# Preferred Stock Financing: A Survey of Trends in the 1980's

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**Abstract**

*Following major structural changes in the preferred stock market, a survey was undertaken to determine whether reasons for issuing preferred stock had changed and for what purposes it is now issued. Differences in uses between traditional and new preferred stock are documented. No support is found for the common generalization that convertible preferred stock is issued primarily for merger and acquisition activities. Reasons for issuing preferred stock vary by industry and whether the firm is expanding or restructuring.*

## Introduction

In recent years, two major structural changes have occurred in the market for preferred stock. First, beginning in 1982 a number of new types of preferred stock have been issued. These securities are characterized by variable dividends and include variable-rate, adjustable-rate, dutch auction rate, and money market preferred stock.(1) Second, there has been a remarkable shift in the proportions of preferred stock supplied to the capital markets by various industry groups. A search of the National Accounting Automated Research System (NAARS) database reveals that a total of 643 firms made 892 issues of preferred stock during the 1981-1987 period.(2) Of these 815 issues, 59% were made by industrials, 31% by financials, and 10% by utilities. This stands in sharp contrast to previous periods in which utilities were the dominant supplier of preferred stock.(3)

These new developments raise several interesting questions. What corporate functions are financed by the funds raised from variable-dividend preferred stock? Do these functions differ from those financed by fixed-dividend preferred stock? Have the reasons why various types of firms issue preferred stock changed from those identified by earlier studies?

The purpose of this paper is to shed some light on these questions. Information not typically disclosed in firms' published reports was obtained using a questionnaire. Analyses of the responses of financial executives are presented in the subsequent sections.

## Research Design, Sample Selection, and Respondent Characteristics

Firms issuing preferred stock during the period 1981-1987 were identified by searching the National Accounting Automated Research System (NAARS) database. In June, 1988, questionnaires were mailed to the highest ranking financial officer in each of 200 firms, randomly selected from the NAARS population. The questionnaire included (i) a listing of the types of preferred stock issued since 1980; (ii) statements designed to profile the uses to which the funds were put; (iii) statements with a five-point numerical scale designed to allow the respondents to indicate the degree of importance of a number of factors in the decision to issue preferred stock rather than debt or common stock; and (iv) the title of the respondent.(4) In July, 1988, a second request was sent to firms which had not responded. A total of 99 usable responses were received, resulting in a response rate of 49%.

## Survey Results

### *What the Funds Were Used For*

Survey participants were asked to indicate how they used the funds raised by issuing preferred stock. Pre-selected responses included two broad categories: (1) acquisition of assets (long term assets, mergers or acquisitions, and working capital); and (2) restructuring of the balance sheet (reduction of long term debt, reduction of short term debt, repurchase of common, and redemption of preferred). Analysis of responses is based on the number of issuances instead of the number of respondent firms.(5)

Exhibit 1 provides information regarding the NAARS population, the target sample, and the respondent firms. In general, the NAARS population and the random sample to which questionnaires were sent have approximately the same characteristics in terms of the proportion of firms in each industry, number of issues, and dollar amounts of issues. A moderate response bias exists, to the extent that

Exhibit 1. Industry Composition and Amounts of Preferred Stock (all types combined) Issued by the NAARS Population, the Survey Target Sample, and the Sample of Survey Respondents

| | No. of Firms | | No. of Issues | | Dollar Amount (in millions) | |
|---|---|---|---|---|---|---|
| **Panel A. NAARS Population[a]** | | | | | | |
| Utilities | 61 | 10% | 95 | 10% | $ 5,803.9 | 12% |
| Financials | 182 | 28% | 264 | 30% | 18,831.0 | 40% |
| Industrials | 400 | 62% | 533 | 60% | 22,750.6 | 48% |
| Total | 643 | 100% | 892 | 100% | 47,385.5 | 100% |
| **Panel B. Survey Target Sample[b]** | | | | | | |
| Utilities | 12 | 6% | 23 | 7% | 1,170.8 | 5% |
| Financials | 71 | 35% | 118 | 36% | 8,586.4 | 37% |
| Industrials | 117 | 59% | 188 | 57% | 13,199.2 | 58% |
| Total | 200 | 100% | 329 | 100% | 22,956.4 | 100% |
| **Panel C. Survey Response Sample[c]** | | | | | | |
| Utilities | 7 | 7% | 12 | 7% | 473.8 | 5% |
| Financials | 45 | 45% | 75 | 45% | 6,392.2 | 66% |
| Industrials | 47 | 48% | 78 | 48% | 2,765.4 | 29% |
| Total | 99 | 100% | 165 | 100% | 9,631.4 | 100% |

[a] Companies in the NAARS database issuing preferred stock from 1981-1987.

