CHAPTER – 2

REVIEW OF LITERATURE
Chudsan (1945); concludes that there is direct evidence on the companies with high proportion of fixed assets tending to use more long – term debt. The research also indicated that there is no simple linear relationship between Corporate size and debt ratio.

Golden (1962); noticed that gearing increased with size, return on investment is negatively related with debt ratio; and also confirmed the negative association between operating risk and debt ratio.

Schwartz and Aronson (1967); investigated the effect of one factor viz, industry, on the firms financial structure. They examined the hypothesis that financial structure measured by book values does not vary significantly within an industry, but does vary significantly among industries. The statistical technique employed was the one way ANOVA, which use the F-ratio test of statistical significance. Their results were significant and they concluded that industries have developed optimum financial structures (Conditioned by their inherent 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.

Baxter, N. O. (1967); repeated that leverage will depend on the variance of net operating earnings. Since business with relatively stable income streams are less subject to 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 less able to assume fixed charges source of finance. Hence, he concluded that there was negative association between variance of net operating earnings and leverage.

Bray, J.N. (1967); shows that risky firms are 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 negative relationship between return on investment and debt ratio, positive association between growth and debt ratios, finally debt ratio being positively related to assets turnover, and negatively related to payout.

Gupta, M.C. (1969); had conducted a study on the financial structure of American manufacturing enterprises. The focus of the study was on analyzing the industry effect, the size effect and the growth effect on the financial structure relationship of American manufacturing enterprises. It was cross-section study for the year 1961-62. The study confirmed that total debt ratios were positively related to growth, and negatively related to
size. He also found significant industry effect on debt ratio. He further observed that “family pattern of ownership” is an important determinant of leverage in the paper and allied product industry.

Lev, B. (1969); concluded that there is a significant relationship between industry-class and debt ratio.

Baxter and Cragg (1970); have analyzed 230 security issues made in 1950-65 using logit & probit analysis and the explanatory variables were selected partly on prior grounds and partly by trial and error. Their final model for example, contained 11 independent variables, but at least 79 others were examined. They found that two variables were important. First, companies raising large sums in relative terms favored debt. Possibly, this reflects concern over control. Secondly, companies with high ratios of market capitalization to total assets favored equity. This could reflect timing consideration.

Scott, Jr. (1972); has presented an article on the importance of financial structure. The objective of his study was to present evidence on whether the importance of the financial structure of the firm has in practice been confirmed by corporate decision makers. The one-way analysis of variance was the statistical test employed. It tests the null hypothesis that the difference among the population means of various industrial classes sampled is zero. Ultimately, the null hypothesis was rejected. The study found that the financial structure of firms in the various industry classes was significantly different and, hence, underlies the importance of the financial structure of the firm.

Remmers, Stonehill, A Wright, R. and Beekhuisen, T. (1974); the purpose of this study was to report the results on an international test of the hypothesis that the industry, and the corporate size are the determinants of debt ratio. To determine if industry is a determinant of debt ratio in the United States, a one-way analysis test was run on firms from nine different industries. Their results did not support the hypothesis that industry is a determinant of debt ratio in United States. Further, they examined a sample of four manufacturing industries in five developed countries, namely, France, Japan, Netherlands, Norway and United States. They concluded that industry does not appear to be determinant of corporate debt ratio in the manufacturing sellers of the Netherlands, Norway and the United States. It does appear to be a determinant in France and Japan. In so far as the corporate size is concerned, they also found that size does not appear to be a determinant of
debt ratio. Remmer et al. suggested that certain institutional variables, earning rate and growth rate seem to be more important as determinants of debt ratio internationally.

Toy, N., Stonehill, A., Remmers, L, Beekhuisen, T, (1974); reported that higher operating risk companies showed some tendency towards higher debt ratio. They found that debt ratios were positively related to growth, typically measured as sales growth, and return on investment to be negatively correlated with debt ratio. They also concluded that the corporation size, and the industry-class do not appear to be determinants of debt ratio.

Scott and Martin, (1975); analysed the industry influence on financial structure. They have tested the null hypothesis of no relationship between industry and financial structure by using a parametric one-way analysis of variance, as well as, the non-parametric Kruskal-Wallis one-way Analysis of variance by Ranks. They concluded that industry-class is indeed a determinant of financial structure. Scott and Martin also concluded that corporate size is the determinant of firms financial leverage ratio.

Stonehill et al. (1975); conducted survey of financial executives in 87 firms of manufacturing corporations in France, Japan, the Netherlands, Norway and the United States on the corporate financial goals and debt ratio determinants. They concluded that financial risk appears to be the most important debt ratio determinant. Coverage of fixed charges under various cash flow forecasts ranked first in the Netherlands, Norway and the United States; third in Japan; and seventh in France. Almost equally important was the availability of capital. Capital market conditions during the survey period (1966-70) were the most important debt ratio determinant in France. Historical capital market opportunities to issue either debt or equity ranked first in Japan; second in France; and third in Norway. Rate in Japan; and variance in earnings were second most important in Japan and third most important in the Netherlands. Finally according to them, the industry norm does not appear to be an important debt ratio determinant in any of the countries surveyed.

Taub, A. J, (1975); used logit analysis to examine 172 issues of equity and bonds made in 1960-69, with the help of certain explanatory variables. He concluded that uncertainty of earning variable was negative, although not significant. The size of the firm had a positive impact on the desired debt-equity ratio. The tax rate was found to be negatively associated with debt equity ratio. The estimated coefficient of the period of solvency variable was negative. Finally, the coefficient of debt-equity ratio was negative but not significant.
Carleton and Silberman (1976); reached the conclusion that higher operating risk companies tended to avoid long-term debt issues. They found that larger U.K. companies had more long-term debt. This was very much in line with expectations.

Schmidt, R. (1976); observed a significant industry effects on debt ratio. Secondly, he found the return on investment to be negatively associated with the debt ratio. Thirdly, he looked at the composition of debt and found that large companies had more long term debt and vice-versa. Finally, Schmidt found a negative correlation between total debt and the proposition of fixed assets.

Carleton and Silberman (1977); have concluded that higher the variability in rate of return on invested capital, the lower will be the degree of financial leverage adopted. Hence, it is the variance, not the rate of return, that is the ultimate determinant of leverage. They also found the return on investment to be negatively correlated with the debt ratios.

Ferri and Jones (1979); examined the determinants of financial structure. The objective of their study was to investigate the relationships between a firm’s financial structure and the industry-class, size variability of income and operating leverage. They found that the industry-class was linked to a firm’s leverage, but not in a direct manner than what has been suggested in other researches. Secondly, a firm’s use of debt is related to its size, but the relationship does not confirm to be positive, linear scheme that has been indicated in other researches. Thirdly, variation in income could not be shown to be associated with a firm’s leverage. Finally, operating leverage does influence the percentage of debt in a firm’s financial structure and the relationship between these two types of leverage is quite similar to the negative, linear from which financial theory suggests.

Errunza, V.R., (1979); conducted a study on the determinants of financial structure in the Central American Common Market (CACM) Countries using a consistent data base obtained from primary sources. For the purpose of this study, 15 large domestic private sector companies for each of the four Central American Countries (Costa Rica, Guatemala, Honduras and Nicaragua) were selected. To test the hypothesis, two-way analysis of variance by ranks were used.

This study supports the hypothesis that there are statistically significant differences in the financial structures of different industries in the CACM Countries. Such variations have
persisted over a reasonable time span. The effect of country factor is not as strong as the industry classification.

Bhat, Ramesh K. (1980); conducted a research on the “Determinants of Financial Leverage” by selecting 63 units of Indian Engineering industry. He has examined the effect of various determinants of financial leverage, such as firm’s size, variation in income, growth, profitability, operating leverage dividend payout and debt service capacity with the help of multiple regression. He observed that (a) firm’s financial leverage is not associated with the size; (b) the negative relationship between financial leverage and coefficient of variation in EBIT shows that risky firms are more likely to employ low percentage of debt in their financial structure; (c) firm’s growth rate does not seem to be associated with firm’s leverage, and the relationship does not turn out to be positive as indicated in other works; (d) there is negative relationship between dividend payout and leverage ratio, though cause-and-effect relationship between them is not clear (e) the earning rate is negatively related with leverage (f) the degree of operating leverage does not influence the use of debt; and (g) financial leverage and debt service capacity have been found to be negatively related.

