

January 12, 2010

## Surge in the Urge to Merge

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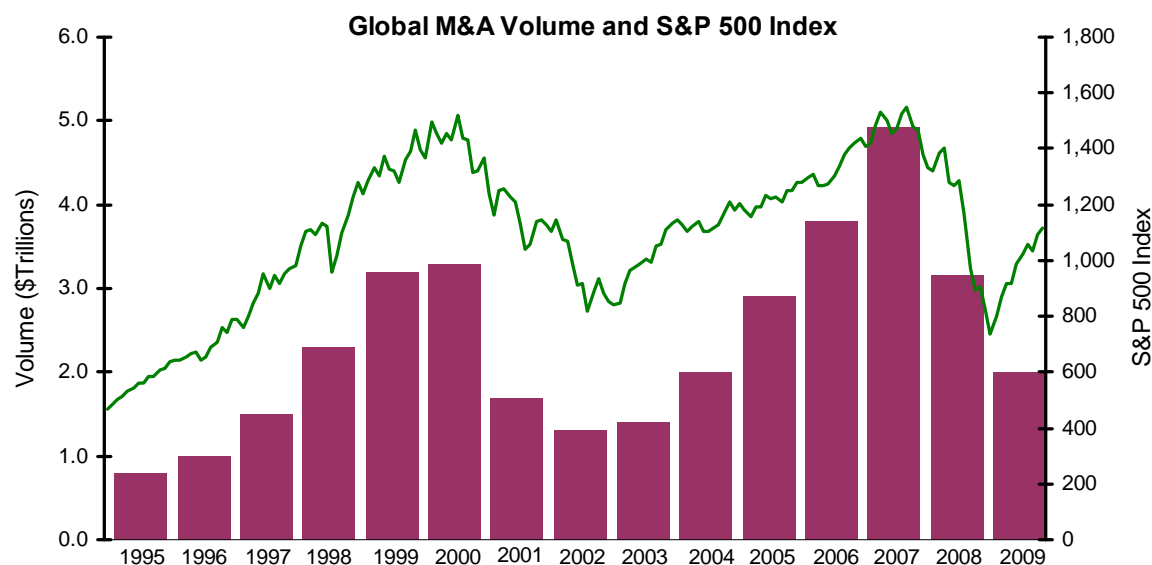
### M&A: Trends and Analysis

Results show . . . acquirers moving early within an industry acquisition wave not only outperform those acquiring later, but on average achieve an economic gain. This result is particularly impressive because researchers have concluded that although target shareholders benefit from acquisitions, acquiring firm shareholders do not.

Gerry McNamara, Jerayr Haleblan, and Bernadine Johnson Dykes  
*The Performance Implications of Participating in an Acquisition Wave*<sup>1</sup>



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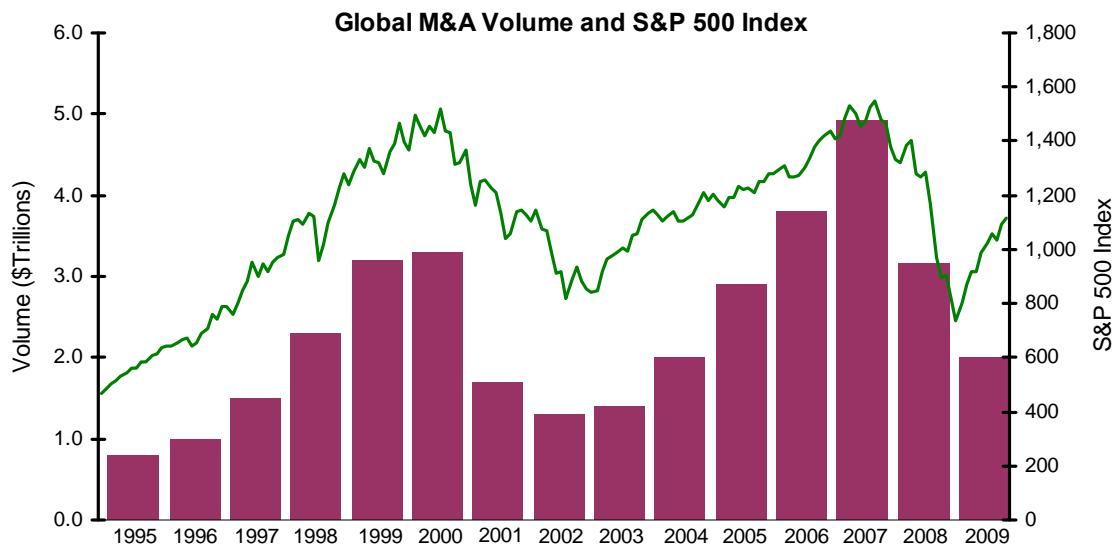
Source: Bloomberg, Reuters, LCM estimates; data through 2009.

- **An M&A wave may be on the way. If history is any guide, M&A activity tends to follow the stock market with a modest lag.**
- **The early bird gets the worm. Academic research strongly suggests that companies doing deals early in the M&A cycle provide better returns for their shareholders than the companies that participate later.**
- **Use economic, not accounting, measures to evaluate deals. While it stands to reason that executives seek to create shareholder value with the deals they do, the evidence shows that most don't. It appears that executives (and investment bankers) miss the mark because they focus on accounting-based measures instead of considering the extent to which synergies can exceed the premium.**

## Higher Stock Market, More Deals

We may be at the front end of another mergers and acquisition (M&A) boom. Historically, upswings in deal activity have coincided with improvements in the economy and the stock market. Exhibit 1 shows the relationship between deal volume and the price level of the S&P 500 Index over the past 15 years. The strong rally in equities off the March 2009 lows, sharply improved credit conditions, solid non-financial corporate balance sheets, and companies seeking to enhance their strategic positions all point to more deals. Notably, research shows that companies making acquisitions in the early part of the cycle deliver better returns to their shareholders, on average, than those that act toward the end of the cycle.<sup>2</sup>

### Exhibit 1: M&A Is Heavily Procyclical



Source: Bloomberg, Reuters, LCM estimates; data through 2009.