[b] The 200 firms randomly selected from the NAARS population.

[c] The firms in the target sample providing usable responses.

industrials are under-represented and financials are over-represented among the responding firms.

Exhibit 2 is a summary, by industry, of the uses of all types of preferred taken together. Note that the majority of firms in each industry issued preferred stock to acquire assets. Firms acquire assets for one of two purposes: to expand the asset base, to replace worn out assets, or both. Mikkelson and Partch (1986) find empirical evidence that financings of capital expenditures by industrial firms lead, on average, to a large relative change in total assets. In the case of financials, preferred stock often qualifies as regulatory capital and, within regulatory limitations, can substitute for common stock. Normally, the primary reason for increasing regulatory capital would be to expand the asset base.(6) It appears, therefore, that for each industry group the majority of preferred stock financings are used to support corporate growth.

The utilities showed a preference for acquiring long term assets (43%) or for reducing long term debt (39%). None of the utilities had used preferred for takeover purposes.

Financials and industrials made similar use of preferred stock in two ways. First, neither made significant use of funds to repurchase common stock or redeem previously issued preferred stock. Second, the most prevalent use of funds for both groups was to facilitate mergers and acquisitions (37% for industrials and 39% for financials). There were two major differences in the way financials and industrials made use of preferred stock. First, industrials were more than three times

Exhibit 2. Uses of Funds by Industry.

| | Response Percentages[a] | | | |
|---|---|---|---|---|
| | Industrials (45) | Utilities (7) | Financials (43) | Total (95) |
| Acquisition of Assets | | | | |
| Long term assets | 12 | 43 | 26 | 22 |
| Mergers or Acq. | 37 | 0 | 39 | 35 |
| Working capital | 17 | 9 | 24 | 20 |
| | 66 | 52 | 89 | 77 |
| Financial Restructuring | | | | |
| Reduce s.t. debt | 10 | 0 | 1 | 4 |
| Reduce l.t. debt | 25 | 39 | 6 | 16 |
| Repurchase common | 0 | 0 | 3 | 2 |
| Redeem preferred | 0 | 9 | 1 | 1 |
| | 35 | 48 | 11 | 23 |
| | 100 | 100 | 100 | 100 |

[a] Number of firms providing useable responses in parentheses, percentages may not total 100 due to rounding.

as likely as financials to use funds for restructuring the balance sheet (35% versus 11%). Specifically, industrials used over four times as many issues for reducing long term debt (25% versus 6%), and ten times as many issues for reducing short term debt (10% versus 1%). A potential explanation is that long term debt is simply more prevalent in the balance sheets of industrials. Financial institutions generally favor the use of short term liabilities such as deposits and central bank borrowings over the use of long term debt. Moreover, preferred stock of most types would generally not be viewed as a reasonable substitute for deposits or central bank borrowings.(7)

Concurrent with the use of a lower percentage of preferred for restructuring activities, financials used a higher percentage of issues (89% versus 66%) to acquire assets (including mergers and acquisitions). For industrials, the restructuring activity was overwhelmingly in the direction of reducing leverage; that is, preferred stock was used to reduce debt rather than to repurchase common.

Exhibit 3 presents uses of funds by type of preferred stock, for all industries taken together.(8) In Exhibit 3, we have partitioned variable dividend preferred into auction rate and adjustable rate in order to identify any dissimilarity in usage associated with differences in duration. There are some interesting variations in usage. For example, the predominant use of convertible, straight redeemable, and adjustable rate preferred was to facilitate mergers and acquisitions, while the predominant use of straight perpetual preferred was to acquire long term assets. Of greatest interest, however, is the fact that there is no single use to which the majority of preferred stock proceeds were applied. This is true both for each type of preferred stock and for all types taken together. The most popular use, to facilitate mergers and acquisitions, accounts for only 36% of the total usage of preferred funds. It is interesting to note that preferred stock was used by the survey respondents to finance the same broad spectrum of corporate activities as any other type of corporate security.

As a whole, we fail to find support for the common generalization that convertible preferred stock is issued primarily to finance mergers.(9) Exhibit 3 shows that all types of preferred stock are used to finance mergers. Furthermore, while 36 percent of the combined total issues were used to facilitate mergers and acquisitions, only 31 percent of the convertible preferred was used for that purpose.

