Similarities and Differences in Small and Large Corporation Beliefs about Capital Structure Policy

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ABSTRACT. Theoretical researchers posit many factors that affect a firm's capital structure decisions. Theory also suggests that these influences will have different impacts on small and large firms. However, empiricists face difficulties in testing these hypotheses due to problems of quantifying the motivations, expectations, and preferences prevalent in the various theories.

To test some of the strands of theory and to determine differences between small and large corporation capital structure beliefs, a survey was sent to financial managers of 405 small corporations; 27% of the surveys were completed and returned. By comparing the results of this survey to those of previously published large corporation surveys, similarities (e.g., belief in a financing pecking order, little belief in the importance of bankruptcy costs, agency costs, and information asymmetries) and differences (e.g., less reliance by small firms on target debt ratios, greater preference for zero debt by the small firms) were identified.

Introduction

Ever since Modigliani and Miller's (1958) seminal article on capital structure, researchers have attempted to explain how firms choose their capital structures. Some progress has been made since that article, but financial researchers still have work to do in order to fully satisfy their curiosity. In his presidential address to the American Finance Association, Stewart Myers stated, "How do firms choose their capital structures? . . . The answer is we don't know . . . we do not know how firms choose the debt, equity, or hybrid securities they issue" (1984, p. 575).

Final version accepted on January 8, 1990

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Capital structure research, both theoretical and empirical, has generated many viewpoints and papers seeking to explain why business firms do what they do. Researchers have focused on a number of factors which may affect capital structure, including bankruptcy costs (see, e.g., Myers, 1984); the tax shield of debt and non-debt expenses (DeAngelo and Masulis, 1980); the pecking order theory, in which firms first finance assets using low cost sources and then, if necessary, seek higher cost sources of financing (Myers, 1984); agency theory (Jensen and Meckling, 1976); signalling (Ross, 1977); information asymmetries between the firm's managers and financial markets (Leland and Pyle, 1977; Myers and Majluf, 1984); the use of debt to maintain managerial discipline (Grossman and Hart, 1982); the relationship between managerial ownership and the debt/equity choice (Friend and Lang, 1988); the uniqueness of a firm's product (Titman and Wessels, 1988); and the transaction costs involved in financing individual projects (Williamson, 1988). Views that run counter to some of these papers can be found in Haugen and Senbet (1978, 1979, 1988). With all the research done to propose and allegedly support these different explanations, it is understandable why Myers' presidential address was entitled "The Capital Structure Puzzle."

Large corporations have been the focus of most of the research done in capital structure. Some theoretical work has focused on small business (see, e.g., Day, Stoll, and Whaley, 1985; McConnell and Pettit, 1984; Ou, 1988; Pettit and Singer, 1985; Walker, 1989). Empirical work on small business and capital structure has been virtually nil (two exceptions are Walker and Petty, 1978; Day, Stoll, and Whaley, 1985). Given the importance of

Small Business Economics 2: 229—245, 1990.

the small business corporation to the U.S. economy, and the potential importance of finance and capital structure in helping to maintain the viability of small businesses, serious study of capital structure and small business is warranted.

Much of the discussion of agency costs, asymmetric information, signalling, and the M&M irrelevance theorem take place in the setting of large firm capital structure. Data used in empirical tests is mainly from large firms as researchers attempt to solve the "capital structure puzzle."

Entrepreneurship researchers theorize of differences between small and large firms. Expectations of possible bankruptcy costs, greater monitoring or agency costs, and significant information asymmetries between managers and potential investors are believed to play major roles in determining small firm capital structure. These factors are thought to be hindrances to the small firm seeking external financing. These factors may also affect the financing decisions of large corporations, but their impact on small corporations is believed to be much greater (Pettit and Singer, 1985).

Additionally, small and large corporations are believed to have different tax influences affecting their capital structures. Smaller firms are believed to be generally less capital intensive and less profitable than large corporations. Therefore, the debt interest tax shield is less valuable to small corporations and should therefore affect their relative use of debt and equity (Day, Stoll, and Whaley, 1985).

Despite these alleged differences affecting large and small firm capital structure choices, little empirical work has sought to determine the importance of these and other factors. This paper seeks to discover if different influences affect large and small firm capital structure decisions. The influences examined in this paper are factors that finance theory has identified as impacting capital structure.

Much recent capital structure research has stressed the inputs that may affect the capital structure decision (e.g., market expectations, beliefs about bankruptcy costs and monitoring costs) and the decision process itself. However, empirical research has difficulties attempting to test these theories due to the problems of quantifying motivations, expectations, and behavior. A possible solution to this problem has been advanced by several researchers. A number of papers have advocated the need for behavioral studies if we are to fully appreciate financial decision making by both individuals and firms (Burrell, 1951; Farrelly, 1980; Keenan, 1970; Merton, 1989). This is the approach taken in this paper.

I. Use of surveys

The empirical analysis used in this study is not usually done in finance research. The use of surveys seems to be frowned upon in academic circles, as it provides "soft data," and can not provide the hard conclusions of fact that, e.g., regression analysis supposedly can (for an interesting view on the ability of econometrics to discern "facts" and test hypotheses, see Leamer, 1983).

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 and conclusions in the finance literature about capital structure and (2) determine the motivations that practitioners face when considering capital structure decisions. Surveys themselves are not a new research tool. Surveys are frequently used in management research; questionnaires have also been distributed to firms to inquire of capital budgeting methods, cash management techniques, and the use of debt ratios. However, a relatively new application of surveys in the finance literature is their use in this paper to study the motivations of small and large corporation decision makers.

A. *Management motivations*

The use of surveys can be especially fruitful in the joint area of capital structure and small business. The risk-taking proclivity, the motivation, and the attitudes of the entrepreneur-manager can have major impacts on the firm's capital structure. Such attitudes cannot be quantified, but the use of surveys can give insight into the beliefs and attitudes of the small business leader.

Ou (1988) argues that the owner's objective function affects the willingness of the entrepreneur to explore different financing sources. In starting a small 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.

