

CHAPTER 29: MERGERS AND ACQUISITIONS AND CORPORATE RESTRUCTURING

MERGERS AND ACQUISITIONS

Merger: one firm absorbs the other. Must be approved by the stockholders of each firm.

Acquisition of stock: an offer is made to a firm's shareholders.

The biggest concerns in a merger are that it may be taxable (in a cash buyout), there may be disgruntled minority shareholders, and it transfers all of the assets and liabilities of the acquired firm. In an *acquisition of assets*, the acquiring firm gets control of the assets without having to deal with minority shareholders. The biggest advantage of an *acquisition of stock* through a tender offer is that management approval of the acquisition is not necessary. If enough shareholders tender their stock, control can be obtained despite management resistance.

Anti-takeover Provisions in Corporate Charters

Quite often management is able to write anti-takeover provisions into their corporate charters. Examples of anti-takeover protection include:

- staggered terms for the board of directors
- an "equal protection" provision that minority shareholders are offered at least the same value as any other shares that are sold in a takeover
- a provision so that "supermajority" vote (e.g. 80%) is required for a merger
- a "lockup" provision prohibiting a hostile raider from quickly dismantling these takeover defenses once he has obtained a majority interest in the firm

Even T. Boone Pickens, a vocal critic of entrenched management, has instituted anti-takeover provisions at his firm. Pickens owns 2% of Mesa Limited Partners and is the general partner. A June 1987 amendment fixed the value of Pickens's equity at the price prevailing 30 days before a takeover bid is announced in the event the price subsequently falls. Mesa also implemented an equal protection provision that would assure all ownership interests must be offered the same price ["Pickens, Foe of Entrenchment, Seeks Change That Could Bring Job Security," Wall Street Journal, June 5, 1987, pp 2.].

Equal protection amendments are designed to thwart two-tiered tender offers in which one price is offered for the first batch of shares tendered and a lower price is offered for any remaining shares.

Other Anti-takeover Tactics

Other anti-takeover tactics include:

- Repurchase Standstill Agreements (bidder agrees to limit its holdings)
- Greenmail: the (targeted) purchase of Shares from Bidder at a premium to ward off acquisition
- Exclusionary Self-tenders (firm makes tender offer for its stock, excluding certain shareholders)
- Going Private and LBO
- Golden Parachutes (if excessive, otherwise these are not always bad; see Jensen)

- Crown Jewels: selling major assets when faced with a takeover threat (a “scorched earth” policy).
- Poison Pill: Ross, Westerfield, and Jaffe describe a Poison Pill as a right to buy shares in the firm at a bargain price. The right is granted to the target firm’s shareholders, contingent on another firm acquiring some degree of control. This right dilutes the stock so much that the bidding firm loses money on its shares. Wealth is transferred from the bidder to the target shareholders.

Anti-Takeover Legislation

In the past two decades, tender offers have become a popular way to gain control of a firm. They are useful in hostile takeovers because they do not require the cooperation of the target firm's management. A popular criticism is that these hostile takeovers divert capital from more productive uses such as investing in real assets. Another concern of people living in 'one-company towns' is that outside owners will pay less attention to their civic responsibility. Because of these concerns, state legislatures have passed anti-takeover legislation aimed at deterring hostile takeovers. Until recently, these statutes have been routinely struck down by the courts.

In March 1986, the Supreme Court finally upheld a state's anti-takeover law. Under the Indiana law, if a corporate raider acquires a 20% stake in a firm incorporated in Indiana, there is a 50-day delay before the raider can vote his shares without the approval of 'disinterested shareholders.' Disinterested shareholders are shareholders who are not officers or inside directors. This delay allows existing management to setup takeover defenses. Most states have since passed similar legislation.

Synergy Arising from an Acquisition or Merger

Suppose firm A acquires firm B for cash. The synergy or total gain in value to the shareholders of A and B is

$\text{Synergy} = V_{AB} - [V_A + V_B]$. If the synergy is *positive*, then the combination of the two firms (V_{AB}) is more valuable than the sum of the separate firms.

As we learn from the first principles of finance, the value of an asset is the present value of its discounted future cash flows. The cash flows from synergy is

$\Delta CF_t = CF_{ABt} - [CF_{At} + CF_{Bt}]$. If positive, then the combined firm results in greater cash flow than the sum of the separate firms.

Therefore, $\text{Synergy} = \sum_{t=1}^T \frac{\Delta CF_t}{(1+r)^t}$ where r is the appropriate risky discount rate.

If no value is created through the combination of A and B, i.e. synergy = 0, then the merger is a zero-sum game and the gain to B shareholders is equal to the cost to A shareholders. If $V_{AB} > V_A + V_B$, then both parties may benefit.

