ACF 302: Week 18

Mergers and Acquisitions

Berk and DeMarzo Chapter 28

Lecture

Lancaster University Management School

Road Map for this week

M&A part I

28.1 Background and Historical Trends

28.2 Market Reaction to a Takeover

28.3 Reasons to Acquire

M&A part II

28.4 Valuation and the Takeover Process

28.6 Who Gets the Value Added from a Takeover?

M&A part III

28.5 Takeover Defenses

28.1 Background and Historical Trends

- Market for corporate control
  - Acquirer (or bidder) – the buyer of the firm
  - Target – the seller of the firm
- The global takeover market is highly active and large, averaging more than $1 trillion per year in transaction value.

Table 28.1 Twenty Largest Merger Transactions, 1998–2015

Date Announced	Date Completed	Target Name	Acquirer Name	Equity Value (in $billion)
Nov. 1999	June 2000	Mannesmann AG	Vodafone Air Touch PLC	203
Oct. 2004	Aug. 2005	Shell Transport & Trading Co.	Royal Dutch Petroleum Co.	185
Jan. 2000	Jan. 2001	Time Warner	America Online Inc .	182
Apr. 2007	Nov. 2007	ABN-AMRO Holding NV	RFS Holding BV	98
Mar. 2006	Dec.2006	BellSouth Crop	AT&T Inc.	89
Nov. 1999	June. 2000	Warner-Lambert Co.	Pfizer Inc.	89
Dec.1998	Nov. 1999	Mobil Crop.	Exxon Crop.	85
Jan.200	Dec. 2000	Smith Kline Beecham PLC	Glaxo Wellcome PLC	79
Feb. 2006	July. 2008	Suez SA	Gaz de France SA	75
Apr. 1998	Oct. 1998	Citicrop	Travelers Group Inc.	73
July. 1998	June. 2000	GTE Crop.	Bell Atlantic Crop.	71
May. 1998	Oct. 1999	Ameritech Crop.	SBC Communications Inc.	70

