# A Survey of Stock Repurchase Motivations and Practices of Major U.S. Corporations

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# **Abstract**

This study reports the findings of a comprehensive mail questionnaire survey of the stock repurchase programs of major U.S. corporations. Emphasis is placed on understanding the precipitating circumstances and motivations leading to stock repurchases. Contrary to recent studies, it appears that stock repurchases are viewed as financing rather than investment decisions. While the desire to change the capital structure was the most frequently expressed motivation, a majority of the responses were consistent with the signalling hypothesis. This finding suggests that signalling may indeed be as important as suggested by prior theoretical and empirical research.

### I. Introduction

The repurchase of outstanding shares by corporations is a common occurrence. While the reported frequency and amounts of shares repurchased have been generally increasing for many years, the October 1987 stock market "crash" resulted in a surge of stock repurchase announcements. The January 1988 issue of *Institutional Investor* (see p.147) reported that during the six weeks following the crash more than 900 companies announced repurchase plans accounting for nearly 1.3 billion shares, exceeding the announcements for any previous year.

An extensive amount of research has dealt with the wealth effects of stock repurchase programs. Among others studying repurchases have been Masulis (1980), Dann (1981), Dann and DeAngelo (1983), Bradley and Wakeman (1983), Vermaelen (1981, 1984), and Klein and Rosenfeld (1988). Rather consistently, these researchers have found that increases in wealth of common shareholders occur around the announcement date of the stock repurchases. Such wealth increases are expected if the repurchase (a) moved the firm closer to its optimal capital structure, replacing equity with taxdeductible debt; (b) increased debt leverage reducing the safety of outstanding debt, thus transferred wealth from debtholders to shareholders; (c) provided a positive message to the market concerning the firm's prospects (signalling); (d) thwarted an attempted takeover; (e) bought out the interest of a major shareholder, thus transferred wealth from the non-participating to the participating shareholder; (e) distributed cash to shareholders reducing personal tax obligations (prior to TRA 86), and (f) distribute cash without paying out dividend, thus avoiding future dividend distributions.

While the above interpretations for the positive wealth effects represent alternative stock repurchases motives, only a few researchers have directly examined the motives of managers of firms conducting stock repurchase programs. Austin (1969) and Weintraub and Austin (1974), in examinations of the uses of repurchased stock during the mid 1960s and early 1970s. found that firms used repurchased stock for executive compensation plans, for use in acquisitions, and to facilitate stock dividends and security conversions. These studies further suggested that emphasis was being placed on repurchases as a financing decision. The late 1970s study by Baker, Gallagher, and Morgan (1981) affirmed the use of repurchases for executive compensation plans as well as a good investment of excess cash. However, the study reported that financial managers then tended to view the repurchase as an investment-rather than financing--decision. More recently, Lees' (1983) early 1980's survey based on 134 responses from NYSE firms engaged in stock repurchase plans suggested four primary reasons for repurchasing shares: (1) obtaining shares for employee compensation programs, (2) exploiting investment opportunities presented by depressed stock prices, (3) improving earnings per share, and (4) obtaining shares for acquisition programs. Lees' findings tend to confirm those of Baker, Gallagher, and Morgan (1981) and provide further evidence in support of an investment motive for repurchase.

In this study, financial executives were asked which factors they considered most important in their firm's stock repurchase decision. Specifically, its objectives were: (1) to ascertain from a set of predetermined responses the precipitating circumstances or factors leading to the adoption of stock repurchase programs; (2) to identify the primary motivations for firms adopting repurchase programs; (3) to examine the prevailing methods used to finance stock repurchases; (4) to assess the perceived success of repurchase programs; and (5) to gather opinions relating to the repurchase of shares.

The remainder of the paper consists of four sections. Section II sets forth the survey design. Section III presents survey results and compares them with expectations based on financial theory and the findings of earlier empirical studies. Section IV reports responses to a series of survey questions examining the opinions of corporate financial executives relative to various theoretical and practical repurchase issues. Section V concludes the study and discusses its limitations.

# II. Survey Design

A total of 1,000 firms were selected to participate in the study, including the Fortune 500 industrial firms and 500 firms selected from the Compustat database. The firms selected from the Compustat files were the largest firms in the database that were not included in the Fortune 500 list.