Exhibit 3. Uses of Funds by Type of Preferred.

| | Response Percentages[a] | | | | | |
|---|---|---|---|---|---|---|
| | Convert (48) | Straight(R) (22) | Straight(P) (11) | Adjust (24) | Auction (6) | Total (111) |
| Acquisition of Assets: | | | | | | |
| Long term assets | 18 | 18 | 46 | 25 | 38 | 23 |
| Mergers or Acq. | 31 | 49 | 36 | 38 | 17 | 36 |
| Working capital | 21 | 10 | 9 | 28 | 13 | 19 |
| | 69 | 77 | 91 | 91 | 68 | 78 |
| Restructuring: | | | | | | |
| Reduce s.t. debt | 7 | 9 | 0 | 0 | 8 | 5 |
| Reduce l.t. debt | 23 | 14 | 9 | 9 | 7 | 16 |
| Repurchase common | 0[b] | 0 | 0 | 0 | 0 | 0[c] |
| Redeem preferred | 0 | 0 | 0 | 0 | 16 | 1 |
| | 31 | 23 | 9 | 9 | 32 | 22 |
| | 100 | 100 | 100 | 100 | 100 | 100 |

[a] Number of issues in parentheses.
[b] Unrounded percentage is 0.4375
[c] Unrounded percentage is 0.189

*Why Preferred Stock Rather than Bonds or Common Stock?*

This issue stands at the heart of the capital structure "puzzle". Survey participants were asked to indicate the importance of 15 factors in the decision to issue preferred stock rather than either debt or common stock. Factors were ranked by order of importance from 5 (most important) to 1 (least important), or were marked not relevant. Mean rankings could range between 5 (highest importance) and 0 (not relevant). For the purpose of reporting these rankings, the population has been partitioned into those firms using preferred to acquire assets (expanding firms) and those using preferred to restructure the balance sheet (restructuring firms). These rankings are presented in Exhibits 4 and 5, respectively. Again, we further partition on the three industry groups.

Mean response rankings for the expanding firms are listed in Exhibit 4 in order of their overall importance in the total (aggregated) rankings. The order of importance for each of the industry sub-groupings is shown in parentheses. Exhibit 4 highlights the similarities and differences between the industry groups for expanding firms. Consider the rankings of the industrials and financials. We comment first on an area of agreement -- the group of factors which, overall, have the least importance. For both industries these factors are: the potential costs of renegotiating debt covenants, protection against takeover attempts, the avoidance of technical default on existing debt, the current ratio, and the interest coverage ratio. Although there are some industry differences in the ranking of these factors, they are small. Similar to Elsaid's findings (1969), both groups also agree on the importance of market timing in the decision to issue preferred rather than debt or equity. It thus appears that managers time issuance of preferred stock. Whether they succeed or not is an empirical question beyond the scope of the current study.

Exhibit 4. Expanding Firms: Mean Response Rankings of Factors Affecting the Decision To Issue Preferred Stock Rather than Debt or Common Stock. Most important = 5.

| | Industrials | Utilities | Financials | Total |
|---|---|---|---|---|
| To maintain or improve the debt/equity ratio | 3.47 (1) | 4.67 (1) | 2.58 (4) | 3.00 (1) |
| To facilitate mergers and acquisitions | 3.00 (4) | 0.00 (13) | 3.06 (1) | 2.93 (2) |
| Market timing: market more favorable for issuing preferred | 2.90 (5) | 3.33 (5) | 2.85 (3) | 2.89 (3) |
| To maintain or improve minimum net worth | 2.21 (9) | 1.50 (7) | 2.92 (2) | 2.64 (4) |
| To prevent dilution of common equity | 2.43 (7) | 4.00 (3) | 2.54 (5) | 2.55 (5) |
| To preserve debt capacity for future investment opportunities | 3.16 (3) | 4.33 (2) | 2.00 (6) | 2.51 (6) |
| To improve the borrowing base for future debt financing | 3.26 (2) | 4.00 (3) | 1.80 (7) | 2.40 (7) |
| To maintain or improve working capital | 2.61 (6) | 1.50 (7) | 1.39 (8) | 1.81 (8) |
| To maintain or improve the debt/asset ratio | 2.28 (8) | 1.00 (11) | 1.39 (8) | 1.71 (9) |
| Lower underwriting costs (compared to common) | 1.50 (12) | 1.00 (11) | 1.15 (10) | 1.27 (10) |
| To maintain or improve the interest coverage ratio | 1.79 (11) | 3.00 (6) | 0.76 (11) | 1.24 (11) |
| To maintain or improve the current ratio | 1.84 (10) | 1.50 (7) | 0.76 (11) | 1.17 (12) |
| To minimize the possibility of technical default on exist. debt | 1.11 (13) | 1.50 (7) | 0.30 (15) | 0.62 (13) |
| To protect against takeover attempts | 0.61 (15) | 0.00 (13) | 0.45 (13) | 0.50 (14) |
| To avoid the costs of renegotiating debt covenants | 0.70 (14) | 0.00 (13) | 0.41 (14) | 0.50 (14) |

