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Capital Structure and Small Growth Firms

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Capital structure choices and preferences in small, rapidly growing corporations are examined. As much of capital structure theory involves variables not easily or practically quantified (e.g., preferences, motivations, agency costs, information asymmetries) a survey was designed in an attempt to gauge the relevance of several theories of capital structure. The survey was sent to 405 firms, taken from lists of successful high growth corporations; 27.2% returned usable responses. Analysis of the responses indicates that tax factors and management preferences have major impacts on capital structure. Implications arising from agency cost, information asymmetry, and signalling theory apparently have little impact on capital structure choice and financing strategies of the responding firms.

Small, rapidly growing firms have attracted the attention of a number of researchers. Work has dealt with the strategies and business plans (or lack thereof) of rapid growth firms (Shuman, Sussman, and Shaw [35]; Hills and Welsch [20]). Several papers have focused on the background of those involved in the growing firm, the nature of the firms (Dunkelberg, Cooper, Woo, and Dennis [12]) or on the factors perceived to contribute to the success of the growing firm (Hills [19]; Goslin [15]; Feeser and Willard [13]). Others have concentrated on the human resource and organizational structure issues that leaders of small rapidly growing firms must face (Hambrick and Crozier [17]; Fombrun and Wally [14]).

The role of finance and the influence of capital structure on small rapid growth firms are mentioned only briefly, if at all, in the above studies. The purpose of this paper is to examine influences on capital structure decisions in small high growth firms. A forty-one question survey was sent to 405 small high growth firms. Survey questions were derived from the capital structure and entrepreneurship literature. The survey questionnaire was designed to determine which theories best explain the capital structure choices and preferences of small high growth firms. In the context of our study, surveys can provide evidence and insight that quantitative analysis cannot. Surveys can be used to (1) test some of the qualitative assumptions

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and conclusions in the capital structure literature and (2) indicate practitioners' perceptions when making capital structure choices.

1. MOTIVATIONS AFFECTING CAPITAL STRUCTURE DECISIONS

The survey questions analyzed in this paper deal with capital structure motivations that are among the most prevalent in the literature and that are also among the most difficult to empirically test.

Insights from Financial Theory

Tax

Masulis [25] argues that tax considerations are a primary force influencing capital structure decisions. As debt interest shields income from taxation, profitable firms with few non-debt tax shields should use more debt than less profitable firms. As discussed by McConnell and Pettit [26], Pettit and Singer [33], and Day, Stoll, and Whaley [10], smaller firms are expected to be less profitable and to have less use for tax shields than large firms. In addition, the greater potential for small business bankruptcy, as discussed by these authors, implies that smaller firms should use less debt than their larger counterparts.

Agency Costs

Several areas of conflict may arise when a principal hires an agent to perform tasks in which the agent is to keep the best interests of the principal in mind. As discussed in Jensen and Meckling [24] and Masulis [25], agents may seek to consume "perks" and decrease their work load if the cost of so doing is absorbed mainly by the principal. Agents may also seek to improve their job security by fending off takeover attempts or by reducing the possibility of firm bankruptcy, both of which may sacrifice the principal's potential returns. To reduce these adverse effects the principal absorbs agency costs. Agency costs are the costs associated with monitoring, bonding, and auditing the performance of an agent. In addition to these explicit costs, implicit costs may arise from opportunities missed as a result of placing restrictions on the actions of the agent. The agent may be handcuffed from undertaking swift action which may benefit the principal.

The managerial labor market may act as a mechanism to ensure proper agent behavior and thus reduce agency costs. Agents who exploit their position or who make poor decisions may face job termination and the prospects of trying to find another position while holding a poor performance record. Likewise, Grossman and Hart [16] argue that financial leverage, by increasing the possibility of bankruptcy, can be an appropriate bonding mechanism to reduce discretionary

agent behavior. In an attempt to convince potential investors of their sincerity, managers should be willing to suggest restrictive covenants to lenders (Jensen and Meckling [24]). Callable bonds can be used as an instrument to reduce agency costs as well (Barnea, Haugen, and Senbet [1]; Bodie and Taggart [4]). These ramifications from the agency cost literature will be examined in the context of the survey instrument.

