, there is no need for external financing. This ratio is computed inthis study by dividing sales by total assets.

 $Asset \ Utilsation \ Ratio = \ \frac{Net \ Sales}{Total \ Assets}$ 

# **3.2.8 DEBT – EQUITY RATIO**

Because ownership structure can influence agency incentives, it is likely to have a major impact on capital structure decisions (Booth et al., 2001)[186]. As a result, information on the differences (if any) in capital structure decisions across businesses with State shareholdings might be useful. According to AT (Jensen and Meckling, 1976; Jensen, 1986)[213,214], the ideal leverage and ownership structure may be utilised to reduce overall agency costs, and the construction of a capital structure can affect a firm's governance structure (Jensen, 1986)[214]. (Dewenter and Malatesta, 2001)[215] show that state-owned companies are more leveraged than privately held firms, and that privately owned firms outperform state-owned enterprises. State ownership is positively related with leverage and companies' access to long-term financing, according to Li et al. (2009). Huang and Song (2006)[156] discovered that

capital structure is influenced by ownership structure. Firms with a larger percentage of state ownership and a smaller share of institutional ownership have a lower total liabilities ratio and a lower total debt ratio. Su (2010) claims that government- controlled businesses utilise less debt financing and that state ownership reduces the favourable link between unrelated diversity and leverage. According to Brav (2009)[205], private companies that rely nearly entirely on debt funding have greaterleverage ratios.

$$\textit{Debt Equity Ratio} = \frac{\textit{Total Liabilities}}{\textit{Total Equity}}$$

# 3.2.9 Inventory Ratio

The inventory turnover ratio is the number of times a company has sold and replenished its inventory over a specific amount of time. The formula can also be used to calculate the number of days it will take to sell the inventory on hand.

The turnover ratio is derived from a mathematical calculation, where the cost of goods sold is divided by the average inventory for the same period. A higher ratio more desirable than a low one as a high ratio tends to point to strong sales.

A number of additional research have looked at the link between inventory and margins, excess returns, and capital expenses. These research focused on absolute inventory levels rather than volatility, although the results were usually consistent. According to Gaur et al. (2005) and Roumiantsev and Netessine (2007), inventory levels and gross margins have a favourable relationship. Negative excess returns are observed among businesses with large inventory levels, which is consistent with studies on poor operational leverage, assuming a positive link between inventory levels and margins. Hendricks and Singhal (2005) further show that inventory level interruptions appear to have a major influence on returns. Kashyap, et al. examine the impact of capital markets on inventory levels (1994),, which indicates that limited monetary supply has a large impact on inventory investment and is also consistent with the scenario provided. While these findings have more basic foundations, Lai (2006) finds evidence of considerable behavioural influences in inventory levels, especially in terms of enterprises catering to market reactions to inventory levels.

 $Inventory Ratio = \frac{Cost \ of \ Goods \ Sold}{Average \ Inventory}$ 

#### 3.2.10 Debtor Ratio

Accounts receivable are an essential portion of every company's current assets. Accounts receivable, like inventory, is seen as a necessary evil in the corporate world. Large corporations seldom conduct business with their wholesalers and distributors in cash. The majority of the transactions are made on credit, resulting in the presence of accounts receivable on the balance sheet.

Accounts receivable is a risky asset. If a company takes too long to collect accounts receivable, this indicates that the company is not making the most use of its cash. Buyers are taking advantage of the company's interest-free credit and deferring payments, forcing the company to pay for working capital. Also the older accounts receivable become, the less likely they are to be collected. As a result, the accounts receivable turnover percentage is regularly monitored.

Debtors Ratio =  $\frac{Debtors + Bills Receivable}{Credit sales} \times 365$ 

#### **3.2.11** Creditor Ratio

The accounts payable turnover ratio, like the accounts receivable turnover ratio, shows the funding that the business is able to collect from its vendors and suppliers at no cost. Because there are no interest costs and this is just a trade credit arrangement, the firm's goal should ideally be to pay its expenses as late as feasible. By doing so, they are able to use the money from the suppliers to temporarily fund their own business at no expense. However, sellers must exercise caution to ensure that financial charges are not passed on to customers in the form of higher product pricing. In that instance, the company may be better suited utilising its own funds to purchase things at a reduced cost from lower-cost vendors.

Creditors Ratio =  $\frac{Creditors + Bills Payable}{Credit Purchase} \times 365$ 

#### 3.2.12 Cash, Bank and other Marketable Securities by Sales Ratio

Businesses usually keep cash in reserve to prepare for situations in which they may need to act quickly, such as taking advantage of an acquisition opportunity or making contingent payments.

However, rather than retaining all of the cash in its coffers, which provides no chance to earn interest, a company will invest a fraction of the cash in short-term liquid assets. Instead of sitting on cash, the firm can generate returns on it this way. If an unexpected need for cash arises, the firms can successfully decide to sell these securities. A group of assets categorised as marketable securities is an example of a short-term investment product.Common stock and preferred stock are two types of marketable equity securities. They are public business equity securities held by another corporation and listed on the holding company's balance sheet. The holding company will identify the stock as a current asset if it is scheduled to be liquidated or traded within a year. If the corporation expects to keep the shares for more than a year, the equity will be classified as a non-current asset. All current and non-current marketable equity securities are listed at the lower of cost or market value.The securities are not considered marketable equity securities if a firm invests in the equity of another company in order to acquire or control that company. Instead, they are listed as a long-term investment on the company's balance sheet.

