

The influence of financial policy on the growth profitability and size of firms

* Department of Business Economics, University of the Witwatersrand, Johannesburg

INTRODUCTION

A considerable portion of the development of the theory of finance over the past two decades has been devoted to the subject of debt financing, corporate debt capacity, the retention of earnings and the nature of their influence on the growth, profitability and size of firms. It is to these issues that an empirical study, undertaken by the author, of 280 companies listed on The Johannesburg Stock Exchange, addressed itself. This paper is a report on the study in question.

DEBT FINANCING

In the vast array of managerial texts on the subject, debt and capital structure are amongst the most widely discussed topics. Indeed, the researcher in the area will detect an almost excessive preoccupation with the benefits of debt financing as a cure for all corporate ills to the exclusion, as the present paper will show, of an adequate evaluation of the role played by leverage in the financing of the firm in the real world.

A critical appraisal of the various approaches to the debt financing problem was given by Donaldson with his publication of *Corporate Debt Capacity*.¹ Wary of the current approach towards debt policy which he felt had received inadequate attention in the literature,² Donaldson's stated objective was to stimulate dissatisfaction with the then prevailing conventions regarding debt capacity. That he succeeded beyond doubt is attested by the numerous references to this thought-provoking topic in the subsequent literature. While scope of the present paper does not allow a full consideration of this important subject, a brief review of the literature will serve as a useful background to the subsequent discussion.³

A most striking example advocating debt financing as the key to competitive success is given in *Corporate Growth Strategies*, a publication of the Boston Consulting Group.⁴ The latter were strong advocates of growth as an overriding objective of the firm, and the use of debt financing as the means of attaining that growth conspicuously emerges in the publication referred to.

For example:

If the firm were to introduce debt financing in its capital structure, its position would improve on a compound basis. Not only would leverage funds increase the amounts of investable capital, but also would allow the firm to pursue an aggressive pricing policy.⁵

Alternatively consider the subject of corporate strategy, which is essentially an integrative study dealing with long-run strategic planning but embodying the various disciplines of applied business economics. Lund notes that:

The current preoccupation with performance and highly levered earnings provides a great pressure for the use of debt. Indeed use of a reasonable amount of debt can be highly beneficial to the firm . . . The pressure for earnings growth by means of inordinate amounts of debt should be resisted, however.⁶

The above citations then are fairly representative of a vast, normative managerial literature which in general advocates debt financing for 'forward looking, aggressive management'. However, the extensive and protracted analysis of debt financing on which the present paper is based strongly questions its strategic importance. The role of debt financing in the South African study was examined on three levels and each stage of the investigation confirmed the previous findings.

THE FINDINGS

The initial method relying on a contingency analysis explored the differences attaching to the return on shareholders' funds and the financial structures of firms.⁷ With the exception of one industry the results were negative, that is, no significant difference was found between high and low profitability with respect to gearing. As the contingency study ignored quantitative differences between companies which made up the industry, regression analysis was employed. A bivariate regression of profitability on debt financing, however, scarcely improved on the results of the contingency analysis. In the regression analysis, two sectors showed a significant correlation between the return on shareholders' funds and leverage. In one industry debt financing was positively associated with rate of return, while an inverse relationship was found between the two variables in the second. The lack of significant results was disturbing, but the inverse relationship though unexpected, could be explained in terms of the combined use of retained profits and borrowed funds to finance the firms in this sector. (This is discussed further below.)

The low overall correlations found in the bivariate analysis suggested that other hidden factors might influence the return on shareholders' funds. The third level of enquiry, therefore, employed multiple regression analysis which facilitated an examination of the interaction between the independent variables, growth and retentions, and their joint effect on the dependent variable, profitability. However, this too failed to show up any meaningful or statistically significant results.⁸

Inasmuch as there is justification for criticism of a confused application of debt financing,⁹ it will be shown that growth does not necessarily follow the retention of profits.