Information Asymmetry

By their position, agents (i.e., corporate managers) may know more about the present and future expected condition of the firm than the principals or other outside investors. The use of private placements may be a helpful means of reducing such information asymmetries (Campbell and Kracaw [6]), though some have argued that public offerings by a reputable investment banker have an important certification effect (Ibbotson, Sindelar, and Ritter [21]). Given the costs of small public issues (Brigham and Gapenski [5, pp. 594–595]), small businesses and small corporations may find private placements an attractive source of outside capital.

Signalling

In order to reduce information asymmetries, insiders (agents) may choose to send financial signals to the principals and to the firm's other investors. Signalling theory explains how certain managerial actions can convey important information on future firm prospects and about the agents' decisions regarding the use of the firm's free cash flow (Ross [34]; Jensen [23]; Myers [30]; Myers and Majluf [31]). Debt issues signal "good" information as the firm is committing itself to a fixed payment schedule and the belief that shareholders will benefit from the leverage; according to Jensen's [23] free cash flow view, such an action represents good news to shareholders as it reduces managerial discretion over available cash. Stock issues will occur, e.g., if the firm has insufficient growth opportunities to warrant debt finance or if the firm is positioning itself financially for difficult conditions in the future. Stock repurchases, as reported in Masulis [25], are perceived as a good signal and common share prices rise, on average, following announcements of tender offers, stock repurchase plans, or purchases of targeted small holdings. Contrary to Jensen's concern about the agency problems of free cash flow, some researchers indicate that firms should try to maintain financial slack so profitable investment opportunities will not be foregone as a result of the need for unattractive outside finance (Myers and Majluf [31], Cornell and Shapiro [8]).

Management's Impact on Capital Structure

Ou [32] argues that the owner's objective function affects the willingness of the entrepreneur(s) to explore different financing sources. In starting a small

	Wealth	Control
Rapid Growth	Cell 1A	Cell 1B
Stable Growth	Cell 2A	Cell 2B

Figure 1. Owner's Objectives

business, the owner may have an objective of career independence (and total control of the business) or wealth accumulation (in which case control will be shared if it results in favorable financing to help achieve greater entrepreneurial wealth). The tradeoff between gains in wealth and control dilution must be determined subjectively by the wealth-seeking entrepreneur.

Ou states that a second set of objectives an entrepreneur may have is the desire for a stable business versus a rapid growth business. The desire to grow at a faster rate than can be financed by the internal generation of funds will lead the entrepreneur to seek outside financing. Of course, the owners' desire for rapid growth may not coincide with market realities or future growth forecasts.

Ou's discussion leads to the creation of a 2 X 2 matrix (Figure 1). An entrepreneurial team may be located in any of the four cells, though cell 1B will be possible only if the team has deep pockets or a very highly profitable product to finance rapid growth.

Barton and Matthews [3] present, like Ou, a qualitative framework for evaluating small firm financing decisions. Rather than relying solely upon financial theory to explain financing decisions, Barton and Matthews use a strategic management framework. Similar to Ou, Barton and Matthews [3, p. 1] believe "managerial choice exerts considerable influence on small firm financing decisions." Using a framework first developed in Barton and Gordon [2], Barton and Matthews derive five propositions regarding small firm financing choices. Among these propositions are the views that management's degree of risk aversion and management's goals for the firm will affect financing decisions. Like Ou [32], Barton and Matthews posit that management's goals—stable or rapid growth, wealth or control—affect financing strategy.

Davidsson [9], in a study using a sample of small business owner-managers in Sweden, derives empirical results that are similar to Ou's and Barton and Matthews' qualitative analyses. Davidsson finds that the most important growth motivators are "expectations of financial reward" and "increased independence."

However, Davidsson discovered that economic incentives did not provide growth motivation for 40% of his sample. The reasons given by these respondents indicated fears that such growth may lead to a loss of control or a reduction in employee well-being. Davidsson found that when growth is expected to result in a loss of control, the net effect is to deter growth.

This review indicates that influences such as owner/management's goals, preferences, and degree of risk aversion may have important affects on capital structure.

2. THE SURVEY SAMPLE

Survey recipients were chief financial officers of small corporations featured in the successful small business lists of several periodicals. The lists used as reference were the *Inc.* 100 (May 1987), *Financial World* 500 (August 1987), *Forbes* 200 (November 1987) and *Business Week* 100 Best Small Growth Companies (May 1987). The specific criteria differ between the periodicals for a firm to be included on a list.[1] Generally the firm must be publicly held, with sales less than a specified level, and have a superior growth rate in either sales or earnings over the previous three to five years. To be part of the survey sample, firm sales had to be less than $200 million. Surveys were mailed during April and May 1988.[2]

After removing duplicates from the above lists and deleting firms for which no address information could be obtained, the mailing list contained 405 firms. Of these, 279 firms had sales of under $100 million; 126 firms had sales between $100 and $200 million. Sales volume of the sample firms ranged from $10 million to $196 million.