After reaching an all-time high in 2007, M&A activity has tumbled in the last year and a half, reflecting the financial and economic turmoil. While 2008's deal volume looks respectable given the stock market's sharp decline, the deals were heavily skewed toward the first half of the year. Announced activity was weak in 2009, but the fourth quarter was the strongest of the year, reflecting the improvement in equity and credit markets. For all of 2009, global M&A volume was roughly \$2 trillion, about half of the average level over the past five years.<sup>3</sup>

During the deep recession of the past two years, falling earnings and limited access to capital made executives more risk averse. As a result, firms slashed expenses, squeezed their balance sheets, and reined in growth initiatives. This has allowed companies to generate healthy free cash flows and to sustain strong financial positions. While consumer and government debt may be of concern, the balance sheets of many companies are solid. As the recovery gains momentum, companies are again setting their eyes on growth.

In recent months, several high-profile M&A deals have been announced. The most notable is Exxon Mobil's \$31 billion offer for XTO Energy, a leading acquirer and producer of oil and gas. Kraft's \$16.8 billion bid for Cadbury, a global confectionery producer, is also a large potential transaction. (Hershey has also expressed interest in Cadbury.) While not a clean M&A deal, General Electric has agreed to sell its majority stake in NBC Universal to Comcast in a complex transaction valuing the unit at about \$30 billion.<sup>4</sup>

M&A activity tends to rise and fall along with the stock market, and almost every company is either involved in a deal, or affected by one, at some point. For instance, research suggests that

roughly 2-3 percent of public companies are acquired in a given year.<sup>5</sup> Often, a move by one competitor triggers cascading moves by its competitors hoping to sustain their competitive position. Mergers and acquisitions play a large role in shaping competitive landscapes and can have a large impact on corporate value.

Many companies and investors do not have a firm grasp on how M&A deals create or destroy shareholder value. Companies do deals for a host of reasons, including the pursuit of growth, diversification of their businesses, or to consolidate an industry. And companies often feel compelled to do a deal simply because other companies in their industry are doing them. Generally, companies, investment bankers, and investors assume that deals that add to earnings per share are virtuous. But for an acquirer there is ultimately only one test of a deal's merits: whether it creates shareholder value. Since investors have a strong incentive to properly evaluate a deal's economic virtue, the stock price change following an announcement is often an excellent barometer of a deal's merit. On this point, the evidence is damning.

Research shows roughly two-thirds of M&A transactions destroy shareholder value for the acquiring companies. In addition, the market's initial reaction to a deal is a reasonably unbiased predictor of long-term value creation. Mark Sirower and Sumit Sahni, consultants versed in M&A economics, looked at the persistence of returns for deals that the market initially deemed favorable or unfavorable (see Exhibit 2). While the initial response wasn't always the final say, about one-half of deals with positive initial reactions stayed favorable one year later, while roughly two-thirds of deals with initial negative reactions remained unfavorable.<sup>6</sup>

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**Exhibit 2: Initial Reaction Speaks Volumes**

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<u>Stock Reaction</u>	<u># of Deals</u>	<u>Announcement Return</u>	<u>One-Year Return</u>	<u>Premium</u>
Persistent positive	52	5.6%	33.1%	25.8%
Initial positive	103	5.7%	4.9%	30.7%
Full sample	302	-4.1%	-4.3%	35.7%
Initial negative	199	-9.2%	-9.0%	38.4%
Persistent negative	133	-10.3%	-24.9%	40.5%

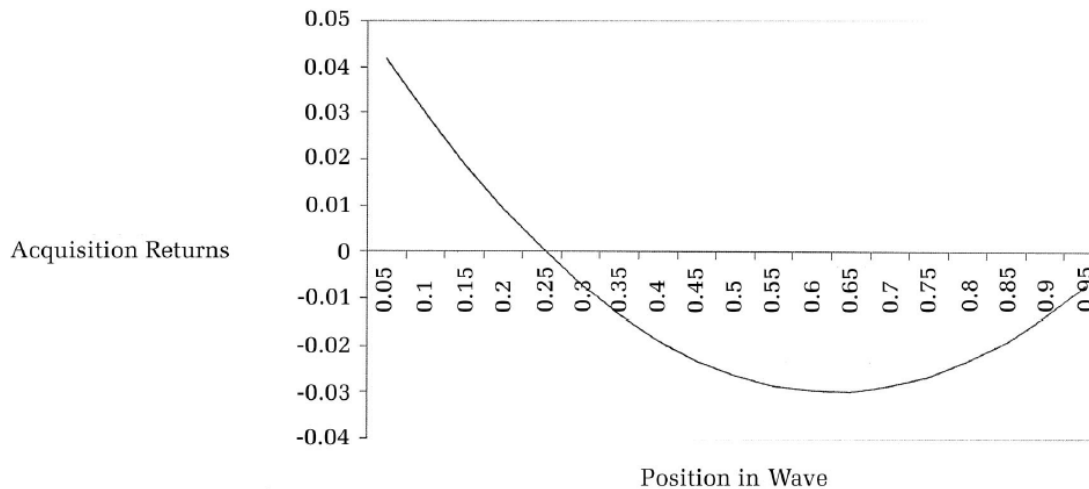
Source: Mark L. Sirower and Sumit Sahni, "Avoiding the 'Synergy Trap': Practical Guidance on M&A Decisions for CEOs and Boards," *Journal of Applied Corporate Finance*, Vol. 18, 3, Summer 2006, 85. Used with permission.

