options

value

growth

JOHN S. DYKES

Deals that create **value**

Hans Bieshaar, Jeremy Knight, and Alexander van Wassenaer

No doubt the market is skeptical about M&A, but it is a lot more receptive to some kinds of deals than to others. Inquire before you acquire.

Half or more of the big mergers, acquisitions, and alliances you read about in the newspapers fail to create significant shareholder value, according to most of the research that McKinsey and others have undertaken into the market's reaction to announcements of major deals. For shareholders, the sad conclusion is that an average corporate-control transaction puts the market capitalization of their company at risk and delivers little or no value in return.

Managers could eschew corporate deals altogether. But the right course is to pursue them only when they make sense—in other words, to make sure that all of your deals are above average. Easily said, of course. But what, exactly, does an "above-average" deal look like? We decided to take that question to the stock market.

Our study examined the stock price movements, a few days before and after the announcement of a transaction, of companies involved in corporate deals. Using a multivariate linear regression, we tried to explain those movements in terms of several deal variables, such as deal size, industry, and deal type.

Hans Bieshaar is a consultant and **Alexander van Wassenaer** is a principal in McKinsey's Amsterdam office, and **Jeremy Knight** is a consultant in the London office. Copyright © 2001 McKinsey & Company. All rights reserved.

Our experience with scores of corporate-control transactions has taught us that mergers, acquisitions, and alliances tend to serve some kinds of strategies better than others. A large part of our study therefore involved identifying the strategic purpose behind each deal we followed and making that purpose one of the variables used to describe it. If the market reacted more enthusiastically to deals that embodied a particular strategy, our analysis might expose these underlying trends.

Indeed, we found that the market apparently prefers deals that are part of an "expansionist" program, in which a company seeks to boost its market share by consolidating, by moving into new geographic regions, or by adding new distribution channels for existing products and services. The market seems to be less tolerant of "transformative" deals, those that seek to move companies into new lines of business or to remove a chunk of an otherwise healthy business portfolio.

EXHIBIT

What does the market prefer?

Stock market premium, percent[1]

Acquisition	2.65
Merger	0.26
Sale	0.20
Joint venture, alliance	−3.10
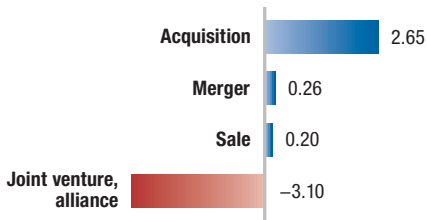
[1]For the 11 trading days around a deal's announcement (5 days before, 5 after, and day of announcement).

Even within a given type of strategy (whether expansionist or transformative), the market seems to prefer certain kinds of transaction to others. In particular, acquisitions create the most market value overall, despite the well-known "winner's curse," in which buyers pay too high a premium. If a deal is structured as a merger or a sale, it has little clear effect on stock prices. Choosing to structure deals as joint ventures or alliances, all else being equal, does not create significant value for the participants and may even destroy some value (exhibit). Finally, if a company competes in a growing or fragmented industry, or if the performance of the company has recently lagged behind that of its peers, some signs indicate that the market may reward its transactions more than those of stronger performers. Managers might find it useful to understand these biases as they consider whether or how to proceed with a deal.

One dramatic example of the way the transactions of a company can boost its share price was Heineken's conquest of the European beer market. In the past five years, acquisitions have lifted the company's share price by 12 percent a year, reckoned by the increases that occurred when the deals were announced. In other words, Heineken's acquisition strategy alone generated half of the company's outperformance as compared with the Dutch stock market index for the five-year period.

The architecture of a study

We started with a sample of 479 corporate deals announced by 36 companies in the telecommunications, petroleum, and European banking industries over a five-year period. Because we wanted our study to account explicitly for the size of a deal, we excluded all transactions whose monetary value had not been announced publicly. This left us with a core sample of 231 deals: 16 mergers, 151 acquisitions, 18 joint ventures, 18 alliances of other types, and 28 sales of company subsidiaries (*see* sidebar, "A note on methodology," for more detail).