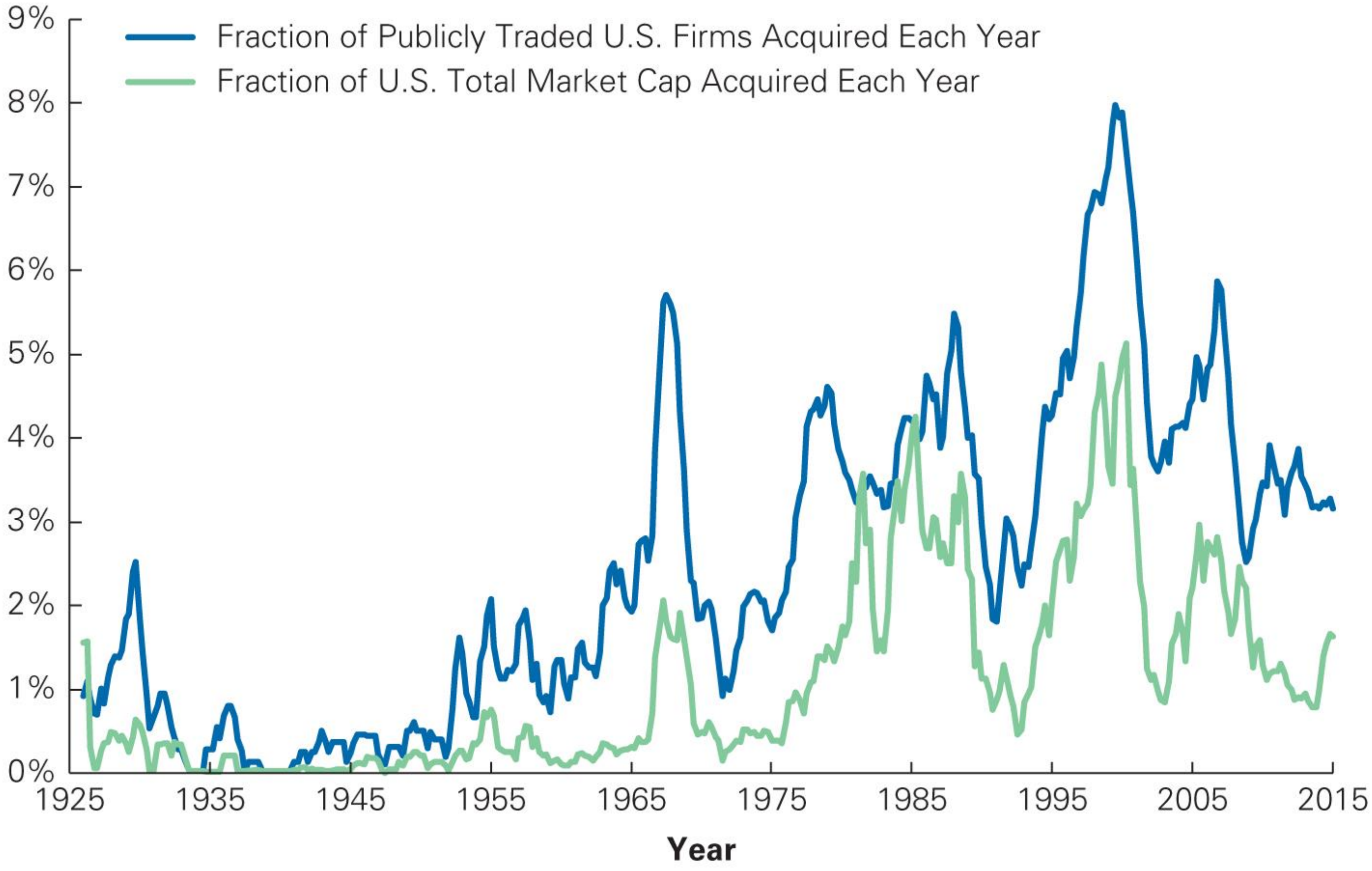
TRIPLE-ACCREDITED, WORLD-RANKED

Lancaster University Management School

28.1 Background and Historical Trends

- **Merger Waves:** Peaks of heavy activity followed by quiet troughs of few transactions in the takeover market. Each wave is associated with different types of deals:
  - 1960s
    - Known as the conglomerate wave
  - 1980s
    - Known for the hostile takeovers
  - 1990s
    - Known for the “strategic” or “global” deals
  - 2000s
    - Marked by consolidation in many industries and the larger role played by private equity

Figure 28.1 Fraction of U.S. Public Companies Acquired Each Year, 1926–2015



Source: Authors' calculations based on Center for Research in Securities Prices data

Types of Mergers (1 of 2)

- Horizontal merger
  - Target and acquirer are in the same industry
  - Nov 2015: AstraZeneca agrees $2.7bn deal for US biotech firm ZS Pharma

- Vertical merger
  - Target's industry buys from or sells to acquirer's industry
  - Nov 2015: Ikea Buys Romanian, Baltic Forests to Control Its Raw Materials

- Conglomerate merger
  - Target and acquirer operate in unrelated industries
  - ITT, Avis Rent-a-Car, Sheraton Hotels and Continental Baking

Types of Mergers (2 of 2)

- Mergers are also characterized by:
  - How do shareholders get paid
    - Stock Swap
      - Target shareholders are swapping old stock for new stock in either the acquirer or a newly created merged firm
  - Term sheet
    - Summary of price and method of payment
    - Consideration paid to target shareholders can be very complex.

28.2 Market Reaction to a Takeover (1 of 3)

- In most U.S. states, the law requires that when existing shareholders of a target firm are forced to sell their shares, they receive a fair value for their shares.
  - A bidder is unlikely to acquire a target company for less than its current market value.
  - In practice, most acquirers pay a premium on the current market value.

28.2 Market Reaction to a Takeover (2 of 3)

- Acquisition Premium
  - Paid by an acquirer in a takeover, it is the percentage difference between the acquisition price and the pre-merger price of a target firm.
  - Research has found, as shown on the next slide, that acquirers pay an average premium of 43% over the pre-merger price of the target.
    - When a bid is announced, target shareholders enjoy a gain of 15% on average in their stock price.
    - Acquirer shareholders see an average gain of 1%, but half receive a price decrease.

Table 28.2 Average Acquisition Premium and Stock Price Reactions to Mergers

Premium Paid over Premerger Price	Announcement Price Reaction	
	Target	**Acquirer**
43%	15%	1%

Source: Data based on all U.S. deals from 1980 to 2005 as reported in **Handbook of Corporate Finance: Empirical Corporate Finance**, Vol. 2, Chapter 15, pp.291-430, B. E. Eckbo, ed., Elsevier/North Holland Handbook of Finance Series, 2008.

28.2 Market Reaction to a Takeover (3 of 3)

- Why do acquirers pay a premium over the market value for a target company?

28.3 Reasons to Acquire

- Large synergies are by far the most common justification that bidders give for the premium they pay for a target.
  - Such synergies usually fall into two categories: cost reductions and revenue enhancements.
    - Cost-reduction synergies are more common and easier to achieve because they generally translate into layoffs of overlapping employees and elimination of redundant resources.
    - Revenue-enhancement synergies, however, are much harder to predict and achieve.

Economies of Scale and Scope (1 of 2)

- Economies of Scale
  - The savings a large company can enjoy from producing goods in high volume that are not available to a small company
  - Examples: Fixed costs, bulk buying, better rate of interest.
- Economies of Scope
  - Savings large companies can realize that come from combining the marketing and distribution of different types of related products.
  - Example: Online retailer acquires with a currier company.

Economies of Scale and Scope (2 of 2)

- A cost associated with an increase in size is that larger firms are more difficult to manage.

Vertical Integration (1 of 2)

- Vertical Integration
  - Refers to the merger of two companies in the same industry that make products required at different stages of the production cycle

Vertical Integration (2 of 2)

- A major benefit of vertical integration is coordination.
  - For example, Apple Computers makes both the operating system and the hardware.
- However, not all successful corporations are vertically integrated.
  - For example, Microsoft makes the operating system but not the computers.

Expertise

- Firms often need expertise in particular areas to compete more efficiently.
  - Particularly with new technologies, hiring experienced workers directly may be difficult.
  - It may be more efficient to purchase the talent as an already functioning unit by acquiring an existing firm.
  - Very common practice among technological companies nowadays.

Monopoly Gains (1 of 2)

- It is often argued that merging with or acquiring a major rival enables a firm to substantially reduce competition within the industry and thereby increase profits.
  - Most countries have antitrust laws that limit such activity.

Monopoly Gains (2 of 2)

- While all companies in an industry benefit when competition is reduced, only the merging company pays the associated costs (from, for instance, managing a larger corporation).
  - This may be why, along with existing antitrust regulation, that there is a lack of convincing evidence that monopoly gains result from the reduction of competition following takeovers.

