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# LES CONFÉRENCES DE LA CHAIRE

Conférence du Professeur

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Tokyo

# « Pratiques managériales et performance des entreprises : une comparaison Japon – Corée du Sud »

15 mars 2010

Faculté Jean Monnet

Salle Georges Vedel

16h-18h

# Pratiques managériales et performance des enterprises: une comparaison Japon-Corée du Sud

## Management Practices and Firm Performance in Japanese and Korean Firms -An Empirical Study Using Interview Surveys-

**Presented at the seminar in Université Paris-Sud 11**
**March 15, 2010**

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# Contents

# 1. Motivation (1)

- **IT revolution→Productivity growth in the US after the late 1990s.**
- **Productivity gap between the US and other developed countries remains, although other countries also stimulate IT investment.**
- **To improve productivity, we should accumulate not only IT assets but also intangible assets (Economic Report of the President, 2007 stated 'Only when they made intangible investments to complement their IT investments did productivity growth really take off').**

**Growth Accounting in the Advanced Countries**

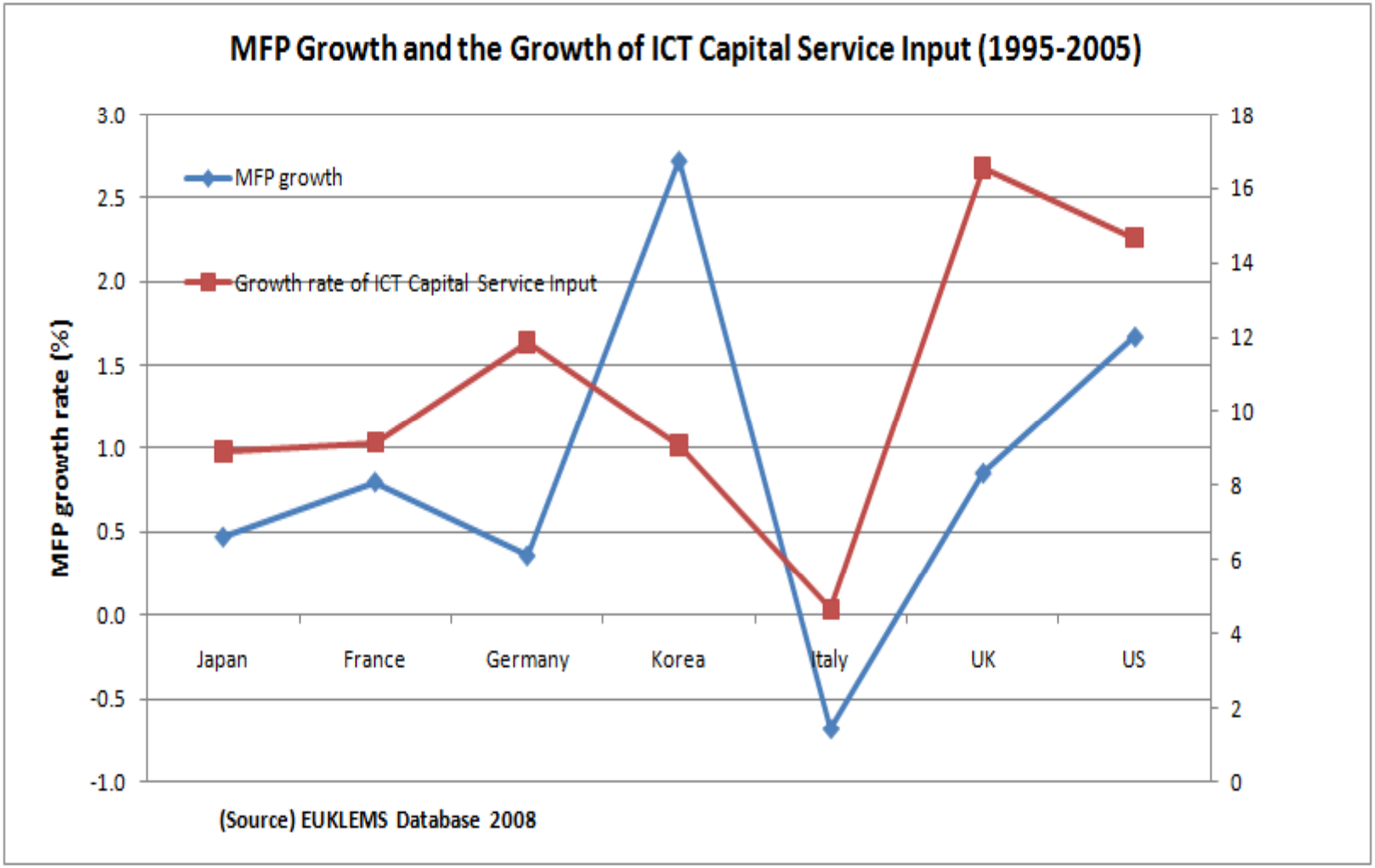
（%）

| Country | Value Added | Labor Service | Capital Service | MFP Growth |
|---|---|---|---|---|
| | 1980-95 | | | |
| France | 1.8 | -0.1 | 0.7 | 1.2 |
| Germany | 1.9 | -0.2 | 1.2 | 0.8 |
| Italy | 1.9 | 0.3 | 0.8 | 0.8 |
| Japan | 3.9 | 0.4 | 2.0 | 1.5 |
| Korea | 9.5 | 2.2 | 5.6 | 1.8 |
| UK | 2.5 | -0.3 | 1.2 | 1.5 |
| US | 3.0 | 1.2 | 1.1 | 0.7 |
| | 1995-2007 | | | |
| France | 2.1 | 0.7 | 0.8 | 0.6 |
| Germany | 1.6 | -0.1 | 1.0 | 0.7 |
| Italy | 1.4 | 0.8 | 0.9 | -0.3 |
| Japan* | 1.2 | 0.0 | 1.1 | 0.1 |
| Korea** | 4.8 | 0.7 | 5.1 | -0.9 |
| UK | 2.7 | 1.0 | 1.3 | 0.4 |
| US | 3.0 | 0.9 | 1.5 | 0.6 |

