Perspectives



June 2012 Legg Mason Capital Management Share Repurchase from All Angles

Past performance is no guarantee of future results. All investments involve risk, including possible loss of principal.

This material is not for public distribution outside the United States of America. Please refer to the disclosure information on the final page.

IN THE UNITED STATES - INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE





June 11, 2012

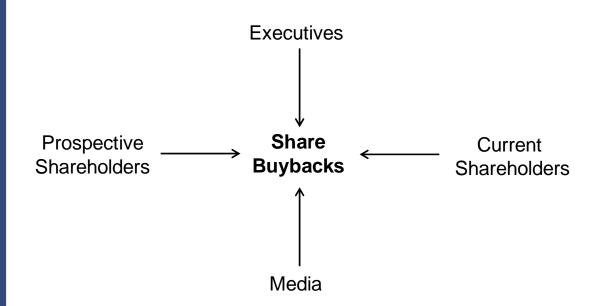
Michael J. Mauboussin



mmauboussin@lmcm.com

Share Repurchase from All Angles

Assessing Buybacks, No Matter Where You Sit



- The prime responsibility of a management team is to invest financial, physical, and human capital at a rate in excess of the opportunity cost of capital.
- Executives should always seek to allocate capital to the opportunities with the highest returns.
- Buybacks can be more attractive than investing in the business.
- If the company of a stock that you own is buying back shares, you must recognize that doing nothing is doing something.
- The media must stop with the canard that investors deem buybacks to be good because they increase earnings per share (EPS).



The purpose of a company is to maximize long-term value. As such, the prime responsibility of a management team is to invest financial, physical, and human capital at a rate in excess of the opportunity cost of capital. Operationally, this means identifying and executing strategies that deliver excess returns. Outstanding executives assess the attractiveness of various alternatives and deploy capital to where its value is highest. This not only captures investments including capital expenditures, working capital, and acquisitions, but also share buybacks. There are cases where buying back shares provides more value to continuing shareholders than investing in the business does. Astute capital allocators understand this.

Exhibit 1 shows how companies in the U.S. have apportioned dollars over the past quarter century in capital expenditures, M&A, share buybacks, and dividends. From 1985 through 2011, spending on capital expenditures was roughly twice that of M&A. Spending on M&A was about 50% higher than dividends and buybacks combined. So for every dollar spent in these four areas, roughly \$0.55 went to capital spending, \$0.27 to M&A, and \$0.18 to dividends and buybacks.

Research shows that capital expenditures can generate returns in excess of the cost of capital, and it appears that they have done so in the aggregate over the past 25 years. M&A creates value if you consider the seller and buyer together, but the value tends to go to the seller while buyers earn about the cost of capital. Buyers tend to do worse the larger the percentage premiums they pledge to acquire their targets, and research shows that the market's initial reaction to M&A is not biased.

Not surprisingly, the exhibit reveals that the year-to-year changes in capital expenditures and dividends are much more modest than those for M&A and share repurchases. Indeed, M&A and buybacks follow the economic cycle: Activity increases when the stock market is up and decreases when the market is down. This is the exact opposite pattern you'd expect if management's primary goal is to build value.

Executives should always seek to allocate capital to the opportunities with the highest returns. But M&A and share buybacks generally happen when times are good and don't happen when times are more challenging, meaning that executives struggle to consistently create value with these investments. While there may be an economic rationale for a pattern that follows the economic cycle—access to capital may be more challenging in tougher times, for example—it's more likely a case of mental accounting: capital expenditures and dividends have priority to M&A and buybacks irrespective of the prospective returns from the alternative investments.



Exhibit 1: Where the Money Has Gone - 1985-2011

-	Market	<u>-</u>	Executed	Mergers &	Capital	
Date	Capitalization	Dividends	Buybacks	Acquisitions	Expenditures	
1985	2,321.5	61.7	23.1	139.2	139.2 505.7	
1986	2,699.1	64.3	24.1	121.9	486.2	
1987	2,417.1	68.1	23.7	118.1	490.9	
1988	2,738.4	73.1	51.4	97.3	507.9	
1989	3,419.9	81.5	27.8	86.0	550.4	
1990	3,101.4	88.6	35.6	36.1	549.8	
1991	4,041.1	90.1	24.2	32.4	508.6	
1992	4,289.7	94.1	21.5	31.7	536.4	
1993	4,657.8	92.5	26.7	82.5	590.8	
1994	4,540.6	104.7	41.9	109.2	691.0	
1995	6,057.2	107.3	73.1	215.3	754.8	
1996	7,198.3	119.6	59.9	292.9	802.1	
1997	9,298.2	134.1	77.6	456.8	918.3	
1998	11,317.6	141.7	80.6	1,139.5	973.8	
1999	13,812.7	157.3	70.7	1,112.1	1,060.9	
2000	12,175.9	148.4	108.9	1,246.1	1,161.9	
2001	10,707.7	156.2	106.1	592.4	1,033.2	
2002	8,343.2	164.4	122.5	177.5	980.8	
2003	10,799.6	178.1	118.5	233.5	1,005.0	
2004	11,951.5	198.7	210.7	497.3	1,114.9	
2005	12,497.2	231.0	361.0	533.2	1,233.0	
2006	14,215.8	245.6	528.3	1,245.5	1,395.8	
2007	14,753.6	270.1	761.8	1,223.1	1,453.4	
2008	9,056.7	272.3	387.2	610.0	1,379.6	
2009	11,385.1	216.6	149.5	328.8	963.2	
2010	13,131.5	221.5	342.7	485.2	1,198.8	
2011	13,019.3	256.4	489.4	983.6	1,309.6	

