MERGERS AND ACQUISITIONS: A REVIEW OF THE LITERATURE

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Abstract

This paper is a selected literature review of the theories and empirical evidence on mergers and acquisitions. Initially, the fundamental factors, and the underlying theories, causing mergers is explored. Subsequently, the empirical evidence is examined on: (1) the operating performance of the acquirers and the acquired firms before and after the merger, (2) stockholder wealth impact, (3) form of payment used to complete the acquisition, (4) conglomerate mergers, and (5) corporate governance affecting the firm's ownership and control.

Keywords: Mergers, acquisitions, conglomerates, corporate control, governance

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Mergers and acquisitions is an enduring phenomenon. Year after year firms acquire other firms both big and small, private and public, foreign and domestic, and inside and outside their industry. The merger decision involves corporations choosing to acquire existing companies as opposed to internal growth and expansion. Thus, in general, existing larger firms take ownership and control of other small firms. The purpose of this paper is to review the mergers and acquisition literature to answer the questions of why they occur, who benefits from them, and what is their ensuing performance.

Why do firms merge? Several reasons explain the motivation of firms to acquire other firms. The reasons for a specific merger are not mutually exclusive. That is, one or more reasons may be driving a particular combination. The causes of mergers include investment theory where the target firm to be acquired is a profitable investment in a capital budgeting sense with a positive net present value. How the target firm will generate the returns above that which is required in the capital markets is another matter. The target firm may be underpriced in the stock market causing a value creating opportunity. This underpricing, may be due to an information asymmetry between investors and the firm.

A disequilibrium in the physical asset market may be attributed to the undervaluation. That is, the Tobin's Q ratio (market value of assets divided by the replacement cost of assets) may be less than one. This would give rise to purchasing already in-place assets through merger to enjoy a cost savings versus constructing the assets onself.

Other sources of value augmentation may come from a differential efficiency between the management of the acquirer and the target company. This is where the acquirer management efficiency exceeds that of the target management efficiency. Thus, upon combining the two entities the efficiency of the combined firm increases to the higher of the two management efficiencies resulting in increased value. Another root of increased worth may be derived from synergy when the firms coalesce into one organization. These synergies may be due to the amortization of fixed costs on a greater volume level and, therefore, lowering the average cost per unit. Furthermore, the synergy may come from economics of scale or scope or both. When two firms combine and become larger, in a horizontal merger, this may enable the organization to choose a different technology or organization structure that is of lower per unit cost when the quantity produced is great. For example, a nuclear powered electrical generating plant, as opposed to a coal fired electrical generating plant, may be cheaper to operate when electrical power production levels are gargantuan. A merger with economies of scope produces a decline in per unit costs. This occurs in a congeneric merger where two firms that are allied-in-nature join. An illustration of this is when a commercial bank (doing business in deposit instruments, checking accounts, consumer and small business loans) joins with an investment bank (doing business in retail brokerage accounts, corporate fund raising, managing mutual funds). A fount of value may come from tax considerations such as in the U.S. with unused tax loss carryforwards, underutilized depreciation tax shields, interest expense tax deductions, inheritance taxes, et cetera. A market power reason for a merger is where the acquirer gains a dominating market share in the product market that the firm sells in. Because of the heightened market power, with lesser competition due to the competitor being bought out, the firm has influence if not control (for a monopoly) over market prices and therefore can better manage its profits. This concentration of power placing the ownership and control of an industry in a few may be thwarted by government and its regulatory agencies. For example, in the U.S. the Department of Justice oversees all mergers and a regulatory agency is assigned for a particular industry such as the Federal Communications Commission in the television and radio industry. Vertical integration mergers are another form of market power, either upstream or downstream in the supply chain, giving more control to the firm to affect prices at which distribution channel point the profit is made so as to provide fiercer competition where needed.

