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Buy High, Sell Low

Evaluating pre-crisis buybacks with perfect hindsight

J.P.Morgan

1. Hindsight is 20/20

Fueled by global economic growth, strong cash flows, benign financial market conditions, and shareholder pressure, US firms repurchased stock in record amounts over 2005-2007.¹ Since then, many of the same firms have cut dividends and capex, and issued equity to strengthen their balance sheets and enhance liquidity. With the benefit of hindsight, the 2005-2007 distributions seem to have been ill timed, leading to criticism by investors. Criticism has been most virulent for firms that bought shares at high levels and subsequently needed to issue equity at lower levels.

Figure 1

Hindsight is 20/20: Is the criticism of pre-crisis buybacks justified?

“The problem is that, in practice, corporate executives are terrible market timers. In 2007 [Company X] spent close to \$1 billion to buy back stock at an average price of around \$30 a share. It isn't currently repurchasing any, even though its stock is currently trading under \$10.”

Robert Cyran, February 5, 2009
CNNMoney.com

“Since early last year, [Company X] spent \$3 billion to repurchase almost 49 million shares, at an average price of around \$61.50. Now the stock is under \$27, having lost more than \$11 today after announcing a \$2 billion loss — and the company says it is going to try to raise capital quickly.”

Floyd Norris, November 20, 2007
The New York Times

“The firms bought stock when they felt flush and are now selling it cheap because they need the money. In December [Company X] sold \$5.6 billion of common stock at \$48 a share to raise capital. Earlier in the year, however, it paid 75% more — \$84.48 — for the shares it bought in the market.”

Allan Sloan, January 24, 2008
Fortune

Source: J.P. Morgan

We address questions that arise prominently from the buy high sell low debate, namely:

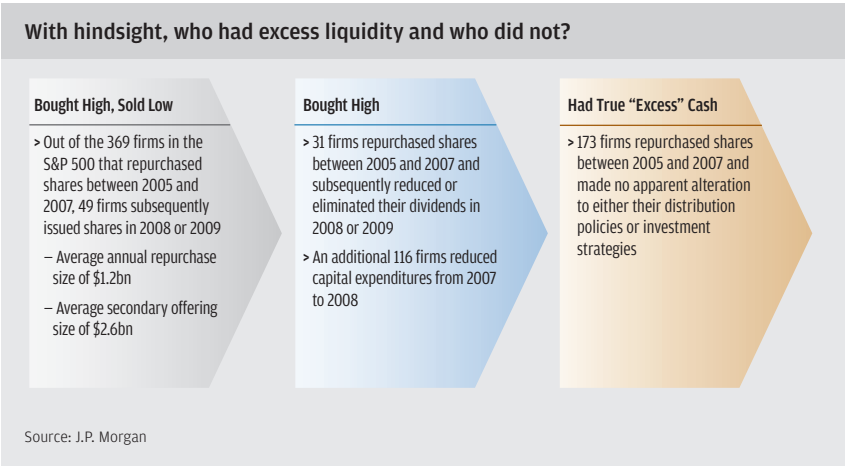
(1) Did many firms buy high and sell low? Firms repurchased massive amounts of stock in the pre-crisis years. Specifically, 369 firms in the S&P 500 had positive net repurchases from 2005 to 2007. This is not surprising, as firms tend to have excess cash flow when the economy is flourishing. Since the beginning of the crisis, 49 of these 369 firms have issued equity at

¹ For example, S&P 500 firms repurchased \$335bn in 2005, \$493bn in 2006 and \$590bn in 2007.

significantly lower prices (including 31 financial firms), 147 did not issue equity but had to cut their dividends or capital expenditures, and 173 truly had “excess” cash, i.e., they repurchased shares but did not have to cut dividends and capex even in one the most severe economic crises in recent history (see Figure 2).

(2) Could decision-makers have anticipated the liquidity needs they faced in the current crisis? With hindsight, it seems that 196 of the S&P 500 firms distributed “excess” liquidity that they did not really have. Could they have foreseen the downside scenario we experienced over the last two years? Based on historic precedents, peer analysis, and statistical downside analysis, we show that firms could not have anticipated the unprecedented course of events they experienced.

