

Strategic Financial Management

Lecture 1 : Introduction to M&As

Learning objectives

- Describe trends in the global takeover market since the 1960s.
- Identify the sources of synergies that are most commonly cited in the justification given for acquiring a firm.
- Define the term “tender offer,” and discuss the premium typically paid over current share price.
- Identify the gains to both acquiring and target firms upon announcement of a takeover; provide reasons for those gains to accrue.
- Calculate the maximum premium that should be paid in a stock acquisition, as well as the earnings per share before and after a merger, the new price of the combined firm, and the change in percentage ownership that will happen as a result of the merger.
- Identify two methods commonly used to pay for a target, and the tax and accounting consequences of each.
- Discuss the role of the board of directors and shareholders of the target and the board of directors of the acquirer in the merger.
- Distinguish between a friendly and a hostile takeover.
- List and define several defense strategies against takeovers.
- Define the free rider problem, and describe how it can be alleviated by a toehold, a leveraged buyout, or a freeze out merger.

1. Background and Historical Trends

- Market for Corporate Control
 - = maximize stakeholder value and equity
 - Acquirer = bidder = the buyer of the firm
 - Target = the seller of the firm
- > \$1 trillion per year of takeovers
 - Mergers= mostly same size → will work together
 - Acquisitions = one company is becoming big → become one firm
- Largest Merger Transactions
 - They are coming in waves = merger waves
 - Greatest takeover activity:
 - 1960s – Conglomerate wave
 - 1980s – Hostile takeovers
 - 1990s – Strategic or global deals
 - 2000s – Marked by consolidation, larger role played by private equity



- Type of Mergers – by organizational structure
 - Horizontal merger
 - Target and acquire firm are in the same industry
 - Gain more market share in the sector → Gain Power
 - Vertical merger
 - Target's industry buys from or sells to acquirer's industry
 - Ex. Chipfactory and pc company
 - Conglomerate merger
 - Target and acquirer operate in unrelated industries
- Type of mergers – by method of payment
 - Cash
 - Target shareholders receive a cash payment for their stock from the acquirer
 - Most common and simplest
 - + Corporate identity and ownership structure of the acquirer remains unchanged
 - The acquirer must compensate the target shareholders the tax that those have to pay on their capital gains
 - Stock (Stock swap)
 - Target shareholders are swapping old stock for new stock in either the acquirer or a newly created merged firm
 - 'What is the right exchange ratio?'
 - This affect the actual benefits to the shareholders of acquiring company
 - Ideal: price earnings ratio of the acquiring company is > (comparatively) than the target company
 - It takes more time to complete the deal
 - Higher transaction costs
 - Potential misevaluation at determining the "right" stock exchange rate
 - Lots of legal procedures
 - Debt
 - Target shareholders exchange old stock for debt instruments issued by either the acquirer or a newly created merged firm
 - Acquirer put debt in the structure of its deal to buy the target
 - Seller doesn't pay income taxes until they received the debt payments
 - Seller should not accept this form of payment, if the acquirer enters bankruptcy, the seller will be categorized as another creditor for the remaining assets.

2. Market Reaction to a Takeover

- Release information about a merger will have consequences for the stock market
- Acquisition premium
 - Paid by an acquirer in a takeover, percentage difference between acquisition price and merger price
 - On average, they pay 43% over the pre-merger price
 - announcement price reaction: +15% for target, +1% for acquirer
- Important questions:
 - Why do acquirers pay a premium over the market value for a target company?
 - Although the price of the target company rises on average upon the announcement of the takeover, why does it rise less than the premium offered by the acquirer?
 - Why does the acquirer not consistently experience a price increase?

