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**Topics in Finance  
Part VIII-Mergers & Acquisitions**

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# Topics in Finance

## Part VIII—Mergers & Acquisitions

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### ABSTRACT

*In this series, three key axioms—stockholder wealth maximization, the risk-return tradeoff, and agency conflicts—are applied to the major topics in financial management. The current article looks at mergers and acquisitions, reviewing the presumed motivations, the ethical challenges, and the literature dedicated to this financial activity.*

### Introduction

Finance textbooks typically excel at the mechanics but tend to skimp on the critical concepts that undergird financial management. Among these are stockholder wealth maximization, risk and return, and agency theory. This series supplements the textbook coverage and, to date, has offered an introductory article providing the conceptual foundation plus articles devoted to financial analysis, leverage, the valuation of stocks and bonds, capital structure, capital budgeting, and dividend policy. [See Laux 2010 (a) through (d), as well as Laux 2011 (a), (b), and (c).] This article investigates mergers and acquisitions (M&A) and asks questions such as:

- What motivates M&A decisions, in theory?
- What drives M&A activity in practice?
- What agency conflicts confront financial managers considering a merger?
- What aspects of mergers have researchers investigated, and what are their findings?
- What queries would lead the financial manager to make better M&A decisions?

As in previous articles, we first review the mechanics and conceptual framework offered by textbooks (what mergers are and what compels managers to engage in mergers, theoretically), then consider how risk and return and agency problems interface with stockholder wealth maximization, summarize some of the most approachable literature dedicated to mergers and acquisitions, and finally offer the financial manager an avenue of introspection for developing the corporation's most appropriate M&A policy.

### M&A—The Textbook Version

Most textbooks give a brief list of possible motives for mergers and acquisitions, outline the mechanics of tender and stock offers, look at the accounting magic of earnings per share, and sometimes admit that mergers often do little more than transfer wealth from the stockholders of the acquiring firm to those of the target. On occasion, acquisition decisions are described as special cases of capital budgeting, yet they almost never appear in the same chapter. A brief article by Harris [1997] summarizes the four major approaches to firm valuation. Now, as a quick refresher, we will visit some of the most often cited motivations and recap how a company can increase its EPS by buying a company with a lower price-earnings ratio, adding the caveat that it's creating real wealth that matters.

Managers often defend merger actions with one or more of several common rationales, claiming mergers:

- Provide diversification
- Create synergy
- Increase debt capacity
- Generate greater market share
- Create accounting/financial synergies (raise earnings per share, given the right conditions)
- Add wealth for stockholders.

Each can be argued against. Diversification sounds good in theory, but investors can do it more easily and cheaply on their own; synergies often fail to develop; access to debt markets might improve for the acquirer but raise the risk of the target; market share increases can invite anti-trust action and the associated costs of litigation; financial synergies are more apparent than real, and measuring true wealth changes is difficult, at best. In addressing the last two of these motivations, Block, Hirt, and Danielsen [2011, pp. 626-27] offer an example of a merger in which a firm with a price-earnings ratio of 12 buys a smaller company with a PE of 7.5, the effect of which is always to immediately increase the earnings per share of the acquiring firm—accounting magic or real wealth creation? How does one measure the attendant increase in stockholder welfare? The authors caution the reader to look beyond the numbers at the growth potential of the newly combined firm, because this is what ultimately influences the market value of the acquiring firm, and maximizing long-run market value is the true test of a successful merger.

Although managers don't often admit it, mergers also result in a larger firm to control, and with size comes power, prestige, and quite likely, greater compensation for the manager. Researchers often link mergers and the term "executive hubris"—meaning that managers often let their egos and self-confidence guide M&A decisions rather than concentrating on maximizing the wealth of their stockholders. The outcome can be a decrease in that wealth, as noted in the following section in which we visit agency conflicts.

### Mergers and Agency Conflicts

As outlined in the previous section, many of the theoretical justifications for acquiring other firms are connected in a very real way to managers' personal power, prestige, and compensation. This sets the stage for agency conflicts. Managers would prefer to have complete power over buying other firms and total defense against becoming the takeover target, since the latter could jeopardize their own jobs. Thus the subject of takeover defense mechanisms becomes pertinent. Managers who fear losing their jobs due to takeover might elect to institute golden parachute agreements, wherein their "landing" is cushioned by pre-specified separation contracts. Poison pill arrangements make takeover prohibitively expensive and typically kick in when a certain percentage of outstanding shares are purchased by an outsider, again protecting managers. In the exciting "Saturday night special," a hostile bid is initiated during non-trading hours, and managers sometimes look for a white knight to bid for their firm instead.