Figure 2



(3) Was repurchasing shares a “bad” investment strategy? Most large firms repurchase shares because they believe that they have excess liquidity and because share repurchases are a tax effective and flexible distribution strategy that can be used in combination with dividends. They do not view these repurchases as an investment on which they seek to earn excess returns. Some commentators criticize repurchases more than dividends, however, because they remember the prices at which the repurchases were executed. We show that, on a relative basis, the returns of repurchases tracked the S&P 500 closely. Thus, if investors had received the repurchase totals in the form of dividends and invested the proceeds in the broader market, their returns would have closely matched the returns earned on repurchases.

(4) What have we learned? While firms and investors cannot predict the exact duration of economic cycles, decision-makers should use recent knowledge to update their views on the possible severity of peaks and troughs. Firms should develop through-cycle financial policies that reevaluate the cash reserves needed to weather economic downturns, when access to capital is limited and the cost of capital is high. Firms should also re-examine their capital structures in light of the new economic environment, and not be hesitant to issue equity because they repurchased shares at higher pre-crisis prices.

(5) How do investors view distributions

today? Although investors are justifiably focused on strong balance sheets and liquidity, they continue to appreciate well thought out shareholder distributions. The market reaction to dividend increases and repurchases has continued to be meaningfully positive despite the economic environment. In a market where most firms have cut distributions or raised capital, investors applaud firms that are producing and distributing excess cash flows.

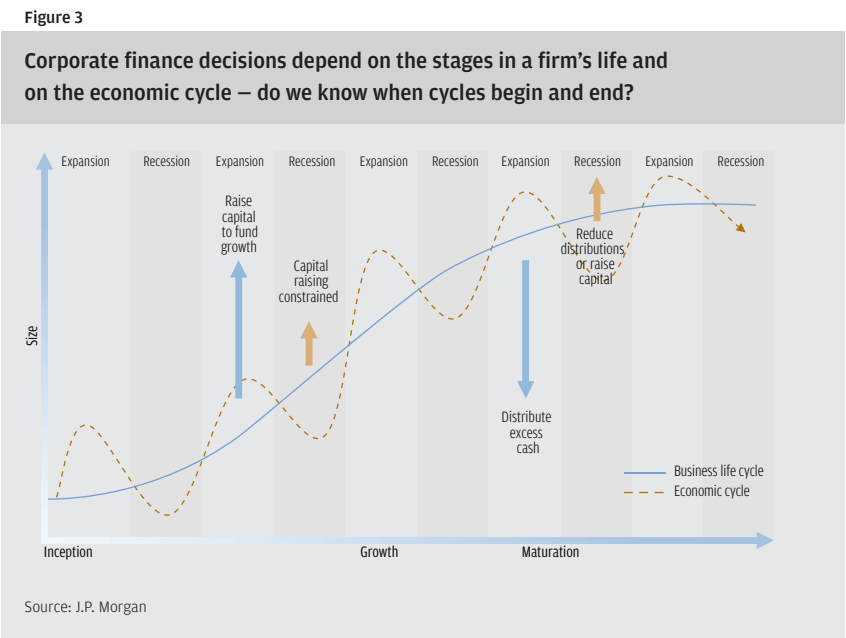
EXECUTIVE TAKEAWAY

Investors, board members, and the press have argued that many of the large 2005-2007 distributions were ill conceived. In particular, they have criticized firms buying high and selling low. We show that investors would have been indifferent between dividends and repurchases, that firms should adopt revised through-cycle financial policies, and that investors continue to applaud balanced distribution decisions. We also argue that firms' decisions regarding equity issuances in today's environment should be independent of pre-crisis stock repurchases.

