# ECON 4245 Economics of the Firm

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13 lectures; 6 seminars (in two groups)

Lecture slides available before each lecture at:

http://www.uio.no/studier/emner/sv/oekonomi/ECON4245/v09/

# Course topic: the firm

- The firm's relationship with
  - o Investors
  - Creditors
  - Suppliers
  - o Employees (managers)
- Applying *economics* to understand these relationships
  - o The economics of information
  - o Contract theory
  - o Three essential informational problems
    - Hidden action
    - Hidden information
    - Non-verifiable information
- At the centre stage: the firm/investor relationship
  - o Corporate governance
  - o Corporate finance
    - How are firms managed?
    - How are firms financed?
    - How do informational problems affect these questions?

#### Textbook: Jean Tirole, The Theory of Corporate Finance

- A unified treatment of the topic
- Building on a simple model
  - o Hidden action (moral hazard)
- Required reading: chapters 1 through 11, including supplementary sections (unless noted otherwise).

#### Overview

- Basics:
  - (a) one-stage financing: fixed and variable investment models;
  - (b) applications: debt overhang, diversification, collateral pledging, redeployability of assets.
- Multistage financing: liquidity ratios, soft budget constraint, free cash flow.
- Financing under asymmetric information.
- Exit and voice in corporate governance.
- Control rights.

(in the book, but not in the course: macroeconomic implications of corporate finance; political economy of corporate finance)

#### Corporate governance

- How *suppliers of finance* to a firm make sure they get returns on their investments.
  - o Investors
  - o Creditors
- How *corporate insiders* can credibly commit to returning funds to outside investors, thus attracting external finance
  - o Insiders: management; current owners
- A narrow definition
  - Stakeholders vs shareholders
    - Employees, customers, suppliers, communities

# The separation of ownership and control

- Berle and Means, *The Modern Corporation and Private Property* (1932).
- Corporate insiders may not act in the interest of the providers of funds.
- How to deal with this problem?
  - o Incentives
  - o Monitoring

## The moral-hazard problem

- Moral hazard is an awkward term but the one commonly used
  - o No implication of immoral behavior
  - o Behavioral risk; hidden action
- Owner/manager conflict
  - o Manager does not always act in the interest of owners
- Insufficient effort
  - Insufficient internal control of subordinates
- Allocation of effort across tasks
  - o Workforce reallocation, supplier switching
- Overinvestment
  - o Pet projects, empire building, acquisitions
- Entrenchment
  - o Managers making themselves indispensable
  - Manipulating performance measures
  - Being excessively conservative in good times, excessively risk-taking in bad times
  - o Resisting takeovers
  - o Lobbying against shareholder activism
- Self-dealing
  - o Perks: private jets, big offices, etc.
  - o Picking successor
  - o Illegal activities: theft, insider trading, etc.

#### When corporate governance does not work

- Lack of transparency
  - Shareholders do not observe compensation details, such as perks and stock options
- Level of compensation
  - o Tripling of average CEO compensation in the US 1980-1994, a further doubling until 2001.
  - Average CEO/worker compensation ratio in the US went from 42 in 1982 to 531 in 2000.
  - Proponents argue this is a byproduct of more perfomancebased pay.
  - Norway: average CEO/worker compensation ratio at 10 in 2005
    - Smaller companies than the US ones
    - Report by Randøy and Skalpe (2007)
- Fuzzy links between performance and compensation
  - o Bebchuk and Fried, *Pay without Performance* (2004).
  - o Compensation in an oil company based on stock price, when management has little control over the oil price.
  - o Golden parachutes when leaving.
- Accounting manipulations
  - o The Enron scandal.
  - o Manipulating stock price, and therefore compensation.
  - Hiding bad outcomes and therefore protecting against takeovers.