Efficiency Gains

- Another justification acquirers cite for paying a premium for a target is efficiency gains, which are often achieved through an elimination of duplication.
  - Acquirers often argue that they can run the target organization more efficiently than existing management could.
    - Although identifying poorly performing corporations is relatively easy, fixing them is another matter entirely.

Tax Savings from Operating Losses

- A conglomerate may have a tax advantage over a single-product firm because losses in one division can offset profits in another division.
  - To justify a takeover based on operating losses, management would have to argue that the tax savings are over and above what the firm would save using carry back and carry forward provisions.
  - IRS can disallow a tax brake if the main reason for a takeover is tax avoidance.

Textbook Example 28.1 (1 of 2)

Taxes for Merged Corporation

Problem

- Consider two firms, Ying Corporation and Yang Corporation.
- Both corporations will either make $50 million or lose $20 million every year with equal probability.
- The only difference is that firms' profits are perfectly negatively correlated. That is, any year Yang Corporation earns $50 million, Ying Corporation loses $20 million, and vice versa.
- Assume that the corporate tax rate is 34%.
- What are the total expected after-tax profits if the two firms' when they are two separate firms?
- What are the expected after-tax profits if the two firms are combined into one corporation called Ying-Yang Corporation, but are run as two independent divisions? (Assume it is not possible to carry back or forward any loses.)

Textbook Example 28.1 (2 of 2)

Solution

Ying Corporation:

In the profitable state, the firm must pay corporate taxes, so after-tax profits are $50 × (1 − 0.34) = $33 million.

No taxes are owned when the firm reports loses, so the expected after-tax profits of Ying Corporation are 33(0.5) − 20(0.5) = $6.5 million.

Yang Corporation has identical expected profits, its expected profits are also $6.5 million. Thus, the expected profit of both companies operated separately is $13 million.

Merged corporation, Ying-Yang Corporation, always makes a pretax profit equal to 50 − 20 = $30 million. After taxes, expected profits are therefore $30 × (1 − 0.34) = $19.8 million.

So Ying-Yang Corporation has significantly higher after-tax profits than the total stand-alone after-tax profits of Ying Corporation and Yang Corporation.

Diversification (1 of 3)

- **Risk Reduction**
  - Like a large portfolio, large firms bear less unsystematic risk, so often mergers are justified on the basis that the combined firm is less risky.
    - A problem with this argument is that it ignores the fact that investors can achieve the benefits of diversification themselves by purchasing shares in the two separate firms.
    - The only class of stockholders who benefit from the diversification are stockholders who do not hold well-diversified portfolios, such as employees.

Diversification (2 of 3)

- **Debt Capacity and Borrowing Costs**
  - All else being equal, larger firms are more diversified and, therefore, have a lower probability of bankruptcy.
    - The argument is that with a merger, the firm can increase leverage and thereby lower its costs of capital.
  - Due to market imperfections like bankruptcy, a firm may be able to increase its debt and enjoy greater tax savings without incurring significant costs of financial distress by merging and diversifying.
  - Gains must be large enough to offset any disadvantages of running a larger, less focused firm.

Diversification (3 of 3)

- **Liquidity**
  - Shareholders of private companies often have a disproportionate share of their wealth invested in the private company.
  - The liquidity that the bidder provides to the owners of a private firm can be valuable and often is an important incentive for the target shareholders to agree to the takeover.

Earnings Growth (1 of 2)

- It is possible to combine two companies with the result that the earnings per share of the merged company exceed the pre-merger earnings per share of either company, **even when the merger itself creates no economic value.**
- **However, if there's no economic value created, while EPS increase, the P/E ratio declines.**
- See the two examples in the next slides.

Textbook Example 28.2

Mergers and Earning per Share

Consider two corporations that both having earnings of \$85 per share.

The first firm, Old World Enterprises, is a mature company with few growth opportunities. It has 1 million shares that are currently outstanding, priced at \$60 per share.

The second company, New World Corporation, is a Young company with much more lucrative growth opportunities. Consequently, it has a higher value: same number of shares outstanding, its stock price is \$100 per share.

Assume New World acquires Old World using its own stock, and the takeover adds no value.

Textbook Example 28.2 (2 of 5)

Mergers and Earning per Share

- In a perfect market, what is the value of New World after the acquisition?
- At current market prices, how many shares must New World offer to Old World's shareholders in exchange for their shares?
- Finally, what are New World's earnings per share after the acquisition?

Textbook Example 28.2 (3 of 5)

Solution

- Because the takeover adds no value, the post-takeover value of New World is just the sum of the values of the two separate companies: 100x1 million+ $60x 1 million = $160 million.

- To acquire Old World, New World must pay $60 million. At its pre-takeover stock price of $100 per share, the deal requires issuing 600,000 shares.

- As group, Old World's shareholders will then exchange 1 million shares in Old World for 600,000 shares in New World, or each shareholders will get 0.6 million share in New World for each 1 share in Old World.

Textbook Example 28.2

Solution

Notice that the price per share of New World stock is the same after the takeover: The new value of New World is $160 million and there are 1.6 million shares outstanding, giving it a stock price of $100 per share.

However, New World's earnings per share have changed. Prior to the takeover, both companies earned $5 million. The combined corporation thus earns $10 million. There are 1.6 million shares outstanding after the takeover, so New World's post-takeover earnings per share are

$$\text{EPS} = \frac{\$10\text{ million}}{1.6\text{ million shares}} = \$6.25/\text{share}$$

By taking over Old World, New World has raised its earning per share by $1.25.

