

A Systematic Literature Review Analysis Of The Capital Structure Theories & Its Determinants: An Estimation Of The Future Trends

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Abstract

Capital Structure is one of the most prominent words of the financial analysis. Several Studies have been done worldwide but very few numbers are there considering Indian Scenario, So there is a need to do a Comprehensive Systematic Literature review analysis of the topic. Our main objective of the study is to determine the future trends of the Capital Structure & its determinants based on the Systematic Literature review of the previous researches done to analyze the Capital Structure, Capital structure theories & its determinants. We are analyzing various Capital structure theories such as NI approach, NOI approach, MM approach, Trade-off Theory, Pecking Order Theory etc. We will also evaluate various firm specific determinants like Profitability, Tangibility, Growth, Size, Business Risk, Non-Debt tax shield & their impact on Financial Leverage (Capital Structure). In order to realize the stated objectives, we have studied more than 100+ research papers, articles & Journals from various sources like Google Scholar, Research Gate etc. Also we have used VOS viewer for the bibliometric analysis of the Scopus data for a period of 11 years from 2009-2022. As a result, Our study revealed the relationship between Financial leverage & various determinants of Capital structure. We have also analyzed various future trends based on our study. Our study will help financial managers & higher authorities to take rational decisions while evaluating financial decisions in order to enhance the firm value.

Keywords: Capital Structure, MM approach, NI approach, NOI approach, Pecking order Theory, Trade off Theory

INTRODUCTION

(Capital Structure, n.d.)The way an organization finances its operations is referred to as its "Capital Structure." It means a mix of different sources of money. (Capital Structure1, n.d.) The term "capital structure" also refers to a company's financing or capital level of debt. A capital structure is also the name given to a collection of all sources of long-term funding. Equity share capital, preference share capital, reserves and surplus, loans, debentures, and various other options for long-term financing are all included. A company must decide how much money it should have from its own resources and from outside sources, particularly debt financing. The finance ratio has an effect on the value and WACC of a business. Financial leverage refers to how a business uses money borrowed or owed to it. In terms of financial management, it is a crucial decision for business. In a company's capital structure, the two primary sources of capital are equity and debt. Debt is a more cost-effective way to finance than equity because interest payments can be deducted from taxable income. (Saji & Eldhose, 2017) Debt is seen as an essential component of many businesses' growth strategies. The company's willingness to take on risk will determine the financial leverage it employs. However, financial leverage affects the companies' market valuation and shareholder return on investment. Therefore, determining how leverage affects the company's market value would be interesting. Any business's ultimate objective is the maximization of Shareholder's wealth. Furthermore, without effective cost management, it is impossible to aim for sustained and consistent profit growth. The most beneficial capital structure is

necessary for a business. As a result various capital structure theories are available for study. (Myers, n.d.) There is no reason to anticipate a universal debt-equity choice theory. However, there are a number of useful capital structure theories. For instance, according to the tradeoff theory, businesses aim for debt levels that strike a balance between the costs of potential financial distress and the tax benefits of additional debt. Firms that pay taxes are predicted to borrow moderately under the tradeoff theory. According to the pecking order theory, when internal cash flow is insufficient to fund capital expenditures, the company will borrow money rather than issue equity. As a result, the company's total need for outside funding will be reflected in its debt level. In our research we will analyze various Capital structure theories such as NI approach, NOI approach, MM approach, Trade-off Theory, Pecking Order Theory etc. (Gabriel, n.d.-a) The contributions of renowned financial researchers including David Durand, Modigliani, Miller, Stephen Ross, Solomon Ezra, etc. are highlighted in our paper. The existence of an optimal capital structure has been the subject of many debates and divergent opinions. The value of the company is maximized and the cost of capital is reduced in an optimal capital structure. While the Net Income School and certain traditionalists maintain the relevance of the Capital Structure theory, the M-M Hypothesis and the Net Operating Income School advocate the theory's irrelevance. Another objective of our study is to study the various determinants of Capital Structure. We have analyzed the determinants relevant to our study & based on the research papers we have studied for our research study. To carry out the study, determinants such as Profitability, Tangibility, Growth, Size, Business Risk, Non-Debt tax shield etc have been identified & used to explore their potential impact on the firm's capital structure & that will enable to predict the future trends based on the study.