# Cash, Bank and other marketable securities by sales ratio $=\frac{Cash, Bank and other marketable securities}{Net sales}$

From amongst the variables mentioned above Debt Equity Ratio is treated asdependent variable and the remaining variables i.e. Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset UtilsationRatio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales are treated as independent variables.

In this study first the research has been carried out using secondary data. Then a questionnaire base survey was carried out to map the perception of decision makers and find out whether their perception was in line with empirical results or not.

# 3.3.0 RESEARCH DESIGN

- **3.3.1** Secondary Data Descriptive research design.
- **3.3.2** Primary Data Cross sectional convenient sampling design.
- **3.3.3** Technique Convenience snowball technique.

# **3.4.0 RESEARCH OBJECTIVES**

The research objectives, in this study are:

- (1) To understand the variables affecting capital structure.
- (2) To assess the impact of the capital structure variables on profitability.
- (3) To develop better understanding of capital structure of the enterprises.

# 3.5.0 PERIOD OF STUDY

The variables Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio of various pharmaceutical companies have been examined for a period of ten years from 2010-11 to 2019-20 with a view to neutralize cyclical effects of the economy and develop better understanding of the behaviour of the said variables.

# **3.6.0 DATA COLLECTION**

# 3.6.1 Criteria

For this research study the pharmaceutical companies were extracted from reputed databases viz. Capitaline and Prowess for greater reliability of data. From this the companies for which complete data for the entire time frame of ten years each of 12 months was not available were removed in order to avoid statistical inaccuracies in the data analysis. The final set of enterprises so derived comprises of 23 companies placed at Annexure -1.

# **3.6.2** Type and Nature of Data

The required data pertains to each variable i.e Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio as stated in this chapter at paragraph no. 3.4.0for each company in the list and that too for a period of ten years ending on 31<sup>st</sup> March, 2020. The data required , thus was historical and voluminous in nature.

# **3.6.3 Data Collection Tools**

The data was first extracted from a reputed database CAPITAline and Prowess

The data so extracted from said databases were cross checked with each other and further validated as under:

- (1)The data so extracted from the database for a company was compared with the audited Profit & Loss Account and Balance Sheet of the said company for a given year, as these are the authentic documents.
- (2)The said comparison was carried out for each year of the study period.
- (3)The exercise at point (1) and (2) above was carried out for each of the companiesmentioned in Annexure 1.
- (4) The necessary audited Profit & Loss Accounts and Balance Sheets of companies were obtained personally from the companies, chartered accountants, Bombay Stock Exchange Ltd. and National Stock Exchange Ltd.

Thus, the data collection tools viz. Audited Profit & Loss Accounts and Balance Sheets and CAPITAline and Prowess database were put to rigorous use to collect necessary data.

# 3.7.0 DATA ANALYSIS

The data for all the variables i.e. Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio was entered for each company and for all the ten years. Then the measures of central tendency viz. average, median and standard deviation were

Worked out. Then Multiple Regression Analysis technique was used to study the relationship of independent variables with dependent variable and to know the extent of influence independent variables exercise over the dependent variable. F test and multi co linearity tests were undertaken to better understand how the variables behave. To facilitate the process SPSS program has been used.

# **3.8.0** Hypothesis of the Study

1. **H0:** There is no significant association between Current ratio anddebt-equity ratios.

H1: There is significant association between Current ratio anddebt-equity ratios.

2. H0: There is no significant association between Sales Growth anddebt-equity ratios.

H1: There is significant association between Sales Growth anddebt-equity ratios.

3. H0: There is no Significant association between Effective tax rate anddebt- equity ratios

H1: There is significant association between Effective tax rate anddebt-equity ratios.

4. H0: There is no significant association between Firm Size anddebt-equity ratios.

H1: There is significant association between Firm Size anddebt-equity ratios.

5. H0: There is no significant association between Asset structure anddebt- equity ratios.

H1: There is significant association between Asset structure anddebt-equity ratios.

6. H0: There is no significant association between Net profit ratio anddebt- equity ratios.

H1: There is significant association between Net profit ratio anddebt-equity ratios.

7. **H0:** There is no significant association between Asset Utilsation Ratio and debt-equity ratios.

H1: There is significant association between Asset Utilsation Ratio anddebt- equity ratios.

8. H0: There is no significant association between Inventory ratio anddebt-equity ratios.

H1: There is significant association between Inventory ratio anddebt- equity ratios.

9. H0: There is no significant association between Debtors ratio anddebt-equity ratios.

H1: There is significant association between Debtors ratio anddebt- equity ratios.

10. H0: There is no significant association between Creditors Ratio anddebt-equity ratios.

H1: There is significant association between Creditors Ratio anddebt-equity Ratios

- 11. **H0** : There is no Significant association between Cash, Bank and other marketable Securities/sales and debt-equity ratios
- **H1:** There is significant association between Cash, Bank and other marketable securities/Salesand debt-equity Ratios.

# **CHAPTER - 4**

#### **Data Analysis and Interpretation**

4.1.0 In order to develop better understanding of capital structure behaviour thepharmaceutical companies were divided into 2 groups.

The companies having turnover of Rs.1000 crore or more as on 31-3-2020.( Part- A) The companies having turnover of less than Rs.1000 crore as on 31-3-2020.(Part- B)

4.1.1 Part A - Results and discussions of Companies having turnover Above Rs.1000crore are mentioned in following Tables.

