

Fall 2008  
International Corporate Finance I

LECTURE 10  
Changing Financial System:  
Japanese Experience

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## Main ideas of my lectures so far

- Business investment decision when:
  - There is no risk.
  - There is risk, but no information asymmetry
  - With risk and with information asymmetry
  - The principal-agent problem
- Risk and information asymmetry are important because they affect cost of capital (=discount rate).
- So that affect efficiency of investments.

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## How can we mitigate the agency problem in corporate finance?

- Or: how can we reduce information asymmetry?
- General ideas
  - Inducing transparency of financial system
  - Protecting investors
- Institutional foundations
  - Legal system
  - Accounting system

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## Legal Foundation

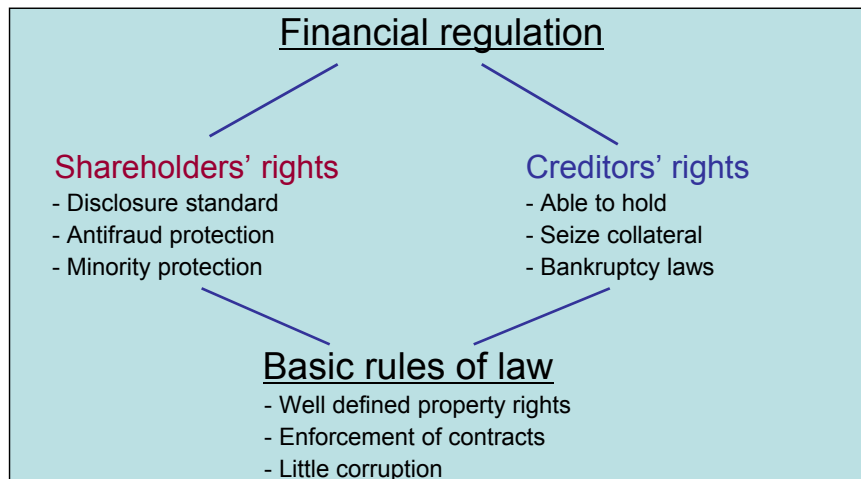
- Legal system as the foundation of financial system
  - Property rights
  - Contracts
  - Companies
  - Finance
- Properly working business law system is necessary to financial development

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# Legal system and the financial system



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- Shareholder protection
  - Accounting standard and disclosure
  - Antifraud protection
- Creditor protection
  - Property rights and collateral
  - Bankruptcy

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## Accounting system

- US: Enron, WorldCom
  - Gatekeeper's problem: cf. John Coffee
  - Accounting firms: cf. Arthur Andersen
  - Rating agencies, Financial analysts
- Japan: Daiei, Kanebo, Seibu
  - Non-performing loan problem
  - Cross-share holdings

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## Market finance or Bank-oriented finance?

- Pure market finance type is an exception in developed economies.
  - Anglo-Saxon origin countries
- Other countries more or less depend on
  - Financial intermediation (including shareholdings)
  - Concentration of ownership
    - Family business
    - Conglomerates
  - Even in developed economies (Japan, Italy, Korea)

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## Examples

- Japan: Toyota, Matsushita (Panasonic)
  - Mitsubishi, Sumitomo
  - SONY, Honda, Nissan
- Korea: Chaebols
  - Samsung, Hyundai
  - Family domination of Chaebols substantially weakened after East Asian crisis (1997-98) and intervention of IMF/World Bank.
- Italy: Fiat

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## Decline of banking-oriented finance?

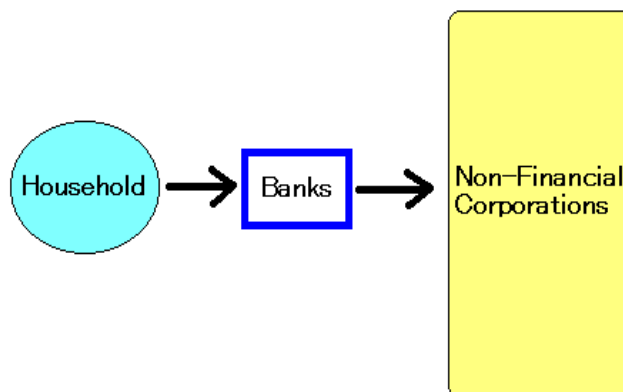
- Most of large Japanese and Korean corporations are heading toward market financing in last 10 years.
- More recently, BRICs (Brazil, Russia, India, China) depend significantly to family own businesses or government control.
- Banking-oriented finance might be a *economic growth* highway for a developing country, but could be an obstacle once its economy and financial system are developed.

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## Japanese financial system up to 1970s



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## 1970s to early 1980s

- Slow down of economic growth and oil shock
  - Less financial needs
  - Budget deficit → development of JGB market
- International firms
  - Stock issues in foreign market: e.g. SONY
- External pressure
  - US demands financial liberalization

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## The first half of 1980s

- Large firms of established reputations began to switched to market financing.
- In 1984-1983: Media talks about Tokyo as the international financial center. This caused the boom in Tokyo' commercial real estates.

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## Mid 1980s: Turning point

- 1985: Plaza agreement
  - The dollar had been overvalued in 1980s
  - Following Plaza agreement among G5 countries, Japanese yen began to decline very rapidly from the second half of 1985.
  - Oil price declined too.
- Serious recession in 1986
- Bank of Japan lowered interest rate.