Theoretical Background

Supporting Literature

(i) Capital Structure Framework

(Myers, n.d.) The study of capital structure aims to explain how corporations finance real investment with a combination of securities and financing sources. The proportions of equity versus debt have been the focus of the majority of capital structure research. (Gabriel, n.d.-b) In the financial structure of a company, it is the combination of owner funds (equity) and creditor funds (debt). A company's capital structure, also known as its financial structure, is the particular combination of equity and long-term debt that it uses to fund its operations.

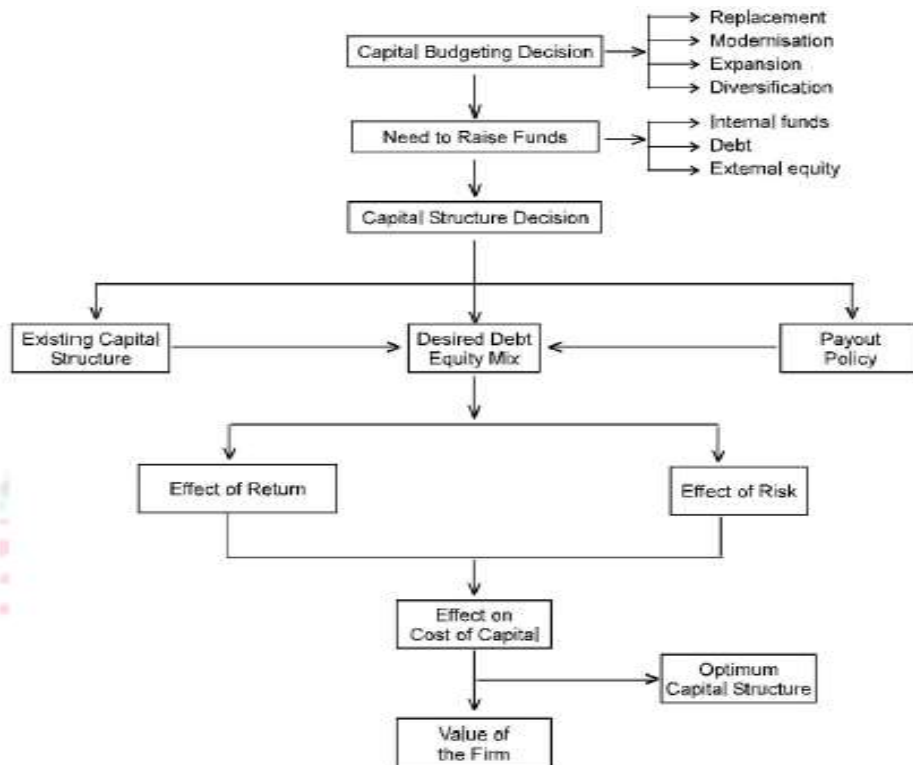


Figure1: Capital structure decisions/framework

Source : (Kumar, n.d.)