Diversification reasons for mergers are at the heart of conglomerate mergers. If there is an amalgamation of firms whose cash flows are less than perfectly positive correlated than by their melding together the overall variance of cash flows is reduced. This diversification effect, or risk sharing, is analogous to that delineated by the Markowitz-Roy Covariance Model and Sharpe-Lintner-Mossin Capital Asset Pricing Model. Another aspect of the risk sharing effect through diversification is when there are financial distress costs. One extreme version of financial distress costs equals the expected deadweight bankruptcy costs multiplied by the probability of bankruptcy. Of course, there are other financial distress costs like lost customer sales due to uncertainty of a continued replacement parts supply, higher employee turnover, creditors unwillingness to extend further debt, suppliers discontinuing service and so on. In a conglomerate merger the likelihood of financial distress is lessened due to this co-insurance effect. This outcome brings about cost savings to the conglomerate corporation.

Large conglomerates may also provide an internal capital market for funds at a lower cost of capital (such as from reduced transaction and flotation costs) compared to securing money from the external market. This cheaper financing makes for additional investments to be considered profitable and therefore spurs further mergers and growth. The free cash flow theory is applicable to companies contemplating mergers who possess excess positive free cash flows coupled with poor internal investment opportunities. The process of acquiring other existing firms provides an outlet for this excess free cash flow. This scenario may persist in the future and accounts for a prolonged merger and acquisition binge.

As growth through mergers is an alternative to internal growth some distinction between the two is in order. Internal growth in a market expansion, or branching out to another industry, requires time to assemble the assets, hire the workforce, train the personnel, acquire government licenses and permits, develop the clientele base and so on. In addition to the potentially lengthy time the costs are somewhat unknown and uncertain. This is in contrast to a merger where the timeframe is much shorter and costs are relatively known. Simultaneously, an acquisition eliminates a competitor whereas internal growth gives notice to competitors of a firm's intentions. More importantly, there are businesses that can only be obtained by an acquisition. For example, a company that has a patent on a pharmaceutical drug. If you want to be in that drug business you can wait for the patent to expire or you can buy the firm. Another example is when a government issues a finite number of licenses to conduct business in an industry. Therefore, you must choose to buy an existing company that holds a license or not enter that business segment. Companies that occupy land with rare minerals found nowhere else on earth are prime candidates for acquisition. That is, if these scarce elements are required in some manufacturing process then this would necessitate that company being acquired by the firm desiring to be in that line of business. A fatuous rationale to effect a merger is the follow-the-herd argument. That is, as everybody else is doing it so too should we do it. We may not be able to elucidate why we are acquiring firms but so as not to look different and possibly inferior to other firms we mimic their behavior. In the least the firm, by replicating the actions of others, may mirror their average performance and not be below average achievement. Strategic planning reasons for mergers seem elusive at the consummation of the acquisition but nevertheless may be the cause. Firms aim to enter a new business line with a toehold investment to establish their presence. The actual current entry appears to have dubious value inasmuch a net present value analysis calculates a negative figure. Nevertheless, this acquisition gives the firm growth options to expand at a subsequent date. These call options have value now and possibly more so later.

Government fiat describes the rationale for some mergers especially in developing nations that necessitates the formation of a joint venture between a foreign firm, wishing to enter the country, and a local company. This proposition occurs for those craving to penetrate the market in China and to some extent in Eastern Europe and Central Asia.