Textbook Example 28.2 (5 of 5)

- By acquiring a company with low growth potential (low P/E multiple), a company with high growth potential (and high P/E) can raise its earnings per share.
- This merger adds no economic value.
- The high-growth company lowered its overall growth rate by combining with a low-growth company.
- As a results, its P/E fall as a result of the EPS rising.
- No conclusion can be drawn solely by looking at it's impact on the acquirer earnings.

Textbook Example 28.3 (1 of 2)

Mergers and the Price-Earnings Ratio

Problem

Calculate New World's price-earnings ratio before and after the takeover described in Example 28.2.

Textbook Example 28.3 (2 of 2)

Before the takeover, New World's price-earnings ratio is

$$P/E = \frac{\$100/\text{share}}{\$5/\text{share}} = 20$$

After the takeover, New World's price-earnings ratio is

$$P/E = \frac{\$100/\text{share}}{\$6.25/\text{share}} = 16$$

The Price-earnings ratio has dropped to reflect the fact that taking over Old World, **more of the value of New World comes from earnings from current projects than from its future** growth potential.

Managerial Motives to Merge (1 of 2)

- Conflicts of Interest
  - Managers may prefer to run a larger company due to additional pay and prestige.

- Overconfidence
  - Roll's "hubris hypothesis" maintains that overconfident CEOs pursue mergers that have low chance of creating value because they believe their ability to manage is great enough to succeed.

Managerial Motives to Merge (2 of 2)

- Main difference
  - Under the conflict of interest explanation, managers know they are destroying shareholder value but personally gain from doing so.
  - Under the hubris hypothesis, managers believe they are doing the right thing for shareholders.

End of M&A Part I

- …next: M&A part II: valuation and takeover process

M&A Part II: Valuation and the Takeover process.

28.4 Valuation and the Takeover Process (1 of 2)

- Valuation
  - A key issue for takeovers is quantifying and discounting the value added as a result of the merger.
    - For simplicity, any additional value created will be referred to as the **takeover synergies.**

28.4 Valuation and the Takeover Process (2 of 2)

- Valuation
  - The price paid for a target is equal to the target's pre-bid market capitalization plus the premium paid in the acquisition.
    - If the pre-bid market capitalization is viewed as the stand-alone value of the target, then from the bidder's perspective, the takeover is a positive-NPV project only if the premium it pays does not exceed the synergies created.
    - The tender offer will be made accordingly.

The Offer (1 of 6)

- Once the acquirer has completed the valuation process, it is in the position to make a tender offer.
  - Not all tender offers are successful.
    - Often acquirers have to raise the price to consummate the deal.

Several rounds of tender offers can take place.

The Offer (2 of 6)

- A bidder can use one of two methods to pay for a target: cash or stock.
  - In a cash transaction, the bidder simply pays for the target, including any premium, in cash.

The Offer (3 of 6)

- A bidder can use one of two methods to pay for a target: cash or stock.
  - In a stock-swap transaction, the bidder pays for the target by issuing new stock and giving it to the target shareholders.
    - The bidder offers to swap target stock for acquirer stock.
- Exchange Ratio
  - The number of bidder shares received in exchange for each target share

The Offer (4 of 6)

- A stock-swap merger is a positive-NPV investment for the acquiring shareholders if the share price of the merged firm exceeds the pre-merger price of the acquiring firm.

The Offer (5 of 6)

- Let *A* be the pre-merger value of the acquirer,
- *T* be the pre-merger value of the target, and
- *S* be the value of the synergies created by the merger.
  - If the acquirer has N_A shares outstanding before the merger and issues *x* new shares to pay for the target, then the acquirer's share price should increase post-acquisition if

$$\frac{A+T+S}{N_A+x} > \frac{A}{N_A} = P_A$$

The Offer (6 of 6)

- *x* gives the maximum number of new shares the acquirer can offer and still achieve a positive NPV:

$$xP_A < T + S$$

- This can be expressed as an exchange ratio:

$$Exchange\ ratio = \frac{x}{N_T} < \frac{P_T}{P_A}\left(1 + \frac{S}{T}\right)$$

For example, if the value of the synergies equals 20% of the value of the target, you would be willing to pay an exchange ratio 20% higher than the current price ratio.

Textbook Example 28.4 (1 of 2)

Maximum Exchange Ratio in a Stock Takeover

Problem

- At the time Sprint announced plans to acquire Nextel in December 2004, Sprint trading for $25 per share and Nextel stock was trading for $30 per share.
- If the projected synergies were $12 billion, and Nextel had 1.033 billion shares outstanding,
- What is the maximum exchange ratio Sprint could offer in a stock swap and still generate a positive NPV?
- What is the maximum cash offer Sprint could make?

Textbook Example 28.4 (2 of 2)

Solution

Nextel's premerger market cap was T = 1.033 × 30 = $31 billion. Thus using Eq. 28.5,

$$\text{Exchange ratio} < \frac{P_T}{P_A}\left(1+\frac{S}{T}\right) = \frac{30}{25}\left(1+\frac{12}{31}\right) = 1.665$$

That is, Sprint could offer up to 1.665 shares of Sprint stock for each share of Nextel stock and generate a positive NPV. For a cash offer, given synergies of

$$\frac{\$12\text{ Billion}}{1.033\text{ Billion shares}} = \$11.62\text{ per share},$$

Sprint could offer up to $30 + 11.62 = $41.62. Note that this cash amount equals the cash value of the exchange offer: $25 × 1.665 = $41.62.