3. Reasons to Acquire

- Large synergies
 - = most common justification that bidders give for the premium they paid
 - 2 categories:
 - Cost reductions
 - Layoffs of overlapping employees
 - Elimination of redundant resources
 - Revenue enhancements
 - Much harder to predict
- Commonly listed reasons to acquire:
 - 1. Economies of Scale and Scope**
 - Economies of Scale
 - In a large company can you enjoy from producing goods in high volume that are not available in small companies
 - Fixed costs decrease thanks to bigger volume
 - Economies of Scope
 - Large companies can realize to combine the marketing and distribution of different types of related products
 - BUT larger firms are more difficult to manage
 - 2. Vertical Integration**
 - Merger of two companies in the same industry that make products required at different stages of the production cycle
 - + Coordination
 - 3. Expertise**
 - Firms often need expertise in a particular areas to compete more efficiently
 - It is better to acquire an existing firm with the talent as an already functioning unit
 - 4. Monopoly Gains**
 - Reduce competition → increase profit
 - Most countries have antitrust laws that limit such activity
 - While all companies benefit when competition is reduced , only the merging company pays the costs
 - 5. Efficiency Gains**
 - Paying a premium for a target is efficiency gains
 - mostly gained with elimination of duplication
 - 6. Tax Considerations**
 - Tax advantage
 - Losses in one division can offset profits in another division

7. Diversification

- Risk reduction
 - Large firms bear less unsystematic risk → combined firm is less risky
 - ❖ Here we ignore the fact that investors can achieve the benefits of diversification themselves by purchasing shares in the two separate firms
- Debt Capacity and Borrowing Costs
 - Merger can increase leverage and lower its cost of capital
 - Due to market imperfections, a firm is able to increase its debts and enjoy greater tax savings without incurring significant costs
- Asset allocation
 - A diversified conglomerate may benefit by being able to quickly reallocate assets across industries
 - <-> Profitable divisions may subsidize money-losing ones for longer than is optimal
- Liquidity
 - Shareholders often have a disproportionate share of their wealth invested
 - The liquidity that the bidder provides to the owners can be valuable and often is it an important incentive for the target shareholder to agree

8. Earnings Growth

- By combining companies it is possible that :
the eps of the merged company > the pre-merger earnings per share of either company
! Even when the merger itself creates no economic value

9. Managerial Motives to Merge

- Conflicts of interests
 - 1. Managers prefer to run a larger company due to additional pay and prestige
- Overconfidence
 - 2. 'Hubris Hypothesis' → overconfident CEOs pursue mergers that have low chance

4. Valuation and the Takeover Process

- Key issue: quantifying and discounting the value added as a result of the merger
 - Takeover synergies = any additional value
- Price paid for the target = target's pre-bid market capitalization + premium paid
 - If pre-bid market capitalization = stand-alone value of the target
 - From bidder view: takeover is positive NPV project if premium < created synergies
- Offer
 - After valuation process → tender offer
 - Using Cash or Stock
 - Stock: bidder pays for the target by issuing new stock and giving it to the target shareholders
 - Exchange ratio = number of shares received in exchange for each target share
 - Share price of merged firm > pre-merger price → Positive NPV investment

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

A = pre-merger value of the acquirer

T = pre-merger value of the target

S = value of the synergies created by the merger

N_A = acquirer has this number of shares outstanding before the merger

X = new issued share to pay for the target

- $xP_A < T + S$ X = maximum number of new shares the acquirer can offer and still achieve a positive NPV

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

S/T = value of synergy per unit of value of target

- Merger Arbitrage
 - When a tender offer is announced, the uncertainty about whether the takeover will succeed adds volatility
 - Risk-Arbitrageurs: Traders who speculate the outcome of the deal after the announcement
 - Merger-Arbitrage Spread = target stock's price – implied offer price
 - There is always a risk that the deal will not go through
- Tax and Accounting Issues
 - How the acquirer pay will affects the taxes of both (target and combined)
 - Cash
 - Immediate tax liability
 - Exchanging bidder stock
 - Tax liability is deferred until the target shareholders actually sell the new shares
 - Step Up
 - Book value will increase if the acquirer purchase those assets directly
 - The method of payment does **not** affect the combined firm's financial statements for financial reporting
 - Purchase price >>> fair market value → rest is goodwill
- Board and Shareholder Approval
 - Friendly takeover
 - When the target's board supports a merger
 - Hostile takeover
 - Enough votes to replace the target's board of directors and CEO
 - Corporate Raider
 - = Acquirer in a hostile takeover