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The basic reason that most M&A deals fail to create value for buyers is that acquirers tend to pay too much for targets. A host of factors might explain this tendency, including an overly optimistic assessment of market potential, overestimation of synergies, poor due diligence, and hubris. But while deals are harmful for the shareholders of acquirers on average, some buyers do create value. Acquirers can increase their chance of success by paying low premiums and executing on operational improvement.<sup>7</sup> The research points to another reason some acquirers succeed: good timing.

A recent study by three professors of management showed that companies that do deals early in an acquisition wave generally enjoy share-price rises, while those that buy later tend to suffer stock-price declines. Acquirers at the beginning of a wave see their shares increase more than four percent above what would be expected, based on past performance and market trends, over the three weeks following the M&A announcement (see Exhibit 3.) Buyers acting roughly two-thirds through the wave see average declines of approximately three percent. Returns actually improve somewhat later in the wave, but are still vastly below those of the early-movers.<sup>8</sup>

**Exhibit 3: Early Movers Get the Returns**



Source: Gerry McNamara, Jerayr Halebian, and Bernadine Johnson Dykes, "The Performance Implications of Participating in an Acquisition Wave," *The Academy of Management Journal*, Vol. 51, No. 1, February 2008.

The professors defined an acquisition wave as any six-year period where the peak year of acquisition activity was twice as high as the base year, and where there was a subsequent decline of greater than 50 percent. The sample included over 3,000 companies in a wide range of industries from 1984 through 2004. All returns were adjusted for market factors.

There are several benefits to acting early in a cycle, including choosing from a greater pool of potential targets and the ability to buy assets cheaply. Naturally, the larger the number of potential acquisition candidates, the more likely it is that a buyer can find a suitable target. Further, firms that move early can generally do deals at cheaper prices—usually against a background of economic growth—than companies that act late in the cycle. Finally, benefits to moving early are most pronounced for industries that are growing and stable.

Underperformance for late movers is generally the result of taking strategic action based on the previous action of other firms. While early movers can scan the landscape for the best targets, late movers act less rationally and with greater haste, often leading them to acquire suboptimal targets at elevated prices. Bandwagon pressures motivate the late movers to focus on social cues. As a result, they assume other companies have superior information and plunge into deals without fully considering the strategic implications.

Bandwagon pressures also explain why returns improve late in the wave. The pressures subside as the M&A boom simmers out, allowing firms to complete more rational assessments of acquisition targets and their values. Even so, the latest movers still generate shareholders returns that lag those made by early movers.<sup>9</sup> Finally, the form of financing plays a role in determining shareholder returns for acquirers later in the cycle. Companies that finance their deals primarily with cash see a smaller decline in their shares than companies that use equity.

**Setting the Stage**

There are two types of acquirers: strategic and financial. Strategic buyers are companies that use M&A as a tool to implement corporate objectives. The most common rationales for doing deals include industry capacity reduction, product or market line extension, geographic rollup, industry convergence, and M&A as research and development.<sup>10</sup> Strategic buyers generally assume that they can realize significant operational synergies, which justifies the premium they pay for their targets.

Financial buyers are typically private equity firms that acquire companies, business units, or assets and seek to improve their operating performance. The substantial use of debt—private equity firms typically use \$3-4 dollars of debt for every \$1 of equity they contribute—allows them to enhance their cash-on-cash returns. Further, there is a perception that private equity firms, less susceptible to pressure from the public markets, can make more optimal capital allocation decisions. (While I acknowledge this perception, I strongly disagree that public companies are hamstrung with their capital allocation decisions.)

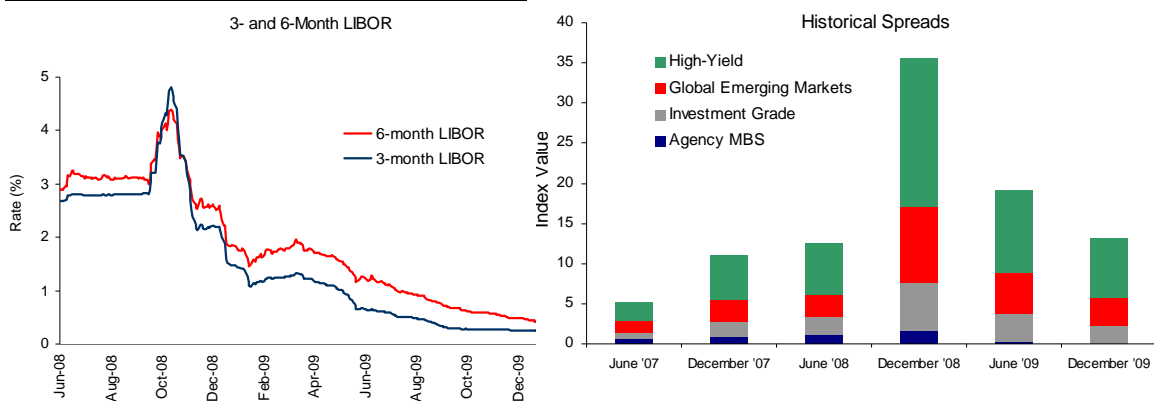
Companies generally pursue strategic deals in order to expand their core strengths. This may involve plans to extend their product or geographic scope. Recent instances of this horizontal expansion include Exxon and XTO, Kraft and Cadbury, Stanley Works and Black & Decker, and Disney and Marvel. Consider Kraft's pursuit of Cadbury. With many of its traditional businesses growing slowly, Kraft seeks to bolster its organic growth through a purchase that offers similar products, but with much broader geographic reach.<sup>11</sup>

