CHAPTER II
REVIEW OF LITERATURE

Introduction

Reviews of earlier studies have been carried out on different aspects related to the problem focused in this research. Different authors have analysed financial leverage in different perspectives. A review of these analyses is important in order to develop an approach that can be employed in this study. The various findings therein are presented in this chapter.

Chudson (1945)[30] had provided direct evidence on the companies with a high proportion of fixed assets tending to use more long-term debt. His research also indicates that there is no simple linear relationship between corporate size and debt ratio.

Modigliani and Miller (1958)[31] argued that an 'optimal' capital structure exists when the risks of going bankrupt is offset by the tax savings of debt. Once this optimal capital structure is established, a firm would be able to maximise returns to its stakeholders and these returns would be higher than returns obtained from a firm whose capital is made up of equity only.

Donaldson (1961)[32] reported that practically the corporate behaved as if they followed some sort of a pecking order while designing the capital structure of the companies. In a field survey of corporate debt policies, Donaldson met finance managers who acknowledged that, "it was their long-term objective to hold to a rate of growth which was consistent with their capacity to generate funds internally".

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30 Chudson,W.A. (1945), "The Pattern of Corporate of Financial Structure", *National Bureau of Economic Research.*

31 Modigliani, F. and Miller, M. (1958). The Cost of Capital, Corporation Finance, and the Theory of Investment. *American Economic Review* 48, June, 261-197.

32 Donaldson. G, (1961), "Corporate Debt Capacity: A study of Corporate Debt Policy and Determination of Corporation Debt Capacity", Boston, Division of Research, Harvard Graduate School of Business Administration.

Gordon (1962)[33] found that gearing increased with size and that the return on investment was negatively related to debt ratio. He confirmed the negative association between operating risk and debt ratio.

The study made by Sastry (1966)[34] on the basis of individual balance sheets of public limited companies (for the period 1955-60) was a major attempt to analyse investments, dividends and external financing and their interdependence. Sastry's model, while explaining external financing in relation to gross retained earnings, investment and stock of net debt, indicated "external finance to be negatively sloped function of stock of net debt and gross retained earnings and a positively sloped function of investment outlays".

Baxter (1967)[35] reported that leverage depended on the variance of net operating earnings. Since business units with relatively stable income streams are less subject of the possibility of ruin, they may find it desirable to rely relatively heavily on debt financing. On the other hand, firms with risky income streams are reluctant to assume fixed charges sources of finance. Hence, he concluded that there was negative association between variance of net operating earnings and leverage.

Bray (1967)[36] observed that risky firms were more likely to have lower debt ratio. He observed that there was no simple linear relationship between size and debt ratio. Further, he found a negative association between total debt and the proportion of fixed assets. Apart from the factors mentioned above, he also concluded that there was a negative relationship between return on investment and debt ratio. Finally, he found that debt ratio was positively related to assets turnover and negatively related to payout.

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33 Gordon. M.J, (1962), "The Investment, Financing and Valuation of the Corporation", Home Wood III Irwin, 140.

34 Sastry, V.K, (1966), "Dividends, Investments and External Financing Behavior of the Corporate Sector in India", Unpublished Doctoral Dissertation, University of Pinnsylvania.

35 Baxter, N.D., (1967), "Leverage, Risk of Ruin and the Cost of Capital", *Journal of Finance*, September, 22: 395-403.

36 Bray, J.N, (1967), "The Risk and Use of Debt Financing", Unpublished Ph.D. Dissertation, UCLA.

Schwartz and Aronson (1967)[37] investigated the effect of one factor viz., industry on the firm's financial structure. They examined the hypotheses that financial structure measured by book values did not vary significantly within an industry but did vary significantly among industries. The statistical technique employed was the one way ANOVA, which used the 'F' ratio test of statistical significance. Their results were significant and they concluded that industries had developed optimal financial structures conditioned by their internal business risk. The rationale for this is that, firms in the same industry face the same kinds of environment and economic conditions and therefore, tend to cycle together.

Donaldson G (1968, 1969)[38] developed an approach to predict insolvency of certain corporations and to evaluate their debt-equity. He defended that excessive use of debt even in a large and mature corporation, becomes problematic and when it leads to a point where they cannot pay their obligations in recession. In this study, the viewpoint of management is from the view of the borrowing firm rather than from the standpoint of the lenders.

The optimum leverage and its implications are expressed by Ezra Solomon (1969)[39] in the following words. "Optimum leverage can be derived as that mix of debt and equity which will maximize the market value of a company i.e. the aggregate value of the claims and ownership interests represented on the credit side of the balance sheet. Further, the advantages of having an optimum financial structure, if such an optimum does exist, effects are twofold, it maximizes the value of the company, and the wealth of its owners and it minimizes the company's cost of capital which in turn increases its ability to find net wealth creating investment opportunities. Also by increasing the firm's opportunity to engage wealth creating investment it increases the economy's rate of investment and growth".

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37 Schwartz, E and Aronson, J.R., (1967), "Some Surrogate Evidence in Support of the Concept of Optimal Financial Structure", *Journal of Finance,* March, 1967.

38 Donaldson, G, (March – April 1968), New Frame Work for Corporate Debt Policy; *Harward, Business review,* Vol. 40, P. 14

39 Solomon. E, (1969), Theory of Financial Management (New York) Columbia University Press, p.42

Chakraborty (1977)[40] has also conducted a study to investigate debt-equity ratio in the private corporate sector in India. He tested the relation of debt-equity with age, total assets, retained earnings, profitability and capital intensity. He found that age, retained earnings and profitability were negatively correlated while total assets and capital intensity were positively related to debt-equity ratio. He also provided a glimpse of the regional patterns of debt-equity ratios in different industrial centers in India. He also attempted a prediction equation for debt-equity ratio for each industry. Chakraborty also used a very simple methodology for calculating the cost of capital. He showed calculation of cost of capital for 22 firms. He found that cost of capital increased from 7.36 percent to 12.36 percent over years. The average cost of capital for all the consumer goods industry firms taken together was the highest while it was lowest for the intermediate goods firms. One of the reasons for this was attributed to the relatively low amount of debt used in the former industry than in the latter. An indirect attempt was also made to test the M.M. hypothesis by plotting debt-equity ratios on the X-axis and the cost of capital on the Y-axis for 22 firms. The result showed almost a horizontal line parallel to the X- axis. The study also discussed environmental factors influencing corporate debt-equity ratios and cost of capital in India.

Pandey. I.M. (1978)[41] has made an analysis of the return risk implications of leverage and then, to relate the two to develop a decision rule to select an appropriate capital structure. First he examined leverage and return on equity. In his study, the effect of using debt and equity combination on return on equity is analysed, when the firm's overall rate of return is assumed to be constant.

Second aspect of his study was leverage and risk. From his study, he concluded that the risk associated with the shareholders earnings of a leveraged firm is greater than its business risk due to increased financial risk. A high degree of leverage associated with increased probability of insolvency will reduce expected rate of return on equity. His study further reveals that addition of debt in the capital structure increase the

40 Chakraborty, (1977) S.K, Corporate Capital Structure & Cost of Capital, Calcutta: *ICWA*.

41 Pandey.I.M,(March 1978), Indian Institute of Technology, Leverage risk and The Choice of Capital Structure, *The Management Accountant*, p.205-207.

shareholder's earnings as well as variability of these earnings. Therefore, the risk-averse shareholders would seek a "trade off" between their expected earnings and financial risk purely on the basis of earnings criterion, the choice of a capital structure can, thus, be made if the information regarding the shareholders return – risk preference is available.

Bhat's (1980)[42] paper has concerned about the impact of size, growth, business risk, dividend policy, profitability, debt service capacity and the degree of operating leverage on the leverage ratio of the firm. The study used the multiple regression model to find out the contribution of each characteristic. Business risk (defined as earnings instability), profitability, dividend payout and debt service capacity were found to be significant determinants of the leverage ratio. The study used a sample of 62 companies from the engineering industry.

Dr. Sathya Brata Bhattacharya (1981)[43] has conducted a study on the financial management of Tea industry (1974 –1981). A part of the study dealt with the capital structure pattern. Tea company's capital structure pattern as a whole was very simple. The technique of financial leverage through the instrument of debt was conspicuously absent. The debt capital was only about one percent.

The utmost reliance on retain earnings revealed economic soundness of capital structure but by restricting the debt in capital structure had deprived the firms effect of gains from trading on equity.

Bharathi Batra (1981)[44] made an attempt to study the trends in debt-equity ratio in various industries eg. Aluminium, Cement, Chemical etc. A comparison was also made between the observed ratio of industries and the norms set by the controller of capital issues in this regard and identified the factors responsible for the difference. The data has been taken from the studies of RBI and the period covered is from 1970-71 to 1977-78.

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[42] Bhat, Ramesh (December 1980), "Determinants of Financial Leverage: Some Further Evidence," *Chartered Accountant*, pp.451 -456.

[43] Sathya Brata Bhattacharyya, (1981) Financial Management in Tea Industry, *A Survey of Research in Commerce and Management*, Vol 5, p.15-30

[44] Bharthi Batra, (September 1981), Debt Equity Ratio in Indian Corporate Sector, *The Chartered Accountant*, Vol XXX No. 3.

The conclusion derived is that the overall debt-equity ratio for 11 industries takes together is well below 1:1

Pandey's (1984)[45] study about the corporate manager's attitude towards use of borrowings in India revealed that the practicing managers generally prefer to borrow instead of using other sources of funds because of low cost of debt due to the interest tax deductibility and the complicated procedures for raising the equity capital.

