Ownership Structure and Capital Structure:
Evidence from Indian Firms.

K. Lakshmi

Abstract

This paper examines the cross sectional variation in the capital structure of 1314 Indian firms from the ownership structure perspective. Ownership structure is defined as promoters' shareholding and institutional investors' shareholding. The study finds a negative relationship between the ownership structure variables and capital structure. This could be because the average promoters' shareholding for the sample firms is 50 per cent. Hence, the concentration of promoters' shareholding increases the risk of the promoters and prompts them to reduce the risk of financial risk by employment of higher levels of debt. Institutional investors' shareholding and debt employment are also inversely related. This may be because the institutional investors choose to avoid high debt firms as they have a higher probability of suffering from financial risk in the future.

Key words: *ownership structure, capital structure, financial risk, agency costs, concentration of promoters' shareholding.*

The capital structure decision of a firm is a conscious choice made by the decisions makers. It is not a function of its characteristics or the cost benefit analysis alone. (See for example Barton and Gordon, 1988) Recent works on corporate finance focus on two important aspects of corporate governance: agency problem and control. Agency theory argues that there is an inherent conflict of interests between managers and owners. Separation of ownership and control results in managers' pursuing their self interests. They may take decisions that do not fulfill the owners' interests. However, studies on agency theory argue that corporate ownership structure can affect the firm performance by mitigating the agency conflicts between owners and managers. (See for example Agrawal and Mandelker 1990, Putterman 1993, Prowse 1994)

Debt is one of the important factors used to alleviate the agency costs. Use of debt increases the risk of bankruptcy. This compels managers to increase their efficiency. (Grossman and Hart 1982) Jensen (1986) argues that the interest commitment of debt helps resolve free cash flow problem. We hypothesize that because capital structure is related to agency costs mitigation; it is likely to be influenced by the ownership structure.

The present paper examines the effect of ownership structure on capital structure. The relationship between ownership structure and firm performance is well researched. But, the effect of ownership structure on capital structure is little known, especially in the context of Indian firms. This paper is an attempt to fill this gap. The study does a cross sectional analysis of capital structure variations across firms from ownership structure perspective using ordinary least squares regression. Ownership structure is defined as promoters' shareholding and institutional investors' shareholding. The study finds an inverse relationship between these ownership structure variables and capital structure.

Previous Research
Promoters' shareholding and capital structure

Jensen and Meckling (1976) point out that the managers have a natural tendency to make decisions that serve their own interests. This may be in conflict with those of shareholders. As debt increases the risk of financial distress,

managers may employ debt at a level less than what is required for value maximization. This is to serve their self interests. Harris and Reviv (1990) argue that mangers are concerned with the bankruptcy risk. Bankruptcy risk may result in managers losing their jobs. This may cast doubts on their managerial competencies. But higher levels of promoters' shareholding will pressurize managers to act in their interest. Managers may, as a result, be deprived of the opportunity to pursue their interests. Hence, promoters' shareholding and debt employment may be positively correlated.

Fama and Jensen (1983) argue that the increased insider ownership may entrench managers at some point. Managers, as a result, may get a free hand to pursue their self interests. They may employ less debt than what is required for value maximization. Entrenched managers will choose lower levels of debt as it relieves them from facing the pressure of debt on the firm's free cash flows. (Jensen, 1986) Lesser use of debt reduces the risk of financial distress. The managers' employment risk is also reduced. (Fama, 1980) As a result, promoters' shareholding and debt may be negatively related.

The empirical findings on the relationship between promoters' shareholding and debt do not converge. Kim and Sorensen (1986), Agrawal and Mandelker (1987) and Agrawal and Knoeber (1996) find a positive relationship between insider ownership and debt levels. Friend and Lang (1988) and Agrawal and Nagarajan (1990) show a negative relationship between debt and insider ownership.

Hence, there is no a priori hypothesis on the relationship between promoters' shareholding and the level of debt.