5. Takeover Defenses

- Proxy fight
 - Acquirer convinces the target's shareholders to unseat the target's board by using their proxy votes
- 1. **Poison Pills**
 - Defense against a hostile takeover
 - The right to buy shares in either the target or an acquirer at a deeply discounted price
 - This makes the takeover so expensive that they choose to pass
 - Flip in gifpil
 - = recht om bij een bepaalde koersverandering extra aandelen te kopen tegen oude prijs, hierdoor stijgt het aantal eigenaars en dus het bedrag dat nodig is om een overname te doen
- 2. **Staggered Boards**
 - A board of directors is staggered for three years → so each year 1/3 directors are up for election
 - Bidder have to win the fight two year in a row to have the majority

3. White knights

- White knight
 - Offer yourself to another company to make it harder for the original acquirer
- White Squire
 - Passive investor agrees to purchase a substantial block of shares in the target with special votes

4. Golden Parachutes

- Management krijgt een prachtige ontslagvergoeding indien het bedrijf wordt overgenomen en het management wordt ontslagen, dit creëert daadwerkelijk waarde. Hierdoor zal het management ook sneller opstaan voor een overname.

5. Recapitalizations

- Company changes its capital structure to make itself less attractive as target

6. Other Defensive Strategies

- A firm can require a supermajority of votes to approve merger
- Restrict voting rights of very large shareholders
- Require that a fair price be paid for the company

7. Regulatory Approval

- All mergers must be approved by regulations
 - European Commission
 - US → mergers > \$60 billion

6. Who Gets the Value Added from a Takeover?

- Target shareholders ultimately capture the value added by the acquirer (the premium)
- The Free Rider Problem
 - Target firm is often poorly managed → lower share price
 - Corporate raider can take control of the firm and replace the management
 - → value will increase
 - BUT if the tender offer < potential price → no one will tender their shares → no deal
 - ONLY way to persuade shareholders: tender offer = potential price → no profit anymore
- Toeholds
 - Stake in a firm that corporate raider can use to initiate a takeover attempt
 - They must make their intentions public by informing investors of their large stake
 - The Leveraged Buyout
 - Corporate raider: tender offer for half of the outstanding shares
 - ❖ He borrows the money and pledges the shares themselves as collateral
 - ❖ Tender offer succeed → he has control
 - attach loans to the corporation
 - looks like the company borrowed the money
 - He still owns half the shares, but corporation is responsible for repaying the loan
 - he didn't pay anything!!!!
 - The Freezeout Merger
 - Laws allow an acquiring company to freeze existing shareholders out of the gains from merging by forcing non-tendering shareholders to sell their shares for the tender offer price
 - acquiring company need not make an all-cash offer but can use shares of his own stock

- Competition
 - Why do they want to pay such a large premium? → COMPETITION
 - An auction in which the target is sold to the highest bidder

Chapter quiz

1. What is the difference between a horizontal and vertical merger?
2. On average, what happens to the target share price on the announcement of a takeover?
3. On average, what happens to the acquirer share price on the announcement of a takeover?
4. Explain why risk diversification benefits and earnings growth are not good justifications for a takeover intended to increase shareholder wealth.
5. What are the steps in the takeover process?
6. What defensive strategies are available to help target companies resist an unwanted takeover?
7. Based on the empirical evidence, who gets the value added from a takeover? What is the most likely explanation of this fact?

Lecture 7: Corporate restructuring and divestitures

1. Reorganization of assets and ownership via divestitures

a. Asset Sales

= sale of a division, subsidiary, product line, ... to another firm usually for cash

b. Equity carve-outs

= Offering of a full or partial interest in a subsidiary to the investors; creates separate publicly traded company

- Typically via an IPO
- New organization is complete with its own board and financial statements
- Helps parent organization to retain its hold over the subsidiary by keeping the majority equity
 - + Benefits both; new company and parent company
 - + Streamline focus on core business
 - + Maintaining indefinite corporate control over carve-outs
 - + go on to be acquired by third parties in the future
 - Raise share prices on the short-run, but over the long-term shareholders are at loss
- Example: Lehman Brothers and American Express

c. Spin-offs

= Pro rata distribution of the shares in a subsidiary to existing shareholders of the parent; creates separable, publicly traded company