Marsh, P. (1982); has revealed that the companies are heavily influenced by market conditions, and the past history of security prices in choosing between debt and equity. Secondary, he provides evidence that companies appear to make their choice of financing instruments as if they have target levels of debt in mind. Finally, the results are consistent with the notion that these target levels are themselves a function of company size, bankruptcy risk and assets composition.

Bowen et al. (1982); made a pioneering work in the area of determining an optimal capital structure. The object of his study was to provide additional evidence of the relationship between leverage and industry classification both cross-sectionally and across time, as well as to test empirically the role of non-cash tax shelters. They concluded a statistically significant difference between mean industry financial structures. The ranking of mean industry financial structures demonstrated a statistically significant stability over the entire time period studied and firms showed a tendency to move towards their industry mean over both five and ten years period. Finally, they confirmed that the level of tax shelters played a significant role in determining the optimal use of debt in capital structure.
Venkatesan, S. (1983); investigated the determinants of financial leverage. The analyses attempted to analyse the relationship of seven different variables to the financial structure of firms. These include industry categorization, business risk, and a growth ratio. Industry influence has been examined on the grouping of firms in various leverage classes and he found a statistical relationship between industry class and leverage, but the relationship might not be significant and conclusive. The impact of remaining independent variables on the dependent variable was examined in two sample classifications, namely intra-industry and intra-industry through multiple regression analysis. In summary, only debt coverage ratio was found to be the important variable significantly affecting the financial structure of firms.

Pandey, I. M. (1985); carried a study on 743 companies classified into 18 industrial groups for the period 1973-74 to 1980-81 and examined the relationship between leverage on the one hand, and size, industry, profitability and growth on the one other. He observed that the highly favorable attitude of the corporate managers towards the use of leverage was borne out by the very high level of debt employed by the Indian corporate sector. The study also indicates that classifying leverage percentage by the type of industry does not produce any pattern which may be regarded systematic and significant. The study reveals the tendency of large size companies to concentrate in the high level leverage class. But it was difficult to say conclusively that the size has an impact on the degree of leverage, since the analysis reveals that a large number of small companies also employ high level of debt. The study also does not indicate a definite structure relationship between the degree of leverage, on the one hand and profitability and growth on the other. According to Pandey, although over the time, profitability and growth have improved and so has the degree of leverage, yet majority of the profitability and growth groups of companies are concentrated within narrow bonds of leverage.

Titman and Wessels (1988); suggest that firms with unique or specialized products have relatively low debt ratio. Uniqueness is categorized by the firm’s expenditure on research and development, selling expenses and the rate at which employees voluntarily leave their jobs. They also find that smaller firms tend to use significantly more short-term debt than larger firms. Their model finds no evidence to support theoretical framework that predicts that debt ratios are related to a firms expected growth, non-debt tax shields, volatility or the collateral value of its assets. They however find some support for the proposition that profitable firms have relatively less debt relative to the market value of their equity.
Sekely. Collins (1988); this paper presents the results of a study of the debt structure of 677 firms in 9 industries head quartered in 23 countries. The results of this study tend to agree with the hypothesis that cultural differences are correlated with the significant country and minimal industry influences which are found. Further there appear to be some inter country influences caused by underlying cultural patterns among group of countries.

Rao, P. Mohana (1989); conducted a research on "Debt-Equity Analysis in Chemical Industry". Dr. Rao selected 30 chemical companies and examined correlation between debt equity ratio on the one hand and size, retained earnings and profitability on the other. He observed significant negative correlation between age and debt equity ratio with the indication that possibly younger age of chemical companies tended to be associated with higher debt-equity ratio. The negative correlation between retained earnings and the debt-equity ratio indicated that a company with higher volume of retained earnings had low debt-equity ration. He also observed that, in case of high debt-equity ratio, the profitability declined due to large payment of interest. However, Rao observed a positive correlation between debt-equity ratio and the size measured in terms of total assets, and net assets. Apart from this he also examined the trends and pattern in the debt-equity ratio.

Mathew, T. (1990); has made an attempt to analyze the relationship between ownership structure and financial structure with a view to knowing whether the former has any input on the latter. The analysis was based on three hypothetical relationship that exist between ownership structure on the one hand and unsystematic risk, non-manufacturing expenses, and profit appropriation policies on the other and their impact on the firm's financial structure. They concluded that, where the management stake is high, the leverage will be low and vice-versa and then exist a significant relationship between ownership structure and financial structure of firms.

Chiarella, Pham, Sim, Tan (1991); this study seeks to provide evidence on the importance of capital structure determinants in the Australian Context. The analysis was implemented on a sample of 226 Australian Companies from 1977 to 1985. The following results are obtained.

Company non-debt shields display a negative relationship with respect to each of the debt ratios. This evidence is consistent with the theory proposed by De Angelo and Masulis (1980) that firms with non-debt tax shields at their disposal can use these as substitutes for interest tax shields. The evidence canvassed also lends some support to the pecking order
hypothesis of Myers and Majluf (1984). Specifically, significant negative relationships between profitability and all debt ratios are found. The implication is that the sample of firms’ studied prefer to finance investments with internally related funds before issuing debt. Some evidence of a size effect is present and this indicates that the larger firms in the sample tended to employ more debt in their capital structure. The positive relationship between cash holdings and debt ratios indicates some support for the free cash flow hypothesis of Jenson (1986), although these estimates are not significant. No support for the growth opportunities and collateral value attributes as determinants of debt ratios can be discerned, consistent with Titman and Wessels (1988).

Damodaran (1994), calculate the incremental cost of debt. Increasing debt to take the debt ratio from 30% to 40% implies contracting that debt at 21.5%, which is an enormous figure. Stranger still is the finding that the next debt increment (which has a higher risk) is cheaper: it costs 19%. It is also shown that if it is assumed that the debt's market value is the same as its book value, then the capital structure that minimizes the WACC also maximizes the share price. However, without this assumption, the minimum value of the WACC may not occur at the same point as the maximum share price.

Eugene F. Fama, Kenneth R. French (1997); used cross-section regressions to study how a firm's value is related to dividends and debt. With a good control for profitability, the regressions can measure how the taxation of dividends and debt affects firm value. Simple tax hypotheses say that value is negatively related to dividends and positively related to debt. They found that dividends and debt convey information about profitability (expected net cash flows) missed by a wide range of control variables. This information about profitability obscures any tax effects of financing decisions.

John R. Graham(1998); This paper estimates how much "interest deductibility" contributes to firm value. By integrating under firm-specific benefit functions, the present value tax benefit of interest deductions is estimated to equal approximately 10% of firm value. The economy-wide benefit peaked at about $118 billion in 1990 (or about $60 billion, net of the personal tax penalty). The implicit cost of debt is inferred by observing where firms locate on their interest-deduction benefit curves. Paradoxically, profitable firms with low apparent costs are very conservative in their pursuit of interest deductions. Conservative debt policy is persistent and firms do not use their financial slack to fund future capital expenditures or acquisitions.
Sumit K. Majumdar And Pradeep Chibber (1999); examined the relationship between the levels of debt in the capital structure and performance for a sample of Indian firms. Existing theory posits a positive relationship, however, analysis of the data reveals the relationship for Indian firms to be significantly negative. The structure of capital markets in India, whose both short-term and long term lending institutions are government owned, is hypothesized to account for the finding of this relationship, and it asserted that corporate governance mechanisms which work in the west will not work in the Indian context unless the supply of loan capital is privatized.

