

Chapter 4: Merger strategy

Motives and Determinants of Mergers→	
2. Operating synergy - economies of scale	1. Growth
4. Diversification	3. Financial synergy
6. Vertical integration benefits	5. Horizontal mergers and pursuit of monopoly power
8. Higher executive compensation / managerial hypothesis	7. Hubris hypothesis
10. Tax benefits	9. Improved management
12. Defensive (buying a firm so as to be a less desirable target itself)	11. Buying business model (e.g. buying a target without unions, or with a differing benefits package)
14. Local market expertise	13. Intellectual property
16. Target firm distress	15. Access to distribution channels

1. Growth→

1. Company may not be able to grow fast enough by internal expansion, so M&A a key part of their growth strategy
2. Internal expansion (organic growth) usually *takes more time* than acquisitions (non-organic growth)
3. Critical issue: *Premium paid for this speed* - price of target
 - a. Use project evaluation techniques (i.e., NPV) to decide
4. Critical that the greater size comes with greater shareholder returns, or else slower growth should be preferred
5. External growth via M&A often justifiable to take advantage of time-expiring opportunities as well as geographic expansion
6. Examples of successful growth-through-acquisition strategy: Johnson and Johnson; Pfizer

2. Operating Synergy – Economies of Scale→

1. Refers to revenue enhancements and cost reductions
2. **Economies of Scope:** offer wide range of products to same customers→Commercial bank (major retail network) buying a bank with strong trust department
3. **Economies of Scale:** Declining per unit costs as output rises
4. May only last within certain range of output; beyond this diseconomies of scale are possible
5. Mgmt time, skillset, and utilization rate of assets are considerations here

Two General Types of synergies→

1. **Cost Reducing Synergies:** These are easier to predict and achieve
 - Economies of Scale
2. **Revenue Enhancing Synergies:**
 - Harder to achieve
 - Harder to predict
 - Example: Cross selling of products and services

Economic Basis for Mergers→ Net Acquisition Value for firms A and B: $NAV = PV(A+B) - [PV(A) + PV(B)] - PV(Expenses)$

3. Financial Synergy→

1. Refers to lowering the cost of capital by combining companies
2. If cash flow streams are not perfectly correlated, firms' risk should be reduced with a lower chance of bankruptcy (*debt coinsurance*)
3. Lower flotation costs, better access to financial markets, and reduced borrowing costs are other examples of financial synergies

4. Diversification→

1. By itself, a poor motive for acquisitions
2. Track record of these deals typically poor
3. Some exceptions (i.e., General Electric)
4. Shareholders can diversify their portfolios much less expensively than companies can do this for shareholders
 - a. Shareholders do not incur the sizeable transaction costs that companies do when they buy other companies
 - b. Shareholders do not have to pay a premium
 - c. However, stability of income can permit research programs and other long-term necessities
5. Diversified firms less often targets (more often acquirers)

5. Horizontal acquisition→

1. **Horizontal Mergers:** Combinations of two firms producing the same product
 - a. Both companies at the same level in the production to market process
2. **Main benefits are:**
 - a. Elimination of duplicate facilities
 - b. Offer broader product line
 - c. Market power→ Example: Acquisition of Sitmar Cruises by Princess Cruises
3. **Shareholder Wealth Effects of Horizontal Acquisitions**
 - a. Do firms merge to achieve monopoly power: If so you would expect the stock prices of competitors to fall Research studies fail to show this (maybe because they are potential targets as well) Nowadays achieving the same degree of monopoly power as before is unheard of due to regulators

6. Vertical mergers→

1. **Backward Expansion:** Toward the source of supply→ Example: Oil company buying another oil company with abundant reserves
 - a. 1984 Mobil Oil acquisition of Superior Oil which
2. **Forward Expansion:** Toward the ultimate consumer→ Example: Oil company buying another oil company with large retail network.

7. Hubris Hypothesis→

1. Managers seek to acquire firms for their own personal motives
 - a. May pay a premium for companies for this reason
2. Managers may believe their own valuations are superior to the market→ This may cause them to *overpay*
3. This does not mean that hubris explains all takeovers
 - a. It just may explain some takeover→ Example: Campeau vs. Federated

Hubris vs. Managerialism→

1. **Hubris:** Managers believe their valuation is superior to the market and then may overpay
2. **Managerialism:** Managers may know they are overpaying but they do so to pursue their own goals (agency cost)

8. Higher Executive Compensation→

1. One theory of acquisitions which is part of the *Managerialism* hypothesis is that managers of companies acquire other companies to increase their size which, in turn, allow them to enjoy higher compensation and benefit
2. For companies that engaged in acquisitions, researchers found a positive relationship between firm size and executive compensation, but not for firms which did not engage in acquisitions

9. Improved management→

1. The belief that the acquiring firm's management can better manage the target firm resources, and so value would rise under its management.

10. Tax benefits→

1. Much debated
2. May reduce deal costs, improving deal approval likelihood
3. Tax reform act removed many possible benefits

Desirable Characteristics of Targets→

1. Low P/E ratio but high book value
2. Firms with undervalued assets
3. High liquidity
4. High steady cash flows
5. Unused borrowing capacity
6. No antitrust problems
7. No concentrated block of stock in hands of insiders
8. Management amenable to takeover
9. Overfunded pension plan
10. Easily separable divisions/liquid assets
11. High cash on hand

Chapter 5: Anti-Takeover measures

2 types→

1. **Preventative**
 - a. Defenses installed in advance of a takeover
 - b. Exercise in Wall Building
2. **Active**
 - a. Defenses deployed during a takeover battle

Preventative→

1. Common preventative defenses (aka shark repellants):
 - a. Poison pills
 - b. Corporate charter amendments
 - c. Golden parachutes
 - d. Making the target firm less attractive to the bidder, e.g. by increasing target leverage, disposing or locking up key assets, etc.