2. Life and business cycle impact shareholder distributions

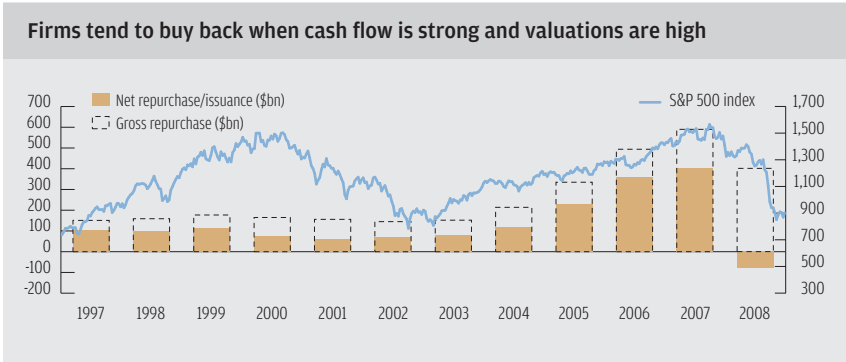
When firms grow and develop, they are cash flow negative and need significant amounts of capital relative to their size. During expansions, it is easier to raise this growth capital than during recessions. Once they reach a more mature stage, firms generate cash flow in excess of their investment opportunities. Assuming they are satisfied with their capital position, they distribute this excess cash flow to shareholders. In expansionary periods, excess cash flow will be significant. During recessionary periods, they have less to distribute and may even have to raise capital.

From the illustration in the figure below, one could conclude that it does not make sense to distribute excess capital during expansionary periods, knowing that a trough will eventually come and capital may be needed. **Unfortunately, in practice, the length and strength of cycles varies and is hence unpredictable.**



We illustrate the tendency to distribute excess capital at valuation peaks in Figure 4 on the following page. This trend was particularly pronounced in 2005-2007, when firms were buying an increasing amount of stock as the overall market valuation level increased. While firms continued to buy back stock in 2008, even larger amounts of equity were raised; hence “net repurchases” were negative.

Figure 4



We observe the same pattern if we analyze separate industries. For example, financial firms repurchased significant amounts through 2007, but their 2008 issuance volume dwarfed all the net repurchases of the previous 10 years. Energy firms repurchased modest amounts from 1997 to 2004 and then started returning large amounts of capital to investors through buybacks as their valuations were also increasing to reflect the improved economic conditions. Today, the energy sector also needs significant liquidity to execute its capital plans.

EXECUTIVE TAKEAWAY

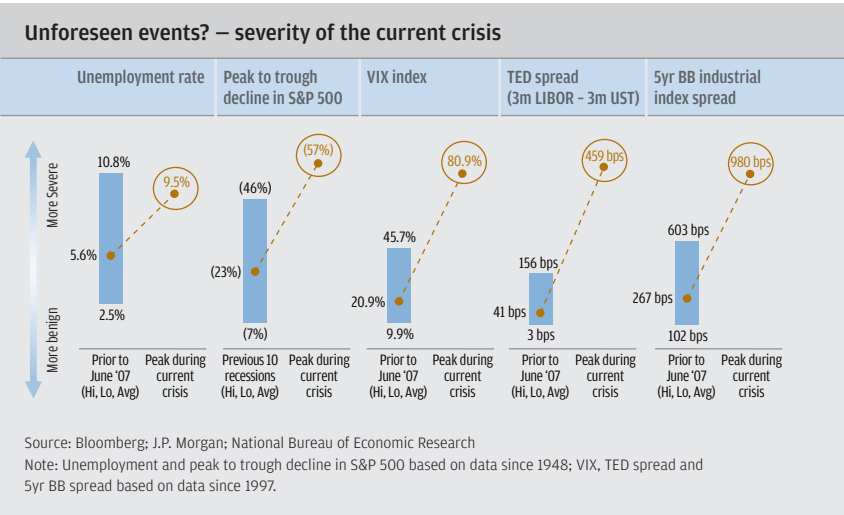
Firms make larger distributions when they generate more cash flow, and these distribution waves tend to correspond with higher stock prices. Why do firms not preserve this liquidity, knowing that down cycles will eventually arrive? Investors are typically not patient regarding shareholder distributions, firms may not be managed as effectively when they have a lot of liquidity, and most importantly, it is hard to predict when up cycles will end and down cycles begin.