The agency theory denoting the conflict between the interests of stockholders to that of managers underlies the impetus for some mergers. Managers of large firms, on average, earn higher compensation and consume greater perquisites than managers of small firms. Accordingly, in their own self interest managers have an incentive to conduct empire building. That is, growth in the size of assets or sales is pursued regardless of the prudence of the investments with the intention of maximizing manager's utility as opposed to shareholders. This gives rise to the overinvestment problem of selecting impoverished investment opportunities. There is a restraint on managerial hubris in the capital markets through hostile acquisition bids. That is, an outside investor may acquire an effective ownership stake in a bloated underperforming company and with its control status effect changes to discharge the peccant management. The impact of mergers revolves around the subsequent operating performance of the combined entity as well as the stock market reaction to the merger surrounding the announcement date. These responses have been extensively examined in the literature. A selection of the empirical evidence is furnished. The operating performance of the acquired firm subsequent to a merger can be difficult to discern as its operations are melded and entangled with its new parent partner. Lang, Poulsen and Stulz (1995) find the combined corporation conducts asset sales following poor firm-level performance. John and Ofek (1995) ascertained that the remaining assets of the firm improve in performance after asset sales that subsequently leave the firm more focused. These results are confirmed by Maksimovic and Phillips (2001). Saffieddine and Titman (1999) display evidence where targets that terminate takeover offers significantly increase their leverage ratios, reduce capital expenditures, sell assets, reduce employment, increase focus and realize cash flows and share prices that outperform their benchmarks in the five years following the failed takeover. Heron and Lie (2002) found no evidence that the method of payment conveys information about the acquisition's future operating performance. In one of the seminal articles investigating merger buyer and seller premiums Halpern (1973) found a significant stock price increase for both buyers and sellers. These results were supported by Mandelker (1974). However, Ellert (1976) indicates only the acquired firms have statistically significant gains from mergers. The finding of significant gains to the target company only is bolstered by Langetieg (1978), Dodd (1980), Malatesta (1983), and others. Moreover, Noe and Kale (1997) found that takeovers offer target premiums that are less than post takeover value with no relation to pre-announcement stock price runups according to Schwert (1996). Nonetheless, Cotter, Shivdasani and Zenner (1997) show that target firm's independent outside directors driving takeover attempts by tender offers enhance shareholder wealth. Moeller, Schlingemann and Stulz (2005) report acquirers lose money and perform poorly afterwards. Eckbo and Thorburn (2000) discovered Canadian bidders earn significantly positive abnormal returns versus American bidders acquiring Canadian targets.

The form of payment employed to execute a merger and characteristics of the firms involved affects the returns of bidders and targets. Dodd and Ruback (1977) analyzed both successful and unsuccessful cash tender offers. Both bidders and targets earned statistically significant abnormal returns prior to the announcement date. Furthermore, the target firms earned greater excess returns than bidder companies. Moreover, successful tender offers generated even greater positive residuals versus unsuccessful tender offers but nevertheless both created significant stockholder wealth. These findings are partially supported by Bradley (1980) for the target corporations but rather negative returns for the acquirer company. Travlos (1987) reports negative abnormal returns for firms financing a takeover with common stock and no abnormal returns for those financing with cash. This outcome parallels the empirical evidence of a public offering of new equity. Faccio and Masulis (2005) promulgated results where cash payments are used by bidders when their dominant voting control is threatened. Otherwise, stock financing is employed as the bidder's financial condition weakens. For privately held targets Chang (1998) hypothesized that when the acquisitions market is uncompetitive bidding firms can reap positive gains as the probability of underpayment is high. Pulvino (1998) provided support for this concept contrasting differentially financially constrained airlines in the sale of assets. Loughran and Vijh (1997) showed that for the five-year period following an acquisition, on average, firms that complete stock mergers have significant negative excess returns and cash tender offers earn significant positive excess returns. Martin (1996) published findings that support the notion that the higher the acquirer's growth opportunities the more likely the acquirer is to use stock to finance the acquisition. Stock financing increases with higher pre-acquisition market and acquiring firm stock returns. It decreases with an acquirer's higher cash availability, higher institutional shareholdings and block holdings, and in tender offers. Lang, Stulz and Walkling (1991) present results that bidder returns are significantly related to cash flow for low Tobin Q bidders but not for high Tobin Q bidders. The former Tobin Q firms have poor investment opportunities whereas the latter Tobin Q firms have good investment opportunities. These results are amplified by Rau and Vermaelen (1998) who found poor post-acquisition performance of low book-to-market firms. Business cycle conditions can influence the choice of stock or cash. Choe, Masulis and Nanda (1993) and Taggart (1997) support a non-recession state of the economy as favorable to the use of stock to consummate a merger. Rhodes-Kroph and Viswanathan (2004) found a positive correlation between merger activity and when the stock market is high. A subfield in the merger literature is that of conglomerates. Lewellen (1971) demonstrated diversified firms enjoy greater debt capacity and debt tax shields relative to pure play firms due to lower risk. This study is confirmed by Amihud and Lev (1981) showing lower firm risk due to multiple lines of business with imperfectly correlated returns. In addition, they show managers engage in corporate diversification, even if it reduces shareholder value, to reduce their own human capital risk. In fact, mergers oftentimes are in lines of business with poor investment opportunities (Jensen (1986) and Stulz (1990)). Meyer, Milgrom and Roberts (1992), Berger and Ofek (1995) and Mansi and Reeb (2002) show that conglomerates cross-subsidize poorly performing divisions. While Stein (1997) discusses that diversification can create internal capital markets, which may increase investment efficiency, Rajan, Servaes and Zingalesm (2000) explain that conglomerates can have internal power struggles causing resource allocation distortions. Scharfstein and Stein (2000) show how divisional managers subvert internal capital markets in their pursuit of rent-seeking investments leading to inefficiencies. Thus, Lins and Servaes (1999) and Lamont and Polk (2001) exhibit data of conglomerates priced at a discount versus comparable single line of business corporations while on the contrary Graham, Lemmon and Wolf (2002) casts doubt, based on methodology, on the conglomerate discount. Weston (1970) expounded on the ability of diversified organizations to leverage economies of scale due to their efficient and profitable operations rather than stand-alone firms.

