

# DETERMINANTS OF CAPITAL STRUCTURE: A LITERATURE REVIEW

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**ABSTRACT:** Financial decision is one of the most crucial decisions in corporate finance. Financial managers want to know the optimum level of debt and equity. In this paper the literatures on determinants of capital structure studied by the Indian and international researchers are reviewed. The paper is divided in two parts. In first part the researcher reviews articles on determinants of capital structure being conducted in abroad and second part includes review of literature on determinants on capital structure being done in India. Many empirical researchers have explored the determinants of capital structure from different point of view and in different environment relating to developed and developing countries. The empirical results vary and sometimes contradict in many studies. It is still debated what are the significant determinants of capital structure and how they impact on capital structure decision, even though various studies have been conducted on this subject. In this paper the researcher intends to throw light on different variables, methodologies and findings of empirical studies conducted on this topic. It is found that the relationship between factors and capital structure is not consistent. The review is conducted on the basis of available literature during the period 2000-2015.

**KEYWORDS:** Capital structure, review, debt, equity, leverage, profitability.

**INTRODUCTION:** Capital structure decision is one of the most crucial decisions made by financial managers. The main objective of financial manager is to maximise the shareholders wealth through the lower cost of capital. Decision making in capital structure is a great issue to all firms. To maximise firm's value as well as minimize cost of capital, a manager should set up an optimum capital structure. But no strict theory has been yet developed to determine the exact optimal capital structure.

Capital structure refers to the combination of sources which have been used to create a pool of funds. The sources of financing can be divided in to two categories-(1) external Equity and (2) Internal equity. External equities are Debentures, loans and advances, public deposits, preference share capital etc. internal equities are equity share capital, retained earnings etc.

What factors affect the firm's financing decision? Researchers in the corporate finance area have devoted extensive time and effort to ascertain the answer to this question through theoretical and empirical study. This question acquired special significance after the publication of seminal papers by Modigliani and Miller (1958, 1963).

The capital structure of a firm is determined by various internal and external factors. Internal factors are – size and nature of the business, capital gearing, cash position, future

plans and developments, period of finance, trading on equity etc. External factors are – market condition, government rules and regulations, interest rate, market competition, tax rate etc.

This study presents a literature review on ‘determinants of capital structure’ conducted by the researchers in India and abroad for the period 2000 to 2015. This paper is divided into three sections. In section 1, the researcher reviews capital structure determinants of international studies. In section 2, the researcher discusses literature review on capital structure determinants conducted by Indian researchers. Section 3 contains summary and conclusions.

**OBJECTIVES:** The main objective of this paper is to review the existing available literature on determinants of capital structure and to highlight the research gap of the existing available studies conducted in India and abroad for the period 2000 to 2015.

**DATA COLLECTION AND METHODOLOGY:** This study is based on secondary data. Data have been collected from different published Journals, periodicals, websites, books etc. After having available literature, these have been analysed, synthesized and arranged according to the publication year from 2000 to 2015.

## 1. DETERMINANTS OF CAPITAL STRUCTURE: INTERNATIONAL PERSPECTIVE

This section contains review of major determinants of capital structure conducted by international researchers.

**Bevan and Danbolt (2000)** analysed the dynamics in the capital structure of UK companies from 1991 to 1997. They observed significant changes in the relative importance of various debt elements over time, as well as changes in the relationship between gearing and the level of growth opportunities, company size, tangibility, and profitability. The results of the study suggest that the nature of the credit market in the UK has been changed significantly during the 1990’s, with large companies using less bank finance and banks increasingly lending to smaller firms. At the same time, bank debt appears to have become more closely related to corporate profitability and collateral values.

**Huang and song (2000)** studied the determinants of capital structure of 1000 listed companies in China for the period 1994 to 2000. They found from the study that fixed assets, size of the firm and non debt tax shields have significant positive relation with leverage and negative relation with profitability of the selected companies.

**Baral (2004)** evaluated the impact of the determinants of capital structure of the 40 companies listed in Nepal stock exchange Ltd. as on July 16, 2003. They found that growth rate, size of the firm and earning rate have significant positive impact to determine the capital structure of the selected companies. On the other hand degree of operating leverage business risk and dividend payout ratio has insignificant impact to determine the capital structure.

**Coleman (2006)** studied on capital structure in small manufacturing firms in USA. Results revealed that industry sector is not a significant determinant of capital structure rather

capital structure in small to mid size firms is determined by measures size of the firm, firm age ( since its inception), organisational status, assets structure and profitability.

**Frank and Goyal (2007)** examined the effect of the determinants of capital structure on the leverage of publicly traded American firms for the period 1950-2003.They found that there is a negative relation of market to book assets ratio and profit with leverage. On the other hand log of assets, expected inflation, median industry leverage and tangibility have a positive relationship with the leverage.

**Bas, Muradoglu and Phylaktis (2009)** studied the determinants of capital structure decisions of 11,125 firms (small and private firms) in 25 developing countries using data from world development indicators. The researchers found that tangibility, size of the firm and profitability are the major determinants of capital structure decisions.

**Afza and Hussain (2011)** studied on the determinants of capital structure of Automobile Sector of Pakistan for 26 firms. The study used pooled data regression model and used liquidity and cost of debt variables which have significant influence on the debt and equity financing decisions. The results showed that the large firms having good assets structure should go for debt financing .The results of profitability, liquidity and taxes are statistically significant in determining the capital structure of sample firms.