**(Source) EU KLEMS Database, November, 2009.**

*** Growth accounting in Japan is measured from 1995 to 2006**

**** Growth accounting in Korea is measured from 1995 to 2005**


MFP Growth and the Growth of ICT Capital Service Input (1995-2005)
MFP growth rate (%)
MFP growth
Growth rate of ICT Capital Service Input
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
18
16
14
12
10
8
6
4
2
0
Japan
France
Germany
Korea
Italy
UK
US
(Source) EUKLEMS Database 2008

# 1. Motivation (2)

- **Measurement in aggregate intangible investment: Corrado, Hulten and Sichel (2006, 2009) , Marrano, Haskel and Wallis (2009) , Hao, Manole, and van Ark (2008) , Fukao et al. (2009).**
- **While the share of innovative property in Japan is the highest among developed countries, the share of economic competencies, which includes expenses in organizational reforms and human resource management in Japan is smaller than the US, the UK, France, and the Netherlands .**

**International comparison in intangible investment/GDP ratio**

| | | Total investment | Computerized information | Innovative property | Economic competencies |
|---|---|---|---|---|---|
| Japan | All industries (2000-05) | 11.1 | 2.2 | 6.0 | 2.9 |
| | Manufacturing (2000-05) | 16.6 | 2.1 | 11.5 | 3.0 |
| | Service (2000-05) | 9.2 | 2.4 | 3.6 | 3.2 |
| Australia | Market economy (2005-06) | 9.6 | 1.3 | 3.6 | 4.7 |
| Canada | All industries (2005) | 9.8 | 1.0 | 5.0 | 3.8 |
| France | Market economy (2004) | 8.3 | 0.9 | 3.1 | 4.4 |
| Germany | Market economy (2004) | 7.1 | 0.8 | 3.5 | 2.9 |
| Italy | Market economy (2004) | 5.2 | 0.7 | 2.3 | 2.2 |
| Netherlands | All industries (2005) | 8.4 | 1.4 | 1.8 | 5.2 |
| Spain | Market economy (2004) | 5.2 | 0.8 | 2.5 | 2.0 |
| UK | Market economy (2004) | 13.0 | 2.1 | 3.9 | 6.9 |
| US | Non-farm business (2000-2003) | 13.8 | 1.9 | 5.3 | 6.6 |

(Source) Barnes and McClue (2008), CHS (2009), Fukao et al (2009), and MHW(2009)

# 1. Motivation (4)

- **However, studies on the measurement in aggregate intangible investment implies that it is difficult to measure expenditures in firm-specific resources.**
- **To overcome this difficulty, many researchers focus on the measurement in intangibles at the firm level and examine their effects on firm performance.**

# 2. A Brief History of Studies on Intangible Assets at the Firm Level (1)

- **The main stream researches in economics and management science has been interrelated to studies on intangibles within the firm.**
- **Coase (1937): Emphasizes on the role of the firm in the market economy.**
- **Penrose (1959): Argues that firm growth is supported by internal resources within the firm.**
- **Williamson (1975): Proposes the significance in organizational design within a firm.→Tirole (1988), and Milgrom and Roberts (1992)**
- **Lucas(1978): Shows management abilities as a production factor→organizational capital**
- **Aoki (1988): Addresses that firm organization reflects several features in the labor and financial markets in a country.**

# 2. A Brief History of Studies on Intangible Assets at the Firm Level (2)

- **On an empirical basis, researchers examined the effects of R&D expenditures on productivity.**
- **Since the 1990s, they have extended their empirical research on intangible assets to effects of other intangible assets such as human capital and organizational reform on firm performance.**

## 3. Bloom and Van Reenen's Work on the Effects of Management Practices on Firm Performance (1)

- **Bloom and Van Reenen (2007) conducted telephone interview surveys with respect to organizational reforms and human resource management in 735 manufacturing firms in France, Germany, the UK, and the US. The response rate was 54%.**
- **18 interview questions were grouped into four areas: operations (3 questions), monitoring (5 questions), targets (5 questions) and incentives (5 questions).**

## 3. Bloom and Van Reenen's Work on the Effects of Management Practices on Firm Performance (2)

- **Based on their survey, they constructed scores indicating management practices.**
- **They estimated a production function including the management score and examined their effects on firm performance. In addition, they looked for what kind of factors improved management practices.**

## 3. Bloom and Van Reenen's Work on the Effects of Management Practices on Firm Performance (3)

- **Main conclusions of their paper**

**(1)They found significant cross-country differences in management practices in the sense that US firms are better managed than firms in other countries.**

**(2)High management scores are related to better firm performance.**

**(3)Inferior management practices appeared in firms in low competitive environments and family-owned firms.**

# 4. Interview Surveys on Management Practices in Japan and Korea (1)

- **Following Bloom and Van Reenen (2007), we conducted interview surveys with respect to organizational reforms and human resource management in Japanese and Korean firms.**
- **Based on the results of our interview surveys, we constructed a measure evaluating the management practices of the firm and examine the effects of management practices on firm performance.**
- **Related literatures: Kurokawa and Minetaki (2006), Kanamori and Motohashi (2006)→These studies examined the effects of management in ICT section within a firm on firm performance.**

