Is a Share Buyback Right for Your Company?

by Justin Pettit

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Is a **Share Buyback** *Right* for Your Company?

When a company's performance is lagging, share buybacks can look very attractive indeed. Unfortunately, buybacks can backfire – unless executives understand why, when, and how to use this powerful and risky tool.

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SHARE BUYBACKS HAVE BECOME COMMONPLACE in the business world. In 1999 alone, 1,253 companies on the New York Stock Exchange repurchased their own shares, spending an estimated $181 billion – nearly as much as the $216 billion that NYSE companies distributed as dividends during that year. On the face of it, the popularity of buybacks is easy to understand. By purchasing its own stock, a company reduces the number of shares outstanding without affecting its reported earnings. That increases the company's earnings per share and, so the argument goes, the price of a share should rise accordingly. And in most cases, buybacks seem to pay off: historically, companies that bought back their

ILLUSTRATION BY PHILIP ANDERSON

The way a buyback is announced and implemented conveys signals about the company's prospects and plans – but not always the ones the company intends.

own shares have posted immediate returns between two and 12 percentage points above the market average, representing billions of dollars in shareholder value.

But not all buybacks go according to plan. Consider the pharmaceutical powerhouse Merck. On February 22, 2000, Merck unveiled a $10 billion buyback plan – the biggest ever announced. But far from rising, Merck's share price fell by some 15% in the following month. In the eyes of investors, the buyback only underscored the company's weaknesses. A number of important patents were approaching expiration; Merck's drug pipeline was running dry; its own chief scientist admitted that the company could no longer maintain its target 20% earnings growth rate. As one analyst put it: "$10 billion would have funded a lot of research and development." Merck's experience appears to be an increasingly common one: over the course of 1999, companies listed on the NYSE that implemented buyback programs actually underperformed the index by 20 percentage points.

Merck's story reveals just how subtle the effects of share buybacks can be. In this article, I'll explain how share buybacks actually do affect value and how managers can influence the process through their decisions on the rationale for, size of, and way they implement their buyback programs. (For a good recent illustration of what can happen when the buyback is well thought through, see the sidebar "The Perfect Buyback.")

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How Will the Buyback Affect Your Company's Value?

Contrary to the common wisdom, buybacks don't create value by increasing earnings per share. The company has, after all, spent cash to purchase those shares, and investors will adjust their valuations to reflect the reductions in both cash and shares, thereby canceling out any earnings-per-share effect. If increasing earnings per share were the only rationale for buybacks, they would have no impact on value – which, as we've seen, is certainly not the case.

Buybacks affect value in two ways. First, the buyback announcement, its terms, and the way it is implemented all convey signals about the company's prospects and plans, even though few managers publicly acknowledge this. Second, when financed by a debt issue, buybacks can significantly change a company's capital structure, increasing its reliance on debt and decreasing its reliance on equity.

Signaling. The signaling effect of share buybacks has been the focus of much academic research over the past ten years. According to these studies, investors and analysts use a company's financial decisions as a window into what management really thinks about the company's prospects. The announcement of a share buyback, the argument goes, indicates that managers are so confident of their company's prospects that they believe the best investment it can make is in its own shares.

If only it were that simple. In real life, investors interpret a company's decisions through the lens of past experience and in its current context, taking into account a host of other indications and signals. As Merck found out, the information conveyed by a buyback announcement is not always the information that management wants to express. In my experience, a buyback announcement can send a negative signal in three situations.

First of all, other information can contradict, and sometimes swamp, the intended buyback signal. From November 1998 through October 2000, for instance, the computer giant Hewlett-Packard spent $8.2 billion to buy back 128 million of its shares. According to HP executives, the aim was to make opportunistic purchases of HP stock at attractive prices – in other words, at prices they felt undervalued the company. But if managers hoped thereby to signal good operating prospects to the market, they should have saved themselves the trouble. The buyback signal was completely drowned out by a rapid succession of other moves, all emitting contradictory and more powerful signals about the company's future: an aborted acquisition, a protracted business restructuring, slipping financial results, and a decay in the general profitability of key markets. By last January, HP's shares were trading at around half the average $64 per share paid to repurchase the stock.