Under a cover letter describing the study and guaranteeing anonymity, a questionnaire was mailed in June 1988 to the CFO of each of the firms. The questionnaire included 6 background questions concerned with firm size, line of business, capital structure, and ownership structure; 14 questions regarding the firm's stock repurchase activity; and 7 questions eliciting opinions concerning various theoretical and practical issues surrounding stock repurchases. It is important to note that in designing the questionnaire, the hypothesis for a wealth transfer from non-participating shareholders to participating shareholders was excluded as a primary motive. It was felt that, regardless of assured anonymity, few respondents would state it as a motive.

# III. Survey Results

Of the 1,000 questionnaires mailed, 210 were returned. Of those returned, 183 respondents answered at least half of the questions included in the questionnaire.

# A. Respondent Profile

A majority (84%) of the individuals completing the questionnaire identified themselves as either the Chief Financial Officer or Treasurer. Among the remaining respondents were managers of Investor Relations (7%) and Chief Executive Officer (4%). The industrial classifications of responding firms included manufacturer of durables (35%), manufacturer of nondurables (26%), financial service firms (12%), utilities (7%), and petrochemicals (5%). The industrial classifications of respondents are proportionally very near the classifications of the sample firms. Exhibit 1 summarizes respondent characteristics relating to firm size (measured by total revenues), capital structure, and ownership structure. Sixty percent of firms had revenues above \$500 million. The typical respondent's capital structure contained 31 percent debt and 69 percent equity. More than one-half of the responding firm's outstanding shares were owned by institutions (36%), insiders (13%), and employee stock ownership plans (ESOPs) (4%).

Seventy-five percent of the respondents had repurchased shares during the prior five-year period and the same proportion anticipated repurchasing shares during the next five years. While some firms indicated that repurchase programs were initiated prior to 1983 (13%), an approximately equal number (11%) began their repurchases each year from 1983 through 1986. The largest proportion (43%), however, initiated repurchases after 1986.

Panel B of Exhibit 1 presents statistics relative to the percentage of outstanding shares repurchased. Surprisingly, a large number of firms (28%) repurchased more than 10 percent of outstanding shares. More than one-half (55%) repurchased more than five percent of outstanding shares.

Panel C of Exhibit 1 shows that open market purchases were the most common method of stock repurchase. Cash tender offers and private repurchases of large blocks were each used in less than 10 percent of the repurchases. This finding is generally consistent with that of Baker, Gallagher, and Morgan (1981) who found 64 percent of their respondents made open market purchases and 8 percent used tender offers.

# B. Circumstances Precipitating Repurchases

Table 1. Profile of Respondents

Panel A: Characteristics of Repurchase Survey Respondents

	· · · · · · · · · · · · · · · · · · ·						
<u>Revenues</u>		Perce	<u>∍nt</u>				
Greater than \$500		609	k				
\$200 million - \$5	500 million	31					
\$100 million - \$2	200 million	8					
Less than \$100 mi	lllion	1	-				
Total		_100%					
Typical Respondents' Capital Structure			Aggregate Ownership Structure				
Type of Capital	Percent	Owners		Percent			
Debt	31%	Insiders		13%			
Equity	<u>69</u>	Institutions		36			
Total	<u>100%</u>	ESOPs		4			
		Public		47			
		To	otal	100%			

Panel B. Percent of Outstanding Shares Repurchased

Percent Repurchased		<u>Percent</u>
Greater than 10% More than 5% through 10% More than 3% through 5% More than 1% through 3% 1% or less		28% 27 19 17 _9
	Total	100%

Panel C. Repurchase Methods Used

Method		<u>Percent</u>
Open Market Purchase Cash Tender Offer Private Repurchase of Large Block All Other		81% 9% 8 2
	Total	100%

Initiation and execution of a stock repurchase program will occur only when managers deem circumstances favorable. Survey participants were asked to select from five key circumstance that would lead them to initiate a stock repurchase: low stock prices, threat (or fear) of a takeover, need for treasury stock, need to fund an ESOP, and lack of profitable investment opportunities. The "low stock price" and the "lack of profitable investment opportunities" were believed to be closely associated with a signalling motivation since both reflect management's current view of the accuracy of the market's current valuation of the firm. Participants were also given the opportunity to specify a circumstance not included among these alternatives. Exhibit 2 summarizes the responses to this question. About two-thirds of respondents indicated that the primary circumstance precipitating repurchase was a low stock price. Other circumstances were important to relatively few respondents.

# C. Stock Repurchase Motivations

Early studies by Bierman and West (1966) and Elton and Gruber (1968) posit the reduction of the share-holders' personal tax liability as the primary motivation for corporate stock repurchases. More recent research by Masulis (1980), Dann (1981), and Vermaelen (1981, 1984) dismiss this proposition, arguing that large stock price reactions to repurchase announcements cannot be fully explained by the shareholder tax benefits. Instead, management uses repurchases to signal to the market their expectations concerning the firm's cash flows.