# 4. Interview Surveys on Management Practices in Japan and Korea (2)

- **Although our interview questions are based on Bloom and Van Reenen (2007), we excluded interview questions on product management, because our survey covered not only manufacturing firms but also firms in the service sector.**
- **We added questions regarding informal meetings, on the job training and recent organizational reforms. All questions are shown in Appendix 1 in Miyagawa et, al. (2010).**
- **We classified our interview questions into two parts: Questions 1 to 4 are related to organizational management and Questions 5 to 13 are related to human resource management.**

# 4. Interview Surveys on Management Practices in Japan and Korea (3)

- **Each main question was comprised of three questions. If the firm manager answers 'no' to the first question→the score is 1for this main question and we move to the next main question. If he answers 'yes' to the first question and answers 'no' to the second question →the score is 2 for the main question and we move to the next main question. If he answers 'yes' to the second question and answers 'no' to the third question → the score is 3 for the main question and we move to the next main question. If he answers 'yes' to the third question → the score is 4 for the main question.**
- **As for organizational management (Questions 1 to 4), a high score suggests that the organization is more transparent and each employee has the same information with respect to firm performances.**
- **As for human resource management (Questions 5 to 13), a high score reflects more flexible human resource management. Firms with high scores with respect to human capital swiftly promote employees who show good performance and place more value on improvements in human capital through earnest job training.**

# Examples of our interview questions

**2. Implementation of organizational goals**

2 **Are there specific numerical goals on multiple levels that go beyond being just a vision or a slogan, regardless of the level of the goals (such as company-wide or divisional or sectional goals)?**

3 **Are the goals of each division adjusted in each division to ensure consistency between divisions?**

4 **Is consistency maintained between these goals and the goals of the management principles or of the long-term company-wide goals?**

**6. Schemes to improve motivation**

2 **Are there any schemes other than promotion-related or pay-related systems to increase the motivation of the employees? Please give an example.**

3 **Is that scheme used on an institutional basis throughout the company?**

4 **Do you monitor when the employees' motivation, retention rate or job performance increases as a result of such scheme?**

# 4. Interview Surveys on Management Practices in Japan and Korea (4)

- **Our survey focused on four industries in the manufacturing sector (Electric machinery, Information and communication equipment , Motor vehicle , and Precision machinery) and three industries in the service sector (Internet-based services and information services, Media activities, and Retail service).**
- **In Japan, we obtained our data from 573 firms. As the total sample was 1086 firms, the response rate in Japan was 52.8%. In Korea, we obtained data from 350 firms of the sample 591 firms.**
- **The interview surveys were conducted from February to October, 2008 in Japan, and from May to July, 2008 in Korea.**

# 5. Comparison of Management Practices between Japan and Korea (1)

- **The distributions of surveyed firms by industry: In Japan, the share of manufacturing firms was 34%, the share of firms in information related industries was 26%, and the share of retail firms was 40%. On the other hand, the share of manufacturing firms was 85% in Korea.**
- **The distributions of surveyed firms by employee size: In Japan, the number of large sized firms is almost equal to that of small and medium sized firms. On the other hand, the share of small and medium sized firms in the entire sample firms in Korea was 74%.**

**The Distribution of Firms in Japan and Korea by Industry**

| | Japan | | Korea | |
|---|---|---|---|---|
| Industry | Number of Firms | | Number of Firms | |
| Electric machinery | 44 | ( 7.7% ) | 51 | ( 14.6% ) |
| Information and communication machinery | 73 | ( 12.7% ) | 96 | ( 27.4% ) |
| Motor vehicles | 52 | ( 9.1% ) | 140 | ( 40.0% ) |
| Precision machinery | 25 | ( 4.4% ) | 10 | ( 2.9% ) |
| Internet-based services | 135 | ( 23.6% ) | 15 | ( 4.3% ) |
| Information service | | | 11 | ( 3.1% ) |
| Media activities | 14 | ( 2.4% ) | 9 | ( 2.6% ) |
| Retail | 230 | ( 40.1% ) | 18 | ( 5.1% ) |
| Total | 573 | | 350 | |

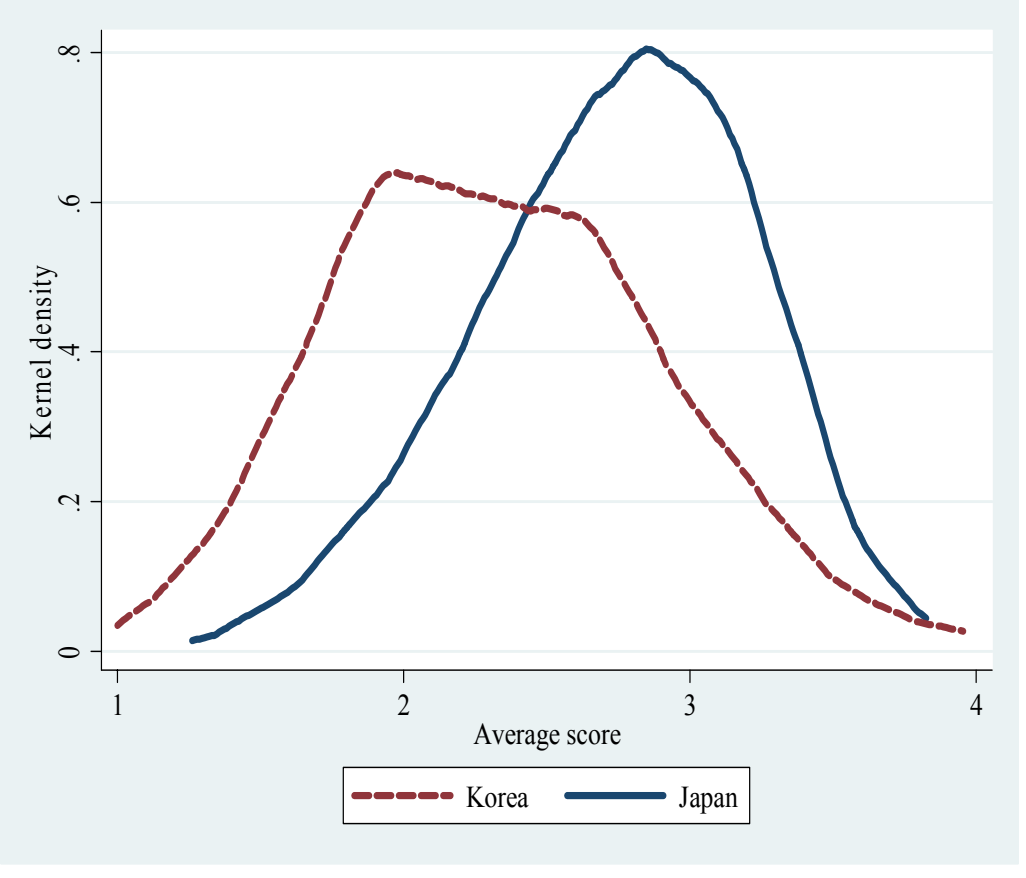
**The Distribution of Firms in Japan and Korea by Number of Employees**