While horizontal expansion may be the most popular rationale for doing a deal, there has been a notable increase in deals based on vertical integration. A vertically integrated company controls a product or service throughout the value chain, from raw materials to the end product. In recent decades the trend has been toward more specialization, as companies increasingly focused on one part of the value chain. In the last two years—perhaps spurred by the economic downturn—some prominent companies have done deals to become more vertically integrated. These include Oracle and Sun Microsystems, PepsiCo and Pepsi Bottling Group, and Live Nation and Ticketmaster.<sup>12</sup>

One factor slowing the pace of deals is that banks have been hesitant to fund them. In the U.S., bank loans for M&A fell sharply in 2009 to approximately \$100 billion, about one-third of 2008's volume and only one-sixth of the volume of 2007.<sup>13</sup> After a brutal period in 2008 and early 2009, there are encouraging signs in the credit markets. Deal financing is picking up, interest rates are falling, credit spreads are narrowing, and bond issuance is at record-highs.

For instance, banks offered nearly \$30 billion in loans to fund acquisitions or leveraged buyouts in the month of November 2009, according to Dealogic, exceeding the total of the previous seven months combined. In addition, the cost of debt is falling rapidly. To illustrate, three- and six-month LIBOR—widely used reference rates for borrowing—have moderated from extremely high levels in 2008 (see Exhibit 4, left panel). Credit spreads, which reflect the cost of corporate borrowing above the risk-free rate, have receded sharply for all major fixed income products (Exhibit 4, right panel).

**Exhibit 4: Improvement in Credit Markets**



Source: Left: Bloomberg; Right: Barclays; Data through 2009.

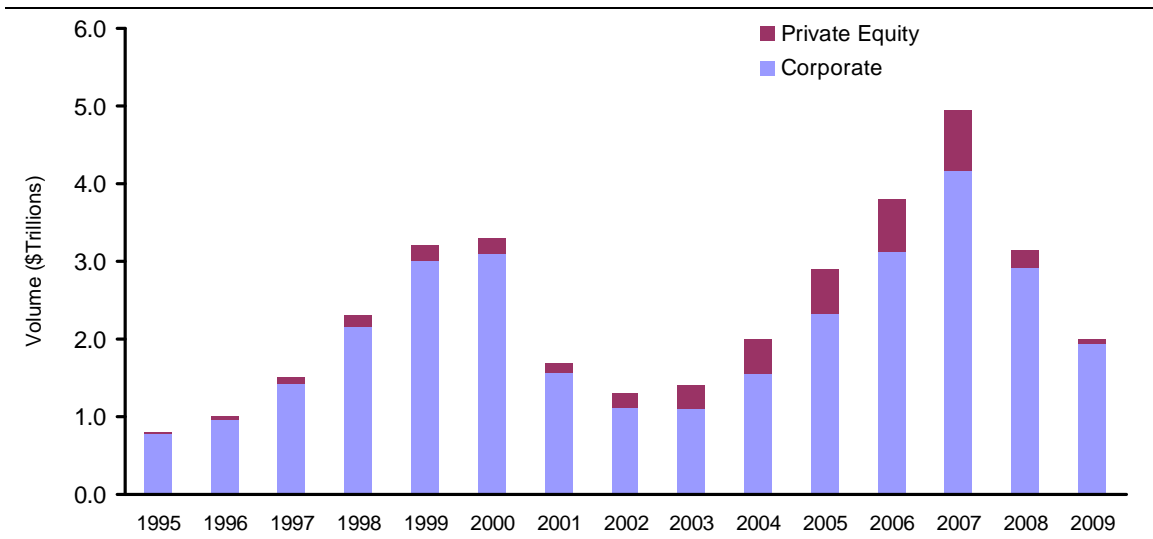
Along with the falling cost of debt, we have also seen a major increase in bond issuance. U.S. corporate bond issuance hit an annual record of \$1.2 trillion in 2009, just ahead of the issuance in 2007 and up nearly 34 percent compared to 2008.<sup>14</sup> Much of this increase is the result of latent demand that built up during the credit freeze in 2008. Government initiatives and low interest rates also helped.

Improvement in the credit markets is encouraging, but banks are not likely to return to pre-crisis mode any time soon. Even if the volume of loans recovers, lenders are likely to be more conservative on the terms in the future than they were in the past. This might include, for example, insisting on a lower ratio of debt to the company's operating cash flow or as a percentage of total capitalization. Banks remain fearful that another market downturn will leave them with vulnerable debt instruments. Also, banks are operating under the scrutiny of tighter capital requirements, limiting their ability to expand M&A financing.<sup>15</sup>

These more conservative lending standards have hit the financial buyers especially hard. Private equity firms have historically financed buyouts with a ratio of anywhere from 60 to 90 percent debt to total capital.<sup>16</sup> During the golden age of 2002-07, investors poured record amounts into the private equity industry and bankers accommodated deal activity by relaxing standards on credit. The financial crisis changed all that. Investors are now hesitant to invest with private equity firms, either because they're worried about capital calls or because they've simply lost faith in the industry.<sup>17</sup>

Some of the largest institutional investors have already begun to cut back on their investments in private equity. For example, California Public Employees' Retirement System, the biggest pension plan in the U.S., has reduced its allocation to private equity by more than 60 percent.<sup>18</sup> In addition, over 40 percent of the largest university endowments are currently above their target allocations to private equity, suggesting they are also likely to reduce their investments in the future.<sup>19</sup> These factors have led to the virtual disappearance of private equity deals. Based on trends through the first half of 2009, we estimate private equity M&A to be about \$70 billion in 2009, or 3-4 percent of total deals, much lower than the 15 percent average over the past decade (see Exhibit 5).<sup>20</sup>

**Exhibit 5: Global M&A Volume**



Source: Bloomberg, Reuters, LMCM estimates. Data through 2009.