A total of 110, or 27.2%, usable responses were returned. The great number of written comments on the returned surveys indicate many respondents put careful thought and effort into completing the survey.

The survey contained 41 questions. Due to length considerations this paper focuses on the analysis of the 15 Likert scale items (questions 23 through 37) and one open-ended question (question 38) on the survey. The Likert scale ran from 1 (strongly agree) to 5 (strongly disagree). The basic conclusions from the analysis of these items are in agreement with the responses to all 41 questions (comprised of 13 multiple choice questions, 2 ranking questions, 7 yes/no questions, 15 Likert scale questions, and 4 open-ended questions).

Since responses were to be kept anonymous, the survey questions did not request information on individual firm characteristics. However, the postage-paid reply envelopes used to return the completed surveys were marked to identify if the responding firm had sales under $100 million or between $100 and $200 million. As noted above, 279 firms, or 68.9%, of the sample firms had sales under $100 million. Of the 110 responding firms, 74 firms, or 67.3%, had sales under $100

Table 1
Responses to statement 23 through 37

	Agreement 1	2	3	Disagreement 4	5	Mean	Std. Dev.	*t* ratio
23. The firm believes a decision to issue common stock sends a favorable signal to the financial marketplace concerning future long-term firm prospects.	45.8%	41.1%		13.1%		2.55	0.93	5.03[d]
24. If bankruptcy occurred, the chief officers would, in general, easily find comparable positions elsewhere.	42.5%	26.4%		31.1%		2.89	1.12	1.02
25. The firm believes that private placements offer a satisfactory exchange of information between the firm and investors without the publicizing of proprietary information which may occur in a public offering.	35.9%	31.1%		33.0%		3.04	1.06	0.39
26. The firm uses private placements of stocks/bonds for at least 75% of all new long-term issues.	18.7%	8.8%		72.5%		4.09	1.26	8.30[d]
27. The firm would suggest restrictive covenants to a doubtful lender in hopes of convincing the lender to allow the firm to borrow.	20.4%	24.3%		55.3%		3.64	1.26	5.18[d]
28. If the firm could issue insured long-term debt at the same after-issue, after-tax cost of uninsured debt, the firm would increase its relative use of debt financing.	24.7%	32.0%		43.3%		3.33	1.12	2.92[d]
29. Debt is mainly used as a strategic tool to help lower costs.	19.1%	22.9%		58.1%		3.54	1.06	5.24[d]
30. The firm, in its financing decisions, explicitly considers the difference in the tax treatment of retained earnings, dividends, interest income, and capital gains from the investors' viewpoint.	46.0%	25.0%		29.0%		2.74	1.07	2.44[d]
31. If the firm has issued bonds with a call provision, they were issued solely to take advantage of expected interest rate declines.	34.6%	42.3%		23.1%		2.88	1.14	1.03
32. Private placements offer the firm less restrictive covenants than public offerings.	33.3%	12.1%		54.5%		3.37	1.31	2.83[d]
33. The use of equity financing would increase relative to debt financing if common and preferred stock dividends were to become tax-deductible.	59.1%	21.9%		19.1%		2.39	1.20	5.23[d]
34. The decision to issue debt or equity is affected by the existence of tax-loss carryforwards.	24.7%	27.8%		47.4%		3.42	1.26	3.30[d]

continued

Table 1 (continued)

	Agreement 1	2	3	Disagreement 4	5	Mean	Std. Dev.	*t* ratio
35. The firm uses debt to "play the yield curve" to get the cheapest financing possible.	28.4%		27.4%	44.2%		3.24	1.15	2.04[c]
36. New issues of debt and equity are purposely targeted by the firm to certain investor groups (e.g., low risk/return, high risk/return, financial institutions, individuals) as opposed to the capital market as a whole.	30.4%		27.2%	42.4%		3.18	1.19	1.46[a]
37. Outside financing is sought only when (not before) firm growth demands exceed the limits of bank financing possibilities.	54.7%		11.3%	34.0%		2.73	1.31	2.13[c]

Notes: [a]significant at the 10% level
[b]significant at the 5% level
[c]significant at the 2.5% level
[d]significant at the 1% level

million. Thus, at least in terms of size, the responding firms closely parallel the distribution of the sample.