B. Banerjee (1984)[46] has made an analysis of the trend of capital structure in the corporate sector in India. It studied public limited companies (from 18 selected industry group) for a period of 7 years and the central government companies for a period of 18 years on the other. Data from the RBI bulletins are used and trend analysis of the debt-equity ratio is done. The study revealed that in the medium and large public limited companies the average the debt-equity ratio for the 18 industry group is always above 2:1 where in the other case it ranges from 1.39:1 to 1.81.

U.K.Mallik (1984)[47] made an attempt to study the impact of financial leverage on EPS and risk characteristics. This wealth of the shareholders can be increased either by increasing the earnings per share (EPS) or the market value per share or both. Again the market value of share depends upon the risk –perception of the shareholders in the capitalization rate of earnings. Earnings per share can be increased by taking the advantage of leverage. In financial management, two types of leverages are found to exist. The cost structure gives rise to operating leverage and the financial structure depicts the financial leverage. The conclusion derived is that, more the degree of financial leverage, higher is the financial break–even level of profit and lower is the margin of safety. The study also indicated that the trading on equity was greater than one; the financial leverage was beneficial to the equity shareholders.

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[45] Pandey I.M, (Feb. 1984), "Financing Decisions: A Survey of Management Undertaking", (Management review), Economic and Political Weekly,

[46] Banerjee, B. (1984), Capital Structure Trend in the Corporate Sector in India, Eok Udyog, 18(6), p.27-36.

[47] Malik, U.K. (April 1984, University of Burdwan, Impact of Financial Leverage on EPS & Risk Characteristic Analysis from Published Financial Statements – A Case Study - *Management Accountant*, P. 178-180

Pandey (1985)[48] conducted an empirical study to examine the industrial patterns, trends and volatilities of leverage and the impact of size, profitability, and growth on leverage. For this purpose, data of 743 companies in 18 industrial groups for the period 1973 – 74 to 1980 – 81 were analysed. It was found that about 72 to 80 percent of the assets of sample companies were financed by external debt, including current liabilities. Companies employed trade credit as much as bank borrowings. The level of leverage for all industries showed a noticeable increase after 1973 – 74. The study also indicated that classifying leverage percentages by the type of industry does not produce any patterns which may be regarded as systematic and significant. The trend and volatility associated with the leverage percentage also did not give any support to the belief that the type of industry had an impact on the degree of leverage. It also revealed that there was some evidence of the tendency of large size companies to concentrate in the high levels of leverage. But it is difficult to conclude that size has an impact on the degree of leverage, since a large number of small firms were also found employing high levels of debt. The study also did not show a definite structural relationship between the degree of leverage, on the one hand and profitability and growth, on the other, although over a period of time profitability and growth have improved and so has the degree of leverage. The majority of the profitability and growth of companies were concentrated within narrow bands of leverage.

Alexandros P. Prezas (1987)[49] in his study entitled 'Effects of Debt on the Degree of Operating and Financial Leverage' suggested that when interactions exist between the firm's real and financial decisions, changes in debt cause adjustments in the firm's real side. This in turn implied that degree of operating leverage (DOL) and degree of financial leverage (DFL) will both be affected when the firm's capital structure changes. In addition, DFL changes due to the adjustment in the interest payments. The changes in DOL and DFL depend on the relative sizes of the debt elasticities of real capital and contribution margin. It was also shown that DOL and DFL are determined simultaneously instead of the latter taking over where the former left off.

[48] Pandey, I.M., (March 1985), 'The Financial Leverage in India: A Study', *Indian Management*, pp. 21-34

[49] Alexandros P. Prezas (1987), 'Effects of Debt on the Degrees of Operating and Financial Leverage', Financial Management/Summer 1987, Pp.39-44.

R.P. Sharma (1988)[50]studies the general capital structure and with the help of ratios and other statistical tools analysed the financial structure of the automobile industry. Inter-firm and inter-industry comparisons have also been made. The author concluded that the automobile industry and its companies adopted complex pattern of capitalization with high capital gearing ratio. There exists a satisfactory position of debt-equity. Again the proprietary ratio of the automobile industry was only higher than of the sugar cotton textiles and shipping industry. It shows that the industry and its companies under study were highly depended on borrowed funds. Thus gains and losses are magnified by leverage and the higher the leverage employed by a firm, the greater will be the volatility of its returns.

Dr. P.Mohan Rao (1989)[51] in his study of debt equity in chemical industry said that to achieve profits and financial soundness, the finance manager must be careful in managing capital structure of a firm. The analysis of the study showed that the Indian corporate recorded a low debt equity ratio which is far below the norms of 2:1 various studies like RBI, CIC, ESRE and even our own empirical study discloses that the Indian Corporate Sector has a very low debt-equity ratio in spite of many advantages in using of debt finance. The reasons are many amongst the reasons of such a low debt ratio, some are as follows:

1. The Indian industries are to meet a part of their long term financial requirement through borrowing from commercial banks for short term and get it rolled over a number of years.
2. Inclusion of convertibility clause is the loan agreement; the public financial institutions (IDBI, IFCI, ICICI and UTI) have also been responsible for the low debt equity ratio.
3. The reason for the low debt-equity ratio is that the response of the public to the issue of equity share capital by both new and existing companies has been encouraging.

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50 Sharma, R.P. (1988), " Corporate Financial Structure" *Printwell Publishers*, Jaipur.

51 Mohan Rao, P. (1989), Debt Equity Analysis in Chemical Industry, *A Survey of Research in Commerce and Management*, Vol.3, P. 257.

4. In ordinate delay in the disposal of loan applications by the public financial institutions cause a low debt-equity ratio.
5. Due to internal generation of funds of joint stock companies in India debt-equity ratio becomes lowed.

Smith (1990)[52] who carried a study on 58 Management Buyouts of public companies during the period of 1977 to 1986 revealed that there exist a positive relationship between management ownership and the performance of the firm. This study also provide empirical evidence that increase in operating profits result from the decrease in operating costs and the proper management of working capital of the firms.

D.E. Allen (1991)[53] in his research work 'The Determinants of the Capital Structure of Listed Australian Companies: The Financial Manager's Perspective' reports the results of an investigation of financial managers' perceptions of the broad determinants of listed Australian company capital structure decisions. The research method involves a series of field interviews undertaken with the company secretaries and senior financial personnel of 48 listed Australian companies. The results are consistent with Donaldson's previously reported American findings, in that companies appear to follow a pecking order with respect to funding sources and also report policies of maintaining spare debt capacity.

IL-Woon Kim, Kung H. Chen and Jon Nance, (1992)[54] have done a research work on 'Information Content of Financial Leverage: An Empirical Study' and have examined the information content of financial leverage. Every effort has been made to control for confounding events. The information effect and the impact of other news announcements during the event period were controlled by following a strict sampling procedure. Tests were undertaken to search for other confounding events. The results failed to provide

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52 Smith, A. (1990). Corporate Ownership Structure and Performance. The Case of Management Buyouts. *Journal of Financial Economics*, 27, pp.143-164.

53 Allen. D.E. (1991), 'The Determinants of the Capital Structure of Listed Australian Companies: The Financial Manager's Perspective', *Australian Journal of Management,* 16, 2, December 1991, Pp.103-128.

54 IL-Woon Kim, Kung H. Chen and Jon Nance, (1992), 'Information Content of Financial Leverage: An Empirical Study', *Journal of Business Finance & Accounting*, 19(1), January 19.Pp.133-152.

evidence on the existence of such events. The empirical evidence of the study fails to support the theorem of increasing stock prices with increasing financial leverage. The irrelevance theorem is not supported either. The hypothesis that any types of external financing decrease stock prices is also rejected. The empirical evidence is, however, consistent with the existence of optimal financial leverage. The market reacts to changes in financial leverage. The direction of this reaction seems to depend on the position of a corporation's financial leverage relative to its optimal level.

Lubatkin and Chatterjee (1994)[55] argue that increasing the debt to equity ratio will help firms ensure that managers are running the business more efficiently. Hence, managers will return excess cash flow to the shareholders rather than investing in negative NPV projects since the managers will have to make sure that the debt obligations of the firm are repaid. Hence, with an increase in debt level, the lenders and shareholders become the main parties in the corporate governance structure. Thus, managers that are not able to meet the debt obligations can be replaced by more efficient managers who can better serve the shareholders. This mean that leverages firms are better for shareholders as debt level can be used for monitoring the managers.

Staking and Babbel, (1995)[56], in ‘The Relation between Capital Structure, Interest Rate Sensitivity and Market Value in the Property-Liability Insurance Industry’ utilizes a modification of the Taylor Separation Method to project the total cash flows from claim payments, rather than focusing solely on loss severity. This approach incorporates the volume and type of business written and historical loss development. This method assumes that inflation in a given year affects all unpaid losses for a given line equally, regardless of the accident year. The relationship between the market value of the firm and its leverage and surplus duration is then measured. The results of these relationships calculated for 25 insurers over 7 years are displayed graphically by a saddle-shaped curve representing the relationship among leverage, surplus duration, and the Tobin's Q value

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55 Lubatkin, M. and Chatterjee, S. (1994). Extending Modern Portfolio Theory into The Domain of Corporate Diversification: Does it Apply?. *Academy of Management Journal,* 37, pp. 109-136.

56 Staking and Babbel, 1995, “The Relation between Capital Structure, Interest Rate Sensitivity, and Market Value in the Property-Liability Insurance Industry,” *Journal of Risk and Insurance*, 62:690-718.