Friend and Lang (1988) argue that managerial self-interest will affect capital structure decisions. They argue that managers, to reduce the threat of bankruptcy and subsequent unemployment and loss of equity wealth, may seek to use less debt than that dictated by shareholder wealth maximization. Managerial motivations, they hypothesize, will have a direct impact on capital structure decisions. Pettit and Singer (1985, p. 58) conclude likewise: "What is clear is that the optimal level of debt and equity in a smaller firm is more than likely a function of the characteristics of the firm and its managers."

Barton and Gordon (1987, 1988) argue that strategy literature and finance literature should be merged to help solve the capital structure puzzle. Strategy literature stresses the perspective of decision-making by managers in a dynamic environment. Managers may have goals and concerns in addition to shareholder wealth maximization, such as career aspirations, risk preferences, mitigating the impact of external events on the firm, or exploiting the internal strengths and weaknesses of the firm for personal gain. The resulting capital structure arises from a number of factors, both internal and external to the firm. Management goals, risk perceptions, and risk preferences will play a large role in capital structure decisions.

The importance of managerial preferences is all but ignored in the finance literature, and empirical analysis with "hard" data involving management preferences, goals, and attitudes is next to impossible. The use of surveys is the only tool presently available to obtain this information and to determine its impact on capital structure decisions. Thus the ability to obtain information about the attitudes and beliefs of management is one justification for the use of survey instruments in financial research.

B. *Financial theories*

A second justification for the use of surveys is that they can be used to test hypotheses that are difficult to test quantitatively. Much of the current research in the area of capital structure deals with topics such as agency costs and information asymmetries. It also deals with management perceptions and expectations about market responses; e.g., if I issue stock, what will the market think of my firm's future prospects?

Empirical research is needed to ascertain if the assumptions and the results of theoretical work are valid. The practical difficulty empirical researchers face is unavailable data. Agency costs, bankruptcy costs, and expectations are not easily or practically quantified, nor are they publicly available. Lack of data hinders empirical researchers in their attempts to determine if theory fits real world experience and practice.

Theory has moved into the decision-making black box. To add some light to the "insides" of that box, the motivational and expectational aspects of decision-making must be analyzed to see if the real world supports present theoretical conjectures. As Farrelly (1980) states, "According to Fama and Miller (1972), the theory of finance is concerned with how resources are allocated through time and how the existence of capital markets and firms facilitates this allocation process. Since perceptions are important determinants of how individuals and firms allocate resources, perceptions are worthy of study." And given the importance of managerial motivations in a small firm, the study of perceptions is especially relevant for the study of small business.

Surveys can be used to allow researchers to peer into the financial decision-making black box. Survey instruments can provide qualitative assessment of theoretical assumptions and hypotheses which cannot be tested quantitatively. Some of the results of theoretical research can be tested by asking survey questions to determine the motivations and constraints which affect financial decision-making.

As financial researchers do not know how firms choose their capital structures, a possible and plausible research approach is to ask how they reach these decisions. Questions asked in a survey can give insight into the practice of how firms decide to finance themselves and the factors that affect the firms' decisions. It can give researchers knowledge of whether firms consider internal

factors, market factors, or agency factors most important in determining firm capital structure. Indeed, empirical tests of some of the conclusions of agency and signalling theory are difficult to test without the use of a survey instrument. And without empirical testing, we are relying on theoretical conjectures to describe firm behavior.

The effects of management motivations, management expectations, tax laws, agency costs, information asymmetries, prior security issues, and market expectations are already reflected in the stock prices and interest rates set by the impersonal financial marketplace. The focus of this paper is how the above factors affect — or do not affect — financial managers making capital structure decisions. Thus our motivation for this study is similar to that of Scott and Johnson (1982) and Norton (1989) in their studies of capital structure; Baker, Edelman, and Farrelly (1985) in their survey of motivations and beliefs affecting corporate dividend policy; as well as that of Wansley, Lane, and Sarkar (1989) in their survey of managerial attitudes toward share repurchases and tender offer repurchase premiums.

Many surveys previously used in the finance literature (see, e.g., Kamath *et al.*, 1985; Scott and Petty, 1984; Stanley and Block, 1984) were mostly attempts to determine what methods, ratios, and techniques firms used. The main reason for the surveys seemed to be to determine if textbooks were teaching what firms were using. With few exceptions, behavioral and motivational factors affecting decisions were not the focus of survey studies done by financial researchers. The use of surveys to peer inside firm behavior is a promising new avenue for financial researchers.

Any new approach to research will be subject to criticism. Those who would rather trust in complex mathematical models, game theory, and sophisticated statistical regressions generally will not trust survey results, especially those seeking motivational and behavioral factors to explain financial decisions. Farrelly (1980, p. 18) has prepared an excellent response for such doubters: "traditionalists may tend to label the new methodology as unscientific, impractical, and unsuited to the subject matter of their discipline. Along these lines, skeptics might well note Sterling's (1972) reminder that the basic tenet of science is that nothing is beyond doubt and final, including the methods of science."

II. The survey

The purpose of the paper is to compare the motivations, beliefs, and perceptions of financial managers of successful small and large corporations regarding capital structure. The questions contained in our survey of small corporation financial managers previously appeared in published studies involving large U.S. corporation capital structure (Scott and Johnson, 1982; Norton, 1989). Two benefits arise from constructing a survey solely from questions which have already appeared in published work. First, it helps to achieve a goal of this study, which is to directly compare motivations and beliefs of small and large corporations regarding capital structure policy. Second, much of the difficulties inherent in survey design and any potential criticisms of the questionnaire are mitigated.

Comparing the responses of the large and small corporation surveys must be tempered by the fact that the surveys were not completed in the same time frame; thus differences in management and economic environment may hinder the comparison. Still, it is worthwhile to see what differences and similarities exist between the small and large firms that took part in the surveys as little empirical research has been published on these differences.