- To reduce agency costs and create tax shields or to enter a new industry
- Way of reorganizing a company's administrative structure in order to improve its efficiency/profitability
 - share price can be volatile and can tend to underperform in weak markets and outperform in strong markets
 - High selling activity; shareholders of the parent may not want the shares because they may not fit their investment criteria
 - Shareprice may dip in short-term even the spin-offs long-term prospects are positive
- Example: Paypal and Ebay

d. Other variations: Split-ups, tracking stocks, exchange offers

- Split up
 - = separation of the company into two or more parts, often via spin-off
- Tracking Stock
 - = Creation of a separate class of stock with value based on the cash flows of a specific division; sometimes part of a public offering
 - Does NOT represent or require any change in business structure
 - Holders of tracking stock are considered to hold equity in the parent company and not the specific identity represented by the tracking stock
 - So that investors can take a share in a division of their interest
 - If a company feels that a successful division is underappreciated by the market and not fully reflected in the company's stock price.
 - Salient features of Tracking Stock
 - ❖ Voting Rights
 - ❖ Dividend Rights
 - ❖ Liquidation Rights
 - holders of a tracking stock do not have a special right to the tracked assets

❖ Conversion Rights

- + Tracking stocks give investors access to the more promising divisions of a company
- + The performance comes only from the tracked segment
- + Provides companies with capital to pay down debt and fund growth

- Investors can lose money on tracking stocks if the division performs poorly even the parent company does well
- Tracking Stocks typically come with limited or no voting rights
- If the parent company goes into bankruptcy, creditors may have a claim on the tracking segments assets

- Example: Walt Disney for go.com

○ Exchange offer

= Distribution giving shareholders a choice to retain parent or exchange for shares in new subsidiary; creates a separate, publicly traded company

- It resembles a spin-off
- Shares in the new firm are received only by those shareholders who opt to trade in the shares in the parent

2. Theory: why might divestitures create wealth?

- Transaction cost
 - divestitures is a response to in changes transaction cost
- Information/signalling
 - Corporate managers posses information not known to the market; divestitures could signal info
- Incentives/monitoring costs
 - Corporate governance geared towards monitoring; divestitures could enhance monitoring

→ there is empirical evidence for this

Lecture 8: Financial Restructuring

1. What is Financial Structuring?

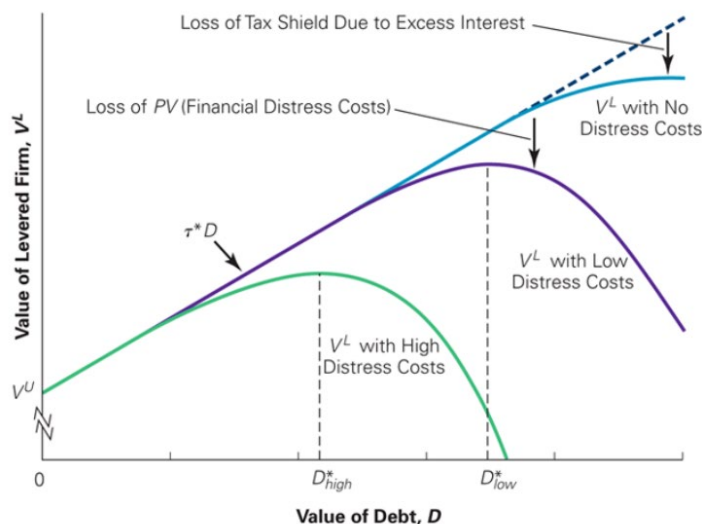
- Corporate structuring entails any fundamental change in a company's business or financial structure, designed to increase the company's value to shareholders or creditors
 - Divided into 2 parts:
 - Operational Structuring
 - Financial Structuring
 - = relates to improvements in the capital structure
 - ❖ Involves restructuring the assets and liabilities of corporations

2. Why to undergo financial structuring?

- Why?
 - Unlocking the value in the firm normal times
 - Increasing the value of the firm in financial distress
- How?
 - Optimizing leverage (debt-to-equity ratio)
 - Fine-tuning debt structure
 - Fine-tuning equity structure
 - Financial reorganization
 - Liquidation