Buybacks can also backfire for a company competing in a high-growth industry because they may be read as an admission that the company has few important new opportunities on which to otherwise spend its money. In such cases, long-term investors will respond to a buyback announcement by selling the company's shares. This effect is most commonly observed when, like Merck, the company is in a technology-laden business because those industries change quickly and companies competing in them need to demonstrate high growth potential. IBM, for instance, has seen no clear benefit from the $27 billion it spent on buybacks between 1995 and 2000 because the cash payout only heightened analysts' concerns over the company's ability to continue coming up with new products and services.

Finally, the credibility of a signal is seriously weakened if the company's managers choose to participate in the buyback themselves. When managers elect to sell shares rather than retain them, that suggests to the markets that the managers do not believe in their own estimates of value. They have not, in effect, put their own money where their mouths are. All other things being equal, though, if managers do not participate, the benefits can be dramatic. One study of tender-offer buybacks has shown that programs in which managers did not participate generated returns seven percentage points higher than those they did join in.

Leverage. Buybacks can also affect value by changing a company's capital structure. Indeed, many companies use them as a way to increase their reliance on debt financing. Early last year, for instance, Payless ShoeSource increased its long-term debt from $127 million to $384 million by repurchasing 25% of its outstanding shares through a tender offer. Its debt increased from 10% of capital employed to 33%, and the returns to shareholders were remarkable. Immediately after the buyback was

The Perfect Buyback

Perhaps the most striking recent example of a well-executed buyback is the one launched by SPX, a diversified industrial manufacturer of everything from automatic fare-collection systems to tire gauges. On April 10, 1998, SPX announced a Dutch-auction tender offer for 2.7 million shares, or 18% of the total shares outstanding. The tender range was set between $48 and $56 per share, representing a 24% to 45% premium over the year's opening price of $38¾, and a 12% to 30% premium over April 8th's $43 close.

With its aggressive terms and size, the buyback was a clear affirmation of faith in the company, reinforced by senior management's explicit pledge not to tender their own shares. What's more, since the buyback was financed through debt, it served to radically releverage the company's balance sheet.

The market roared its approval, as SPX's share price posted an extraordinary return of 20% over the two days following the announcement. Indeed, such was the confidence of investors in the company that SPX was unable to secure more than 80% of the number of shares it wanted to repurchase, even at the upper price limit of $56. It was forced to continue buying back shares in the open market. Within one month, the stock was trading at over $70.

As a further affirmation of the benefits of buybacks, SPX has pledged to replace its quarterly cash dividend with share repurchases as the preferred method of returning cash to shareholders, pointing out that buybacks allow shareholders more flexibility in tax planning. As CFO Patrick O'Leary puts it: "We are giving shareholders a choice."

announced, Payless's share price rose from $40 to $52.

Leveraging has traditionally conferred two great benefits. First, interest payments on debt are, of course, tax deductible, which means that the after-tax cost of debt is well below the shareholders' expected return on equity, reducing a company's average cost of capital. A rough value of this extra tax shield can be easily calculated – multiply the increase in debt by the current corporate tax rate. In the case of Payless, the value of the additional tax shield came to about $103 million ($384 million less $127 million times 40%). In situations involving a straight substitution of debt for equity, this value plus the enterprise's initial value before the buyback are now distributed across a smaller number of outstanding shares, dramatically increasing the value of each share.

But debt finance is appropriate only if there are any taxable profits for the interest expense to shield from taxation and if servicing the debt will not impose an unnecessary risk of financial distress. Companies can know the answers to those questions only if they can predict their future cash flows with a reasonable degree of confidence. That's difficult when a company is, like Merck, in an industry in which growth comes in rapid bursts. The market value of such a company depends on investors' assessment of its portfolio of future investment opportunities rather than on expectations about the future cash flow of current operations. In such risky situations, companies should rely on equity finance rather than debt finance.