The recipients of our survey were chief financial officers of small corporations featured in the successful small business lists of several business periodicals. The lists used as references were the *Inc.* 100 (May 1987), *Financial World* 500 (August 1987; only those firms with sales under $200 million were surveyed), *Forbes* 200 (November 1987) and *Business Week* 100 Best Small Growth Companies (May 1987). The specific criteria for inclusion in a list differ between these periodicals,[1] but generally the firms must be publicly held, with sales below a specified level, and have a superior growth rate in either sales or earnings over the past three to five years.

The *Million Dollar Directory* and the *Standard and Poor's Directory of Corporate Directors* were used to find the addresses of the firms and names of officers. If the name of someone with the title of CFO could not be found, the survey was addressed to a person with the title of vice president of finance or treasurer; if no such titles were listed, the survey was sent to the President or CEO of the

firm. The surveys were mailed to the firms during April and May 1988.[2]

After removing duplicate names from the above lists of successful small corporations and deleting the names of firms for which no address information could be obtained, the mailing list contained 405 firms, each with sales under $200 million. Of these, 279 firms had sales of under $100 million; 126 firms had sales between $100 and $200 million. To be included in the 1987 *Fortune* 500 list of the largest U.S. corporations, sales of at least $450 million were required. Thus the largest firm included on our survey mailing list was less than half the size of the smallest *Fortune* 500 firm. The results of the survey will give insight into corporations the size of which are typically not examined by capital structure researchers.

Thus the focus of our survey is small, publicly held corporations, that have had enough past success to allow for at least one public equity issue and to allow the firm to be listed in one or more of the above lists. As discussed above, the questions asked of these firms had previously appeared in the published surveys of Scott and Johnson (1982) and Norton (1989). The Scott and Johnson survey was sent to *Fortune* 1000 firms; Norton's survey was mailed to *Fortune* 500 firms. As the focus of these prior studies was successful large corporations (assuming a place on the *Fortune* list denotes a degree of success), it is appropriate that this comparison study focus on successful small corporations. The firms taking part in our small corporation survey ranged in sales volume from $10 million to $196 million; over two-thirds of the firms had sales below $100 million. It is not certain if our survey responses from successful small corporations can generalize to the larger population of all small firms. But this is no different from surveys containing the responses of *Fortune* 500 firms; i.e., there is no certainty regarding the applicability of *Fortune* 500 survey findings to the population of "large" firms as a whole. By using an objective measure of success, our survey seeks to compare capital structure issues between successful large firms and successful small firms.

Surveys were mailed to 405 firms that, as discussed above, were identified as successful small corporations. The survey responses were to be completely anonymous; no identifying marks, serial numbers, or prior coding were used to identify specific firms. Thus no knowledge is available of which firms did or did not respond to the survey. The cover letter informed the respondents that all responses were to be anonymous and that responses would be kept in total confidence. Other suggestions by Singhvi (1981) were followed to maximize the response rate.

A total of 110 completed surveys were returned, a 27.2% response rate. This rate compares favorably with response rates received on other surveys of capital structure involving large corporations. Scott and Johnson (1982) sent out a 25 question survey and had a 21.2% response rate; Norton (1989) mailed out a 27 question survey and received a 21.0% response rate. Thus a 27.2% response rate is better than might be expected a priori. However, like virtually all anonymous survey studies, the results of this small corporation survey will suffer from response bias. Nonetheless, we now have information on the beliefs of small corporation financial executives from over 100 firms. The great number of written comments on the returned surveys indicate many respondents put careful thought and effort into completing the survey.

III. Survey results

Questions 1 through 8 correspond to several questions found on Scott and Johnson's (1982) survey. Questions 9 through 24 correspond to questions found on Norton's (1989) survey. The focus of the Scott and Johnson (SJ) questions were to gather information on factors presumably important to the capital structure decision process. The Norton questions used here also seek information on guidelines used by CFOs, as well as views on factors and motivations that financial theory concludes may be important in capital structure decisions.

A. *Scott and Johnson: 1979 Fortune 1000 questions*

Question 1 in Table I seeks information on influential advisors or sources affecting capital structure. This question corresponds to SJ Question 2, with the exception that our survey included an additional choice, the availability of long-term sources of financing (Choice G). This choice was added as information asymmetries and agency costs may hinder the ability of small firms to

TABLE I
Comparison of Scott and Johnson's 1979 *Fortune* 1000 survey responses to the responses of the small corporation survey

1. Who is most important (influential) in setting your firm's target financial structure ratios? (Indicate the most important with a 1, next most important with a 2, etc.)

Choices	Average rank	No. of times ranked first	No. of times ranked second
a. Firm's management	1.097/1.31	87.3%/85%	6.4%/7%
b. Investment bankers	3.826/4.31	0.9%/3%	14.1%/39%
c. Commercial bankers	2.698/5.58	2.7%/0%	30.8%/9%
d. Trade creditors (suppliers)	5.610/7.11	0.0%/1%	1.3%/0%
e. Outside security analysts	3.800/5.78	0.9%/1%	9.0%/4%
f. Comparison with ratios of industry competitors	3.260/5.06	1.8%/3%	25.6%/23%
g. Availability of long-term sources	3.864/NA	2.7%/NA	6.4%/NA
h. Other (please specify)	NA/NA	3.6%/7%	6.4%/18%

Note: Percentages may not add to 100.0% due to rounding.
The responses are in the following order: small corporation(%)/Scott and Johnson(%).

obtain long-term financing at costs that the entrepreneur is willing to pay (Peterson, Shulman, and Darroch, 1987; Pettit and Singer, 1985). The relative ranking of the responses between the two surveys is virtually identical, with one exception. The rankings of commercial bankers and investment bankers are almost switched; SJ had investment bankers ranked Number 2 and commercial bankers ranked Number 4; our survey places them 5 and 2, respectively. The small corporation's greater reliance on commercial bankers is presumably due to their lesser reliance on external financing.

Both the large and small corporation samples overwhelmingly indicated Choice A, firm's management, as the most influential in setting target financial ratios. Rarely was another choice ranked first in place of the firm's management. Evidently Choice G, the availability of long-term financing sources, is not a major concern of the responding firms.