3. Leverage Recapitalizations

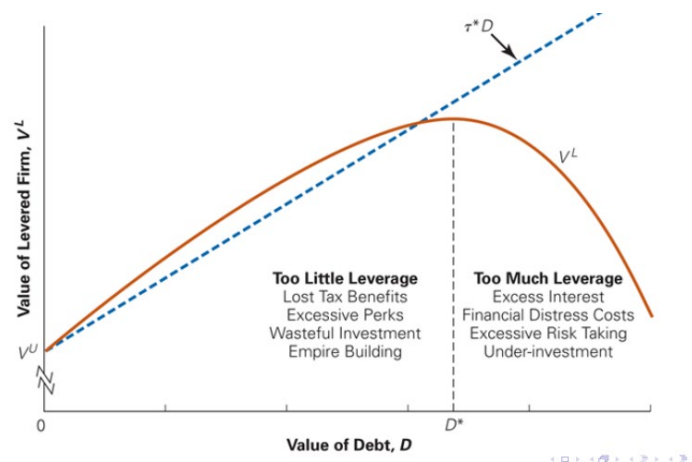
- Trade-off theory
 - Tax-benefits of debt vs financial distress cost
 - τ = corporate tax rate
 - r = interest rate on debt
 - τr = tax-shield per unit of debt
 - Higher level of debt \rightarrow higher interest payments \rightarrow increased default risk
 - Too little debt means losing on tax shields but too much debt means a higher default risk, and higher cost of financial distress
 - Firm value = $PV(FCF) + PV(\text{tax-shields}) - PV(\text{bankruptcy costs})$



- Agency cost
 - Arise when there are conflicts of interest among the firm's stakeholders
 - Between shareholders and debtholders
 - ❖ Debt repayments have priority over dividend
 - ❖ Equity is a residual claim
 - ❖ Too much debt aggravates the risk shifting and debt overhang problems

- Between managers and investors
 - ❖ Managerial moral hazard: private benefit extraction: align manager's payoff with those of stockholders by giving them stock options
 - ❖ Free Cash flow problem: too little debt leads to inefficiencies
- Trade-off theory with agency cost:

Firm value = $PV(FCF) + PV(\text{tax-shields}) - PV(\text{bankruptcy costs}) - PV(\text{agency cost})$



- A Leveraged recapitalization is a type of financial restructuring in which a company changes its capitalization structure by replacing the majority of its equity with a package of debt securities consisting of both senior bank debt and subordinated debt.
 - The company will borrow money in order to buy back shares that were previously issued, and reduce the amount of equity in its capital structure.
 - Used to prepare the company for a period of growth
 - Popular in periods when interest rates are low
 - Have a similar leveraged buyouts; the firms remain publicly traded
 - Can increase the value of a tax shield, decrease the likelihood of a takeover, improve incentives
 - Can increase default risk and agency costs

4. Debts Restructuring and Bankruptcy Procedure

Debts Restructuring

= process of reorganizing the whole debt capital of the company

- It involves reshuffling of the balance sheet items as it contains the debt obligations of the company
- Can be done based on different circumstances of the companies: There are 3 ways:
 - A healthy company can go in for debt restructuring to change its debt part by making use of the market opportunities by substituting the current high cost of debt with low cost borrowings.
 - A company that is facing liquidity problems can go for debt restructuring so as to reduce the cost of borrowing and to increase the working capital position.
 - A company that is in default and thus is in the prospect of bankruptcy may attempt debt restructuring in order to make improve its solvency and avoid liquidation.
- Most cases: Reorganization of a distressed company's outstanding obligations to restore its liquidity and keep it in business
- Negotiation between distressed companies and their creditors:
 - Reducing total amount of debt the company owns
 - Decreasing the interest rate it pays
 - Extending the period of time it has to pay the obligation back

Bankruptcy

= legal proceeding involving a business that is unable to repay its outstanding debts. It begins with a petition filed by the debtor on behalf of creditors

