Corporate Finance and Human Resource Management: Evidence from Changing Corporate Governance in Japan

Masahiro Abe, Dokkyo University and RIETI
Takeo Hoshi, IR/PS (UCSD) and RIETI
Corporate Governance

- Stakeholder view of corporate governance
- Design of institutions that induce or force management to internalize the welfare of stakeholders (Tirole 2001)
- Set of self-enforcing rules that regulates action choices of the players (manager, investor and worker) contingent on evolving states (Aoki)
- Whether firms are operated in the interests of stakeholders, including employees and customers as well as shareholders (Allen and Gale)
Corporate governance has various aspects, including:

- Corporate finance
- Human resources management
- Customer relationship
Complemantarity in Corporate Governance

- As Masahiko Aoki has pointed out, the aspects of corporate governance may be complementary to each other.
  - For example,
    - Corporate financing and human resource management
    - Corporate financing and customer relationship
Corporate finance and human resource management: complementarity

- Bank loans may be easier to be renegotiated under financial distress (compared with bond financing)
- Conducive to human resource management that depends on long-term relationship (e.g., investment in firm specific skills encouraged by seniority wages)
“Japanese” corporate governance

- Fits the stakeholder view
- Characterized by long-term relationship with:
  - Main banks
  - Stable shareholders
  - Lifetime employees
  - Keiretsu customers/suppliers
- But, has been changing since the late 1970s
Changes in corporate financing

- Following the financial deregulation from the late 1970s
- Reduced dependence on bank loans
- Increased dependence on market (bond) financing
- (more recently) declining cross-shareholdings
- Increased presence of foreign ownership
Bank Debt / Total Assets for large manufacturing firms (%)
Unwinding cross-shareholding (%)

Average proportion of shares in a company held by the companies whose shares are also held by the company (NLI Research Institute)
Foreign ownership (% of market value, Tokyo Stock Exchange)
Changes in Human Resource Management

- The lifetime employment, the seniority wage system, and firm specific training, characterized the “Japanese” human resource management
- "Japanese HRM system" have been changing since the early 90s
- For example, according to the survey conducted by Japan Institute of Labour in 1996, more companies plan to weaken the lifetime employment and seniority wage system
Changes in Human Resource Management

- Increasing labor market mobility (decline of lifetime employment system)
  - Faster employment adjustment
  - Growing number of part-timers
- Increased adoption of job-based pay scale (decline of seniority wages)
- Expansion of salary gap
# Speed of employment adjustment

<table>
<thead>
<tr>
<th>Period</th>
<th>Speed of employment adjustment</th>
<th># of periods to reach the optimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977II - 85II</td>
<td>0.199</td>
<td>5</td>
</tr>
<tr>
<td>85III - 91I</td>
<td>0.197</td>
<td>5.1</td>
</tr>
<tr>
<td>91II - 2000IV</td>
<td>0.213</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Growing proportion of part-time workers (% of all employees)
### Proportion of firms that have introduced job-based pay scales

<table>
<thead>
<tr>
<th>Year</th>
<th>type of worker</th>
<th>% of firms that have job-based pay scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>All employees</td>
<td>28.3</td>
</tr>
<tr>
<td>1989</td>
<td>All employees</td>
<td>24.5</td>
</tr>
<tr>
<td>1998</td>
<td>Managers</td>
<td>48.6</td>
</tr>
<tr>
<td></td>
<td>Non-managers</td>
<td>47.9</td>
</tr>
</tbody>
</table>
Among the firms with salary structures that reflect individual performances

<table>
<thead>
<tr>
<th></th>
<th>In the last 5 years</th>
<th>Increased the salary range</th>
<th>Reduced the salary range</th>
</tr>
</thead>
<tbody>
<tr>
<td>For managers</td>
<td></td>
<td>41.3%</td>
<td>8.4%</td>
</tr>
<tr>
<td>For non-managers</td>
<td></td>
<td>39.5%</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>In the next 3 years</th>
<th>Plan to increase the salary range</th>
<th>Plan to reduce the salary range</th>
</tr>
</thead>
<tbody>
<tr>
<td>For managers</td>
<td></td>
<td>51.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>For non-managers</td>
<td></td>
<td>49.2%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Source: Survey on Employment Condition (MHLW)
Are these changes linked?

- This project proposes to examine the relation between the change in corporate financing and the change in human resource management for Japanese firms.
- We seek the evidence for complementarity between financial aspect of corporate governance and human resource management.
- Note: we study the complementarity at the firm level, not at the system level.
Data

1. DBJ Corporate Financial Data (Development Bank of Japan)
Survey on the Human Resource Management Systems

- Conducted in spring 2001
- Sample includes:
  1. 3440 listed companies
  2. 352 large but unlisted companies
  3. 2582 medium sized companies that employ more than 100 employees
- 621 companies returned the survey
Matching data

- Corporate financial data covers all non-financial listed firms
- Corporate financial data are matched with the human resource management data
- For 130 companies, we have data in both databases
Preliminary results

- Some evidence that firms that deviate from lifetime employment practice tend to have low dependence on bank financing and/or to be owned more by foreign investors.
- Some evidence that firms that value individual performance (rather than group performance) of the employees (thus deviating from seniority wages) tend to have low dependence on bank financing and/or to be owned more by foreign investors.
Flex-time system

- Firms with “flex-time” system tend to have low bank dependence and high foreign ownership

<table>
<thead>
<tr>
<th></th>
<th>Has flex-time (94 firms)</th>
<th>No flex-time (83 firms)</th>
<th>P-value for the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank loan / total debt</td>
<td>0.22</td>
<td>0.28</td>
<td>0.0406</td>
</tr>
<tr>
<td>% owned by foreigners</td>
<td>7.74</td>
<td>3.20</td>
<td>0.0003</td>
</tr>
</tbody>
</table>
Awards for continued services

- Firms that award the employees with long continued services tend to have low foreign ownership

<table>
<thead>
<tr>
<th></th>
<th>Has awards (137 firms)</th>
<th>No awards (40 firms)</th>
<th>P-value for the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>% owned by foreigners</td>
<td>4.92</td>
<td>7.98</td>
<td>0.0446</td>
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</tbody>
</table>
Financial rewards for inventions

- Firms that give financial rewards to individual employees who come up with inventions tend to have low bank dependence and high foreign ownership.

<table>
<thead>
<tr>
<th></th>
<th>Has rewards (69 firms)</th>
<th>No rewards (108 firms)</th>
<th>P-value for the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank loan / total debt</td>
<td>0.20</td>
<td>0.29</td>
<td>0.0037</td>
</tr>
<tr>
<td>% owned by foreigners</td>
<td>7.21</td>
<td>4.59</td>
<td>0.0448</td>
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</table>
(near) Future agenda

- Suggestive but inconclusive evidence so far
- Examination with more controls (e.g., size, industry)
- Try to find the relation between “changes”