## Managerial incentives

- Monetary incentives
  - o Compensation
    - Salary: fixed
    - Bonus: based on accounting data
    - Stock-based incentives: based on stock-market data
  - o Bonuses vs. stock-holdings
    - Bonuses provide incentives for short-term behavior
    - Shares provide incentives for long-term behavior
    - The two are complements, not substitutes
  - o The compensation base
    - Indexing
    - Relative performance
  - o Shares vs. stock options
    - Stock options provide stronger incentives
    - ... but do not perform well after a downturn (excessive risk, lack of credibility).
  - o Too low managerial incentives in practice?
    - In the US in the 1980s, the average CEO kept 3‰ of shareholder wealth; later estimate: 2.5%.
    - But incentives are costly to owners, because of manager risk aversion
    - ... and owners must also take care of *team incentives*.
- Implicit incentives
  - o Keeping the job
    - Firing or takeover following poor performance
    - Bankruptcy
  - o Career concerns
  - Explicit vs implicit incentives
    - Substitutes: Strong implicit incentives lower the need for explicit incentives
    - ... but this is difficult to trace empirically.

## Managerial incentives, cont.

- Monitoring
  - Boards of directors
  - Auditors
  - o Large shareholders
  - o Large creditors
  - Stock brokers
  - o Rating agencies
- Active monitoring
  - o Interfering with management in order to increase the value of one's claims in the firm.
    - Linked to exercising control rights
  - Forward looking
  - o Examples
    - large shareholder sitting on the board
    - resolutions at general assembly
    - takeover raid
    - creditor negotiations during financial distress
- Speculative monitoring
  - o Not linked to control rights
  - o Partly backward looking, aiming at *measuring* value, rather than at enhancing it.
  - o Example: stock-market analysts, rating agencies
  - Provides incentives by making firm's stock value more informative about past performance.
- Product-market competition
  - o Relative performance is easier
  - o Exogenous shocks are filtered out
- The board of directors
  - o Independence; attention; incentives; conflicts
  - o Many differences across countries.

#### Investor activism

- Active monitoring requires control
- Formal control vs real control
  - o Formal control: majority owner
  - Real control: minority owner convincing other owners of the need to oppose management
- Proxy fight: discontent share owners seeking a place in the board of directors in order to implement changes

## Ownership structure

- Institutional investors, such as pension funds, life insurers, mutual funds
- Cross-shareholdings
  - o Firms owning shares in each other
- Ownership concentration: huge variations across countries
  - o For example: US vs Italy
- Ownership stability: again international variation

## Limits to active monitoring

- Monitoring the monitor: incentive problems inside institutional investors
- Externalties from monitoring
  - One shareholder's monitoring benefits all shareholders underprovision of monitoring?

## The market for corporate control

- Takeovers
  - o Keep managers on their toes
  - o Make managers act myopically
- Takeover bids: tender offer
- Takeover defenses
  - o Corporate charter defenses
    - Making it technically difficult to acquire control
    - Staggered board
    - Supermajority rules
    - Differential voting rights
  - o Diluting the raider's equity
    - Scorched-earth policies: selling out those parts of the firm that the raider wants
  - o Poison pills
    - Current shareholders having special rights to purchase additional shares at a low price in case of a takeover attempt
  - White knight
    - An alternative acquirer who is friendly to the current management
  - o Greenmail
    - Repurchases of stock from the raider, at a premium
    - Management colluding with the raider, at the expense of other owners.
- Leveraged buyout (LBO)
  - o Going private, borrowing to finance the share purchase
  - o Management buyout (MBO): an LBO by management

## The role of debt in corporate governance

- Debt provides management discipline
  - o Management has less cash available for perks
  - Management must make sure there is cash flow available in the future for paying back debt
  - If the firm does not pay back debt, creditors can force the firm into bankrupty
- Debtholders are more conservative then equityholders
  - Debtholders suffer from bad projects, but get no extra benefit from good projects.
- But there are limits to debt
  - o Debt means the firm is less liquid, which is costly.
    - Internally generated funds are the cheapest source of capital available for firms.
  - o Bankruptcy is costly.

# International comparison

- Two broad legal traditions
  - o Common law
    - Independent judges
    - Limited codification
    - US, UK
  - o Civil law
    - Politically appointed judges
    - Codification
    - France, Germany, Scandinavia
- Differences across legal systems
  - Shareholders have more protection in common law countries
  - o Correspondingly, common-law countries have a higher ratio of external capital to GDP.
  - Common-law countries have a more dispersed ownership of firms.

Note: Supplementary section to Tirole's ch. 1 is not required reading.