How Poison Pills Work→

1. Shareholders receive a dividend of one right per share of common
2. Rights holders receive right to purchase a share at the exercise price anytime during the exercise period
 - a. Exercise period: Typically ten years
 - b. Exercise price: Typically 50% off: buy \$200 worth for \$100
3. Approval: Usually only need Board of Directors' approval, not shareholders

Poison pills→

1. Number of Companies with Poison Pills:
 - a. Over 1,500 corp. have poison pills (as of late Dec 1990)
 - b. 56% of the Fortune 500
 - c. 52% of Business Week 1,000
2. **Other Name for Poison Pill:** Shareholder Rights Plan
3. **Meaning of Poison Pill Name:** If the acquiring company takes over the target the acquirer will have to swallow the poisonous consequences of the pill
4. **Shadow Pill:** A poison pill need not be pre-existing
5. **Chewable Pill:** Pill disappears, or is redeemable by shareholders, rather than only by boards
6. **Typical Poison Pill:**
 - a. The typical shareholder rights plan involves a scheme whereby shareholders will have the right to buy more shares at a discount, if one shareholder buys a certain percentage of the company's shares.
 - b. The plan could be triggered, for instance, when any one shareholder buys 20% of the company's shares, at which point every shareholder (except the one who possesses 20%) will have the right to buy new shares at a discount.
7. **Flip Over:** Grants shareholders special benefits once:
 - a. Triggering event occurs: 20% share or asset ownership or offer for 20% to 30% and 100% Merger between acquirer and target occurs
 - b. Shareholder can then convert special rights to buy stock in *combined firm* at half price
 - c. Does not prevent an acquisition of a controlling interest that is less than 100%
8. **Flip In:** Now almost always accompanies a flip-over provision
 - a. Occurs after similar triggering event and merger
 - b. Allows holders to buy shares in **target** at 50% off
 - c. Deals with the less than 100% controlling interest acquisition

Development of Poison Pills→

1. First used in 1982, and more famously in 1983 but not popular until 1985
2. **Martin Lipton:** Perfected the poison pill in 1985 to not involve the issue of *preferred stock*
 - a. He is senior attorney at Wachtell Lipton
 - b. The new poison pills were *rights*
 - c. These rights were convertible into shares of the combined company

First Poison Pill *Brown Forman Distillers v. Lenox Inc.*

Supermajority Provisions→

1. Charter amendments requiring higher than majority voting approval for certain events (i.e., changing board or approving of a takeover). Often 80% is required.
2. Board out clauses allow the target board to cancel this provision (without target directors representing the bidding firm allowed to vote)
3. Ambrose and Megginson (1992) found that companies with supermajority provisions less likely to be a target of a takeover bid

Staggered Boards (aka Classified Boards)→

1. This is where all the directors do not come up for election at the same time
2. Example: Only 1/3 at a time
3. This means the bidder can takeover a company but only get majority control after two elections (years)
4. Requires shareholder approval

Dual Capitalization→

1. Where have one or more classes of stock – usually one with super voting rights
2. Sometimes called *alphabet* stock
3. Example: GM has Class E (EDS) and Class H (Hughes Aircraft) shares

Process of Dual Capitalization Issuance

Why Are Dual Capitalizations Approved by Shareholders→

- Shareholders want the greater dividends
- Most value the dividends more than voting rights
- Those who want voting rights will not exchange

Fair Price Provisions→

1. These are shareholder amendments which require bidder to pay a “fair price” for all shares acquired
2. Fair may be:
 - a. Certain P/E
 - b. Highest price paid for any shares
 - c. Highest price stock traded for over past year
 - d. Same as those in first tier
3. In the mid-1980s they were one of the most popular defenses
4. They are less popular now as many states have fair price statutes

Reincorporation: Reincorporate in another state which has stronger antitakeover laws California and Pennsylvania are two such states

Antigreenmail Provisions: Charter amendments which prohibit payment of greenmail Greenmail will be discussed shortly

Active Antitakeover Measures→

1. **Greenmail:** Payment of a premium to buy shares of threatening shareholders
2. **Antigreenmail:** The act of doing, not the provision, is active
3. **Standstill Agreements:** Payment to threatening shareholder not to purchase any more shares
4. **White Knights:** Friendly buyer preferred to hostile buyer
5. **White Squire:** Friendly buyer of a block of stock that it is put in safe hands
6. **Lock-Up Transactions:** Sale of assets that make target less desirable
7. **Lock-Up Options:** An option that gives potential buyer right to buy certain assets at an attractive price
8. **Capital Structure Changes:** Tie-up shares or alter leverage
9. **Pac-Man Defense:** Make bid for the hostile bidder
10. **Litigation:** Delays can be advantageous

Share Repurchases and Discriminatory Self Tenders (Antigreenmail)→

1. **Discriminatory Self Tenders: Tender offers initiated by the target to repurchase shares from certain shareholders**
 - a. Were put forward as an alternative to a hostile bid
 - b. Legality was tested by Boone Pickens who through Mesa Petroleum owned 13% of Unocal
 - c. He initiated a \$4 billion tender offer for Unocal
 - d. Unocal had low debt--\$1 billion--made it vulnerable to a leveraged takeover
 - e. Unocal did a self tender with a provision that Mesa could not participate in the offer
 - f. Delaware Supreme court ruled that discriminatory self tender were legal
 - g. This led the SEC to move to have the law changed – it was and such offers are now illegal

White Knights→

1. A friendly bidder that the target prefers over the hostile bidder
2. The white knights are in an *auction* which tends to result in *higher-priced targets*

Lock-Up Options 1985 Pantry Pride v. Revlon→

1. Pantry Pride made \$53 per share offer for Revlon
2. Revlon's board approved an LBO with Forstmann Little at \$56
3. Pantry Pride increased offer to \$56.25
4. Revlon got Forstmann Little to increase bid to \$57.25 if they gave Forstmann Little an option to buy two Revlon divisions for \$525 million (despite a value of \$600 million)
5. The idea here is that the option to Forstmann would be in force if the alternate bidder, Pantry Pride, were to succeed in an acquisition. This represents a cost to them, and would be factored into Pantry's bid.
6. Delaware Court said this was a breach of the board's fiduciary responsibility
7. Court said the lock-up options were illegal
8. They were a give a way of corporate property

Capital Structure Changes→

- I. **Issue more shares** 1. General issue 2. White squire 3. ESOP
- II. **Buyback own shares** 1. Self tender 2. Target share repurchases 3. Open market purchases
- III. **Recapitalization plan**
- IV. **Assume more debt** 1. Issue more bonds 2. Take out bank loan

P/E Game→ Assume acquiring firm is larger than target. **Acquirer P/E = 25**; annual earnings are \$1 million and it has 1 million shares outstanding. $P_a = \$25$. Target P/E = 10; annual earnings are \$100,000 and it has 100,000 shares outstanding. $P_t = \$10$. Acquirer offers one share for two shares of the target, paying a premium of 25%. To finance the purchase, acquirer thus issues 50,000 shares. EPS after merger: $\$1.1 \text{ million} / 1.05 \text{ million shares} = 1.05$ (up from 1) If P/E of acquirer remains the same (25), then: $P/E = (\text{Price/Share}) / (\text{Earnings/Share}) = 25 = (\text{Price/Share}) / 1.05 \Rightarrow \text{Price/Share} = \26.25 -- this is the acquirer's new stock price. Price went up by virtue of acquisition. Note: P/E must not decline.