- Types of bankruptcy
 - Liquidation
 - 1) Liquidate non-exempt assets to pay creditors
 - 2) Unsecured debt is separated into classes with each class receiving priority for payment
 - 3) Secured debt: secured by collateral to reduce the risk associated with lending
 - 4) Payment of nonpriority – pro rata basis
 - Reorganization
 - remains in control of operations and is not required to liquidate assets
 - + Can continue operations while going through the reorganization process – generates cashflow
 - very complex and expensive
 - Plan has to be approved by the bankruptcy court
 - Plans
- Strategic bankruptcy
 - Strategic choice rather than an unavoidable condition
 - + Strategic debt cutting
 - + Breaking outstanding contracts
 - + same name, different company
 - + different name, same company: rebranding
- Chapter 11 and Efficiency
 - Theory message-can go any way
 - Bankruptcy laws exacerbate the incentive to overinvest → ch 11 may encourage corporate managers to reorganize when liquidation is efficient
 - Improves efficiency
 - Empirical evidence – some positive effects
 - Firms that significantly restructure their assets and liabilities during ch11 are more likely to achieve positive operating performance.
- Chapter 11 and Incentives
 - Ex-ante
 - Chapter 11 is beneficial as it helps to reduce excessive risk shifting
 - Ex-post
 - There is evidence that less than half of the directors of the distressed firms remain with their firms after reorganization and that these directors are less likely to serve on the boards of other publicly traded firms
 - Board members are monitored for the performance of their firms

5. Equity restructuring

- Common methods of equity restructuring
 - Repurchasing the shares from the shareholders for cash
 - Dual-class stock recapitalizations
 - Two or more classes of shares with different voting rights; insiders have votes, outsiders not
 - This allows to retain the control in the hands of long term investors
 - Can also be used by the managers to entrench their positions against takeovers so that they are not replaced
 - shareholders wealth is not adversely affected by the adoption of dual class stock
 - The power of the insiders is often not sufficient enough to explain the approval
 - prisoner's dilemma

6. Exchange Offers and Equity-for-Debts swaps

Exchange offer – empirical evidence

- An exchange offer provides one or more classes of securities the right or option to exchange part of all of their holdings for a different class of securities of the firm.
 - Usually open for one month
 - 2 types of exchange offers
 - Equity to debt swaps; debt for equity
 - There are positive, on average
 - Increased leverage → higher return on equity
 - Imply increase in future cash flows
 - Typically, the control over cash usage by management is reduced
 - Benefits of leverage: potential signalling with leverage & tax shields
 - Debt to equity swaps; equity for debt
 - There are negative, on average
 - Decreased leverage
 - Imply decrease in future cash flows
 - Typically, the control over cash usage by management is increased
 - Loss of tax shields
- Why? – the effect of what is replaced with what really depends on whether
- leverage increases or decreases
 - cash flows are expected to increase or decrease
 - is stock under- or overvalued
 - increase/decrease of management (insider) ownership
 - increase/decrease of management's control over the use of cash
 - positive/negative signalling effects

Lecture 9: Going private & Leveraged buyouts

1. Going Private and LBO/MBO

- Going private = opposite of going public and refers to the transformation of a public corporation into a privately firm
- Leveraged buyout (LBO) = the purchase of a company by a small group of investors using a high percentage of debt financing
- Why?
 - It is no longer values the benefits provided by being publicly
 - Result of a takeover
 - For restructuring purposes to be later sold or taking through an IPO
- Management buyout transaction (MBO) – company is taken private by its own management
 - To streamline operations and improve profitability
 - Stands in contrast with a management buy-in (replacing existing management)

2. Private equity

→ a private equity firm will buy a controlling share in the company, often leveraging amount of debt
→ private equity firm secures these debts against the assets of the company being acquired
→ the interest and principal payments on debt are then paid for using the CF from business
= alternative investment class and consists of capital that is not listed on a public exchange
= composed of funds and investors that directly invest in private companies, or that engage the buyout of public companies

+ It allows them access to liquidity
+ Venture capital
+ If de-listed; they can help to attempt growth strategies away from the glare of public markets

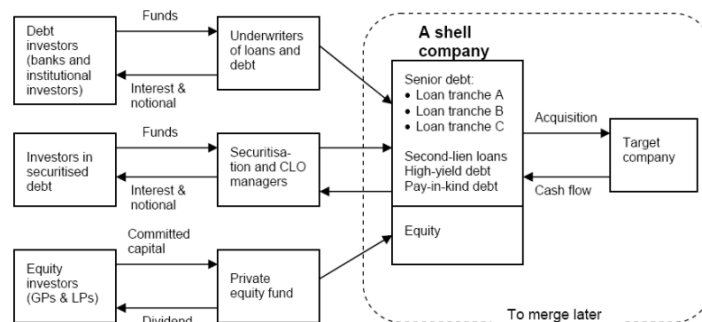
- Difficult to liquidate holdings in private equity
- Pricing is negotiated between buyers and sellers and NOT by market forces
- The rights are decided case by case through negotiations of a broad governance framework