Table-1: Co-efficients						
	Unstandardized		Standardized			Collinearity Statistics
	B	ficients	Coefficients	_		
Model	Б	Std. Error	Beta	t	Sig.	VIF
(Constant)	1.249	0.545		2.293	0.027	
CR	-0.063	0.065	-0.145	-0.979	0.334	2.979
SGR	0.001	0.001	0.186	1.511	0.139	2.050
ETR	0.092	0.239	0.055	0.388	0.700	2.735
FS	-0.136	0.055	-0.627	-2.447	0.019	8.880
AS	0.980	0.147	0.729	6.644	0.000	1.627
NPR	0.002	0.001	0.215	1.780	0.083	1.971
AUR	-0.145	0.042	-0.593	-3.431	0.001	4.040
IR	-0.033	0.014	-0.503	-2.362	0.023	6.139
DR	-0.010	0.008	-0.319	-1.272	0.211	8.524
CDR	0.033	0.015	0.432	2.256	0.030	4.950
CBM	-0.287	0.399	-0.106	-0.720	0.476	2.916

a. Dependent Variable: Debt-equity ratio(times)			
b. Independent Variables: CR, SGR, ETR , FS, AS , NPR, AUR, IR, DR, CDR, CBM			
Adjusted R Square = 0.638			

 Table: 2 Anova							
Model Sum of Squares df Mean Square F Sig.							
1	Regression	1.571	11	0.143	8.834	$0.000^{b}$	
	Residual	0.614	38	0.016			
	Total	2.185	49				

Table- 3	Descriptive	<b>Statistics</b>
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	Mean	Std. Deviation
DER	0.201	0.211
CR	1.435	0.484
SGR	21.529	34.396
ETR	0.130	0.125
FS	7.858	0.976
AS	0.310	0.157
NPR	15.700	20.258
AUR	1.0896	0.864

IR	6.736	3.257
DR	8.045	6.745
CDR	6.126	2.725
CBM	0.049	0.078

#### Analysis and Interpretation of Companies Having Turnover Above Rs.1000 Crore

- 1. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (CR) -0.145 suggests that CR has negative relationship with DER. And its significance level of .334 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (CR) be accepted and alternate Ha (CR) be rejected. This clearly means CR doesn't impacts DER.
- 2. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (SGR) 0.186suggests that SGR has positive relationship with DER. And its significance level of 0.139 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (SGR) be accepted and alternate Ha (SGR) be rejected. This clearly means SGR doesn't impacts DER.
- 3. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (ETR) 0.055 suggests that ETRhas positive relationship with DER. And its significance level of 0.700 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (ETR) be accepted and alternate Ha (ETR) be rejected. This clearly means ETRdoesn't impacts DER.
- 4. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (firm size) 0.627suggests that FS has negative relationship with DER. And its significance level of .019 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0(FS) be rejected and alternate Ha (FS) be accepted. This clearly means FS moderately impacts DER.
- 5. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (AS) 0.729suggests that asset structure has positive relationship with DER. And its significance level of 0.000 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0 (AS) be rejected and alternate Ha (AS) be accepted. This clearly means AS has significant impact on DER.
- 6. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (NPR) 0.215 suggests that Net profit has positive relationship with DER. And its significance level of 0.083 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (NPR) be accepted and alternate Ha (NPR) be rejected. This clearly means NPR doesn't impacts DER.
- 7. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (AUR) 0.593 suggests that AURhas negative relationship with DER. And its significance level of 0.001 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0(AUR) be rejected and alternate Ha (AUR) be accepted. This clearly means AURhas moderate impact on DER.

- 8. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (IR) -0.503 suggests that Inventory ratio has negative relationship with DER. And its significance level of 0.023 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0 (IR) be rejected and alternate Ha (IR) be accepted. This clearly means IR has moderate impact on DER.
- 9. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (DR) -0.319 suggests that DR has negative relationship with DER. And its significance level of 0.211 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (DR) be accepted and alternate Ha (DR) be rejected. This clearly means DR doesn't impacts DER.
- 10. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (CDR) 0.432suggests that CDRhas positive relationship with DER. And its significance level of 0.030 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0 (CDR) be rejected and alternate Ha (CDR) be accepted. This clearly means CDRimpacts DER.
- 11. Table 1 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-1, the standardized  $\beta$  (CBM) - 0.106 suggests that CBM has negative relationship with DER. And its significance level of 0.476 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (CBM) be accepted and alternate Ha (CBM) be rejected. This clearly means CBM doesn't impacts DER.
- 12. The result stated in Table- 2 points out that F = 8.834 with significance level of 0.000 having DF (11, 38). This suggests that all regression coefficients will be non-zero.
- 13. VIF statistics given in Table -1 have been used to verify the presence of multicollinearity amongst the independent variables. In addition each of the VIF is far less than 10 and each VIF centers around its mean. This points out absence of multi collinearity.
- 14. The results mentioned at point no. (12) and (13) give substantial dependability to the results obtained. The mathematical model emerges as under:

DER = 1.249 - 0.145 (CR) + 0.186 (SGR) + 0.055(ETR) - 0.627(FS) + 0.729(AS) + 0.729(AS)0.215(NPR) -0.593(AUR) -0.503 (IR) -0.319 (DR) +0.432(CDR) -0.106(CBM)

The coefficient of determination i.e. adjusted  $R^2$  is 0.638. This points out that the above stated model can justify 63.8% variations in DER.

- 15. Table-3 provides mean and standard deviation of all the variables. The above model may give better predictive value if the enterprises to be analysed have similar data pattern
- 4.1.1 Part B Results and discussions of Companies having turnover below Rs.1000crore are mentioned in following Tables.