Particularly after many acquisitions, this becomes very suspect as it requires the acquiring firm to operate target firm resources in just as good a profit/growth manner as the rest of the enterprise

Chapter 6: Take-over tactics

Typical tactics for mergers→

1. Bear hugs / bypass offers
2. Tender offers
3. Proxy fights
4. Streetsweep
5. Creeping tender offer

Preliminary steps may include a toehold or casual pass NB: Only "hostile takeover" if target directors vote against it

The choice of tactic is influenced by at least four considerations:

1. Attitude of target management and board
2. Distribution of voting power
3. Strength of target's defenses in place
4. Presence of competing offers and or a white knight

The Casual Pass→

1. Where a bidder may attempt a friendly overture prior to initiating a hostile bid.
2. Sometimes is done when bidder is unsure of the target's response.
3. May backfire as it gives advance warning to target.
4. Management of target is often advised not to discuss such deals with bidder so as that the bidder may not misinterpret target's intentions.

Toehold→

1. Establishing a toehold: May allow for less expensive purchase of a target's stock
 - a. May lower the average cost of the takeover
 - b. May also give the bidder leverage with target management (bidder now a shareholder; may help in litigation; more credible threat of a proxy fight)
 - c. Discourages white knights and may circumvent supermajority provisions

Why Don't Bidders Max Out Toeholds?

1. Danger of being caught holding shares if the bid is unsuccessful
2. This is especially worrisome if management appears to be entrenched
3. Can alert target management (and/or market) of a forthcoming bid

Bear hug→

1. Bidder brings offer directly to the target's directors, bypassing management. Popular in the 1990s
2. Typically carries threat that a hostile bid will be forthcoming
3. May be publicly announced (*strong bear hug*) or threaten to reduce offer price in the event of opposition or delay (*super strong bear hug*)
4. If the target rejects a friendly bid and does not bring it to the shareholders for a decision then the target directors may face lawsuits from target shareholders; however, directors do not have a legal duty to sell the corporation
5. Less expensive and less time-consuming than a tender offer, but ultimately requires target board acceptance

Tender offers→

1. Two-Tiered Tender Offers (also called Front End Loaded)
2. Offers:
 - a. Courts have found them to be illegal
 - b. *Best price rule* renders them ineffective
3. *Fair price provisions* in state laws and corporate charters also make them ineffective
4. Tender offers are more expensive than negotiated deals due to legal costs, publication costs, information costs, etc
5. * Note the eight factors relevant in deciding whether an offer is a tender offer, as previously discussed

Creeping Tender Offer→

1. Open market purchases which may eventually lead to a tender offer
2. It refers to the repeated purchases of shares by a party which may (or may not) do a full takeover
3. **Requires** a 13D filing, and updates with each new 1% addition, courts have typically ruled this is not a tender offer so it does not require a Schedule TO
4. Generally, the purchase of stock from sophisticated institutional investors is not a primary concern of the Williams Act.

Open Market Purchases and Street Sweeps→

1. Open market purchases may be a precursor or an alternative to a tender offer
2. Street Sweeps: Sweeping up large block holdings of target firm stock which remain after a cancelled tender offer.
3. The idea is even if a tender offer doesn't appear to be working, arbitrageurs will have purchased large holdings of stock. Ending the tender offer still keeps the target "in play", because arbs will need to sell and easier now to accumulate large holdings.
4. After crossing the 5% threshold, have to do a 13D filing.

Main Types of Proxy Fights→

1. Contests for Seats on the Board of Directors
 - a. Insurgent group may be trying to replace management
2. Contests about management proposals
 - a. Mergers or acquisitions
 - b. Anti-takeover amendments

Characteristics That Increase Likelihood of Proxy Fight Success→

1. Management has insufficient voting support
 - a. Management does not hold many votes
2. Poor operating performance
 - a. The worse it is, the more likely shareholders are unhappy with management
3. Sound alternative operating plan
 - a. Insurgents has good plan to improve shareholder returns

Proxy Fight Costs→

1. Generally less expensive than a tender offer or a revised bid, but still expensive:
2. Professional Fees: Proxy solicitors, attorneys and public relations professionals
3. Printing, Mailing and Communications Costs
4. Litigation Costs: Proxy fights tend to be actively litigated.
5. Other Fees: Miscellaneous fees (i.e., for tabulators)

Trends in Proxy Contests→ Management and boards are starting to give in to insurgents more and are more willing to make concessions

Proxy Fights and Hedge Funds→

1. Hedge funds sometimes threaten to start proxy fights to bring about changes in the company
2. Companies have been more willing to acquiesce to such pressures

Riskless Arbitrage: Buying and selling the same asset in different markets and different prices

Risk Arbitrage: Buying shares in potential or actual targets and possibly selling shares in acquirers

- There are mutual funds they just do M&A arbitrage
- Arbitrators causes more shares to be concentrated in large blocks
- This may make buying large blocks easier

Role of Arbitrators→

1. They acquire shares so that the deal will close→ they will get the difference between their purchase price of the target's shares and the closing price with its premium
2. They may also sell the acquirer's shares short knowing that the bidder's stock price often declines after M&A announcements AND if the consideration of the offer includes stock

Risk Arbitrage Return→ A simple equation of a risk arbitrator's annualized return (RAR) is shown: $RAR = GSS/I \times (365/IP)$