Despite the challenges, several factors suggest private equity M&A could soon be back. The industry currently has roughly \$500 billion in capital waiting to be invested, the largest amount in history. Assuming leverage at a 3-to-1 ratio to equity, this cash hoard represents \$2 trillion in purchasing power, roughly 20 percent of the market capitalization of the S&P 500. In addition, private equity firms such as TPG, Blackstone, and Kohlberg Kravis Roberts are beginning to exit past investments.<sup>21</sup> These exits generate cash to disperse to investors and bode well for new rounds of fundraising. The sharp contraction in credit spreads provides another reason to expect a pickup in leveraged buyout (LBO) activity. Over the past decade, LBO activity has been much greater when credit spreads were tight.<sup>22</sup>

Private equity may also benefit from an improvement in the market for collateralized loan obligations (CLOs), a critical source of financing for LBOs. These specialist funds, which pool loans and divide them into securities of varying risk, bought large amounts of LBO loans during the prior M&A boom. In the first half of 2007, CLOs financed nearly two-thirds of the loans backing LBOs. But after peaking at about \$100 billion in 2006 and 2007, sales of CLOs virtually disappeared. However, with market conditions improving and the sharp increase in the value of leveraged loans, many industry observers expect to see CLOs make a modest comeback over the next year.<sup>23</sup>

For the foreseeable future, private equity deals will likely be smaller, and will include more upfront cash. Lower amounts of leverage may reduce returns, as the use of leverage has accounted for between one-quarter to one-third of returns. Transaction fees of about 1 to 2 percent will come under pressure as well, as fees this high are hard to justify in an environment of lower expected returns.<sup>24</sup>

### **Implications for Investors**

Resurgent M&A activity is by no means inevitable, but the evidence strongly points toward a reversal of the 2008-2009 decline. Should deal volume pick up, investors need to be prepared to assess these transactions properly. Investors should ask three critical questions when companies announce a deal:

1. Does the deal have material economic consequences for shareholders of the buying and selling companies?
2. Is the buyer sending signals by choosing to pay for the deal with stock instead of cash?
3. What is the stock market's likely reaction?

### **Materiality**

The first question investors must answer is whether or not the deal is likely to have a material impact on shareholder value. Shareholder value at risk—SVAR<sup>®</sup>—measures the potential risk to shareholders of the acquiring company in the event that synergies do not materialize. SVAR provides an immediate and accurate assessment of how much a deal is likely to affect acquiring-company shareholders.<sup>25</sup>

Since SVAR is a percentage measure of the acquirer's potential downside, it quantifies the extent to which a company is betting the firm on the success of a deal. Low SVARs suggest limited upside or downside for the acquirer. High SVARs may portend larger-scale changes in the acquiring company's stock price.<sup>26</sup>

SVAR is a function of two things: the premium an acquirer pledges and the deal's funding source—i.e., cash, stock, or some combination. For a cash deal, the SVAR is simply the premium divided by the market capitalization of the acquirer. In a stock-for-stock deal, the SVAR is the premium divided by the combined market capitalizations of the acquirer and target (including the implied premium).

SVAR in a stock-for-stock deal is always lower than an all-cash SVAR transaction because the target shareholders become part owners in the combined firm, and thus assume a portion of the risk. The SVAR is higher in fixed-value stock deals than in fixed-share deals because acquiring shareholders bear all the pre-closing risk. Exhibit 6 shows SVARs for some recent transactions.

**Exhibit 6: SVARs for Recent M&A Transactions**

<u>Acquirer</u>	<u>Target</u>	<u>SVAR</u>
Xerox	Affiliated Computer Services	12.1%
Kraft	Cadbury	7.9%
Dell	Perot Systems	4.9%
Baker Hughes	BJ Services	4.5%
Exxon Mobil	XTO Energy	1.6%
Pepsi	Pepsi Bottling Group	1.1%

Source: LMCM analysis.

Premium at risk measures the risk that target company shareholders assume in the case that synergies do not materialize. In a fixed share offer, the target shareholders assume a proportion of the risk because the ultimate value they receive is a function of the acquiring company's stock price. If the market perceives that the buyer is overpaying, it will drive the buyer's price down, reducing the acquisition value proportionately.

In cash and fixed-value deals, target company shareholders have no risk (except deal-failure risk). In fixed-value share deals, the buyer must completely absorb any fall in its price following the announcement to assure that the bid value remains intact. Exhibit 7 shows how to calculate SVAR and premium at risk for various types of deals.<sup>27</sup>

**Exhibit 7: Calculations for SVAR and Premium at Risk**

<b>SVAR Calculation</b>	
<b>Cash Deal</b>	= premium/buyer market cap
<b>Stock Deal (fixed-share)</b>	= % of the combined company buyer-owned x (premium/buyer market cap)
<b>Stock Deal (fixed-value)</b>	= premium/buyer market cap
<b>Combination Deal</b>	= % stock x (stock SVAR) + % cash (cash SVAR)
<b>Premium at Risk Calculation</b>	
<b>Cash Deal</b>	none
<b>Stock Deal (fixed-share)</b>	= % of the combined company that the target will own
<b>Stock Deal (fixed-value)</b>	none
<b>Combination Deal</b>	= % of the combined company that the target will own