Merger "Arbitrage" (1 of 5)

- Once a tender offer is announced, the uncertainty about whether the takeover will succeed adds volatility to the stock price.
- Either the Board can reject the offer and recommend their shareholders not to tender, or if accepted a regulator can stop it.
  - This uncertainty creates an opportunity for investors to speculate on the outcome of the deal.

Merger “Arbitrage” (2 of 5)

- Risk-arbitrageurs
  - Traders who, once a takeover offer is announced, speculate on the outcome of the deal

  - (Note there is no real arbitrage, what these traders do if actually risky)

Merger "Arbitrage" (3 of 5)

- In September 2001, HP announced that it would purchase Compaq by swapping 0.6325 share of HP stock for each share of Compaq stock.
  - After the announcement, HP traded for $18.87 per share, while the price of Compaq was $11.08 per share. Thus, Compaq's share price after the announcement was $0.8553 below the implied value of HP's offer.

$$\$18.87 \times 0.6325 = \$11.9353$$

Merger “Arbitrage” (4 of 5)

- If just after the announcement, a risk-arbitrageur simultaneously purchased 10,000 Compaq shares and short sold 6325 HP shares, he would net $8553.

$$6325 \times \$18.87 - 10{,}000 \times \$11.08 = \$8553$$

Merger "Arbitrage" (5 of 5)

- If the takeover was successfully completed on the original terms, the risk-arbitrageur would pocket the $8553 as a profit.
  - This potential profit arises from the merger-arbitrage spread.
- Merger-Arbitrage Spread
  - The difference between a target stock's price and the implied offer price
    - Note: It is not a true arbitrage opportunity because there is a risk that the deal will not go through.

Figure 28.2 Merger-Arbitrage Spread for the Merger of HP and Compaq

TRIPLE-ACCREDITED,

AMBA ACCREDITED EQUIS THE AWARDS WINNER

Lancaster University Management School

28.6 Who Gets the Value Added from a Takeover?

- Evidence suggests that the premium the acquirer pays is approximately equal to the value it adds, which means the **target shareholders** ultimately capture the value added by the acquirer.
- It does not appear that the acquiring corporation generally captures this value.

The Free Rider Problem (1 of 5)

- Often times the target firm is poorly managed, resulting in a low share price. If the corporate raider can take control of the firm and replace management, the value of the firm (and the raider's wealth) will increase.

The Free Rider Problem (2 of 5)

- Assume the current price of the target firm is $45 per share and the potential price if the firm is taken over is $75 per share.
    - If the corporate raider makes a tender offer of $60 per share, tendering shareholders gain $15 per share.
        - $60 – $45 = $15

The Free Rider Problem (3 of 5)

- But non-tendering shareholders can "free ride."
  - By not tendering, these shareholders will receive the $75 per share or a gain of $30 per share.
  - However, if all the shareholders feel that the potential price is $75, they will not tender their shares and the deal will not go through.

The Free Rider Problem (4 of 5)

- The only way to persuade shareholders to tender their shares is to offer them at least $75 per share, which removes any profit opportunity for the corporate raider.

The Free Rider Problem (5 of 5)

- The problem is that existing shareholders do not have to invest time and effort but still participate in all the gains from the takeover that the corporate raider generates, hence the term “free rider problem.”
  - The corporate raider is forced to give up substantial profits and thus will likely choose not to bother at all.

Toeholds

- Toehold
  - An initial ownership stake in a firm that a corporate raider can use to initiate a takeover attempt
    - Once an investor has a toehold, they must make their intentions public by informing investors of their large stake.

The Leveraged Buyout (1 of 2)

- Assume a corporate raider announces a tender offer for half the outstanding shares of a firm.
  - Instead of using his own cash to pay for these shares, he borrows the money and pledges the shares themselves as collateral on the loan.
    - Because the only time he will need the money is if the tender offer succeeds, the banks lending the money can be certain that he will have control of the collateral.

The Leveraged Buyout (2 of 2)

- If the tender offer succeeds, the corporate raider now has control of the company.
  - The law allows the corporate raider to attach the loans directly to the corporation—that is, it is as if the corporation, and not the corporate raider, borrowed the money.
    - At the end of this process the corporate raider still owns half the shares, but the corporation is responsible for repaying the loan.
      - The corporate raider has effectively gotten half the shares without paying for them!

Textbook Example 28.5 (1 of 3)

Leveraged Buyout

Problem

FAT Corporation stock is currently trading at $40 per share. There are 20 million shares out-standing, and the company has no debt. You are a partner in a firm that specializes in leverage buyouts. Your analysis indicates that the management of this corporation could be improved considerably. If the managers were replaced with more capable ones, you estimate that the value of the would be increased by 50%. You decided to initiate a leveraged buyout and issue a tender offer for least a controlling interest – 50 % of out-standing shares. What is the maximum amount of value you can extract and still complete the deal?

Textbook Example 28.5 (2 of 3)

Solution

Currently, the value of the company is $40 × 20 million = 800 million, and you estimate you can add an additional 50%, or $400 million and the tender offer succeed, and you will take the control of the company and install new management. The total value of the company will increase by 50% to $1.2 billion. You will also attach the debt to the company, so the company will now have $400 million in debt. The value of the equity once the deal is done is the total value minus debt outstanding:

$$\text{Total equity} = 1200 - 400 = \$800 \text{ million}$$

The value of the equity is the same as the premerger value. You own half the shares, which are worth $400 million, and paid nothing for them, so you have capture the value you anticipated adding to FAT.