Institutional investors and capital structure

Institutional investors can reduce the agency costs by monitoring the firm's performance and by ensuring the shareholders' interests. (Jensen 1986, Pound 1988) Shleifer and Vishny (1986) show that institutional investors successfully monitor the performance of the management team. According to this 'active monitoring hypothesis' institutional investors can reduce the scope of managerial opportunism by closely monitoring them. Because of their fiduciary position, institutional investors are compelled to monitor the mangers. Their huge stake in the firm offers the economics for doing so. Shome and Singh (1995) produce evidence that supports the active monitoring hypothesis. Lev (1988) argues that the institutional investors perform better than individual investors because of their access to various sources of information. Friend and Lang (1988) suggest that external blockholders have incentives to monitor and influence management appropriately in order to protect their significant investments. The close monitoring of institutional investors may force managers to take decisions in the interests of shareholders. Their ability to purse self interests may diminish. As a result, managers may be prevented from employing lower levels of debt to protect their employment risk. Hence, we may hypothesize that institutional shareholding and debt levels will be positively related.

The empirical literature shows that institutional shareholding and firm debt level are related. Crutchley, etal., (1999) show that institutional ownership may be related to capital structure. They find that institutional ownership is simultaneously determined with leverage.

Pound (1988) challenges the active monitoring hypothesis. He puts forth the argument that large external shareholders are passive voters. They may collude with insiders against the interests of dispersed shareholders. In line with this argument, McConnell and Servaes (1990) present the 'passive voters hypothesis' by relating the large shareholders and

firm value. If this argument describes the behaviour of institutional investors then institutional shareholding and debt level may be negatively related to each other. Hence, we are not able to fix an ex ante relationship between institutional shareholding and debt level.

The Study

This paper investigates the relation between structure of equity ownership and cross sectional variation in capital structure. Ownership structure is measured by promoters' shareholding and institutional shareholding. The study uses the OLS regression method.

The Sample

All non-financial companies for which data was available for the financial year 2008 in the Prowess data base of Centre for Monitoring Indian Economy are studied. 1314 such companies constitute the sample for this study on which the analysis is carried out and conclusions are drawn.

Dependent variable

Debt ratio is defined as the capital structure measure. It is the dependent variable in the study. That debt ratio is the key indicator of capital composition is established by some of the earlier studies. (Titman and Wessels 1988, Graham 1996) Debt ratio is defined as the book value of long term debt divided by the sum of market value of equity and book value of long term debt. Most of the studies in finance theory use long term debt as debt. (Miguel and Pindado 2001)

Independent variables

The study defines ownership structure as shareholding by two categories of shareholders, promoters and institutional investors. The promoters' shareholding is measured by the percentage of shares held by promoters. Institutional shareholding is measured by the percentage of total shares held by them.

Control variables

In addition to these two independent variables the study also uses certain firm specific characteristics that are identified to have impact on the capital structure of the firm by earlier research.

Size

That firm size is significantly positively correlated to gearing is brought out by some of the research studies. (See for example Crutchley and Hanson 1989) However, it is theoretically difficult to set out clearly a priori relationship between these two variables. The relationship between firm size and leverage will be a function of what the firm size is used as a proxy for. Fama and Jensen (1983) argue that larger firms tend to be more diversified. As a result, they are less likely to go bankrupt. Larger firms generally provide more information to lenders than smaller firms. Hence they can employ higher levels of debt. Warner (1977) and Ang and McConnell (1982) suggest that the direct financial distress costs decrease with firm size. Rajan and Zingales (1995) state that, "the effect of size on equilibrium leverage is more ambiguous. Larger firms tend to be more diversified and fail less often, so size may be an inverse proxy for the probability of bankruptcy." These arguments predict a positive relation between firm size and debt level.

The earlier studies also show that firm size may also be related inversely to the level of information asymmetries between insiders and external shareholders. This will facilitate the use of more equity financing. (Rajan and Zingales, 1995)

The empirical findings on the relationship between firm size and the level of debt financing used are not similar. Crutchley and Hanson (1989) find a significant positive correlation between firm size and debt, while Kester (1986)

finds an insignificant negative relationship. Remmers, Stonehill, Wright and Beekhuisen (1974) find that firm size does not have any effect on debt level.

The measure of firm size used in this study is total assets expressed in natural logarithmic form.