The second benefit of debt is that it serves as a discipline for managers. Unlike equity, debt binds managers to pay out future cash flows. As many financial commentators have argued, the need to pay cash to bondholders prevents managers from investing in projects that earn returns below the company's cost of capital. This effect is most often observed in LBO situations, where the company's operating performance frequently improves dramatically after its debt levels have risen. Companies that are largely equity financed will almost inevitably forgo most of the benefits of this effect, although they can mimic some of them by adopting appropriate performance measures.[1]

How Large Should Your Buyback Be?

The amount of shares you should repurchase depends on the purpose of the buyback. If the primary goal is to reach a predefined capital structure, then the number of shares is a function of the company's market value, its share price, and the percentage of debt you want to reach. It's a fairly simple, if sometimes iterative, calculation.

Suppose the total market value of your company (debt and equity combined) is $1 billion, its shares are trading at $20, and you wish to shift your company's capital structure from 25% debt to 40% debt. In principle, all you need do is exchange $150 million in equity for debt by repurchasing 7.5 million shares. But the repurchase may, as we have seen, boost the value of the company's remaining equity because of the tax benefits and the signals the buyback sends to other investors. That would increase the number of shares you need to repurchase to reach the desired 40% debt target. In this example, in fact, the value of the tax benefits, let alone signaling, will be $60 million (that is, 40% of the $150 million increase in debt), which will be reflected in a higher pro forma share price of $22. Buying the 7.5 million shares, therefore, has got you to a debt level of only 38%, which means you should have bought more shares.

To calculate the number of additional shares you need, you must go through the same exercise, using the new share price, number of shares, and base debt level. The exercise usually has to be repeated several times until you reach the target debt level. In this case, the total comes out at about 8.15 million shares repurchased with $178 million of new debt, which represents 22% of the shares outstanding. However, a 22% repurchase is also likely to have a signaling impact. Taking that into account through one more iteration results in approximately 8.5 million shares repurchased with $200 million of new debt.

Materiality Levels for Share Buybacks

The materiality level shows, for different degrees of market mispricing, how large a buyback must be to have a significant effect on the share price. Small buybacks will have an effect only if the market heavily undervalues the shares. The common 5% buyback will hit the trigger materiality level of 5% only if the shares are trading at a 50% discount to their real value.

Discount of Share Price Relative to Real Value	Percentage of Shares Repurchased: 5%	10%	15%	20%	25%
10%	1	1	2	3	4
15%	1	2	3	4	6
20%	1	3	4	6	8
25%	2	4	6	8	11
30%	2	5	8	11	14
35%	3	6	10	13	18
40%	4	7	12	17	22
45%	4	9	14	20	27
50%	5	11	18	25	33

If the primary goal is to send a signal to investors, though, a different calculation is involved. The yardstick for deciding the size of a signaling buyback is its *materiality level*, a number that measures how much impact the buyback will have on the wealth of shareholders who keep their shares. The materiality level for any given number of shares the company may buy back depends on the degree to which the market undervalues that company.

To see how it is calculated, consider the hypothetical company BuyBack Incorporated. Managers believe that the company's assets are worth $100, and 100 shares are outstanding. Unfortunately, the market values these shares at 80 cents each – a 20 cent discount to their believed value. In an attempt to rectify this, BuyBack's CEO decides to repurchase 5% of the shares. The total value of the discount (which is still $20) is now distributed over 95 shares rather than 100, creating a potential for a price rise of 21 cents per share. The repurchase program's materiality level, therefore, is one cent, or 1.25% of the current share price. This indicates the size of the potential added value the buyback will create for loyal shareholders.

In my experience, however, a buyback needs to have a materiality level of at least 5% to trigger any appreciable revaluation of the stock price by the market. In Payless's case, for instance, the estimated materiality level was about 8% of the value of its shares before it initiated the buyback program, given the 25% program size and the prebuyback market discount of about 20%. The size of the potential gain to the shareholders who stayed in was therefore large enough to prompt the market to look more closely at the company and consequently revalue its shares by as much as 30%. BuyBack Incorporated's proposed repurchase, by contrast, is likely to be a nonevent for shareholders.

All too many companies routinely underestimate how many shares they need to buy back to send a credible signal to the markets.