Textbook Example 28.5 (3 of 3)

What if you borrowed more than $400 million? Assume you were able to borrow $450 million. The value of equity after merger would be

$$\text{Total equity} = 1200 - 450 = \$750 \text{ million}$$

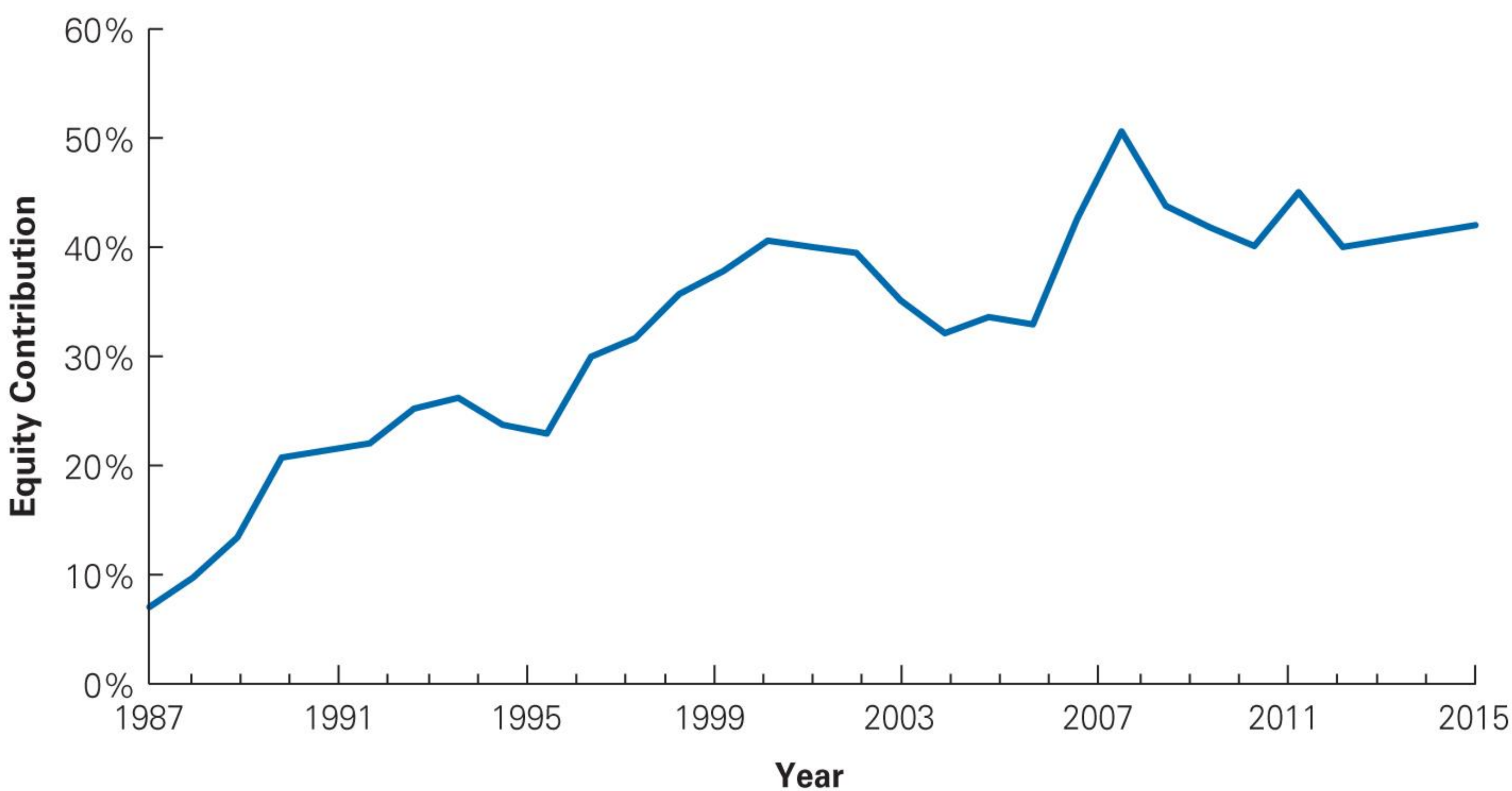
This is lower than the premerger value.

Recall, however, in the United States, existing share-holders must be offered at least the premerger price for their shares. Because existing shareholders anticipate that the share price will be lower once the deal is complete, all shareholders will tender their shares.

This implies that you will have to pay $800 million for these shares, and so to complete the deal, you will have to pay 800 − 450 = $350 million out of your own pocket. In the end, you will own all the equity, which is worth $750 million. You paid $350 million for it, so your profit is again $400 million.

Thus you cannot extract more value than the value you add to the company by taking it over.

Figure 28.4 Average Equity Stake in LBO Transactions, 1987–2015



Source: Standard & Poor's Leveraged Commentary & Data (LCD), 2015

Competition

- Why do acquirers choose to pay a large a premium?
  - The most likely explanation is the competition that exists in the takeover market.
    - Once an acquirer starts bidding on a target company and it becomes clear that a significant gain exists, other potential acquirers may submit their own bids.
  - The result is effectively an auction in which the target is sold to the highest bidder.

End of M&A part II

- …next: Anti-takeover defenses

M&A Part III: Anti-takeover defenses

Section 28.5 Berk and DeMarzo

Rubak, 1987

Board and Shareholder Approval (1 of 2)

- For a merger to proceed, both the target and the acquiring **board of directors** must approve the deal and put the question to a vote of the shareholders of the target.