Note: In \$ billions.

Source: Birinyi Associates and FRB Z.1. Past performance is no guarantee of future results. The table above is for illustrative purposes only and is not reflective of an actual investment.

In theory, dividends and buybacks are equivalent assuming no taxes, identical timing of cash receipts, and an efficient market. ⁴ In practice, they are very different. Take, for example, the issue of taxes. Even when the tax rates for dividends and capital gains are the same, as they are now, there's an advantage to buybacks. This is because a shareholder can choose to defer tax payments by not selling shares today—think of this as refusing a "dividend" today in exchange for a potentially larger dividend down the road. Paying a tax bill in the future is better than having to pay one today.

There's a more fundamental reason that dividends and buybacks are different, and it's the result of how executives think of them. Executives consider dividends on par with investment decisions such as capital spending. Once a board has instituted a dividend, executives like to increase the payment steadily over time and hate the idea of cutting it. As a result, the aggregate stream of dividends is less volatile than the stock market or the allocation to share repurchases.

Executives think of buybacks as an alternative for spending residual cash. If there's money left over after a company has paid all of its bills (including dividends) and made all of the investments it deems worthwhile, executives will consider a buyback. Because they are viewed as a residual, buybacks are much more volatile than dividends. Exhibit 2 shows dividends and share buybacks for the companies in the S&P 500, as well as the price level for the index. Buybacks bounce around more than dividend payments do and more closely track the S&P 500 Index. ⁵



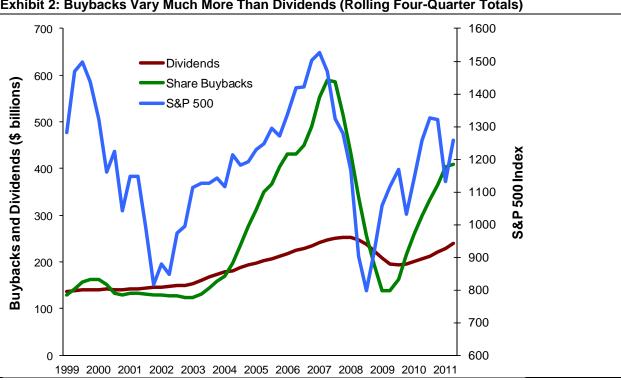


Exhibit 2: Buybacks Vary Much More Than Dividends (Rolling Four-Quarter Totals)

Source: Standard & Poor's. Past performance is no guarantee of future results. The graph above is for illustrative purposes only and is not reflective of an actual investment. Please note that an investor cannot directly invest in an index.

Another noteworthy point is that the value of executed buybacks exceeded that of dividends in 2004 and have remained at a higher level ever since (with the exception of the height of the financial crisis in 2009). It is common for market prognosticators to compare today's dividend yield to those of the more distant past and to point out that the yield isn't what it used to be.

But it was only in 1982 that Congress enacted rule 10b-18, which provided companies with a safe harbor, or a legal shield from the threat of being sued if they followed certain rules. Rule 10b-18 made buybacks viable on a large scale for the first time in modern history. Recent research shows that there is no evidence that companies have a lower propensity to distribute cash to equity holders—it's just that the form of payment has shifted from dividends to buybacks.