Alternative repurchase motives include the leverage motive, the dividend tax avoidance motive, the motive for reduction of aggregate future dividend levels and the wealth transfer motive. Respondents were asked to select the primary repurchase motive from a list of the five motives suggested in the literature. Exhibit 3 summarizes the responses. Although a dominant motive was not uncovered, changing the firm's capital structure was most frequently (33%) cited. However, while only 18 percent indicated the desire to send a signal to the market, other responses can be interpreted as signalling motives. For example, 25 percent of the respondents indicated the primary motive was to increase stock prices. Other responses that can be interpreted as signalling motives include: (1) "stabilization of stock

price," (2) "good investment," (3) "bargain price," and (4) "increase book value per share." When these response percentages are added to those explicitly indicating signalling, the signalling motive accounts for 54 percent of the responses. Even the desire to change the firm's capital structure is consistent with the signalling motive. Ross (1977) developed a signalling theory of capital structure wherein managers of valuable firms increase leverage as a signal to the market. The incentive to signal is the higher level of compensation (i.e., making stock options more valuable) associated with greater firm value. Since managers are penalized for increasing the probability of bankruptcy (i.e., through job loss or lower compensation), managers have an incentive not to overlever their firms. Thus, a repurchase decision may be a signal to the market that management has high expectations for the future. Apparently, while not always explicitly recognizing the motive as signalling, corporate financial officers agree that stock repurchases may accomplish those purposes consistent with the signalling motive.

Although studies by Dann (1981) and Vermaelen (1981, 1984) argued that signalling may be the primary motive for repurchases, especially for tender offers, they noted that the observed positive impact on stock prices of a repurchase announcement may be interpreted as consistent with more than one motive. This study also

Table 2. Most Important Circumstance Precipitating Repurchase

Circumstance	<u>Percent</u>
Low Stock Price Need for Treasury Stock Lack of Profitable Investment Alternatives Need to Fund an ESOP Threat of a Takeover	66% 11 7 4 3
All Other	100%

Table 3. Stock Repurchase Motives

<u>Motive</u>	Percent
Change the Firm's Capital Structure Increase Stock Price Send a Signal (Information) to the Market Defer Taxes for Remaining Shareholders Reduce the Level of Future "Required" Dividends	33% 25 18 4 1
All Other	19
Total	100%_

fails to provide evidence pointing to a primary repurchase motive. While responses consistent with a signalling motive were indicated by about one-half of the respondents, the desire to change the firm's capital structure was the most commonly cited motive. As noted by recent researchers, the motives consistent with tax-avoidance received insignificant responses from survey respondents.

The motives of the participants in this survey differ significantly from those responding to either the Baker, Gallagher, and Morgan (1981) or the Lees (1983) survey. Apparently, repurchase motives of firms have changed over time as a result of changing economic and market conditions--especially the impact of the market crash of 1987. The only motive that was listed as primary by the participants in this study that also appeared in prior studies was the desire to increase stock price which was cited as popular in the Lees (1983) study. The primary motive indicated in the earlier study was "obtaining shares for employee compensation programs." Only five respondents in this study cited their primary motive as one related to acquiring shares for benefit plans. The third most frequent motive in the earlier study was to improve earnings per share. Only three participants in this study listed this motive as primary. The fourth most frequently cited motive in the Lees survey was to obtain shares for use in acquisitions. Only four respondents in the current study noted that this was their primary motive. Assessment and comparison of the motives cited here with those found by both Baker, Gallagher, and Morgan (1981) and Lees (1983) tend to suggest that the repurchase decision is no longer is viewed as an investment decision, but rather is viewed as a financing decision. While this difference maybe attributable to differences in questionnaire design and response choices, the dominant response choice "change the firm's capital structure," clearly reflects the financing orientation of the repurchase motive.

# D. Financing Arrangements

The majority of respondents used available cash balances (61 percent) to finance their stock repurchases. Short-term debt (26 percent) was the second most popular repurchase financing method followed by long-term debt (12 percent). These results are summarized in Exhibit 4. The use of available cash balances was observed for firms of all sizes. Fifty-one percent of the largest responding firms (revenues over \$500 million) and 60 percent of the smallest firms (revenues under \$200 million) used available cash balances. Short-term debt, the second most popular method, was used to finance 24 percent of large-firm repurchases, 16 percent for medium-size firms (revenues between \$200 and

\$500 million), and 13 percent for small firms.