To some extent, the methodology of our study limited its conclusions. We looked only at the stock market's immediate reaction to deal announcements. Such market responses can't possibly capture all that is good or bad about them, some managers feel. Still, if you accept the hypothesis that financial markets are efficient, all of the information you need about a deal should be folded into the stock market's immediate reaction to its announcement. That

A note on methodology

We undertook the research behind this article to identify some success factors for corporate-control transactions—mergers, acquisitions, sales, and joint ventures and other alliances. Our sample comprised 36 companies in three industries: global telecommunications, global petroleum, and European banking.[1] For the five-year period of the study (1994–98), we identified 740 transactions announced by the 36 companies. Of these 740 deals, 261 were removed from the sample, because they seemed more likely to obscure our results than to enhance them, for two basic reasons. In some cases, the company experienced another significant event, such as the release of a quarterly financial report, during the 11-day "window." In others, the deal was an asset swap (often a swap of oil fields by petroleum companies); we felt that such swaps were significantly different in kind from the sales and purchases of major businesses

that were to be the focus of our study. This left us with 479 transactions. The size of the deal was made public in 231 of them—including 78 in banking, 44 in petroleum, and 109 in telecommunications. These transactions became our core sample for the multivariate-regression analysis.

The three industries we selected include what we regarded as the most important industry variables: different rates of growth and degrees of consolidation. Such a sample would be fairly representative of the whole universe of companies. But since the companies came from just a few industries, the sample let us add an "industry"

[1] Banking was restricted to Europe because the business is still a regional one and because adding banks in the United States would have complicated the research in view of that country's special rules limiting business diversification deals by banks.

variable to our regression and still get meaningful results.

Since we wanted our sample to include companies spanning a range of sizes and degrees of success, we created a graph, for each industry, plotting book value (representing company size) along one axis and market-to-book ratio (representing business success) along the other. We then selected representative companies from each quadrant of the chart.

To compute the excess returns of each company's stock—the stock price movements above or below what you would expect given the movement of broad market indicators—we started with total returns to shareholders during the period. For each company, we then subtracted the cost of equity—that is, the book value of the company's equity multiplied by the cost of equity capital, computed using the capital asset-pricing model and the company's beta. From this number, we subtracted the movement in a broad nationwide stock market index over the five years, adjusting for differences in volatility between the company's share price and the overall stock market. (Before subtracting the movement in the relevant stock market index,

EXHIBIT

Results of the regression

Variable	Category	Variable type	Parameter	T-statistic[1]
Transaction focus	Constant		−0.0712	9.5
	Market consolidation, geographic expansion	Dummy	0.0112	1.8
	Business system extension	Dummy	0.0417	5.8
	Portfolio refocus, business diversification	Dummy	−0.0530	4.6
Transaction type	Merger	Dummy	0.0026	0.4
	Acquisition	Dummy	0.0265	4.0
	Sale	Dummy	0.0020	0.1
	Joint venture, alliance	Dummy	−0.0310	2.7
Transaction size		Variable	−0.0006	0.9
Transaction frequency		Variable	−0.0002	0.4
Company performance		Variable	−0.0354	2.5
Industry	Telecom	Dummy	0.0228	6.5
	European banking	Dummy	0.0200	5.3
	Petroleum	Dummy	−0.0428	9.2

[1]A t-statistic above 1.96 indicates an at least 95% probability that the parameter isn't zero. This size-weighted, multivariate-regression model has been constructed so that parameters associated with dummy variables measure the transaction value impact relative to the sample average. For instance, European banking is associated with a 2.0% boost in stock price per deal announcement. Therefore, all else being equal, a deal by a company in this industry would boost the company's market capitalization by 2.0% more than the average deal across all industries, for which the average announcement impact on market capitalization is zero. We used this method because we were mainly interested in the relative success of different kinds of deal. This is a transformation of a regression on the dummy coefficients and does not change the accuracy or reliability of our estimates of the coefficients or the r^2 of the regression itself.

we had reduced that movement by the average cost of equity in the country's stock market, to avoid double-counting the cost of equity.) We undertook this calculation for every company during the five-year period of the study and also during every 11-day period spanning the announcement of a deal: 5 trading days before the announcement, 5 days after it, and the day of the announcement itself.

With these data in hand, we carried out a multi-variate regression to assess the correlations between the excess returns created by each deal and various characteristics of that deal. We used a deal size–weighted least-squares multivariate-regression model, in which all dependent and independent variables for each transaction were weighted by the size of that transaction relative to the size of the company undertaking it.[2] In our study, the dependent variable was defined as excess returns relative to the local stock market, corrected for the risk-adjusted cost of capital, during the 11 trading days surrounding the announcement of the deal. The r^2 of the regression was 57 percent.

We used six kinds of independent variables (exhibit):

1. Transaction focus: A three-part dummy variable indicating the main reason for each deal: (a) consolidating existing markets or expanding geographically, (b) extending the business system by adding new distribution channels, or (c) diversifying into new markets or selling part of a business portfolio.

2. Transaction type: A four-part dummy variable indicating (a) a merger, (b) an acquisition, (c) a sale, or (d) a joint venture or an alliance between companies.