While the empirical evidence is mixed on whether merger defense mechanisms are good for the stockholder, in general, the empirical proof suggests that, on the whole, mergers tend to transfer wealth from the acquiring firm to the target firm (primarily in the form of the premium paid to entice the target to sell), so the wise and impartial manager of the target firm should consider a takeover bid seriously as a way of increasing his/her stockholders' wealth. Unfortunately, takeover moves often occur as a result of a target company's poor performance given the assets at its command; this results in a depressed stock price and an invitation for an acquirer to move in. The last thing managers want to do is admit they have been falling short of expectations in managing the company. One defense is to become so big that others cannot acquire the firm, another questionable reason for merging.

### Mergers and Acquisitions in the Literature

The literature can be divided into articles that speak to the theoretical justifications for M&A activity, those that investigate empirically whether wealth is created (and to whom it might accrue), and a number of works that offer advice to managers in this area that is rife with potential for failure. Each category has articles that address many of the drawbacks to the motives cited above, albeit from varying vantage points. While the literature is immense and begins decades ago, this article presents a few of the seminal articles but concentrates the coverage on some of the more approachable contemporary works.

### *Merger Motives*

For decades diversification has been touted as a major motive for mergers. Lintner's 1965 seminal work, "Security Prices, Risk, and Maximal Gains from Diversification," is widely cited because it discusses the portfolio effect of combining assets whose returns do not move in tandem. Even though, theoretically, one could make a good case for smoothing earnings per share by combining firms whose earnings are negatively correlated (or even simply uncorrelated), the stockholder can achieve such diversification much easier (and cheaper) by buying stock in the separate entities. For mergers to accomplish this requires much more effort. And the outcome is never as certain once the firms are combined. Market efficiency, including the tradeoff between risk and return, lies at the heart of

this debate; if stocks are priced appropriately, buying another firm should accomplish nothing that the stockholder cannot create through diversifying his or her own portfolio. Porter makes this argument in his 1987 work, “From Competitive Advantage to Corporate Strategy.” He suggests that the diversification justification really doesn’t hold in today’s market. It would be better to pay dividends and let the shareholders diversify for themselves. He does offer three other motivations that might pay under certain circumstances: Restructuring, transferring skills, and sharing activities. He offers details on how to spot each opportunity and an “action program” to advise managers who might be contemplating such acquisitions.

An argument can be made for purchasing another firm that has latent debt capacity—is underleveraged—not only to improve access to the debt markets but to lower the cost of debt for the acquiring firm. The seminal article in this area is Lewellen’s 1971 work, “A Pure Rationale for the Conglomerate Merger,” and the author poses the challenge in this manner: “The question is whether it is possible for firms, by merging, to produce gains for their stockholders in the *absence* of any opportunities for operating efficiencies—to create increments in wealth out of ‘pure’ financial combinations of enterprises” (p. 522). He concludes that joining firms might reduce the probability of bankruptcy, enhance the merged company’s ability “to meet the cash-inadequacy tests of lenders ... *create* additional borrowing capacity as an inevitable consequence of consolidation” (p. 533), and extend the range of debt-to-total-capitalization over which investors do not punish companies for adding debt. In short, “...valuation gains *are* obtainable merely from the joining of companies; there is in fact some quantum of pure financial ‘synergy’ which can be released by conglomeration” (p. 533). Score one for financial synergy! Unfortunately, a 1975 work by Higgins and Schall refutes Lewellen’s contentions, showing that, if leverage varies, a decline in equity value is simply “offset... by an increased reliance on debt financing. The ultimate effect...depends upon the relative strength of these opposing forces” (p. 111). Similarly, Sweeney [1991] finds no support for the hypothesis that increased debt capacity represents a defensible motive for conglomerate mergers. The jury might still be out on this issue.