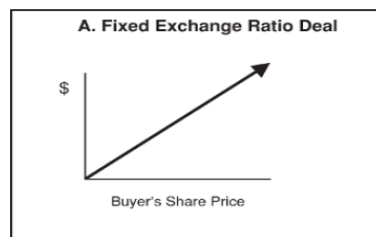
Where: RAR = risk arbitrage return GSS = gross stock spread I = investment by arbitrator IP = investment period (days investment and closing date)

Sources of Risk in Risk Arbitrage→ That the Deal May be Cancelled, Regulatory Approval May Not be Secured Material Adverse Change Clause May be Activated

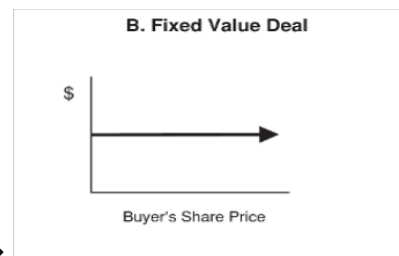
Merger Consideration Analysis→

1. A collar is simply a way to hedge against uncertainty about the value of the buyer and/or target
2. It may or not grant either or both of the merging firms the right to renegotiate the deal if the buyer's stock price falls outside the bounds of either strike price

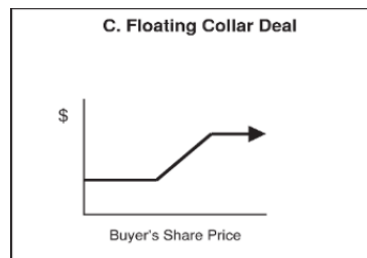
Four Classic Profiles of Payment: In each case, following graphs show the values paid by the buyer for four stock-for-stock deals—the horizontal axis gives the share price of the buyer, and the vertical axis gives the value received by target shareholders



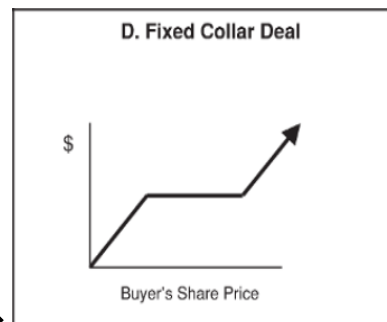
← Fixed exchange ratio deal



Fixed value deal→



← Floating collar



Fixed collar→

Chapter 7: Leveraged Buyouts

An LBO is when an investor acquires a controlling interest in a company, with a significant amount financed through debt

The remaining portion of the purchase price is funded with equity by the “sponsor”→ This frequently takes a public company private

Management buyout (MBO) – where the buyers are managers→ **Premiums offered tend to be lower** than in other takeovers (often less synergies as well)

Key Participants→

1. **Financial Sponsors**
 - a. PE firms, merchant banking divisions of investment banks, hedge funds, venture capital funds, and SPACS with various investment parameters; perform due diligence
2. **Investment Banks**
 - a. Provide both financing and advice; perform due diligence; provide a financing commitment to support the sponsor’s bid (“underwritten financing”); often syndicate much of the debt
3. **Banks and Institutional Lenders**
 - a. Typically banks provide capital for revolvers and amortizing loans, while institutions provide capital for longer tenored loans
 - b. Institutions include hedge funds, pension funds, prime funds, and insurance companies
 - c. Perform due diligence; mitigate risk with covenants and collateral
4. **Bond Investors**
 - a. Purchase high yield bonds as part of the LBO financing structure
 - b. Attend “roadshow presentations”
 - c. Receive an offering memorandum which satisfies a higher degree of legal scrutiny and disclosure, with most bonds being registered with the SEC for exchange trading privileges
5. **Target Management**
 - a. Market the target; typically hold a meaningful equity interest in post-LBO firm
 - b. LBO originated and led by target’s existing management referred to as a management buyout (MBO)

Characteristics of a Strong LBO Candidate→

1. Strong cash flow generation
2. Leading and defensible market positions
3. Growth opportunities
4. Efficiency enhancement opportunities
5. Low capex requirements
6. Strong asset base
7. Proven management team
8. Able to foresee sufficient returns with a viable exit strategy

Economics of LBOs→ IRR is the primary metric, measuring the total return on sponsor’s equity investment during the investment horizon IRR is defined as the discount rate that must be applied to the sponsor’s cashflows during the investment horizon in order to produce an NPV of 0.

- **IRR of 20%** plus typically required
- Primary IRR drivers include the target’s projected financial performance, purchase price, financing structure, exit multiple, and year
- LBOs generate returns through debt repayment and a growth in enterprise value
- Higher debt results in higher tax savings due to the tax deductibility of interest payments
- Higher leverage of course increase the company’s risk and limits financial flexibility

Primary Exit / Monetization Strategies→

1. Sponsors aim to exit or monetize their investments within a 5 yr holding period
2. This can be realized via a sale to another company, sale to another sponsor, or an IPO
3. May extract a return through a dividend recapitalization (issuing additional debt to pay shareholders a dividend)
4. Sponsors ideally increase the firm’s EBITDA (e.g. through organic growth, acquisitions, and/or increased profitability)
5. Strategies to increase exit multiples include increasing size and scale, operational improvements, repositioning to highly valued industry segments, increasing growth rate and/or profitability, and timing the economic cycles

LBO Financing: Structure→

1. LBO debt typically 60 – 70 % of the financing structure
2. Most debt components usually deemed non-investment grade (BB+ and below by S&P)
3. Debt may include a broad array of loans, securities, and other debt instruments with varying terms and conditions to appeal to different classes of investors
4. The higher a debt instrument ranks in the capital structure hierarchy, the lower its risk and therefore the lower its cost of capital to the borrower

LBO Financing: Primary Sources→

1. **Bank Debt**
 - a. Revolving credit plus one or more term loan tranches
 - b. Issued in private market and therefore not subject to SEC and disclosure requirements
 - c. Bears interest at benchmark (e.g. LIBOR) plus margin
2. **High Yield Bonds**
 - a. Non-investment grade securities which require interest payments in the interim and full repayment of principal at maturity
 - b. Higher coupon rate than bank debt due to risk
 - c. Sponsors may use these to substantially increase leverage levels beyond those available in the leveraged loan market alone
3. **Mezzanine Debt**
 - a. Highly negotiated debt and/or equity instruments tailored to meet financing needs of the specific transaction at hand
 - b. Typical investors include mezzanine funds and hedge funds