T.K. Suresh Babu (1999); the empirical evidence of this research indicates that the negligible unused debt capacity together with the high financial and business risk, will have serious finance operating implications to the private corporate sector in India in the years to come. As per the sound tenets of financial management, it is expected of the corporate firms to have unused debt capacity for the future needs in order to preserve operating flexibility, particularly in circumstances when funds requirements are sudden and unpredictable. In the post-liberalised scenario, where business is not going to be the same as it used to be, the private corporate sector firms are likely to encounter serious difficulties in raising funds, with the increased focus on fundamental analysis in India particularly with setting up of credit rating agencies (ICRA, CRISIL)

Santimoy Patra (2000); in this paper a case study of debt-equity ratio of TISCO Ltd. was taken, which shows that capital structure policy of TISCO Ltd. was conservative. The company maintained its debt-equity ratio at a low level. But the results drawn from this study was not a generalized decision. The relationship between debt-equity ratio and weighted average cost of capital and EPS did not follow any accepted norm, as already stated earlier that divergent result might arise due to the non-fulfillment of certain assumptions. The same result may not arise in other companies belonging to the same industry or in other companies belonging to some other industries.

Dr. R.N. Misra and Chinmoy Sahu (2000); made a simple attempt to study the debt-equity mix preferred by Indian Industry and believed by them to maximize wealth. The findings of their study indicate that Indian Industry has been playing safe on the whole as suggested by the presence of maximum number of sample firms in the lower debt equity classes. In other words, if wealth maximization is the objective being practiced by the corporate, then they believe that lower level of debt will help them to achieve this objective.
A deeper analysis of data points to a small but interesting change in pattern of preference of level of debt in the capital structure over the time horizon of their study. They find that till the year 1994, the debt -equity class of '0 to1' as the most preferred debt equity class. However, year 1995 onwards, the debt -equity class of '0 to 1' clearly overtook and dominated to debt -equity class of '1 to 2' as the most preferred debt -equity class. This switch in preference for lower levels of debt in capital structure may be attributed to the downturn and recessionary affects of the Indian as well as global economy in and around the years 1994 to 1996.

Babu & Jain (2000); the present study indicates strong industry nature of business influences on the debt -equity ratios of the private corporate sector enterprises in India. The industry class/group influences on the choice of debt-equity in the corporate capital structure is not without reasons. Corporate firms operating in the same industry & group/class are subject to the same set of systematic factors which equally affect their business prospect. These firms operate in the same environment and economic conditions. Hence it can be presumed that each industry group develops it own required/desired debt -equity mix as per the needs of its nature of business. The corporate firms initially not following the industry norms gradually adjust their debt equity ratios to those of the related industry. Firms belonging to industries dealing with fast moving, non-durable, consumer goods or with inexpensive items or products having inelastic demand will be in a position to afford moderate to high debt in their capital structure. However industries which pass through trade cycles and run the risk of not being able to meet the debt obligations, de facto, should rely less on debt.

Murray Z. Frank, Vidhan K. Goyal(2000), The pecking order theory of corporate leverage is tested against the static tradeoff theory of corporate leverage, using a broad cross-section of US firms over the period 1980-1998. A derivation of the conditional target adjustment framework is provided as a better empirical test of mean reversion. None of the predictions of the pecking order theory hold in the data. As predicted by the static tradeoff theory, robust evidence of mean reversion in leverage is found. This is true both unconditionally and conditionally on financial factors. Leverage is more persistent at low levels than at higher levels. When debt matures, it is not replaced dollar for dollar by new debt and so leverage declines. Large firms increase their debt in order to support the payment of dividends. By contrast, small firms reduce their debt while they pay dividends.
Pablo Fernandez (2001), analysed the optimal capital structure using two examples: one proposed by the Harvard Business School and the other proposed by Damodaran. First, they highlighted certain inconsistencies in the debt and equity costs assumed by the Harvard Business School note from a number of viewpoints. They calculated the incremental cost of debt implied in Harvard's note and found inconsistencies: surprisingly, the last two debt increments have a cost of 14.75% and 18.5%, while the required return to equity in the unlevered company is 12%. With respect to the cost of debt, the inconsistency is not the cost of debt (the bank can charge whatever interest it likes) but in assuming that the debt's cost is the same as its required return (or that debt's value equals its nominal value). They also calculated the required return to incremental equity cash flow implied in Harvard's note and they find that the required return first falls, then increases, and then falls again. The required incremental return should fall as the capital structure. The difference between the required return to equity and the required return to debt decreases for debt levels above the optimal capital structure. It is also shown that assuming no leverage costs there is no optimal capital structure (the company's value increases with the debt ratio) and the difference between required return to equity and the required return to debt is constant.

Booth, Aivazian, Kunt & Maksimoric (2001); this study used a new data set to assess whether capital structure theory is portable across countries with different institutional structures. They analyzed capital structure choices of firms in 10 developing countries, and provide evidence that these decisions are affected by the same variables as in developed countries. However, there are persistent differences across countries, indicating that specific country factors are at work. Their findings suggest that although some of the insights from modern finance theories are portable across countries, much remains to be done to understand the impact of different institutional features on capital structure choices.

I M Pandey (2001); in this paper the determinants of capital structure of Malaysian companies are examined by utilizing the data from 1984 to 1999. The data is classified into four sub-periods that correspond to different stages of Malaysian capital market. Debt is decomposed into three categories, short term, long term and total debt. Both book value and market value debt ratios are calculated. The result of pooled OLS regressions show that profitability size, growth, risk and tangibility variables have significant influence on all types of debt. These results are normally consistent with the results of fixed effect estimation with the expectation that risk variable loses its significance. Unlike the evidence from the developed markets, investment opportunity (Market-to-book value ratio) has no significant
impact on debt policy in the emerging market of Malaysia. The results are generally robust to time periods, but the significance of some variables changes over time. Profitability has a persistent and consistent negative relationship with all types of debt ratios in all periods and under all estimation methods. This confirms the capital structure prediction of the pecking order theory in an emerging capital market.

Mahesh Chand Garg and Chander Shekher (2002): this paper has attempted to find the determinants of capital structure in Indian private corporate sector. Assets composition, collateral value of the assets, life of the company and the corporate size are noticed to be the most significant factors in deciding the capital structure. Business risk is found to be of no significance in deciding the leverage of the firm. This paper although an exploratory effort, is limited to 40 large manufacturing firms drawn equally from Cotton, Chemical and Pharmaceuticals, Engineering and Cement industry. The results demonstrated that asset composition, collateral value of assets, life of the company and corporate size are the important determinants of capital structure.

Graham and Harvey (2002); this paper summarized the findings by stating that in setting capital structure policy, CFOs appear to place less emphasis on formal leverage targets that reflect the trade off between the costs and benefits of debt than on informal criteria such as credit ratings and financial flexibility and despite the efforts of academics to demonstrate that EPS dilution per se should be irrelevant to stoke valuation, avoiding dilution of EPS was the most cited reason for companies reluctance to issue equity.

Suprita Sengupta (2002); this paper critically surveyed the key literature on corporate financing policy, capital structure and firm ownership in order to identify the leading theoretical and empirical issues in this area. The theoretical component of the survey attempted to reconcile competing theories of capital structure and appraised recent models which use agency theory and asymmetric information to explore the impact of managerial shareholdings, corporate strategy and taxation on the firms capital structure. The empirical component focused on primary as well as secondary analysis of various company data and made a comparison between theoretical predictions and empirical results. A comparison was made of debt equity ratios for domestic companies (MNC's and Indian owned) with global companies for 1999.

Kaifeng Kevin Chen (2002); In this paper, they empirically tested the influence of the debt structure on the company value given different growth opportunities with the companies
incorporated in Netherlands. It is well accepted that the market value of any firm is independent of its capital structure, given the assumptions of capital markets are "perfect". It is observed that the optimal capital structures are closely related to the growth potential of the firms and some other variables, such as: the size and the industry characteristics. Building on the argument that high-growth firms corporate value is negatively correlated with leverage, whereas for "low-growth" firms corporate value is positively correlated with leverage, they observed that the growth opportunities may influence the optimal capital structure. The reason is that the optimal leverage may shift with the changes of growth opportunities that lead to the changes of agency costs of debt and cost of managerial discretion. They empirically tested 1: The correlation between Tobin's Q and leverage will be positive given the differences in growth opportunities; and 2: The correlation between Tobin's Q and leverage will be negative for high-growth firms and positive for low-growth firms.