Reasons for Mergers and Acquisitions

To identify the sources of synergy, we find it useful to decompose the cash flows arising from a merger or acquisition. The gain in value of the combined firm is the present value of the synergy cash flows, ΔCF_t . Therefore, synergy may arise from the size or timing of expected future cash flows, or from a reduction in the riskiness of the cash flows. The synergy cash flows may be decomposed as:

$$\Delta CF_t = \Delta REV_t - \Delta COSTS_t - \Delta TAXES_t - \Delta CAPITAL\ REQUIREMENT_t$$

We discuss these potential sources of synergy from mergers and acquisitions:

Increased revenues may result from:

- increased market (monopoly) power
- better or more efficient marketing efforts
- strategic benefits such as entry into new markets

Decreased operating costs may arise from:

- economies of scale
- economies of vertical integration
- complementary resources
- elimination of operating or management inefficiencies
- If the market for control of the firm is efficient, inefficient management teams would quickly be replaced by efficient ones. If a firm is not being managed according to shareholder wealth maximization, another firm may seize the opportunity to increase value by taking over the inefficient firm. Jensen and Ruback [1983], following Manne [1965], call this "**the market for corporate control.**"

Taxes can be reduced through:

- the transfer of net operating losses to profitable firms
- utilization of unused debt capacity
- reinvestment of surplus funds ("**free cash flow**") in nontaxable acquisitions as an alternative to paying dividends or repurchasing stock

Decreased financing costs arising from:

- the large economies of scale in issuing debt and equity securities
- the merged firm may have greater access to the capital markets at a lower cost

"Bad" Reasons for Mergers in an Efficient Market

- we briefly mention 'earnings growth' and 'diversification' - two reasons that are often cited as justification for merger but which make little financial sense.

Mergers and acquisitions represent an area where traditional NPV analysis fails to fully explain the prices paid for firms even in the presence of heterogeneous expectations and asymmetric information. We conclude our discussion of the reasons for mergers by describing how and why the motivations of management may differ from those of shareholders in acquisitions and mergers. We refer to the agency problem and the goal of the firm (shareholder wealth maximization).

Risk Reduction through the Coinsurance Effect

The **coinsurance effect** in a merger or acquisition occur because even if one of the pre-merger firms fails bondholders will be paid by the surviving firm. The coinsurance effect can reduce the costs of financial distress if the cash flows between two firms are not perfectly correlated. While this can increase total stakeholders' value, there may also be a transfer of value from the stockholders to the bondholders through the coinsurance effect.

Stocks can be valued as a call option. In this view, bondholders own the firm but sell shareholders an option to buy the firm at an exercise price equal to the face value of debt. One of the inputs to the Black and Scholes option pricing model is the variability (standard deviation) of the underlying asset. When the variability of the underlying asset decreases, so does the value of the call option.

Stapleton [1982] has shown that this is exactly what occurs when two firms merge. Because of the coinsurance effect, the value of equity (a call option) falls and there is a transfer of wealth from stockholders to bondholders. The coinsurance effect can also result in greater debt capacity. This in turn means greater interest tax shields and lower taxes.

Some Evidence on the Winners and Losers

1. Winners include the shareholders of target firms.
2. Losers usually include the target shareholders in unsuccessful mergers.

Shareholders and management of acquiring firms may gain or lose depending on the circumstances. Empirical studies have reported mixed results including significantly negative returns (Dodd [1980]), insignificantly positive returns (Dennis and McConnell [1986]), and small but significantly positive returns (Bradley, Desai, and Kim [1983]) to the shareholders of acquiring firms.

Method of Payment in Mergers and Acquisitions

Travlos (1987) examined the method of payment (cash or common stock) and the returns to the stockholders of acquiring firms around the time of the announcement of merger or acquisition. His main results are:

<u>Methods of Payment</u>	<i>Successful</i>		<i>Unsuccessful</i>	
	<u>Cash</u>	<u>Stock</u>	<u>Cash</u>	<u>Stock</u>
Tender Offers	mixed	large negative	mixed	large negative
Mergers	small positive	large negative	Not studied	Not studied

Travlos relies on a **signaling** argument to explain these results. In a competitive market for corporate control, acquiring firms must pay a fair price to the shareholders of target firms. This results in near-zero returns to the shareholders of acquiring firms when payment is made in cash. Financing through common stock rather than cash signals the market that management believes the stock of the acquiring firm is overvalued. This signal results in negative returns to the shareholders of the acquiring firms.

CORPORATE RESTRUCTURING: LEVERAGED BUYOUTS

A **LEVERAGED BUYOUT** is the process by which a group (usually a management group) borrows heavily to take a firm private. That is, the shares are repurchased from the stockholders where the purchase is financed through heavy debt. On average leverage increased from 19% to 88%.

The purpose of an LBO:

- (1) Jensen: The buyout improves operating efficiency through
 - Reducing inefficient use of Free Cash Flow
 - Provide additional incentives for management through higher ownership share and the necessity to make high debt coverage. Debt disciplines the firm and curtails the incentive to overinvest or be inefficient.
 - Under the watchful eye of the buyout specialists (Kohlberg, Kravis, Roberts(KKR), Donaldson Lufkin Jenrette, First Boston, etc.) managers are monitored more effectively and provided incentives to maximize value.
 - Increased after tax cash flow due to tax benefits
- (2) Rappaport: The buyout is "Shock Therapy." The firm is taken private, managers make critical changes in operations, selling off assets, changing management and then reintroduces the firm to public ownership through a new (IPO) public offering.