(which measures the ratio of market to book value). These results suggest the need for further study on the duration measure. While the mean value of leverage for this sample, 3.47, lies along the crest of the saddle, suggesting that on average insurers adopt a leverage ratio that maximizes the market value of the firm, the mean value of surplus duration, 9.68, lies near the minimum values of the curve. If surplus duration were any lower or higher than the average value, then the market value of the firm would increase. Since the distribution of surplus duration values was not bimodal, this suggests that insurers were operating at a surplus duration level that minimized the firm's value. This finding suggests either that surplus duration is not measured accurately, or that insurers need to look at duration much more closely.

Joseph C. Kang (1995)[57] in his work entitled 'The Conditional Relationship Between Financial Leverage and Corporate Investment: Further Clarification' an option-theoretic approach was used to further clarify Dammon and Senbet's (1988) hypothesis on the relationship between bond financing and capital investment, which is conditional on firm-specific variables. This was accomplished by examining the effects for the relationship of the firm-specific tax-shield retention ability, capital intensity, and insider equity ownership. The analysis suggests a negative relationship between the level of bond financing and the level of investment. This is so because firms will use less bond (more equity) financing to invest more if they face high tax-shield transfer costs, high levels of capital intensity, or small insider equity stakes. As respective proxies for these firm-specific variables, one might use the firm size, one minus the fraction of employee compensation in the net operating profit, and the fractional equity ownership held by insiders (e.g., directors and managers).

Raj S Dhankar and A jit S Boora (1996)[58], in 'Cost of Capital, Optimal Capital Structure, and Value of Firm: An Empirical Study of Indian Companies' revealed that no

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[57] Joseph C. Kang (1995), 'The Conditional Relationship between Financial Leverage and Corporate Investment: Further Clarification', *Journal of Business Finance & Accounting,* 22(8), December 19.Pp.1211-1219.

[58] Raj S Dhankar and A jit S Boora (1996), Cost of Capital, Optimal Capital Structure, and Value of Firm: An Empirical Study of Indian Companies, *Vikalpa,* Vol. 21, No. 3, July-September, pp.29-36.

significant relationship was found between change in capital structure and the value of a firm, at the micro level. This is because of the fact that the value of a firm is affected by a multiplicity of factors and capital structure is just one of them. Many of these factors like the reputation of promoters, management of the company, economic and political conditions, role of bulls and bears, government policies, etc., are not measurable as they are qualitative in nature. Because of this problem, their effect cannot be segregated, and hence, an exact relationship between change in capital structure and value of a firm could not be established. However, at the macro level, the relationship was statistically significant at 5 percent level of significance. Companies were found to differ significantly in capital structure irrespective of whether they belong to the same industry group or different groups. This is because of the fact that the magnitude of the effect of determinants of capital structure vary from company to company. Further, it was also found that Indian companies do not employ a specific model for computing the cost of capital and have no scientific model for determining their target capital structure. Thus, it could be concluded that like perfect capital markets of the west, in India, too, wherein the capital markets are imperfect, companies have no definite way of determining their optimal capital structure.

Brigham and Gapenski (1996)[59] said that, in theory, the Modigliani-Miller (MM) model is valid. But, in practice, bankruptcy costs exist and these costs are directly proportional to the debt level of the firm. Hence, an increase in debt level causes an increase in bankruptcy costs. Therefore, they argue that that an optimal capital structure can only be attained if the tax sheltering benefits provided an increase in debt level is equal to the bankruptcy costs. In this case, managers of the firms should be able to identify when this optimal capital structure is attained and try to maintain it at the same level. This is the only way that the financing costs and the weighted average cost of capital (WACC) are minimized thereby increasing firm value and corporate performance.

V. Sivarama Krishnan and R. Charles Moyer, (1997)[60], in 'Performance, Capital Structure and Home Country: An Analysis of Asian Corporations' offers an empirical

[59] Brigham, E. and Gapenski, L. (1996). Financial Management. Dallas: The Dryden Press.

[60] Sivarama Krishnan, V. and R. Charles Moyer, (1997), 'Performance, Capital Structure and Home Country: An Analysis of Asian Corporations', *Global Finance Journal*, 8(l): (1997), 129-143.

look at the corporate performance and capital structure of large enterprises from four emerging market economies of Asia. The paper combined two strands of business research: one from the international business field on corporate performance and country of origin; and the other from corporate finance research on capital structure. They studied 81 corporations from Hong Kong, Malaysia, Singapore and Korea and found that both financial performance and capital structure are influenced by the country of origin. Specifically, this paper find that Hong Kong corporations have significantly higher returns on equity and invested capital than corporations from the other countries, possibly reflecting the concentrated conglomerate business structure typical of Hong Kong. The performance differences among firms from other countries are not statistically significant. Firms from Korea have significantly higher leverage than firms from the other countries. Leverage itself does not seem to affect corporate performance. The evidence lends only limited support to the extant capital structure theories in these emerging market economies.

Dev Prasad, Garry D. Bruton and Andreas G. Merikas (1997)[61], in their paper 'Long-Run Strategic Capital Structure' demonstrates the relevance of the concept of long run strategic capital structure. The evidence illustrated that there is a relationship between the strategic long-term goals of the firm and its capital structure decisions. Specifically, there is a joint impact of both asset structure and capital structure on systematic risk. Empirical findings suggest that, the interaction between asset and financial structure explain a large portion of the variation in beta. Specifically, managers were found to structure the selection of debt and capital intensity in a way consistent with the strategic goal of long-run control of systematic risk.

Yan Qin and Sitikantha Pattanaik (2000)[62] in their study 'Measuring Cost of Capital Credit Rating vs. Global CAPM highlights the complexities associated with the estimation of hurdle rates in emerging market economies and explores whether credit ratings could be used as an alternative to global CAPM for estimating equity cost of

[61] Dev Prasad, Garry D. Bruton and Andreas G. Merikas (1997), 'Long-Run Strategic Capital Structure', *Journal of Financial and Strategic Decisions*, Volume 10 Number 1, Spring 1997, Pp. 47-58.

[62] Yan Qin and Sitikantha Pattanaik (2000), 'Measuring Cost of Capital Credit Rating vs. Global CAPM', *Economic and Political Weekly,* September 9, 2000, Pp.3325-3334.

capital for valuation of projects in such economies. By adopting the log-linear country credit rating model, this paper estimated the cost of capital for 136 countries, with or without equity markets. India's low stock return correlation with the return on the global index indicates that if the residents are permitted to hold a globally diversified portfolio, they could significantly reduce their exposure to unsystematic risks. Without this the cost of equity capital (which should compensate only for systematic risk) may be higher.

Graham Hall, Patrick Hutchinson and Nicos Michaelas (2000)[63] in the research work 'Industry Effects on the Determinants of Unquoted SMEs' Capital Structure' reports a study of 3500 unquoted, UK small and medium sized enterprises (SMEs). The objectives of the research were to test various hypotheses concerning the determinants of SME capital structure and to establish whether and how the relationship of these determinants to long- and short-term debt varied between industries. Long-term debt was found to be related positively to asset structure and company size and negatively to age; short-term debt was related negatively to profitability, asset structure, size and age and positively to growth. Significant variation across industries was found in most of the explanatory variables. The effect of growth on short-term debt, however, was consistent across industries while profitability had no effect on long-term borrowing in any industry.

Saugata Banerjee, Almas Heshmati and Clas Wihlborg (2000)[64] in their research work 'The Dynamics of Capital Structure' revealed that the common approach in empirical capital structure research has been to study the determinants of optimal leverage by studying the association between observed leverage and a set of explanatory variables. This approach has two major shortcomings. First, they observed that leverage need not necessarily be the optimal leverage. Second, the empirical analyses, being effectively non-dynamic, are unable to throw any light on the nature of dynamic capital structure adjustment by firms. In this paper, they use a dynamic adjustment model and panel data methodology on a sample of UK and US firms to specifically establish the

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[63] Graham Hall, Patrick Hutchinson and Nicos Michaelas (2000), 'Industry Effects on the Determinants of Unquoted SMEs' Capital Structure', *International Journal of the Economics of Business,* Vol. 7, No. 3, 2000, pp. 297- 312.

[64] Saugata Banerjee, Almas Heshmati and Clas Wihlborg (2000), 'The Dynamics of Capital Structure', SSE/EFI Working Paper Series in Economics and Finance No. 333, First Version: September 21, 1999, Revised Version: May 12, 2000.

determinants of a time-varying optimal capital structure. In addition, the model allows for the possibility that at any point in time firms' observed leverage may not be optimal, and that firms differ in their speed of adjustment towards the optimal capital structure, which itself may be changing over time for the same firm. They also attempt to identify factors determining the speed of adjustment. The study found that firms typically have capital structures that are not at the target, and that they adjust very slowly towards the target.

Malay Bhattacharyya and Ashok Banerjee (2001)[65] examined the effect of independent variables representing the three broad factors namely the tax factors, contracting cost factors and information cost factors on the corporate debt policy. Sample was drawn from the corporate database process of the CMIE. Companies were chosen from eight different industries viz. Chemical, F & B, Machinery, Metal Products, Non-metallic mineral products, Textiles, Transport and Transport equipments and diversified group. The period of study was 11 years (1988-89 to 1998-99). It was found that contracting cost and information cost factors affected corporate capital structure more than tax factors.

Emilio Colombo (2001)[66] in his study 'Determinants of corporate capital structure: evidence from Hungarian firms' investigated the capital structure of Hungarian firms by using a cross-section and a panel data approach. The data set is composed of balance sheet data and information on market structure for 1100 firms from 1992 to 1996. Evidence is found of imperfections that constrain firms in the achievement of their optimal capital structure, but also some positive indications: there are no distortions typical of the planned system and no signs of the presence of soft budget constraints.