Growth

Signaling theory, tax based theory and pecking order theories are used to predict the relationship between firm growth and debt level.

Signaling theory suggests that high growth firms generally are characterized by greater information asymmetry and as a consequence use higher debt levels to signal firm performance. This theory predicts a positive relationship between firm growth and debt.

The tax based theory is based on the assumption of progressive tax structure. This implies that expected tax liabilities are higher with greater volatility in taxable income. Since higher growth firms may have higher cash flow volatility, they may be motivated to reduce their debt exposure. (Smith and Watts, 1992) So, the higher the firm growth, the lower would be the level of debt employed.

The pecking order theory suggests a positive relationship between firm growth and debt. Higher growth firms require funds exceeding the level of what can be provided by internally generated and equity sources. They may employ higher levels of debt, ceteris paribus.

The average annual percentage change in the value of total assets over the period 2004-08 is used as a measure of firm growth.

Profitability

Higher profit firms will have better access to debt financing. As a consequence, profitability may be positively related to debt financing level. This argument relates to supply side. However,

the demand side argument is that higher profit firms do not require large amount of external financing. According to pecking order theory, debt financing is the last choice for firms. Higher the profits, lower would be the debt employed by the firm.

Modigliani and Miller (1963) use the tax deductibility of interest payments to show that firms may prefer to use debt to equity. Since the higher profits firms have the ability to bear the interest rate risk exposure associated with higher levels of risk, they are expected to use higher levels of debt to enjoy the tax shield on interest payments. Miller (1977) contradicts this argument of Modigliani and Miller citing the personal taxation effects. DeAngelo and Masulis (1980) show that as firms may use other sources of tax shields like depreciation, they may not depend on the tax shields provided by interest. Titman and Wessels (1988) show that higher profitable firms use their cash flows to pay back debt. As a result, they may end up with lower levels of debt. Toy, Stonehill, Remmers, Wright and Beekhuisen (1974), Kester (1986), Titman and Wessles (1988), Shyamsunder and Myers (1999) and Fama and French (2002) find a negative relationship between profitability and leverage. Long and Malitz (1985) and Firth (1995) find no significant relationship between profitability and leverage.

The measure of profitability used in this study is the operating profits before interest and taxes scaled by total assets.

Tangibility

Managers generally use the riskier debt financing only if they have assets in place. The cost of borrowing is expected to be lower if the firms have collaterals to offer. Otherwise the cost will be higher. The higher the value of tangible assets, the higher would be the leverage ratio. Long and Malitz (1985), Friend and Lang

(1988), Jensen, Solberg and Zone (1992) and Grier and Zychowicz (1994) empirically support this hypothesis.

The agency cost and asymmetric information theories of capital structure help to explain the relationship between asset structure and capital structure. As mentioned earlier, managers have a tendency to use sub optimal level of debt to serve their self interests. Firms with less collaterizable assets are more vulnerable to such agency costs as monitoring capital expenditure is more difficult for them. (Grossman and Hart 1982, Jensen, 1986) Debt may be used as a proxy for monitoring to reduce the agency costs. Therefore, a negative relationship can be expected between the level of tangible assets and debt.

The ratio of net fixed assets to total assets is used as a measure of tangibility.

Free cash flows

Free cash flows of the firm determine its debt employing capacity. Since debt involves periodical cash out flow, firms with higher levels of free cash flows have higher debt capacity and hence may employ higher levels of debt.

But, the pecking order theory of firm financing argues that the use of internal funds are preferred to debt funds. As a consequence, firms with higher free cash flows are expected to be characterized by lower levels of debt. They can substitute the external borrowing with internally generated funds.

As Zwiebel (1996) notes the relationship between free cash flows and capital structure is complex. Colombo (2001) finds empirical evidence to support the hypothesis that firms with higher levels of free cash flows employ lower levels of debt. Brailsford, Oliver and Pua (2002) find no significant relationship between free cash flows and debt.

This study defines free cash flows in a manner similar to Lehn and Poulsen (1989) and Brailsford et al. (2002). It is operating income before tax, depreciation and amortization after deducting the taxes and dividends paid divided by total assets.