4. **Equity Contribution**

- a. Typically 30 – 40 % of the financing structure; acts as a cushion for lenders
- b. “Rollover” equity (from previous firm management and shareholders) typically 2% – 5% of overall equity portion
- c. A “club deal” indicate a consortium of sponsors working in concert

LBO Financing: Selected Key Terms→

1. **Security:**

- a. This refers to the pledge of, or lien on, collateral that is granted by the borrower to the holders of a given debt instrument
- b. Collateral represents assets, property, and/or securities pledged by a borrower to secure a loan, thus subject to seizure in the event of a default
- c. Higher collateral is typically required the higher the cash flow volatility of the borrowing firm

2. **Seniority:**

- a. This refers to priority status of a creditor’s claims against the borrower/issuer relative to those of other creditors
- b. Achieved through either *contractual* or *structural* subordination
- c. Contractual subordination: Claims of senior creditors must be satisfied in full before junior creditors
- d. Structural subordination: Subsidiary debt is junior to parent company debt obligations unless the parent company provides legal guarantees on said debt (can refer to different aspects as well)

3. **Maturity:**

- a. This refers to the length of time the debt obligation remains outstanding until the full principal amount must be repaid
- b. Shorter-term debt less risky and therefore less costly
- c. In LBOs, various debt instruments with different debt maturities are used

4. **Coupon:**

- a. The annual interest rate (“pricing”) paid on a debt obligation’s principal amount outstanding
- b. Bank debt generally pays interest quarterly, whereas bonds semi-annually
- c. The coupon is affected by the type of debt, ratings, security, seniority, maturity, covenants, and prevailing market conditions
- d. Bank debt tends to be the lowest cost of capital debt instrument (cheapest) as it has first lien security, higher seniority, shorter maturity, and more restrictive covenants than high yield bonds

5. **Call Protection:**

- a. This refers to restrictions on voluntary prepayments of debt or redemptions of bonds during a defined period
- b. For high yield bonds, typically non-callable for 4 - 5 years; redemption prior to maturity requires the issuer to pay a premium in accordance with a defined call schedule
- c. Traditional first lien bank debt has no call protection, allowing the borrower to repay principal at any time without penalty

6. **Covenants:**

- a. These are provisions in credit agreements intended to protect against the deterioration of the borrower’s credit quality
- b. While many covenants are similar, traditional bank debt features financial maintenance covenants while high yield bonds have less restrictive incurrence covenants
- c. E.g., maintenance covenants may require certain leverage and coverage ratios be maintained over time, while incurrence covenants prevent the issuer from taking specific actions that are not in pro forma compliance with a ratio test regarding leverage or interest coverage

LBO Financing: Determining Financing Structure→

1. A mix of art and science
2. Balances needs of financial sponsor(s), debt investors, firm, and management, which are not necessarily aligned, especially w.r.t. ideal leverage ratios
3. Structuring an LBO is predicated on analyzing a target’s cash flows, credit statistics, industry sector, market conditions, leverage and coverage ratios
4. Once the initial financing structure is determined, it is run through the LBO model and sensitized to analyze IRRs and pro forma credit metrics

Rationale of LBOs→

1. Synergies and external growth are not the purpose of an LBO, as the company stays independent (at least initially) afterwards
2. So what then provides the gains to shareholders to afford paying a premium and increasing the risk structure?
3. **Efficiency Gains**
 - a. Management is better incentivized to perform via higher company ownership and motivation to avoid bankruptcy
 - b. Mgmt may have purposefully performed low initially
 - c. Higher monitoring by shareholders and bondholders
 - d. More focus on *cash flow* rather than EPS
4. **Tax Benefits**: Tax shields and asset step-ups are useful, but Tax Reform Act of 1986 eliminated many benefits
5. **Higher return (albeit higher risk)**: debt cheaper than equity; lower WACC despite higher individual costs of capital due to higher debt %
6. **Ownership**: May provide the only means for selected shareholders to obtain control
7. **Information Asymmetry**: Managers and/or investors may have more information than the general public does

Desirable Characteristics of LBO Candidates→

1. **Stable cash flows**→ Does not ensure LBO will not go bankrupt (i.e., Southland)
2. **Stable and experienced management**
3. **Room for significant cost reductions**→ Lichtenberg and Siegel (1989): LBO employee cutbacks were at the administrative layers—average reduction=16%
4. **Equity interest of owners**: Provides risk cushion
5. **Limited debt on balance sheet**
6. **Separable non-core businesses-breakup LBOs**

Chapter 10: Corporate restructuring

Terminology→

1. **Divestitures: Sale of a portion of the firm to a 3rd party**
 - a. Comes from “divest”, meaning to sell off or be free of something
2. **Three main forms sell-offs:**
 - a. **Asset sales:** Sale of a division, subsidiary, product line, or other assets directly to another firm
 - b. **Equity carve-out:** *Selling* equity interest in a subsidiary to *outsiders*.
 - i. A new legal company is created
 - ii. New shares are issued
 - iii. Stockholder base (at least partially) different from parent company
 - c. **Spin-off** (aka spin-out; starburst): *Giving* equity interest in a subsidiary to *stockholders*.
 - i. A new legal company is created
 - ii. New shares are issued
 - iii. Stockholder base *initially the same* as parent company as stocks initially distributed to stockholders on a pro-rata basis
 - d. **Split-up:** Entire company is broken up into a series of spinoffs; parent company no longer exists

The buyer doesn't want all the company they want only a part of it.

*Create a new company to sell it. Create new shares and ask new investors → In spin off you get new shares in the new spin off

Reasons Why→ Reasons for a divestiture may include:

1. **Involuntary divestiture**
 - a. Either the Justice Department or Federal Trade Commission may require divestiture of a particular division to conform with an antitrust ruling
2. **Poor Strategic Fit**
3. **Reverse Synergy**
 - a. An outside bidder may pay more to the company than the division is worth to the parent company i.e. $4 - 1 = 5$
 - b. How is this possible? → may be issue of efficiency, skillsets, investor confusion, lack of belief in strategic vision, etc.
4. **Poor Performance**
 - a. A non-profitable division may be divested to relieve the financial drain
 - b. The rate of return for a division should exceed the parent company's hurdle rate, which is at least as high as the cost of capital.
5. **Capital Market Factors**
 - a. Attracting capital may be easier as investors may find the company to large to feel comfortable providing capital
 - b. Similarly, some investors may want to invest in “pure-plays” rather than diversified companies
6. **Cash Flow Needs**
 - a. Simply of necessity
7. **Abandoning the Core Business**
 - a. Not so common, but mgmt may want to leave an industry if it believes, for example, it has matured and provides few growth opportunities

Spinoffs→ Stock Price on the Day of Spinoff

1. **Day of spinoff**→ stock price of parent company drops to reflect→ some assets been removed from its books and segregated into a new separate entity.
2. Spinoff starts trading→prices of parent company's and spinoff's stocks add up to the price of the old parent company stock prior to the spinoff (for now)
3. Eventually the prices of the two new companies will be set by the market based on their individual values and prospects.