Aydin Ozkan (2001)[67] in his work 'Determinants of Capital Structure and Adjustment to Long Run Target: Evidence from UK Company Panel Data' investigated

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65 Malay Bhatacharya and Ashok Banerjee, (April 2001), Determinants of Capital Structure – Revisited Empirically, *The ICFAI Journal of Applied Finance*, Vol. 7, No. 2, p.38.

66 Emilio Colombo (2001), 'Determinants of Corporate Capital Structure: Evidence from Hungarian Firms', *Applied Economics*, 2001, 33, 1689 -1701

67 Aydin Ozkan (2001), 'Determinants of Capital Structure and Adjustment to Long Run Target: Evidence from UK Company Panel Data', *Journal of Business Finance & Accounting*, 28(1) & (2), January/March 2001. Pp.175-198.

the determinants of target capital structure of firms and the role of adjustment process. A panel data set for 390 UK companies was constructed, which allowed adapting a dynamic model which throws some light on the issues of long-term target debt ratio of firms and adjustment process to this target. The evidence suggested that firms have long-term target leverage ratios and they adjust to the target ratio relatively fast, implying that the costs of being away from their target ratios and the costs of adjustment are equally important for firms. The results provided evidence that profitability, liquidity and growth opportunities exert a negative effect on the capital structure choice of firms. The results are also consistent with the prediction of the theory that there exists an inverse relationship between non-debt tax shields and borrowing ratio of firms. Finally, there is only a limited support for a positive effect arising from size of firms.

M. Pandey (2002)[68], in his study 'Capital Structure and Market Power' has empirically examines the relationship between capital structure and market power by using data for 208 Malaysian companies for the period from 1994 to 2000. The estimation method uses fixed firm and time effects model on panel data. The study provided new insights on the way in which the capital structure measured by total debt-to-assets ratio and market power measured by Tobin's Q ratio are related. This work predicts and shows that capital structure and market power has a cubic relationship, i.e., at lower and higher ranges of Tobin's Q, firms employ higher debt, and reduce their debt at intermediate range. This was due to the complex interaction of market conditions, agency costs, and bankruptcy costs. The paper also showed saucer-shaped relation between capital structure and profitability because of the interplay of agency costs, costs of external financing and interest tax-shield. In addition to Q ratio and profitability, researcher includes other independent variables in the estimation. The study find that size and tangibility have a positive and growth, risk (systematic) and ownership have a negative influence on capital structure.

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[68] Pandey I. M. (2002), Capital Structure and Market Power, Working Papers. No. 2002-03-01, Indian Institute of Management. Ahmedabad.

The study of Dolmat-Connel (2002)[69] showed that the profitability of firms increase considerably when managers are given shares of the company. This is because the managers will work in the interest of the shareholders since the managers themselves own shares of the firm. Therefore, linking the ownership structure to management can solve the principal agent problem.

Saumitra N. Bhaduri (2002)[70] in the research work ‘Determinants of capital structure choice: a study of the Indian corporate sector’ revealed that existing empirical research on capital structure has been largely confined to the United States and a few other advanced countries. This paper attempts to study the capital structure choice of Less Developed Countries (LDCs) through a case study of the Indian Corporate sector. The objective was to develop a model that accounted for the possibility of restructuring costs in attaining an optimal capital structure and addresses the measurement problem that arises due to the unobservable nature of the attributes influencing the optimal capital structure. The evidence presented here suggested that the optimal capital structure choice can be influenced by factors such as growth, cash flow, size, and product and industry characteristic etc. The results also confirm the existence of restructuring costs in attaining an optimal capital structure.

Andy C.W. Chui, Alison E. Lloyd and Chuck C. Y. Kwok. (2002)[71] in their research work entitled ‘The Determination of Capital Structure: Is National Culture a Missing Piece to the Puzzle?’ analysed why does knowing the nationality of the company help predict its financial leverage. Differences in institutional backgrounds provide only a partial answer to this question. This study suggested that national culture affects corporate capital structures. Empirical hypotheses, drawn from financial models and cross-cultural psychology, are tested against a sample of 5591 firms across 22 countries. Results show that countries with high scores on the cultural dimensions of "conservatism" and "mastery" tend to have lower corporate debt ratios. The effects are

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69 Dolmat-Connell, J. (2002). Carrots and Sticks. *Forbes*, p.42.

70 Saumitra N. Bhaduri (2002) in the research work ‘Determinants of Capital Structure Choice: A Study of the Indian Corporate Sector’, *Applied Financial Economics*, 2002, 12, 655-665.

71 Andy C.W. Chui, Alison E. Lloyd and Chuck C. Y. Kwok. (2002), ‘The Determination of Capital Structure: Is National Culture a Missing Piece to the Puzzle?’ *Journal of International Business Studies*, 33, 1 (First Quarter 2002): 99-127.

strong and remain significant even after accounting for differences in economic performance, legal systems, financial institutions, and some other well-known determinants of debt ratios.

Alan A. Bevan and Jo Danbolt (2002)[72] in their research paper 'Capital structure and its determinants in the UK - a decompositional analysis' focused on the difficulties of measuring gearing, and the sensitivity of Rajan and Zingales' resulted to variations in gearing measures are tested. Based on an analysis of the capital structure of 822 UK companies, Rajan and Zingales' results are found to be highly definitional-dependent. The determinants of gearing appear to vary significantly, depending upon which component of debt is being analysed. In particular, significant differences are found in the determinants of long- and short-term forms of debt. Given that trade credit and equivalent, on average, accounts for more than 62% of total debt, the results are particularly sensitive to whether such debt is included in the gearing measure. It is argued, therefore, that analysis of capital structure is incomplete without a detailed examination of all forms of corporate debt.

Jitendra Mahkud and L.M.Bhole (2003)[73] has developed the dynamic panel data model, more specifically, the General Method of Moments (GMM) model for an empirical study of capital structure in the case of private corporate sector in India. The results suggested that the variables like the lagged leverage ratio, the cost of borrowing, the cost of equity, the size of the firm, the collateral value of assets, the liquidity, and the non-debt tax shields are the major determinants of corporate capital structure in India. The negative relationship between the leverage ratio and liquidity supports the Pecking Order hypothesis in the case of Indian corporate capital structure. The period analysis has also been done to show the impact of the liberalization on the determinants of the corporate capital structure.

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72 Alan A. Bevan and Jo Danbolt (2002), 'Capital structure and its Determinants in the UK - A Decompositional Analysis', *Applied Financial Economics*, 2002, 12, 159-170

73 Jitendra Mahakud and L.M. Bhole, (September 2003), Determinants of Corporate Capital Structure in India : A Dynamic Panel Data Analysts, *The ICFAI Journal of Applied Finance*, Vol. 9, No.6, p.41.

Gavin Cassara, Scott Holmesb (2003)[74] in 'Capital structure and financing of SMEs: Australian evidence' investigated the determinants of capital structure and use of financing for small and medium sized enterprises. Hypotheses utilising static tradeoff and pecking order arguments are empirically examined using a series of firm characteristics including: size, asset structure, profitability, growth and risk. The hypotheses developed are tested using a large Australian nationwide panel survey. The results suggested that asset structure, profitability and growth are important determinants of capital structure and financing. For asset structure the direction of the influence is reliant upon the capital structure or financing measure employed. The results generally support static trade-off and pecking order arguments proposed by theoretical models.

Connie X. Mao (2003)[75] in his research paper 'Interaction of Debt Agency Problems and Optimal Capital Structure: Theory and Evidence' tried to answer the question does more leverage always worsen the debt agency problem? This paper presents a unified analysis that accounts for both risk-shifting and under –investment debt agency problems.For firms with positive marginal volatility of investment (defined as the change in cash flow volatility corresponding to a change of investment scale), equity holders' risk-shifting incentive mitigated the under-investment problem. This implied that contrary to the conventional views, total agency cost of debt does not uniformly increase with leverage. This model further predicted that, far high growth firms in which the under-investment problem is severe, the optimal debt ratio is positively related to the marginal volatility of investment. Empirical results supported this prediction.

A. Panno (2003)[76] in his work 'An empirical investigation on the determinants of capital structure: the UK and Italian experience' investigated the empirical determinants of capital structure choice by analysing security issues made by companies in the UK and Italy between 1992 and 1996, and examines how companies actually select between financing instruments at a given point in time and in different financial contexts. A

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74 Gavin Cassara, Scott Holmesb (2003), 'Capital Structure and Financing of SMEs: Australian Evidence', *Accounting and Finance*, 43 (2003) 123–147.

75 Connie X. Mao (2003), 'Interaction of Debt Agency Problems and Optimal Capital Structure: Theory and Evidence', *Journal of Financial and Quantitative Analysis*, Vol 38, No. 2. June 2003.Pp.399-423.

76 Panno. A. (2003), 'An Empirical Investigation on the Determinants of Capital Structure: The UK and Italian Experience', *Applied Financial Economics*, 2003, 13, 97-112

descriptive model of choice is developed and then estimated using Logit and Probit estimation procedures, and using data of two samples, which are assumed to be representative of a particular financial environment. The results provided evidence of interesting differences between the two financial markets, generally supporting the idea of the UK market being more testable and in principle more consistent with the main prescriptions of the more recent developments of capital structure theory; on the whole, the results provide support for positive effects of size and profitability, and negative impact of liquidity conditions and bankruptcy risk on the financial leverage of companies. This, together with the negative effect displayed by the available reserves which are taken as a proxy of internally generated funds, lends support to the pecking order theory of capital structure. It is also suggested that firms in well developed financial systems (UK) may have long-term target leverage ratios, while in less efficient markets (Italy) an optimal debt level does not seem to be a major concern. Finally, for both markets, the results are consistent with the notion that the tax advantage of debt financing plays a relevant role in capital structure decisions.