Business risk

Finance theory suggests that firms that are characterised with higher business risks should not employ higher debt as debt involves periodical cash outflow. Firms with volatile income are expected to be less geared, as both increase the probability of bankruptcy. Bradley, Jarnell and Kim (1984) argue that if the costs of financial distress are significant, the debt and variability in firm value are negatively related. Jensen et al. (1992) argue that the supply of debt to higher business risk firms is low at any given interest rate.

Myers (1977) concludes, on the basis of the findings of his study, that firms that are characterized by higher business risks may have lower agency costs of debt. They may borrow more than firms with lower business risk.

The empirical evidence is mixed. Bradley et al. (1984), Friend and Lang (1988), Jensen et al. (1992) and Bathala, Moon and Rao (1994) find a significant negative relationship between business risk and debt. Long and Malitz (1985), Kim and Sorensen (1986) and Bennett and Donnelly (1993) report a positive relation between the variables. Titman and Wessels (1988), Grier and Zychowicz (1994) and Firth (1995) find no significant relationship between business risk and debt.

Business risk is measured by the standard deviation of the annual percentage change in operating income before interest, taxes and depreciation over 2004-2008.

Growth opportunities

According to corporate finance theory, risky debt creates incentives for excessive risk taking

on the part of the firm. (Jensen and Meckling 1976, Green 1984). Jensen and Meckling (1976) argue, 'with the financial structure (firms financed almost entirely with debt type claims) the owner-manager will have a strong incentive to engage in activities (investments) which promise very high payoffs if successful, even if they have a low probability of success. If they turn out well, he captures most of the gains, if they turn out badly, the creditors bear most of the costs.' This risk shifting behaviour increases an agency cost of debt. The opportunity for such a risk shifting behaviour depends on the investment opportunities available to the firm. Firms with low growth opportunities are expected to indulge less in risk shifting and enjoy lower agency costs. Firms with low growth opportunities are expected to carry higher levels of debt. Myers (1977) suggests that growth opportunities add value to the firm only as long as the firm exists. If a firm faces insolvency, the potential loss in firm value is greater for firms with higher growth opportunities. Bradley et al. (1984) suggest that the debt ratio should be negatively related to the cost of financial distress, including bankruptcy costs and the agency costs. Firms with higher growth opportunities will employ lower levels of debt.

The market to book ratio is defined as the sum of market value of equity to total assets minus net worth divided by total assets.

Non-debt tax shield

The tax based theory of capital structure suggests that firms tend to use more debt financing because of the tax deductibility of interest payments. DeAngelo and Masulis (1980) point out that the firms enjoy other sources of tax shield like depreciation. Hence firms that take advantage of higher levels of non-debt tax shields are expected to use less debt.

The non-debt tax shields defined in this study is same as the one used by Brailsford et al. (2002) It is defined as the ratio of depreciation to total assets.

The Model

DEBT = a + b PROMOTERS' SHAREHOLDING + c INSTITUTIONAL SHAREHOLDING + d SIZE + e GROWTH + f PROFITABILITY + g TANGIBILITY + h FREE CASH FLOWS + i BUSINESS RISK + j GROWTH OPPORTUNITIES + k NON-DEBT TAX SHIELDS

Table 1 : DESCRIPTIVE STATISTICS

	Minimum	Maximum	Mean	Std. Deviation
Networth Rs. In crores	-527.95	79766.20	538.8995	3386.87846
Market Capitalization Rs. In crores	.04	314124.14	1823.4485	12217.47391
Promoters' shareholding %	.06	99.51	50.6359	18.18677
Institutional shareholding	.00	75.41	8.5078	12.04509
Debt Rs. In crores	.01	38162.08	333.9803	1712.60105
Total assets Rs. In crores	.05	150149.44	1265.4156	7033.06359
Net Fixed assets Rs. In crores	.01	84889.47	477.0965	3105.60656
Profit before interest and taxes Rs. In crores	-451.14	25680.66	165.7933	1117.08152
Profit before taxes Rs. In crores	-714.43	25621.71	145.5202	1075.42896