| Industry | Japan | | | | | | Korea | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Employees | | | | | Total | Number of Employees | | | | | |
| | 50-99 | 100-299 | 300-499 | 500-999 | 1000- | | 50-99 | 100-299 | 300-499 | 500-999 | 1000- | Total |
| Manufacturing | 25 | 63 | 31 | 32 | 43 | 194 | 42 | 180 | 31 | 30 | 14 | 297 |
| Information related services | 43 | 59 | 13 | 17 | 17 | 149 | 5 | 22 | 3 | 0 | 5 | 35 |
| Retail | 43 | 80 | 42 | 40 | 25 | 230 | 0 | 11 | 1 | 0 | 6 | 18 |
| Total | 111 | 202 | 86 | 89 | 85 | 573 | 47 | 213 | 35 | 30 | 25 | 350 |

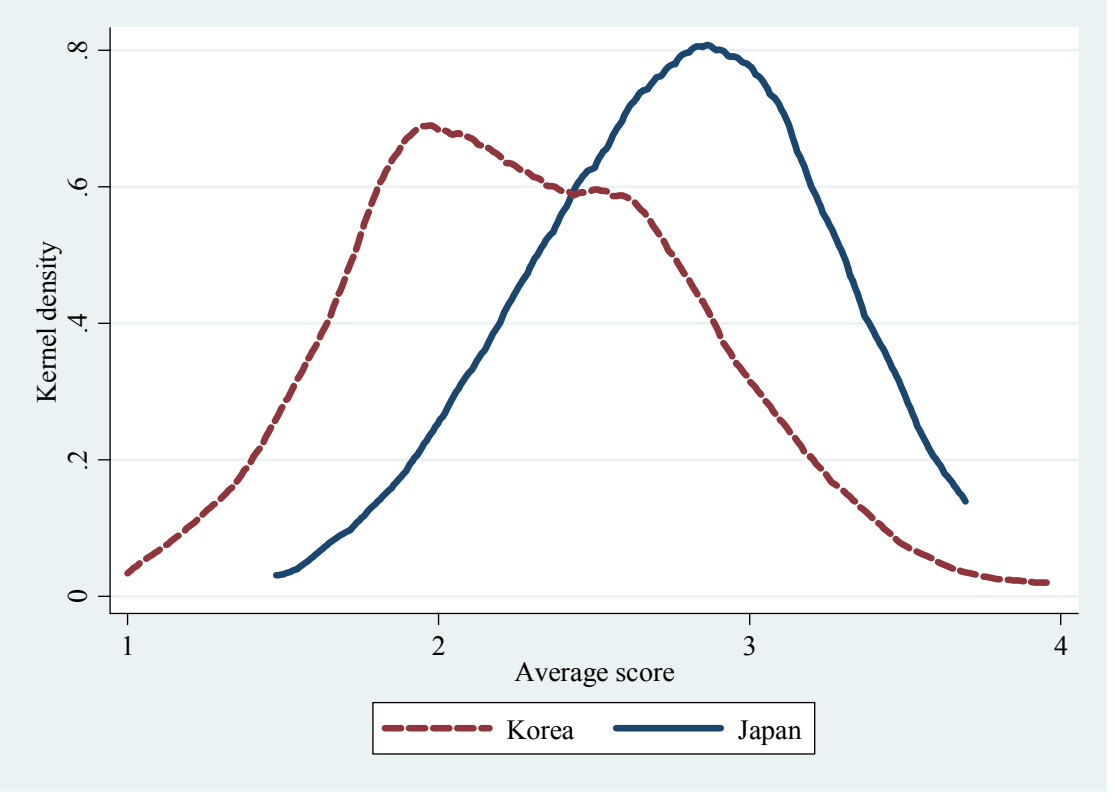
# 5. Comparison of Management Practices between Japan and Korea (2)

- **The distribution of average scores：The mean in the distribution of average scores in Japan (2.73) is higher than that in Korea (2.33). However, the difference between the two means is not significant.**
- **The distribution of average scores (Manufacturing sector): The mean in the distribution of average scores in Japan (2.77) is also higher than that in Korea (2.29).**