Exhibit 5. Restructuring Firms: Mean Response Rankings of Factors Affecting the Decision to Issue Preferred Stock Rather than Debt or Common Stock. Most important = 5.

| | Industrials | Utilities | Financials | Total |
|---|---|---|---|---|
| To preserve debt capacity for future investment opportunities | 3.17 (2) | 5.00 (1) | 2.33 (4) | 3.13 (1) |
| To maintain or improve the debt/equity ratio | 3.40 (1) | 3.00 (4) | 2.00 (8) | 3.07 (2) |
| To improve the borrowing base for future debt financing | 3.15 (3) | 3.00 (4) | 2.33 (4) | 3.00 (3) |
| To maintain or improve minimum net worth | 2.62 (5) | 2.00 (8) | 2.33 (4) | 2.53 (4) |
| To minimize the possibility of technical default on exist. debt | 3.15 (3) | 0.00 (13) | 0.33 (12) | 2.47 (5) |
| To maintain or improve the debt/asset ratio | 2.08 (8) | 4.00 (3) | 2.67 (2) | 2.31 (6) |
| To facilitate mergers and acquisitions | 1.86 (9) | 3.00 (4) | 2.33 (4) | 2.00 (7) |
| Market timing: market more favorable for issuing preferred | 1.77 (10) | 2.00 (8) | 3.00 (1) | 2.00 (7) |
| To maintain or improve working capital | 2.31 (7) | 1.00 (11) | 0.67 (11) | 1.94 (9) |
| To maintain or improve the current ratio | 2.47 (6) | 0.00 (13) | 0.33 (12) | 1.94 (9) |
| To prevent dilution of common equity | 1.77 (10) | 5.00 (1) | 1.00 (10) | 1.82 (11) |
| To avoid the costs of renegotiating debt covenants | 1.47 (12) | 3.00 (4) | 0.00 (14) | 1.29 (12) |
| To maintain or improve the interest coverage ratio | 1.25 (13) | 0.00 (13) | 1.33 (9) | 1.19 (13) |
| To protect against takeover attempts | 0.33 (15) | 2.00 (8) | 2.67 (2) | 0.88 (14) |
| Lower underwriting costs (compared to common) | 0.92 (14) | 1.00 (11) | 0.00 (14) | 0.76 (15) |

There is disagreement, sometimes substantial, on a number of the remaining factors -- those of greatest importance to both industries. For example, maintaining or improving the debt/equity ratio was of highest importance to the industrials and only fourth in importance to the financials. Conversely, the factor of highest importance to the financials -- to facilitate mergers and acquisitions -- was fourth in importance to the industrials. There are two areas of especially wide disagreement. Not surprisingly, to maintain or improve minimum net worth is second for financials (who must satisfy regulatory demands) and ninth for industrials. To improve the borrowing base for future debt financing is second for industrials and seventh for financials. For this factor, the response from industrial firms executives is consistent with the findings of both Elsaid (1969) and Fischer and Wilt (1968), but the financial institution executive responses indicate a much lower importance than the two earlier studies found. Consequently, it would appear that preferred stock plays a somewhat different role in the plans of the average expanding financial organization than it does for the average expanding industrial. Even so, Friedman's test, a nonparametric two-way analysis of variance, provides statistical support for the conclusion that some factors are more important in the decision to issue preferred stock for expanding firms, regardless of the industry to which the firm belongs (alpha $<$ .005).

Exhibit 5 provides the mean response rankings for restructuring firms. Compared to Exhibit 4, there is less agreement on the rankings of the factors by the different industries. Protection against takeover attempts, for example, was ranked 2 by financials, 8 by utilities, and 15 by industrials. Likewise, financials and utilities ranked minimizing technical default on existing debt 12 and 13 respectively, while industrials ranked that factor 3. Responses by industrials and utilities indicate significantly less importance of market timing (10 and 8 respectively) than the ranking of 3 reported by Elsaid (1969) and Fischer and Wilt (1968). In contrast to the results of the Friedman test for expanding firms, the rankings by the industry groups of the restructuring firms showed only weak agreement (alpha = .10), indicating less similarity between the industry groups of the restructuring firms than among those of the expanding firms.