3. ANALYSIS OF RESPONSES

Means and Significance

Table 1 presents the Likert scale survey questions and summary statistics. The *t*-ratio is from a significance test to determine if the average response is significantly different from 3 (neutral).[3]

Respondents agreed (statement 23) that common stock issues are a favorable signal to the marketplace about the firm. This belief runs counter to financial theory (Myers [30]; Myers and Majluf [31]). One respondent wrote a comment next to this question which summarizes a thought that may need to be addressed by financial researchers: "Can't float without a good story."

A suggestion advanced by some financial theorists (Grossman and Hart [16]; Seitz [36]) that the managerial labor market punishes managers (via termination or takeover) who do poor jobs and thereby helps to reduce agency costs received little support from the respondents; they could reach no consensus on statement 24.

Statements 26 and 32 received negative, or disagreeing, responses. Despite the ability of private placements to reduce information costs and information asymmetries (Pettit and Singer [33]; Campbell and Kracaw [6]; Barnea, Haugen, and Senbet [1]), private placements are not popular with the responding firms (statement 26). Neither do the respondents perceive that they allow less restrictive covenants

(statement 32) than public offerings. No consensus was reached (statement 25) on the efficacy of the information exchange that takes place in a private placement. These results run counter to some theoretical discussions which state that investors have opportunities in private placements to reduce information asymmetries between themselves and management.

Jensen and Meckling [24], in their seminal piece on agency theory, state that (p. 306) "firms would themselves be led to suggest the imposition" of restrictive covenants in an effort to lower agency costs and financing costs. Statement 27 asks if the CFOs would be willing to do so. The consensus response strongly disagreed with statement 27.

Firms seeking to attract investors can theoretically achieve lower financing costs and easier access to the financial markets if agency costs can be reduced (Jensen and Meckling [24]; Barnea, Haugen, and Senbet [1]; Pettit and Singer [33]). One means of reducing agency costs is insurance. Thus, if firms could insure their bond issues at no extra cost to the firm (so there will be no change in the relative cost of debt and equity to the firm), firms should be willing to increase their relative use of debt. The survey respondents disagree with this thought as indicated by their average response to statement 28.

Statement 31 was included in the survey as financial theorists (Myers [29]; Barnea, Haugen, and Senbet [1]) state that callable bonds can be used to reduce agency costs. As explained in Barnea, Haugen, and Senbet ([1], pp. 16-17) callable bonds can reduce agency costs in many instances.

Conventional wisdom regarding callable bonds is that they are issued so the firm can take advantage of a future decline in interest rates by recalling high coupon debt and replacing it with lower coupon debt. From the overall neutral (i.e., average response not significantly different from 3) response to statement 31, it appears agency costs may not be playing a major role in callable bond issues in our sample.

Much of financial theory is premised on the belief that managers seek to maximize shareholder wealth. Related to this thought is that management must take a long-run view toward planning and investor (both debt and equity) relations. Therefore, management should consider, from the investors' viewpoint, the different tax treatments of financial cash flows. Statement 30 asks if this indeed is true. The respondents significantly agree (i.e., the average response is significantly less than 3) with this view. Thus some evidence is provided that the managers agree with the theoretical view of maximizing shareholders' wealth.

Henderson [18] and Modigliani and Miller [28] encourage the use of debt as a means to lower financing costs. As interest on debt is tax-deductible and equity dividends are not, a more highly leveraged capital structure may result in lower overall financing costs. Statement 29 provides some evidence of how the respondents view debt. The mean response indicates that the firms in our sample do not use debt as a tool to lower costs. In fact, as we shall see later in the paper, many respondents have a strong aversion to debt.

Statements 33 and 34 seek to determine the importance of taxes on capital structure decisions. Due to the tax- deductibility of interest, the relative after-tax

Table 2

Response to Question 38: "What is the target proportion of long term debt in your firm's capital structure, as a percent of all long term sources of financial capital?"

no target	3
depends	2
NA/no debt	15
0–10%	14
11–20%	2
21–30%	16
31–40%	12
41–50%	17
51–60%	3
61–70%	2
more than 70%	4
total written responses =	90
No response	20

cost of debt is less than equity. Discussions of tax factors in capital structure decisions are quite prevalent in the finance literature (Myers [30]; Modigliani and Miller [28]; Henderson [18]; DeAngelo and Masulis [11]; Miller [27]; Day, Stoll, and Whaley [10], among many others). If equity dividends were to become tax-deductible, the relative costs of debt and equity would change and, from an after-tax viewpoint, equity financing would become more attractive. In order to take advantage of the tax deductibility of interest, the corporation must have taxable income. If past losses result in tax-loss carryforwards, the firm has less incentive to use debt as they may not be able to fully benefit from the interest deduction.