(ii) Capital Structure Theories

The existence of an ideal capital structure is not universally acknowledged, hence there are several debates and competing theories surrounding it. There are various schools of thought that look at the problem from various angles. According to Durand (1959), two extreme viewpoints and a middle position have been identified. The Net Income and Net Operating Income approaches are the extremes, while the traditional approach acts as a middle ground between the two. (Gabriel, n.d.-b) According to the Net Income (NI) Approach, the capital structure is important since leverage can have an impact on the firm's value and capital costs. This strategy is predicated on the assumptions that (a) as leverage or debt increases, the cost of equity (k_e) and the cost of debt (k_d) remain constant, and (b) that the cost of debt (k_d) is less than the cost of equity (k_e). The firm will have the best capital structure when its value is highest and its weighted average cost of capital is lowest. The Net Operating Income (NOI) Approach, on the other hand, maintains that the capital structure is irrelevant since changes in the capital structure caused by an increase or decrease in the value of debt have no impact on the firm's value or cost of capital. The Traditional Approach, which is a variant of the net income approach and oftenly seen as a mediate approach between the NI and NOI approaches. According to this strategy, the capital structure is important since it can be optimized through the careful balance of debt and equity. (Shun-Yu Chen, 2011) By demonstrating that the choice between debt and equity financing has no effect on a company's values under certain strong assumptions (an ideal world of pure and perfect competition without taxes), Modigliani and Miller (1958) provide the foundation for the study of the capital structure problem. They argued that the ratio of equity to debt has no effect on a company's value when certain conditions are met. The absence of taxes, transaction costs, and information asymmetry between market participants are examples of these conditions in the capital market. They came to the conclusion that whether a firm is worth more or less depends on its ability to generate value from its assets, and that it makes no difference whether the money comes from internal or external sources. Modigliani and Miller acknowledged in 1963 that taxation would have an effect on company value. For instance, businesses are encouraged to use debt because they can take advantage of tax shields when using debt instead of internal capital. This point of view is in line with the trade-off theory, which mostly talks about the benefits (Tax Shield) and the costs (like agency and bankruptcy costs) of debt (Jensen and Meckling, 1976, n.d.) (Harris & Raviv, 1991). Jensen and Meckling's (1976) agency theory is based on the conflict between bondholders, outside shareholders, and corporate managers. A static trade-off choice or pecking order framework can be used to describe the theoretical underpinnings of the capital structure, financing, and lending decisions made by businesses. In their 1976 study, Jensen and Meckling identified two types of conflict: those between shareholders and managers, as well as bondholders and shareholders. The issue of moral hazard is to blame for the conflict that exists between bondholders and shareholders because of their divergent claims regarding the company. Managers frequently have the ability to exploit the company's resources to their advantage, resulting in a negative impact on shareholder wealth, which is the source of conflict between shareholders and managers. Managers, for instance, might put money into projects that make them more in control of the company's resources while making the company less valuable (Shyam-Sunder & Myers, 1994). The pecking order hypothesis, which Donaldson (1961) first proposed as a description of financing practice, was referred to by Myers (1984) as a way to describe the priority of various financing options. As per pecking order theory, due to the reason, as managers possess information that investors do not, is the cause of the relationship between firm value and capital structure. (Shun-Yu Chen, 2011) Taggart (1977) and Bradley (1984) used the trade-off theory to argue that it is found that businesses tend to maintain an optimal debt level. Contrary to the pecking-order theory, other researchers discovered a strong correlation between profitability and debt ratio.