Table-4: Co-efficients						
	Unstandardized		Standardize			Collinearity
	Co	efficients	d			Statistics
			Coefficients			
Model	В	Std. Error	Beta	t	Sig.	VIF
constant	11.609	4.240		2.738	0.007	

Research Based Approach to Capital Structure - Pharmaceutical Sector

CR	-0.902	0.798	-0.138	-1.130	0.260	2.793
SGR	0.017	0.021	0.066	0.790	0.431	1.287
ETR	-3.940	3.625	-0.090	-1.087	0.279	1.284
FS	-1.634	0.721	-0.232	-2.266	0.025	1.949
AS	-0.149	0.980	-0.021	-0.152	0.879	3.620
NPR	0.009	0.045	0.016	0.196	0.845	1.269
AUR	0.450	0.241	0.269	1.870	0.063	3.854
IR	0.001	0.043	0.002	0.021	0.983	1.248
DR	-0.649	0.238	-0.281	-2.722	0.007	1.982
CDR	0.144	0.251	0.057	0.577	0.565	1.788
CBM	-10.862	11.725	-0.093	-0.926	0.356	1.862
a. Dependent Variable: Debt-equity ratio(times)						
b. Independent Variables: CR, SGR, ETR, FS, AS, NPR, AUR, IR, DR,						
CDR, CBM						
		Adjuste	d R Square =	0.076		

#### Table -5 Anova

	Model	<b>Sum of Squares</b>	df	Mean Square	F	Sig.
1	Regression	1523.133	11	138.467	2.291	.012 <sup>b</sup>
	Residual	9728.812	161	60.427		
	Total	11251.945	172			

# Table- 6 Descriptive Statistics

	Mean	Std. Deviation
DER	0.884	8.088
CR	1.693	1.241
SGR	14.421	31.283
ETR	0.226	0.185
FS	3.779	1.147

AS	0.574	1.151
NPR	5.080	14.719
AUR	2.294	4.832
IR	11.766	15.501
DR	5.550	3.501
CDR	6.255	3.163
CBM	0.062	0.069

# Analysis and Interpretation of Companies having turnover Above Rs.1000 crore

- 1. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (CR) -0.138suggests that CR has negative relationship with DER. And its significance level of 0.260 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (CR) be accepted and alternate Ha (CR) be rejected. This clearlymeans CR doesn't impacts DER.
- 2. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (SGR) 0.066suggests that SGR has positive relationship with DER. And its significance level of 0.431 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (SGR) be accepted and alternate Ha (SGR) be rejected. This clearly means SGR doesn't impacts DER.

- 3. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (ETR) 0.090 suggests that ETR has negative relationship with DER. And its significance level of 0.279 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (ETR) be accepted and alternate Ha (ETR) berejected. This clearly means ETR doesn't impacts DER.
- 4. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (FS) -0.232suggests that FS has negative relationship with DER. And its significance level of 0.025 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0 (FS) be rejected and alternate Ha (FS) be accepted. This clearly means FS moderately impacts DER.
- 5. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (AS) 0.021suggests that AS has negative relationship with DER. And its significance level of 0.879 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (AS) be accepted and alternate Ha (AS) be rejected. This clearly means AS has insignificant impact on DER.
- 6. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (NPR) 0.016suggests that NPR has positive relationship with DER. And its significance level of 0.845 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (NPR) be accepted and alternate Ha (NPR) be rejected. This clearly means NPR doesn't impacts DER.
- 7. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (AUR) 0.269 suggests that AUR has positive relationship with DER. And its significance level of 0.063 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (AUR) be accepted and alternate Ha (AUR) be rejected. This clearly means AUR doesn't has impact on DER.
- 8. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (IR) 0.002 suggests that IR has positive relationship with DER. And its significance level of 0.983makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0(IR) be accepted and alternate Ha (IR) be rejected. This clearly means IR has insignificant impact on DER.
- 9. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (DR) -0.281suggests that DR has negative relationship with DER. And its significance level of 0.007 makes it technically relevant. The statistical evidences, therefore suggest that null hypothesis H0 (DR) be rejected and alternate Ha (DR) be accepted. This clearlymeans DR impacts DER.
- 10. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (CDR) 0.057suggests that CDR has positive relationship with DER. And its significance level of 0.565 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (CDR) be accepted and alternate Ha (CDR) be rejected. This clearly means CDR doesn't impacts DER.

- 11. Table 4 depicts the standardised regression co-efficients of independent variables with associated values. As mentioned in this Table-4, the standardized  $\beta$  (CBM) 0.093 suggests that CBM has negative relationship with DER. And its significance level of 0.356 makes it technically irrelevant. The statistical evidences, therefore suggest that null hypothesis H0 (CBM) be accepted and alternate Ha (CBM) be rejected. This clearly means CBM doesn't impacts DER.
- 12. The result stated in Table-5 points out that F = 2.291 with significance level of 0.012 having DF (11,161). This suggests that all regression coefficients will be non-zero.
- 13. VIF statistics given in Table -4 have been used to verify the presence of multicollinearity amongst the independent variables. In addition each of the VIF is far less than 10 and each VIF centers around its mean. This points out absence of multi collinearity.
- 14. The results mentioned at point no. (12) and (13) give substantial dependability to theresults obtained. The mathematical model emerges as under:

# DER = 11.609- -0.138 (CR) + 0.066 (SGR) - 0.090 (ETR) - 0.232(FS) -0.021 (AS) + 0.016(NPR) + 0.269(AUR) + 0.002 (IR) -0.281 (DR) + 0.057(CDR) - 0.093(CBM)

The coefficient of determination i.e. adjusted  $R^2$  is 0.076. This points out that the above stated model can justify 7.6% variations in DER.