Still, there remains widespread confusion about the role of dividends in delivering total shareholder returns. The key point is that price appreciation is the only source of investment returns that increases accumulated capital over time. Capital accumulation comes from three sources: how much a shareholder invests, how long he invests, and price appreciation. A shareholder will earn the total shareholder return only if he reinvests 100 percent of his dividends back into the stock in a tax-free account. A very small percentage of investors, either institutional or individual, actually do so. Price appreciation is the driver of capital accumulation over time. 7

That said, there is research that shows that corporate events that contract assets, including spinoffs, buybacks, debt prepayments, and dividend initiations, are followed by good shareholder returns. Further, analysis suggests that historically, higher dividend payout ratios have been associated with higher earnings growth rates—contrary to what simple theory would say. Taken together, these studies broadly suggest that capital markets tend to reward companies that do not pursue asset growth for the sake of growth. 8



The issue of capital deployment is of particular relevance today because non-financial companies are sitting on \$1.7 trillion in liquid assets, according to the Federal Reserve. ⁹ A good deal of that is cash that is offshore, a topic addressed later. So companies have the resources available to invest but don't know quite what to do. Uncertainty about the global economy makes executives wary of sizeable capital expenditures and M&A deals. The same uncertainty creates concerns about dividends, because companies don't want to enter into an implicit contract that they feel they may not be able to honor in the future. Share buybacks look attractive but stocks have been on a roller coaster and the ten-year compounded annual return for the S&P 500 has been an abysmal four percent. Executives who purchased their company's stock at higher prices in recent years are also gun-shy about buying back stock today in fear that they will again pay too much.

This report looks at buybacks from four distinct points of view: companies, shareholders, prospective shareholders, and the media. Naturally, the issues are intertwined. If you are in one of these groups, you can go directly to the section that pertains to you. Or you can skim other sections to gain some appreciation for their points of view.



Company Management:

One of the first concepts to acknowledge with a share buyback is value conservation. Here's the
basic idea: whether a company buys back overvalued stock, undervalued stock, or pays a
dividend, value is conserved. One group may benefit at the expense of another, but in aggregate
the outcome sums to zero. The key issue is how each decision affects ongoing and selling
shareholders.

Exhibit 3 illustrates this point. Assume the sole asset of a company is \$1,000 in cash, and that there are 100 shares outstanding. Value per share is \$10 (\$1,000/100). The company decides it wants to return \$200 to shareholders. In scenario A, the stock price is at \$20, twice the value. The company goes ahead and repurchases 10 shares for a total cost of \$200, leaving 90 shares. In this case, the selling shareholders gained \$100 (\$20 price - \$10 value x 10 shares = \$100) and the ongoing shareholders have lost \$100 (\$8.89 new value - \$10 old value x 90 shares = \$100). Selling shareholders have benefitted at the expense of ongoing shareholders.

		Scenario A Assume	Scenario B Assume		Scenario C Assume	
Assumptions	Base	buyback @ \$20	buyback @ \$5	Assumptions	dividend of \$2	
Buyback amount		\$200	\$200	Dividend amount	\$200	
Firm Value	\$1,000	\$800	\$800	Firm Value	\$800	
Shares outstanding	100	100	100	Shares outstanding	100	
Current price	\$10	\$20	\$5	Current price	\$10	
Shares post buyback		90	60			
Value/share	\$10	\$8.89	\$13.33	Value/share	\$8.00	
				Dividend/share	\$2.00	
Selling shareholders		10	40			
		\$20	\$5			
Value to sellers		\$200	\$200			
Ongoing shareholders		90	60	Ongoing shareholders	\$800	
		\$8.89	\$13.33	Dividends	\$200	
		\$800	\$800			
Total value		\$1,000	\$1,000	Total value	\$1,000	
Per share +/- sellers		\$10.00	(\$5.00)			
Per share +/- holders		(\$1.11)	\$3.33			

In scenario B, the stock price is at \$5, one-half of the value. The company now repurchases 40 shares for a total cost of \$200, leaving 60 shares. In this case, the selling shareholders lost \$200 (\$5 price - \$10 value x 40 shares = \$200) and the ongoing shareholders gained \$200 (\$13.33 new value - \$10 old value x 60 shares = \$200). Ongoing shareholders have benefitted at the expense of selling shareholders.

In scenario C, the company pays a dividend of \$200. No matter what the price, shareholders get $$2 ext{ for each share they hold } ($2 ext{ x 100 shares} = $200).$



The value conservation in each of these scenarios belies a fundamental point: *management's* objective should be to maximize the long-term value for ongoing shareholders. Management should be preoccupied with generating the greatest long-term value per share. Building a larger entity should not be the goal. Creating value for the continuing shareholders should be.

Scenario A should not be confused with buying back the stock, seeing it go down subsequently, and assuming that the decision was poor. After all, even highly successful money managers buy stocks that underperform. The key is whether, given the information the executives had at the time, the stock traded at a sufficient discount to a reasonable assessment of its intrinsic value. If the process is solid and the conclusion about intrinsic value sound, then a later decline in the stock price is not evidence of a bad decision. In reality, however, very few executives think about buybacks properly.

For companies that are overcapitalized and have a stock that management deems to be overvalued, a special dividend is a reasonable alternative. A dividend treats all investors the same and allows investors to reallocate the proceeds as they see fit. Those shareholders who think the shares are undervalued can reinvest their dividend proceeds back into the shares.