Kaplan: Looked at a set of firms that were taken private through LBOs between 1979 and 1986, following them through 1990.

- 62% Remained private
- 24% Purchased by public company
- 14% Publicly owned through a public stock offering.

Thus, to a large extent there does not seem to be a large scale effort to simply take the firm private, make changes and return it public.

Median time spent as a private firm is 2.5 years, and is estimated as 6.8 years for the entire sample.

30% of buyouts sold assets to other related businesses. This amounted to 33% of the total value of the assets.

Leveraged Recapitalization: similar to an LBO in that leverage is greatly increased. In a leveraged recap, debt is issued and the proceeds are used to repurchase most of the common stock (a large debt for equity swap). The firm remains owned by the public. Much of the former incentive to overinvest will now be curtailed. The equity ownership is no longer as diffuse as before. Announcements of leveraged recaps result in a large increase in stock price (average increase is about 26%)

RJR-Nabisco was bought out and taken private by Kohlberg, Kravis, and Roberts (KKR) in late 1988. The purchase was primarily financed by debt. LBOs use unique debt financing commonly known as strip or mezzanine financing, especially designed to mitigate the conflicts of interest among creditors if financial distress ever came about in the future.

The typical LBO financing structure is shown below.

<p><u>SENIOR DEBT</u></p> <p>Senior debt has the first claim on the firm's assets, of course. About 60% of financing is in this form, mostly as loans from banks and insurance companies.</p>
<p><u>SUBORDINATE DEBT</u></p> <p>First layer of the mezzanine financing.</p>
<p><u>CONVERTIBLE DEBT</u></p> <p>Second layer of the mezzanine financing</p>
<p><u>PREFERRED STOCK</u></p> <p>Third layer of the mezzanine financing. Often the preferred stock is convertible into more preferred stock or may receive dividends in the form of more preferred stock (called payment in kind or PIK).</p>
<p><u>COMMON STOCK</u></p> <p>Common stock or will represent about 10% to 15% of the deal. Very concentrated ownership. About 20% of the stock is held by management and 80% by the LBO firm (such as KKR) and its partners. Ownership is not diffuse.</p>

The “mezzanine” level financing must be owned in proportional amounts by investors. In order to own 10% of the Subordinate Debt, then the investor must also purchase 10% of the Convertible Debt and 10% of the Preferred Stock. The securities cannot be separated (they are considered to be “stapled” together); the investor must maintain the proportional ownership of the mezzanine securities. Thus we say that these securities are sold to investors in “strips”.

CORPORATE RESTRUCTURING: continued
Agency Costs of Free Cash Flow paper

Remember that the value of a corporation can be defined as:

Value = PV of cash flow from assets in place + NPV of growth opportunities

Michael Jensen's (Harvard Univ.) published a now famous paper in 1986, arguing that the mature firms (i.e., oil, tobacco, forest products, broadcasting, etc.) having substantial assets in place, and cash flow that exceeds the need for +NPV investments. Of course, mature firms are a large part of the economy. Jensen would have argued that the Internal Control Systems of many of these firms had failed, and that these firms were actually a drag on the U.S. economy, since they were unable to distribute their excess cash flow so that it could be freed up and invested into firms with growth opportunities.

One problem was that many managers had compensation that was linked to sales, Earnings per Share, etc., rather than linked to shareholder value or the ability to earn higher returns than the firm's cost of capital.

First of all it is hard for many to accept the fact that managers would put their own interests in front of the shareholders best interests and waste resources. RJR-Nabisco prior to the 1988 takeover was such an example. Such activities would include investing internal cash flow into low yielding projects (likely having a negative NPV, although the firm might try to avoid letting the public know that the project had a low yield) just so that the corporation could grow larger, produce *higher* earnings or sales and thus produce a larger empire for the managers.

Jensen argues that in firms having large Free Cash Flows, there exists the potential for serious agency problems between shareholders and managers. This situation is especially found in **mature** or **declining** industries in which the firm's cash flow from operations often far exceeds the need for positive Net Present Value investments. The problem is even worse when the firm is overly financed with equity.

Such industries often have excess capacity and should shrink in size, as well as invest less in new projects. Free Cash Flow, the internally generated cash flow that exceeds the need for new investment, should be distributed to the shareholders.

However, many firms have retained this cash and wasted by investing in low yielding projects or by acquiring firms outside of the firm's industry.

What can be done to keep these firms from investing in projects that have a return that is less than the cost of capital?

Debt can act as a valuable "asset" by forcing managers to pay out the firm's cash flow and by acting as a control mechanism to become more efficient and prevent corporate waste. The debt contract explicitly states the cost of capital in the form of a contractual interest rate. If new investments cannot generate a return that is higher than this cost of capital, then financial distress or bankruptcy is likely to occur.

This discipline from the financial markets is not as likely to occur in a firm that is primarily equity financed, especially in the absence of activist shareholders or when ownership of the firm is rather diffuse. However, many of these poorly run, equity financed firms became takeover targets in the 1980s.