Manoj Anand (2002); This study surveys 81 CFOs of bt-500 companies of India and her most valuable PSUs to find out the corporate finance practices with respect to capital budgeting decisions, cost of capital, capital structure, and dividend policy decisions. Large firms and growth firms follow the EVA maximization objective more than the small firms and low growth firms. The objective to reduce side costs in the form of conflicts amongst the various stakeholders of the firm is not very popular in India.

Ivo Welch (2003); U.S. corporations do not use their debt and equity issuing and repurchasing activities to counteract the mechanistic effects of stock returns on their debt equity ratios. Thus, over 1-5 year horizons, stock returns can explain about 40% of debt ratio dynamics. Although corporate (net) issuing activity is lively, and although it can explain the remaining 60% of debt ratio dynamics (long-term debt issuing activity being most capital structure relevant), corporate issuing motives remain largely a mystery. When stock returns are accounted for, taxes, bankruptcy costs, and many other proxies used in the literature, play at best a very modest role in explaining capital structure.

Stein Frydenberg (2003); presented a dynamic empirical model for capital structure. The result of the dynamic panel data estimate is that fixed asset and the lagged-debt variables explain leverage. Conditioning the debt level on the lagged-debt level reveals that the significance of other parameters fall as compared to a static model, and can be interpreted as support for the pecking order hypothesis. The dynamic model is estimated by GMM methods.
that yield consistent parameter estimates. I have shown that the capital structure is changing at a slow pace. The firms change only about 28% of the total debt each year. The debt ratio of low and high level debt firms change more for each year, they are less dependent on past year debt ratio. This finding shows that the firms set a target level for their debt structure.

Esperança, Gama and Gulamhussen (2003); The capital structure decision can be considered a difficult problem for academics as well as for managers. Corporate debt policy has been studied in the context of both large and small firms in developed countries, but comparatively less developed countries have received much less attention in the literature. This is particularly true in the case of medium income economies with an above average weight of financial intermediaries. This paper tests the factors affecting the capital structure decision of small firms in one such country. The pooled time series cross-section regression estimates for 995 firms and five years, suggests variables such as taxes, bankruptcy costs, size, collateral, age and growth opportunities affect the capital structure decisions of small firms. These findings have significant implications, both at the firm level and for the support of policies that redefine the financial infrastructure that may foster the emergence of local entrepreneurs in these economies.

John R. Graham, Campbell R. Harvey (2003); They surveyed 392 CFOs about the cost of capital, capital budgeting, and capital structure. The survey consisted of 14 main questions, most with subparts - over 100 questions in total. Although the survey was anonymous, they collected information on 12 characteristics of the firms and management and on debt-equity ratios and debt ratings. The analysis showed that many survey responses differed by the firm and management characteristics.

Their research left much of the data unexplored. In particular, in only one instance in the paper did they perform question-conditional analysis. That is, given a particular response to one question, how does that impact the response on another question. For example, is it the case that those CFOs that use real options analysis in project evaluation decisions also value financial flexibility in capital structure? Given the large number of inquiries they have received for the survey data, they now publicly release the raw data files so that other researchers can conduct question-conditional analysis. Using these data, researchers should be able to obtain CFO survey evidence related to specific aspects of their own research agendas, as well as perform more detailed analysis of the survey responses.
Darren J. Kisgen (2003); This paper examines the impact of credit ratings on capital structure decisions and found that firms near a change in credit rating issue (retire) annually up to 1.5% less (more) debt relative to equity as a percentage of total assets than firms not near a change in rating, reflecting managers' desire to obtain upgrades and avoid downgrades of the firm's credit rating. These results are shown to be distinct from financial distress concerns. The results are robust to several model specifications and inclusion of control variables. They further show how credit rating effects complement the pecking order and tradeoff capital structure theories, and find that dummy variables, indicating firms are near a change in rating, remain predictive when nested in previous empirical tests of these theories. The results of this paper do not appear to be explained with traditional theories of capital structure, and thus this paper enhances the capital structure decision theoretical and empirical frameworks. To my knowledge, this is the first paper to show that credit ratings directly affect capital structure decision-making.

Michael W. Faulkender, Mitchell A. Petersen (2003); Empirical examinations of capital structure have led some to conclude that firms are underlevered. Implicit in this argument and much of the empirical work on leverage is the assumption that the availability of incremental capital depends solely on the risk of the firm's cash flows and characteristics of the firm. However, the same market frictions that make capital structure relevant suggest that firms may be rationed by lenders, leading some firms to appear to be under-levered relative to unconstrained firms. They examine this theory, arguing that the same characteristics that may be associated with firms being rationed by the debt markets are also associated with financial intermediaries, opposed to bond markets, being the source of a firm's debt capital. They find that firms have significantly different leverage ratios based on whether they have access to public bond markets as measured by the firm having a debt rating. Although firms with a debt rating are fundamentally different, these differences do not explain their findings. Even after controlling for the firm characteristics previously found to determine observed capital structure and the possible endogeneity of having a bond rating, they find that firms which are able to raise debt from public markets have 35 percent more debt.

Frank and Goyal (2003); this paper examines the relative importance of 39 factor in the leverage decisions of publicity traded U.S. firms. The pecking order and market timing theories do not provide good descriptions of the data. The evidence is generally consistent with tax / bankruptcy trade off theory and with stake holder co-investment theory. The most
reliable factors are median industry leverage (+ effect on leverage), risk as measured by Altman’s 2 – score (- effect on leverage), firm size as measured by log of sales (+), divided – paying (-), intangibles (+), market to book ratio (-) and collaterals (+). Somewhat less reliable effects are the variance of own stock returns (-), net operating loss carry forwards (-), financially constrained (-), profitability (-), change in total corporate assets (+), the top corporate income tax rate (+), and the treasury bill rate (+). Using Markov Chain Monte Carlo multiple imputation to correct for missing – data bias, they find that the effects of profits and net operating loss carry forwards are not robust.

Pao, Bohdan, Tenpao (2003); this study adopted four linear models (multiple regression model variance-component model, first-order autoregressive model, and variance-component moving average model) with 10 independent variables to analyze the important determinants of capital structure of the high tech and traditional industries respectively. The results of the study show that the determinants of capital structure of the high tech industry are different from that of the traditional industry. In four linear models, the variance component model has the smallest root MSE in both industries. These indicate that time series and cross sectional variations are very important in analyzing the determinants of capital structure in Taiwanese industry. Managers can apply these results for their dynamic adjustment of capital structure in avenging optimality and maximizing firm’s value.

Bhole and Mahakud (2004); this paper presented a brief review of literature of theories of the corporate capital structure. It also analyzed the trends in the corporate capital structure in India in respect of public limited companies and private limited companies and it developed the panel data model for the empirical examination of the existing theories of corporate sector in India. The period analysis has also been done to show the impact of liberalization on the determinants of the corporate capital structure in India. It is found that leverage ratios generally have increased significantly during 1966-2000. Also apparently, dependence on debt is more in the case of public limited companies than private limited companies unlike in countries like USA, UK, Australia the pecking order of funds in India broadly has been borrowings, trade dues, external equity and reserves and surplus. From the econometric analysis it can be calculated that the variables like the cost of borrowing, the cost of equity, the size of firm, the collateral value of assets, the liquidity and the non-debt tax shields are the major determinants of corporate capital structure in India.
F. Voulgaris, D. Asteriou & G. Agiomirgianakis (2004); aspects of a firm's financial performance, which relates significantly with its capital and debt structure, are investigated in this paper. The research covered the Greek manufacturing sector, utilizing panel date of LSEs and SMEs samples. The findings suggest that there exist differences in the determinants of capital structure among the two size groups. They find that for both SMEs and LSEs debt increases with size. Debt correlates negatively with profitability as indicated by the pecking order frame work theory.

- Growth (measured as total asset increase) results in higher use of total debt, basically through higher short-term debt.