# E. Perceived Success of Repurchase Program

Three survey questions explored the perceived success of the stock repurchase program. Eighty percent of respondents believed their repurchase objectives had been achieved. Only 8 percent believed the objectives had not been achieved. The remaining 12 percent could not make such a judgement due to a lack of data. When asked to characterize the cost of repurchased shares relative to their value, 64 percent of the respondents indicated that the cost was either low or very low relative to value, 31 percent believed the cost was equal to the value, and only 5 percent considered the cost high relative to value. These perceptions of having paid less than the value for repurchased shares add support to the signalling motive for share repurchase. Their repurchase program was judged to be very successful by 53 percent of the respondents while 37 percent felt their program was moderately successful. The remainder felt that either the program was a mistake (3 percent) or that it was too soon to make such a judgement (7 percent).

# IV. Repurchase Opinions

Participants were asked to respond to seven opinion statements relating to the repurchase of shares. They used a seven-point semantic differential scale to indicate their degree of disagreement or agreement with the statements. The statements, ranked order by means along with response statistics are shown in Exhibit 5.

Respondents generally agreed with three statements: (1) stock repurchases should not be undertaken at the expense of profitable capital spending plans (statement 1), (2) greenmail is harmful to remaining shareholders (statement 2), and (3) repurchases serve as a signal to the market that management believes the stock is undervalued (statement 3). Interestingly, participant opinions were nearly evenly split on whether repurchase programs signalled the lack of available investment opportunities (statement 5).

Two statements drew general disagreement: (1) stock repurchase plans should be implemented only during periods when stock prices are declining (statement 6) and (2) repurchases benefit participating shareholders more than nonparticipating shareholders (statement 7). Slight agreement that for making cash distributions to shareholders stock repurchases should be preferred over (extra) dividend payments (statement 4) was observed. Such preference however, should not be related to tax advantages of repurchases over dividends, unless management is compensated based on EPS.

Table 4. Financing Stock Repurchase Plans

Method		<u>Percent</u>	
Available Cash Balances Short-term Debt Long-term Debt Preferred Stock		61% 26 12 1	
	Total	<u>100%</u>	

Table 5. Repurchase Opinions

		Percent Generall Disagre L 2	У	Perce Neith Disagn nor Ac	ner ree	Gene:	cent rally ree 5 7
1.	Stock repurchase plans should not be undertaken at the expense of profitable capital spending plans.				.5 Std.	82 Dev:	
2.	Private repurchases of large blocks of stock at a premium (greenmail) harms remaining shareholders.	16.5 Mean:		_	.1 Std.	74 Dev:	· -
3.	A stock repurchase plan reveal indirectly to the market management's belief that the stock is undervalued.	ls 8.0 Mean:	5.3		.6 Std.	82 Dev:	
4.	If a firm makes cash distributions to shareholders stock repurchases should be preferred over (extra) dividend payments.	21.1 ' Mean:			.9 Std.	44 Dev:	
5.	A stock repurchase plan reveal indirectly to the market information about the lack of available investment opportunities.	ls 37.5 Mean:	4.0			46 Dev:	
6.	Stock repurchase plans should be implemented only during periods when stock prices are declining.	43.4 Mean:			.3 std.	18 Dev:	
7.	Stock repurchase plans benefice participating shareholders more than nonparticipating shareholders.	t 43.8 Mean:			.6 Std.	17 Dev:	

# V. Conclusions

Several limitations of this study should be noted. The first is possible nonresponse bias attributable to the fact that respondents to the survey generally represented only very large firms -- more than 60 percent of the participants had revenues exceeding \$500 million. Thus, the extent to which the findings represent all stock repurchase programs is unknown. A second limitation may result from the fact that most questionnaires were completed by financial executives, who are not the only individuals involved in the repurchase decision.

With these caveats in mind, several conclusions emerge from the study. First, this study contributes to the repurchase literature significant insights into the motivations behind stock repurchase programs. While the desire to change the firm's capital structure was the most frequently expressed motivation, a majority of the responses were consistent with the signalling hypothesis. It appears that signalling may be as important as suggested by theoretical researchers. Clearly further empirical research is needed to assess the validity of this observation. Second, contrary to recent studies, it appears that stock repurchases are again viewed as financing rather than investment decisions. Third, most repurchases are accomplished through open-market transactions and are financed in a majority of cases with available cash balances. Fourth, low stock price is the circumstance most often precipitating repurchases. Finally, financial executives generally express opinions relating to stock repurchase issues that are consistent with academic research.

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