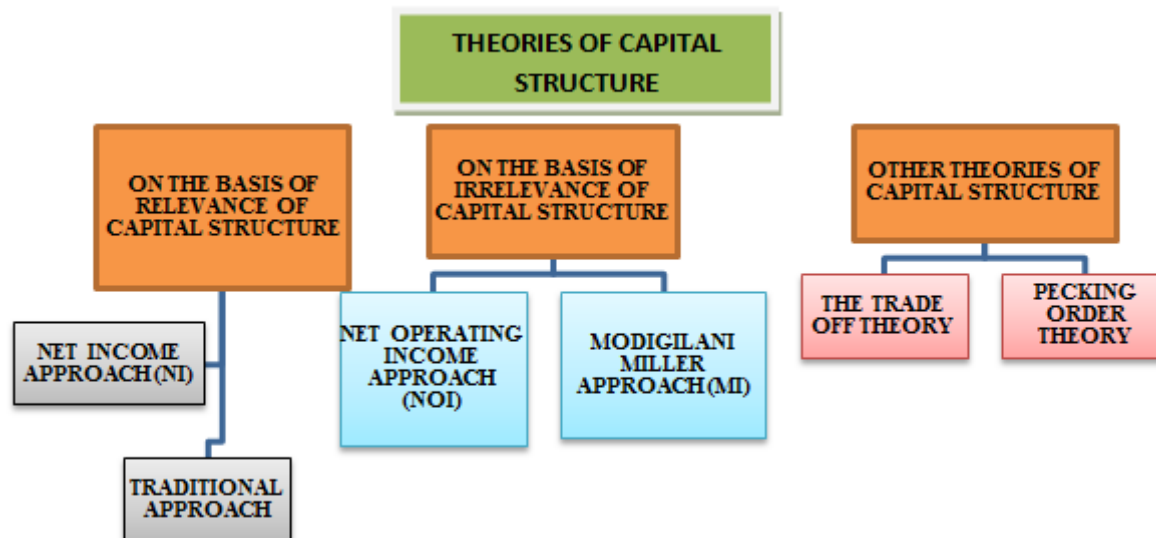


Figure 2: Theories of Capital Structure

(iii) Determinants of Capital Structure

(Bhargaw, n.d.) They looked into the factors that influence a company's capital structure in the Indian FMCG sector. In order to carry out the investigation, five primary variables—size, tangibility, profitability, liquidity, and growth—have been identified and utilized to investigate their potential effects on the capital structures of the companies under investigation. According to the study's descriptive parameters, the majority of FMCG companies in India have short-term debts, and some of them do not use long-term debt to fund their projects. Corporate profitability and liquidity are found to have a negative association with the long-term debt ratio of companies, whereas size and tangibility are found to have positive relations with the debt burden of the companies. This supports the hypothesis that more profitable and cash-rich businesses prefer to use internal funds. (Kim & Berger, 2008) Among the five independent variables—profitability, size, non-debt tax shields, growth, and business risk—profitability was the only significant factor that had a negative impact on the leverage ratios in both nations (i.e The United States and The Republic of Korea). Myers' pecking order theory could explain these results, which are generally in line with those of Kester (1986), Titman and Wessels (1988), and Allen and Mizuno (1989): the preference for funding from within rather than from outside sources. (Wayan et al., 2020) Growth and asset structure had a positive and significant effect on the capital structure of Consumer Goods Companies in Indonesia Stock Exchange, while profitability had a positive but not significant effect. In consumer goods companies listed on the Indonesia Stock Exchange, profitability has a positive and significant effect on company value, growth has a negative but not significant effect, and asset structure has a positive but not significant effect on company value. Additionally, it has been demonstrated that capital structure can significantly mediate the effects of growth and asset structure on company value. On the other hand, capital structure does not significantly mediate the effects of profitability on company value in consumer goods companies listed on the Indonesia Stock Exchange. (Uremadu & Onyekachi, 2019) The outcomes from the review showed a negative and irrelevant effect of capital construction on corporate execution of the purchaser merchandise firm area of Nigeria. Returns on assets were negatively and insignificantly affected by the total debt to equity ratio and the long-term debt to total asset ratio, respectively. As a result, the study came to the conclusion that a company's performance is not significantly impacted by capital structure. As a result, the study suggests that managers should exercise caution when using debt as a source of financing because the capital structure and the performance of a corporate firm are negatively correlated. Also, the pecking order theory says that businesses should try to finance their operations with retained earnings and only use debt as a last resort. This means that the study strongly recommends that corporations finance their business activities with equity rather than debt. This is because, despite the fact that debt capital can increase a company's value, it eventually becomes detrimental or unfavorable to the company. (Sathyanarayana et al., 2017) They assert that the FMCG sector's Earnings, Tangibility, and Growth were the primary factors, while the capital goods sector's Earnings, Tangibility, and Growth were the primary factors. For the IT sector, the most important factors were Growth, Business Risk, and Size, while Earnings, Business Risk, and Size were the most