15. Table-6 provides mean and standard deviation of all the variables. The above model may give better predictive value if the enterprises to be analysed have similar data pattern

# 4.2.0 Comparative Analysis of Part A and Part B

#### CURRENT RATIO

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is - 0.145 with a significance level of 0.334 as compared to regression coefficient of -0.138 with significance level 0.260 in case of companies below Rs. 1000 crore turnover. The relationship though remains negative in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally higher, but with higher irrelevance.

# **Sales Growth Ratio**

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is 0.186 with a significance level of 0.139 as compared to regression coefficient of 0.066 with significance level 0.431 in case of companies below Rs. 1000 crore turnover. The relationship though remains positive in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally higher, but with higher irrelevance.

# **Effective Tax Rate**

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is 0.055 with a significance level of 0.700 as compared to regression coefficient of - 0.090 with significance level 0.279 in case of companies below Rs. 1000 crore turnover. The relationship is opposite in direction in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginallyhigher, but with lower irrelevance.

# Firm Size

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is - 0.627 with a significance level of 0.019 as compared to regression coefficient of -0.232 with significance level 0.025 in case of companies below Rs. 1000 crore turnover. The relationship though remains negative in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally lower, but with higher relevance.

# Asset Structure

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is 0.729 with a significance level of 0.000 as compared to regression coefficient of - 0.021 with significance level 0.879 in case of companies below Rs. 1000 crore turnover The relationship is opposite in direction in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is very high, with higher relevance.

# Net Profit Ratio

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is 0.215 with a significance level of 0.083 as compared to regression coefficient of 0.016 with significance level 0.845 in case of companies below Rs. 1000 crore turnover. The relationship though remains positive in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginallyhigher, but with lower irrelevance.

# Assets Utilisation Ratio

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is -0.593 with a significance level of 0.001 as compared to regression coefficient of 0.269 with significance level 0.063 in case of companies below Rs. 1000 crore turnover. The relationship is opposite in direction in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is very low, but with higher relevance.

# **Inventory Ratio**

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is - 0.503 with a significance level of 0.023 as compared to regression coefficient of 0.002 with significance level 0.983 in case of companies below Rs. 1000 crore turnover. The relationship is opposite in direction in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally lower, but with higher relevance.

# **Debtors Ratio**

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is - 0.319 with a significance level of 0.211 as compared to regression coefficient of -0.281 with significance level 0.007 in case of companies below Rs. 1000 crore turnover. The relationship though remains negative in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally lower, but with higher irrelevance.

# **Creditor Ratio**

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is 0.432 with a significance level of 0.030 as compared to regression coefficient of 0.057 with significance level 0.565 in case of companies below Rs. 1000 crore turnover. The relationship though remains positive in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally higher, but with higher relevance.

# Cash, Bank and Other Marketable Securities/Sales

In case of companies above Rs. 1000 crore turnover. The regression coefficient value is - 0.106 with a significance level of 0.476 as compared to regression coefficient of -0.093 with significance level 0.356 in case of companies below Rs. 1000 crore turnover. The relationship though remains negative in both segments, the value of regression coefficient in the segment of companies above Rs 1000 crore is marginally lower, but with higher irrelevance.

From the above comparative analysis it is observed that Asset structure and Asset utilisation are very relevant, while firm size, Inventory ratio and creditor ratio are moderately relevant in case of companies above Rs. 1000 crore turnover. While in case of companies turnover less than Rs. 1000 crore turnover the variables FS and Debtors ratio are highly relevant.

Adjusted R Square in case of companies having turnover above Rs. 1000 crore is 0.638 which is comparatively better than adjusted R square i.e. 0.076 of companies having turnover below Rs. 1000 crore.

The value of F is 8.834 with significance of 0.000 of companies having turnover above Rs. 1000 crore while the value of F is 2.291 with significance 0.012 of companies having turnover below 1000 crore which shows that comparatively companies with turnover more than Rs. 1000 crore stands better on this front.

Value of VIF in both segments is below 10.0 which shows absence of multicollinearity.

#### 4.3.0 Analysis and Interpretation of Primary Data

The Age groupwise bifurcation of the responses is placed at Table-1 below.

Table – 7 Age group				
Age	Nos.	%		
30-40	255	64.56		
41-55	101	25.57		
Above 55	39	9.87		
Total	395	100		

Out of 395 respondents, 255 were in the age group of 30-40 years, 101 were in the age group of 41- 55 years and 39 were in age group above 55 years.

Table – 8 Gender					
Gender	Nos.	%			
Male	289	73.16			
Female	106	26.84			
Total	395	100			

Out of 395 respondents, 289 were male while 106 were female constituting 73.16% and 26.84% respectively.

Education	Nos.	%
Graduation	91	23.04
Post Graduation	176	44.55
Professional	128	32.41
Total	395	100

 Table -9 Educational Qualification

Out of 395 repondents 91 were graduates, 176 were post graduates while 128 wereprofessional constituting 23.04%, 44.55% and 32.41% respectively.

The response from Q4 to Q12 have been summarized in Table- below

Table 10: Response Summary							
Variables	Negative	%	Neutral	%	Positive	%	Total
CR	106	26.84	184	46.58	105	26.58	395
SGR	150	37.97	50	12.66	195	49.37	395
ETR	4	1.01	30	7.59	361	91.4	395
FS	33	8.35	165	41.77	197	49.88	395
AS	160	40.50	93	23.54	142	35.96	395
NPR	105	26.58	94	23.80	196	49.62	395
AUR	47	11.9	259	65.57	89	22.53	395
IR	35	8.86	91	23.03	269	68.11	395
DR	218	55.18	112	28.35	65	16.47	395

Table 10: Response Summary

The mean score and standard deviation of the response obtain for various factors affecting capital structure placed at Table -below.