3. Assessing excess liquidity with unpredictable events

Assessing “excess” liquidity: To gauge whether they have “excess” liquidity that can safely be distributed to shareholders, firms employ a variety of methodologies: (1) They look at their peers to gauge their financial policy decisions; (2) They examine past history to assess the types of policies that have been effective; and (3) They test whether their liquidity is sufficient to weather deep but likely downside scenarios.

What are reasonable downside scenarios? To assess how realistic downside scenarios are, firms can review historical data and select the low or high points of certain metrics. Alternatively, they can use a statistical approach to quantify the averages or volatility of certain metrics and estimate the likelihood of various downside scenarios. As we show in Figure 5 below, these approaches would not have predicted the extremes that we have experienced over the past two years. For example, over 1997-2007, the 3-month TED spread (difference between Libor and Treasuries) had an average of 41 basis points, and a high of 156 basis points. In the fall of 2008, around the time of the Lehman collapse, it skyrocketed to 459 basis points. Based on historical data, decision-makers could never have foreseen the severity of the financial crisis that we just experienced.

Figure 5



EXECUTIVE TAKEAWAY

It would have been easy to estimate liquidity needs and true excess cash flow if we had perfect foresight. Yet, we typically examine history to learn about the future. With the then-available information, firms could not have anticipated the downside scenarios they experienced over the last two years.

4. Shareholder distribution philosophies

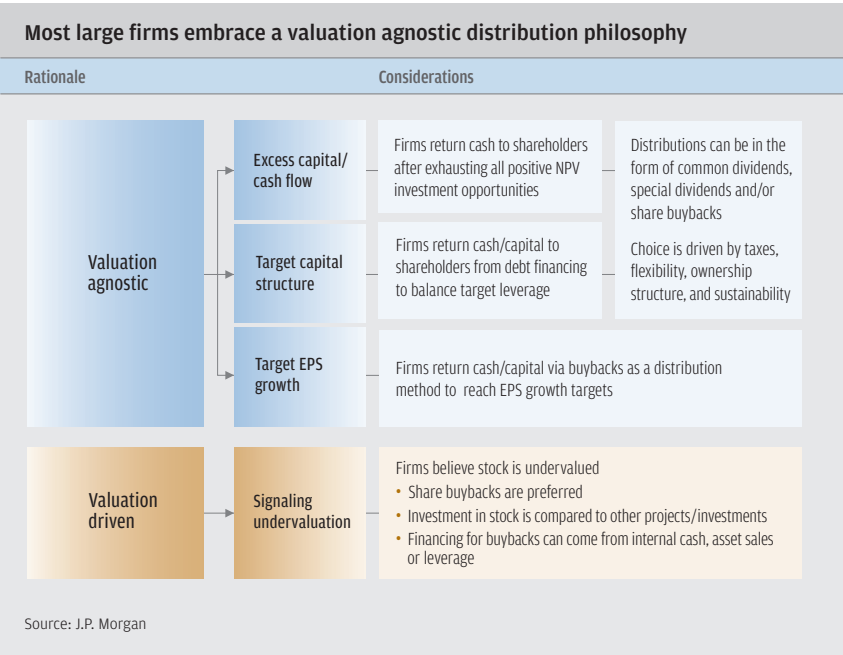
Firms repurchasing shares embrace two broad philosophies that are summarized in the figure below.

Valuation agnostic distribution of excess cash flow: Some firms, mostly larger firms that distribute very large sums of excess cash flow or capital year after year, adopt a valuation agnostic approach. Their choice between buybacks and dividends is not valuation driven, but rather based on taxes as well as on the predictability of cash flows. When cash flows are very stable and acquisition opportunities are limited, these firms return more of their cash flows in the form of dividends. When cash flows are less predictable and/or acquisition opportunities are large and less predictable, they may prefer the flexibility offered by buybacks. The notion that supports this choice between repurchases and dividends is that investors accept reductions in stock repurchase activity much more readily than dividend cuts.

While the philosophy is valuation agnostic, many firms appreciate the fact that when interest rates are low, repurchases also tend to be **earnings accretive** (depending on the earnings per share and the multiple at which the firm is trading). How does this help? If the firm projects an EPS growth rate of 12%, and it can organically only achieve a growth rate of 8%, then reducing the share count through buybacks is another avenue to achieve the promised 12% EPS growth rate.