DeYoung et al. [2009] concentrates on the mergers and acquisitions literature for financial institutions and cites a number of proposed rationales for merging: These include financial benefits (including operational efficiency and market power), stockholder wealth maximization, diversification, and managerial motives such as utility maximization, increased compensation, and creating a “Too Big to Fail” firm. Two other articles [Savor and Lu, 2009 and Yang et al., 2010] cite overvalued equity as a reason for acquiring other firms in a stock exchange. Their findings are outlined in the following section, “Who Wins and Who Loses?” In sum, most of the “merger motives” articles describe, *conceptually*, why merging might be advisable, but the ones that investigate it *empirically* generally find little support. The next section looks at a number of those empirical studies.

#### *Who Wins and Who Loses?*

A number of articles try to get at the heart of whether or not mergers create value. If firms are mispriced (allowing a firm to get a “bargain” by buying out another firm), then markets are inefficient; this would represent a big credibility issue for academics who believe in market efficiency. The six articles in this section suggest that the evidence is mixed.

In a study of 33 companies widely engaged in mergers during the 1950 to 1986 period, Porter [1987, p. 3] finds that “on average corporations divested more than half their acquisitions in new industries and more than 60% of the acquisitions in entirely new fields. Fourteen companies left more than 70% of all the acquisitions they had made in new fields.” In unrelated acquisitions, average divestment was 74%. If mergers are, in fact, value-adding, why would more than half (and substantially more than that in the case of unrelated acquisitions) be abandoned? This does not bode well for the case against efficient markets, but it would support a case for inefficient management! Similarly, in “Effects of Multinational Mergers and Acquisitions on Shareholders’ Wealth and Corporate Performance,” Shukla and Gekara [2010] contend that mergers do not create value and offer proof that managers do not maximize firm value by engaging in this activity.

On the opposite side of the empirical fence, some studies support the wealth-generating potential of M&As. Sudarsanam, Holl, and Salami [1996] find that acquisitions generate wealth increases for the stockholders of both the acquiring and target firms. This is accomplished through a variety of synergies, including operational, financial, and managerial. Both Savor and Lu [2009] and Yang et al. [2010] find that acquirers can use their overvalued equity in completing mergers, effectively purchasing the assets of the target firm at a discount. A result of information

asymmetry, one can see how this might benefit the stockholders of the acquiring firm, but doesn't it imply an equal loss for the target who has been fooled and sold itself at a discount? And doesn't that fly in the face of market efficiency?

Weidenbaum and Vogt [1987] reveal evidence that acquisitions are poor investments for the acquirer, although they might, on the whole, break even when the returns to targets are considered. The culprit, according to these authors might be a poor alignment between the interests of the managers and those of the acquiring firm's stockholders. Managerial self interest in the forms of increased economic or political power and prestige, job satisfaction, and enhanced compensation packages through higher salaries, bonuses and stock options can lead to more acquisitions. The authors suggest that greater stock ownership might counter this tendency.

Two articles specifically address the use of takeover defenses. In "Poison Pills and Corporate Governance," Downen, Johnson, and Jensen find support for the hypothesis that "poison pill adoptions may be rational responses by management to conditions inside and outside of the corporation undertaken to minimize transaction costs" (p. 305). These mechanisms can help the target firms maximize shareholder wealth by forcing the acquirer to pay a higher premium. The opposing argument is that inefficient management utilizes poison pills to "entrench" themselves. In "What Matters in Corporate Governance?" [2009], Bebchuk, Cohen, and Ferrell look at a number of takeover readiness provisions, including poison pills and golden parachutes to determine their effect on firm valuation. They find that both poison pills and golden parachutes, along with supermajority requirements for mergers, are among those corporate governance provisions associated with significant reductions in firm valuation and negative abnormal returns. These provisions "have systematically drawn substantial opposition from institutional investors" because they "limit the extent to which a majority of shareholders can impose their will on management" (pp. 784-85). Once again, we see that mergers can bring out the worst in managers, in this case those of the target firm.

This brief review of some of the literature that investigates whether, empirically, merger activity creates value offers a mixture of pros and cons. Obviously, the market efficiency/firm valuation and mergers and acquisitions relationship remains a mystery. Researchers will continue to create new ways to investigate whether markets can be fooled by combining firms. The following section looks at mergers from a slightly different vantage point—that of offering the financial manager counsel.