Table 11: Result of Likert scale.						
Variables	Mean Score	<b>Standard Deviation</b>				
What do you think creditorsaffect the	3.833	1.06				
borrowing capacity of the company?						
To what extent do you thinkcash,	3.35	1.009				
bank and other marketable securities						
affect your firm?						
What do you think of present	4.25	0.86				
inventory practices in your company						
are appropriate?						
To what extent do you think the asset	3.67	0.82				
structure appropriate ?						
What do you think sales growth affect	3.39	1.101				
the borrowingcapacity of the						
company?						
What do you think size of the firm	3.58	0.84				
matters while borrowing the money?						

Table 11: Result of Likert scale

Reliability test was conducted using **Chronbach Alpha**. The score of Chronbach Alpha stands at 0.640 indicating acceptable level of reliability of data and therefore the results may as well be considered reliable.

# 1 Age

There were 395 respondents of which 255 (64.56%) are of age group 25-35 years, 101 (25.57%) are of age group 35-50 years and 39 (9.87%) are of age group 50 years and above.

# 2. Gender

Out of 395 respondents 289 (73.16%) are male respondents while 106 (26.84%) are female respondents.

# **3. Educational Qualification**

Out of 395 respondents 95(24.05%) respondents were undergraduate, 176(44.56%) respondents were graduate while 128(31.39%) respondents were post graduate.

# 4. Relationship Between CR and Borrowing of Pharmaceutical Companies.

Out of 395 respondents 106 (26.84%) respondents are of opinion that there is negative relationship between CR and borrowing of pharmaceutical companies, 184(46.58%) respondents are of opinion that CR is not at all related to borrowing of pharmaceutical companies, while 105(26.58%) are of opinion that there is a positive relationship between CR and borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that CR and DER are not negatively related. This is in contrast with empirical results of the companies having turnover above 1000 crores rupees and below 1000 crores rupees.

# 5. Relationship Between SGR and Borrowing of Pharmaceutical Companies.

Out of 395 respondents 150 (37.97%) respondents are of opinion that there is negative relationship between SGR and borrowing of pharmaceutical companies, 50(12.66%) respondents are of opinion that SGR is not at all related to borrowing of pharmaceutical companies, while 195(49.37%) are of opinion that there is a positive relationship between SGR and borrowing of pharmaceutical companies. Thus majority of the respondents are ofthe opinion that SGR and DER are not negatively related. This is context with empirical results of the companies having turnover above 1000 crores rupees and below 1000 crores rupees.

#### 6. Relationship between Effective tax rate and borrowing of Pharmaceutical Companies.

Out of 395 respondents 4 (1.01%) respondents are of opinion that there is negative relationship between ETRand borrowing of pharmaceutical companies, 30 (7.59%)respondents are of opinion that ETRis not at all related to borrowing of pharmaceutical companies, while 361 (91.4%) are of opinion that there is a positive relationship between ETRand borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that ETR and DER are not negatively related. This is not in contrast with empirical results of the companies having turnover above 1000 crores rupees but in contrast with companies having turnover below 1000 crore rupees.

# 7. Relationship between Firm size and borrowing of pharmaceutical companies.

Out of 395 respondents 33 (8.35%)respondents are of opinion that there is negative relationship between FS and borrowing of pharmaceutical companies, 165 (41.77%)respondents are of opinion that FS is not at all related to borrowing of pharmaceutical companies, while 197 (49.88%) are of opinion that there is a positive relationship between FS and borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that FS and DER are not negatively related. This is in contrast with empirical results of the companies having turnover above 1000 crores rupees and turnover below 1000 crore rupees.

# 8. Relationship between Asset structure and borrowing of Pharmaceutical Companies.

Out of 395 respondents 160(40.50%) respondents are of opinion that there is negative relationship between Asset structure and borrowing of pharmaceutical companies, 93(23.54%) respondents are of opinion that Asset structure is not at all related to borrowing of pharmaceutical companies, while 142(35.96%) are of opinion that there is a positive relationship between Asset structure and borrowing of pharmaceutical companies. Thusmajority of the respondents are of the opinion that AS and DER are not negatively related. This is in contrast with empirical results of the companies having turnover above 1000 crores rupees but not in contrast with companies having turnover below 1000 crore rupees.

#### 9. Relationship between Net profit and borrowing of pharmaceutical companies.

Out of 395 respondents 105(26.58) respondents are of opinion that there is negativerelationship between Net profit and borrowing of pharmaceutical companies, 94(23.80%) respondents are of opinion that Net profit is not at all related to borrowing of pharmaceutical companies, while 196 (49.62%) are of opinion that there is a positive relationship between Net profit and borrowing of pharmaceutical companies. Thus majority of the respondents areof the opinion that NP and DER are not negatively related. This is context with empirical results of the companies having turnover above 1000 crores rupees and turnover below 1000 crore rupees.