# Distribution of Management Scores (All firms)



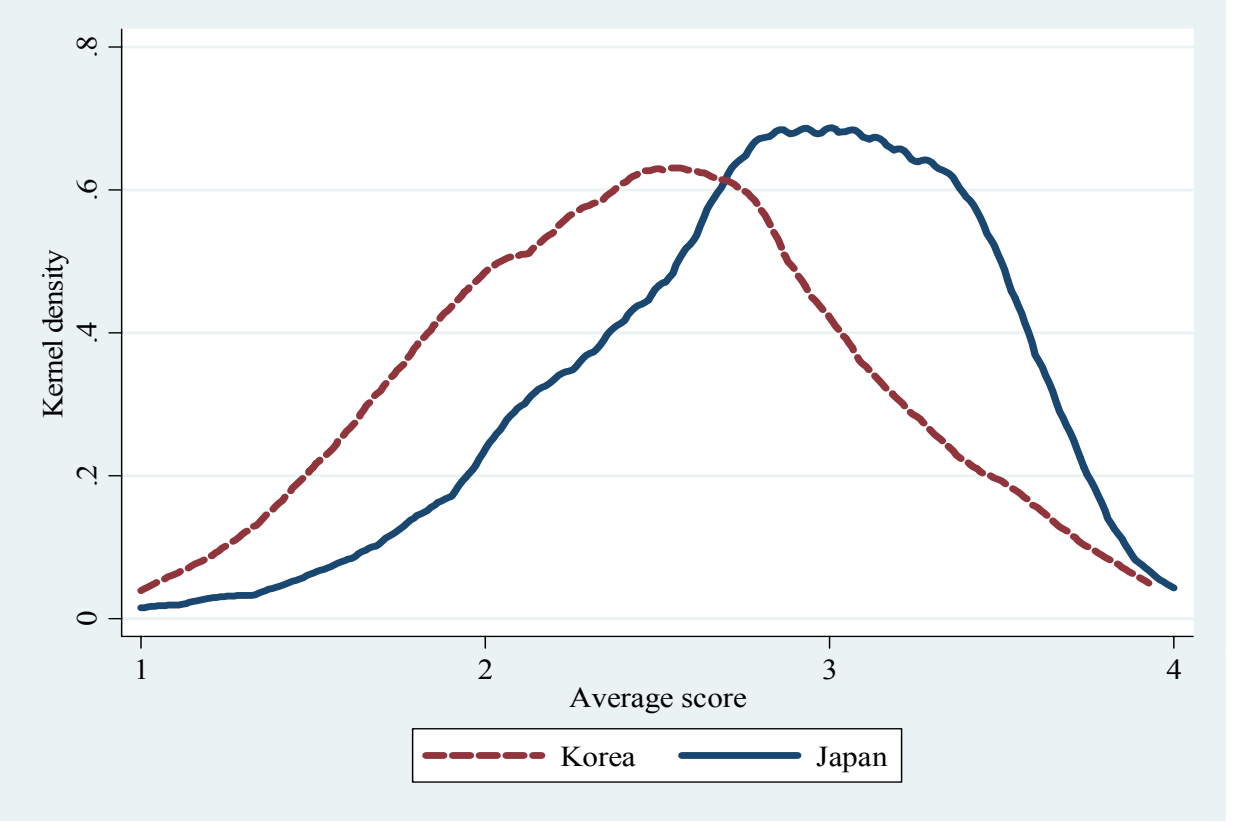
# Distribution of Management Scores (Manufacturing firms)



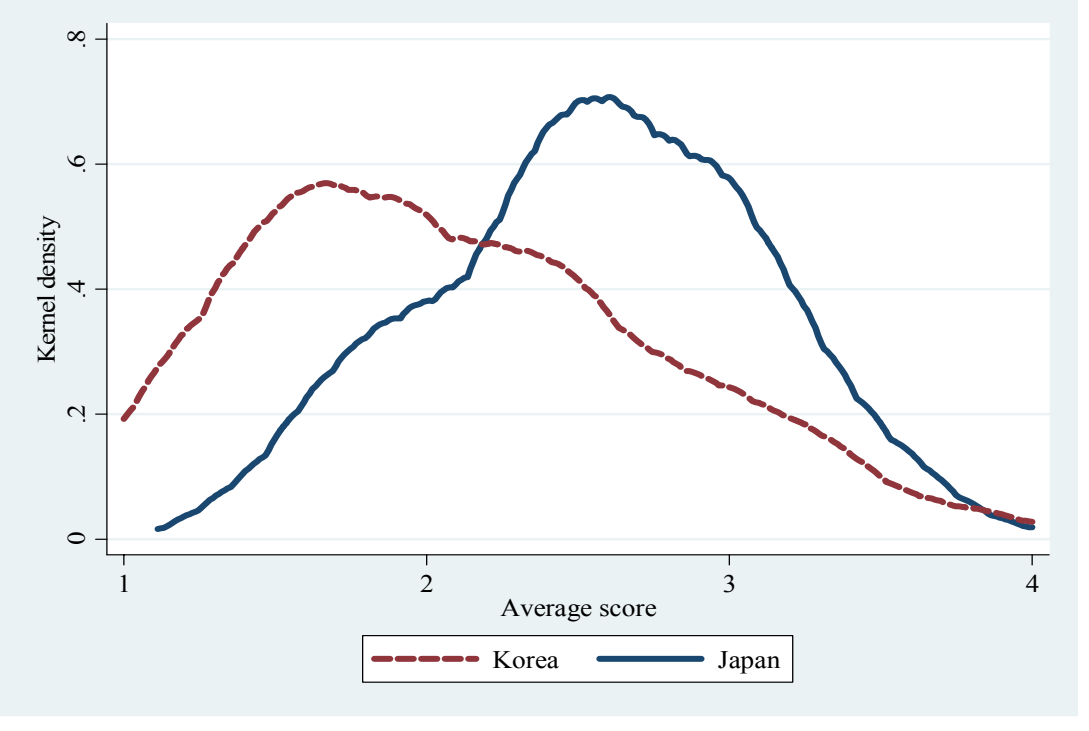
# 5. Comparison of Management Practices between Japan and Korea (3)