### *Counseling the Merger Manager*

The variety of potential motives for merging indicates just how complex this financial decision can be. Thus a number of authors believe they can offer good advice for managers contemplating an acquisition. In "Are You Paying Too Much for That Acquisition?" [1999] Eccles, Lanes, and Wilson warn that managers have to know their top price and be disciplined about sticking with it. In addition, in deciding on that appropriate price, managers should know that potential cost savings are easier to estimate than revenue enhancements and that process improvements often can justify higher prices, but financial engineering rarely does. Bower [2001] says that mergers occur for five very different reasons (dealing with overcapacity in an industry; to roll-up competitors; to extend a firm into new products; as a substitute for R&D; to invent a new industry), and each requires a different set of strategic activities, creating a special challenge for managers.

Sometimes a merger really isn't the answer. In "When to Ally and When to Acquire" [2004, p. 28], Dyer, Kale, and Singh instruct managers to analyze three sets of factors to determine whether an alliance would be preferable to an acquisition. These include "the resources and synergies they desire, the marketplace they compete in, and their competencies at collaborating." Only through this type of introspection and investigation can they make merger decisions that will enhance their stockholders' wellbeing. In short, mergers and acquisitions don't lend themselves to a textbook approach, perhaps explaining why typical textbook coverage is scant.

The articles in this section offer warnings to financial managers, and the cautionary tone revolves around the fact that no two mergers are alike. This makes for a difficult and steep learning curve. How does one develop a checklist of value-maximizing possibilities and force management to describe exactly how purchasing a particular firm, in a particular industry, at a particular time in the history of both firms will result in a value-added scenario from which the stockholders of both firms will benefit? The next section offers a few questions along that line.

## The Bottom Line: Advice for the Financial Manager

To avoid making bad acquisitions, managers must refrain from placing their own security, wealth, and power above that of the stockholders they are to serve. Good questions to ask include:

- Have we treated the possible merger as a special case of capital budgeting (which it is)? Have we done our best to quantify the associated future cash flows and discounted them using an appropriate rate of return?
- Is diversification at the heart of this merger (and should we let our stockholders diversify instead)?
- Are personal compensation, power, and/or prestige motivating this acquisition?
- Is “creative accounting” anywhere in the valuation picture?
- Are we paying too much for this acquisition?
- Would an alliance better serve our stockholders’ interests?
- Is the synergy we seek real? What are the sources of that synergy? How long will it take us to realize the returns from these synergies?

This series continually asks for managerial self reflection and tough honesty. Managers must view their first assignment as finding and investing in good projects, and mergers represent that activity on steroids! The associated dollars, time, energy, and uncertainty make this activity particularly risky; this risk must be justified by expected (and realizable) high returns. Just as with dividend policy, if managers are uncertain about whether or not a merger will pay off, at the very least they should employ a kind of Hippocratic Oath—above all, do no harm.

### This Series Continues

Financial managers struggle with agency challenges in the mergers and acquisitions area. Keeping the long-run wealth of stockholders in mind and eschewing opportunities to grab for the power and prestige associated with running a bigger firm test even the best of managers. The next, and final, article in the series will investigate working capital management, perhaps the least “sexy” of the financial manager’s assignments but one that takes up the lion’s share of the day.

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### References

- Bebchuk, Lucian, Alma Cohen, and Allen Ferrell. 2009. “What Matters in Corporate Governance?” *The Review of Financial Studies*, Vol. 22, No. 2: 783-827.
- Block, Stanley B., Geoffrey A. Hirt, and Bartley R. Danielsen. 2011. *Foundations of Financial Management* 14<sup>th</sup> ed. (New York: McGraw-Hill/Irwin).
- Bower, Joseph L. 2001. “Not All M&As Are Alike—and That Matters.” *Harvard Business Review*, March, accessed online, July 25, 2011, at <http://hbswk.hbs.edu/cgi-bin/print/2123.html>.
- Cullinan, Geoffrey, Jean-Marc Le Roux, and Rolf-Magnus Weddigen. 2004. “When to Walk Away from a Deal.” *Harvard Business Review*, April, accessed through [www.hbrreprints.org](http://www.hbrreprints.org) as reprint R040F: 12-23.
- DeYoung, Robert, Douglas D. Evanoff, and Philip Molyneux. 2009. “Mergers and Acquisitions of Financial Institutions: A Review of the Post-2000 Literature.” *Journal of Financial Services Research*, Vol. 36: 87-110.
- Downen, Richard J., James M. Johnson, and Gerald R. Jensen. 1994. “Poison Pills and Corporate Governance.” *Applied Financial Economics*, 4: 305-13.

