

# MERGERS & ACQUISITIONS

## EXPERT ANALYSIS

### Merger Failure and Deal Pricing

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There are no ifs, ands, buts or maybes about it — 2015 was a record-breaking year for global mergers and acquisitions. Aggregate deal value exceeded \$4.7 trillion, eclipsing the \$4.3 trillion level of 2007.<sup>1</sup>

Despite the hoopla surrounding the record-setting activity, the sad truth is that while short-term global M&A gains are typically enjoyed by the seller's shareholders, most such transactions fail to live up to the buyer's expectations.<sup>2</sup> Commentators cite a variety of reasons for merger failure. These include misgauging strategic fit, corporate culture clash, failure to communicate clearly or enough and focusing more on cost cutting than revenue enhancement.<sup>3</sup> Other causes include external factors, changes in the business environment, and the buyer's inability to use the assets of a seller larger than itself.<sup>4</sup>

Common to all such merger failure analysis is the vexing problem of buyers who paid more than the purchase turned out to be worth to it. Given this fact, it is useful for buyers' boards of directors and the corporate lawyers who represent them (as well as litigators on both sides) to consider the three typical pricing mechanisms used by M&A deal makers to identify areas in which overpricing may take place: discounted cash flow, guideline companies and precedent transaction analyses.

While nobody expects lawyers advising buyers' boards to duplicate the deal pricing efforts of the buyer's investment bankers or other financial advisers, savvy counsel can at least ask board members (especially independent ones) whether they have considered some of the overpricing issues described in this analysis.

#### DISCOUNTED CASE FLOW ANALYSIS

The discounted cash flow approach is an income-based approach used by deal makers to determine the net present value of the target's cash flows plus its terminal (residual) value following the discounting period. Both are discounted back to present value at a designated cost of capital. With respect to this approach, deal pricing may go awry in a number of ways. These include the following.

#### OVERESTIMATING THE TARGET'S CASH FLOW PROJECTIONS

Beyond the obvious problem of "hockey stick" projection showing cash flows dramatically greater than the target's historic ones — and unaccompanied by plausible assumptions for the increase — are more subtle reasons for bad projections.

Does each of the buyer's best-case, worst-case and middle-case cash flow projections for the target appropriately consider its value on a stand-alone basis, without viewing the proposed purchase's effect on those cash flows?<sup>5</sup> Given the use of such an approach and assuming application of proper



pricing techniques, if the deal price is at or around the fair value price, the buyer's downside risk is modest. Its risk increases with every synergy bell and whistle added to that approach.

Nonetheless, it's important to consider increments to combined cash flows resulting from possible buyer-target synergies, so long as one is realistic about how those are to be achieved. Synergies result either from cost savings or revenue enhancement, the latter being difficult to attain.<sup>6</sup>

It's important to provide sensitivity models by which to quantify prospective synergies. Conversely, there may be elements of idiosyncratic (also termed non-systematic) cash flow risk to the target as distinguished from its peers. These include factors such as thin management, limited geographic scope, and customer or supplier dependency. As courts frown on adding a specific company risk premium to the cost of equity capital,<sup>7</sup> to recognize these idiosyncratic risks when calculating cost of capital the target's cash flows should be adjusted to account for such risks.

### **Additional cost-of-capital issues**

Some of the more material issues to be considered in cost-of-capital determination include the following.

First, when spot (contemporaneous) prices on U.S. treasuries used to determine the risk-free rate are at historic lows, overpricing can be avoided by using average rates over an extended period.

As to equity risk premiums, there is an ongoing debate over whether to use historic risk premiums or so-called supply side risk premiums — which are arguably the most influential component of a company's cost of capital.

Without digging too deeply into the arcana of the differences between the two approaches, suffice it to say that historic risk premiums are calculated by subtracting the long-term average of the income returns on the riskless assets described above from the long-term market return. The supply-side model uses fundamental information such as earnings, dividends or overall economic productivity to measure the expected risk premium.<sup>8</sup>

As the historical equity risk premium generates a higher premium than the supply side model,<sup>9</sup> conservatism may cause one to opt for it or at least to seriously consider its use in one of the DCF scenarios.

