Fall 2008
International Corporate Finance I

LECTURE 9
Economic Growth and Finance

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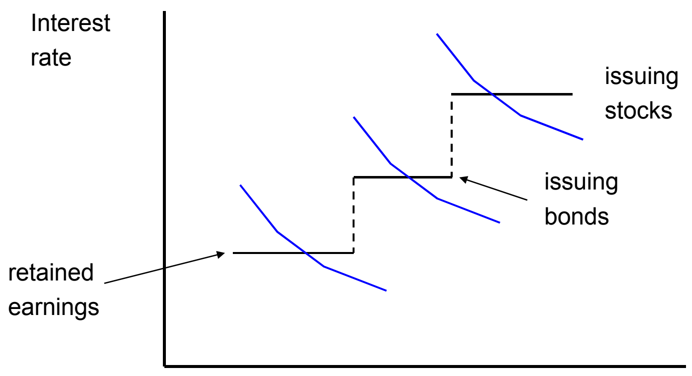
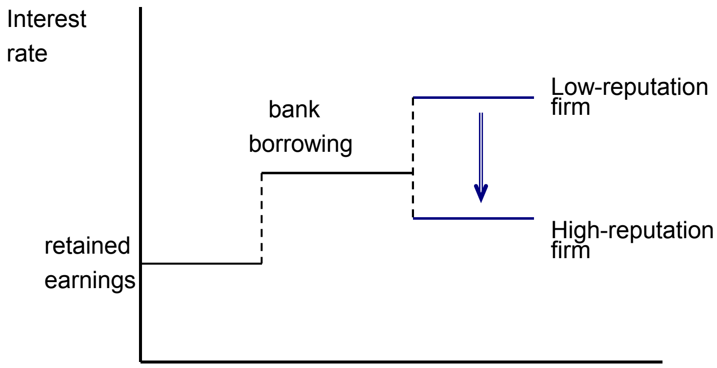
Review from the last week: Pecking order for the firm



Choice between bond issue or bank borrowing



Dynamics of the firm's financing decision

- A firm will go to market when its reputation is established
- Entrepreneurial firm starts with
  - own money
  - bank borrowing; venture capital
  - IPO: becomes a public firm
  - Issue corporate bonds: this is already very large firm

Empirical evidence on benefits of financial intermediaries: HKS

- Hoshi, Kashyap, and Scharfsetin (1991,QJE), hence HKS.
- Japanese "firm groups" (Keiretsu)
- Very strong long-term relationship with groups' main banks
- HKS: Analyzed investment behaviors of group firms and non-group firms
- Non-group firms' investments are more sensitive to current cash flows.

Investment equation

- Tobin's q: MK/BK
  - MK: Market valuation of the firm
  - BK: Accounting value ("book" value) of the firm's installed capital.
  - When Tobin's q is higher than one, the firm should invest

$$Investment = \alpha + \beta_1 \cdot Cash + \beta_2 \cdot Tobin's Q + \varepsilon$$

HKS's Table II

	Group Firms	Independent Firms
Cash flow	0.041 (0.033)	0.501 (0.084)
Short-term securities	0.061 (0.024)	0.512 (0.085)
Tobin's q	0.007 (0.03)	0.007 (0.004)

Implications

- Remember, the firm will prefer retained earnings most, as the source of its investment.
- The second will be either corporate bonds or bank borrowings
- Business group affiliation is mostly fixed. In other words, it is exogenous to firms.
- HKS's finiding: Group affiliations (=strong ties with main banks) will stabilize firms' investment activities.

Important reservations

- HKS only looked at the “benefits” of firm’s long-term relationship with bank and business group affiliations.
  - HKS themselves stress this point in their paper
- There might be costs.
  - Group affiliation gone bad: Mitsubishi motors
  - Excellent independent firms: Toyota, Honda

Economic development and financial development: Japanese experience

Economic development

- Production function: Y=F(K,L)
  - I: investment
  - K: capital stock
  - Y: output / GDP
  - I → K → Y
- Financial needs for equip investments

Economic growth and financial development

- Economic growth will cause financial development too
  - Income growth → saving growth
  - Saving growth induces the development of financial system
- It is not obvious whether:
  - financial development → economic growth
  - Or: economic growth → financial development

Financing is difficult at the initial stage of economic development

- Remember our discussions on financial intermediation
  - Without reputation, raising funds in market will be difficult
  - In the country in which economic institutions are established, the dependence to bank financing will be low.