The average long term debt employed by the sample firms is Rs. 333.9803 crores. The maximum debt employed is Rs. 38162.08 crores and the minimum is Rs. .01 crores. The average market value and the net worth of the firms studied are Rs. 1823.4485 crores and Rs. 538.8995 crores respectively. The promoters' shareholding is at 50.63% on an average. The maximum institutional investors' shareholding is 8.50%. Some of the companies do not have institutional shareholding at all. The mean total assets and net fixed assets for the sample firms are Rs. 1265.4156 crores and Rs. 477.0965 crores respectively. The profit before interest and taxes ranges from Rs. 25680.66 crores and Rs. 165.7933 crores. The profit before taxes on an average is at Rs. 145.5202 crores.

The Results : The results of the ols regression are presented below.

Table 2 : Results

Variables	Coefficients	t statistics
Intercept	0.399	12.812*
Promoters' shareholding	- 0.002	-6.070*
Institutional shareholding	- 0.005	-6.964*
Size	0.010	0.862*
Growth	- 0.044	-2.414*
Profit	- 0.067	-2.553*
Tangibility	0.394	10.244*
Business risk	0.002	1.962**
Growth options	0.001	-1.791
Non-debt tax shields	-0.147	-0.427

Dependent variable : DEBT / R square : .172 / Adjusted R square : .167/ F statistic : 30.165*/ * significant at 99 per cent. / ** significant at 95 per cent.

Both the promoters' shareholding and institutional investors' shareholding emerge to be statistically significant variables in explaining the differences in the debt employed by the sample firms. Both the variables bear a negative sign. Higher the promoters' shareholding lower is the debt employed. Firms with higher institutional shareholding, employ lower levels of debt. The firm specific variables that are found to be statistically significant are size, growth, profit, tangibility and business risk. Bigger firms employ more debt. Firms with higher growth and higher profitability employ lower levels of debt. Business risk and debt employed are positively related. Growth options and non-debt tax shields are not statistically significant in explaining the cross sectional differences in the capital structure.

Discussion of results

The study shows that the ownership structure defined as promoters' shareholding and institutional investors' shareholding is significantly negatively related to the level of debt employed by the firm. High promoters' shareholding results in firm's control being in their hands. They employ lower levels of debt in order to avoid the risk. As the promoters' shareholding increases a conflict between the owners with controlling interests and minority shareholders arises. This may result in the controlling owners pursuing their own interests. Demsetz and Lehn (1986) argue that large shareholders are expected to encourage the use of lower levels of debt for risk reduction purposes. The reason for a negative relationship between promoters' shareholding and debt may also be because the average promoters' shareholding for the sample firms is at 50 percent. This may not be surprising as the promoters shareholding in Indian companies is generally high. The high level of promoters' shareholding could be the reason for the inverse relationship between promoters' shareholding and the level of debt employed. As the concentration of shareholding increases, the risk faced by the promoters increases with increases

in the debt employed. This could cause a reduction in the level of debt employed as a measure to reduce the risk by firms with higher levels of promoters' shareholding.

The institutional investors' shareholding also bears a negative relationship with the level of debt used by the firms. The higher the institutional investors' shareholding the lower the level of debt for the sample firms. This result is in line with the findings of some of the earlier studies. (See for example, Chaganti and Damanpour 1991, Grier and Zychowicz 1994, Bathala et al. 1994, Gutchley and Jensen 1996) Firms with high level of debt may face a higher financial risk in the future. Hence, institutional investors may prefer firms with lower levels of debt. (Chen and Steiner 1999) The average institutional investors' shareholding of the sample firms is at 8percent while the promoters' shareholding is around 50percent. This may also be the reason for a negative relationship between institutional investors' shareholding and debt.

References

Agrawal, A., and Mandelker, G.(1987) "Managerial Incentives and Corporate Investment and Financing Decision", *Journal of Finance*, 42, 823-837.

Agrawal, A., and Mandelker, G., (1990), "Large Shareholders and the Monitoring of Managers: The Case of Anti Takeover Charter Amendments", *Journal of Financial and Quantitative Analysis*, 25, 143-161.