Rataporn Deesomsak, Krishna Paudyal, Gioia Pescetto (2004)[77], in their study 'The Determinants of Capital Structure: Evidence from the Asia Pacific Region' tests in the Asia Pacific region the findings of extant theoretical and empirical literature on the determinants of capital structure. Overall, the results support existing evidence with respect to firm-specific determinants. However, they also show some significant differences between the sample countries, and thus the paper also seeks to test for country specific determinants. In addition, since the sample period straddles across the 1997 Asian Crisis, the paper investigates the impact of the crisis on the capital structure decision. Firstly, the positive effect of firm size and the negative effect of growth opportunities, non-debt tax shield, liquidity and share price performance on leverage lend support to major capital structure theories. Secondly, the importance of the determinants of capital structure varies across countries in the region. For instance, profitability has significant influence on the capital structure of Malaysian firms and firm size has no effect on Singaporean firms. These differences confirm that managerial decisions may be affected by country specific considerations. Thirdly, the financial crisis of 1997 is found

[77] Rataporn Deesomsak, Krishna Paudyal, Gioia Pescetto (2004), The Determinants of Capital Structure: Evidence from the Asia Pacific Region, *Journal of Multinational Financial Management,* 14 (2004) Pp.387–405.

to have altered the role of both firm and country specific factors. For instance, the relationship between leverage and firm specific variables such as firm size, growth opportunities, non-debt tax shield, and liquidity, has altered between the pre- and post-crisis periods. To sum up, the capital structure decision is not only the product of the firm's own characteristics but also the result of the corporate governance, legal framework and institutional environment of the countries in which the firm operates.

Joseph P.H. Fan, Sheridan Titman and Garry Twite (2004)[78] in their research work 'An International Comparison of Capital Structure and Debt Maturity Choices' examined the capital structure and debt maturity choices of firms in a cross-section of 39 developed and developing countries, focusing on the effect of the countries' public policies and institutional structures. Analysis suggested that a country's taxation and inflation policies as well as its legal institutions have an important effect on how its corporations are financed. Specifically, the preferential tax treatment of dividends is associated with lower leverage, high inflation is associated with lower leverage and the use of short-term debt and corruption increases financial leverage and reduces the maturity structure of the debt. Countries with large amounts of bank deposits tend to have shorter debt maturities and countries with a greater presence of other institutional investors are less levered and have longer debt maturities. They also found that the presence of information intermediaries is associated with lower leverage and the use of trade credit, highlighting their role in facilitating information dissemination. Finally, union bargaining power is unrelated to leverage, but is associated with the greater use of long-term debt.

Shenghui Tong and Yixi Ning (2004)[79] in their work entitled 'Does Capital Structure Affect Institutional Investor Choices?' suggested that capital structure influences institutional investors' stock-picking choices. First, there was a very significant and negative relation between dividend yield and institutional ownership. The dividend yield of a firm is related significantly and negatively to all four of the institutional ownership variables of the firm. Dividend yield has a substantial effect on institutional

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78 Joseph P.H. Fan, Sheridan Titman and Garry Twite (February, 2004), 'An International Comparison of Capital Structure and Debt Maturity Choices', http://www.afajof.org/pdfs/2005program/UPDF/P250_Corporate_Finance.pdf

79 Shenghui Tong and Yixi Ning (2004), 'Does Capital Structure Affect Institutional Investor Choices?' *The Journal of Investing*, Winter 2004, Pp.53-66.

investors' investment decisions. There is only limited evidence that institutional investors prefer firms with low debt ratios, high ratios of short-term debt to long-term debt, high ratios of capital expenditures to assets, and high ratios of cash flow to sales. Although debt ratio is positively and significantly related to the average shares held by each institutional investor, it is negatively and significantly related to the number of institutional investors, suggesting that firms with a low debt ratio tend to attract more institutional investors but reduced average shareholdings by each institutional investor.

Mihir A. Desai, C. Fritz Foley, and James R. Hines Jr. (2004)[80] in the study entitled 'A Multinational Perspective on Capital Structure Choice and Internal Capital Markets' analyzeed the capital structures of foreign affiliates and internal capital markets of multinational corporations. Ten percent higher local tax rates were associated with 2.8% higher debt/asset ratios, with internal borrowing being particularly sensitive to taxes. Multinational affiliates were financed with less external debt in countries with underdeveloped capital markets or weak creditor rights, reflecting significantly higher local borrowing costs. Instrumental variable analysis indicates that greater borrowing from parent companies substitutes for three-quarters of reduced external borrowing induced by capital market conditions. Multinational firms appeared to employ internal capital markets opportunistically to overcome imperfections in external capital markets.

F. Voulgaris, D. Asteriou And G. Agiomirgianakis (2004)[81] in their work 'Size and Determinants of Capital Structure in the Greek Manufacturing Sector' revealed that increasing competition in the European Union (EU) and world markets affected the Greek manufacturing sector. This study utilized panel data of two random samples, one for small and medium sized enterprises (SMEs) and the other for large sized enterprises (LSEs). The findings showed that profitability was a major determinant of capital structure for both size groups. However, efficient assets management and assets growth are found essential for the debt structure of LSEs as opposed to efficiency of current assets, size, sales growth and high fixed assets, which were found to affect substantially the credibility of SMEs.

80 Mihir A. Desai, C. Fritz Foley, and James R. Hines Jr. (2004), 'A Multinational Perspective on Capital Structure Choice and Internal Capital Markets', *The Journal of Finance* • Vol. Lix, No. 6 • December 2004. Pp.2451-2487.

81 Voulgaris, F. Asteriou. D. and Agiomirgianakis. G. (2004), 'Size and Determinants of Capital Structure in the Greek Manufacturing Sector', International *Review of Applied Economics,* Vol. 18, No. 2, 247–262, April 2004.

A. A. Bevan and J. Danbolt (2004)[82] in their study 'Testing for inconsistencies in the estimation of UK capital structure determinants' analysed the determinants of the capital structure of 1054 UK companies from 1991 to 1997, and the extent to which the influence of these determinants are affected by time-invariant firm-specific heterogeneity. Comparing the results of pooled Ordinary Least Squares (OLS) and fixed effects panel estimation, significant differences in the results are found. While the OLS results are generally consistent with prior literature, the results of their fixed effects panel estimation contradict many of the traditional theories of the determinants of corporate financial structure. This suggested that results of traditional studies may be biased owing to a failure to control for firm-specific, time-invariant heterogeneity. The results of the fixed effects panel estimation find larger companies to have higher levels of both long-term and short-term debt than do smaller firms, profitability to be negatively correlated with the level of gearing, although profitable firms tend to have more short-term bank borrowing than less profitable firms, and tangibility to positively influence the level of short-term bank borrowing, as well as all long-term debt elements. However, the level of growth opportunities appeared to have little influence on the level of gearing, other than short-term bank borrowing, where a significant negative relationship is observed.

Graham C. Hall, Patrick J. Hutchinson and Nicos Michaelas (2004)[83] in their study 'Determinants of the Capital Structures of European SMEs' showed that there are variations in both SME capital structure and the determinants of capital structure between the countries surveyed. The hypotheses appeared to hold up reasonably well as overall explanations with that for collateral being the strongest and that for growth being the weakest (consistent with Jordan et al., 1998). However, it becomes clear that the hypotheses do not explain everything in terms of SME capital structure since there are variations in the effects of the determinants on capital structure between countries. The variations could well be due to differences in attitudes to borrowing, disclosure requirements, relationships with banks, taxation and other national economic, social and cultural differences. These, in turn, are likely to be related to different levels of agency,

[82] Bevan, A. A. and J. Danbolt (2004), 'Testing for Inconsistencies in the Estimation of UK Capital Structure Determinants', *Applied Financial Economics*, 2004, 14, 55–66.

[83] Graham C. Hall, Patrick J. Hutchinson and Nicos Michaelas (2004), 'Determinants of the Capital Structures of European SMEs', *Journal of Business Finance & Accounting*, 31(5) & (6), June/July 2004, Pp.711-728.

information asymmetry and signaling costs between countries. Further research can provide more explanations by considering additional country-specific variables that determine SME capital structure.

Lisa A. Keister (2004)[84] in the study 'Capital Structure in Transition: The Transformation of Financial Strategies in China's Emerging Economy' found that during economic transition, firms must dramatically reduce their financial dependence on the state and begin to borrow from non-state capital sources. This paper draws on institutional and resource dependence theories to examine this fundamental transformation of firm capital structure during China's transition. The study proposed that managers borrowed from external sources even when internal funds were available because retained earnings were considered state assets. Firms used retained earnings to signal financial health but borrowed externally to reduce dependence on the state. Uncertainty during transformation produced inter-firm imitation of borrowing strategies, particularly imitation of local and high status others. The study argued that the dynamics of market development shaped firm borrowing strategies and that these strategies are best viewed as trajectories over time.