The differences between the two types of firms are summarized in the following:

- The inventory and accounts receivables build up are found as determinants of debt only for SMEs. In the case of Greece, banks are reluctant to lend firms that show high inventory accumulation considering that as a sign of inefficient management.
- Liquidity does not affect LSE's debt leverage, as opposed to SMEs.
- Size of fixed assets and employee productivity are not shown as significant determinants of LSE's capital structure, as in SMEs.
- Productivity of assets does not affect the amount of financial liabilities of SMEs, as it does for LSEs.
- Higher profit margins were found to induce higher use of short-term debt only for SMEs.

Bancel & Mittoo (2004); in this paper they surveyed managers of firms in seventeen European Countries on their capital structure choice and its determinants. Their main objective was to explore the link between theory and practice of capital structure. Preliminary analysis of the survey shows some interesting findings. Financial flexibility, credit rating and tax advantage of debt are the most important factors influencing the debt policy while the earning per share dilution is the most important concern in issuing equity. Evidence also supports that the level of interest rate and the share price are important consideration in selecting the timing of debt and equity issues respectively. Hedging considerations are the primary factors influencing the selection of the maturity of debt or when raising capital around. They also compared the responses of European managers with those of the U.S. in
Graham and Harvey (2001) as well as across countries based on the English, French, German and Scandinavian law.

Ratapon Deesomsak, Krishna Paudyal and Gioia Pescetto (2004); this paper contributes to the capital structure literature by investigating the determinants of capital structure of firms operating in the Asia pacific region, in four countries with different legal, financial and institutional environments, namely Thailand, Malaysia, Singapore and Australia. The results suggests that the capital structure decision of firms is influenced by the environment in which they operate, as well as firm – specific factors identified in the extant literature. The financial crisis of 1997 is also found to have had a significant but diverse impact on firm’s capital structure decision across the region.

Stein Frydenberg (2004); This paper is a review of the central theoretical literature. The most important arguments for what could determine capital structure is the pecking order theory and the static trade off theory. These two theories are reviewed, but neither of them provides a complete description of the situation and why some firms prefer equity and others debt under different circumstances. The paper is ended by a summary where the option price paradigm is proposed as a comprehensible model that can augment most partial arguments. The capital structure and corporate finance literature is filled with different models, but few, if any give a complete picture.

Dan S. Dhaliwal, Shane Heitzman, Oliver Zhen Li (2005); examine the associations between leverage, corporate and investor level taxes, and the firm's implied cost of equity capital. Expanding on Modigliani and Miller [1958,1963], the cost of equity capital can be expressed as a function of leverage and corporate and investor level taxes. This expression predicts that the cost of equity is increasing in leverage, but that corporate taxes mitigate this leverage related risk premium, while the personal tax disadvantage of debt increases this premium. They empirically test these predictions using implied cost of equity estimates and proxies for the firm's corporate tax rate and the personal tax disadvantage of debt. Their results suggest that the equity risk premium associated with leverage is decreasing in the corporate tax benefit from debt and find some evidence that the equity risk premium associated with leverage is increasing in the personal tax penalty associated with debt.

Jan F. Jacob (2005); A lot of finance textbooks present calculation of WACC (Weighted Average Cost of Capital) as: WACC = Kd - (1 -/- T)- D % + Ke - E %, whereas Kd is opportunity cost of debt before taxes, T is tax rate, D % is percentage of debt to total value,
Ke is opportunity cost of equity and E % is percentage of equity to total value. Numerous textbooks state that D % and E % are market values, but the correct interpretation of these values is not sufficiently dealt with: which market values, what D/E-ratio? This paper repudiates Proposition II, constituting Ke being a cost to the firm and similarly a return to the equity investor. Ke and WACC are measuring costs, just costs. Return and cost values coincide at intersect-points only of clearly divergent return and respectively cost functions.

Shivdasani and Zenner (2005); in this paper the author summarized that maintaining the right amount of financial flexibility is a key consideration when determining the right credit rating for a given company. A BBB rating will accommodate considerably more leverage (30-60%) in companies with fairly stable cash flows and limited investment requirements than in more cyclical or growth-oriented companies (10-20%) when contemplating taking on more leverage, companies should exercise all major operating risks and view their capital structure in the context of an enterprise wide risk management framework.

Joseph P.H. Fan and Sheridan Titman (2006); this study examines 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. They provide evidence that indicates that firms operating within legal systems that provide better protection for financial claimants tend to have capital structures with less total debt, and more long term debt as a proportion of total debt. They also find that taxes and the characteristics of the institutions that supply capital have an influence on how firms are financed. When dividends are more highly taxed, firms tilt their capital structures towards more debt. In addition, they find that firms in countries where Unions have strong bargaining power tend to have higher leverage. They argue that policies that have no direct relation with the financial sector affect capital structure choices for example; the threat of unionization can lead firms to choose higher debt ratios. This suggests that public policies that are more supportive of unions can have to unintended consequence of increasing leverage. Finally they find that the cross-sectional determinants of leverage differ across countries. In particular, the relationship between profitability and leverage tends to be stronger in countries that have weaker shareholder protection.

Vunyale Narender and Abhinav Sharma (2006); this paper is an attempt to understand the capital structure policies adopted by the profit making central public enterprises and the study has been conducted for the period 1994-1995 to 2004-2005. To compare and contrast with
the private enterprises capital structure policies, a comparative study has been made for the same period with enterprises of similar industries in the private sector. The capital structure deals with aspects like the proportion of debt and equity to finance the company’s operations in terms of internal funds vis-à-vis external funds. It is found that the tangibility of assets play a significant role in determining the leverage of PEs, the results of NDTS and Tax, inferring that the PEs are not utilizing debt to pay less tax, instead using their internal resources for the PEs in expansion and financing. The PEs are mobilizing long-term resources for meeting short-term requirements. It can be concluded that the PEs are using pecking order theory in terms of adopting to the capital structure policies.

Guy Ford, Tyrone M. Carlin, Nigel Finch (2006); The issue of hybrid instruments by firms is often justified on the grounds that these instruments allow issuers to achieve a lower cost of capital than would be the case under issues of straight debt and equity. In order to assess the validity of such claims it is necessary to examine the economic impact of hybrid instruments on the issuing company. If a firm can genuinely achieve a lower cost of capital than would otherwise be the case with the issue of either straight debt or equity, they argue that this is directly linked to regulatory (reporting) arbitrage, rather than the outcome of financial synergy that arises when debt, equity and option instruments are combined to form a hybrid security. They evaluate the argument that hybrid structures lower the cost of capital from an opportunity cost and risk perspective. They focus their analysis on two main structures: convertible debt and reset preference shares.

Rastogi, Jain and Yadav (2006); The objective of this paper is to study and compare the debt financing decisions and practices of the public sector, private sector and foreign controlled companies in India. It also finds out the impact of the liberalized environment, in terms of the significant changes, if any, in the phase-2 (1998-2003) of the liberalized business scenario vis-à-vis phase-1 (1992–1997). The declining trend in the debt ratios suggests that majority of the corporate firms are reducing the preference for debt. The study indicates that the profile of debt financing has significantly changed during the period covered by the study. A notable finding of the study is that there is a shift towards preference for short-term debt as against long-term debt. The economic and financial reforms have caused a significant decrease in the use of debt, particularly long-term, in financing the assets of the sample corporate enterprises in India. Throughout the period of study, ownership control was a significant factor in determining the extent of debt financing. With strong waves of globalization and liberalization across the world, those firms in India that have lagged behind
are required to take a bold initiative to make qualitative changes in their debt financing decisions, if they are to remain competitive in domestic as well as international markets.

Murray Z. Frank and Vidhan K. Goyal (2007); This paper examines the relative importance of many factors in the leverage decisions of publicly traded American firms from 1950 to 2003. The most reliable factors are median industry leverage (+ effect on leverage), market-to-book ratio (-), tangibility (+), profits (-), log of assets (+), and expected inflation (+). Industry subsumes a number of smaller effects. The empirical evidence seems reasonably consistent with some versions of the tradeoff theory of capital structure.