Agrawal, A., and Nagarajan, N., (1990), "Corporate Capital Structure, Agency Costs and Ownership Control : The Case of All-equity Firms", *Journal of Finance*, 45, 1325-1331.

Agrawal, A., and Knoeber, C.R., (1996), "Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders", *Journal of Financial and Quantitative Analysis*, 31.

Ang, J., and McConnell, C., (1982), "The Administrative Costs of Corporate Bankruptcy : A Note", *Journal of Finance*, 37, 219-226.

Barton, S., and Gordon, P., (1988), "Corporate Strategy and Capital Structure", *Strategic Management Journal*, 9, 623-632.

Bathala, C.T., Moon, K.P., and Rao, R.P., (1994), "Managerial Ownership, Debt Policy and the Impact of Institutional Shareholdings: An Agency Perspective", *Financial Management*, 23, 38-50.

Bennett, M., and Donnelly, R., (1993), "The Determinants of Capital Structure: Some U.K. Evidence", *British Accounting Review*, 25, 43-59.

Bradley, M., Jarnell, G., Kim, E., (1984), "On the Existence of an Optimal Capital Structure, Theory and Evidence", *Journal of Finance*, 39, 857-880.

Brailsford, T.J., Oliver, B.R., and Pua, S.L.H., (2002), "On the Relationship between Ownership Structure and Capital Structure", *Accounting and Finance*, 42, 1-26.

Chaganti, R., and Damanpour, F., (1991), "Institutional Ownership, Capital Structure and Firm Performance", *Strategic Management Journal*, 12, 479-493.

Chen, C., and Steiner, T., (1999), "Managerial Ownership and Agency Conflicts: A non-linerar Simultaneous Equation Analysis of Managerial Ownership, Risk Taking, Debt Policy and Dividend Policy", *Financial Review*, 34, 119-136.

Colombo, E., (2001), "Determinants of Corporate Capital Structure: Evidence from Hungarian Firms", *Applied Economics*, 33, 1689-1701.

Crutchley, C., and Hanson, R., (1989), "A Test of the Agency Theory of Managerial Ownership, Corporate Leverage and Corporate Dividends", *Financial Management*, 18, 36-46.

Crutchley, C., Jensen, M., Jahera, J., and

Raymond, J., (1999), "Agency Problem and the Simultaneity of Financial Decision Making: The Role of Institutional Ownership", *International Review of Financial analysis*, 8, 177-197.

DeAngelo, H., and Masulis, R., (1980), "Optimal Capital Structure under Corporate and Personal Taxation", *Journal of Financial Economics*, 8, 3-29.

Fama, E., (1980), "Agency Problems and the Theory of the Firm", *Journal of Political Economy*, 88, 288-309.

Fama, E., and Jensen, M., (1983)," Separation of Ownership and Control", *Journal of Law and Economics*, 26, 301-325.

Fama, E., and French, K.R., (2002), "Testing Trade-off and Pecking Order Predictions about Dividends and Debt", *Review of Financial Studies*, 15, 1-33.

Firth, M., (1995), "The Impact of Institutional Stockholders and Managerial Interests on the Capital Structure of Firms", *Managerial and Decision Economics*, 16, 167-175.

Friend, I., and Lang, L., (1988), "An Empirical Test of the Impact of Managerial Self-interest on Corporate Capital Structure", *Journal of Finance*, 43, 271-281.

Graham, J., (1996), "Debt and Marginal Tax Rate", *Journal of Financial Economics*, 41, 41-73.

Grier, P., and Zychowicz, E.J., (1994), "Institutional Investors, Corporate Discipline and the Role of Debt", *Journal of Economics and Business*, 46, 1-11.

Grossman, S., and Hart, O., (1982), "Corporate Financial Structure and Managerial Incentives". In McCall, J., Ed. *The Economics of Information and Uncertainty.*, Chicago., University of Chicago Press.

Harris, M., and Raviv, A., (1990), "Capital Structure and the Informational Role of Debt",

Journal of Finance, 45, 321-349.

Jensen, M., and Meckling, W., (1976), "Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure", *Journal of Financial Economics*, 3, 305-360.