Question 2 in Table II corresponds to SJ Question 1 and seeks information on the use of debt ratios in constraining capital structure choices. There is a significant difference, at the 1% level, between the proportion of SJ respondents using a financial leverage measure and the proportion of our respondents using such a measure, 89% vs. 50%. Larger firms are much more concerned about hitting or being close to a leverage target than the small corporations.

Question 3 (Table II), seeks information on the effect of leasing on capital structure; it corresponds to SJ Question 4. In both our survey and SJ's survey, a number of respondents did not check an answer, presumably because they do not lease. However, of those indicating an answer, both surveys had nearly identical results; about 75% of both the small and large corporations include fixed lease payments in their measures of financial leverage.

Questions 4 through 7 (Table II) correspond to SJ Questions 6, 7, 9, and 10, respectively. The questions seek to determine the respondents' belief in the existence of a U or saucer-shaped cost of capital curve. With the exception of Question 7 (effect of debt on common stock prices), significant differences do exist between the perceptions of small and large corporations. Even though large percentages (79% or higher) from both groups agree the cost of capital curve is U shaped, significantly higher percentages occur in the large corporation sample. Evidently large corporation financial managers feel they are more strictly limited about a financing target in order to minimize the cost of capital than the small corporation financial managers in our sample.

Question 8 (Table III) corresponds to SJ Question 11 and inquires of the firm's use of a target debt ratio. The existence of a target or optimal debt ratio is implicit in the belief of a U shaped cost of capital curve and is a staple in the

TABLE II
Responses to Questions 2 through 7

2. In making financial decisions, does your firm use some measure of financial leverage (e.g., a debt/equity or times-interest-earned ratio) as a constraint on the mix of debt and common equity funds employed?
   Yes: 50% No: 50%
   (89%) (11%) Z-statistic = −7.46[a]
3. If your firm leases equipment, does your calculation of financial leverage measures recognize the fixed lease payment as a financing charge similar to interest expense?
   Yes: 74% No: 26%
   (76%) (24%) Z-statistic = −0.39
4. Does your firm believe that there is a functional relationship between its capital costs and the amount of debt which it utilizes in its financial structure?
   Yes: 79% No: 21%
   (92%) (8%) Z-statistic = −3.02[a]
5. Does your firm believe that the use of a "proper" amount of debt in its capitalization (as opposed to too little, or too much) will result in a lower overall cost of capital to the firm?
   Yes: 80% No: 20%
   (92%) (8%) Z-statistic = −2.83[a]
6. Does your firm believe that the use of an excessive amount of debt will eventually result in an increase in the yield (cost) of debt faced by your company?
   Yes: 87% No: 13%
   (97%) (3%) Z-statistic = −2.93[a]
7. Does your firm believe that the use of an excessive amount of debt will eventually result in the market price of your common stock being adversely affected?
   Yes: 86% No: 14%
   (90%) (10%) Z-statistic = −1.03

Note: Small corporation responses are listed on top and represent percentages of responding firms. Scott and Johnson's *Fortune* 1000 responses are listed on the bottom, in parentheses, and represent percentages of responding firms.
[a] By the Z proportions test (using the proportion of "yes" responses), a significant difference exists between the small corporation percentage of "yes" responses and the large corporation "yes" responses at the 1% level of significance.

finance literature. In the small corporation survey, more firms sought capital structures with no debt (28%) and large amounts of debt (10% of respondents had target structures with 50% or more debt) than in SJ's large corporation survey. The responses were more concentrated in the 26—40% range in the large corporation survey. A chi-square test to determine if there is a statistical difference in the distribution of the target capital structures cannot be used using this format as the small corporation responses include several categories ("no target", "depends") that were not reported in SJ's paper. Part B of Table III excludes those respondents that did not give a definite numerical answer for a target capital structure. By creating five different categories of target capital structures, the chi-square statistic can be computed. The chi-square test statistic is 145.13, indicating, as mentioned above, significant differences between the small and large corporation distribution of target capital structures at the 0.5% level.

B. *Norton: 1984 Fortune 500 questions*

Question 9 (Table IV) corresponds to Norton's Question 1. This was a general question to determine if any philosophy or viewpoint is predominant in making financial decisions. Response A is the pecking order theory; B is included to see if market reaction is important to the firm's decisions (Marsh, 1982); C is a rather simple rule to keep the debt load from becoming too high. D deals with management taking advantage of optimistic investor expectations by issuing equity; E is the static tradeoff hypothesis; F through K are responses taken from Donaldson's (1965) study. According to Donaldson, K is the proper choice. L and M are two variations on the same theme — both go against a strict tradeoff or pecking order

TABLE III
Responses to Question 8

8. 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?

A.	Small corporation	Scott & Johnson
no target	2.7%	
depends	1.8	
0—10%	12.7	
11—20%	1.8	
		0—20% 8%
21—30%	14.5	21—25% 9%
		26—30% 29%
31—40%	10.9	31—35% 22%
		36—40% 13%
41—50%	15.5	41—45% 2%
		46—50% 5%
51—60%	2.7	> 50% 3%
61—70%	1.8	no response 9%
more than 70%	3.6	
NA/no debt	13.6	

Total written responses = 81.6%
No response 18.2%

B. Results of those responding with a definite numerical answer.

	Small corporation	Large corporation
0—20%	36.5%	8.9%
21—30%	18.8%	41.7%
31—40%	14.1%	38.1%
41—50%	20.0%	7.3%
over 50%	10.6%	4.2%

Chi-square test statistic = 145.13
Level of significance: 0.5%

Note: Percentages may not add to 100.0% due to rounding.

interpretation in favor of financing according to stock market and interest rate cycles. Jalilvand and Harris (1984) and Myers (1984) mention these possibilities.

Most small corporation respondents checked more than one response, indicating capital structure policy involves more than just a simple rule of thumb. A total of 261 responses were checked by the small corporation financial officers; percentages in Table IV are based on the total number of responses.