- Executives should follow the golden rule of share buybacks: A company should repurchase its shares only when its stock is trading below its expected value and when no better investment opportunities are available. ¹⁰ The first part of this rule reinforces the notion that executives should seek to maximize value for the ongoing shareholders. The second part of the rule addresses prioritization and makes clear that executives should assess the virtue of a buyback against alternative investments, including capital spending and M&A.
- Buybacks can be more attractive than investing in the business. Most executives don't want to hear this because they think that their prime responsibility is to grow the business. But the objective of growth can, and often does, come into conflict with the proper objective of maximizing long-term value for ongoing shareholders. In most cases, companies achieve value creation through operations—investments in the business that earn above the cost of capital. And building value through operations should remain their top priority. But properly executed buybacks can provide a legitimate and significant lever to build value for ongoing shareholders.
- Buybacks can be more attractive than M&A. Most M&A deals are close to value neutral for the buyer, which means that they earn something close to the cost of capital. The reason is pretty simple: attractive assets typically lure multiple buyers, so most of the value of synergies goes to the sellers than to the buyers. Buybacks offer executives a potential advantage over M&A. In M&A, a company must properly forecast the cash flows of the target as an ongoing business and then attempt to pay a premium for control that is less than the present value of synergies. So a deal must clear two hurdles: deliver on the expectations already in the market and deliver on a positive spread between the synergies and the premium. It may be easier for an executive to assess the cash flows of his own business than the cash flows of an acquisition target. Further, with smart buybacks the company pays no premium—in fact, the company can acquire the shares at a discount.
- There are three basic schools of thought behind buying back stock:
 - o Fair value school. This school believes that a steady and consistent approach is best. Over the span of many years, the company will repurchase shares that are at times undervalued, at times overvalued, and often somewhere near the fair value. The attitude is that it all works out in the end, and the company returns cash at roughly fair value. Since buybacks offer ongoing shareholders more flexibility—they can hold and defer



taxes or sell a pro-rated amount and create homemade dividends—executives in this school deem them superior to a dividend.

- Intrinsic value school. This school believes that a company should only buy back stock when the shares are undervalued. If management's assessment of value is correct, this approach rewards ongoing shareholders at the expense of selling shareholders. To properly execute buybacks using this approach, executives must have a good, grounded sense of what their company's stock is worth. Experience indicates that few executives cultivate this sense.
- o Impure motives school. Executives in this school buy back shares to achieve goals that may or may not coincide with the economic interests of shareholders (and raise agency costs). These include buying back shares to boost earnings per share (EPS), to offset dilution from options or M&A, or to lift the return on equity. ¹¹ The use of buybacks to manipulate EPS is particularly tempting. *To be clear, there is no economically sensible rationale to buy back stock solely to increase EPS.*

Whether a buyback increases or decreases EPS is a function of the price earnings (P/E) multiple and either the company's foregone after-tax interest income or the after-tax cost of new debt to finance the buyback. When the inverse of the P/E, or earnings yield, [1/(P/E) = E/P] is greater than the after-tax interest rate, a buyback adds to EPS. When the E/P is lower than the after-tax rate, a buyback reduces EPS. Management should view the EPS impact of a buyback as a residual, not as a source of motivation.

- Assuming a process through which management can distinguish between an undervalued and overvalued stock, the intrinsic value school is best. The actions of executives in the intrinsic value school provide a useful signal to investors as to when those executives think the stock is cheap or dear. The fair value school is tolerable if management articulates its strategy and executes it consistently. ¹² There is major risk in the impure motives school and, unfortunately, this is the school of thought to which most companies subscribe.
- The shareholder rate of return—the return that continuing shareholders can expect—equals the cost of equity divided by the ratio of stock price to intrinsic value. For example, say a stock is trading at \$50, management's thoughtful analysis suggests that it is worth \$75, and the cost of equity is 8 percent. The expected return from the buyback is 12 percent [8%/(\$50/\$75)]. A more sophisticated approach incorporates both the discount to intrinsic value and the time it takes for the value gap to close. But even this simple approach provides management with a reasonable basis to compare the returns from a buyback to other alternatives.
- A number of companies are sitting on enormous cash balances. For example, tech giants Apple, Cisco Systems, Facebook, Google, Microsoft, Oracle, and Qualcomm have between them \$282 billion in net cash, which represents more than 20 percent of their combined market capitalizations. ¹³ However, of the \$1.7 trillion in aggregate liquid assets in U.S. nonfinancial companies, over \$1 trillion is outside of the U.S. This means that companies must repatriate the cash and pay taxes before they can use the funds for dividends or share buybacks. The tax rate they have to pay is the difference between U.S. taxes and what the company paid in the local jurisdiction. Research shows that companies that face high taxes are more likely to hold cash balances. ¹⁴