RETAINED PROFITS AND GROWTH OF THE FIRM

Managerial 'conventional wisdom' advocates a retention of profits as a means of assuring the success of the enterprise. For example:

With the 'givens' on investment and capital structure, management can choose either to (a) pay higher dividends at the expense of lower growth in earnings per share or (b) restrain its dividend policy in favour of higher earnings per share.¹⁰

Though the importance of retained earnings to the firm was carefully noted in the South African study, the general supposition that retained earnings are profitably employed to the benefit of shareholders was recognised. Indeed the logical use of retained profits as opposed to paying these out in the form of dividends has long been noted by writers in the area.¹¹ Thus, according to the residual funds theory of dividend policy, investors would prefer that earnings be reinvested rather than paid out, given that the returns on the reinvested funds exceed the rate of return the investor can obtain on alternative investment opportunities. In other words, as long as the firm reinvests at a rate exceeding its cost of capital the shareholders of the company will not be prejudiced. Once again the question of dividend policy comes back to economic rather than managerial considerations, which tend to favour retentions of funds, that in fact belong to shareholders, without a careful evaluation of their cost. In this regard it is interesting to note that dividend policy and the use of borrowed funds are frequently combined in order that dividends may continue to be paid by the firm. This observation emerges in the literature and has been confirmed in empirical studies. For instance both Sihler¹² and Meyer and Kuh¹³ have found that it is common to combine the analysis of the dividend decision with either the debt or the investment question. This was also found to be the case in the South African study.

The results of the empirical analysis of the study negate the role of the financial policy variables, debt financing and retained earnings, in influencing growth. The study analysed data over the period 1962 to 1972 as well as during three similar intermediate time periods corresponding to the business cycle.

In all the analyses that were conducted, no consistent relationship was found to exist between growth of the firm and its level of gearing, though in three of the eight industrial sectors examined, the use of leverage was significantly associated with growth. The regression studies of growth and retentions were even less satisfactory. In all the time periods examined, no consistent systematic relationship between growth and retentions was found to exist. The weight of evidence strongly suggests that the positive contribution of retained earnings to the growth of the firms occurs almost randomly. Indeed, it could be inferred that growth rates do not appear to be influenced by particular sources of financing. The implications of these findings for the economist, investor and management are far reaching, and are discussed below.

THE ROLE OF SIZE

To what extent has size been of importance in the earnings of profits and the growth of firms? The evidence of the study suggests that 'bigness in business' is not associated with 'bigness' in profitability. Indeed the tentative finding is that profitability declines with size but this requires further investigation. The lack of relationship between growth and size found in the original research, discounts the importance of the size factor, which also has little bearing on the financial policy variables. If it is true that growth results from the chance operation of a number of factors which affect each other, leverage and retentions are unlikely to be influenced by the size of the firm.¹⁴ In fact, no systematic variation was found to occur between size and the

financial policy variables. There was, therefore, no indication that larger companies relied to a greater extent on debt financing, or retained a greater proportion of their profits to finance growth. It is interesting to note that in an earlier study, Natrass found that though there were differences in the patterns of new equity financing as between large and small firms, there was no appreciable difference in the growth rates of the firms concerned.

SUMMARY AND CONCLUSIONS

The present paper has reviewed the role of debt financing and retained earnings in the financing of the firm, and has examined how these variables affect corporate performance. The prominence attaching to financial policy variables in the literature was also surveyed.

The research on which the present paper is based strongly suggests that the emphasis on debt financing and the notion of corporate debt capacity in the managerial literature, is largely misplaced. Regarding the role of debt in explaining growth, there is no reason to believe that faster growing companies have higher debt:equity ratios than other firms. Neither do the findings support the view that leverage is necessarily exploited to take advantage of favourable investment opportunities or that faster growing companies employ a higher than average degree of debt. The role of the debt:equity ratio in explaining the return on shareholders' funds is also of considerable interest. Statistically, the variation in the return on shareholders' funds explained by debt financing is so small that leverage as a strategic variable in financial policy must also be doubted.

It would be expected that above average rates of growth would be associated with a policy of high retentions of profit. Yet the weight of evidence strongly suggests that the contribution of retained earnings to the growth of firms occurs randomly. Indeed, it would appear that growth rates are not necessarily influenced by particular sources of financing.

The role of size was also considered in the study, where its significance was largely discounted as an explanatory variable. No systematic relationship was found between growth of the firm, its size, or the financial policy variable, debt financing and retained earnings.