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## Monetary expansion and the Bubble economy

- Speculation in asset markets: real estate prices
  - Land prices up
    - Collateral value of real estates goes up
    - Bank lending increase
    - Equip investments increase
    - Demand for real estates goes up
    - Further increase in land prices
- Key elements of this story
  - Collateral lending
  - Continuing real estate price increase in post war period

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## Other aspects

- Stock market boom: the cost of equity finance declined
  - More firms switched from bank borrowings to market financing
  - Those who did not want to increase their debts issued warrants and convertibles, as backdoor equity financing
- Banks lost their borrowers
  - They have to find new borrowers
  - Real estates, construction, resort business and etc.
    - New borrowers. Banks had have very few previous experience in screening and monitoring.

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## Convertibles, Warrants

- **Convertible bonds:** Bonds that can be converted into stocks
  - Issued as corporate bonds. Latter, it can be converted into stocks at the predetermined prices.
  - If they were not converted, will be repaid as ordinary corporate bonds
- **Warrants:** Bonds with the call options on stocks
  - Corporate bond part will remain in anyway.

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## Why do firms issue convertibles?

- **Jeremy Stein (1992): Convertibles as Backdoor Equity Financing**
  - If the firm continues to grow and its stock price continues to increase, convertibles will be converted into stocks. Then, there will be no cost of debt financing (bankruptcy cost).
- **Three types of firms: Bad, Medium, Good**

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## Financing strategy of each type

- **Bad:**
  - Convertibles will not be converted ex post. So issuing convertibles will simply increase total amount of debts. So choose equity issue.
- **Medium:**
  - Convertibles will be converted and the cost of debt financing will be lower. So issue convertibles.
- **Good**
  - Very low cost of debt financing. So issue straight debts.

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## Implications of the model

- Issuing convertibles has the advantages for:
  - Rapidly growing firm
    - ← Needs funds & high expected future cash flows
  - Relatively small and unknown
  - High debt/equity ratio
    - ← Debt financing is costly

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## MCI case: 1978—1983

Based on HBS case 386-110 by Bruce Greenwald

- MCI Communication Corporation
  - Long-distance phone company
  - IPO in 1972: \$ 30 million
  - Negative profits in next several years
- But, the MCI's business itself was rapidly growing
  - Total assets: \$ 161 million in 1978, \$2,071 million in 1983.

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## Capital structure as of 1978

- March 1978: total debt \$ 173 million
  - Book value of equity: \$ 30 million
  - Market value of equity: \$ 40 million
  - So MCI was in a typical 'debt overhang' situation
  - Too high cost of debt financing
  - Want to avoid equity financing too

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## Issues of convertibles (1)

- December 1978
  - Could not get exemption interest payment, because it had not paid corporate tax.
  - Issued convertible preferred stock: \$ 28 million
- September 1979: \$ 67.5 million
- October 1980: \$ 49.5 million
- All three issues were latter converted into ordinary stocks.

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## Issues of convertibles (2)

- Subordinate debts
  - July 1980: \$ 52.5 million
  - April 1981: \$ 105.9 million
- Convertible subordinate debts
  - August 1981: \$ 100 million
  - May 1982: \$ 250 million
  - Both issues were latter converted subordinate debts.

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## Issues of convertibles (3)

- March 1983: \$ 400 million of convertible subordinate debts
- July 1983: \$1 billion of synthetic convertibles = straight debts + warrants
- Competition with AT&T became stiff. Profits and stock price stagnated. Neither issues were converted:
  - In June 1986, MCI sold 18% of its stocks to IBM
  - December 1986: Significant restructuring, including major layoffs.

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## Issues of convertibles by Japanese firms

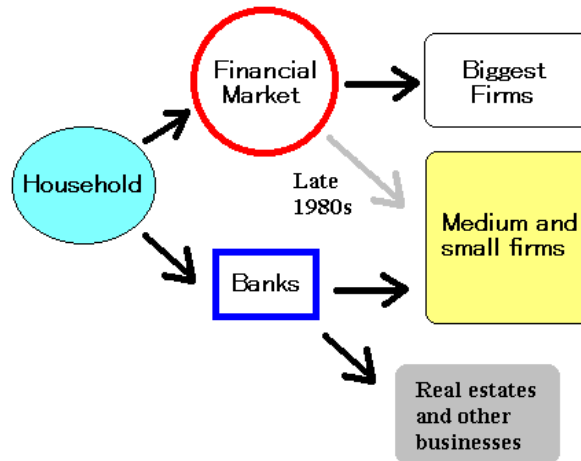
- 1970s to early 1980年: Significant deregulation in corporate financing
  - 1<sup>st</sup> half of 1980s: Large firms issued stocks, warrants, and convertibles in foreign markets (mainly US).
  - 2nd half of 1980s: Many firms issued stocks, warrants, and convertibles in domestic market.
  - Most of them were issued in 1988 and 1989
- 1990s
  - Straight debts and CPs have become dominant
  - Issues of warrants and convertibles have negative impacts on stock prices

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## Japanese financial system in 1980s and in early 1990s



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## Monetary tightening and the burst of the bubble

- In 1989, BoJ raised interest rate, stating that they were “preparing for potential inflation”
  - Several further interest rate hikes followed.
  - Tokyo stock market had peaked at the end of 1989, and then began to decline.
  - Land prices began to decline little latter.
  - The economy continued to grow until 1992.

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## Prolonged recessions

- Land prices go down
  - Collateral value of real estates goes down
- The cycle began to work in the opposite way
- So called 'non-performing problem'
- Political economy
  - LDP traditionally has its roots in agricultural areas and small-medium size firms.
  - Agricultural cooperative and credit cooperative: Jusen problem
  - Ministry of Finance: the convoy system
  - Deposit insurance

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