- Dyer, Jeffrey H., Prashant Kale, and Harbir Singh. 2004. "When to Ally and When to Acquire." *Harvard Business Review*, July-August: 26-34.
- Eccles, Robert G., Kersten L. Lanes, and Thomas C. Wilson. 1999. "Are You Paying Too Much for That Acquisition?" *Harvard Business Review*, July-August, accessed as reprint 99402: 136-46.
- Harris, Robert S. 1997. "Valuing Companies—An Overview of Analytical Approaches." Technical note, UVA-F-1187, revised July 2002, copyright by the University of Virginia Darden School Foundation: 1-6.
- Higgins, Robert C. and Lawrence D. Schall. 1975. "Corporate Bankruptcy and Conglomerate Merger." *The Journal of Finance*, Vol. XXX, No. 1: 93-113.
- Laux, Judith A. 2010. "Topics in Finance: Part I—Introduction and Stockholder Wealth Maximization." *American Journal of Business Education*, Vol. 3, No. 2: 15-21.
- \_\_\_\_\_. 2010. "Topics in Finance: Part II—Financial Analysis." *American Journal of Business Education*, Vol. 3, No. 3: 81-88.
- \_\_\_\_\_. 2010. "Topics in Finance: Part III—Leverage." *American Journal of Business Education*, Vol. 3, No. 4: 13-18.
- \_\_\_\_\_. 2010. "Topics in Finance: Part IV—Valuation." *American Journal of Business Education*, Vol. 3, No. 9: 1-6.
- \_\_\_\_\_. 2011. "Topics in Finance: Part V—Capital Structure." *American Journal of Business Education*, Vol. 1, No. 1: 79-87.
- \_\_\_\_\_. 2011. "Topics in Finance: Part VI—Capital Budgeting." *American Journal of Business Education*, Vol. 4, No. 7: 29-37.
- \_\_\_\_\_. 2011. "Topics in Finance: Part VII—Dividend Policy." *American Journal of Business Education*, Vol. 4, No. 11: 25-32.
- Lewellen, Wilbur G. 1971. "A Pure Financial Rationale for the Conglomerate Merger." *The Journal of Finance*, Vol. XXVI, No. 2: 521-35.
- Lintner, John. 1965. "Security Prices, Risk, and Maximal Gains from Diversification." *The Journal of Finance*, Vol. XX, No. 4: 587-615.
- Lovullo, Dan, Patrick Viguierie, Robert Uhlener, and John Horn. 2007. "Deals Without Delusions." *Harvard Business Review*, December, accessed through [www.hbrreprints.org](http://www.hbrreprints.org) as reprint RO712G: 2-11.
- Porter, Michael E. 1987. "From Competitive Advantage to Corporate Strategy." *Harvard Business Review*, May-June: 2-21.
- Savor, Pavel G. and Qi Lu. 2009. "Do Stock Mergers Create Value for Acquirers?" *Journal of Finance*, Vol. LXIV, No. 3, accessed as reprint 87307: 1061-97.
- Shukla, Anita and Mouni Geoffrey Gekara. 2010. "Effects of Multinational Mergers and Acquisitions on Shareholders' Wealth and Corporate Performance." *The IUP Journal of Accounting Research & Audit Practices*, Vol. IX, Nos. 1 and 2: 44-62.
- Sudarsanam, Sudi, Peter Holl, and Ayo Salami. 1996. "Shareholder Wealth Gains in Mergers: Effect of Synergy and Ownership Structure." *Journal of Business Finance & Accounting*, Vol. 23, Nos. 5 and 6: 673-98.

Sweeney, Larry E. 1991. "An Empirical Evaluation of the Increased Debt Capacity Motive for Conglomerate Mergers." *Journal of Economics and Finance*, Vol. 15, Issue 1: 119-36.

Weidenbaum, Murray and Stephen Vogt. 1987. "Takeovers and Stockholders: Winners and Losers." *California Management Review*, Vol. XXIX, No. 4: 157-68.

Yang, Sheng-Yung, Lin Lin, De-Wai Chou, and Hsiao-Chen Cheng. 2010. "Merger Drivers and the Change of Bidder Shareholders' Wealth." *The Service Industries Journal*, Vol. 30, No. 6: 851-71.