- Is there advantage of private equity-controlled businesses offer over public ownership?
 - Private ownership can mitigate some agency problems
 - Able to provide high level management oversight
 - Seek to limit inefficient use of free cash flows
 - May promote long-term decision-making
- Types of Private equity
 - Distressed funding
 - Invest in troubled companies with underperforming business units to turn them around by making necessary improvements and sell later for profit
 - Leveraged buyouts
 - Buying out a company completely with the intention of improving its business and financial health and reselling it for a profit to an interested party or conduction an IPO
 - Real Estate Private Equity
 - Typically targets commercial real estate
 - Fund of Funds
 - Focuses on investing in other funds
 - Venture Capital
 - Funding goes to start ups or other young businesses that show potential for long-term growth

3. Historical overview of LBO market

- Tool for extracting value through reorganization by streamlining low-growth public firms that have stable cashflows.
- 1980s – dramatic surge in LBO activities
 - Made possible by the emergence of the high-yield bond market as the dominant source of financing for speculative grade-debt.
 - End: Excess speculation and overpriced deals became quite pervasive
- 1989 – the junk bond market imploded
- 1990 – collapse of the junk bond market → interest in LBOs cooled of
- Mid 2000s – resurgence in the volume of LBO deals
 - Spurred by the growing pool of private equity firms
- 2007 – Peak of the LBO market
- Profile of LBO targets
 - Mechanism for disciplining inefficient corporate organizations and realigning the interests of stockholders and management
 - Agency Problems - between stockholders and management
 - Are more prevalent in low-growth stable firms with substantial free cash flows
 - Managers are more likely to squander these cash flows on unprofitable investments
 - LBOs mitigate these conflicts by enabling managers to own a larger stake in the firm and enhance managerial discipline through the high debt service imposed on the firms.

4. LBO Deal structure



Hart of the private equity fund

- General partners (GPs)
 - = sponsor and manage private equity funds but they need capital to invest an to get the deal done
- Limited partners (LPS)
 - = the investors committing capital to those funds;
 - Institutional LPs
 - Wealthy individuals and families

→ Relationship requires balance of caution and trust

- Securitisation vehicles have play an important role in the growth of the leveraged loan market
- The leveraged loan = a type of loan that is extended to companies or individuals that already have considerable amounts of debt.
- Collateralized loan obligation (CLO) = securities that are backed by a pool of loans, have been part of a broader class of securitisation and securitisation vehicles that have contributed to a strong demand for leveraged loans

5. Stages of LBO

1. Planning and fund raising

Financing: 10% from PE and 50-60% bank loans
Set up management incentives: stock price based

2. Take firm private

Achieved through stock acquisition or asset acquisition
After acquisition, the new owners would typically sell off parts of acquired firm to reduce debt

3. Cash flow improvement attempts

Achieved by cutting operational costs and spending

4. Take the firm public again

Secondary IPO or SIPO

6. Exist Strategies of LBO

- Private equity investors need to recover their investment, it takes 5 years after the deal
- Typical exist strategy include:
 - (S)IPO
 - Sell the company to other company in the industry
 - Secondary Buyout

7. Empirical evidence on LBO's

Lezen in slides

8. LBO and value creation

- Tax advantages
 - The larger the potential advantages → the larger the premium
 - Substantial part of bid premium can be recovered through tax advantages
- Management incentives & agency costs
 - LBO/MBO creates managerial ownership
 - Better alignment of the interests of managers and shareholders
 - Less asymmetric information problems
 - Less FCF problems thanks to high leverage
- Advantages of being a private company
 - Long-term goals
 - Frees up management time
 - Reduces communication needs
- Wealth transfer from debt to equity
 - Increase in leverage lowers the value of existing debt instruments
 - Losses for bondholders are statistically significant, but are quite small compared to the gains of SHs
- Wealth transfer from employees to shareholders
 - LBOs do sometimes result in reduction of employment
- Wealth transfer from tax payers to shareholders