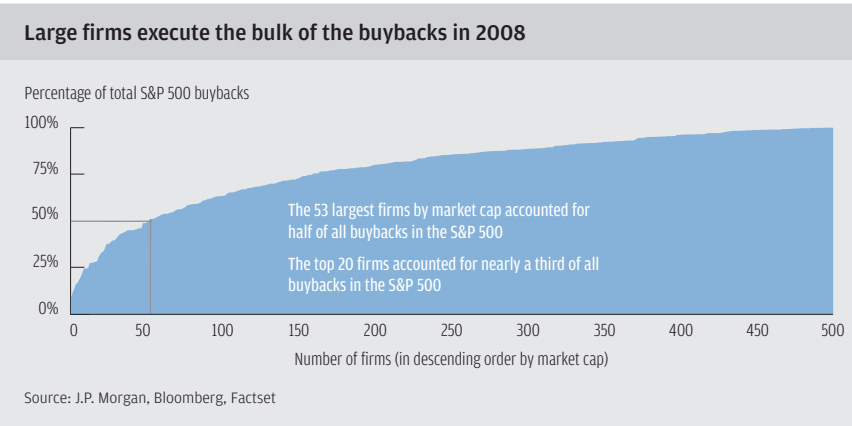
Undervalued stock: Another set of firms return cash flow through repurchases specifically because they believe their stock is undervalued. While these firms may have excess cash or capital, the key driver of their buyback decision is their desire to invest in an asset with a high return potential, i.e., their own undervalued stock. Especially with an aggressive repurchase, these firms also hope to convey their “undervaluation” belief to the markets and hence generate a positive stock price response. Using the same logic, decision-makers who believe their shares are currently overvalued should abstain from repurchases and distribute excess cash in the form of dividends instead.

Figure 6



Which philosophy is more prevalent? While these two philosophies are not mutually exclusive, our experience suggests that large firms that execute steady large repurchases are more valuation agnostic when buying back shares. Large firms also execute the bulk of the repurchases. For example, in 2008, the top 20 firms in the S&P 500 accounted for about one third of the S&P 500 buyback volume. In the same vein, 53 of the largest firms accounted for half the S&P 500 repurchase volume. The repurchase concentration has been similar in other years. Granted, all firms in the S&P 500 can be considered large firms relative to the smaller firms that announce one-time buybacks because they believe they are undervalued. Overall, the buyback concentration with large firms suggests that a large proportion of the repurchases have been executed in a valuation agnostic fashion.

Figure 7



EXECUTIVE TAKEAWAY

Most large firms adopt a valuation agnostic distribution policy. They distribute excess cash or capital using dividends and buybacks. They repurchase shares over time and their repurchase decisions are not driven by their views on the valuation of their shares. For these firms, the repurchase decision is a distribution decision, not an investment decision.

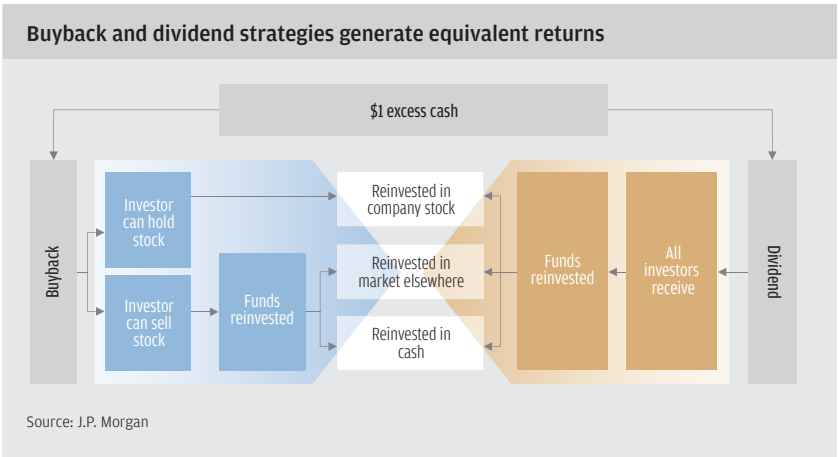
5. Would dividends have been better than buybacks?