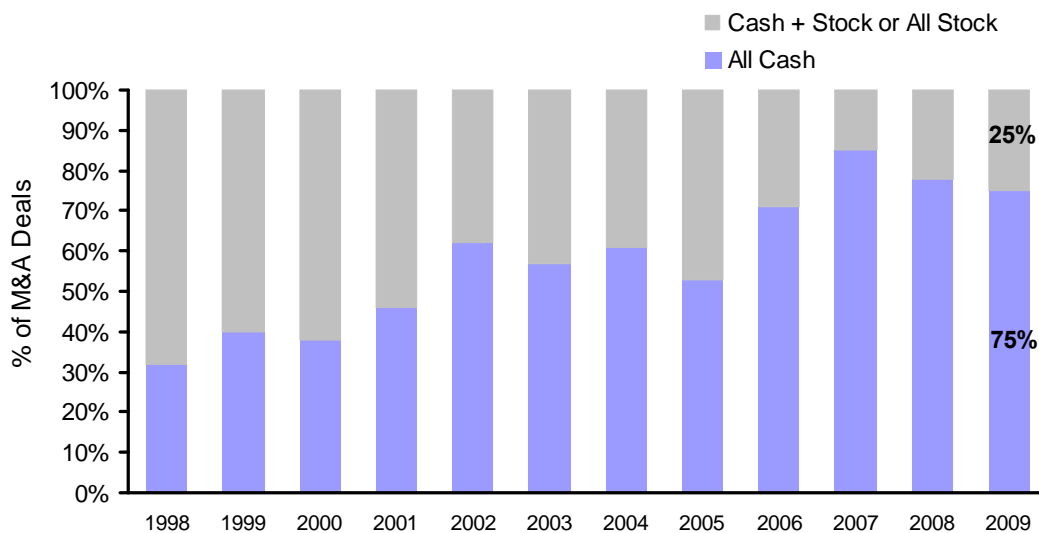
Source: LMCM analysis.

**Stock or Cash**

Investors must next consider how a company funds the deal. The method of payment can represent a strong signal to the market. Specifically, the empirical evidence shows that cash deals are better than stock deals—i.e., the market responds more favorably to cash deals.<sup>28</sup> Investors should thus view the recent trend toward a greater proportion of deals being funded entirely with cash as a positive (see Exhibit 8).



**Exhibit 8: More Deals Funded with Cash versus a Decade Ago**



Source: Citigroup Research, "U.S. M&A Arbitrage: 2007 Review & 2008 Pending Deals," January 2008; Bloomberg; LMCM estimates.

The market reacts more favorably to cash deals in large part because the acquirer bears the entire risk or reward. As such, a buyer using cash is signaling to the market that it truly expects the deal to work. Managers who doubt whether a deal will achieve the required synergies are better off hedging their bets by issuing stock, thereby limiting the risk (and reward) their shareholders assume.

The relatively poor reception to stock deals is also consistent with the hypothesis that managers issue stock when they believe that their stock is overvalued. Issuing stock is dilutive for current shareholders and indicates that management does not believe its stock is undervalued.<sup>29</sup> However, investors cannot solely rely on a deal's funding as an indicator of its value-creation potential. An acquirer may have to issue stock because it does not have sufficient cash or debt capacity to fund a very attractive investment. We suggest only that the form of payment often provides an important signal about management's views of their business and their convictions surrounding a deal's likely success.

**Value Creation**

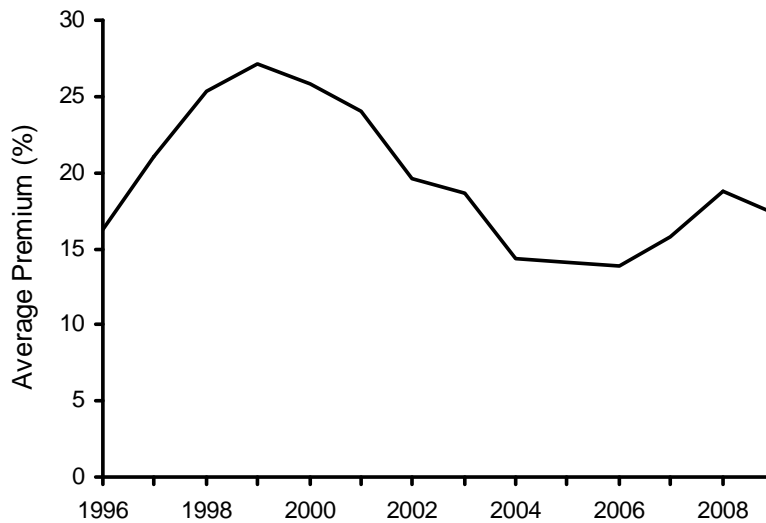
Investors can assess a deal's value creation potential in two parts, one largely quantitative and the other mostly qualitative. The first part deals strictly with the deal economics and measures value creation in an M&A deal with the following formula:

$$\text{Value change} = \text{present value of the synergies} - \text{acquisition premium}$$

Investors can use this straightforward formula to anticipate the cumulative abnormal price changes for both the buyer and the seller. Cumulative abnormal returns seek to isolate the impact of an announcement by measuring a company's stock price change after adjusting for market and industry moves. Note that earnings per share play no role in this assessment. This approach is consistent with the standard net present value rule, and it is an easy formula to apply.

To state the obvious, the higher the premium a buyer pledges, the larger the synergy the combined companies must generate to create value. Exhibit 9 shows the average premium offered from 1996 through 2009. Note that the average premium has trended lower over the past decade.

**Exhibit 9: Average Premium Trending Lower**



Source: Reuters. <http://www.reuters.com/finance/deals/mergers>.

Judging synergies is trickier. Managers usually quantify their synergy expectations when they announce a deal, although there is generally a broad range of specificity. In many cases, assessing whether or not operating or financial synergies are reasonable is difficult.