Pablo Fernandez (2007); They value a company that targets its capital structure in book-value terms. This capital structure definition provides us with a Value of Tax Shields that lies between those of Modigliani-Miller (fixed debt) and Miles-Ezzell (fixed market-value leverage ratio). If a company targets its leverage in market value terms, has less value than if it targets the leverage in book value terms. How could some manager target leverage in market value terms? They also present empirical evidence that permits to conclude that debt is more related to the book value of the assets than to their market value.

Abubakr Saeed (2007); this thesis is concerned to test that if financial patterns of listed firms in energy sector of Pakistan follow any foremost capital structure theories. The analysis was implemented on a sample of 22 listed firms during the period 2001 to 2005. The results of pooled regression model show that both static trade-off theory and pecking order theory are pertinent corporate capital structure theories to the firms in Pakistani energy sector. To achieve their intended goal they have formulated nine hypotheses and classified them on the basis of followed capital structure theories into three groups. For testing these hypotheses they have selected five explanatory attributes. Their results show that collateralizable value of assets has indirect relation with financial leverage but they could not get enough statistical significance. Size displays a positive relation with financial leverage and is found to be a most important determinant of corporate financing patterns. Positive relation between growth and leverage also found out as important determinant of firms financial behaviour. The results suggest that more profitable firms do not often finance their investments by debt source in energy sector of Pakistan. Non debt tax shield displays a positive relation with financial leverage and found statistically insignificant. This positive relation verifies that firms with high non debt tax shield use more debt than equity. This evidence is consistent with static trade off theory for only short term debts.
Robert S. Harris (2008); This note discusses how some of the most financially sophisticated companies and financial advisers estimate the cost of equity capital. It focuses on areas where finance theory is silent or ambiguous and practitioners are left to their own devices. Survey evidence shows that the Capital Asset Pricing Model (CAPM) is the most widely used model. The note discusses methods companies use to estimate the three key elements needed to apply the CAPM: a proxy for the risk-free rate, an estimate of beta, and an equity-market risk premium. The note is useful for students attempting to apply the Capital Asset Pricing Model.

Murray Z. Frank, Vidhan K. Goyal (2008); In the static trade-off theory, when profits increase, the firm should issue more debt and reduce equity to shield the profits from taxation or agency abuse. When a corporate leverage ratio is explained by firm profits, it is well-known that a negative regression coefficient is usually found. The literature (e.g., Myers (1993), Fama and French (2002), and Welch (2007)) considers this negative relationship to be a particularly serious rejection of the static trade-off theory. In this paper, they show that the literature has misinterpreted the evidence as a result of the wide-spread use of familiar, but inappropriate, empirical methods. They make four main points. They show that highly profitable firms do actually tend to issue debt and repurchase equity. The least profitable firms tend to reduce debt and issue equity. These facts are empirically very robust. Large firms tend to be more active in the public debt markets, while small firms tend to be relatively more active in the equity markets. The type of empirical work that is appropriate depends on the model to be tested. They present a simple static trade-off agency-based model of capital structure. According to the model, the appropriate testing structure is a pair of regressions: one explaining debt, and the other explaining equity. When they estimate this model, they find the model's predictions perform rather well. Profits are not properly exogenous according to the model. They discuss how to deal with the exogeneity problem within the context of the model. to what is usually believed, the empirical evidence on profits and capital structure seems easy to interpret from the perspective of the static trade-off theory.

Robert S. Harris, Susan Chaplinsky (2008); This note outlines the link between shareholder-return requirements and a firm's use of debt. It explores the theoretical arguments concerning how the cost of equity changes with the use of debt and discusses the limitations of each view. It also provides conceptual and practical guidance on the use of "levered" and "unlevered" betas.
Saurabh Ghosh (2008); This paper examines the effect of past dividend policy, leverage and profitability on the probability of increase in future value of the firm (in terms of market to book value ratio (MBVR)) for an emerging economy, India. It uses fixed effect logit model to predict the probability of increase in future value of the firms presently included in S&PCNX500 index. They found that there is a non-linear relation between leverage, profitability and probability of increase in future value of the firm. Probability of increase in future value of firm decreases exponentially with the increase in leverage, whereas, it increases with the raise in profitability of the firm. The relation of profitability and chances future value creation is stronger for foreign standalone firms as compared to private Indian standalone or business group owned firms.

Marc L. Lipson, Sandra Mortal (2009); They examine the relation between equity market liquidity and capital structure. They find that firms with more liquid equity have lower leverage and prefer equity financing when raising capital. For example, after sorting firms into size quintiles and then into liquidity quintiles, the average debt-to-asset ratio of the most liquid quintiles is about 38% while the average for the least liquid quintiles is 55%. Similar results are observed in panel analyses with clustered errors and using instrumental variables. Their results are consistent with equity market liquidity lowering the cost of equity and, therefore, inducing a greater reliance on equity financing.

Darren J. Kisgen, Philip E. Strahan (2009); In February 2003, the SEC officially certified a fourth credit rating agency, Dominion Bond Rating Service ("DBRS"), for use in bond investment regulations. After DBRS certification, bond yields change in the direction implied by the firm's DBRS rating relative to its ratings from other certified rating agencies. A one notch better DBRS rating corresponds to a 42 basis point reduction in a firm's debt cost of capital. The impact on yields is driven by cases where the DBRS rating is better than other ratings and is larger among bonds rated near the investment-grade cutoff. These findings indicate that ratings-based regulations on bond investment affect a firm's cost of debt capital.

Roger J. Grabowski and Duff & Phelps LLC (2009); The current economic environment has created challenges in estimating the cost of equity capital ("COEC") and in estimating the appropriate overall cost of capital (i.e., the weighted average cost of capital or "WACC"). Since late 2008, new complications have arisen in estimating the cost of capital. Traditional methods typically employed in estimating the COEC and the WACC are subject to significant estimation and data input problems. This paper attempts to address some of these
issues and offers some specific recommendations on dealing with these issues. First, U.S. Treasury bond (“T-bond”) yields, the typical benchmark used in either the Capital Asset Pricing Model (“CAPM”) or the Build-up methods of estimating COEC, were temporarily low for several months, resulting in unreasonably low estimates of COEC as of the important valuation date, December 31, 2008. In the past several weeks T-bond yields have returned to more normal levels. Second, the expected equity risk premium (“ERP”), the rate of return expected on a diversified portfolio of common stocks in excess of the rate of return on an investment in T-bonds, has likely increased as the broad stock market level has declined. Third, because the stock market correction has been heavily concentrated in the financial services sector and in highly leveraged companies, the commonly-employed methods they use for estimating betas, the risk measure in the traditional CAPM, are potentially flawed providing faulty estimates of risk for non-financial and companies with little debt. The result is that at the very time when one assumes a priori that estimates of COEC have increased, the methods they traditionally use to estimate the COEC are providing calculations that imply risk has declined. Fourth, current leverage ratios are likely not sustainable in the long-term for many companies and one needs to consider estimating cost of capital with expected changing capital structures. Fifth, because income subject to income taxes is and will continue to be less than zero for many companies, one cannot automatically use an after-tax cost of debt capital (i.e., multiply the interest rate by one minus the income tax rate) in calculating an appropriate WACC. Sixth, one must always test the resulting cost of capital estimates for reasonableness and not simply apply data or formulas by rote.

Debabrata Datta and Babita Agarwal (2009); There are three major theories in the Corporate Finance literature, namely, Trade-off theory, Agency Cost theory and Pecking-Order theory that highlight different determinants of corporate capital structure. In an attempt to study the determinants of capital structure in Indian scenario and to verify whether any of the above mentioned theories can characterize the Indian corporate financing, this paper makes an empirical study of the capital financing pattern of 76 Indian firms for the period 2003-2007, the period of unprecedented growth of Indian economy. The study makes fixed effect panel data (LSDV) regression and finds out that financing with internal funds, as suggested by pecking-order theory has emerged as a major feature of corporate capital structure. Some other determinants, however, have patterns of influences that match with the postulates of other two theories. The analysis finds out that the capital structure pattern on an average portends well for long term development of Indian corporate sector.
Dirk Hackbarth, David C. Mauer (2009); They study the interaction between financing and investment decisions in a dynamic model where the firm has multiple debt issues and equityholders choose the timing of investment. Jointly optimal capital and priority structures can virtually eliminate investment distortions, because debt priority serves as a dynamically optimal contract. Examining the relative efficiency of priority rules observed in practice, they develop several predictions about how firms adjust their priority structure in response to changes in leverage, credit conditions, and firm fundamentals. Notably, large, financially unconstrained firms with few growth opportunities prefer senior debt, while small, financially constrained firms, with or without growth opportunities, prefer junior debt. Moreover, lower rated firms are predicted to spread priority across debt classes. Lastly, their analysis also has a number of important implications for empirical capital structure research, including the relations between market leverage, book leverage, and credit spreads and Tobin’s Q, the influence of firm fundamentals on the agency cost of debt, and the conservative debt policy puzzle.