Perhaps the most important observation regarding the financial policies of companies stems from the suggestion that retained earnings tend to be invested at rates of return below the firm's cost of capital. Since there is evidence of an increasing dependency by companies on internally generated funds (in the past over 50% of financing has come from these sources)¹⁵, and that these funds are considered to be cost free by management, investments subsequently made are not evaluated strictly according to criteria such as would occur were management to compete for required funds on capital markets. This of course calls into question the allocative efficiency of capital markets, whose function it is to transform the savings of the economy into capital formation according to the desired degree of risk and return of investors.

The divorce of ownership from control and the theory of managerial capitalism with which the former concept is associated, predicts that increasing use of retained earnings to finance the corporate sector, will result in

greater concentration allowing firms to bypass the capital markets thus removing the discipline imposed by competition. Whether or not companies are indeed circumventing the capital market, by pursuing defensive strategies of high retentions, is not entirely clear at this stage, though the possibility exists and is posed as an hypothesis for further research.

However, the findings of the present study, strongly supported as they are by the work of Baumol,¹⁶ Little and Rayner¹⁷ do suggest that management is not judicious in its use of internally generated funds. It might be thought that questioning the allocative function of the capital market is perhaps going too far, but this hypothesis with the view that growth is a random variable, does cast doubt on the role of the rate of return on investment in the allocation of resources. It is worthwhile, therefore, to conclude with a quote from Little and Rayner who have stated that "the yield structure established by the market does not appear to perform a beneficial social purpose".

Footnotes

- 1 Donaldson, G., *Corporate Debt Capacity*, Harvard University Press, 1961.
- 2 This assertion, however, was not entirely correct. Numerous articles had appeared in the literature prior to 1961, and indeed as early as 1952 Durand had published what today is still regarded as one of the foundation works on the question of the costs of debt and equity funds for business. (Durand, D., Cost of Debt and Equity Funds for Business: Trends and Problems of Measurement, *Conference on Research in Business Finance*, New York, 1952.)
- 3 Cf. Bethlehem, G., *The Financial Policies of South African Industrial Companies*, unpublished doctoral thesis, University of Pretoria, 1977.
- 4 *Growth and Financial Strategies*, The Boston Consulting Group, 1968.
- 5 *Ibid.*, p. 23.
- 6 Lund, H. A., Corporate Financial Strategy, in *Corporate Growth Strategies*, Stemp, I., Ed., American Management Association, 1970, p. 318.
- 7 All the firms were classified according to high and low profitability and high and low debt using the median as the cut off point.
- 8 The quantitative results are reported in the *South African Journal of Economics*, Vol. 46(3), 1978, in an article by the writer entitled "Debt, Debt Capacity and Financial Performance".
- 9 Compare Gordon, M. J., *The Investment, Financing and Valuation of the Corporation*, Irwin, 1962. Gordon found that profitable companies do not appear to make use of leverage in order to take advantage of investment opportunities, and that unprofitable companies resort to leverage in an attempt to show respectable profits or to obtain otherwise unavailable funds.
- 10 Sihler, W. W., Framework for Financial Decisions, *Harvard Business Review*, March/April 1971.
- 11 Although Rubner has noted that the debate whether profits should be paid out or retained cuts across managerial and academic thought. Cf. Rubner, A., *The Ensnared Shareholder*, Pelican, 1966, p. 108.
- 12 Sihler, W. W., *op.cit.*
- 13 Meyer, R. and Kuh E., *The Investment Decision*, Harvard University Press, 1959.
- 14 Hart, P., and Prais, S. J., The Analysis of Business Concentration: A Statistical Approach, *Journal of the Royal Statistical Association*, Series A, 119, 1956, pp. 150-181. Compare also, Samuels, J. M. and Chesher, A. D., Growth, Survival and the Size of Companies, 1960-1969 in *Market Structure and Corporate Behaviour*, edited by Cowling, K., Gray Mills Publishing Ltd., 1972, pp. 39-60.
- 15 Sources of company finance have been analysed in Bethlehem, G., *The Financial Policies of South African Industrial Companies*, *op.cit.*, chapter 9.
- 16 Baumol, W. J., Heim, P., et.al., Earnings, Retentions, New Capital and the Growth of the Firm, *The Review of Economics and Statistics*, 52, 4, 1970, pp. 345-355.
- 17 Little, I. M. D., and Rayner, A., *Higgledy Piggledy Growth Again*, Blackwell, Oxford, 1966, p. 94.