Slim Mseddi and Fathi Abid (2004)[85] in 'The Impact of Operating and Financial Leverages and Intrinsic Business Risk on Firm Value' investigated and modeled the

Jen Baggs and James A Brander (2006)[95] in their research work entitled 'Trade liberalization, profitability, and financial leverage' investigated the effects of trade liberalization on profitability and financial leverage using Canadian data arising from implementation of the Canada–US Free Trade Agreement. They found that falling domestic tariffs are associated with declining profits, especially for import-competing firms, while falling foreign tariffs are associated with increasing profits, especially for export-oriented firms. Also, import tariff reductions tend to increase leverage while export tariff reductions tend to decrease leverage.

Armen Hovakimian (2006)[96] in the study entitled 'Are Observed Capital Structures Determined by Equity Market Timing?' Contrary to Baker and Wurgler (2002), found that the importance of historical average market-to-book ratios in leverage regressions is not due to past equity market timing. Although equity transactions may be timed to equity market conditions, they do not have significant long lasting effects on capital structure. Debt transactions exhibit timing patterns that are unlikely to induce a negative relation between market-to-book ratios and leverage. He also found that historical average market-to-book ratios have significant effects on current financing and investment decisions, implying that they contain information about growth opportunities not captured by current market-to-book ratios.

Mitalisen and J.K.Pattanayak (2006)[97] in their research paper ' Influence of Fee Based Income on Debt Structure of Indian Commercial Banks: Empirical Investigation' attempted to examine the effect of fee based services of Indian commercial banks on its debt structure choice with the determinants of capital structure as control variables. The bank specific determinants of capital structure, identified from the literature include profitability, size, asset quality, liquidity and efficiency. The present study provided new insights on the way in which the capital structure and fee based income are related. The

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95 Jen Baggs and James A Brander (2006), 'Trade Liberalization, Profitability, and Financial Leverage', *Journal of International Business Studies* (2006) 37, 196–211.

96 Armen Hovakimian (2006), 'Are Observed Capital Structures Determined by Equity Market Timing?' *Journal of Financial and Quantitative Analysis*, Vol. 41, No. 1, March 2006. Pp.221-243.

97 Mitalisen and J.K.Pattanayak (2006), ' Influence of Fee Based Income on Debt Structure of Indian Commercial Banks: Empirical Investigation', *Finance India*, Vol. XX No.4, December 2006. Pp.1449-1458.

data used in the paper comprises 82 banks for a period of seven years from 1996 to 2002. The Ordinary Least Square (OLS) method is employed to study the direction of relationship between fee-based earnings and the various components of debt. The results indicated that the total debt and long term debt elements are negatively correlated with fee based income, while the short term debt component has a positive relationship with fee based earnings.

Prakash Basanna and Basavaraj.C.S. (2006)[98] in their research work entitled 'Means of Payment and its Impact on Capital Structure of Acquiring Companies' observed that most of merger cases are equity biased. The acquiring companies believed that the internal cash resources can be used for future growth. Another reason as to why most of the cases are equity biased is that, in most of the cases subsidiary companies have been merged with its holding companies, and therefore, holding company did not seem to hesitate to exchange equity in discharging claims of the minority shareholders. Further observation: the pre-merger reserves and surplus of merged entity has substantially increased immediately after merger in the cases of profitable company merging with another profitable company. The reason for such increase is attributable to the combined effect of two profitable companies. The study also reveals that loss making or sick acquired company upsets the pre-merger leverage of the acquiring company.

Zelia Serrasqueiro and Paulo Macas Nunes (2007)[99] in their research paper 'The Explanatory Power of Capital Structure Theories: A Panel Data Analysis' examined whether the main capital structure theories – Pecking Order, Trade-off, Agency, and Signaling theories – could explain the determinants of debt for a panel data covering 162 Portuguese companies for the period 1999-2003. A better understanding of the determinants of debt in a relatively small, open and industrialized economy of a less developed country may shed further light on Portuguese companies' capital structure decisions. The results have mixed evidences. A negative relationship between

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[98] Prakash Basanna and Basavaraj.C.S. (2006) in their research work entitled 'Means of Payment and its Impact on Capital Structure of Acquiring Companies', *The Management Accountant*, September 2006, pp.683-690.

[99] Zelia Serrasqueiro and Paulo Macas Nunes (2007), 'The Explanatory Power of Capital Structure Theories: A Panel Data Analysis', *The ICFAI Journal of Applied Finance*, Vol.13, No.7, 2007. Pp. 23-38.

profitability and debt confirms the Pecking Order theory while a positive relationship between size and debt, confirmed the Trade-off and Signaling theories. The opposite relationships between tangibility and short-term debt and long-term debt, suggested that the determinants of debt vary depending on the analyzed form of debt. On the whole, the results seem to support the capital structure theories in explaining the determinants of corporate debt.

Bahram Barzegar and K Nagendra Babu (2008)[100] in their study 'The Effects of Ownership Structure on Firm Performance: Evidence from Iran' reveals the relationship between ownership structure and corporate performance of top 50 companies listed on the Tehran Stock Exchange during the period 2001-03. In the present study, the ownership structure is considered in terms of institutional and non-institutional ownership. The study useed Returns on Asset (ROA), Return on Equity (ROE), and Tobin's Q ratios as measures of firm performance. The results indicated that there is a positive relationship between institutional ownership and firm performance in case of Iran. In addition, it is found that ownership structure is highly concentrated and firms with diffused ownership have performed better that those with concentrated ownership. In addition, there is a significant negative relationship between performance and company size, and finally the relationship between debt-to-asset ratio and performance is significant.

Benjamin B Bae and Mahdy F. Elhusseiny (2008)[101] in their study 'Measurement of financial leverage in the presence of environmental liabilities relating to Superfund sites' examined the effect of environmental liabilities on risk assessment by investigating whether the markets consider these liabilities a form of corporate debt in the assessment of the firm's risk. A model developed by Rubinstein (1973) and further expanded and operationalised by Dhaliwal (1986) is used to examine whether the inclusion of environmental liabilities relating to Superfund sites has any incremental explanatory

[100] Bahram Barzegar and K Nagendra Babu (2008) , 'The Effects of Ownership Structure on Firm Performance: Evidence from Iran', *The ICFAI Journal of Applied Finance*, Vol. 14, No. 3, 2008.

[101] Benjamin B Bae and Mahdy F. Elhusseiny (2008), 'Measurement of Financial Leverage in the Presence of Environmental Liabilities Relating to Superfund Sites', *American Journal of Finance and Accounting 2008* - Vol. 1, No.2 pp. 121 - 138.

power. A positive association between the environmental liabilities and measures of firms' risk is expected. Such results should help policy-makers decide whether or not to require companies to disclose environmental liabilities in their financial reports. The empirical results weakly support the hypothesis that environmental liabilities relating to Superfund sites are considered corporate liabilities in assessing firm's risk. One possible explanation is that the problems in recognising and determining the exact amount of liabilities for the Potentially Responsible Party (PRP) firms make it difficult for the investors to use this information for risk assessment. This paper addressed some important issues such as reporting environmental liabilities in the financial statements, their recognition and their roles in firm risk assessment.

Bo Becker and Per Stromberg (2009)[102], in the study ‘Equity-Debt holder Conflicts and Capital Structure’ used an important legal event as a natural experiment to examine equity-debt conflicts in the vicinity of financial distress. A 1991 Delaware bankruptcy ruling changed the nature of corporate directors’ fiduciary duties in that state. This change limited incentives to take actions favoring equity over debt. The work showed that, as predicted, this increased the likelihood of equity issues, increased investment, and reduced risk taking. The changes are isolated to indebted firms (where the legal change applied). These reductions in agency costs were followed by an increase in average leverage and a reduction in interest costs. Finally, they can estimate the welfare implications of agency costs, because firm values increased when the rules were introduced. The paper concluded that equity-bond holder conflicts are economically important, determine capital structure choices, and affect welfare.

Dilek Teker, Ozlem Tasseven, and Ayca Tukel (2009)[103] in their research paper ‘Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis’ tried to define the fundamentals underlying the capital structure theories and evaluates whether some *a priori* assumed macroeconomic determinants can be related to the leverage

[102] Bo Becker and Per Stromberg (2009), Equity-Debt holder Conflicts and Capital Structure, Working Paper No.10-070, *Harvard Business School*.

[103] Dilek Teker, Ozlem Tasseven, and Ayca Tukel (2009), ‘Determinants of Capital Structure for Turkish Firms: A Panel Data Analysis’, *International Research Journal of Finance and Economics,* Issue 29 (2009).pp.179-187.

parameters of interest examined in the paper. An empirical research that covers 42 selected firms traded at the Istanbul Stock Exchange ISE-100 index was conducted. To use time series and cross section data concurrently, the panel data methodology has been applied to the actual data to compute the leverage ratios for each firm within the time period 2000-2007. From this, the study highlights the issue of what properties that the leverage ratios have and how can the macroeconomic determinants affect the leverage ratios under various groupings such as tangibility, size, growth opportunities, profitability, and non-debt tax shields. The results revealed that return on assets and tangibility of assets have a positive and statistically significant impact on the firm's leverage ratio, while the ratio of total depreciation to total assets and profit margin on sales seem to have some negative and significant impacts on firms' leverage degree.

Reint Gropp and Florian Heider (2009)[104] showed that mispriced insurance and capital regulations were of second order importance in determining the capital structure of large U.S and European banks during 1991-2004. Instead, standard cross-sectional determinants of non-financial firms' leverage carry over to banks, except for banks whose capital ratio is close to the regulatory minimum. Consistent with a reduced role of deposit insurance, we document a shift in banks liability structure away from deposits towards non-deposit liabilities. They examined that unobserved time-invariant bank fixed effects are ultimately the most important determinant of banks' capital structure and that banks' leverage converges to bank specific, time invariant targets.