If a firm did not have excess liquidity, then distributing liquidity was a mistake (with hindsight), regardless of the distribution form (i.e., buybacks or dividends). Some commentators seem to argue that the situation has been aggravated because cash was used to repurchase shares at high levels. Implicitly they argue that paying out the cash in the form of dividends would have been a better strategy. Is this a fair criticism?

When the firm pays a dividend: With dividend payouts, all investors are treated equally and receive the firm’s cash. Subsequently, they have to make a reinvestment decision. If they desire to maintain or increase their exposure to the firm, they can reinvest the dividend and buy the firm’s shares. They can also reinvest the dividend proceeds in the overall market or in other segments, depending on their preferences at the time. Finally, they can keep the dividend proceeds in cash.

When the firm repurchases shares: If the firm repurchases shares instead of paying a dividend, then investors have a similar set of choices. If they desire to maintain or increase their exposure to the firm, they hold on to their shares. If instead they prefer more exposure to the broader market or other sectors, then they can sell their shares and reinvest the proceeds in the assets they desire (including cash).

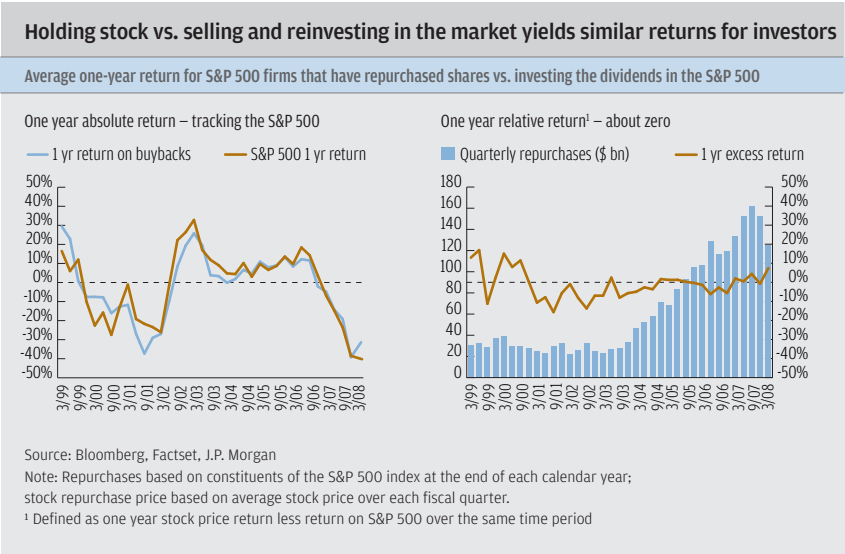
Figure 8



In sum, in the absence of transaction costs (brokerage fees, personal taxes), dividends and buybacks give investors the same choices and outcomes.

Although many firms do not approach buyback strategies from a return on investment perspective, we gauge the return on repurchases over the year following the repurchases. The annual returns are negative in 2001-2002 and then again in 2007 (see Figure 9). We compare the returns of repurchases to the corresponding S&P 500 annual returns and observe that these returns track the buyback returns quite closely. This is what we would expect if the repurchase volume is similar to the weights of firms comprising the S&P 500. We consolidate the two return series and chart the buyback returns in excess of the overall market on the right side of Figure 9. Returns relative to the S&P 500 hover around zero.

Figure 9



These results mean that (1) **absolute** returns for firms executing buybacks have been negative (not surprising, given that very large buybacks were executed at high stock levels before the crisis); (2) returns **relative** to the S&P 500 are close to zero (not surprising, given that most S&P 500 firms executed large buybacks); (3) firms or investors could have outperformed this strategy if they had reinvested proceeds in cash (they could have done this with buybacks or dividends); and (4) cosmetically, dividends may appear superior because investors do not associate price levels with dividends, whereas they tend to remember the prices at which large repurchases were executed.