As seen in the responses to statement 33, despite dilution of equity ownership, managers believe they would increase the relative use of equity in their capital structures if dividends became tax-deductible. Statement 34, however, shows that the respondents significantly disagree with the belief that capital structure decisions are affected by tax-loss carryforwards. Rather than interpreting this as running counter to financial theory, this result may be best explained by looking at the sample. The sample is comprised of small, high growth, successful corporations. To be included on the "successful" lists from which our sample was taken, minimum profitability standards must be met. Thus the response to statement 34 may reflect the respondents' profitability and lack of experience with tax-loss carryforwards.

As the responses to statement 29 indicate, the respondents do not use debt as a tool to lower costs. Even so, perhaps they may "play the yield curve" to take advantage of its shape and expected future interest rates in an attempt to lower debt financing costs (Jalilvand and Harris [22]). Statement 35 asks about this strategy; respondents significantly disagreed with it. Firms in our sample apparently do not switch between long-term and short-term financing to take advantage of attractive interest rates or expectations of future interest rates.

Table 3
Cluster Analysis

Results for the Two–Cluster Solution, Likert Scale Questions and Question 38.

	Cluster 1	*Cluster 2*
23. Common stock signal	0.13	–0.26
24. Bankruptcy and jobs	–0.34	0.72
25. Private placements offer a good info exchange	–0.77	1.67[b]
26. Private placements at least 75% of the time	–0.57	2.45[d]
27. Suggest covenants	–1.73[b]	3.97[d]
28. Insured debt	–1.00	2.49[d]
29. Debt used to lower costs	0.24	–0.59
30. Investor's tax views	–0.12	0.28
31. Callable bonds	–0.34	0.80
32. Private placements offer less restrictive covenants	–0.70	1.38[a]
33. Increase equity if dividends deductible	–0.54	1.37[a]
34. Tax-loss carryforwards	–0.01	0.03
35. Play yield curve	0.15	–0.36
36. Clientele vs. market	–0.89	2.02[c]
37. Outside finance	–0.95	2.48[d]
38. Target debt ratio	1.44[a]	–5.42[d]
Sample size	86	24

Notes: The numbers represent the *t*-ratio for the test of the difference between the overall sample mean and the mean of the cluster responses. Thus a negative *t*-ratio on the Likert items (numbers 23 through 37) denotes the cluster disagrees more strongly with the statement than the overall sample. A positive *t*-ratio on the Likert scale items signifies the cluster agrees more strongly with the statement than the overall sample. For the target debt ratio, question 38, a positive *t*-ratio denotes a *lower* debt ratio for the cluster; a negative *t*-ratio signifies a *higher* debt ratio for the cluster.

[a]significant at the 10% level
[b]significant at the 5% level
[c]significant at the 2.5% level
[d]significant at the 1% level

Several financial researchers (Miller [27]; Chen and Kim [7]) hypothesize a financial clientele effect. Investors are drawn to invest in certain types of firms as the firm's characteristics and security offerings match the desires of the investors.

If financial clienteles are important to firms, the wishes of the clientele should be considered when making capital structure decisions. Lower financing costs can be achieved if new security issues are tailored to the desires of the clientele.

If firms consider financial clienteles to be important, respondents should agree with statement 36. Instead, respondents disagreed with the statement. This provides

evidence in favor of the view that securities are offered to the market as a whole. A justification for offering securities to the market as a whole is to possibly take advantage of certain "windows of opportunity" in the financial marketplace (hot IPO market, investor aversion to low quality debt, etc).

Several researchers (Day, Stoll, and Whaley [10]; Pettit and Singer [33]) posit that small firms prefer internal and bank financing to outside financing, whether it be debt or equity. Others argue outside financing may be valuable to tap even when it is not needed, as it will keep the firm visible in the capital markets and help the firm maintain financial slack and market discipline (Jalilvand and Harris [22]; Myers [30]). Statement 37 asks if firms use outside financing only when growth demands it. The respondents significantly agreed with statement 37. This provides some evidence to those who claim firms follow a financing pecking order, with internal finance as their first preference.