# **10.Relationship** between Asset Utilisation ratio and borrowing of pharmaceutical Companies.

Out of 395 respondents 47 (11.9%) respondents are of opinion that there is negative relationship between Asset Utilisation ratio and borrowing of pharmaceutical companies, 259 (65.57%) respondents are of opinion that Asset Utilisation ratio is not at all related to borrowing of pharmaceutical companies, while 89 (22.53%) are of opinion that there is a positive relationship between Asset Utilisation ratio and borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that AUR and DER are not negatively related. This is contrast with empirical results of the companies having turnover above 1000 crores rupees but in context with companies having turnover below 1000 crore rupees.

# 11. Relationship between Inventory and borrowing of pharmaceutical companies.

Out of 395 respondents 35 (8.86%) respondents are of opinion that there is negative relationship between Inventory and borrowing of pharmaceutical companies, 91(23.03%) respondents are of opinion that Inventory is not at all related to borrowing of pharmaceutical companies, while 269

(68.11%) are of opinion that there is a positive relationship between Inventory and borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that IR and DER are not negatively related. This is contrast with empirical results of the companies having turnover above 1000 crores rupees but in context with companies having turnover below 1000 crore rupees.

#### 12. Relationship between Debtors and borrowing of pharmaceutical companies.

Out of 395 respondents 218 (55.18%) respondents are of opinion that there is negative relationship between Debtors and borrowing of pharmaceutical companies, 112 (28.35%) respondents are of opinion that Debtors not at all related to borrowing of pharmaceutical companies, while 65 (16.47%) are of opinion that there is a positive relationship between Debtors and borrowing of pharmaceutical companies. Thus majority of the respondents are of the opinion that Debtors and DER are negatively related. This is in context with empirical results of the companies having turnover above 1000 crores rupees and companies having turnover below 1000 crore rupees.

# 13. What do you think creditors affect the borrowing capacity of the company?

As shown in the table the mean score is 3.83 which means large number of respondents believe that present practices are appropriate. The standard deviation is 1.06 which is way within the range.

# 14. To what extent do you think cash, bank and other marketable securities affect yourfirm?

As shown in the table the mean score is 3.35 which means large number of respondents believe that present practices are appropriate. The standard deviation is 1.009 which is way within the range.

#### 15. What do you think of present inventory practices in your company are appropriate?

As shown in the table the mean score is 4.25 which means large number of respondents believe that present practices are appropriate. The standard deviation is 0.86 which is way within the range.

# 16. To what extent do you think the asset structure appropriate?

As shown in the table the mean score is 3.67 which means large number of respondents believe that present practices are appropriate. The standard deviation is 0.82 which is way within the range.

#### 17. What do you think sales growth affect the borrowing capacity of the Company?

As shown in the table the mean score is 3.39 which means large number of respondents believe that present practices are appropriate. The standard deviation is 1.101 which is way within the range.

#### 18. What do you think size of the firm Matters While Borrowing The Money?

As shown in the table the mean score is 3.58 which means large number of respondents believe that present practices are appropriate. The standard deviation is 0.84 which is way within the range.

# CHAPTER – 5

#### Major Findings, Future Research Direction and Conclusion

# **5.1.0 Findings from Secondary data**

#### **Current Ratio**

From the analysis mentioned in paragraph 1, it is found that CR has negative association with capital structure but is irrelevant in case of companies both above and below Rs 1000 crore turnover.

#### Sales Growth Ratio

From the analysis mentioned in paragraph 2, it is found that SGR has positive association with capital structure but is irrelevant in case of companies both above and below Rs 1000 crore turnover.

# **Effective Tax Rate**

From the analysis mentioned in paragraph 3, it is found that ETR has positive association with capital structure in case of companies having turnover above Rs 1000 crore turnover and negative association with capital structure in case of companies having turnover below Rs 1000 crore turnover, but is irrelevant in case of companies both above and below Rs 1000 crore turnover.

#### Firm Size

From the analysis mentioned in paragraph 4, it is found that FShas negative association with capital structure in case of companies having turnover above and below Rs 1000 crore, but is relevant in case of companies both above and below Rs 1000 crore.

#### Asset Structure

From the analysis mentioned in paragraph 5, it is found that Asset structure has positive association with capital structure in case of companies having turnover above Rs 1000crore and negative association with capital structure in case of companies having turnover below Rs 1000 crore turnover, but is relevant in case of companies above Rs 1000 crore and is irrelevant in case of companies having turnover below Rs. 1000 crore.

# **Net Profit Ratio**

From the analysis mentioned in paragraph 6, it is found that Net profit ratio has positive association with capital structure in case of companies having turnover above and below Rs 1000 crore, but is irrelevant in case of both companies having turnover aboveand below Rs 1000 crore.

#### Asset Utilisation Ratio

From the analysis mentioned in paragraph 7, it is found that Asset utilization ratio has negative association with capital structure in case of companies having turnover aboveRs 1000 crore and positive association with capital structure in case of companies having turnover below Rs 1000 crore turnover, but is relevant in case of companies above Rs 1000 crore and is irrelevant in case of companies having turnover below Rs 1000 crore.

#### **Inventory Ratio**

From the analysis mentioned in paragraph 8, it is found that Inventory ratio has negative association with capital structure in case of companies having turnover above Rs 1000crore and positive association with capital structure in case of companies having turnover below Rs 1000 crore turnover, but is relevant in case of companies above Rs 1000 crore and is irrelevant in case of companies having turnover below Rs 1000 crore.

#### **Debtors Ratio**

From the analysis mentioned in paragraph 9, it is found thatDebtors ratio has negative association with capital structure in case of companies having turnover above and below Rs 1000 crore, but is irrelevant in case of companies above Rs 1000 crore and isrelevant in case of companies having turnover below Rs. 1000 crore.