Reason for Voluntary Divestitures

Equity Carve-out or Spin-off? Why an Equity Carve-out?:

1. **Adv:**
 - a. Raise money with new shares issued
 - b. Reduce exposure to riskier lines of business
2. **Disadv:**
 - a. More expensive than a spin-off, with additional SEC regulation
3. **Why a Spin-off?**
 - a. Often the transaction may be structured such that it is tax-free
 - b. Access to capital markets may be restricted i.e. it may be perceived that outside investors will not buy the equity

Additional Divestiture Methods→

1. **Tracking Stock:**
 - a. Creation of a specific class of stock with value based on the cash flows of a specific division
 - b. Stockholders have legal interest in the earnings of this division, but the division *remains* part of the overall company, **unlike** a sell-off
2. **Split-Off aka Exchange Offer:**
 - a. Shareholders are given a choice to exchange their shares in the parent company for shares in a new subsidiary
 - b. Creates a new publicly traded company

Tracking Stocks and Dividend Policy→

1. **Tracking Stocks:** Stocks that are tied to the performance of a specific subunit of a parent company
2. **First issued in 1984 but became popular in the 1990s**
 - a. Example: Class H share of GM – Hughes Electronics division of GM or Class E shares which was the EDS division
3. Shareholders of tracking stocks only get rights to *earnings of the entity* in question
4. They *do not get voting rights* for the overall company or even the division
5. Often issued when the overall company is *not trading at values* management expects
6. Issuing a tracking stock may be a way of *separating a problem division* without going as far as selling it off

JP Morgan Study (1995)→

1. Event study of 77 spin-offs
2. Support findings of prior research:
 - a. *Positive* shareholder wealth effects for *parent* companies
 - b. Effect was *greater the larger the subsidiary* was relative to the parent
 - c. *Spun-off subsidiary outperformed the market* by 16% during the first year and a half after the spin-off

Voluntary Liquidations: Where company sells off all assets and distributes proceeds to stockholders, by choice

- If (market value of assets) > (firm equity value), for an extended period of time, then possibly a good idea

Chapter 12: Corporate governance

Corporate Governance → Focuses on how companies are governed:

1. Corporate governance → mechanisms which attempt to deal with the principal-agent problem; when the firm is run by those who do not completely own it.
2. Agency costs arise when management (firm executives and/or board directors) pursue self-interest at the expense of shareholders.
3. What is the relationship between Corporate Governance and M&A?

Corporate Governance and Regulation →

1. **July 25, 2002 Bush signs Sarbanes-Oxley Act in response to accounting scandals**
2. **Some Important SOX Provisions:**
 - a. Accounting firms should *not provide non-auditing services* contemporaneously with auditing work
 - b. CEO and CFO will forfeit bonuses and compensation if financial statements are materially restated
 - c. New auditing practices, including independence of audit committee members
 - d. Prohibition on corporate loans to executives
 - e. Increased penalties for financial fraud
 - f. More costly (proportionately) for small and complex firms
3. **EU Version of SOX**
 - a. Called "Eighth Company Law Directive"
 - b. Less stringent than SOX, but requires auditors be rotated
 - c. Allows inside and outside directors to serve on the audit committee

What Impact Did SOX Have on Firm Value?

1. Gompers, Ishii, and Metrick (*Quarterly Journal of Economics*, 2003, "Corporate Governance & Equity Prices")
 - a. Evidence that it uplifted equity prices
 - b. Implies that shareholders are better off with better corporate governance

Corporate Governance →

1. **Agency Costs:** The losses that shareholders incur by having managers and directors oversee their investment
2. Actually, other stakeholders can create agency costs for shareholders as well: e.g. existing bondholders typically prefer the firm adopt risk-averse projects. If they can push their will to action, they can benefit at the potential expense of shareholders.
3. While we do not believe we can eliminate agency costs, we do strive to reduce them
4. While granting options to management reduces agency costs by creating incentives which more closely mirror shareholders, the resulting opportunity for fraud has caused many to question the value of this

CEO Compensation →

1. Very controversial corporate governance issue
2. Has received much recent media attention in recent years
3. Concern is that some CEOs are enjoying extremely high compensation that is only loosely, and sometimes not at all, tied to value created for shareholders
4. In a large sample over 1994 – 2006 that firms in the highest decile ranking of executive compensation earned significantly negative excess returns
5. Are many perks really justified?
6. The Wall Street Journal/Hay Group 2007 CEO Compensation Survey found total compensation including salary, bonus, restricted stock and options averaged \$8,848,000 across 200 large firms

International Perspective →

1. CEOs in the United States are much higher paid than their international counterparts; however, shareholders are not receiving an associated higher level of returns

CEO and Chairman Positions →

1. For many years it was quite common to find the CEO of a company was also the chairman of the board
2. This has given rise to concerns that a CEO could have too much influence on the board
 - a. Too much influence means not enough checks and balances
3. In the 2000s we are seeing a trend to separate these two positions, and it is generally considered a hallmark of good governance to do so

CEO compensation lower (lower agency costs) when:

1. Smaller board size: Each director has less influence with larger boards
2. Fewer *grey* directors: Directors *receiving compensation from corporation* beyond their director fees
3. Fewer *interlocked* directors – those who sit on each other's boards
4. Fewer directors *over age 69*
5. Fewer inside board members – those board members also employees of the company.
6. Fewer directors who *came on the board after the CEO was in place* – assume that CEO influenced this selection
7. Fewer *busy* directors – those who sit on *three or more boards*
8. When one or more external *blockholders* (with a 5% or greater stock holding) exist
9. Cyert et al. found size of equity holding of largest shareholders and board members is negatively related to CEO compensation
10. Equity ownership of board more important than board size
11. **Conclusion:** Boards watch the store better when their own money is at risk

Board Composition and Antitakeover Defenses→

1. Brickley, Coles, and Terry (1994)
2. Found that how the market reacts when companies adopt poison pills depends on board composition
3. Positive reaction: When *more outsiders* on board
4. Negative reaction: When boards controlled by *insiders*

What Happens to Target Directors After Takeover?