Jarrad Harford, Sandy Klasa and Nathan Walcott (2009)[105] in their research work 'Do firms have leverage targets? Evidence from acquisitions' made an analysis in the context of large acquisitions, they provided evidence on whether firms have target capital structures. The study examined how deviations from these targets affect bidders to choose to finance acquisitions and how they adjust their capital structure following the acquisitions. They showed that when a bidder's leverage is over its target level, it is less likely to finance the acquisition with debt and more likely to finance the acquisition with

104 Reint Gropp and Florian Heider.(2009), "The Determinants of Banks Capital Structure". WPS NO. 2009 Sep.

105 Jarrad Harford, Sandy Klasa and Nathan Walcott (2009), 'Do Firms Have Leverage Targets? Evidence From Acquisitions', *Journal of Financial Economics*, Volume 93, Issue 1, July 2009, Pages 1-14

equity. Also, we find a positive association between the merger-induced changes in target and actual leverage, and we show that bidders incorporate more than two-thirds of the change to the merged firm's new target leverage. Following debt-financed acquisitions, managers actively move the firm back to its target leverage, reversing more than 75% of the acquisition's leverage effect within five years. Overall, the results are consistent with a model of capital structure that includes a target level and adjustment costs.

Raghvir Kaur and N Krishna Rao (2009)[106] in the study ‘Determinants of Capital Structure: Experience of Indian Cotton Textile Industry’ aims to identified important determinants of capital structure and secondly to test for the applicability of trade-off and pecking order theories based on sample data drawn from the Indian Cotton Textile Industry for the five year period 2003-04 to 2007-08. Multiple Regression Analysis and Step-wise regression analysis have been carried out taking total debt to equity ratio as the dependent variable. Profitability, growth opportunities, liquidity and business risk turned out to be the most important determinants, followed by non-debt tax shield and uniqueness. Only firm size and asset structure, two of the eight explanatory variables of the study, were not found to be significant even at ten percent level. On the basis of the signs of the regression coefficients trade off theory has been found to be applicable, rather than pecking order theory, a position upheld by other empirical research work in the area.

Joaquim J.S. Ramalho and Jacinto Vidigal da Silva (2009)[107] in the work entitled ‘A two-part fractional regression model for the financial leverage decisions of micro, small, medium and large firms’ examine the following two hypotheses, which traditional theories of capital structure are relatively silent about: (i) the determinants of financial leverage decisions are different for micro, small, medium and large firms; and (ii) the factors that determine whether or not a firm issues debt are different from those that determine how much debt it issues. Using a binary choice model to explain the

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[106] Raghvir Kaur and N Krishna Rao (2009), ‘Determinants of Capital Structure: Experience of Indian Cotton Textile Industry’, *Vilakshan, XIMB Journal of Management,* September, 2009. Pp.97-112.

[107] Joaquim J.S. Ramalho and Jacinto Vidigal da Silva (2009) ,‘A Two-Part Fractional Regression Model For The Financial Leverage Decisions of Micro, Small, Medium and Large Firms’, *Quantitative Finance,* Volume 9, Issue 5, 2009, pages 621-636

probability of a firm raising debt and a fractional regression model to explain the relative amount of debt issued, they find strong support for both hypotheses. Confirming recent empirical evidence, the study find also that, although larger firms are more likely to use debt, conditional on their having some debt, firm size is negatively related to the proportion of debt used by firms.

Jaewon Choi (2009)[108] in his study 'Rethinking the Conditional CAPM: The Impact of Financial Leverage' revealed that in a framework in which the equity beta is decomposed into leverage and the beta of assets, this paper shows empirically the impact of financial leverage on the conditional CAPM. A firm's asset beta is estimated using asset returns constructed from market data not only on equity, but also on corporate bonds and loans. The CAPM alphas at firms' asset level are much smaller than the alphas at the equity level in the sample of firms where market data for debt are available. Furthermore, leverage alone can explain a substantial portion of the well-documented alphas of book-to-market-sorted portfolios. There is a tight link between book-to-market and leverage, explaining the empirical finding that firms' asset returns do not increase across book-to-market-sorted portfolios.

David T. Brown, C. Edward Fee and Shawn E. Thomas (2009)**[109]** in **'**Financial leverage and bargaining power with suppliers: Evidence from leveraged buyouts' investigated whether leveraged buyouts (LBOs) increase the bargaining power of firms with their suppliers. They found that suppliers to LBO firms experience significantly negative abnormal returns at the announcements of downstream LBOs. They also found that suppliers who have likely made substantial relationship-specific investments are more negatively affected, both in terms of abnormal stock returns and reduced profit margins, than suppliers of commodity products or transitory suppliers. Interestingly, leveraged recapitalization announcements are not associated with negative returns to

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[108] Choi, J. (2009). Rethinking the Conditional CAPM: The Impact of Financial Leverage. *Social Science Research Network. http://ssrn.com/paper =1445196*

[109] David T. Brown, C. Edward Fee and Shawn E. Thomas (2009), 'Financial Leverage and Bargaining Power with Suppliers: Evidence From Leveraged Buyouts', *Journal of Corporate Finance* Volume 15, Issue 2, April 2009, Pages 196-211

suppliers, suggesting that increased leverage without an accompanying change in organizational form does not, on average, lead to price concessions from suppliers.

Debasish Sur, Kaushik Chakraborty and Parveen Begum (2009)[110] in their work on 'Financial Leverage and Owners' Return: A Study on their Relationship with reference to Selected Indian Companies' studied the effect of financial leverage on the behavior of earning per share under different financing alternatives and with varying levels of operating profit is one of the most significant and debatable issues in modern finance. In consequence of the announcement of economic liberalization measures taken by the Government of India in July 1991, the issue has been gaining more and more importance along with the intensified competition in the market place. But this debatable issue has not been addressed with due importance in India especially during the post-liberalization era. This study examined the relation between financial leverage and owner's return of fifty selected Indian companies during the period 1995-96 to 2004-05. The issue has been tackled using relevant statistical tools and techniques. The study reveals in majority of the cases there is a significant effect of financial leverage on owners' return during the post-liberalization era.

Balram Dogra and Shaveta Gupta (2009)[111] in their research paper entitled 'An Empirical Study on Capital Structure of SMEs in Punjab' throw light that a majority of SMEs are still relying on their own funds and comparatively less on borrowed funds. The decision to rely on own funds is not influenced by any of the factors, other than their attitudes towards external funds. The results also revealed that there was a highly significant association of capital structure with the type of firm, growth of the firm, the degree of competition, and level of capital investment, but not by owner's qualification. It is concluded that SMEs need to change their attitude towards the orthodox practice of financing in order to be more competitive in the present business scenario.

[110] Debasish Sur, Kaushik Chakraborty and Parveen Begum (2009) 'Financial Leverage and Owners' Return: A Study on their Relationship with Reference to Selected Indian Companies', *SNS Journal of Finance,* Vol. 1, Issue 1, January-June 2009. Pp.9-19.

[111] Balram Dogra and Shaveta Gupta (2009), 'An Empirical Study on Capital Structure of SMEs in Punjab', *The ICFAI Journal of Applied Finance,* Vol. 15, No. 3, 2009.

Aija Leiponen and Jiahong Zhang (2010)[112] in their research work ‘Capital Structure and Innovation in Asian Emerging Economies’ investigated the relationship between firms’ capital structure and innovation activities in a large sample of firms in East Asian, South Asian, Central Asian and Eastern European emerging economies using the cross-sectional and cross-country World Bank Enterprise Survey. They found that external financing, especially funding from equity markets and from friends and family provide significant financial resources for firms’ innovation investments. Whereas the public equity markets are not mature in most of the analyzed economies, private equity financing still has a significant positive effect on innovation investment. The paper argued that financial development is a critical enabler of innovation in a broad set of service and manufacturing firms. Although there may be a “pecking order” in which firms actually choose the sources of finance for their innovation activities, equity, as well as family and friends play important roles in different stages of firm growth and innovation.

Samer H. Haidar (2010)[113] in his research work ‘Determinants of Capital Structure and Financial Leverage: Saudi Listed Firms’ an attempt is made to understand and elaborate the determinants of capital structure and financial leverage for listed firms. The sample constituted 97 Saudi listed firms from all sectors and industries for the years 2007-2009 by using several regression techniques and models. The findings showed robustness and sound results on the effect of explanatory variables on the capital structure for Saudi listed firms. It is also noted that, these firms hold less levels of debt compared to other western economies. This is mainly due to the cheap equity issuing and the complexity underlined in issuing debt.

Yahanpath Noel and Williams Rachael (2010)[114] in their work ‘Ambiguity of Financial Leverage Measures and Bondholder Protection’ examined whether the

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[112] Aija Leiponen and Jiahong Zhang (2010), Capital Structure and Innovation in Asian Emerging Economies, Paper Presented at the Summer Conference on Opening up Innovation: Strategy, Organization and Technology at Imperial College London Business School, June 16 - 18, 2010.

[113] Samer H. Haidar (2010) ‘Determinants of Capital Structure and Financial Leverage: Saudi Listed Firms’, MSc Finance Thesis, Graduate School of Business, Grenoble France.