Both the *Fortune* 500 and small corporation surveys rated response A (pecking order) the highest. Secondary considerations for small corporations included market response (B) and market timing (L, M). For large firms, important secondary considerations were staying close to a debt/equity target (F), market response (B), bond rating (I), and timing (L, M). A chi-square test for goodness of fit between the small and large firm responses is not possible, as the requirement that all cells have at least five observations is not met. However, if the choices are ranked based on the percentage of respondents indicating that choice, a Spearman rho test can be computed on the differences in the rankings between the small and large corporations. The value of the Spearman rho coefficient is 0.6209. With eleven degrees of freedom, this corresponds to a t-statistic value of 2.627, which is significantly different from zero at the 2.5% level of significance. This implies that overall, despite some similarities noted above, the large and small corporation respondents do have different financing philosophies.

Just how important are bankruptcy cost considerations in capital structure decisions? If they are as important as much of the finance literature (and textbooks) purport them to be, firms should have some ex-ante perceptions of the level of these costs. The ex-ante perceptions should then (theoretically) be used to balance the present value of expected bankruptcy costs with the present value of the interest tax shield on debt to determine the optimal capital structure. This is the crux of the static tradeoff hypothesis (Myers, 1984). Question 10 (Norton's Question 26) asks survey respondents for their estimate of bankruptcy costs, expressed as a percentage of total assets.

As seen in Table V, small firm and large firm responses were similar. Over 50% of the respondents to each survey indicated that they could not estimate bankruptcy costs, they were not applicable, or they were not a concern to the firm. As Part B of Table V indicates, of those indicating a response, (i.e., excluding those who did not answer the question), almost three-quarters of the small

TABLE IV

Comparisons of responses from questions asked on Norton's 1984 *Fortune* 500 survey and the small corporation survey. Most firms responded with more than one choice; percentages are based on the total number of responses in each study. Responses to Question 9

9. Which of the following describes the underlying firm philosophy in making debt and equity decisions? (Check all that apply.)	
a. Raise/use money in the following order: (1) use internal funds as much as possible (retained earnings, decrease cash, marketable securities); (2) issue short-term debt, long-term debt; (3) issue convertible securities; (4) issue common stock	31.8% 25.6%
b. Consider market response to new issues of debt and equity	16.9% 13.6%
c. Alternate between debt and equity issues	4.6% 1.7%
d. Choice depends on the existence of any differences in firm value between management and the marketplace	7.7% 2.7%
e. Try to balance present value of the tax shield of debt with the present value of possible bankruptcy costs	0.0% 1.3%
f. Issue debt and equity to stay close to a target debt-equity ratio	6.1% 20.3%
g. Use no long-term debt	5.4% 0.7%
h. Borrow the maximum available	1.9% 1.0%
i. Borrow the maximum available with an "A" (or AAA, AA, etc.) rating	1.9% 10.0%
j. Maintain a given coverage ratio	5.0% 8.0%
k. Careful firm evaluation of cash flow variation and bankruptcy given financing choices	1.1% 2.0%
l. Issue debt when interest rates are low, issue stock when prices are high, to finance capital budgeting projects	10.0% 8.3%
m. Issue debt when interest rates are low, issue stock when prices are high, even though present needs are not great in order to build up a long-term funds "cushion"	7.7% 5.0%

Note: Percentages may not add up to 100.0% due to rounding.
The small corporation responses are listed first; Norton's *Fortune* 500 responses are listed beneath.

corporation sample and two-thirds of the large corporation sample wrote that bankruptcy costs were unknown, not a concern, or not applicable to their firms. Given the higher proclivity for small business to enter into bankruptcy, one might think that small business leaders would have done a priori thinking about the possibility of bankruptcy and adjusted their capital structures accordingly. But the survey respondents seem to indicate, on the whole, that bankruptcy cost considerations are not an important input in capital structure decisions.

Statement 11 (Table VI) corresponds to Norton's Statement 4. Many researchers (Chen and Kim, 1979; Grossman and Hart, 1982; Myers and Majluf, 1984; Pettit and Singer, 1985) describe the decision to issue debt or equity as signalling information about the firm from knowledgeable managers to unknowledgeable investors. As far as common stock issues are concerned, the bottom line of the signalling hypothesis is that a new stock issue is a negative signal to investors. As new equity issues will dilute the benefit of future investment opportunities, a new equity issue is interpreted to mean that future investment opportunities are not expected (by management) to be very promising. Thus Statement 11 asks, contrary to theory, if issuing common stock sends a positive or favorable signal to the financial markets regarding the firm's future. If the above discussion

TABLE V
Responses to Question 10

10. In case of firm bankruptcy, roughly estimate total bankruptcy costs as a percentage of assets.

A.

	Small corporation	Norton's large corporation responses	
Unknown/NA/ not a consideration	59.1%		51.0%
1—9%	5.5	0—5%	5.1%
		6—10%	9.2%
10%	0.9	11—20%	3.1%
15%	1.8		
20%	4.5	21—30%	4.1%
25%	1.8		
30%	3.6	31—40%	2.0%
35%	0.9	>40%	2.0%
60%	0.9		
More than 95%	1.8		
No response = 19.1%			23.5%

B. Responses of those survey participants listing a definite answer.

	Small corporation	Large corporation
Unknown/not a consideration	73.0%	66.7%
0—10%	7.9%	18.7%
11—20%	7.9%	4.1%
More than 20%	11.1%	10.6%

Note: Percentages may not add to 100.0% due to rounding.

regarding signalling theory is correct, respondents should disagree with the statement. Both the small and large corporation surveys had many more respondents indicating equity issues sent a favorable signal rather than an unfavorable signal,[3] thus contradicting theory. Small corporation respondents were more uncertain as to the effect of a stock issue sending a favorable signal, possibly due to their lack of experience in issuing equity over time. Due to the large neutral response by small corporations, the large firm average response was lower (i.e., in greater agreement with the statement) than the small firm average at the 2.5% level of significance. Thus, relative to the small corporations, the responding *Fortune* 500 firms were more confident of their belief that an equity issue sends favorable signals regarding future firm prospects.