As a result, some companies have been seeking to make acquisitions, or other investments, overseas in order to deploy capital without generating a tax bill. Recent examples include Hewlett-Packard's acquisition of Autonomy for \$11.7 billion and Microsoft's purchase of Skype for \$8.5 billion. ¹⁵ The risk, from the standpoint of shareholders, is clear: managers may find



- acquisitions that earn more than the rate on cash (relatively attractive) but below the cost of capital (absolutely unattractive).
- There is an economic case for repatriating cash from overseas, paying the U.S. taxes, and buying back shares. This action makes sense if the discount to intrinsic value exceeds the tax rate of repatriated funds. Exhibit 4 provides the numbers. The table assumes a cost of equity of 8 percent. The rows reflect different assumed tax rates for funds repatriated to the U.S., which are the difference between the U.S tax rate and the tax rate in the jurisdiction where the cash resides. The columns are a range of price-to-value ratios, which means that lower numbers imply a larger discount to intrinsic value. The body is filled with the shareholder rate of return (equals the cost of equity divided by the ratio of stock price to intrinsic value). In all but the unshaded areas, repatriation plus a buyback would be neutral to value additive for continuing shareholders.

Exhibit 4: Does Repatriating Cash and Buying Back Stock Create Value?

Price to intrinsic value ratio							
		0.5	0.6	0.7	0.8	0.9	1.0
	0%	16.0%	13.3%	11.4%	10.0%	8.9%	8.0%
	5%	15.2%	12.7%	10.9%	9.5%	8.4%	7.6%
	10%	14.4%	12.0%	10.3%	9.0%	8.0%	7.2%
Tax rate	15%	13.6%	11.3%	9.7%	8.5%	7.6%	6.8%
	20%	12.8%	10.7%	9.1%	8.0%	7.1%	6.4%
	25%	12.0%	10.0%	8.6%	7.5%	6.7%	6.0%
	30%	11.2%	9.3%	8.0%	7.0%	6.2%	5.6%

Source: LMCM. The table above is for illustrative purposes only and is not reflective of an actual investment.

• Executives should spend the bulk of their time and effort in creating shareholder value through operations. With regard to share buybacks, executives should do a few things. First, they must realize that their objective is to maximize long-term value for their continuing shareholders. Second, they must be able to assess the economic attractiveness of buybacks by doing a thoughtful assessment of the intrinsic value of their company and compare that value to the prevailing price. Finally, management must be able to assess the attractiveness of buybacks versus alternate uses of the capital and recognize that there are instances when repurchasing shares creates more value than investing in the business does. This may include repatriating cash from overseas.



Shareholders:

- Here's a very basic question: If you own the shares of a company because you believe the stock is undervalued, why would you ever want the company to pay a dividend instead of buying back shares? If you believe the shares are undervalued then you should always favor a buyback because buybacks add value for continuing shareholders at the expense of selling shareholders. As Warren Buffett wrote in Berkshire Hathaway's 1984 annual report, "When companies with outstanding businesses and comfortable financial positions find their shares selling far below intrinsic value in the marketplace, no alternative action can benefit shareholders as surely as repurchases." ¹⁶ Perhaps the final phrase would be more accurate if it read, "no alternative action can benefit ongoing shareholders as surely as repurchases."
- If the company of a stock that you own is buying back shares, you must recognize that *doing nothing is doing something*—increasing your percentage ownership in the company. As a consequence, if you are a longstanding shareholder it is inappropriate to criticize management for having bought back stock at a higher price. Provided that management used a proper process to assess the merit of the buyback, they have come to the same conclusion as you have (assuming that you own the shares because you think they are undervalued). Companies and investors have to make decisions in the face of incomplete information and uncertainty.
- Encourage the companies you own to adhere to the golden rule of buybacks: A company should repurchase its shares only when its stock is trading below its expected value and when no better investment opportunities are available. Most executives think in terms of "growth versus nogrowth" rather than "value creation versus value destruction." There are times when repurchasing shares is more attractive than investing in the business.
- Shareholders who want a dividend can simply create one by selling a pro-rated amount of stock.
 As with a normal cash dividend, a synthetic dividend leaves the shareholder with cash and the
 same proportionate ownership of the company. Buybacks are generally more favorable than a
 dividend because there is no reinvestment risk and little friction. A synthetic dividend is a good
 solution for shareholders who want cash for current consumption.
- Investors frequently use past total shareholder return (TSR) as a guide to anticipate future returns. Here's a simple formula to calculate TSR, where g is the annual rate of price appreciation and d is the dividend yield:

$$\circ$$
 TSR = g + d(1+g)

The problem is that with stocks that pay dividends, almost no investors earn the total shareholder return. This is because dividends are often taxable and generally don't get reinvested back into the stock (either because of consumption or because the dividends are allocated to other investments). Said differently, a shareholder only earns the TSR if he automatically reinvests 100 percent of his dividends back into the stock in a tax-free account, which rarely happens. ¹⁷ In contrast, companies that return cash to shareholders via buybacks allow their ongoing shareholders to earn the TSR.