important factors.(Aggarwal, 1990) According to their study, large Asian companies' capital structures differ significantly between industries and internationally. When developing and implementing capital structure, financing, subsidiary evaluation, and management policies for their Asian operations, multinational and diversified businesses must take this into account.(Amit Hedau, n.d.) They confirmed that the company's capital structure is influenced by sector-specific factors. They say that the factors that determine capital structure vary by industry. It may be tempting to draw the conclusion that the degree of leverage varies depending on the industry. More interestingly, no single factor is found to be shared by all industries.(THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT Capital Structure Practices-Industry Wise Analysis of Companies, 2016) According to industry-specific empirical evidence, corporate firms' capital structure practices are influenced by industry. In terms of their capital structure, all of the industry groups under investigation have a clear preference for shareholder funds. The capital structure of computer, pharmaceutical, and drug industries is heavily dominated by equity. (De Jong et al., 2007)They have find that First, They say that different countries have different firm-specific determinants of leverage. Second, even though we agree that country-specific factors have a direct effect on firms' capital structures, They demonstrate that country-specific factors also have an indirect effect on the roles of firm-specific determinants of leverage.(Vodwal et al., 2019) They find that Indian firms typically modify their capital structure to achieve the optimum level of debt. The study confirms that firm size and profitability are significant determinants of leverage both before and after a crisis; Both measures of leverage show that tangibility is statistically significant in the post-crisis period and insignificant in the pre-crisis period.(Antwi, n.d.) The study found that long-term debt was also found to be the primary determinant of a firm's value, and that equity capital as a component of the capital structure is relevant to the value of a firm in an emerging economy like Ghana. Since long-term debt has a greater impact on a company's value than equity capital, this study's findings suggest that corporate decision makers should finance their operations with more of it.(Chowdhury & Chowdhury, 2010) The intriguing result of this study suggests that the ideal combination of debt and equity is required to maximize shareholder wealth, while the cost of capital has a negative correlation with this decision and must be kept as low as possible. Additionally, this demonstrates that a company can increase its market value by altering the composition of its capital structure.

Determinants	Definitions
(A) Dependent Variable	
Financial Leverage	Debt Equity Ratio
(B) Independent Variables	
Profitability	Ebidta/Total Assets
Tangibility	Total Fixed Assets/ Total Assets
Size	Log(Total Assets)
Liquidity	Current Assets/ Current Liabilities
Non-Debt Tax Shield	Annual Depreciation/Total Assets
Business Risk	Standard Deviation Of Ebidta
Growth	Sales - Salest-1 / Salest-1

Figure 3: Determinants of Capital Structure

Source : (Determinants of Capital Structure: A Study of Indian FMCG Sector Dr. Anil Soni, n.d.) ; (Sathyanarayana et al., 2017)