Jensen, M., (1986)., "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", *American Economic Review*, 76, 323-329.

Jensen, G.R., Solberg, D.P., and Zorn, T.S., (1992), "Simultaneous Determination of Insider Ownership, Debt and Dividend Policies", *Journal of Financial and Quantitative Analysis*, 27, 247-263.

Kester, C.W., (1986), "Capital and Ownership Structure: A Comparison of United states and Japanese Manufacturing Corporations", *Financial Management*, 5-16.

Kim, W.S., and Sorenson, E.H., (1986), "Evidence on the Impact of Agency Costs of Debt on Corporate Debt Policy", *Journal of financial and Quantitative Analysis*, 21, 131-144.

Lev, B., (1988), "Toward a Theory of Equitable and Efficient Accounting Policy", *The Accounting Review*, 63, 1-21.

Lehn, K., and Poulsen, A., (1989), "Free Cash Flow and Stockholder Gains in Going Private Transactions", *Journal of Finance*, 771-789.

Long, M., and Malitz, I., (1985), "The Investment-financing Nexus: Some Empirical Evidence", *Midland Corporate Financial Journal*, 3, 53-59.

McConnell, J., and Servaes, H., (1990), "Additional Evidence on Equity Ownership and Corporate Value", *Journal of Financial Economics*, 27, 595-612.

Miguel, A., and Pindado, J., (2001), "Determinants of Capital Structure: New Evidence from Spanish Panel Data", *Journal of Corporate Finance*, 7, 77-99.

Miller, M., (1977), "Debt and Taxes", *Journal of Finance*, 32, 261-275.

Modigliani, F., and Miller, M., (1963), "The Corporate Income Taxes and the Cost of Capital: A Correlation", *American Economic Review*, 53, 433-443.

Myers, S., (1977), "Determinants of Corporate Borrowing", *Journal of Financial Economics*, 5, 47-95.

Pound, J., (1988), "Proxy Contests and the Efficiency of Shareholder Oversight", *Journal of Financial Economics*, 20, 237-265.

Prowse, S., (1994), "Corporate Governance in an International Perspective", *BIS Economic Papers*, 41, 7-82.

Putterman, L., (1993), "Ownership and the Nature of the Firm", *Journal of Comparative Economics*, 17, 243-263.

Rajan, R. G., and Zingales, L., (1995), "What do We Know about Capital Structure: Some Evidence from International Data", *Journal of Finance*, 50, 1421-1460.

Remmers, L, Stonehill, A., Wright, R., and Beekhuisen, T., (1974), "Industry and Size as Debt Determinants in Manufacturing Internationally", *Financial Management*, 24-32.

Shleifer, A., and Vishny, R., (1986), "Large Shareholders and Corporate Control", *Journal of Political Economy*, 94, 462-488.

Shome, D., and Singh S., (1995), "Firm Value and External Blockholdings", *Financial Management*, 24, 3-14.

Shyam Sundar, L., and Myers, S.C., (1999), "Testing Static Tradeoff Against Pecking Order Models of Corporate Structure", *Journal of Financial Economics*, 51, 219-224.

Smith, C.W., and Watt, R.L., (1992), "The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies", *Journal of Financial Economics*, 32, 263-292.

Titman, S., and Wessels, R., (1988), "The Determinants of Capital Structure Choice", *Journal of Finance*, 43, 1-19.

Toy, N., Stonehill, A., Remmers, L, Wright, R., and Beekhuisen, T., (1974), "A Comparative International Study of Growth, Profitability and Risk as Determinants of Corporate Debt Ratios in the Manufacturing Sector", *Journal of Financial and Quantitative Analysis*, 875-886.

Warner, J., (1977), "Bankruptcy Costs: Some Evidence", *Journal of Finance*, 32, 337-347.

Zwiebel, J., (1996), "Dynamic Capital Structure under Managerial Entrenchment", *American Economic Review*, 86, 1197-1215.

About the Author
K. Lakshmi
is Senior Professor, VIT Business School,
VIT University, Vellore, Tamilnadu, India
She can be reached at : kaylakshmi@gmail.com