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RESEARCH rwsletter of the Research & Publications Committee, IIMA

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Chairperson's Message

Dear readers,



We are pleased to inform you that one of the papers of our faculty, Professor Devanath Tirupati, has been shortlisted amongst the 100 "most influential papers" published in Management Science during last 50 years. This is an intermediate stage in the selection of top-ten

list as part of the 50 year celebrations of the journal. The paper, "Multiproduct Queuing Networks with Deterministic Routing: Decomposition Approach and the Notion of Interference," co-authored with Gabriel Bitran was published in the Management Science, 34(1): 75, 1988. This is indeed a rare honour and the IIMA community is very proud of it. Congratulations to Professor Tirupati on this achievement.

Jayanth R. Varma

Capital Structure and Market Power I. M. Pandey email: impandey@iimahd.ernet.in

Is there a relationship between capital structure and product-market structure (market power)? It is common for companies in developing countries to substitute short-term debt for long-term debt and roll over short-term debt. Hence, it is more appropriate in the context of developing economies, to define capital structure as total debt ratio. We define market structure in terms of market power of firms. Market power means control of a firm over price or volume of production. In operational terms, market power implies a firm's monopoly, or oligopoly or competitive power. Market power could be measured by Tobin's Q (or simply Q ratio). In this paper, we define Q ratio as the market value of equity and debt







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Tobin's Q A Debit Ratro 0

divided by the book value of equity and debt. It has been shown in literature that Q ratio is theoretically a sound and practically the most powerful indicator of a firm's market power. In a competitive market, Q ratios of all firms should be equal to one. Firms with Q ratio higher than one are expected to command competitive advantage either through oligopoly or monopoly power. There is also a practical reason for using this definition of market power. In developing countries, price and quantity or segmental data are not available for measuring the alternative indicator of the market power, viz., Lerner index or the Herfindahl-Hirschman index.

Theoretically market structure affects capital structure by influencing the competitive behaviour and strategies of firms. Firms in the oligopolistic market follow the strategy of maximizing their output for improving profitability in favourable economic conditions. In unfavourable economic conditions, they would take a cut in production and reduce their profitability. Shareholders enjoy increased wealth in good periods, but they tend to ignore decline in profitability in bad times since unfavourable consequences are passed on to lenders because of shareholders' limited liability status. Thus, the oligopoly firms, in contrast to firms in the competitive markets, would employ higher levels of debt to produce more when opportunities to earn higher profits arise. The implied prediction of the output-maximization hypothesis is that capital structure and market structure have a positive relationship. There are some empirical studies that have investigated the issue of capital structure and market structure using the US and some international data. The results are mixed; some studies finding a positive and others a negative relationship between capital structure and market structure.

Contrary to the existing theory and empirical results, we argue in this paper that, due to the interplay of agency-costs, interest tax shield, asymmetric information, and insolvency hypotheses, the relationship between capital structure and the Q ratio is complex. A firm in oligopoly condition sustains its aggressive production and high-income strategy by employing higher level of debt. Shareholders of the firm gain in terms of increased wealth. In adverse market conditions, the limited liability provides protection to shareholders against the risky production decision and lenders would suffer. Thus, a firm's debt level will increase as it gains market power reflected by the Q ratio. The agency costs and the interest tax shield hypotheses also support the use of high debt, and they are consistent with the prediction of the output maximization hypothesis. On the other hand, as debt increases, there are significant costs in terms of increased probability of financial distress and insolvency. This cost would be accentuated by the behaviour of no or low-debt firms with "deep purses". They would resort to predatory price behaviour and lead their rivals to bankruptcy. This argument suggests a negative relationship between capital structure and Q ratio. Further, debt could also cause under-investment. Firms might reject those profitable, low risk investment projects that have the possibility of passing on benefits from shareholders to lenders. Internal financing is cheaper than external debt or equity financing due to asymmetric information. The higher debt, however, could make the higher output costly for a levered firm. In a competitive market, unlevered or low-levered rival firms will intensify competition by increasing their output and/or lowering prices. If the levered firms continue borrowing to meet the competition, they may face financial distress and insolvency. Hence, the pecking order/asymmetric information theory also predicts a negative relation between capital structure and market power.

The opposing effects of debt under alternative theories point towards a non-linear relationship between capital structure and market power. As a firm starts gaining market dominance, it will increase debt to increase its production and income. That is, as firms' market power increases, they employ more debt to pursue their output maximization strategy. This attracts rival firms to intensify competition by cutting price and/or output. At the intermediate level of market dominance when competition intensifies through price cut, higher costs of debt squeezes profitability of highly levered firms and their chances of financial distress and bankruptcy increase. Levered firms react by reducing debt or increase production through improved assets utilisation. However, after consolidating their position, firms at higher level of market dominance once again leverage the use of debt in expanding their production. Firms with strong profitability and reserve funds and high market dominance adopt high-risk production strategy and use more debt. Thus, we can predict a cubic relationship between capital structure and market power.