EXECUTIVE TAKEAWAY

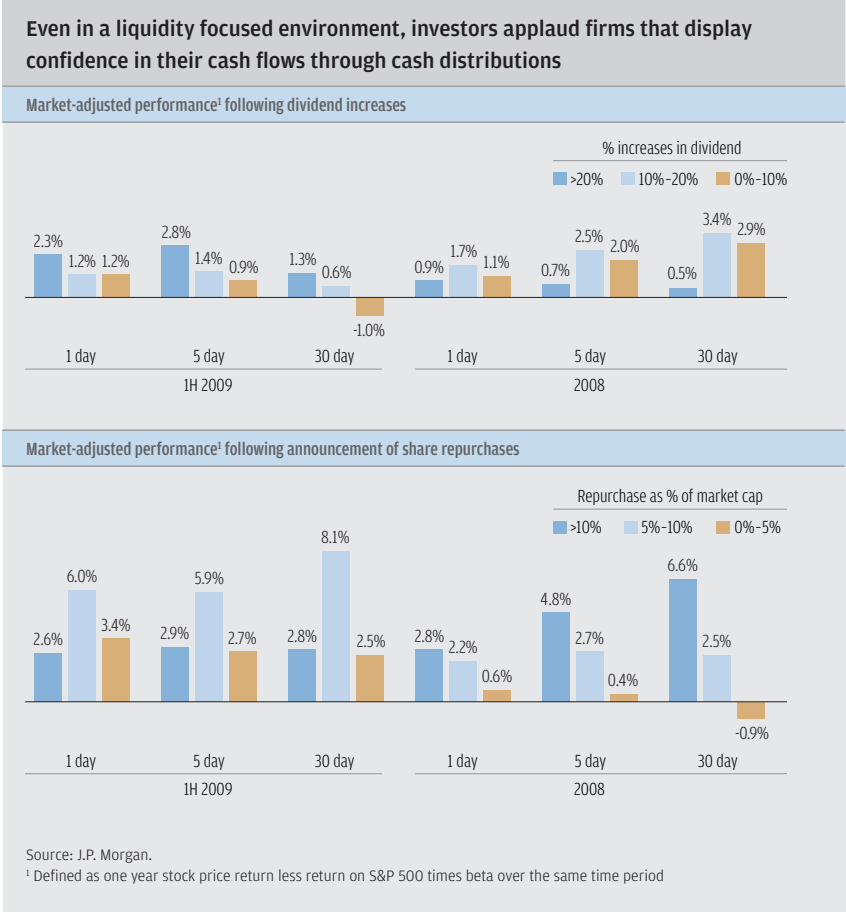
With hindsight, firms that did not have excess liquidity should not have repurchased shares or paid dividends. Some commentators argue, however, that repurchasing shares at high levels was worse than paying dividends at that time. We demonstrate that this issue is specific to buybacks only cosmetically. Although repurchases are comparable to dividends from an investor perspective, investors tend to remember the price levels associated with repurchases, but not with dividends.

6. Lessons learned and implications for future distributions

We conclude that firms should develop through-cycle financial policies and that they should be prepared to defend their financial policies even in the face of shareholder activist pressures. We do not argue, however, that firms should not distribute excess cash flow or capital; rather, we argue that a more conservative approach is warranted in light of our updated view on the severity of potential downside shocks.

Nevertheless, even in an environment where most are focused on liquidity, investors applaud firms that are confident enough in their cash flows and balance sheets to return cash or capital to shareholders. The results in Figure 10 show that despite the stressed market conditions experienced in 2008 and 2009, the market-adjusted investor reaction to dividends and buybacks continues to be positive. This positive response may be explained by the strong signal distributions send to the market, by the investor preference for income, and by the fact that shareholder distributions are now less expected.

Figure 10



EXECUTIVE TAKEAWAY

Firms should develop through-cycle financial policies. With the financial crisis fresh in their minds, decision-makers will evaluate distributions with a fine-toothed comb. As the economy and capital markets normalize, firms will once again need to decide how to distribute excess cash. The evidence suggests that in today's environment, investors continue to appreciate demonstrations of strong balance sheet and cash flow positions through dividend and buyback distributions.

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