Robert M. Conroy (2009); explores the interaction between the use of debt and firm value and provides a brief perspective on the use of debt. It also introduces the notions of financial and operating leverage. In addition, it covers the impact of the use of debt in the presence of no taxes, corporate taxes only, and both personal and corporate taxes.

Bhayani, Sanjay J. (2009); In corporate finance, financing decision has gained greater importance because the optimal capital structure can be created through proper mix of finance. Corporate managers generally prefer borrowings over other means of financing. Management of a company has to be very careful while deciding the extent of financial leverage in its capital structure because the right use of financial leverage can increase the shareholders' wealth whereas its improper use would adversely affect the interest of shareholders. This study examines the empirical effects of corporate capital structure (financial leverage) on cost of capital and the market value of selected firms of Indian Cement Industry for the period from 2000-01 to 2007-08. The research evidence of the study indicates that no impact of financial leverage on cost of capital was found in the cement industry in India, i.e. no significant linear relationship between the financial leverage and cost of capital exists, and there is no correlation between the financial leverage and total valuation within the cement industry. Or in other words, financial leverage does not affect the total valuation of a firm in the cement industry in India.
Joshua D. Rauh and Amir Sufi (2010); Using a novel data set that records individual debt issues on the balance sheets of public firms, they demonstrate that traditional capital structure studies that ignore debt heterogeneity miss substantial capital structure variation. Relative to high credit quality firms, low credit quality firms are more likely to have a multi-tiered capital structure consisting of both secured bank debt with tight covenants and subordinated non-bank debt with loose covenants. They discuss the extent to which these findings are consistent with existing theoretical models of debt structure in which firms simultaneously use multiple debt types to reduce incentive conflicts.

Joy Pathak (2010); This paper examines the relative importance of six factors in the capital structure decisions of publicly traded Indian firms. Existing empirical research on capital structure has been largely confined to developed countries. The papers related to emerging economies usually group several countries together. The Indian Financial Market has been developing at an exponential rate and dedicated research in the field is required. The paper utilises a larger data set in comparison to the earlier studies on India and examines additional factors. They use over 135 firms in the period of 1990-2009 listed on the Bombay Stock Exchange (aka as Mumbai Stock Exchange). The objective of this paper is to build on previous studies on the Indian capital market and model all the important factors affecting capital structure decisions of Indian firms post liberalization policy by Govt of India. I find that factors such as tangibility of assets, growth, firm size, business risk, liquidity, and profitability have significant influences on the leverage structure chosen by firms in the Indian context.

Ivo Welch (2010); This paper points out two common problems in capital structure research. First, although it is not clear whether they should be considered debt, non-financial liabilities should never be considered as equity. Yet, the common financial-debt-to-asset ratio (FD/AT) measure of leverage commits exactly this mistake. Thus, research that explains increases in FD/AT explains, at least in parts, decreases in non-financial liabilities. Future research should avoid FD/AT altogether. 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.

Jeremy Bertomeu, Anne Beyer, Ronald A. Dye (2010); This paper develops a model of financing that jointly determines a firm's capital structure, its voluntary disclosure policy, and its cost of capital. Investors who receive securities in return for supplying capital sometimes
incur losses when they trade their securities with an informed trader. The firm's disclosure policy and the structure of its securities determine the information advantage of the informed trader, and hence the size of investors' trading losses and the firm's cost of capital. They establish a hierarchy of optimal securities and disclosure policies that varies with the volatility of the firm's cash flows. Debt securities are often optimal, with the form of debt -- risk-free, investment grade, or "junk" -- varying with the firm's cash flow volatility. Though the model predicts a negative association between firms' cost of capital and the extent of information firms disclose, more expansive voluntary disclosure does not cause firms' cost of capital to decline. Mandatory disclosures alter firms' voluntary disclosures, their capital structure choices, and their cost of capital.

Fan, P. H, Titman and Twite, G (2010); This study examines the influence of institutional environment on capital structure and debt maturity choices by examining a cross-section of firms in 39 developed and developing countries. They find that a country’s legal and tax system, the level of corruption and the preferences of capital suppliers explain a significant portion of the variation in leverage and debt maturity ratios. Their evidence indicate that firms in countries that are viewed as more corrupt tend to use less equity and more debt, especially short-term debt, while firms operating within legal systems that provide better protection for financial claimants tend to have capital structures with more equity, and relatively more long-term debt. In addition, the existence of an explicit bankruptcy code and/or deposit insurance is associated with higher leverage and more long-term debt. They also find that firms tend to use more debt in countries where there is a greater tax gain from leverage, while firms in countries with larger government bond markets have lower leverage, suggesting that government bonds tend to crowd out corporate debt. Countries with more extensive defined benefit pension funds have higher debt ratios and longer debt maturities, whereas those with more extensive defined contribution fund activities have lower debt ratios. In addition, debt ratios are lower in countries that limit the bond holdings of pension funds. Finally, they do not find a significant association between financing choices and the size of the insurance industry.

Iyer, Yadav and Agarwal (2010); The study investigates capital structure practices in the Indian industry through a sample of top 500 companies classified in 19 industries for a 10 year period (1998-2007) for 67 variables including the leverage variables. The spread of leverage ratio is also examined. The relationship of leverage ratios with market capitalization and EPS is also explored. Multi objective criteria for processing capital structure decisions is
identified and justified based on the findings of the past researches and the empirical survey conducted as a part of this study. In the empirical survey, CFOs as respondents are investigated for their goals, priorities, motivations, constraints and practices for capital structure decision making. Goal Programming model was selected from different multi-objective optimization techniques. The model was found to be capable of providing satisfying solutions to multiple goals simultaneously by minimizing the deviation from the objective function after assuming that the decision maker is an optimist and does not attempt to satisfy all objectives fully. Goal Programming Model has been developed and illustrated for capital structure decisions under multiple objectives.

Mustapa, Ismail and Minai (2011); This paper reports on a study which explores the factors associated with debt structure of public listed companies in Malaysia. Comparisons are made between four main sectors: consumer, construction and property, industrial and trading and services. Based on published secondary data and using regression analyses, various dimensions of debt structure are tested to ensure the robustness of the study, namely total debt ratio, long term debt ratio, short term debt ratio, debt to market value ratio and long term debt to market value ratio. The findings indicate that companies from the construction and property sectors have higher level of debt compared to those in other sectors. The result also indicates that there are significant relationships between debt structure and ownership structure, performance, growth opportunities, and asset tangibility. Size of the companies appear to be significant in all sectors, except for those companies in construction and property sectors

Mahira Rafique (2011); This paper focuses on investigating the effect of the profitability of the firm and its financial leverage on the capital structure of the automobile sector companies in Pakistan. To proceed with this, the capital structure of 11 listed firms has been analyzed by adopting an econometric framework over a period of five years. Estimating regression analysis and checking the relationship of the estimated model through Correlation Coefficient Test, they found that the profitability of the firm and its financial leverage have an insignificant impact on the capital structure of the studied firms during the examined period. Hence, the study is unable to establish any significant relation between profitability and financial leverage effect on the capital structure of a firm.