- Increased deductibility is compensated by capital gains of tax paid by selling shareholders in the LBO; more taxes paid after leverage is reduced.
- Asymmetric information: transfer from outsiders to insiders
 - Insiders have more information about the true value of the company

Lecture 10: Share Repurchase

1. Share Repurchase activities

- Share Repurchase = cash offers made by companies for outstanding shares of their own common stock

Lezen in de slides wat het verschil is met dividenden uitbetalen

2. Reasons for buybacks

- To signal that stock is undervalued
Buyback some of the shares → increase price of remaining shares
- To distribute capital to SH with a high degree of flexibility in the amount and time
Dividends are not so flexible, they must be paid on certain dates and certain amount
Stock Buybacks provide a high degree of flexibility; they do not specify the amount or dates
- To take advantage of tax benefits
If capital gain tax rate < dividend tax rate
- To absorb the increases in the number of shares outstanding due to the exercise of stock options
Offer stock options as a part of compensation packages to employees
Buyback to maintain optimal level of outstanding shares
- To use a hostile takeover defense
Goal: to diminish the acquirer's chances of obtaining a controlling interest in the target company

3. Major types of share repurchases

Fixed-price tender offers (FPTs)

- Fixed date and fixed price
- Includes a premium
- Stock repurchase model
 - Efficient markets
 - No asymmetric information
 - Perfect competition
 - Wealth maximizing investors

Company value after purchase = value of company before – value paid to selling SHs + value created by repurchase

$$P_E N_E = P_0 N_0 - P_T (N_0 - N_E) + W$$

where

- P_E is price after repurchase
- P_0 is price before repurchase
- P_T is FPT offer price
- N_E is the number of shares after repurchase
- N_0 is the number of shares before repurchase
- W is FPT value creation

$$\frac{W}{N_0 P_0} = F_P \frac{P_T - P_0}{P_0} + (1 - F_P) \frac{P_E - P_0}{P_0},$$

where $F_P = \frac{N_0 - N_E}{N_E}$ is the proportion of repurchased shares

→ Value creation is split between selling and non-selling shareholders

Dutch auction repurchases (DARs)

- Range of possible prices, with min price
- SHs make their bids, number of shares and min. price
- Company determines the most suitable price
- Price which is paid is same for all selling SHs
- Premiums are lower
- Lower value creation
- Can be used as takeover defense: remove all shareholders which are willing to sell for small premium

+ Allows a company to identify the buyback price directly from the SHs

Transferable put rights (TPRs)

- Fixed price (strike price) within a stated period (the time to maturity)

+ No mismatch in supply and demand of shares

High reservations prices will not be interested in exercising → sell the right

Low reservations prices will be willing to pay extra to buy more TPRs than they received

Open-market repurchases (OMRs)

- Company buys back its shares directly from the market
- Via company's brokers
- Over long period
- No legal obligations for the firm

+ cost-effectiveness → current market price, no premium

4. Empirical Evidence on Share Repurchase

- Average pre-event CAR → negative
- Announcement CAR → positive

Employee Stock option (ESO)

- = type of equity compensation to employees
- Regular call options; right to buy the company's stock at a specified price for a finite period of time
- Taxed at exercise and stockholders will be taxed if they sell their shares in open market
- Significant time value, even if they have zero intrinsic value

5. Undervaluation and Share Repurchase

- Rappaport's model
 - Share repurchases become more interesting as undervaluation increases
 - If the company can buyback shares < intrinsic value → return on the buyback will higher than the required return on equity

$$\text{Buyback return rate} = \frac{\text{Cost of Equity}}{1 - \% \text{undervaluation}} = \frac{\text{Cost of Equity}}{\text{Market}/\text{Intrinsic_Value}}$$

- Only makes sense if there are no superior alternative investment opportunities

6. Share Repurchases vs Dividends

Are repurchase a substitute for common annual dividend payments?

- + dividend payment is strong signal for long term profit outlook
- Reducing the dividend has strongly negative impact on share price
- Systematic repurchase of shares instead of dividends is not allowed