Financing countries' "take off"

- Public financial intervention
  - Development bank
    - e.g. Japan development bank, Japan Import-export bank
    - Public financial institutions send "signals"
      - Industrial policy
  - International intervention, ODA
    - World bank: e.g. the bullet train in Japan
    - ADBI, JICA

Solving reputation problem by relationship finance

- Long-term relationship with a bank
- Business groups
- Japan up to 1960s
  - Six large business groups (Mitsubishi, Mitsui, Sumitomo, Fuyo,….)
  - Vertical business groups: Toyota, Nissan
- Korea, India

Benefits of relationship finance

- Lowers monitoring cost
- Mitigate moral hazard of borrowers
- Reduce adverse selection
- Reduce the costs of financial distress
- Induce efficient resource (re)allocation within the business group
  - Internal capital market

Reducing the costs of financial distress

- Restructuring of Toyo Kogyo (Mazda): classic case
  - Around the first oil shock (early 1970s): decline of export and over production
  - Kohei Matsuda was third president from the founding family
- Restructuring led by Sumitomo
  - In 1974, Sumitomo sent two officers
  - Announced new loans: crucial to maintain other creditors' confidence
  - Kohei Matsuda was finally pushed out from management in 1977

Costs of relationship finance

- Bank side
  - Empire building motive: Choose size rather than profits
  - Discourage innovation
  - Sometimes have to rescue inefficient firms
- Firms
  - Higher funding costs
  - Too much debt financing
  - Discourage risk-taking

Japanese experience

- Meiji revolution
  - Development of business system in *Edo* era
  - Introduction of Western legal system
- War time finance
  - Resolution of *Zaibatsu* (Prewar family conglomerates)
  - Relationship banking (Business groups)

Post war Japanese experience

- Government intervention
  - Industrial policy
  - JDB, EXIM
  - Postal saving
  - Fiscal Investment Loan Program
  - Interest rate control
  - MoF controlled market finance

Dependence to bank borrowing

	Financial Markets			Borrowed Funds		
Year	Total	Equity	Domestic bonds	Total	Private	Public
1954	21.1 (%)	17.0	4.1	78.9 (%)	70.0	8.9
1960	23.9	19.2	4.7	76.1	68.9	7.2
1965	22.5	17.4	4.9	77.5	70.2	7.3
1970	17.4	12.9	4.3	83.9	76.4	7.4
1975	13.6	9.0	4.4	86.4	78.4	8.0

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

Decline of banking

	Financial Markets			Borrowed Funds		
Year	Total	Equity	Domestic bonds	Total	Private	Public
1975	13.6 (%)	9.0	4.4	86.4 (%)	78.4	8.0
1980	13.3	7.9	4.6	86.7	77.6	9.1
1985	17.0	9.9	5.1	83.0	74.7	8.3
1990	23.5	10.4	6.1	76.5	66.6	9.9
1995	22.2	9.5	8.2	77.8	64.6	13.2

Public intervention in allocation of credit

- Background
  - Wartime finance: no market financing
  - Resolution of Zaibatsu (large shareholders)

  - Catching up process in economic development → lack of capital
  - So called “industrial policy” by MITI
    - Target industries

High growth era (50s to early 70s)

- Japan Development Bank
  - Financing of industrial infrastructure: Railroads, Highways, Bridges, Major roads
  - Direct financing of target industries: “signaling” effect. cf. MITI’S industrial policy
- Japan EXIM
  - Promotion of Japanese exports.
  - Credibility of Japanese firms or financial institutions were low in abroad.

Did public intervention work in high growth era?

- Public guidance of investment– mixed answer
  - Yes: MITI, Aoki
  - No: M.Fukao, D.Weinstein
    - Targeted industries or moving target?
    - Direct evidence suggests government guidance is ineffective, especially in rescuing declining industries.
    - Profits of keiretsu firms tend to be lower than independent firms.
- Debate will continue.
- But, some well-known assessments such as *East Asian Miracle* (WB) apparently overemphasize the importance of government intervention in Japanese (and perhaps East Asian) development.

From mid 70s: Industrial structural change

- Government attempts to rescue declining industries generally failed.
  - Coal mining
  - Textiles
- Social costs and benefits of slow adjustment process
  - unemployment

Current status of public financial institutions (1)

- No active role in “promotion of industries”
  - General importance of FI has declined.
  - Financial innovations. New types of financial institutions such as venture capital.
  - Internationalization of financial market.
  - Public FIs such as DBJ are not very good at picking winning industries.

Current status of public financial institutions (2)

- "Buffering" declining industries.
- Substituting when private banks withdrew funds for their own financial problems.
  - But, is it efficient? Or politically motivated move?
  - Slowing structural change?
- New Move: Restructuring Business