Mergers and acquisitions play a role in corporate governance. While there are both internal controls, such as independent boards and effective executive incentive compensation plans, and external checks, such as legal protection for minority stockholders and monitoring of the firm by accountants, creditors and rating agencies, certification by investment banks and stock exchanges; nevertheless, the market for corporate control through takeovers can motivate a management with astigmatism or hyeropia. The response of managers to takeover bids is correlated to the degree of agency costs. Shleifer and Vishny (1988) show that equity-based compensation (EBC) of executives has the effect of reducing the non-value maximizing behavior of acquiring managers. Datta, Iskandar-Datta and Raman (2001) present evidence that high EBC firms experience positive stock returns versus low EBC firms suffering negative returns. Furthermore, the merger premium paid by high EBC firms is less than low EBC firms. Moreover, high EBC firms experience higher growth rates and stock return performance in the 3 year post-merger period. Berger and Ofek (1996) found that those firms who endured greater losses from diversification were more likely to be taken over. Agrawal and Walkling (1994) discovered that acquisition attempts occur more frequently in industries where chief executive officers have positive abnormal compensation. Boot (1992) furnishes proof that a takeover threat may deter a manager from persisting with a suboptimal project. Berkovitch and Khanna (1990) and DeAngelo and Rice (1983) supply results of how managers will implement defensive strategies such as crown jewel sales, lock-up options, litigation, white knight arrangements, purchases of undesirable assets, and greenmail to thwart a hostile takeover or at least extract additional rents from the potential acquirer. Sinha (1991) shows that takeover target managers repurchase stock to bond themselves to reduce agency costs of overconsumption of perquisites and underinvestment of the firm. Servaes (1994) corroborates the previous finding with evidence that takeover targets have not previously overinvested in capital expenditures. Berkovitch and Khanna (1991) create an acquisition market model to demonstrate how target shareholders must design golden parachutes for managers to foster higher payoff tender offer bids as opposed to merger bids. Kini, Kracaw and Mian (2004) show how corporate takeovers provide an external source of discipline after internal control mechanisms failed.

The preceding overview testifies to the depth and breadth of the mergers and acquisitions literature. Mergers are fascinating in their impact on competition, the upheaval in employees, the relocation of company headquarters, the gains and losses to investors, the attempts to thwart the combination, the legal machinations, and the ramifications on corporate ownership and control. Empirical evidence supporting or refuting hypothesis are ex post in nature and only ex ante studies will prove the efficacy of the theories. No matter, merger waves will continue to transform the global market far into the future.

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