3. Transaction size: Relative to the size of the company at the beginning of the period (expressed as a percentage).

4. Transaction frequency: The number of transactions completed by a company during the entire five-year period of the study. To compute this number, we looked at all 479 transactions.

5. Company performance: Excess annualized returns, relative to the local stock market, corrected for the risk-adjusted cost of capital, during the five-year period of the study.[3]

6. Industry: A three-part dummy indicating (a) telecommunications, (b) European banking, or (c) petroleum.

[2]In ordinary (unweighted) least squares, the random error term in the regression is assumed to be normally distributed, with constant amplitude for all data points. This would be true of stock price movements caused by random fluctuations in the stock market. But any error term introduced by the deal announcement itself is likely to vary with deal size. We assumed that during deal announcement periods, this type of error far outweighed any underlying marketwide error and that the error term was proportional to the size of the deal itself—where, as above, size was measured as a fraction of the deal-making company's market capitalization. If these assumptions are accurate, the method of size-weighted least squares is the appropriate one to use, since it rescales all error terms to follow a probability distribution of the same amplitude. To the extent that there is any underlying market noise (apart from deal-related noise), and to the extent that deal-related noise doesn't scale in a linear way with the size of a deal, the size-weighted least-squares multivariate-regression method loses some of its accuracy.

[3]Some error was introduced because of the correlation between the five-year returns and the returns on any given deal, but in general each deal accounts for only a small part of the five-year excess returns. In any case, this source of error only biases the results against our conclusions, so if anything it strengthens the case for a negative correlation between the performance of a company and the success of its deals.

reaction—up or down—should incorporate an assessment of the foreseeable future performance of the companies involved. And if the stock market, with so many sources of information, agrees that a particular deal will create value, it has probably been chosen and structured fairly well.

Like all rules of thumb, this one has exceptions. Some transactions may make sense for reasons that managers can't fully explain to the market—or for reasons they can explain but that the market refuses to believe. Nevertheless, the market's reaction to a deal is a common proxy for the likelihood that it will succeed, taking into account all information available at the time. We think it is a useful proxy.

The strategic factor

The central results of the study, in our view, concern a deal's strategic type. Depending on the primary strategic purpose underlying the 231 deals, we assigned each of them to one of five such strategic types. If a deal aimed to consolidate a market by combining two companies in the same industry or to expand a company's geographic bounds ("market consolidation" or "geographic expansion," respectively), all else being equal it earned a 1.1 percent stock market premium in the 11 trading days surrounding its announcement—five days before, five after, and the day of the announcement. If a transaction sought to gain new distribution channels ("business system extension"), it earned a 4.2 percent premium. All of these deals are broadly expansionist.

To see this effect in action, take a look at Banco Santander. During our five-year study period, its corporate-control deals created annualized excess returns of 6 percent, out of a total market outperformance of 10 percent. Almost all of these deals were acquisitions, including 11 market consolidation and 14 geographic-expansion deals. Banco Santander, thanks to its geographic roll-up strategy, is now among the largest financial institutions in Latin America.

By contrast, the announcement of a deal whose strategy we classified as transformative—a "portfolio refocus" or a "business diversification"— actually destroyed 5.3 percent of the company's value on average. In a portfolio refocus deal, a company sells off a part of its business portfolio. In a business diversification deal, a company acquires a significant business that takes it outside its core industry.

The market's tendency to favor expansionist over transformative deals makes intuitive sense. The potential synergies from expansionist transactions are

usually much greater because they combine similar assets. Even when a transformative deal does promise synergies, they tend to be less predictable than those in expansionist deals and not as easily verified by investors at the time of the announcement. For managers, the lesson is clear: not to shy away from transformative transactions but to ensure that they get closer scrutiny—and pass a higher hurdle—than expansionist ones, and that they actually create tangible value.

Which deal is likely to succeed?

Of course, there is more to a deal than its strategy. After you decide to do an expansionist deal—or decide on a transformative one and manage to convince yourself (and your investors) that it will fare much better than the norm—you still have a good amount to worry about. For further guidance, we consulted the other variables of our regression. We found several interesting results.

> Mergers and asset sales define the baseline: the market shows **no particular reaction** to these kinds of deal one way or the other

Full deals create more value

One striking discovery was the difference in the market's reaction to various structural forms a deal might take: an acquisition, a merger, a sale, or a joint venture or alliance. Mergers and asset sales define the baseline: the market shows no particular reaction to them one way or the other. Acquisitions, by contrast, boost the announcement impact of a deal on the acquirer's stock by 2.7 percent of market cap, all else being equal. This is a striking result, since acquirers usually pay a hefty acquisition premium. The most likely explanation is that in an acquisition it is always clear which company controls the postmerger integration process. It is therefore much more likely that the full synergies of a deal will be captured in an acquisition than in a merger, in which a lengthy power struggle often ensues between the management teams of the companies involved.