- **The distribution of average scores (organizational management): The mean in the distribution of average scores in Japan (2.85) is also higher than that in Korea (2.47).**
- **The distribution of average scores (human resource management): The means in the distribution of average scores with respect to human resource management are lower than those with respect to organizational management in both countries. In particular, the mean in Korean firms is low, which implies that human resource management in Korean firms is more conservative.**

# Distribution of Management Scores (organizational management)



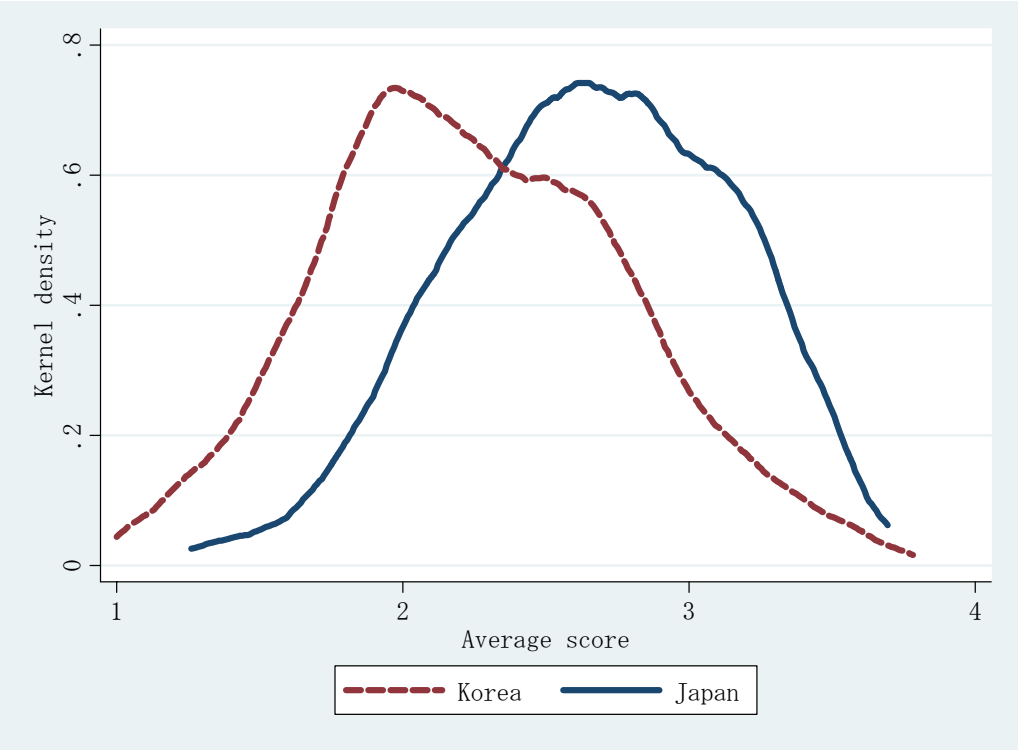
# Distribution of Management Scores (human resource management)



# 5. Comparison of Management Practices between Japan and Korea (4)

- **The distribution of average scores (Small and medium-sized firms): Average scores in Korean firms are concentrated at lower levels, because the average score in human capital in Korean small and medium sized firms are relatively low.**
- **The management scores in our survey imply that human resource management is less flexible in Korean small and medium-sized firms.**

# Distribution of Management Scores (small and medium-sized firms)



## 6. Management Practices and Firm Performance (1)

- **Using the management scores, we examine the effects of management practices on firm performances in Japanese and Korean firms.**
- **We estimate the following equations.**

$$\ln Y_i = const. + \alpha_1 \ln L_i + \alpha_2 \ln K_i + \alpha_3 \ln M_i + \alpha_4 Z_i + Dummy_i + \varepsilon_i$$

$$FP_i = const. + \sum_{j=1}^{2} \beta_j W_{ij} + \beta_3 Z_i + \beta_4 E_i + Dummy_i + u_i$$

## 6. Management Practices and Firm Performance (2)

- **Y: output, L: labor input, K: capital input, M: intermediate input, Z: management score or the first principal factor calculated by factor analysis, FP: a measure of firm performance (labor productivity or TFP), W:capital/labor ratio and intermediate input/ labor ratio, E:logarithm of number of employees, Dummy: organizational reform dummy.**

## 6. Management Practices and Firm Performance (3)

- **Estimation results using all samples in Japan and Korea**

**(1)The average management scores in all interview questions do not affect firm performance significantly.**

**(2)The average management scores with respect to human resource management affects firm performance significantly.**

**(3)In the manufacturing sector, the improvement in management with respect to human resource management leads to better firm performance.**