1. Harford (2003) surveyed 1,091 directors at Fortune 1000 companies
2. Found directors of target companies rarely retained after takeovers
3. Also, these directors less likely to be a director of another company

How Does the Market React When Companies and Managers Announce Acquisitions of Other Companies?

1. Dutta, Dutta, and Raman (2001)
2. Analyzed 1,719 acquisitions over 1993-1998
3. When managers have *high equity-based* compensation → *positive market response*
4. What about the premiums these companies pay?
 - *Premiums are lower* when managers have high equity-based compensation
5. **Conclusion:** When managers playing with their own money they are more frugal

Chapter 15: Tax issues

Summary of Tax Issues

1. Tax considerations do affect the planning and structuring of corporate combinations (M&A). Transactions are structured to maximize tax benefits wherever possible
2. In some instances tax benefits may be substantial and have a major impact on the decision to merge; however, typically tax effects are not the dominant influence in M&A decisions
3. Still, some targets may require tax-free status as a pre-requisite to doing the deal, and may seek out bidders willing to accommodate
4. Tax reform, particularly in the Tax Reform Act of 1986, lessened tax benefits applicable to takeovers
 - a. One such reform involved the repeal of preferential treatment for liquidating corporations. Until this occurred, acquirers could sell off assets of the target without incurring capital gains tax liability
 - b. NOLs were curtailed and greenmail payments could not be deducted
5. In LBOs, taxes can have a significant influence because of the higher leverage employed. However, such leverage increases can also be accomplished without performing the LBO

Taxes have rarely been a primary motivator of M&As. Easy example of firm to save money through taxes is to relocate to another place where taxes are lower.

Summary of Tax Issues (contd)

1. The basic tax rule w.r.t. acquisitions is simple:
 - a. If only stock is exchanged, it is a non-taxable transaction
 - b. If cash/debt is used, it is a taxable transaction
2. In practice, many complications exist, with tax-free transactions falling into a variety of reorganization types placing limits on consideration offered (read pgs 609-610)
3. Note that tax-free really means tax-deferred, as when the target shareholder subsequently sells the acquiring firm's stock received in the takeover transaction, a capital gains tax becomes payable.
 - a. The basis for this capital gains tax is the original basis of the target stock purchased by the target shareholder.
 - b. E.G. A target shareholder buying 1000 shares at \$53 later exchanges them for 770 shares in Newco (the combined firm); if she later sells them for \$88 each, there is a capital gain of $(\$88 \times 770) - (\$53 \times 1000) = \$14,760$ which would be taxed at the time sold.

If the acquiring firm is using 100% stock only or only cash, the taxes will be different.

If cash: IRS is treating it as a taxable transaction

If shares: its looked as reorganization.

Tax free- acquirer is using only shares, IRS sees that as a reorganization.

When the shares in the combined firm are sold, this is when the shareholder will be taxed. Shareholder will be taxed on the gains.

→ This is like taxes are deferred

Nontaxable vs Taxable M&As

	Acquiring Firm	Target Firm
<i>Nontaxable reorganizations</i>	NOL carryover Tax-credit carryover Carryover asset basis	Deferred gains for shareholders
<i>Taxable acquisitions</i>	Stepped-up asset basis Loss of NOLs and tax credits	Immediate gain recognition by target shareholders Depreciation recapture of income

1. In a **tax-deferred reorganization**, the *acquiring firm* generally can use any target Net Operating Loss Carryovers (using previous target losses to offset future Newco income) as well as any unused target tax credits. The *target firm* can defer the capital gains tax until the shares received are sold
2. However, even though the value of the shares paid may be greater than the net book value of assets acquired, no step-up of depreciable assets occurs
 - If paid in cash: any capital gains will be paid on the spot, they may have to pay back accelerated depreciation.
 - You want to claim higher value on the assets you have, because you can depreciate it more and pay less taxes.
 - When acquirer firm buy with shares only they do not have this advantage of high asset value.
 - When acquiring firm uses cash, you are able to step up the basis of the assets (you will be able to have an advantage on depreciation)

In contrast, for a **taxable acquisition** the *acquiring firm* can assign the excess of purchase price over the book value of equity acquired to depreciable assets, whereas the NOLs and tax-credits of the target are unobtainable.

For taxable acquisitions, target firm shareholders do not receive capital gains deferral, and in addition, if they have used accelerated depreciation, excess depreciation deductions will be recaptured to be taxed as ordinary income rather than capital gains (both disadvantages, in general)

Comparable Company Analysis

- Assumes similar assets should sell at similar prices.
- Critical that the “comparable” assets/transactions are truly comparable to the investment being evaluated.
- **The economic rational:** the law of one price—the economic principle that two identical assets should sell at the same price
- The reliability of this method of valuation depends on the ability to identify publicly traded stocks that are “comparable” to the company we are valuing.
- DCF models estimate the “intrinsic” value of a firm. Price multiples value a firm “relative” to how similar firms are valued by the market at the moment.