114 Yahanpath Noel and Williams Rachael (2010) ‘Ambiguity of Financial Leverage Measures and Bondholder Protection’, *New Zealand Journal of Applied Business Research*, Volume 8, Issue 1 (2010) *63-78*.

ambiguity of financial leverage measures undermines bondholder protection. The need for investors to know of the ambiguity associated with financial leverage measures is apparent in all of the finance company collapses. Thirty companies' annual reports were examined and, information obtained showed how financial leverage can vary according to the use of different indicators. Reasons for these variances are discussed. In addition to this qualitative analysis, they have used the Spearman's rank correlation coefficient to test whether there is any evidence to support their argument. The main finding of this paper is that there is no method of accurately discerning financial leverage, because of the measurement's ambiguous nature, but there is a clear indication that this ambiguity has a negative impact on bondholder protection. There are many areas that can be 'tweaked' to a company's advantage, leaving investors in the dark as to what the true situation is.

Bent Jesper Christensen and Petra Posedel (2010)[115] in their research paper 'The Risk-Return Tradeoff and Leverage Effect in a Stochastic Volatility-in-Mean Model' study the risk premium and leverage effect in the S&P 500 market using the stochastic volatility-in-mean model of Barndor-Nielsen & Shephard (2001). The Merton (1973, 1980) equilibrium asset pricing condition linking the conditional mean and conditional variance of discrete time returns is reinterpreted in terms of the continuous time model. Tests are performed on the risk-return relation, the leverage effect, and the over identifying zero intercept restriction in the Merton condition. Results are compared across alternative volatility proxies, in particular, realized volatility from high-frequency (5-minute) returns, implied Black-Scholes volatility backed out from observed option prices, model-free implied volatility (VIX), and staggered bipower variation. Their results are consistent with a positive risk-return relation and a significant leverage effect, whereas an additional over identifying zero intercept condition is rejected. They also show that these inferences are sensitive to the exact timing of the chosen volatility proxy. Robustness of the conclusions is verified in bootstrap experiments.

[115] Bent Jesper Christensen and Petra Posedel (2010), 'The Risk-Return Tradeoff and Leverage Effect in a Stochastic Volatility-in-Mean Model', *School of Economics and Management,* University of Aarhus in its series CREATES Research Papers with number 2010-50.

Baum, C. F., Chakraborty, A. and Liu, B. (2010)[116] in their research paper 'The impact of macroeconomic uncertainty on firms' changes in financial leverage' investigated the relationship between a firm's measures of corporate governance, macroeconomic uncertainty and changes in leverage. Recent research highlights the role of governance in financing decisions. Previous research also indicates that macroeconomic uncertainty affects a firm's ability to borrow. In this paper they investigated how both these channels of influence affects firms' financing decisions. Their findings showed that macroeconomic uncertainty has an important role to play, both by itself and in interaction with a measure of corporate governance.

Raju Majumdar (2010)[117] in his study 'Corporate Borrowing and Growth Opportunities: Evidence from Indian Manufacturing Sector' analysed the relation between growth opportunities and corporate borrowing using a panel data regression model, on a sample of 317 Indian firms covering the period 2004-2008. Isolating the components of growth in terms of growth of assets already-in-place and the present value of future growth opportunities has yielded statistically significant results that point to the possibility of misspecification on independent variables as a possible reason behind the earlier findings. Study findings conformed to the theoretical explanation that firms with high market-to-book ratios have higher costs of financial distress and hence long-term borrowing and growth opportunities are inversely related even in the Indian context as it is elsewhere.

Gianluca Papa and Biagio Speciale (2010)[118] in their work **'**Financial leverage and managerial compensation: Evidence from the UK' using the data on a panel of quoted UK firms over the period 1995–2002 studied the effects of financial leverage on managerial compensation. The change in the investors' expectations that caused the recent collapse of the stock market tech bubble has been used as a source of reasonably exogenous variation in the firm's debt. They found that pay-for-performance sensitivity is increasing in financial leverage, with the exception of the 10% most levered firms.

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[116] Baum, C. F., Chakraborty, A. and Liu, B. (2010), The Impact of Macroeconomic Uncertainty on Firms' Changes in Financial Leverage', *International Journal of Finance & Economics*, 15: 22–30.

[117] Raju Majumdar (2010), 'Corporate Borrowing and Growth Opportunities: Evidence from Indian Manufacturing Sector', *The ICFAI Journal of Applied Finance*, Vol. 16, No. 5, 2010.

[118] Gianluca Papa and Biagio Speciale (2010), 'Financial Leverage And Managerial Compensation: Evidence from the UK', *Research in Economics*, Volume 65, Issue 1, March 2011, Pages 36-46

Aasia Asif, Waqas Rasool and Yasir Kamal (2011)[119] in their study 'Impact of financial leverage on dividend policy: Empirical evidence from Karachi Stock Exchange-listed companies' examined the relationship between dividend policy and financial leverage of 403 companies, listed with Karachi Stock Exchange during the period 2002 to 2008. Dividend policy, vastly followed by the companies, was tested by applying the extended model of Linter (1956) with the debt ratio of the firm, the previous year's dividend yield as its independent variables and change in earnings as a dummy variable. At first, the descriptive statistics for the entire variables were calculated and then correlation matrix was calculated to identify the preliminary relationship among all the variables, followed by regression analysis on panel data to examine the significance and magnitude through fixed and random effects models. Theoretical assertions were justified through random effect model that the level of corporate debt (leverage) and widely practiced dividend policy, significantly, affect the dividend policy of the Pakistani firms. On the other hand, financial leverage was found to have a negative impact on dividend payout, indicating less dividend payments by high-debt firms. The findings also confirmed that change in earnings has no significant impact on dividend policy in case of Pakistan firms while the dividend yield has positive impact and vice versa. Fixed effect model, applied for the study, supports only the significant effect of dividend yield on dividend per share.

Puwanenthiren Pratheepkanth, (2011)[120], in his research paper 'Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange, Sri Lanka' constituted an attempt to identify the impact between capital structure and companies performance, taking into consideration the level of companies financial Performance. The analyze has been made the capital structure and its impact on financial performance capacity during 2005 to 2009 (05 years) financial year of business companies in Sri Lanka. The results shown the relationship between the capital structure and financial performance is negative association at -0.114. Co-efficient of determination

[119] Aasia Asif, Waqas Rasool and Yasir Kamal (2011), 'Impact of Financial Leverage on Dividend Policy: Empirical Evidence From Karachi Stock Exchange-Listed Companies', *African Journal of Business Management* Vol. 5(4), pp. 1312-1324, 18 February, 2011

[120] Puwanenthiren Pratheepkanth, (April, 2011), 'Capital Structure and Financial Performance: Evidence from Selected Business Companies in Colombo Stock Exchange, Sri Lanka', *International Refereed Research Journal*, Vol.– II, Issue –2,April 2011. Pp.171-183.

is 0.013. F and t values are 0.366, -0.605 respectively. It reflects the insignificant level of the business companies in Sri Lanka. Hence, business companies mostly depend on the debt capital. Therefore, they have to pay higher interests.

Matsa David A. (2011)[121] in a research work "Running on Empty? Financial Leverage and Product Quality in the Supermarket Industry." examined whether debt financing can undermine a supermarket firm's incentive to provide product quality. In the supermarket industry, product availability is an important measure of a retailer's quality. Using US consumer price index micro data to track inventory shortfalls, he found that taking on high financial leverage increases shortfalls. Highly leveraged firms appear to be degrading their products' quality in order to preserve current cash flow for debt service. Although reducing quality can erode both current sales and customer loyalty, firms appear to be willing to risk these outcomes in order to achieve benefits associated with debt finance.

Ivo Welch (2011)[122], in his study ‘Two Common Problems in Capital Structure Research: The Financial-Debt-To-Asset Ratio and Issuing Activity versus Leverage Changes’ pointed out two common problems in capital structure research. First, although it is not clear whether non-financial liabilities should be considered as debt, they should never be considered as equity. Yet, the common financial-debt-to-asset ratio (FD/AT) measure of leverage commits this mistake. Thus, research on increases in FD/AT explains, at least in part, decreases in non-financial liabilities. Future research should avoid FD/AT altogether. At the same time, the researcher also agreed that a universal best measure may not even exist, but might depend on the question being asked. The paper also quantified the components of the balance sheet of large publicly traded corporations and discusses the role of cash in measuring leverage ratios. Second, equity-issuing activity should not be viewed as equivalent to capital structure changes. Empirically, the correlation between the two is weak. The capital structure and capital issuing literature are distinct.

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[121] Matsa, David A. 2011. "Running on Empty? Financial Leverage and Product Quality in the Supermarket Industry." *American Economic Journal: Microeconomics*, 3(1): 137–73.

[122] Ivo Welch (2011) ‘Two Common Problems in Capital Structure Research: The Financial-Debt-To-Asset Ratio and Issuing Activity versus Leverage Changes’, *International Review of Finance*, 11:1, 2011: pp. 1–17.

Conclusion

It is quite clear from the above review of empirical works that different authors have approached financial leverage in different ways of varying levels of analysis. These different approaches have helped in the emergence of more and more literature on the subject over the period. It throws more light on the extensive and diverse works on financial leverage. It facilitates to understand the various structural and non structural variables relating to financial leverage. Various studies on capital structure have been carried out to explain the conditions under which the capital structure does affect the firm's value. However, the existing empirical research on this issue has been largely confined to the United States of America and a few other developed countries. The issues of capital structure choice in developing countries have received only a little attention. A few of these existing empirical research studies on capital structure in the developing countries, particularly India, are restricted to the manufacturing firms only. Very little work has been done in the context of Indian services sector. Though some progress is made in the Indian context, such works are not sufficient to explore further. Hence, there is a research gap on the capital structure of Indian services sector emerged and necessitated an empirical research so that the decision on capital structure of services sector industries in India can be facilitated.