Yet another cost-of-capital issue relates to the concept of beta. Beta is the principle measuring rod by which to determine risk when using the capital asset pricing model, or CAPM, which is probably the most commonly used methodology by which to determine the target's cost of capital. It is a forward-looking risk measure that calculates the difference between the return on an individual security and the return on the market generally.

Beyond this bread-and-butter statement lies a thornier issue. Assuming an efficient market, the betas of publicly traded sellers are readily available and consequently baked into the market price of their equity securities. But such is not the case with closely held ones where, if one is using the CAPM, a beta is required. Typically, a beta is constructed from the betas of public companies usable for comparative purposes. These are often termed guideline companies.<sup>10</sup>

The high sensitivity to beta implicit in the CAPM demands that these be carefully chosen. Simply genuflecting to the mean or median beta of this array is not the best choice if one or more of the guideline companies is compellingly similar operationally and financially to the target.

### **Terminal value**

Every deal maker knows that whether the discounting period is five or 10 years, an average business cycle or otherwise, the discounting period must come to end. Thus, there is a need for a device by which to account for the theoretical perpetuity of the target's cash flows. This device is called terminal or residual value. Apart from liquidation value, which is seldom used in the acquisition of going businesses, the two most common approaches for measuring terminal value are the exit multiple approach and the perpetuity approach. Each contains elements that can result in materially overpricing a seller.

*Trends in revenues and earnings over several years matter, and the failure to consider them can result in overpaying for the target.*

The exit multiple approach assumes that the seller will be sold at the conclusion of the discounting period, typically at multiples in the same range of revenues or earnings before interest, taxes, depreciation and amortization as those implied in the deal itself. In addition to the conceptual problems resulting from mixing elements of the DCF and guideline approaches (and the mere speculation that the target will be sold at the end of the discounting period), who is to say that market multiples for the target will be the same at the end of the discounting period as they were when the deal closed?

If multiples are higher at sale time there's no problem. But if they are lower, disaster awaits. Thus, the facially appealing shortcut of the exit multiple approach should generally be rejected.

The perpetuity method typically assumes that the seller's cash flow will continue forever at stable growth rates — say for example, the rate of inflation at the valuation date. Yet small changes in the growth rate assumption can materially affect overall value, particularly if the discounting period is short. It's axiomatic that no firm can grow forever at a rate higher than that of the economy in which it operates or, because of the effect of large numbers, necessarily at its historical growth rate.

In considering terminal value, to avoid overvaluing the targets, thoughtful buyers need to consider many issues, including:

- To what extent the target's growth opportunities are limited by its geography, total market size, government regulation or other factors.
- Whether real cash flow (including inflation) is the measuring rod rather than a mere nominal growth rate — the former represents the better approach because some inflation factor, however modest, most nearly replicates economic history.
- What currency is used to estimate cash flows used for terminal value purposes (one that's from a historically high inflation rate economy or the converse).
- How long the target will continue to maintain a high level of stable growth, a question that depends on the target's size, existing growth rate and excess returns (momentum counts) as well as the size, length and sustainability of competitive advantage.

## GUIDELINE COMPANY ANALYSIS

Guideline company analysis, also used by deal practitioners, is a *market*-based approach. Why use the guideline approach?

"The purpose of compiling guideline company statistics is to develop valuation multiples based on prices at which stocks of similar companies are traded in a public market."<sup>11</sup>

Buyers pricing targets using guideline company analysis need to avoid value-distorting errors such as failing to select the most appropriate guideline companies. The best way to avoid grief is to use a defensible array of public companies. Buyers should be certain that each guideline company stock shares, or can be reconstructed to share, common financial elements (especially those respecting common capital structures) and common operational features.

If this process is correctly performed, every company with those characteristics will be included. In such a circumstance, the only available analytical attack would be on the reasonableness of the search criteria, often a battle of which Bloomberg company description, SIC (Standard Industrial Classification) code or NAIC (North American Industry Classification) code to use in identifying the guideline companies.

These descriptions are a starting point in the process. But the selection process must proceed well beyond that point to ensure true comparability by weeding out companies that nominally are captured in these reference sources but which, on closer inspection, are operationally or financially dissimilar from the target.<sup>12</sup>

Too often, buyers also fail to be sufficiently exacting in setting forth the criteria for comparisons between the financial performance of the target versus those of the guideline companies. Buyers

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often fail to consider the full array of financial measurements to compare the target's financial performance to that of the guideline companies.