We also depart from the earlier empirical works in predicting a quadratic - U-shaped relationship between capital structure and profitability. As per the asymmetric information hypothesis, firms, irrespective of their market power, would depend on internally generated funds for their expansion since external funds involve higher costs. This suggests a negative relationship between capital structure and profitability. But the alternative interest-tax shield hypothesis predicts a positive relationship between capital structure and profitability. Debt acts as a disciplining mechanism to ensure that managers pay out profits rather than building their personal empires. Firms with free cash flow, or high profitability, will have higher debt. Thus, we predict that more profitable firms will employ higher debt and will implement high output strategy. Given these conflicting hypotheses, it is plausible to predict a nonlinear relationship between capital structure and profitability. Firms at lower levels of profitability would employ more internal funds since external funds are expensive and non-debt tax shields (such as depreciation) may be more than enough to take advantage of tax benefits. At higher level of profitability, firms have more profits to shield from taxes as well as they are able to generate more output by employing assets effectively. These firms employ more debt. Thus, it is plausible to predict a quadratic – U-shaped- relationship between capital structure and profitability.

To test our predictions, we examined the relationship between capital structure and market power using panel data of 208 Malaysian companies from 1994 to 2000. We employed the fixed firm and time effects model to account for both individual firms and temporal effects. As predicted, our results showed that capital structure and market power have a cubic relationship. That is, at lower and higher ranges of Tobin's Q, firms employ higher debt, and reduce their debt at intermediate range. This is due to the complex interaction of market conditions, agency costs, and bankruptcy costs. Our findings also vindicated saucer-shaped relationship between capital structure and profitability because of the interplay of agency costs, costs of external financing and interest tax-shield. In addition to Q ratio and profitability, we had included other independent variables in our estimation. We found that size and tangibility have a positive and growth, risk (systematic) and ownership have a negative influence on capital structure.

Pandey, I. M., "Capital Structure and Market Power Interaction: Evidence from Malaysia," Capital Market Review, Vol. 10, No. 1, 2002, pp. 23-40.



Family Business: Relating Intergenerational Blueprints!

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When family firms pass from first to second, and then subsequent generations, changes in management practices can be expected to occur. The founders usually start up a firm with an idea or to exploit an underserved product or market segment, and the first generation firm is likely to be a long shadow of its founder. The founder is likely to retain close control, and the board, if there is one, is likely to consist mostly of family members. Professional management practices may not be expected to find a prominent place in the firm, and outside professional help may not be taken. Succession is likely to be decided by the founder. The management style is likely to be more autocratic and less team driven. Strategic management may not be a priority, when the compulsions of nurturing the firm through its early days are high. The founders may be cautious and conservative in funding, avoiding outside equity and even perhaps even bank loans.

As the firm passes on to the second generation, the successors may not have the same emotional attachment to the firm, and may be willing to delegate more. The firm is sure to have grown in size, and hence more delegation may be expected (which the founder may not have been willing to do). More professionals and modern management practices are likely to be introduced. Succession may involve tussles, and hence the succession plan may not be clear. The management style may be more team oriented. Strategic management may find more importance in the firm's agenda. Outside funding may be more acceptable. These trends are likely to be accentuated with the passing of generations.

Yet though anecdotal evidence can be cited in support of the above propositions, not many empirical studies have been conducted that show the major changes between firms of different generations. Sonfield and Lussier studied this question in US and did not find any major differences. Firms seemed to retain their core management practices even after generation transition.

Our studies extend the context, first to India and to two other countries: Croatia and France. The studies were carried out through questionnaire surveys.

In the Indian case, firms listed by the Centre for monitoring Indian Economy (CMIE) in its data base were selected: 312 firms in all. They represented a range of business sectors and sizes. Thirty-nine usable responses were received. In France, 800 firms were addressed; 312 responses were obtained; in the case of Croatia, 70 firms were addressed and 50 responses were obtained. The following parameters were studied: (1) inclusion of non-family members, (2) inclusion of women family members, (3) use of team management style, (4) management of conflict among family members, (5) formulation of succession plans, (6) use of outside consultants and outside professional services, (7) engagement in strategic management activities, (8) sophisticated techniques of financial management, (9) going public, (10)

continuance of the business methods and objectives of the founder, and (11) changes in debt equity ratio.

The results were similar to those in the case of US: there were no significant differences among any of the countries in any of the dimensions studied. Thus the conclusion is that while individual country characteristics and culture may have significant in-

fluence on a variety of aspects of entrepreneurship on small businesses, family businesses provide a strong continuity across generations. In some sense, this is consistent with a Stanford study on startup businesses, in which Baron and Hannan found that successful firms were those that retained their original "Human Relations (HR) blueprints". It is not the absolute attractiveness of "modern" managerial practices alone that are important to family firms, but also a continuity. Or is it just plain inertia? 🏯

Sonfield, M.C.; Lussier, R.N.; Pfeifer, S.; Manikutty, S.; Maherault, L.; and Verdure, L. (2003). "A Cross-national Study of First Generation and Subsequent Generation Family Businesses," refereed paper published in the Proceedings of the Annual Conference of the Small Business Institute, Clearwater Beach, Florida, February 11-15, 2004.