Post-announcement stock price changes also reflect the deal structure. In cash and fixed-value deals, we expect the seller's shares to rise in proportion with the premium percentage. (The seller's stock doesn't reflect the full premium because of an arbitrage discount.) The buyer's shares reflect whether or not expected synergies exceed the premium. In a fixed-share deal, buyer and seller shares vary based on the deal economics and post-deal ownership. Exhibit 10 helps investors gauge the market's reaction to various deal types.<sup>30</sup>

**Exhibit 10: Gauging the Market's Initial Reaction**

		PV synergies exceed premium	PV synergies equal premium	PV synergies less than premium
Cash	Buyer's stock price	Up by amount that S>P	No change	Down by amount that S<P
	Seller's stock price	Up by premium amount	Up by premium amount	Up by premium amount
Fixed-share stock-for-stock	Buyer's stock price	Up by (% ownership * amount that S>P)	No change	Down by (% ownership * amount that S<P)
	Seller's stock price	Up by premium amount + (% ownership * amount that S>P)	Up by premium amount	Change based on premium - (% ownership * amount that S<P)
Fixed-value stock-for-stock	Buyer's stock price	Up by amount that S>P	No change	Down by amount that S<P
	Seller's stock price	Up by premium amount	Up by premium amount	Up by premium amount

Source: Alfred Rappaport and Michael J. Mauboussin, *Expectations Investing* (Boston, MA: Harvard Business School Press, 2001), 165.

The second part of the deal assessment, based on management signals, is more qualitative. Deals may provide insight into management's outlook for the company or the industry in general. Managers who have no clear path to value creation sometimes choose to sell their companies, or troubled companies get together in an effort to shore up resources.

**Case Study –The Stanley Works Acquires Black & Decker**

On November 2, 2009 Stanley Works agreed to buy Black & Decker in an all-stock transaction. Black & Decker shareholders were to receive 1.275 shares of Stanley Works common stock for each share of Black & Decker. The companies announced expected annual cost synergies of

\$350 million, as well as a one-time expected cash cost of \$400 million to achieve these synergies.<sup>31</sup> Investors can analyze the deal by addressing the three main components to deal analysis—materiality, signals, and market reaction.

First, we assess whether the deal will have a material impact on shareholder value by calculating SVAR. As this is a stock-for-stock deal, the SVAR is the premium divided by the combined market capitalization of Stanley Works and Black & Decker (including the implied premium).

The SVAR is 8.7 percent (\$615 million premium divided by \$7,050 million, the combined market capitalization of the two companies). Note that the SVAR for Stanley Works would have been even higher in an all-cash transaction, as the denominator would have excluded Black & Decker's market capitalization. Again, SVAR represents the potential downside to Stanley Works shareholders in the case that no synergies materialize.

Next, we calculate premium at risk for Black & Decker shareholders, which determines the percentage of the premium that is at risk for Black & Decker shareholders. If no synergies materialize, Black & Decker shareholders will receive the \$3,465 million purchase price minus 49.5 percent of the \$615 million premium, or \$3,160 million. In effect, Black & Decker shareholders would receive about one-half of the pledged premium in the case of no synergies.

We can assess the value creation potential of the deal by looking at the deal economics. We begin with the formula:

*Value change = present value of the synergies – acquisition premium.*

Since we know the premium, the key to solving for the value change is a calculation of the present value of the synergies. We can determine the present value of synergies by capitalizing the after-tax value of the annual synergy target. In this case, there are three steps:

1. Translate synergy from pretax to after-tax ( $\$350 \text{ million} * (1 - \text{tax rate}) = \$227.5 \text{ million}$ )
2. Capitalize the after-tax synergy by the cost of capital ( $\$227.5 \text{ million} / 11\% = \$2,070 \text{ million}$ )
3. Subtract the \$400 million one-time cost of achieving synergy ( $\$2,070 \text{ million} - \$400 \text{ million} = \$1,670 \text{ million}$ )

So the present value of the synergies is \$1,670 million. Subtracting the premium of \$615 million leaves us with total value creation of \$1,055 million. With no further analysis, we know that the stocks of both companies will rise if the market believes the synergy numbers.

A solid estimate of the value creation potential is useful for a couple of reasons. First, it allows for a specific prediction of how the acquirer and target stocks will perform upon the deal's announcement. Second, if the stocks behave differently than the model suggests, it allows you to reverse-engineer the market's expectations.

With total value creation of about \$1,055 million, how would we expect the stock market to react? Since the deal terms call for SWK and BDK shareholders to each own roughly one-half of the shares outstanding after the deal, we can split the value creation evenly between them. SWK shareholders should expect a price increase of approximately \$6.65 per share (\$525 million divided by 79 million post-deal shares) while BDK shareholders should expect an increase of roughly \$18 per share (the \$10 premium plus \$525 million divided by 77 million shares, or \$16.80).

We can compare these expectations to the post-announcement stock price changes to see the extent to which the market believes the expected synergies will be realized. Shares of both companies rose after the announcement, however not to the extent predicted by the model. This could suggest the market considers the synergy estimates to be too high. But we also must bear

in mind that in M&A deals the shares of the target company typically rise less than the model indicates to reflect deal risk and the time to closing.