Statement 12 (Table VI) corresponds to Norton's Statement 5. Several researchers (Grossman and Hart, 1982; Seitz, 1982) discuss that the potential for bankruptcy compels managers to act in the best interests of shareholders and therefore reduces agency costs. The labor market for managers will severely punish those who do not lead their firms well and who do not maximize shareholder wealth. Statement 12 attempts to discover if the labor market is a viable constraining force on managers. If respondents support the view that the managerial labor market reduces shareholder agency costs, respondents should disagree with Statement 12. If, however, managers believe they can find comparable positions elsewhere, the labor market would not be acting as a force, in the Grossman and Hart framework, to reduce agency costs.

Small corporation respondents were more optimistic than the *Fortune* 500 respondents about the possibility of finding comparable managerial positions elsewhere in case of bankruptcy. This implies Grossman and Hart's ideas may apply for the large corporation, but may have little bearing on agency costs for smaller corporations. The difference between the average responses of small and large firms is significantly different at the 5% level.

Statements 13, 14, 15, and 20 (Table VI) correspond to Norton's Statements 7, 6, 8, and 19, respectively. Agency costs are thought to be a major hindrance to firms as they seek external financing (Barnea, Haugen, and Senbet, 1981; Jensen and Meckling, 1976; McConnell and Pettit, 1984). Private placements are believed by some (Campbell, 1979; Campbell and Kracaw, 1980; Pettit and Singer, 1985) to be a means to lower asymmetric information and agency costs. By negotiating directly with interested investors, a better exchange of information can occur. Investors can personally meet with managers, learn

TABLE VI
Responses to Statements 11 through 24

	Agreement 1	2	3	Disagreement 4	5	No. of no response/ NA/don't know	Mean	Std. Dev.
** 11. The firm believes a decision to issue common stock sends a favorable signal to the financial market place concerning future long-term firm prospects.	45.8%		41.1%	13.1%		2	2.55	0.93
	(62.2)		(28.6)	(9.2)		(0)	(2.29)	(0.91)
*** 12. If bankruptcy occurred, the chief officers would, in general, easily find comparable positions elsewhere.	42.5		26.4	31.1		3	2.89	1.12
	(30.9)		(25.5)	(43.6)		(4)	(3.18)	(1.07)
13. 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	3.04	1.06
	(34.4)		(29.2)	(36.5)		(2)	(3.13)	(1.23)
14. The firm uses private placement of stocks/ bonds for at least 75% of all new long-term issues.	18.7		8.8	72.5		13	4.09	1.26
	(15.5)		(4.1)	(80.4)		(1)	(4.19)	(1.17)
* 15. The firm would suggest restrictive convenants to a doubtful lender in hopes of convincing the lender to allow the firm to borrow.	20.4		24.3	55.3		6	3.64	1.26
	(10.6)		(8.5)	(80.9)		(4)	(4.15)	(1.07)
* 16. 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	42.3		12	3.33	1.12
	(10.8)		(24.7)	(64.5)		(5)	(3.80)	(0.95)
* 17. Debt is mainly used as a strategic tool to help lower costs.	19.1%		22.9%	58.1%		4	3.54	1.06
	(42.7)		(21.9)	(35.4)		(2)	(2.92)	(1.00)
18. 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		9	2.74	1.07
	(58.8)		(17.5)	(23.7)		(1)	(2.55)	(1.17)
19. 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		14	2.88	1.14
	(49.5)		(19.6)	(30.9)		(1)	(2.75)	(1.09)
* 20. Private placements offer the firm less restrictive convenants than public offerings.	33.3		12.1	54.5		10	3.37	1.31
	(13.3)		(17.4)	(69.4)		(0)	(3.89)	(1.01)
* 21. 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		4	2.39	1.20
	(78.4)		(14.4)	(7.2)		(1)	(1.99)	(0.86)

Table VI (Continued)

	Agreement 1	2	3	Disagreement 4	5	No. of no response/ NA/don't know	Mean	Std. Dev.
* 22. The decision to issue debt or equity is affected by the existence of tax-loss carry forwards.	24.7		27.8	47.4		12	3.42	1.26
	(42.3)		(36.1)	(21.7)		(1)	(2.78)	(1.03)
* 23. The firm uses debt to "play the yield curve" to get the cheapest financing possible.	28.4		27.4	44.2		14	3.24	1.15
	(55.7)		(28.9)	(15.5)		(1)	(2.53)	(0.90)
24. 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		17	3.18	1.19
	(26.8)		(17.5)	(55.7)		(1)	(3.34)	(1.12)

Note: Small corporation responses are listed on top; Norton's *Fortune* 500 responses are in parentheses. An asterisk (*) prior to the statement number denotes a statistically significant difference between the sample means at a 0.5% level of significance. A (**) denotes a significance level of 2.5%; a (***) denotes a 5% significance level.

non-public information about the firm, and gain insight into management quality and ability. Therefore, if reducing agency costs is a major concern to management, private placements should be frequently used to facilitate information flows without the release of sensitive information to the public. Additionally, Jensen and Meckling (1976, p. 306) assert "firms would themselves be led to suggest the imposition" of restrictive covenants in an effort to lower agency costs and financing costs. However, as seen below, the responses of small and large corporation CFOs cast doubt on either (1) the ability of private placements to reduce agency costs or (2) the importance of agency costs.

Statement 13 seeks insight on the potential for information exchange in a private placement. As the responses indicate, both large and small corporations had similar beliefs. Contrary to the theory (Campbell, 1979; Pettit and Singer, 1985) discussed above, both samples were neutral in their beliefs concerning the ability to exchange information in a private placement.

Statement 14 is for information purposes, to gauge the popularity and prevalence of private placements among the samples. The responses indicate, despite the alleged ability of private placements to reduce agency costs and facilitate information exchange, neither the large nor small corporations in the samples make great use of private placements for long-term financing needs.

Statement 15 is a test of the Jensen and Meckling hypothesis. As seen in the responses, both sets of financial officers feel strongly against suggesting restrictive covenants to lenders. But large corporations were more adamant; their average response was in stronger disagreement with the Jensen and Meckling hypothesis than the small corporation response at the 0.5% level of significance.