**Chandrasekharan (2012)** analyzed the determinants of capital structure in the Nigerian firms for the period 2007 to 2011. He showed that profitability, growth rate, firm age, firm size and tangibility are the main determinants of capital structure of sample firms.

**Choi(2014)** investigated the important determinants of capital structure of the 50 Korean firms for the period 2008 to 2012. The researcher found that the tangibility of assets, firm size and profitability have significant positive relation to the financial leverage of the sample firms. On the other hand tax shield and growth opportunities have significant negative relation to the financial leverage.

**Acaravci (2015)** investigated the determinants of capital structure in Turkey for the period 1993 to 2010 for 79 firms in the manufacturing sector traded on the Istanbul stock exchange. Size of the firm, Growth opportunities, tangibility, profitability, and non debt tax shield were used as the firm specific variables that affect a firm's capital structure decision. Results revealed that there are significant relationships between growth opportunities, size of the firm, profitability, tangibility and leverage variables. But non debt tax shields have insignificant effect on leverage variables.

## 2. DETERMINANTS OF CAPITAL STRUCTURE: INDIAN PERSPECTIVE

This section contains the review of major determinants of capital structure conducted by the researchers in India.

**Guha-khasnobis and Bhaduri (2002)** examined the determinants of leverage of 697 manufacturing and non financial firms in India for the period 1990 to 1998. They found that size of the firm, assets structure, profitability and short term financial distress cost are the significant determinants of leverage of the sample firms.

**Saravanam (2006)** made a study on ownership pattern and debt- equity choice of corporates in India. The study has applied mean, median, multiple regression analysis and Darbin-Watson test on data collected from 423 firms from the year 1992-1993 to 2001-2002. The study observed that firm size and asset composition have negatively related

with debt-equity. On the other hand growth, profitability, tax shield and promoter holdings have positive relationship with debt-equity.

**Kaur (2009)** conducted a study on determinants of capital structure in Indian Cement and Automobile industry. The researcher used the sample of 81 companies from Automobile industry and 35 companies from Cement industry from the period 2004 to 2008. The researcher observed that profitability, weighted average cost of capital and tangibility are important determinants of capital structure in cement industry. On the other hand profitability, tangibility, business risk are statistically significant determinants of capital structure in case of automobile industry.

**Mishra (2011)** studied a sample of 48 manufacturing PSUs for the period 2006-2010. Multiple Regression model had been used. The study revealed that capital structure is affected by Assets structure, profitability, and tax. Growth and Assets structure are positively related to leverage. On the other hand Profitability and tax are negatively related to leverage. None of the other variables like non-debt tax shield, size of the firm, volatility were found to be significant.

**Rasoolpur (2012)** analysed the capital structure determinants of Indian corporate sector by selecting a sample of 298 manufacturing firms for the period from 1995-1996 to 2005-2006. The researcher used correlation, regression, fixed effect approach to panel data and Darbin-Watson test for observing the result. Firm size, uniqueness and operating leverage are positively related to capital structure. Cash flow coverage ratio, earning rate, growth of assets, liquidity, non debt tax shield and dividend payout ratio have negative relation with capital structure. Fixed effect firm model shows that liquidity and uniqueness are only significant determinants of capital structure for the sample firms.

**Handoo and Sharma (2014)** examined the important determinants of capital structure of 870 listed Indian private and government companies for the period 2001 to 2010. They found that growth, asset tangibility, profitability, size of the firm, cost of debt, tax rate and debt serving capacity have significant impact on the leverage structure chosen by the firms in the Indian context.

**Yadav (2014)** evaluated the determinants of capital structure of 50 companies listed on the NSE, Nifty Index during the period 2002-2012 and found that debt service capacity is the only significant determinant of capital structure where as non-debt tax shields, profitability, collateral value of assets, growth, size of the firm, tax rate, liquidity, uniqueness and business risk have no significant relation with leverage of the sample companies.

**B. Suresha and M.Shefali N (2015)** studied on 'determinants of capital structure-Evidence from listed Information Technology Firms in India'. They have used data from 30 IT firms for the period 2009 to 2014. The impact of firm's tangibility, size, profitability, liquidity and earning variability on capital structure is investigated. They used regression analysis. The study indicates that firm leverage is positively related to

median industry leverage. Firm size and growth opportunities have positive relationship with firm leverage. Profitability and firm leverage are negatively related. Other factors have insignificant positive effect on capital structure.

3. **SUMMARY AND CONCLUSIONS:** Through the review of International and Indian literature on determinants of capital structure the reviewer found that size of the firm, growth opportunity, tangibility of assets, age of the firm, profitability, business risk, liquidity, non-debt tax shield, dividend payout ratio, tax rate, debt service capacity, cost of debt are the major important determinants of capital structure. The review of literature indicates that majority of the studies were conducted to identify the significant determinants of capital structure. There is a need to include more independent variables to widen the horizon of capital structure in Indian corporate sector. Majority of the studies have been used single model, multiple or pooled regression, to identify the determinants of capital structure. A few no. of empirical studies has been used appropriate model to satisfy the requirements of the data. On the basis of sample study, the reviewer found that no study has been conducted to compare the capital structure practices of traditional and modern industries.

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