As for joint ventures and alliances, their announcement impact lags behind the average by 3.1 percent of market capitalization. Perhaps the investment community views these deals as incomplete asset combinations that create few immediate synergies but can limit a company's strategic options and sap the attention of managers. There are, of course, a number of outstanding exceptions to the rule, but it does seem to be the case that, all else being equal, "partial" deals are more likely than others to diminish a company's value.[1]

---

[1] For more on the sorts of alliance that create the most and least value, *see* David Ernst and Tammy Halevy, "When to think alliance," *The McKinsey Quarterly*, 2000 Number 4, pp. 46–55.

Size and frequency don't matter

Contrary to expectations, we found that neither the size of deals nor the frequency with which companies pursue them has a positive effect on a company's market cap at the time of an announcement. We had expected that a big deal, in proportion to the size of the company, would create more value than a small one; after all, a big deal can in principle generate greater synergies. But as long as the stock market expects average deals to create no value for shareholders, the greater risk of value destruction may cancel out—in the eyes of investors, at least—the potentially greater synergies of a large deal.

Similarly, we expected that companies doing deals frequently would create more value with each deal, since these experienced companies would be more skilled at completing deals and at managing the postmerger integration process. In fact, they seem to enjoy no special advantage. Perhaps investors recognize that these companies are better at doing deals and thus expect the companies to do an above-average number of them, with above-average execution, in the future. If so, these superior deal-making skills would be embedded in the pre-announcement stock price and wouldn't show up in the market's reaction to a given deal announcement.

Managers can't control everything

We also identified two background features, outside the immediate control of managers, capable of affecting the likelihood that a deal will succeed. As usual, we define "success" narrowly, by the stock market's immediate reaction.

First, there were the sector results. Our sample of 231 deals came from three sectors: global telecommunications, global petroleum, and European banking. The very fact that a deal was in the telecom or banking sectors was correlated with a 2.3 percent and 2 percent increase, respectively, in the deal's average impact on a company's stock price. Competing in the petroleum industry, by contrast, actually seems to destroy 4.3 percent of shareholder value relative to the average. The explanation, we suspect, is that opportunities to create synergies and transfer skills through transactions are plentiful in the banking and telecom industries, since both are still growing, and banking is also quite fragmented. Petroleum, by contrast, is relatively stagnant and consolidated.

Second, underperforming companies (with returns below the average of a local stock market index during the five-year period under study) actually

appeared to create 1.2 percent more value per deal than did companies that outperformed the norm.[2]

This result may sound odd, but there are a few possible explanations for it. Perhaps outperformers already have future "good deals" built into their share price, so the market gives them less credit for good news.[3] Or perhaps investors expect underperformers to use their deals to gain access to the skills and knowledge they currently lack, whereas outperformers gain only tangible assets. Finally, there may be a hubris factor at work: perhaps managers of outperforming companies are less concerned with the market's reaction to deals because those managers can rest on their recently won laurels.

Implications for real life

Our findings reveal no silver bullet that guarantees success in corporate-control transactions. As many companies have learned from experience, investors and securities markets can be fickle, and even the most carefully crafted deals can meet with market skepticism when they are announced. But our research does suggest that companies can substantially improve their chances of success by pursuing transactions aimed at expanding the company's current lines of business and not at taking the company into entirely new activities. Also, all else being equal, it is better to acquire than to merge and better to merge than to ally. If you happen to compete in a growing or fragmented industry, expect better deal opportunities than you would get in a more mature or consolidated industry. Finally, if your company is an underperformer and it announces a well-conceived deal, you can look forward to a larger boost to your share price than a top performer would enjoy.

Of course, it is possible to create value through corporate-control transactions, such as a string of transformative joint ventures, that the market has often rejected in the past. But managers who attempt this should expect a cool reaction from the stock market. And to minimize the problem, they should put extra effort into identifying and capturing deal synergies and into telling investors why their particular deals hold more promise than apparently similar transactions have in the past. M_Q

---

[2] If deal quality effects were zero, the underperforming companies would be expected to lag behind the outperformers during deal announcement periods. So the fact that they actually outstrip the overall outperformers during deal announcement periods is particularly striking.

[3] *See* Richard F. C. Dobbs and Tim Koller, "The expectations treadmill," *The McKinsey Quarterly*, 1998 Number 3, pp. 32–43.