The table "Materiality Levels for Share Buybacks" shows materiality levels for a range of program sizes and value discounts. By using the table, you can get a quick fix on the number of shares your company will need to buy back if you hope to send a convincing signal to the markets. In BuyBack's case, the table reveals that the 5% repurchase program would have a significant materiality level only if the company were undervalued by 50% or more – a huge discrepancy unlikely for a public corporation studied closely by analysts and required to produce quarterly reports. BuyBack would need to consider a far larger program, of around 20% or more, to achieve a materiality level that would not imply an unreasonable undervaluation by the market. Unfortunately, my experience suggests that all too many companies are like BuyBack in that they routinely underestimate how many shares they need to buy to send a credible signal to the markets.

How Should You Carry Out Your Buyback?

If, after taking careful stock of your competitive environment, you conclude that a share buyback will send the right message, or that a more debt-oriented balance sheet will enhance your company's overall value, you need to consider carefully which buyback method to use. There are basically three ways companies can repurchase their shares.

Open-Market Share Repurchases. This is by far the most common buyback mechanism. Companies that implement these kinds of buybacks announce in a press release the total number of shares authorized for potential repurchase but make no commitments about price, timing, or even execution. Thereafter, the company's treasury simply executes trades at its discretion. To prevent potential stock price manipulation, however, the SEC limits a company's daily repurchases to 25% of the average daily traded volume over the previous four weeks.

Managers often favor open-market repurchase programs because buying can easily be suspended if the company finds a better use for its cash. But for that very reason, it is perhaps the least effective approach if a company wants to signal through a buyback that its stock is undervalued. The lack of a firm commitment inherent in open-market repurchase announcements sends a weak – or even negative – signal about managers' confidence in their company's prospects. If managers are convinced of their company's value, why shouldn't they make a firmer public commitment to purchasing its shares?

Open-market repurchasing is also an inefficient way to restructure the balance sheet. The limitation on the amount of shares a company can buy on any one day can drag out the process almost indefinitely, especially if the company is contemplating a major change. For example, Payless would have needed 166 business days to repurchase 25% of its own stock, rather than the 20- to 30-day window given in its tender offer, because its average trading volume is typically only about .6% of all outstanding shares.

Open-market repurchase programs are best used when the company's primary objective is not to boost its share price but rather to distribute excess cash to shareholders in lieu of a dividend. (For a discussion of the advantages, see the sidebar "Buybacks as an Alternative to Dividends.")

Fixed-Price Tender Offers. This is a very powerful way to implement a value-creating buyback. Companies usually use fixed-price tender offers when they want to repurchase more than 15% of their outstanding shares. They will open the process with an announcement inviting shareholders to tender their shares to the company over a 20- to 30-day period at a preset price that reflects some premium – typically between 15% and 20% above the prevailing market price.

Studies have shown that the signaling effect of fixed-price tenders is stronger than any other form of share buyback, leading on average to a 12% appreciation in share price in the days just following the announcement (new information is typically fully capitalized within a few days). If a buyback is misconceived, however, a fixed-price tender offer, with its preset and usually aggressive terms, can severely aggravate the damage. The experience of the luggage company Samsonite is a case in point. On May 12, 1998, it announced a fixed tender offer for about half of its outstanding shares at a 30% premium over the market price. The company aimed to increase its leverage and to allow its management buyout backer, Apollo Advisors, liquidity to exit. The transaction was funded primarily by debt.

Unfortunately, investors didn't believe that Samsonite's operating performance justified such a large switch from equity finance to debt, and they read Apollo's exit as a very negative signal about the company's outlook. The large scale and high premium of the buyback ended up working against the company, and the share price plunged by 50%. Indeed, demand for the stock dried up almost completely once the tender had been concluded. As the share price fell by another 50% over the summer, it became increasingly clear that the transaction had effectively transferred about $200 million in wealth from nontendering to tendering shareholders. A complex web of litigation is now pending.

Auction-Based Tender Offers. In the last few years, this buyback approach has emerged as the method of choice for large buybacks (more than 10% of a company's outstanding shares). The auction mechanism used most often is the Dutch auction, in which sellers post the prices at which they are willing to sell.