Question 38 (Table 2) asked for the respondent's target long term debt to equity ratio. Of those responding to the question, one-half place their target debt/equity ratio between 21% and 50%. However, almost one-third of the respondents indicate a desire for no debt or a minimal (less than 10%) amount of debt in their capital structure.

From this review of mean responses to our Likert scale and target debt questions, several inferences can be made regarding the applicability of financial theory to our sample. First, agency costs apparently are minor for the responding firms (statements 24, 27, 28). Second, information asymmetries apparently play little role for these firms. Questions regarding private placements, a method to share information and reduce information asymmetries, received disagreeing or neutral responses from the officers (statements 25, 26, and 32.)

Third, taxes apparently do affect capital structure decisions in our sample. The response to statement 33 supports this view; the response to statement 34 is best explained by the success and profitability of the firms in the sample.

Fourth, the view of financial theory regarding signalling was rejected by the respondents (statement 23). Fifth, market considerations apparently affect capital structure choice, as opposed to paying attention to a financial clientele (statements 30, 36).

Finally, managerial preferences may play a role in affecting capital structure decisions. The responses to statements 28, 29, 35, and 38 indicate a dislike of the use of leverage.

Cluster Analysis

Cluster analysis, using the SPSS QUICK CLUSTER routine, was run using the questions. The two and three cluster solutions were very similar in their composition (as the third cluster was very small); our discussion below will be of the two cluster solution. Results are contained in Table 3. The numbers in the table

are *t*-ratios from a test of the difference between two means; the overall sample mean less the cluster mean for each item. Negative *t*-ratios on the Likert scale items indicates the cluster disagrees more strongly with the statement than the overall sample; a positive t-ratio signifies the cluster agrees more strongly with the statement than the overall sample.

The first cluster contained 86 firms out of the 110 firms responding to our survey. As a result of the size of the cluster, few significant items occurred. Only the responses to statement 27 and question 38 were different from the mean responses of all the firms at the 10% level of significance; only statement 27 was significantly different at the 5% level. The negative *t*-statistic for statement 27 implies the firms in this cluster more strongly disagreed with statement 27 than did the other firms. That is, these firms would be very unlikely to suggest restrictive covenants to hesitant lenders. The positive *t*-statistic for question 38 means the firms in this cluster are willing to take on less debt than the average firm responding to the questions.

The second cluster contained 24 firms. Responses to statements 26, 27, 28, and 37, as well as question 38, were different from the mean response at the 1% level of significance. Firms in this cluster tend to desire higher leverage. They use outside financing only when growth demands it and they are more positive in their outlook toward private placements than the average firm. Overall, cluster 2 firms appear to be willing to issue debt. Management is also willing to give up some control of the firm in order to obtain funds necessary to finance growth and expansion (item 33).

These two clusters appear to correlate closely with Ou's [32] discussion of the two types of small business owners, as well as with the research findings of Barton and Matthews [3] and Davidsson [9].

Cell 1A (rapid growth, wealth accumulation) of Figure 1 corresponds closely to firms in cluster two of our analysis. The leaders of the firms desire wealth and they are willing to give up some control and freedom to obtain the financing necessary to maintain rapid growth and future capital gains.

Cell 1B (rapid growth, maintain control) is similar to the characteristics of cluster one. The leaders of the firm prefer to maintain control over the firm and resist the placement of restrictions or covenants on the firm by either new equity or new debt investors.

Cell 2B may also apply to cluster one firms. Perhaps the period of rapid growth that propelled these firms into a list of successful small corporations is past. A period of slower and more stable growth may be expected by the firm's management. Looking forward to a future that is less promising than the past may convince a management working for control-oriented owners to behave according to the characteristics of cluster one; namely, keep all external debt and equity financing to a minimum. This strategy also allows management to have a free hand to manage and guide the firm into the period of forecasted slower growth without any hinderance from new owners, control dilution, or covenants.

4. CONCLUSION

This paper reports on a capital structure survey sent to 405 small rapid growth corporations. Over 27% of the firms completed and returned the survey.