The Kinder Cut: A Macro Communication Strategy for Delivering News of Job Termination

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Researchers have been exploring ways of delivering bad news that reduce the pain and frustration the recipients inevitably feel. This paper focuses on communication strategies that can soften the blow of one kind of bad news – job termination.

Most Indian companies that downsize call their personnel reduction programme Voluntary Retirement Scheme (VRS). But in reality it is mostly compulsory retirement or retrenchment. Employees identified by management as redundant or undesirable are pressured to leave. That they have been 'selected' for VRS can be devastating news for them if they do not want to leave, or if finding alternative jobs with similar remuneration and social status is difficult.

What does it mean to deliver bad news well? What kind of communication strategies ought a company to adopt to deliver well the bad news of job loss? These are the questions the paper addresses. The answer given revolves around the concept of perceived fairness.

Discussions on how to communicate bad news tend to be around *micro* communication strategies that depend largely on the verbal component of the complex communication process. This paper illustrates and recommends a *macro* communication strategy that actively deploys several mutually reinforcing non-verbal as well as verbal moves that work down expectations of employees and help them perceive as fair the decision to downsize and the manner of downsizing.

Studies of perceived fairness in different contexts prompt one to conclude that if recipients of bad news perceive distributive, procedural, and interactional justice around it, they will accept it without anger and disgust. If they experience high levels of procedural and interactional justice, they may even overlook low distributive justice. This paper identifies employee expectations that have to be met or worked down by organizations to facilitate the perception of fairness in their job termination. These include:

absence of viable alternatives to downsizing

- adequate notice of termination
- objectivity and transparency in selecting employees to be terminated
- humaneness in the way the downsizees are treated.

This analysis is followed by a brief discussion of the way three Indian companies of different sizes -Pennar Industries Limited, Pennar Investor Services Private Limited, and Everest Limited - downsized. In the first two cases there was no litigation, violence, or strike although one organization paid a very low compensation and the other paid no compensation. In the third case there was litigation although an attractive compensation was offered to employees opting or selected for VRS. The first two used a macro communication strategy that conveyed convincingly to the survivors and downsizees alike that the decision to downsize was unavoidable, that the low compensation was fair under the given circumstances, and that the downsizees were being treated humanely.

The third company relied largely on a micro communication strategy driven by logic and data; it did achieve its target of personnel reduction but failed to convince the employees of its fairness and so invited litigation.

Monippally, MM (2003). "The Kinder Cut: A Macro Communication Strategy for Delivering News of Job Termination," *Vikalpa*, Vol. 28, No.3, pp 31-44.





Children comprise an exciting customer segment. They merit attention due to their power that they wield as consumers and as influencers in purchase of products by households. As shoppers they come out as an interesting group, whether buying alone or with somebody or as accompaniment. A study conducted by Prof. Piyush Sinha and other authors brought out interesting findings. The paper looked at child-retail communication interaction at the kirana store, the Indian version of the US 'mom and pop' retail outlet. The methodologies for data collection were non-participatory unstructured observation and exit interviews. The respondents were 40 children and the accompanying persons at 13 stores in New Delhi.

Observation at the point of purchase found a high level of child-retail interaction. The retail experience was found to be dependent on the planning of the visit. The first interaction between the children and retail communication happened when they spotted the shop. They either pointed towards it or ran to it. They then directed their attention towards the cash counter where most of indulgence goods were kept. The children peered at the jars and pointed towards them and whenever the jars were accessible, they would reach for them. Packs that were golden or odd in shape attracted maximum attention. In most cases, the accompanying person also directed the attention of the children towards the communication in the store.

Acquisition came out as a key behavioural trait of children. Touching of jars, holding on to the packs even after consuming the product, and tugging the netted bags were common expressions of this behaviour. Children verbalized the request by mentioning the brand names, category names, or the need (I'm hungry, I feel thirsty). The responses of the accompanying persons depended on the type of fam-

Children in a Kirana Store: Building a Case for Retail Communication

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ily. While 'young explorer' parents gave in easily, 'retired explorers' were hesitant. Exit from the shop was the highest point of interaction. Children held the products like a treasure. They examined them and played with them. The process was repeated even in the case of immediate second purchase.

Communication at the store triggers a magnifying reaction from children. They visualize small toys/ gifts in life size. The merchandise and its pack have high entertainment value for children. This study suggests that, unlike the traditional communication media, retail store provides the opportunity for a higher level of interaction and hence there is a distinct need to look at the retail outlet as a communication medium that can be exploited, rather than as a mere storehouse of goods.

Kumar, A.M.; Sinha, P.K.; and Krishna, R. "Children in a Kirana Store: Building a Case for Retail Communication," *The Journal of Brand Management*, Vol. 10, No. 3, February 2003, pp. 219-232.



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