To analyze the overall rankings of expanding firms and restructuring firms within the industry groups similar, Spearman's correlation was used. The statistical significance of the correlations between various groupings of the restructuring and expanding industry groups was measured on a pairwise basis.(10) Comparisons of the expanding industry groups reveal highly significant correlations between the rankings of two of three pairs: expanding industrial and expanding financials (.767, alpha $<$ .001); and between expanding industrials and expanding utilities (.669, alpha $<$ .01). Among the expanding firms, only the correlation between utilities and financials (.386) is statistically insignificant. In contrast, none of the pairwise correlations was significant for the restructuring firms, indicating more pronounced industry differences among restructuring firms than expanding firms.

Taking into account the mean rankings of Exhibits 4 and 5, along with the responses summarized in Exhibits 2 and 3, one can begin to construct profiles for typical firms which include preferred stock in their capital structure. The following profile is suggested for a typical financial: it is a firm that wishes to expand either by increasing regulatory capital or by executing an acquisition, and at the same time (i) either wants to lever common earnings, or to at least avoid the dilution of earnings, and (ii) desires to maintain or improve its debt/equity ratio and minimum net worth. For the minority of financials which issued preferred stock for financial restructuring (see Exhibit 2), there is no single clear-cut profile. We find these firms predominantly concerned with one or more of the following: (i) market timing, (ii) protection against takeover attempts, (iii) preservation of debt capacity, (iv) improving the borrowing base, and (v) improving net worth.

In comparison, the following profile is typical of an expanding industrial: it is a firm that (i) wishes to acquire assets or execute a merger, and (ii) wants to improve the debt/equity ratio, to improve the borrowing base, to preserve debt capacity for future investment opportunities, and (iii) at the same time either wants to lever common earnings, or to at least avoid the dilution of earnings. The profile of a typical refinancing industrial would be identical to the above profile except that a concern for avoiding technical default on existing debt must be added.

## Conclusion

The survey results indicate that the majority of firms in each industry issued preferred stock to acquire assets -- including mergers and acquisitions -- which accounted for 35% of total issues. Specifically, 89% of financial issues and 66% of industrial issues were used to acquire assets. The remaining 11% of financial issues and 35% of industrial issues were used for financial restructuring. For industrials, these restructurings were predominantly leverage-reducing.

We found no support for two common generalizations. First, in contrast to their earlier role, utilities issued only 10% of the preferred stock issues. Second, while it is often asserted that convertible preferred stock is issued primarily to finance mergers, 69% of convertible stock issued was not used for that purpose.

Instead, we found that there is no single use to which the majority of preferred stock proceeds were applied, either by type of preferred stock, or taken as a whole. The proceeds from preferred stock issues are used to finance a broad spectrum of corporate activities.

1 Attributes of these securities have been well documented in the business and academic press (see, for example, Winger et al. (1986), Alderson, Brown, and Lummer (1987), and Bildersee (1988)).

2 These figures include all the issues from 1981-1986 plus approximately 60 percent of the fiscal year 1987 issues.

3 This increase in the activity of the financials has also been observed by Nijim and Henderson (1989), who point out that in 1984 financials issued more convertible preferred stock than industrials, transportation and public utilities combined.

4 The questionnaire, too long to be included here, is available from the authors upon request.

5 Some firms issued more than one issue of preferred stock during the test period. Since the purpose of this study is to investigate motivations for the issuance of preferred stock, issuances, instead of the related number of respondents, were used.

6 Financial assets in the case of financial institutions. We provided space for respondents to indicate any use of funds other than those we pre-selected. We are indebted to a number of respondents from financial institutions who wrote-in "the acquisition of regulatory capital" as their use of funds. We did not provide this as a preselected response because we were primarily interested in the ultimate use of funds, which in the case of regulatory capital would normally be to increase the asset base. Of course, in the current situation where increases in required capital ratios are being phased in, the acquisition of capital might be necessary to simply maintain the existing asset base. We appreciate the fact that for most financial institutions the only reason the funds were used for the ultimate purpose of increasing (or maintaining) the asset base was because preferred stock qualified as regulatory capital. This implies that any increased restrictions on the qualification of preferred stock as regulatory capital could have the effect of reducing its use by financial institutions.

7 A possible exception is auction rate preferred.

8 Aggregated totals for Exhibit 3 differ slightly from the industry totals in Exhibit 2 because a small number of firms reported multiple issues of preferred and multiple uses for the proceeds, but did not provide sufficient information to separate the specific uses to which each type of preferred was put.

9 See, for example, Pinches (1970), Melicher (1971), Brealey and Meyers (1988), and Brigham and Gapenski (1988).

10 Since no statistical significance can be attributed to a three-way correlation, pairwise correlations were computed for the groups. (See, for example Siegel (1956, p. 226) and Conover (1980, p. 260).)

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