Board and Shareholder Approval (2 of 2)

- Friendly Takeover
  - When a target's board of directors supports a merger, negotiates with potential acquirers, and agrees on a price that is ultimately put to a shareholder vote.
- Hostile Takeover
  - A situation in which an individual or organization purchases a large fraction of a target corporation's stock and in doing so gets enough votes to replace the target's board of directors and CEO
  - Corporate Raider: The acquirer in a hostile takeover

28.5 Takeover Defenses

- For a hostile takeover to succeed, the acquirer must go around the target board and appeal directly to the target shareholders.
- Proxy Fight
  - In a hostile takeover, the acquirer attempts to convince the target's shareholders to unseat the target's board by using their proxy votes to support the acquirers' candidates for election to the target's board

Takeover defenses

- Takeover defenses include all actions by managers to resist having their firms acquired.
- Attempts by target managers to defeat outstanding takeover proposals are overt forms of takeover defenses.
- Resistance also includes actions that occur before a takeover offer is made which make the firm more difficult to acquire.
- The intensity of the defenses can range from mild to severe.
  - Mild resistance forces bidders to restructure their offers, but does not prevent an acquisition or raise the takeover price substantially.
  - Severe resistance can block takeover bids, thereby giving the incumbent managers of the target firm veto power over acquisition proposals.

Why do firms have takeover defenses?

- We learnt that target shareholders usually benefit from a premium in case of a takeover.
- Are all takeover defenses bad for shareholders?
- Can takeover defenses create value?

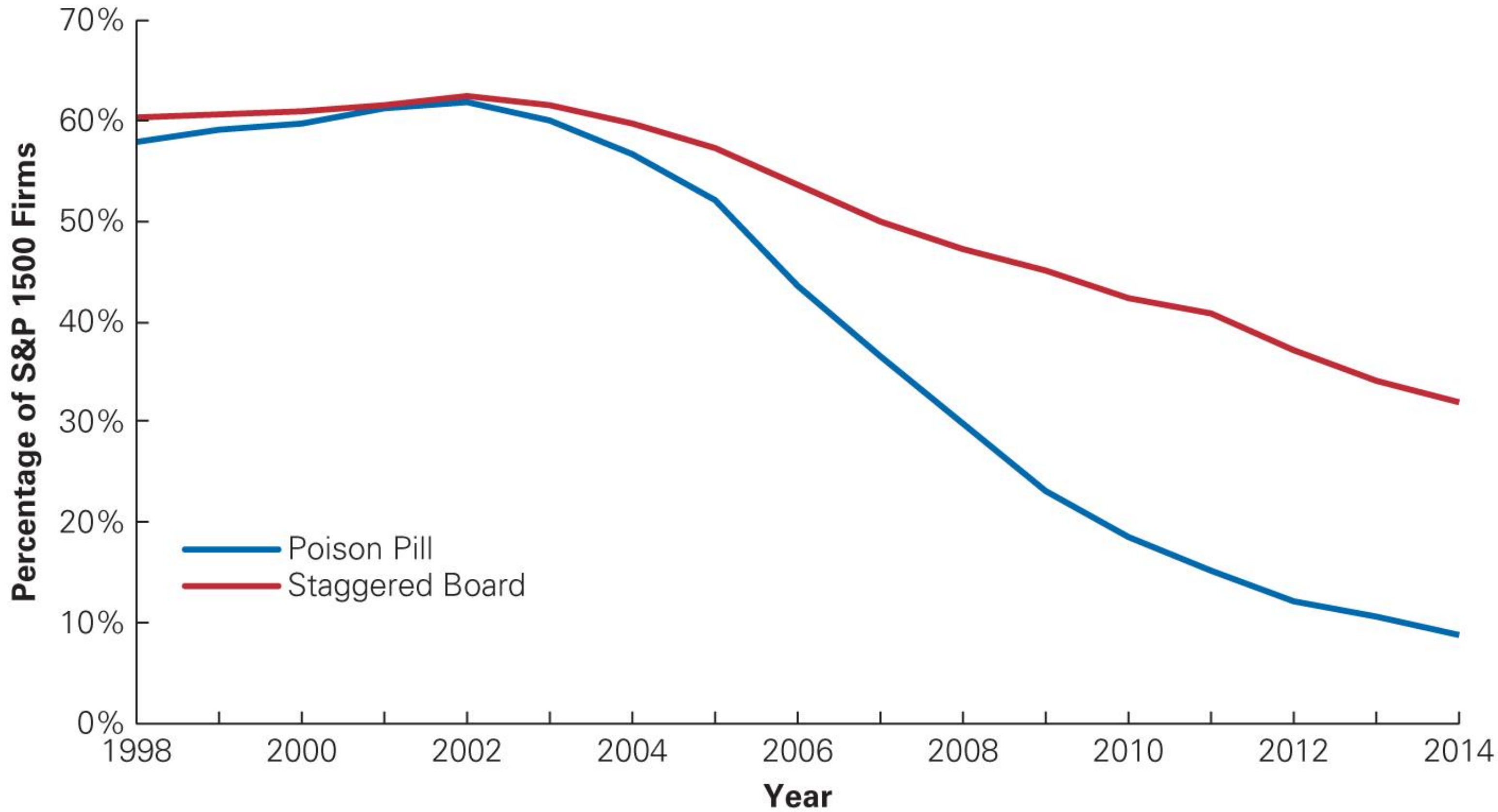
How do takeover defenses affect firm value?