The survey responses have several implications for capital structure theory. The responses provide little evidence in favor of (and sometimes provide evidence against) several implications which arise from popular theories of capital structure determination. Agency costs did not seem to hinder firms in their financing decisions, nor did information asymmetries appear to be a concern to the respondents.

Tax factors apparently affect financing choice, resulting from the tax-deductibility of debt interest. Results opposite to signalling theory were seen in the responses to statement 23; issuing common stock was thought to be a positive, not a negative, signal to the financial marketplace about future firm prospects.

Firms rely on internal financing as much as possible. If additional funds are required, only then is external financing sought. But even here, as seen in the cluster analysis, some firms wish to avoid any dilution and therefore are reluctant to use external financing.

The basic purpose of the survey project was to peer inside rapid growth firms to see if questions based upon current financial theory could explain their behaviors and preferences. The survey responses are clear that present theoretical discussions in these areas may be inadequate as far as entrepreneurial rapid growth firms are concerned. As indicated in the cluster analysis discussion, capital structure decisions may need to be interpreted in the context of Ou's [32] entrepreneurial objective functions. Finance theory may need to more appropriately consider the impact of owner/manager goals and preferences on firm capital structure.

Management preferences, market perceptions, and financial theory may work together. Over the course of its life, there will be times when the firm can rely on internal financing and times when the firm will need external debt or equity financing. When external financing is needed, the choice between debt and equity depends on management preferences and expectations as well as the condition of the financial marketplace. If, e.g., the firm's debt ratio is at or over its target but interest rates are especially favorable, management may decide the attractive low cost of debt financing and the profitability of the project are such that debt should be issued. If, on the other hand, interest rates were higher or the project's profit potential was less, management may decide to issue equity and move the firm toward its target ratio. In making such decisions management must weigh financing costs, security characteristics, return expectations, control dilution considerations, changes in financial risk, as well as their own risk preferences. Certainly management preferences for minimal or no debt, as exhibited by many firms in the sample, will impact the firm's capital structure and growth opportunities.

Thus, management perceptions of a target debt ratio (if any) and perceptions of the tradeoffs involved in external financing will determine whether debt, equity, or neither will be issued. The sum total of these perceptions, beliefs, and conditions over time will be the firm's present capital structure.

In small business and entrepreneurial firms, managerial beliefs and desires will play an especially large role in determining capital structure, as the results of this survey indicate. Capital structure models must include the role of management preferences, beliefs, and expectations if we are to better understand capital structure policy.

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NOTES

1. For the *Business Week* list, a firm needed to have annual sales of under $150 million, a current market value of over $1 million, and a stock price over $1. Firms were ranked by a scheme that took three year sales growth, earnings growth, and return on capital into account. Banks, insurers, real estate firms, and utilities were excluded from consideration, as were any firms that were experiencing sharp declines in current financial results.

   The *Financial World* 500 is composed of the fastest growing companies, ranked by three to five year compounded annual growth rates in earnings per share. For purposes of our study, only those firms with annual sales of under $200 million were used.

   Firms on the *Forbes* 200 list must meet a number of criteria. For the past year, profitability had to be greater than 10%. Firms with earnings declines of more than 75% in any of the previous five years were omitted. Long term debt had to be less than equity. Five year average annual gains in earnings per share and sales had to be 10% or better. Profits of the preceding year had to be at least $1 million, and the stock price had to be at least $2. Banks, electric utilities, REITs, and firms less than five years old were excluded. Those firms meeting these criteria were ranked by five-year average return on equity. For purposes of the survey, only those firms with sales of under $200 million were used.

   The *Inc.* 100 firms must also meet a stringent set of criteria. Firms were ranked on the basis of their percentage increase in sales between 1982–1986. The firms had to have a five year operating history, 1986 sales greater than 1985 sales, 1982 sales of at least $100,000 but less than $25 million. Regulated banks, utilities, and holding companies were excluded.
2. Survey questions need to undergo pre-testing to insure the questions are understood by recipients and that no confusion results from researchers and respondents reading different meanings into the questions. Also, possible bias in question phrasing can be reduced by pre-testing. The questions in this survey were pre-tested by several financial executives,

including individuals who work for small and large corporations. Based on their suggestions and comments, some questions were deleted or reworded before the survey instrument was distributed to small corporation financial managers. No individuals who took part in the pre-test received a survey to complete during the mailing period.

3. The *t*-ratio is an appropriate test statistic as, from the central limit theorem, the categorical response data from the survey can be assumed to be approximately normally distributed.

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