Due to the potential for greater information flow and agency cost reduction in private placements (Campbell and Kracaw, 1980; Pettit and Singer, 1985; and Peterson, Shulman, and Darroch, 1987), less restrictive covenants may exist in private placements than in public offerings. However, responses to Question 20 by both the small and large corporation officers disagree with this theory. This implies, even if private placements do result in greater information flows, covenants are at least as restrictive as those in public offerings. The *Fortune* 500 firms disagree more strongly than small corporations with the statement, at the 0.5% level of significance.

To summarize these questions dealing with private placements, responses indicate that private placements offer little advantage over public offerings. Private placements do not appear to be a

means to improve information flows or reduce agency costs. Or, as discussed above, the responses may indicate that agency costs are not a major concern or hindrance to the large and small corporations surveyed.

Statement 16 (Table VI) corresponds to Norton's Statement 10. The statement is hypothetical, but it strikes at the heart of agency cost theory. If the firm could guarantee potential bondholders that their investment was safe, agency costs would be nil (Jensen and Meckling, 1976, pp. 334—342). The firm's ability to issue debt is hindered by agency costs. Therefore, the use of insurance will reduce agency costs and should increase the firms' relative use of debt (see, e.g., Pettit and Singer, 1985; Peterson, Shulman, and Darroch, 1987). Thus, if firms could issue insured debt at the same cost as uninsured debt, firms should be willing to increase their use of debt. Agreement with Statement 16 implies the respondent feels that agency costs play a major role in determining debt levels. However, both small and large corporations responded negatively to this question, but more so for the large firms. The response by the larger corporations was significantly in greater disagreement with Statement 16 than the small firms' response at the 0.5% level of significance. This response implies that agency costs are not a major concern or hindrance to the responding firms.

In the Modigliani and Miller (1958) world with perfect markets and tax-deductible interest, greater debt use results in lower financing costs. Henderson (1984) stresses debt can be and should be used as a competitive weapon. Increased use of debt relative to equity financing, he argues, will lead to lower financing costs, higher profit margins, and faster growth. Statement 17 (Table VI) corresponds to Norton's Statement 14; the question gives insight into how small and large corporations view debt as a competitive tool. The responses indicate a difference exists between the motivations of small and large firms. Among large firms, more agreed than disagreed with the statement that debt is mainly used as a strategic tool to help lower costs, implying support for the Modigliani and Miller and Henderson views. The opposite was true for smaller firms, who strongly disagreed with the idea of using debt as a means to lower financing costs. The average responses of the two groups were significantly different at the 0.5% level.

Both Chen and Kim (1979) and Miller (1977) discuss a financial clientele effect. Firms choose a financing strategy which attracts certain types of investors. But, as "one clientele is as good as the other" (Miller, 1977, p. 269), the value of the firm is not related to its capital structure, in equilibrium. However, should the firm not properly serve its clientele, they will desert the firm, and the firm's common stock will fall in price as they sell their shares. If this view is true, it stands to reason that firms would consider their clienteles in any financing decision. Indeed, to help lower financing costs, firms should want to package new securities so they will be attractive to their clientele.

Statements 18, 23, and 24 (Table VI) correspond to Norton's Statements 15, 23, and 24, respectively; their purpose is to seek a clientele effect. The first step in serving a clientele is to take into account the investors' view when making financial decisions. Statement 18 discovers that, within the samples, both large and small corporations consider the investor's viewpoint when making certain financial decisions. Large firms tend to be more in agreement with this statement than smaller firms. The difference in the average response, however, is not statistically significant at the 10% level.

But the responses to Statement 18 may also occur if management follows the goal of maximizing shareholder wealth. Perhaps a better picture of the role of financial clienteles is seen in Statement 24. This statement seeks information on whether new issues are targeted to "clienteles" or specific market segments as opposed to the capital markets as a whole. Both small and large corporations tended to disagree with Statement 24; they do not target new issues to specific groups or clienteles. No significant difference exists in the mean responses.

Statement 23 can also be used to test the clientele effect. If debt issues are targeted to a clientele, maturities should focus on the market segment of interest to the clientele. This implies the firm should not find itself playing the yield curve to get attractive financing rates over the long run (such a strategy is described in many finance textbooks (e.g., Block and Hirt, 1981, p. 153) and has some empirical validity (Jalilvand and Harris, 1984).

The *Fortune* 500 sample generally agreed with Statement 23; respondents played the yield curve

to seek lower financing costs, implying no clientele effect. The small corporation sample generally disagreed with the statement, perhaps implying a clientele effect for small corporations. However, rather than being interpreted in favor of the clientele effect, the small firm response may be due to their greater preference for low or no debt financing (Table III) and their preference for internal and bank financing (Day, Stoll, and Whaley, 1985). If a firm desires as little debt as possible, playing the yield curve will not be a strategy used by the firm. The difference in the average responses of the large and small firm samples is significant at the 0.5% level.

Barnea, Haugen, and Senbet (1981) discuss how call provisions on bonds can be used to reduce agency costs. Robbins and Schatzberg (1986) theorize that callable bonds can send a positive signal regarding a firm's prospects in the presence of asymmetric information. Conventional wisdom is that call provisions are included in bond indentures to allow the firm to take advantage of future declines in interest rates. Statement 19 (Table VI) corresponds to Norton's Statement 18; its purpose is to test these viewpoints. If the bonds were not issued *solely* to take advantage of an expected interest rate decline, respondents should disagree with the statement. Many of the smaller firms had not issued callable bonds. But of those responding to the question, both small and large corporations agreed with the statement, lending evidence to the view of conventional wisdom rather than signalling theory. No significant statistical difference exists in the average response between the small and large firm samples.