**Estimation results of production function (all firms in Japan and Korea)**

| | lnY | | ln(Y/L) | | lnTFP (Tornqvist index) | |
|---|---|---|---|---|---|---|
| Average score (all scores) | 0.008 | | 0.022 | | 0.01 | |
| | [0.609] | | [0.511] | | [0.874] | |
| Dummy | 0.022 | | 0.054 | | 0.031 | ** |
| | [1.528] | | [1.398] | | [2.444] | |
| lnK | 0.035 | *** | | | | |
| | [4.581] | | | | | |
| lnL | 0.15 | *** | 0.016 | | 0.007 | |
| | [10.147] | | [1.024] | | [1.305] | |
| lnM | 0.817 | *** | | | | |
| | [67.688] | | | | | |
| ln(K/L) | | | 0.126 | *** | | |
| | | | [6.848] | | | |
| ln(M/L) | | | 0.368 | *** | | |
| | | | [12.030] | | | |
| Constant | 2.144 | *** | 0.846 | *** | -0.077 | * |
| | [13.972] | | [5.091] | | [-1.749] | |
| Observations | 866 | | 857 | | 846 | |
| R2 | 0.998 | | 0.986 | | 0.024 | |
| Adusted-R2 | 0.998 | | 0.986 | | 0.005 | |
| F value | 55365.2 | | 3934.7 | | 2.2 | |

**Note 1. Robust t statistics in brackets.**

**2. Dummy variables for country × industry are included in the regression, but the estimates of the coeffiicients are not reported here.**

**3. * significant at 10%; ** significant at 5%; *** significant at 1%.**

**Estimation results using average score with respect to human capital (all firms in Japan and Korea)**

| | lnY | | ln(Y/L) | | lnTFP (Tornqvist index) | |
|---|---|---|---|---|---|---|
| Average score (human capital) | 0.027 | ** | 0.073 | ** | 0.014 | |
| | [2.260] | | [2.148] | | [1.534] | |
| Dummy | 0.022 | | 0.054 | | 0.032 | ** |
| | [1.528] | | [1.391] | | [2.511] | |
| lnK | 0.035 | *** | | | | |
| | [4.624] | | | | | |
| lnL | 0.148 | *** | 0.008 | | 0.006 | |
| | [9.993] | | [0.533] | | [1.131] | |
| lnM | 0.816 | *** | | | | |
| | [68.364] | | | | | |
| ln(K/L) | | | 0.126 | *** | | |
| | | | [6.878] | | | |
| ln(M/L) | | | 0.367 | *** | | |
| | | | [12.004] | | | |
| Constant | 2.121 | *** | 0.779 | *** | -0.132 | *** |
| | [13.790] | | [5.003] | | [-2.841] | |
| Observations | 866 | | 857 | | 846 | |
| R2 | 0.998 | | 0.986 | | 0.026 | |
| Adusted-R2 | 0.998 | | 0.986 | | 0.007 | |
| F value | 56037.4 | | 4044.4 | | 2.3 | |

Note 1. Robust t statistics in brackets.

2. Dummy variables for country × industry are included in the regression, but the estimates of the coeffiicients are not reported here.

3. * significant at 10%; ** significant at 5%; *** significant at 1%.

**Estimation results using average score with respect to human capital (all firms in the manufacturing sector in Japan and Korea)**

| | lnY | | ln(Y/L) | | lnTFP (Tornqvist index) | |
|---|---|---|---|---|---|---|
| Average score (human capital) | 0.027 | ** | 0.084 | * | 0.01 | |
| | [2.053] | | [1.788] | | [1.205] | |
| Dummy | 0.015 | | 0.024 | | 0.014 | |
| | [0.982] | | [0.432] | | [1.243] | |
| lnK | 0.017 | | | | | |
| | [0.961] | | | | | |
| lnL | 0.151 | *** | 0.038 | | 0.024 | *** |
| | [6.814] | | [1.492] | | [5.479] | |
| lnM | 0.846 | *** | | | | |
| | [47.472] | | | | | |
| ln(K/L) | | | 0.193 | *** | | |
| | | | [4.315] | | | |
| ln(M/L) | | | 0.294 | *** | | |
| | | | [6.197] | | | |
| Constant | 1.8 | *** | 4.736 | *** | -0.172 | *** |
| | [10.441] | | [8.534] | | [-4.125] | |
| Observations | 473 | | 465 | | 460 | |
| R2 | 0.999 | | 0.983 | | 0.097 | |
| Adusted-R2 | 0.999 | | 0.982 | | 0.077 | |
| F value | 71978.9 | | 4503.4 | | 5.5 | |

**Note 1. Robust t statistics in brackets.**

**2. Dummy variables for country × industry are included in the regression, but the estimates of the coeffiicients are not reported here.**

**3. * significant at 10%; ** significant at 5%; *** significant at 1%.**

## 6. Management Practices and Firm Performance (4)

- **Estimation results by country**

**(1)Using the first principal factor of the average score as an explanatory variable, we find that it improves Korean firm performance.**

**(2)In Japanese firms, organizational reform improves firm performance.**

**(3)Estimation results in the manufacturing sector show that the management scores affect firm performance in Korea.**

**(4) However, organizational reform does not affect firm performance in Japanese manufacturing firms.**
**→Organizational reform improves firm performance in the Japanese service sector.**