Shareholders seek to buy the shares of companies when the price in the market is well below the
value. The larger the discount between value and price, the higher the expected return to
shareholders (all else being equal) as the market closes the gap between the two. Provided a
shareholder is right in his assessment of price and value, he should always prefer a buyback to a
dividend because a buyback increases the value per share for continuing shareholders.



Prospective Shareholders:

Step one as a prospective shareholder is figuring out whether there's a gap between price and
value. Integral to that decision is an assessment of management. And all roads to managerial
evaluation lead back to capital allocation: financial capital, physical capital, and human capital.
The interplay between incentives and capital allocation is important, but the guiding principles of
management are probably most important.

The value of a company's stock is the present value of the cash the business will generate throughout its life. A company must ultimately provide its owners cash in order to have value. That cash can come in the form of dividends, share buybacks, or a sale of the company. While management's first and foremost priority is building value through operations, a thoughtful approach to returning cash to shareholders can add meaningful value.

- Assess whether the company is following the golden rule of buybacks: A company should repurchase its shares only when its stock is trading below its expected value and when no better investment opportunities are available. Analyze the results of the company's capital allocation choices and spend time understanding the process by which they make their choices. As in any field filled with uncertainty, a focus on process is more revealing than observing short-term outcomes. If the company did buy back stock, assess their motivation. Did they do it for the right reasons?
- Note the evidence that shows that companies that reduce asset growth via dividend initiations, buybacks, and spinoffs generate better shareholder returns than companies that grow their capital bases rapidly. Judge whether there is sufficient evidence of capital deployment discipline. Further, the research shows that companies that return cash actually grow faster than the average of all companies.
- Analyze the company's capital structure and ask whether it's overcapitalized. As noted earlier,
 cash balances today are very high and free cash flow generation remains strong. Develop an
 informed view of how management is likely to deploy the capital. Will the funds be returned to
 shareholders opportunistically? Will the company chase growth? Will the firm allow the cash to sit
 on the balance sheet, creating an option?



Media:

- Most members of the media have little or no training in finance. The problem arises when members of the media comment on how attractive or unattractive a buyback is based on faulty facts or thinking. Unfortunately, there is a good deal of this type of exposition.
- First things first: A company that bought back stock at a price that is higher than its current price has not committed a sin *if the decision-making process was proper*. A process is proper if the company thoughtfully assessed its value using the facts and information it had at the time and deemed the price to be below that value. Now, the fact is that most executives always think that their stock is undervalued, and so their motivation to buy may not be proper. But the point is that just because a stock has fallen subsequent to a buyback does not mean it was a poor decision.

As we saw earlier, value is conserved. It's just that the selling and ongoing shareholders are treated differently. Here's a related question to contemplate: Would you give a company a hard time if it paid out a dividend when the stock was higher? Unlikely.

- Stop with the canard that investors deem buybacks to be good because they increase earnings per share (EPS) by dividing profits by a smaller number of shares. Here's a typical quotation: "Buybacks serve some useful purposes. Reducing the outstanding stock can help a company boost per-share earnings, as the profit is divided by fewer shares." ¹⁸ This is not even arithmetically true, much less economically valid. As seen earlier, the EPS impact of a buyback is a function of the interest rate (either foregone interest income on cash deployed to buy back shares or the interest expense assumed to borrow to buy shares) and the reciprocal of the P/E multiple, or earnings yield. The EPS effect is separate from the economic effect.
- Returning capital to investors is vital, and redeployment of capital is an essential function of the
 capital markets. While many investors rely on agents to invest on their behalf (e.g., mutual funds,
 hedge funds), redeploying capital from low-return to high-return opportunities is crucial to the
 long-term health of the economy, and buybacks can be a very efficient way to achieve that goal.
- Share buybacks should not be derisively called "financial engineering." If done properly, they are
 a thoughtful and effective means to return capital to owners. Some companies may pursue
 buybacks for the wrong reasons, including boosting the stock price or offsetting dilution from
 compensation programs, but the evidence shows that such moves have little or no lasting
 effects.¹⁹



Endnotes:

- ¹ John J. McConnell and Chris J. Muscarella, "Corporate Capital Expenditures Decisions and the Market Value of the Firm." Journal of Financial Economics, Vol. 14, No. 3, September 1985, 399-422; Kee H. Chung, Peter Wright, and Charlie Charoenwong, "Investment Opportunities and Market Reaction to Capital Expenditure Decisions," Journal of Banking & Finance, Vol. 22, No. 1, January 1998, 41-60. ² Robert F. Bruner. *Deals from Hell: M&A Lessons That Rise Above the Ashes* (Hoboken, N.J.: John Wiley & Sons, 2005).
- ³ Mark L. Sirower and Sumit Sahni, "Avoiding the 'Synergy Trap': Practical Guidance on M&A Decisions for CEOs and Boards," Journal of Applied Corporate Finance, Vol. 18, No. 3, Summer 2006, 83-95. ⁴ For a proof, see Michael J. Mauboussin, "Clear Thinking about Share Repurchase: Capital Allocation, Dividends, and Share Repurchase," Mauboussin on Strategy, January 10, 2006, 16-17.
- ⁵ Mark T. Leary and Roni Michaely, "Determinants of Dividend Smoothing: Empirical Evidence," Review of Financial Studies, Vol. 24, No. 10, October 2011, 3199-3249. Also, Alon Brav, John R. Graham, Campbell R. Harvey, and Roni Michaely, "Payout Policy in the 21st Century," Journal of Financial Economics, Vol. 77, No. 3, September 2005, 483-527.
- ⁶ Gustavo Grullon, Bradley Paye, Shane Underwood, and James P. Weston, "Has the Propensity to Pay Declined?" Journal of Financial and Quantitative Analysis. Vol. 46. No. 1. February 2011. 1-24. Also. Jacob Boudoukh, Roni Michaely, Matthew Richardson, and Michael R. Roberts, "On the Importance of Measuring Payout Yield: Implications for Empirical Asset Pricing," Journal of Finance, Vol. 63, No. 2, April
- 2007, 877-915. The Real Role of Dividends in Building Wealth: Clearing Up Muddled Thinking About Dividends," Mauboussin on Strategy, January 25, 2011.
- ⁸ Michael J. Cooper, Huseyin Gulen, and Michael J. Schill, "Asset Growth and the Cross-Section of Stock Returns," Journal of Finance, Vol. 63, No. 4, August 2008, 1609-1651 and Xi Li, Ying Becker, and Didier Rosenfeld, CFA, "Asset Growth and Future Stock Returns: International Evidence," Financial Analysts Journal, Vol. 68, No. 3, May/June 2012, 51-62. Also, Doron Nissim and Amir Ziv, "Dividend Changes and Future Profitability," Journal of Finance, Vol. 56, No. 6, December 2001, 2111- 2133 and Robert D. Arnott and Clifford S. Asness, "Surprise! Higher Dividends = Higher Earnings Growth," Financial Analysts Journal. Vol. 59, No. 1, January/February 2003, 70-87.
- ⁹ See http://www.federalreserve.gov/apps/fof/Guide/P_67_coded.pdf.
- ¹⁰ Alfred Rappaport and Michael J. Mauboussin, Expectations Investing: Reading Stock Prices for Better Returns (Boston, MA: Harvard Business School Press, 2001), 174.

 11 Kathleen M. Kahle, "When a Buyback Isn't a Buyback: Open Market Repurchases and Employee
- Options," Journal of Financial Economics, Vol. 63, No. 2, February, 2002, 235-261.
- Alice A. Bonaimé, Kristine W. Hankins, and Bradford D. Jordon, "Is Managerial Flexibility Good for Shareholders? Evidence from Share Repurchases," *SSRN Working Paper*, March 15, 2012.
 ¹³ Andrew Bary, "Show Us the Money," *Barron's*, May 26, 2012.
- ¹⁴ C. Fritz Foley, Jay C. Hartzell, Sheridan Titman, and Garry Twite, "Why Do Firms Hold So Much Cash? A Tax-based Explanation," Journal of Financial Economics, Vol. 86, No. 3, December 2007, 579-607. ¹⁵ Michael J. De La Merced, "In Autonomy Deal, a Way for H.P. to Spend Overseas Cash," New York
- Times DealBook. August 18, 2011.
- ¹⁶ See http://www.berkshirehathaway.com/letters/1984.html
- ¹⁷ Alfred Rappaport, "Dividend Reinvestment, Price Appreciation and Capital Accumulation," Journal of Portfolio Management, Vol. 32, No. 3, Spring 2006, 119-123.
- ¹⁸ Rob Cox, Jeff Segal, and John Foley, "Expedia's Buyback Surprise," Wall Street Journal, June 20,
- 2007.

 19 Konan Chan, David L. Ikenberry, Inmoo Lee, and Yanzhi Wang, "Share Repurchase as a Potential Tool to Mislead Investors," Journal of Corporate Finance, Vol. 16, No. 2, April 2010, 137-158.