Questions 21 and 22 (Table VI) correspond to Norton's Questions 20 and 22, respectively. Both questions deal with the effect of taxes on capital structure decisions. The static tradeoff hypothesis states the optimal capital structure occurs when the present value of the tax shield from tax-deductible interest equals the present value of possible bankruptcy costs (Myers, 1984). Miller (1977), on the other hand, argues that the value of the firm does not depend on capital structure or tax shields; he references empirical studies which indicate that tax rates have little relationship with capital structure, both in the U. S. and abroad. But introductory finance texts all inform us that, due to the tax deductibility of interest, debt is the lowest cost source of financing. Tax rate changes will affect the relative cost of debt and equity. And as relative costs change, so should relative usage (Henderson, 1984; Taub, 1975). If dividends were to become deductible, common stock would become a cheaper financing source and should therefore be more frequently used.

Statement 21 is hypothetical, of course. But given the dilution effects of additional equity on the owners' stake in the small corporation, managers may hesitate to increase equity financing in this scenario. Nonetheless, the small corporations responded affirmatively to Statement 21; the relative use of equity financing would rise if common and preferred stock dividends were to become tax-deductible. The *Fortune* 500 sample also would increase the relative use of equity; at the 0.5% level of significance, the large corporations more strongly agreed with the statement.

If a firm has tax loss carryforwards, the tax shield of the interest deduction becomes less important. Thus Statement 22 asks if capital structure decisions are affected by tax loss carryforwards. If tax influences are important in determining capital structure, firms should be in agreement with Statement 22. Large firms indicated tax loss carryforwards did have an effect on the debt/equity decision; small firms, however, indicated otherwise.[4] The difference in the average response of these two groups is significant at the 0.5% level.

IV. Conclusion

Surveys can be an important research tool in finance. Surveys can be constructed to test theories that are difficult to test empirically using publicly available data. This paper has reported and discussed the use of a capital structure survey that was sent to 405 small corporations. The survey was constructed by using questions that had previously appeared in published surveys on capital structure. Thus potential problems with proper survey design are mitigated. This strategy also allows us to compare responses and identify differences and similarities in the factors affecting small and large corporation capital structure. 27% of the surveys were returned, giving insight into the beliefs and motivations of 110 small companies. As little empirical work has been done on small firm capital structure (compared to the

volumes written on large corporations), the results of this survey are important for the information they contain and the evidence they present for the various viewpoints of capital structure theory. The "largest" small firm receiving a survey in this study had 1986 sales of under $200 million, far below the size of the smallest *Fortune* 500 firm.

As questions on this survey have previously appeared in capital structure surveys of large corporations, large and small firm responses were compared. The questions that appeared in Scott and Johnson's (1982) survey dealt with who is important in making capital structure decisions, and if the cost of capital curve is U-shaped. By comparing Scott and Johnson's (1982) *Fortune* 1000 survey responses to those in our sample of small corporations, we see both samples agree that the cost of capital curve is U-shaped, although a greater proportion of the large firms' financial managers have this belief. In terms of setting capital structure policy, both large and small firms concur that management is the most influential. Secondary influences differ slightly, with large firms seeking input from investment bankers and industry standards. Small firms seek advice from commercial bankers and industry standards. Smaller firms have less use for target debt ratios than larger firms. Among those that do have a target ratio, the dispersion of targets is greater for the small corporations than for the large corporations.

By comparing the small firm survey results with those of Norton's (1989) *Fortune* 500 survey, we see both small and large firms follow a "pecking order" in making financing decisions and both attempt to time new issues at attractive interest rates or stock prices. Larger firms, however, are more concerned than smaller firms with maintaining a given bond rating or debt ratio over time. Both sets of firms have little use for or belief in the importance of ex-ante bankruptcy cost expectations.

Statistically significant and opposing views were received on statements reflecting the managerial labor market, the strategic use of debt, the importance of tax loss carryforwards, and playing the yield curve.

In case of bankruptcy, officers of large corporations feel it will be difficult for them to find comparable positions elsewhere; small firm managers, on average, believed they could find comparable jobs. According to Grossman and Hart (1982), this implies the managerial labor market may act to reduce agency costs for large firms, but not for small corporations.

In line with Modigliani and Miller (1958) and Henderson (1984), larger firms are willing to use debt as a tool to help lower costs. Small firms are not, due perhaps in part to the desire of many of the small firms to use no debt at all due to management preference.

Larger firms are willing to play the yield curve to lower debt financing costs; smaller firms, again possibly due to an aversion to debt, are generally unwilling to play the yield curve.

The decision by large firms to issue debt or equity is affected by the existence of tax loss carryforwards; not so for the smaller corporations. The view of the small firms on this point could possibly be due once again to the aversion of some of them to any debt, as well as to their overall profitability and recent inexperience with tax loss carryforwards. Profitability standards must be met to be included in many of the successful small business lists, from which we obtained the firms included in the small corporation survey.

It is interesting to note the overlapping areas of agreement between the small and large corporation. Both sets of firms believe management is most influential in setting capital structure; in line with the pecking order hypothesis, both prefer internal to external financing; contrary to the static tradeoff hypothesis, both sets of firms have little need for bankruptcy cost estimates; both believe in a market penalty for excessive debt use; contrary to agency cost theory and asymmetric information theory, both samples have a generally dim view of private placements as an attractive financing source. By the firms' responses to various questions, agency costs, bankruptcy costs, and information asymmetries appear to have very little or no impact on capital structure in both the small and large corporation samples.

Acknowledgements

The author gratefully acknowledges the financial support given to this project by the New York University Center for Entrepreneurial Studies.

The helpful comments of an anonymous referee and one of the editors is also acknowledged.

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 are 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 from the Scott and Johnson (1982) and Norton (1989) surveys were deleted 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] Perhaps many of the large and small firm respondents would find themselves in agreement with the small corporation CFO who wrote next to this question, "Can't float without a good story."

[4] The small corporation response may be due to the past success of the small corporations in the sample. Their appearance on a successful small business list denotes a minimum level of growth and profitability over the past 3—5 years. Another explanation would be the aversion to debt shown by many of the small firm respondents (Table III). If management has a strong aversion to debt, carryforwards may not lead to a further decrease in the use of debt.

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