**Estimation results using first pricipal factor as an explanatory variable by country**

| | lnY | | | | ln(Y/L) | | | | lnTFP (Tornqvist index) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Japan | | Korea | | Japan | | Korea | | Japan | | Korea | |
| The first pricipal factor | -0.004 | | 0.009 | | -0.012 | | 0.01 | * | -0.002 | | 0.008 | ** |
| | [-1.012] | | [1.477] | | [-1.455] | | [1.742] | | [-0.681] | | [2.063] | |
| Dummy | 0.03 | * | -0.015 | | 0.054 | * | -0.013 | | 0.035 | ** | -0.004 | |
| | [1.964] | | [-0.788] | | [1.685] | | [-0.661] | | [2.534] | | [-0.277] | |
| lnK | 0.03 | *** | 0.032 | ** | | | | | | | | |
| | [4.847] | | [2.023] | | | | | | | | | |
| lnL | 0.192 | *** | 0.132 | | 0.009 | | 0.024 | ** | 0.008 | | 0.017 | * |
| | [14.722] | | [5.549] | | [0.758] | | [1.991] | | [1.414] | | [1.921] | |
| lnM | 0.779 | *** | 0.858 | | | | | | | | | |
| | [69.449] | | [41.16] | | | | | | | | | |
| ln(K/L) | | | | | 0.067 | *** | 0.033 | ** | | | | |
| | | | | | [5.026] | | [2.103] | | | | | |
| ln(M/L) | | | | | 0.467 | *** | 0.85 | *** | | | | |
| | | | | | [19.109] | | [39.44] | | | | | |
| Constant | 0.944 | *** | 1.505 | | 0.475 | *** | 1.595 | *** | -0.111 | ** | -0.105 | ** |
| | [21.076] | | [7.056] | | [4.257] | | [7.233] | | [-2.449] | | [-2.114] | |
| Observations | 520 | | 349 | | 520 | | 342 | | 510 | | 340 | |
| R2 | 0.991 | | 0.983 | | 0.833 | | 0.952 | | 0.018 | | 0.083 | |
| Adjusted-R2 | 0.991 | | 0.983 | | 0.829 | | 0.95 | | 0 | | 0.058 | |
| F value | 6014.1 | | 1491 | | 256.4 | | 364 | | 1.8 | | 3 | |

**Note 1. Robust t statistics in brackets.**

**2. * significant at 10%; ** significant at 5%; *** significant at 1%.**

**Estimation results of production function in the manufacturing sector by country**

| | lnY | | | | ln(Y/L) | | | | lnTFP (Tornqvist index) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Japan | | Korea | | Japan | | Korea | | Japan | | Korea | |
| Average score (all scores) | 0.016 | | 0.037 | * | 0.013 | | 0.037 | * | 0.014 | | 0.019 | |
| | [0.882] | | [1.770] | | [0.292] | | [1.770] | | [0.891] | | [1.248] | |
| Dummy | 0.007 | | -0.033 | | -0.015 | | -0.033 | | 0.01 | | -0.01 | |
| | [0.416] | | [-1.391] | | [-0.342] | | [-1.391] | | [0.615] | | [-0.705] | |
| lnK | 0.020 | * | 0.009 | | | | | | | | | |
| | [1.662] | | [0.393] | | | | | | | | | |
| lnL | 0.188 | *** | 0.15 | *** | 0.036 | * | 0.027 | * | 0.027 | *** | 0.018 | ** |
| | [8.130] | | [4.771] | | [1.889] | | [1.854] | | [5.162] | | [2.337] | |
| lnM | 0.808 | *** | 0.868 | *** | | | | | | | | |
| | [53.049] | | [36.01] | | | | | | | | | |
| ln(K/L) | | | | | 0.064 | * | 0.009 | | | | | |
| | | | | | [1.938] | | [0.393] | | | | | |
| ln(M/L) | | | | | 0.524 | *** | 0.868 | *** | | | | |
| | | | | | [15.920] | | [36.01] | | | | | |
| Constant | 0.721 | *** | 1.535 | *** | -0.059 | | 1.535 | *** | -0.254 | *** | -0.155 | *** |
| | [13.773] | | [6.036] | | [-0.390] | | [6.036] | | [-5.204] | | [-3.347] | |
| Observations | 180 | | 296 | | 180 | | 296 | | 177 | | 287 | |
| R2 | 0.997 | | 0.981 | | 0.898 | | 0.949 | | 0.18 | | 0.059 | |
| Adjusted-R2 | 0.997 | | 0.981 | | 0.893 | | 0.947 | | 0.151 | | 0.039 | |
| F value | 11471 | | 1336 | | 167 | | 346 | | 7.1 | | 2 | |

Note 1. Robust t statistics in brackets.

2. * significant at 10%; ** significant at 5%; *** significant at 1%.

## 6. Management Practices and Firm Performance (5)

- **A summary of the estimation results**

**(1) Better management practices with respect to human resource management improves firm performance. This effect is significant in Korean firms in particular.**

**(2) In Japanese firms, organizational reform improves firm performance in the service sector.**

# 7. Concluding remarks (1)

- **Summary of our study**

**(1)Following Bloom and Van Reenen (2007), we conducted interview surveys with respect to organizational management and human resource management in Japanese and Korean firms. Based on the survey data of Japanese 573 firms and Korean 350 firms, we constructed the measure representing management practices.**

**(2)The average management scores in Japanese firms are higher than those in Korean firms. The difference in management scores between Japanese and Korean firms is due to the low score in human resource management in Korean firms.**

# 7. Concluding remarks (2)

(3) Using management scores, we examine the effects of management practices on firm performances. In Japanese firms, organizational reform improves firm performances in the service sector, while the average management scores do not affect firm performances.

(4) In Korean firms, the first principal factor mainly reflecting human resource management improves firm performances. These effects are particularly significant in the manufacturing sector. The results imply that Korean firms are likely to improve their performances by showing more flexibility in their human resource management.

# 7. Concluding remarks (3)

- **Future studies**

**(1)As for Japanese firms, we will examine what kind of factors induced organizational reforms which improved firm performance.**

**(2)We will focus on the effect of human resource management on firm performance by using complimentary survey on human resource management.**

**(3)We will examine the effect of organizational and human resource management on investment policy or R&D policy of the firm.**

**(4)We would like to extend our surveys to other countries in the advanced and emerging economies.**

# Merci beaucoup