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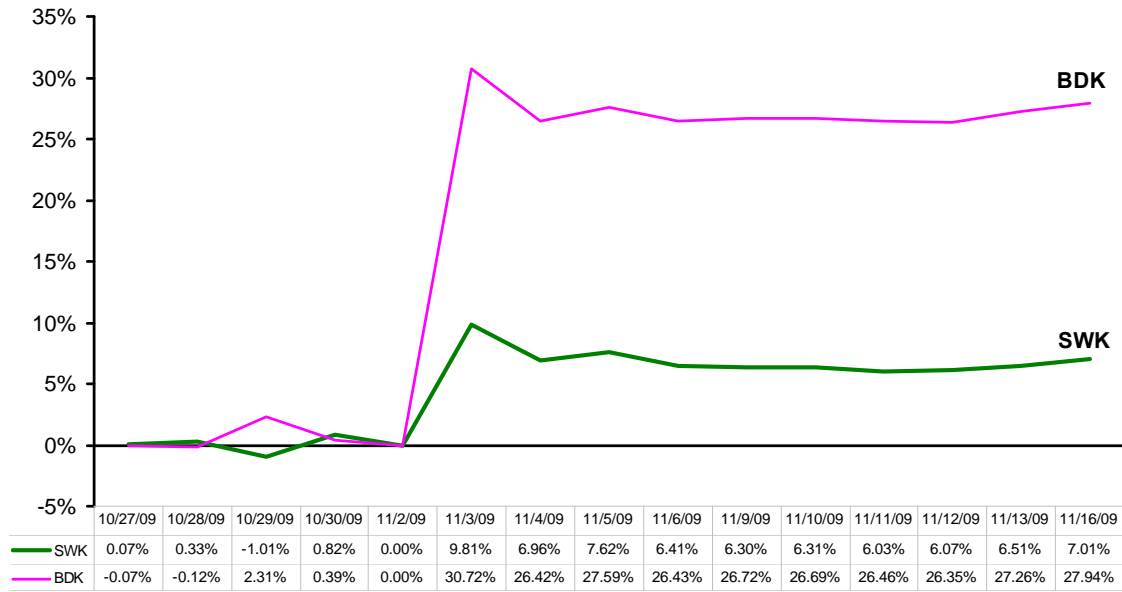
**Exhibit 11: The Stanley Works (SWK) and Black & Decker (BDK)**

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<b>Deal Terms:</b>	
Cash	0%
Stock	100%
announced date	11/2/2009
effective date	11/3/2009

<b>Shareholder Value at Risk (SVAR)</b>	
Premium (\$MM):	\$615.6
as a % of target market cap	22%
Acquirer's Market Cap (\$MM):	\$3,584.9
Target's Market Cap (\$MM):	\$2,849.9
Shareholder Value at Risk	8.7%
Premium at Risk	49.2%

<b>Value Creation</b>	
Premium:	\$615.6
Synergies (after-tax):	\$227.5
Cost of Capital:	11%
PV of Synergy - One-Time Charge:	\$1,668.2
Acquirer anticipated change	14.7%
Target anticipated change	35.5%
EPS impact:	accretive



Source: LMCM analysis.

## A Prepared Mind

Here are the summary points from this discussion:

- *An M&A wave may be on the way.* If history is any guide, M&A activity tends to follow the stock market with a modest lag. The market's bounce off of the March 2009 lows, when combined with more amenable credit market conditions, have set the tone for a resumption of active deal activity.
- *The early bird gets the worm.* Academic research strongly suggests that companies doing deals early in the M&A cycle provide better returns for their shareholders than the companies that participate later. The reason is straightforward: early in the cycle there are more companies to choose from and the targets are cheap. As the cycle matures, options dissolve and valuations rise.
- *Use economic, not accounting, measures to evaluate deals.* While it stands to reason that executives seek to create shareholder value with the deals they do, the evidence shows that most don't. It appears that executives (and investment bankers) miss the mark because they focus on accounting-based measures instead of considering the extent to which synergies can exceed the premium. This report provides a sound approach to valuing M&A deals.

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**Endotes**

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- <sup>2</sup> Ibid.
- <sup>3</sup> Pinning down an exact figure for M&A activity is tricky. Dealogic reports a sum of \$2.3 trillion, Thomson Reuters \$2 trillion, and Bloomberg \$1.8 trillion. For Dealogic, see Jeffrey McCracken and Dana Cimilluca, "Global M&A May Have Hit Bottom," *The Wall Street Journal*, January 4, 2010. For Thomson Reuters, see Steven M. Davidoff, "The Deal Professor's 2009 In Review: Part I: No Exit," *DealBook, The New York Times*, December 28, 2009.
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- <sup>11</sup> Knowledge@Wharton.
- <sup>12</sup> Ben Worthen, Cari Tuna, Justin Scheck, "Companies More Prone to Go 'Vertical'," *The Wall Street Journal*, December 1, 2009.
- <sup>13</sup> Aaron Lucchetti and Jeffrey McCracken, "Wall Street Reopens Its Checkbook," *The Wall Street Journal*, November 27, 2009.
- <sup>14</sup> Gabrielle Coppola and Nikolaj Gammeltoft, "U.S. Corporate Bond Sales Climb to Yearly Record," November 23, 2009.
- <sup>15</sup> Lucchetti and McCracken.
- <sup>16</sup> Steven N. Kaplan and Per Strömberg, "Leveraged Buyouts and Private Equity," *Social Science Research Network*, June 2008.
- <sup>17</sup> "Sticking-Plasters of the Universe," *The Economist*, October 29, 2009.  
See [http://www.economist.com/businessfinance/displaystory.cfm?story\\_id=14753850](http://www.economist.com/businessfinance/displaystory.cfm?story_id=14753850).
- <sup>18</sup> Cristina Alesci, Jonathan Keehner, and Jason Kelly, "Private Equity Funding Plunges 62 Percent at Calpers Amid Fee Review," *Bloomberg*, November 18, 2009.
- <sup>19</sup> "Sticking-Plasters of the Universe."
- <sup>20</sup> See <http://www.reuters.com/finance/deals/mergers>.
- <sup>21</sup> "Sticking-Plasters of the Universe."
- <sup>22</sup> Trahan and Kantrowitz.
- <sup>23</sup> Pierre Paulden and Kristen Haunss, "New Signs of Life for Collateralized Loans," *BusinessWeek*, December 15, 2009.
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- <sup>28</sup> Tim Loughran and Anand M Vihj, "Do Long-term Shareholders Benefit From Corporate Acquisitions?" *The Journal of Finance*, December 1997, 1765-1790.
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