These include comparisons on growth in revenues, profits (at the gross profit, EBITDA, EBIT (earnings before interest and taxes), net income and EPS (earnings per share)) levels. They also include profit margins down to the net income level, as well as investment returns such as returns on equity (net income divided by total equity) and returns on invested capital (pre-tax income divided by total invested capital).

From a balance sheet point of view, there is too often a failure to consider liquidity ratios (current assets divided by current liabilities) or the acid test ratio (cash, marketable securities and good accounts receivable divided by total current liabilities) and leverage ratios (among them, total debt to common equity or total debt to total invested capital).

Because trends in revenues and earnings over several years matter (assuming they exist), the failure to consider all of these trends over several previous years, as well as the more commonly used current and projected ones,<sup>13</sup> can result in overpaying for the target. Finally, buyers often fail to recognize that, despite the winnowing process described above, one or more of the guideline companies may be dramatically more comparable to the target than others. A failure to weigh more heavily the multiples associated with those companies can result in deal mispricing.

### **PRECEDENT TRANSACTION ANALYSIS**

While the guideline company approach attempts to resolve the total value of sellers' minority interests using the market approach, it does not answer the question of how much (if any) premium over a public seller's market price (or fair market value in the case of closely held sellers) should be paid to obtain control. Solving for the target's increased value by acquiring control over it suggests the desirability of applying a market-driven approach called precedent transaction analysis.

Examining both market multiples and premiums over market prices unaffected by news of the transactions in an appropriate array of prior acquisitions allows one to better quantify how much the buyer should pay for control of the target.

This analysis is needed because control gives buyers elements of ownership that are unavailable to minority shareholders. These include the right to control the seller's business operations and the financial decisions required to be made to support those operations; the right to declare or deny dividends; and the right to sell, merge or liquidate the seller. Using a search similar to that involved in guideline company analysis, one can derive conclusions concerning the value of control in given transactions.

If not performed correctly, the process can lead to significant distortions of value. Among potential mistakes is the buyer's failure to distinguish between premiums paid in transactions in which cash is the sole or a majority of the merger consideration versus those in which the buyer's equity is the sole or a majority of the consideration.

It's typical for cash deals to result in higher premiums than stock deals, because in cash deals the target's shareholders are precluded from enjoying any upside opportunities as minority owners in the surviving company. The opposite is true in stock deals. Accordingly, in stock transactions, buyers should avoid overpaying by basing their premiums on those from other stock-based transactions.

Another potential error in setting merger premiums can lie in the determination of the target's price from which to base that premium — the so-called "unaffected price," a price immediately before the date investors knew about the buyer's offer. While it's customary to set fixed periods before the announcement, such as average 30 days, 10 days or one day before such time to determine the target's unaffected price, the sad fact of life is that news of the impending deal may seep into the market at earlier dates.

Thus, a review of the target's price and volume data other than at these dates is useful, although it must be remembered that events exogenous from news of the deal may affect these data. Event charts may be used to sort out this problem.

A continuing problem with guideline transaction analyses is the ability to find a respectable number (say five or more) of otherwise useful transactions that took place close enough to the valuation date that stock market conditions and multiples and merger premiums can provide useful pricing data.

## CONCLUSION

No valuation approach is perfect. Income-driven approaches such as DCF are useful in determining the target's cash flows, unaccompanied by the clutter of data resulting from the application of market-based approaches such as guideline company and guideline transaction approaches. However, the analyses are nonetheless incomplete if they do not consider the real-life effect of the stock market.

The opposite is true for market-based approaches. Further, all valuation conclusions are sensitive to relatively modest changes. In DCF, these include changes in cash flow assumptions, discount rates and terminal value. Such is also true in guideline company analysis, where the choice of guideline companies, the period from which multiples are drawn and judgment calls on which multiples to use can result in widely divergent conclusions.