#### **Creditor Ratio**

From the analysis mentioned in paragraph 10, it is found that creditor ratio has positive association with capital structure in case of companies having turnover above and below Rs 1000 crore, but is relevant in case of companies above Rs 1000 crore and is irrelevant in case of companies having turnover below Rs. 1000 crore.

#### Cash, Bank and Other Marketable Securities/Sales

From the analysis mentioned in paragraph 11, it is found that Cash, bank and other marketable securities/sales has negative association with capital structure but is irrelevant in case of companies both above and below Rs 1000 crore turnover.

#### 5.2.0 Findings from Primary Data

From the primary survey it is found that the decision makers in the industry perceive that all the variables namely current ratio, sales growth ratio, effective tax rate, firm size, asset structure, net profit ratio, asset utilization ratio, inventory ratio, debtor ratio, creditor ratio and cash, bank and other marketable securities/sales affect the capital structure. Thus it is clearly found that in case of companies with turnover above 1000 crore their perception in case of firm size, asset structure, asset utilization ratio, Inventory ratio and creditors ratio confirms to empirical results and for other variablesperception differ.

It is further found that in case of companies below Rs. 1000 crore perception of decision makers confirms to numerical results for the variables firm size and debtor ratio. For other variables namely current ratio, sales growth ratio, effective tax rate, asset structure, net profit ratio, asset utilization ratio, inventory ratio, creditor ratio and cash, bank and other marketable securities/sales affect the capital structure perception differfrom empirical results.

#### **5.3.0 Future Research Direction**

The study has been done for pharmaceutical industry. So the study can be replicated in other industries as well such as Automobile industry, Steel industry, Cement industry, Chemical industry, Insurance industry etc. The study was limited to Gujarat, so study can be done at national and global level. More variables like R&D expense, advertisement expenditure, selling expense, company risk and many more can be considered for the further study.

#### **5.4.0 CONCLUSION**

The research study pertaining to capital structure of pharmaceutical companies have been done. The data required was enormous and historical in nature and the same was extracted from reputed data base. The data so obtained was analysed on various parameters using statistical package for the social sciences (SPSS) software to maintain statistical precision. The data used in the study has been taken from the financial statements of pharmaceutical companies of Gujarat listed on National Stock Exchange of India and Capitaline database.

The study investigated several variables viz. Current ratio, Sales Growth Ratio, Effective tax rate, Firm Size, Asset structure, Net profit ratio, Asset Utilsation Ratio, Inventory ratio, Debtors ratio, Creditors Ratio, Cash, Bank and other marketable securities/sales and Debt-Equity ratio.We used regression technique for the analysis of the data. The study has analysed a sampleof 23 pharmaceutical companies for a period of 10 years from 2011 to 2020.

The data was analyzed in two parts. Part A analyzed that data of companies having turnover above Rs.1000 crore and below Rs. 1000 Crore as on 31<sup>st</sup> march 2020.

From the research study it is found that for companies having turnover above Rs. 1000 crore the variables Firm size, Asset structure, Asset utilization ratio, Inventory ratio and creditor ratiowere found to be significant variables having impact on capital structure and current ratio, Sales growth ratio, effective tax rate, net profit ratio, debtors ratio and Cash, Bank and other marketable securities/sales were found to be insignificant and doesn't have impact on capital structure. For the companies having turnover below Rs.1000 crore the variables Firm size and Debtor ratio have significant impact on capital structure while variables current ratio, sales growth ratio, effective tax rate, Asset structure, net profit ratio, asset utilization ratio, inventory ratio, creditor ratio and cash bank and other marketable securities/ sales are found to be insignificant and doesn't have impact on capital structure. From the primary survey it is found that all the variables namely current ratio, sales growth ratio, effective tax rate, firm size, asset structure, net profit ratio, asset utilization ratio, inventory ratio, debtor ratio, creditor ratio and cash, bank and other marketable securities/sales affect the capital structure. Thus it is clearly found that in case of companies with turnover above 1000 crore their perception in case of firmsize, asset structure, asset utilization ratio, Inventory ratio and creditors ratio confirms to empirical results and for other variables perception differ.

It is further found that in case of companies below Rs. 1000 crore perception of decision makers confirms to numerical results for the variables firm size and debtor ratio. For other variables namely current ratio, sales growth ratio, effective tax rate, asset structure, net profit ratio, asset utilization ratio, inventory ratio, creditor ratio and cash, bank and other marketable securities/sales affect the capital structure perception differ from empirical results.

The study has importance for corporate managers to take strategic decisions pertaining to capital structure especially in view of paradigm shift in favour of equity component.

The said research findings may as well help other sectors of the society such as government department, municipal corporations and non-government organizations to optimally utilize their resources and thus contribute towards social upliftment.

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# LIST OF ALL PUBLICATIONS

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#### **ABOUT THE BOOK**

The research based approach in context of Capital structure is an area which has gained greater importance in last decade. The capital structure has always been one of the most researched topic in finance world. This book discusses the conceptual and practical aspects of capital structure in an easy to understand language. It reflects theoretical and practical aspects that have gained significant importance in capital structure. This book aims to provide a strong conceptual foundation to build the future financial activities and decisions. Beginning with an introduction to the subject, the book discusses different theories of capital structure and variables relationship with capital structure of pharmaceutical sector. The book will be of immense help for financial decision makers to take strategic decisions pertaining to capital structure.

The book is intended to satisfy the long felt need of the students, researchers and corporate managers who were in search of a good book. The teachers and professionals will also find it handy as a source of ready reference.