Eugene F. Fama and Kenneth R. French (2011); They examine three pairs of cross-section regressions that test predictions of the tradeoff model, the pecking order model, and
models that center on market conditions. The regressions examine (i) the split of new outside financing between share issues and debt, (ii) the split of debt financing between short-term and long-term, and (iii) the split of equity financing between share issues and retained earnings. The pecking order does well until the early 1980s, when the share issues that are its bane become common. The adjustment of leverage to target predicted by the tradeoff model, and the response of equity financing to market valuations predicted by the market conditions model have statistically detectable but rather second-order effects on the split of new outside financing between share issues and debt. Targets for short-term debt seem to influence the mix of short-term versus long-term debt choices of smaller firms, but this targeting effect is weak to non-existent for large firms. Sticky dividends plague the predictions of the pecking order and the market conditions models about the split of equity financing between share issues and retained earnings.

Y. Peter Chung, Hyun Seung Na, Richard L. Smith (2011); They test the optimal tradeoff hypothesis against the pecking order hypothesis for capital structure. If there is an economically important optimal capital structure, then firms that deviate too far from the optimum will not be able to compete effectively and will face greater risk of failure or acquisition. Moreover, the aggregate market share of efficiently structured firms should increase as inefficiently structured firms move toward the optimum, fail or are acquired and restructured. Using data from the oil industry to test the relationship between survivorship and capital structure, they find no significant evidence of an economically important optimal capital structure. They also address the question of how firms with persistently low leverage can operate and survive for many years without being targeted for acquisition. Their evidence supports the pecking-order hypothesis. Firms appear to increase leverage when they face attractive growth opportunities or when poor operating performance reduces equity value or compels the firm to raise capital by borrowing.

Judson Caskey, John S. Hughes, Jing Liu (2011), They examine the cross-sectional relation between leverage and future returns while considering the dynamic nature of capital structure and potentially delayed market reactions. Prior studies find a negative relation between leverage and future returns that contradicts standard finance theory. They decompose leverage into optimal and excess components and find that excess leverage tends to drive this negative relation. They also find that excess leverage predicts firm fundamentals, and that the negative relation between excess leverage and future returns may be explained by
investors’ failure to react promptly to information contained in excess leverage about future financial distress and asset growth.

Jules H. Van Binsbergen, John R. Graham, Jie Yang (2011); They study optimal capital structure by first estimating firm-specific cost and benefit functions for debt. The benefit functions are downward sloping reflecting that the incremental value of debt declines as more debt is used. The cost functions are upward sloping, reflecting the rising costs that occur as a firm increases its use of debt. The cost functions vary by firm to reflect the firm’s characteristics such as asset collateral, asset size, the book-to-market ratio, profitability, and whether the firm pays dividends. They use these cost and benefit functions to produce a firm-specific recommendation of the optimal amount of debt that a given company should use. In textbook economics, equilibrium occurs where supply equals demand. Analogously, optimal capital structure occurs where the marginal benefit equals the marginal cost of debt. They illustrate optimal debt choices for specific firms such as Barnes & Noble, Coca-Cola, Six Flags, and Performance Food Group, among others. They also calculate the cost of being underlevered for companies that use too little debt, the cost of being overlevered for companies that use too much debt, and the net benefit of debt usage for those that are correctly levered. Finally, they provide formulas that can be easily used to approximate the cost of debt function, and in turn to determine the optimal amount of debt, for any given firm.

Felipe Mejia-Pelaez, Ignacio Velez-Pareja, James W. Kolari (2011); This paper shows how to proceed to find the optimal capital structure and value with period-to-period constant and variable leverage, when the discount rate for tax shields is Ke, the cost of levered equity. Numerical procedures and recursive closed-form non-circular expressions for the finite-period and perpetuity cases are presented, which facilitate any kind of implementation including Monte Carlo simulations.

Tesfaye Taddese Lemma (2011); The aim of this study is to empirically investigate the role of firm, industry, institutional, and macroeconomic-factors on a firm’s capital structure decision in the context of nine African countries. A sample of 986 non-financial firms over a period of 10 years (1999-2008) have been taken. A battery of econometric procedures including Generalized Method of Moments and Seemingly Unrelated regression was used to estimate the relationship between the variables and provide robustness check. They found that leverage is positively affected by firm size while it is inversely related with profitability; the effect of asset tangibility, non-debt-related tax shield and dividend payout on leverage is
dependent on how the latter is defined; there is inter-industry variation in capital structure decision of African firms; income level of host countries moderates the influence of firm-specific factors on capital structure decisions; and legal and financial institutions and macroeconomic conditions do matter in the capital structure decisions of African firms.

Sushanta Mallick, Yong Yang (2011); This paper contributes to the literature on capital structure and firm performance. Using firm-level data covering over 11,000 firms from 47 countries over a recent period of 1997-2007, they address the effect of different sources of financing on corporate performance, employing a matching process, which allows an adequate 'like-for-like' comparison between high and low level of financing by firms. Robust to different matching estimators, the main findings are consistent with the theories of capital structure, in that firms with high debt-to-equity ratio tend to have lower returns to shareholders (profitability) and lower internal efficiency (productivity). The results become more robust when they separate the firms into advanced and emerging country groups or countries with high/low levels of financial development. Given the lower level of leverage below 50% on average in emerging markets (or in countries with lower level of financial reforms), firms in these economies face lower risk of financial distress and thereby less adverse effect on firm profitability and productivity, relative to their counterparts in advanced economies. They also find that retained earnings and equity financing improve performance, while debt financing by firms particularly in the form of bank loans leads to lower performance, although not so in the case of debt raised through issuing bonds.

Icke and Ivgen (2011); In this study, they examine the firm-specific factors which are influential on capital structure decisions of 212 industrial firms listed in Istanbul Stock Exchange over period 2004 and 2009 with Panel Data Analysis. The results of this study show that firm size, liquidity, profitability and sales growth affect the leverage ratios of industrials firms significantly. Among these factors, firm size and profitability are the most significantly influential factors on capital structures of industrial firms, and these two factors are negatively correlated with leverage ratios. Growth factor is statistically significant and positively correlated with leverage ratios. Liquidity factor is also statically significant but negatively correlated with leverage ratios. The results of this study are consistent with most of the capital structure literature and especially support Pecking Order Theory.
Bapna and Sood (2011); At the global platform in such a complex corporate environment, it is challenge to the finance manager to survive the firm in long-run perspective with the objective of maximizing the owner's wealth. To reach the summit manager is required to pay his due attention on investment, financing and dividend decisions of the firm. Selection of appropriate financing-mix relating to the capital structure or leverage refers to the combination of long-term debt capital and equity capital required to finance investment proposal. It can be attained by the judicious exercise of financial leverage at which overall cost of capital is minimum and value of the firm is maximum. This paper mainly studies the impact of financial leverage on earnings and dividend per share. The Karl Pearson’s coefficient was used to establish the correlation of the financial leverage with the earning per share (EPS) and dividend per share (DPS). ‘t’test was also conducted to prove the significance level between the different variables as EPS, DPS and DFL.

Erik Devos, Upinder Dhillon, Murali Jagannathan, Srinivasan Krishnamurthy (2012); In this paper, they examine why firms have no debt in their capital structure. They reject the hypothesis that zero-leverage policies are driven by entrenched managers attempting to avoid the disciplinary pressures of debt. These firms do not have weaker internal or external governance mechanisms. The debt initiation decisions of these firms are not preceded by shocks to their entrenchment, such as takeover threats or the emergence of activist blockholders. Their evidence supports the hypothesis that these firms are financially constrained. Zero-debt firms are small, young, conserve cash from cash-flow, and are more likely to lease their assets. When they have access to a line of credit, they face stricter covenants and higher all-in costs than comparable control firms. They lose market share in economic downturns, consistent with the financial constraints explanation, but inconsistent with theories of predation which suggest that they may be voluntarily stockpiling debt capacity.

Olayinka Akinlo, Taiwo Asaolu (2012); This study examines the profit profile of firms in Nigeria and analyzes the impact of leverage on profitability for the period 1999-2007. The results show that aggregate profit level for the firms decreased by 0.02 percent yearly over the study period. However, when disaggregated into sectors, a few firms actually experienced an increased profit level. The results show that firm size has a significant positive effect on profitability, while leverage has negative effect. The paper suggests that expansion, increased sales and low debt ratios enhance firm profitability.