Machiavelli may have had it right when he said, "We must bear in mind that there is nothing more difficult and dangerous, or more doubtful of success, than are attempts to introduce a new order of things."<sup>14</sup>

Had he known about such things, Machiavelli might also have advised strategic M&A buyers to avoid siren songs demanding increased bid prices sung in the auction process and to concentrate on the fundamentals of whether the deal affords synergistic product or financial fitness.

To financial buyers, he might have stressed the nuts and bolts of finding sellers with superior management, operating a growing business from which a timely exit by the buyer, with an attractive internal rate of return or cash on cash return, is reasonably foreseeable. To both buyer groups, Machiavelli might have offered his own caveat emptor.

Do not fail to use sound financial analysis to arrive at a price that's lower than the value to you the buyer. If this challenge can't be met, it's better to fold your cards and back away, doing a better deal some other day.

## NOTES

<sup>1</sup> Aditya Kondalamnty, *Merger and Acquisition Activity Hits Record High in 2015*, INT'L BUS. TIMES (Dec. 6, 2015), <http://www.ibtimes.com/merger-acquisition-activity-hits-record-high-2015-report-2213166>.

<sup>2</sup> Susan Cartwright & Richard Schoenberg, *Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities*, 17 BRITISH J. OF MGMT. 51 (2006).

<sup>3</sup> Jim Price, *6 Reasons Why So Many Acquisitions Fail*, BUS. INSIDER (Oct. 26, 2012, 12:11 PM), <http://www.businessinsider.com/why-acquisitions-fail-2012-10>.

<sup>4</sup> Shobhit Seth, *The Top Reasons Why M&A Deals Fail*, INVESTOPEDIA (Dec. 2, 2014), <http://www.investopedia.com/articles/investing/111014/top-reasons-why-ma-deals-fail.asp>.

<sup>5</sup> Here I have in mind a standard much like the Delaware statutory appraisal statute, Section 262(h) of Delaware's General Corporation Law, which mandates that the target's "fair value" be measured "exclusive of any value arising from the accomplishment or expectation of the merger or consolidation." While I recognize that fair value and fair market value are not identical and that Section 262 is designed to provide relief to non-controlling shareholders, I nonetheless argue that a bare bones analysis of this sort presents a target's going-concern rock-bottom value, above which speculative elements associated with projected synergies may or may not be appropriately added.

<sup>6</sup> See Jurgen Rothenbuecher & Joerg Schrotthe, *To Get Value From A Merger, Grow Sales*, HARVARD BUS. REVIEW (May 2008), <https://hbr.org/2008/05/to-get-value-from-a-merger-grow-sales>.

<sup>7</sup> See, e.g., *In re Appraisal of Orchard Enterprises Inc.*, No. 5713, 2012 WL 2923305 (Del. Ch. July 18, 2012)

<sup>8</sup> Ibbotson SBBI 2015 Classic Yearbook Table 11-7, p. 158.

<sup>9</sup> *Id.*

<sup>10</sup> I acknowledge that use of a guideline company approach to create a beta for closely held targets runs afoul of my “apples to oranges” criticism of the exit multiple approach for determining terminal value later in this piece by combining elements of a guideline company approach with those of a DCF approach. However, unlike the case in the exit multiple approach, which has its own built in disabilities, if the guideline companies are well chosen and the betas are appropriately priced, there is utility to such an approach. For those who insist otherwise, the so-called “build-up” approach for determining cost of capital in which beta is not used may be their approach of choice, although that approach has had mixed reviews in the Chancery Court of Delaware (compare *In re Appraisal of Orchard Enterprises* note 7, *supra* (disapproving the buildup approach) with *Delaware Open MRI Radiology Associates v. Kessler*, 898 A.2d 290 (Del. Ch. 2006) (approving it)).

<sup>11</sup> Shannon P. Pratt & Alina V. Niculita, *Valuing a Business* 265 (5th edition, McGraw-Hill 2008).

<sup>12</sup> See David J. BenDaniel, Arthur H. Rosenbloom & James J. Hanks, *International M&A Joint Ventures & Beyond: Doing the Deal* 411-412 (2d edition, John Wiley & Sons Inc. 2002).

<sup>13</sup> *Id.* at 414-421.

<sup>14</sup> NICCOLO MACHIAVELLI, *THE PRINCE* 13 (Dover Publications Inc. 1992).

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