The company begins the process by announcing that it is seeking tenders from shareholders for a specified proportion of its shares and is willing to pay between, say, 10% and 20% above market value for them. The shareholders respond by informing the company within a specified time period, typically about a month, how many shares they are willing to sell at what minimum price within the range. Once all the tenders are in, the final clearing price is set at the minimum price needed to purchase the desired number of shares from those shareholders who agreed to sell at or below that price. All shares transfer at the clearing price – the same

Buybacks as an Alternative to Dividends

Quite apart from their potential for creating value, share buybacks can also offer companies a shareholder-friendly way to distribute cash. That's because, in the United States at least, many investors are taxed more highly on cash dividends than on capital appreciation.

Here's how it works. Suppose a company wishes to distribute $100 of excess cash to its only shareholder. If the money were paid out as a dividend, it would be taxed as ordinary income at, say, 40%, leaving the shareholder with a net $60. But if the company bought back $100 worth of shares, the shareholder would have to pay capital gains tax of only, say, 20% on the amount by which the shares had risen since the purchase. If the company is buying back 50 shares at $2 each, and they had originally been purchased at $1, the shareholder's tax bill would be 20% of the $1 gain on each of 50 shares, or $10, leaving the shareholder with a net $90.

Given the obvious attractions of buybacks, it's fair to ask why dividends are still so popular. The answer seems to be largely psychological – although some institutional investors are limited to investing predominantly in dividend-paying stocks. Regular dividends are more predictable, many managers argue, and give shareholders a greater feeling of confidence. So, if the universe of a company's potential shareholders is risk averse, a company can signal its superiority as an investment over other companies by offering dividends. But while this might work for unsophisticated private investors, it's unlikely to sway professional institutional investors, such as mutual fund managers, whose decisions have the most influence on the markets.

price for all – and tendering shareholders incur no transaction costs.

If more shares are tendered than the company wants (that is, the tender is oversubscribed), the clearing price is set at the bottom of the range, and the amount of shares that the company actually buys from each shareholder may be reduced in proportion to the amount of shares tendered. If, on the other hand, the company does not get as many shares as it wanted (in other words, the tender is undersubscribed), then the clearing price will be set at the range's maximum, and the company will purchase all the shares tendered. In that situation, companies sometimes complete the buyback by announcing an open-market program to follow. The table "The Dutch Auction" illustrates the mechanics of a Dutch auction for a company seeking to buy back 2 million of its shares at a range of $34 to $42 per share. In this case, a clearing price of $40 per share is required to reach the target number of shares, resulting in a capital outlay of $80 million.

The Dutch Auction

This table illustrates the way a Dutch auction would work for a company wishing to repurchase 2 million shares at an offered range of $34 to $42 per share. In this case, the clearing price is $40 per share, resulting in an $80 million outlay for the company.

Price	Shares Tendered (thousands)	Cumulative Shares Tendered (thousands)
$34.00	200	200
$35.75	250	450
$37.00	300	750
$38.00	350	1,100
$39.50	400	1,500
$40.00	500	2,000
$40.50	650	2,650
$41.00	500	3,150
$42.00	450	3,600

Companies that use auction-based tenders generally deliver returns to shareholders about 8% above the market average around the time of the announcement, slightly less than the 12% enjoyed by companies using fixed-price tenders. But auctions also give companies much greater flexibility and safety in sizing and pricing the deal. For a start, the average price premium paid in auction-based tenders (about 13%) is lower than the average paid in fixed-price tenders (about 21%). Auction-based tender offers also reduce the likelihood of transferring wealth between tendering and nontendering shareholders. That's because there is less chance of a major decline in the share price after the buyback since investors have themselves helped to set the buyback's quantity and its price.

Properly applied, a share buyback can help a company significantly enhance its value to shareholders. Managers must ask themselves if they are embarking on the buyback for the right reasons, and they should take pains to make sure that the way they implement the buyback is appropriate to their goals. Managers who do not take the time to think through these issues carefully may well find that their buyback backfires.

1. One study by Stern Stewart has shown that the adoption of the EVA metric for measuring performance and determining management rewards has a positive effect on value. Those companies studied that used the measure reaped returns some eight percentage points above the average. I believe that the effect of the measure is analogous to the behavioral effects of debt observed in LBO firms.

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