Comparable Company Analysis (5 steps)→

1. Select the Universe of Comparable Companies

- a. Study the target firm and industry-specific material
- b. For public targets, sources of information include SEC reports, consensus (analysts) estimates, press releases, earnings call transcripts, etc.
- c. For private targets, it is more difficult to find information (unless firm has public debt), but sources of information include financials possibly provided by target, trade journals, research reports, etc.

d. Comparable Company Analysis – Step 1

- i. Key characteristics of the target for comparison purposes typically include business profile and financial profile traits.
- ii. Such similarities may provide similarities in key drivers, cost structures, risks, and opportunities

1. Business Profile

- a. Sector
- b. Products and Services
- c. Customers and End Markets
- d. Distribution Channels
- e. Geography

2. Financial Profile:

- a. Size
- b. Profitability
- c. Growth profile
- d. Return on Investment
- e. Credit profile

2. Locate the Necessary Financial Information

- a. Valuation is driven on the basis of both historical performance i.e. LTM (last twelve months) and expected future performance (i.e. from consensus estimates, available on Bloomberg for example)
- b. Historical information sources include SEC filings: 10-K (Annual report), 10-Q (Quarterly report), 8-k (Current report), and proxy statements re: upcoming votes
- c. Press releases and financial information services provide access to research reports as well

3. Spread Key Statistics, Ratios, and Trading Multiples

- a. Financial data (for each firm) is entered into an “input page” which assists in calculating key ratios and feeds into summary pages used to benchmark the comparables
- b. Five key categories of financials include:
 - i. Size (equity value; enterprise value)
 - ii. Profitability (Gross profit, NI margins, EBIT(DA))
 - iii. Growth Profile (Historical & estimate growth rates)
 - iv. Return on Investment (ROIC, ROE, ROA, Div Yield)
 - v. Credit Profile (Leverage ratio, coverage, ratings)

c. Enterprise Value

- i. Think of enterprise value as the theoretical takeover price. In the event of a buyout, an acquirer would pay out shareholders and take on the company's debt, but would pocket any cash. EV is a capital-structure neutral metric, and many consider it to be a more accurate representation of a firm's value. The value of a firm's debt, for example, would need to be paid by the buyer when taking over a company, thus by including debt EV provides a much more accurate takeover valuation.

4. Benchmark the Comparable Companies

- a. Benchmarking centers on analyzing and comparing each of the comparable companies with one another and the target
- b. The ultimate objective is to determine the target's relative ranking so as to frame valuation accordingly
- c. Typically the list of comparables is honed down to only those most similar to the target in terms of business and financial profile
- d. Therefore two main steps:
- e. Identify the closest comparable firms
 - i. Consider core value drivers and compare firms on basis of size, profitability, growth, returns, and credit strength, as well as business profile characteristics of sector, products and services, customers and end markets, distribution channels, and geography.
 - ii. A thoughtful benchmarking analysis goes beyond quantitative analysis and requires a strong understanding of each comparable company's story.
- f. Analyze and compare trading multiples for the peer group
 - i. Consider removing outliers
 - ii. Display an output page of relevant comparable firms and statistics (see next slides)
 - iii. Note the trading multiples for the BEST comparables

5. Analyze and compare trading multiples for the peer group

- a. Trading multiples serve as a basis for deriving an appropriate valuation range for the target
- b. Use means and medians of most relevant multiple for sector (e.g. EV/EBITDA or P/E) to extrapolate range of multiples
- c. Focus on 3 or so closest comparables
- d. Must also determine which period financial data is most relevant for calculating multiples
- e. This depends on sector, point in business cycle, and comfort with consensus estimates
- f. Determine valuation based upon trading multiples, recalling:
 - i. **Enterprise value** = equity value + total debt – cash + preferred stock + non-controlling interest
 - ii. **Equity value** = Enterprise value - total debt + cash - preferred stock - non-controlling interest

Calculation of LTM (last twelve months) financial data

- Companies latest earnings announcements (available in an 8K or 10Q) may provide more recent information than that gained from the annual 10K report (not the case if the most recent quarter is the fourth quarter of a company's fiscal year)

LTM = Prior Fiscal Year + Current Stub – Prior Stub

Adjustments for Non-Recurring Items

- To assess financials on a normalized basis, it is important to “scrub” financials
- This involves adding back or eliminating one-time charges and gains to gain a more accurate view of a company's performance
- Some examples of non-recurring items (which may or may not be justifiable) include asset writedowns, restructuring charges, start-up costs, asset sale profit/loss, discontinued operations gains/expenses, strikes, catastrophes, product recalls, etc.

Pros and Cons of Comparable Company Analysis→

1. Pros:

- a. **Market based – reflects market's growth and risk expectations, as well as overall sentiment**
- b. **Relative – Easily measurable and comparable to other companies**
- c. **Quick and convenient**
- d. **Current – Based on prevailing market data**

2. Cons:

- a. **Market based – skewed during periods of exuberance or bearishness**
- b. **Absence of comps – Perhaps difficult to find comparable firms**
- c. **Potentially a disconnect from cash flow analysis (DCF)**
- d. **Potentially a disconnect from target firm – basing valuation on comparable companies may overlook target specific attributes**

Discounted cash flow Analysis

The enterprise value of a company is most often determined using a two-step valuation approach:

- Company cash flows are forecasted for a limited number of years called the planning period and are discounted to present value
- The estimated present value of all remaining cash flows is called the terminal value

→ There are two ways to estimate terminal value: a perpetuity approach (using the Gordon growth model) or a multiples approach (using EBITDA multiples)

- Enterprise value represents the present value of future cash flows in two segments
 - Planning period (finite number of years)
 - Terminal period (all years thereafter)

$$\text{Enterprise Value} = \frac{\text{Present Value of the Planning Period (PP) Cash Flows}}{\text{Present Value of the Terminal Value}}$$

- Hybrid valuation combines DCF analysis with relative valuation
 - The present value of planning period cash flows are discounted using the traditional DCF approach
 - Terminal value is calculated using an EBITDA multiple and end-of-planning period EBITDA
 - The present value of the terminal value is added to the present value of planning period cash flows to estimate enterprise value

Unlevering Beta→

- Calculating WACC for a private company involves deriving beta from a group of publicly traded peer companies that may or may not have similar capital structures to one another or the target
- To neutralize the effects of different capital structures (i.e. to remove the influence of leverage), beta must be unlevered for each peer group to obtain the asset (unlevered) beta

$$\beta_U = \frac{\beta_L}{\left(1 + \frac{D}{E}(1 - t)\right)} \quad \beta_L = \beta_U \left(1 + \frac{D}{E}(1 - t)\right)$$

$$\text{Enterprise Value (APV Approach)} = \left(\begin{array}{c} \text{Value of the} \\ \text{Unlevered} \\ \text{Free Cash Flows} \end{array} \right) + \left(\begin{array}{c} \text{Value of the} \\ \text{Interest} \\ \text{Tax Savings} \end{array} \right)$$