Important risks

All investments are subject to risks, including loss of principal.

This document is for information only and does not constitute an invitation to the public to invest. You should be aware that the investment opportunities described should normally be regarded as longer term investments and they may not be suitable for everyone. The value of investments and the income from them can go down as well as up and investors may not get back the amounts originally invested, and can be affected by changes in interest rates, in exchange rates, general market conditions, political, social and economic developments and other variable factors. Past performance is no guide to future returns and may not be repeated. Investment involves risks including but not limited to, possible delays in payments and loss of income or capital. Neither Legg Mason nor any of its affiliates guarantees any rate of return or the return of capital invested. Please note that an investor cannot invest directly in an index. Forward-looking statements are subject to uncertainties that could cause actual developments and results to differ materially from the expectations expressed. This information has been prepared from sources believed reliable but the accuracy and completeness of the information cannot be guaranteed and is not a complete summary or statement of all available data. Individual securities mentioned are intended as examples of portfolio holdings and are not intended as buy or sell recommendations. Information and opinions expressed by either Legg Mason or its affiliates are current as of the date indicated, are subject to change without notice, and do not take into account the particular investment objectives, financial situation or needs of individual investors. The information in this document is confidential and proprietary and may not be used other than by the intended user. Neither Legg Mason nor any officer or employee of Legg Mason accepts any liability whatsoever for any loss arising from any use of this document or its contents. This document may not be reproduced, distributed or published without prior written permission from Legg Mason. Distribution of this document may be restricted in certain jurisdictions. Any persons coming into possession of this document should seek advice for details of, and observe such restrictions (if any).

This document may have been prepared by an advisor or entity affiliated with an entity mentioned below through common control and ownership by Legg Mason, Inc.

This material is only for distribution in the jurisdictions listed.

Investors in Europe:

Issued and approved by Legg Mason Investments (Europe) Limited, registered office 201 Bishopsgate, London EC2M 3AB. Registered in England and Wales, Company No. 1732037. Authorized and regulated by the Financial Services Authority. Client Services +44 (0)207 070 7444. This document is for use by Professional Clients and Eligible Counterparties in EU and EEA countries. In Switzerland this document is only for use by Qualified Investors. It is not aimed at, or for use by, Retail Clients in any European jurisdictions.

Investors in Hong Kong, Korea, Taiwan and Singapore:

This document is provided by Legg Mason Asset Management Hong Kong Limited in Hong Kong and Korea, Legg Mason Asset Management Singapore Pte. Limited (Registration Number (UEN): 200007942R) in Singapore and Legg Mason Investments (Taiwan) Limited (Registration Number: (98) Jin Guan Tou Gu Xin Zi Di 001; Address: Suite E, 55F, Taipei 101 Tower, 7, Xin Yi Road, Section 5, Taipei 110, Taiwan, R.O.C.; Tel: (886) 2-8722 1666) in Taiwan. Legg Mason Investments (Taiwan) Limited operates and manages its business independently. It is intended for distributors use only in respectively Hong Kong, Korea, Singapore and Taiwan. It is not intended for, nor should it be distributed to, any member of the public in Hong Kong, Korea, Singapore and Taiwan.

Investors in the Americas:

This document is provided by Legg Mason Investor Services LLC, a U.S. registered Broker-Dealer, which may include Legg Mason International - Americas Offshore. Legg Mason Investor Services, LLC, Member FINRA/SIPC, and all entities mentioned are subsidiaries of Legg Mason, Inc.

Investors in Canada

This document is provided by Legg Mason Canada Inc. Address: 220 Bay Street, 4th Floor, Toronto, ON M5J 2W4. Legg Mason Canada Inc. is affiliated with the Legg Mason companies mentioned above through common control and ownership by Legg Mason, Inc.

Investors in Australia:

This document is issued by Legg Mason Asset Management Australia Limited (ABN 76 004 835 839, AFSL 204827) ("Legg Mason"). The contents are proprietary and confidential and intended solely for the use of Legg Mason and the clients or prospective clients to whom it has been delivered. It is not to be reproduced or distributed to any other person except to the client's professional advisers.

This material is not for public distribution outside the United States of America.

Materials were prepared by Brandywine Global Investment Management, LLC and distributed by Legg Mason Investor Services, LLC.

Legg Mason Perspectives® is a registered trademark of Legg Mason Investor Services, LLC.

© 2012 Legg Mason Investor Services, LLC. Member FINRA, SIPC. Legg Mason Capital Management of Legg Mason, LLC. and Legg Mason Investor Services, LLC and all entities mentioned above are subsidiaries of Legg Mason, Inc. 407489 MIPX014745 6/12 FN1211943