- While takeover defenses reduce the probability of being acquired, they may also increase the offer price.
- Takeover defenses can affect the value of the firm even if it is not acquired and remains with the incumbent management team:
  - The firm value could decrease as managers enjoy more freedom to make decisions and there's no risk of being fired.
  - Firm value could increase as managers stop wasting time and resources worrying about a hostile takeover.

Reasons for a takeover defense

- It's hard to determine if a takeover defense is good or bad for shareholders but one can analyse the reason for the takeover defense from the managerial point of view:
    - Managers believe the firm has hidden values: private information about the future prospects of the firm.
    - They believe resistance will increase the offer price: more time haggling the price, more competitors, white knights, etc.
    - They want to retain their positions: being taken over can be considered a sign of failure: The premium indicates that the bidder believes it can manage the firm better than the incumbent managers.

Figure 28.3 Disappearing Defenses



Source: Factset

Pre-offer takeover defenses

- These are takeover defenses that occur prior to an actual takeover bid.
  - Poison pills
  - Staggered boards
  - Super-majority
  - Fair price amendments
  - Dual class recapitalization

Poison Pills

- Poison Pills
  - A defense against a hostile takeover
    - It is a rights offering that gives the target shareholders the right to buy shares in either the target or an acquirer at a deeply discounted price.
    - Acquirer is excluded from this right.
      - Because target shareholders can purchase shares at less than the market price, the rights offering dilutes the value of any shares held by the acquirer.
      - This makes the takeover so expensive for the acquiring shareholders that they choose to pass on the deal.

Staggered Boards

- Staggered Board (Classified Board)
  - In many public companies, a board of directors whose three-year terms are staggered so that only one-third of the directors are up for election each year
  - A bidder's candidate would have to win a proxy fight two years in a row before the bidder had a majority presence on the target board.

Super-majority

- These corporate charter provisions require a very high percentage of shares to approve a merger, usually 80 percent.
- These provisions are also typically accompanied by lock-in provisions that require a super-majority to change the antitakeover provisions.

Fair price amendments

- In these corporate charter changes, a fair price is defined as the *same* price.
- That is, a super-majority provision is waived if the bidder *pays all stockholders the same price*.
- Fair price amendments are designed to prevent two-tier takeover offers.
  - In such offers, the bidding firm makes a first tier tender offer for a fraction of the target's common stock. The tender offer includes provisions for a second-tier merger.
  - The merger price in the second tier is substantially below the first-tier tender offer price.
  - This provides an incentive for stockholders to tender to receive the higher price.

Dual class recapitalization

- These plans restructure the equity of the firm into two classes with different voting rights: the class with inferior voting rights has one vote per share and the class with superior voting rights has ten votes per share. The superior voting stock is typically distributed to shareholders.
- It can then be exchanged for ordinary common stock. The superior voting stock generally has lower dividends or reduced marketability; this induces stockholders to exchange their superior voting stock for inferior voting common stock.
- The managers of the firm do not participate in the exchange (they retain the superior voting stock!).
- This shifts the voting power of the corporation. Managers with relatively small equity holdings can control a majority of the votes after the recapitalization.
- This gives managers veto rights over control changes.

Golden Parachutes

- Golden Parachute
  - An extremely lucrative severance package that is guaranteed to a firm's senior management in the event that the firm is taken over and the managers are let go.
  - The CEO of Gillete Co. received a package worth $165 million.
    - Perhaps surprisingly, the empirical evidence suggests that the adoption of a golden parachute actually creates value.
      - If a golden parachute exists, management will be more likely to be receptive to a takeover, lessening the likelihood of managerial entrenchment.

Post offer takeover defenses

- White knights
- Recapitalization
- Acquisitions or divestitures
- Targeted repurchases (greenmail)

White Knights

- White Knight
  - A target company's defense against a hostile takeover attempt in which it looks for another, friendlier company to acquire it.
  - The white knight makes a more lucrative offer and incumbent management retains control.
- White Squire
  - A variant of the white knight defense, in which a large, passive investor or firm agrees to purchase a substantial block of shares in a target with special voting rights (which will probably not use).

Recapitalization

- With recapitalization, a company changes its capital structure to make itself less attractive as a target.
  - For example, companies might choose to issue debt and then use the proceeds to pay a dividend or repurchase stock.
  - Increasing leverage makes the target less attractive because usually a substantial portion of the synergy gains that the acquirer anticipates come from tax savings from an increase in leverage.
  - Debt obligations help to discipline management and hence make it more efficient (removing the motivation for the take-over).

Acquisitions or divestitures

- These changes in the firm's asset structure can be used to defend against a takeover bid.
  - divesting an asset that the bidder wants,
  - buying assets that the bidder does not want
  - buying assets that will create antitrust or other regulatory problems.
- Each of these actions make the target less attractive to the bidding firm, and reduces the price the bidder is willing to pay for the target.

Targeted repurchases

- A firm buys a block of its common stock held by a single shareholder or a group of shareholders.
- The repurchase is often at a premium, and the repurchase offer is not extended to other shareholders.
- Targeted repurchases can be used as a takeover defense by offering an inducement to a bidder to cease the offer and sell its shares back to the issuing firm at a profit.

Regulatory Approval

- All mergers must be approved by regulators.
  - In the United States, all mergers above a certain size (approximately $60 million) must be approved by the government before the proposed takeovers occur.
  - The European Commission has a similar process.