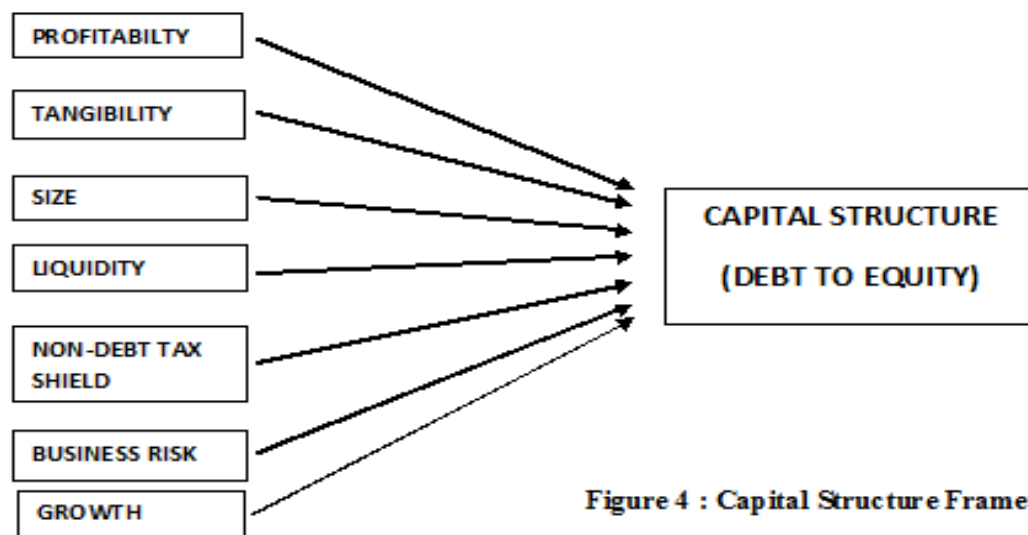


Figure 4 : Capital Structure Framework

RESEARCH METHODOLOGY

Objective

To attempt to predict the future trends based on Systematic Literature review (SLR) of the previous researches done to analyze the Capital Structure, Capital structure theories & its determinants. Also a bibliometric analysis of the Scopus published data for a period from 2009 to 2022 has been done using VOS viewer. we have limited our research only to the subject areas of Economics, Econometric & Finance ; Business Management & Accounting and Multidisciplinary while exporting scopus databases.

Data Collection

Our study is based on secondary sources of information. We have studied more than 100+ research papers , articles & Journals from various sources like Google Scholar, Research Gate etc . We have extracted scopus data for VOS viewer bibliometric analysis.(Hlawiczka et al., 2021) The methodological steps that are typically followed to carry out bibliometric analysis are as follows: It is necessary to define the essential criteria, keywords, and time period of the search in the initial step. After that, a suitable database is chosen, which is crucial for creating input data and altering the search criteria. The obtained search results must then be exported so that they can be used in the final step, which is creating and analyzing the bibliometric map.

Time Period

Data is collected for a period from 2009-2022.

Tools Applied

Systematic Literature Review (SLR) , VOS Viewer

DISCUSSION

The frequency of the term "capital structure" in academic works included in Scopus's scientific database from 2009 to 2022 illustrates the topic's present prominence and growth. The analysis was preceded by a thorough examination of the publications, which involved locating the most significant authors, nations, and countries in the Scopus database. A search phrase targeted at scientific research publications published in the Scopus database between 2009 and 2022 included the term capital structure. The final search result with all available information was exported and subsequently used to create the bibliometric map itself in the VOS Viewer program. The results of the bibliometric analysis show that the keywords capital structure and determinants are the two most related words using the analysis of citations of common occurrence. (Merigó et al., 2018) As the data obtained from bibliometric research is useful for scientists themselves in carrying out their research activities, it is gradually being included into decision-making processes and aiding in the identification of new trends. (Toušek et al., 2021) Different capital compositions are a result of the enterprise's property structure, the management's attitude toward risk, and the management's relationship to foreign capital, as well as external factors relating to the economic and political environment of the nation in which a particular enterprise operates. The keyword capital structure appeared 285 times in the

Figure 6: Network Visualization of all the authors worked for the issue of capital structure

CONCLUSION

(Gajdosikova & Valaskova, 2022) One of the most frequently discussed topics in the theory of corporate finance is capital structure, but the modern theory of corporate finance has not yet provided a convincing answer to this question. Financial managers should be able to creatively apply the theoretical approaches and their practical alterations to the creation of the enterprise capital structure to the conditions of their own business. At the same time, the primary objective of financial decision-making is to select such a structure, to locate such a combination of equity and debt that is most dependable for investors and maximizes enterprise value. The best capital structure is not only one of the most important aspects of a market economy but also one of the most difficult aspects of financial management.

The financial manager should take into consideration and include a number of additional factors that result from the generalization of empirical capital structure research when deciding on the optimization of the capital structure. These additional factors include theoretical approaches, models, and their practical modifications. The enterprise's long-term financial strategy must include the capital structure decision, which cannot be made suddenly. It is possible to argue, on the basis of the outcomes that were obtained from the bibliometric maps that were created, that the terms "capital structure and determinants" and "capital structure and debt" have a strong connection to the amount of debt that market-based businesses have.

The paper explores the conceptual issues, repercussions, and financial management implications of the capital structure issue using SLR and bibliometric analysis. The theoretical and practical contribution of the paper can be seen in the identification of a significant gap in previously published research through SLR and bibliometric analysis of capital structure challenges, as well as in the analysis of the most popularly used keywords and occurrences that investigate the theory of capital structure. Capital structure research has been conducted for many years, and papers are generally acknowledged in practice, academia, and the professional world.

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