

Chapter 2 Competitiveness of Japanese Companies

Section 1 Profitability and productivity of manufacturing companies

- Japanese companies stand at a low level in profitability, behind which lies their low profit margin on sales.
- Profitability of Japanese manufacturers tends to be lower than that of those based in the United States.

Figure 2-1-4 International comparison of ROA
(1) Manufacturers in all sizes

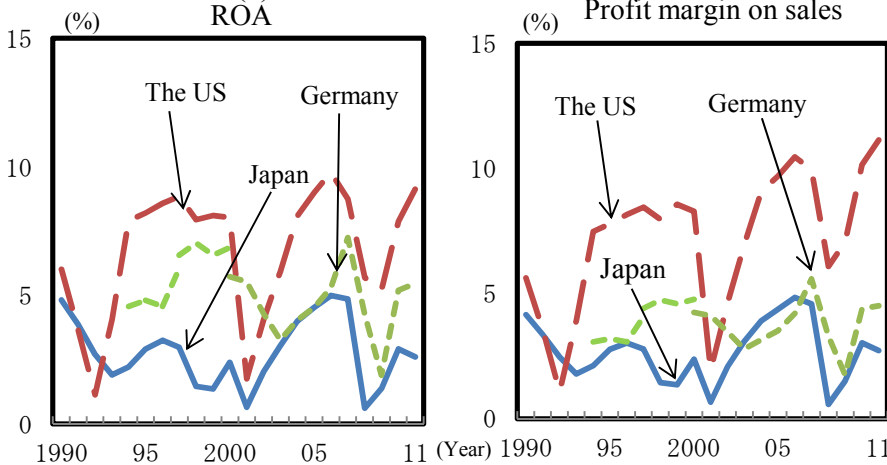
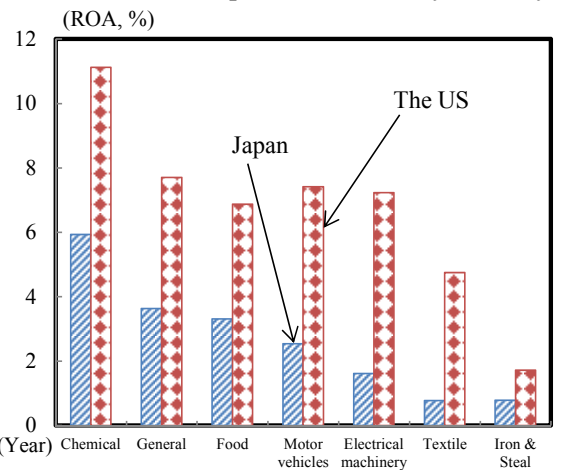


Figure 2-1-5 Comparison of ROA between Japan and the US by industry



- (Notes) 1. (Left) Compiled based on Financial Statement Statistics of Corporations by Industry, Annual, the Ministry of Finance; Quarterly Financial Report, the U.S. Census Bureau; and Bach Database, the European Committee of Central Balance Sheet Data Offices.
2. (Right) Compiled based on Financial Statement Statistics of Corporations by Industry, Annual, the Ministry of Finance; and Quarterly Financial Report, the U.S. Census Bureau.

- Profitability tends to be higher in countries that offer more favorable conditions for business activity.
- Japan sees less differentiation among products, with a smaller variance in profitability between companies.
- The Japanese market is less oligopolistic, probably in the state of what can be called excessive competition.

Figure 2-1-6 ROA of manufactures, and world competitiveness index

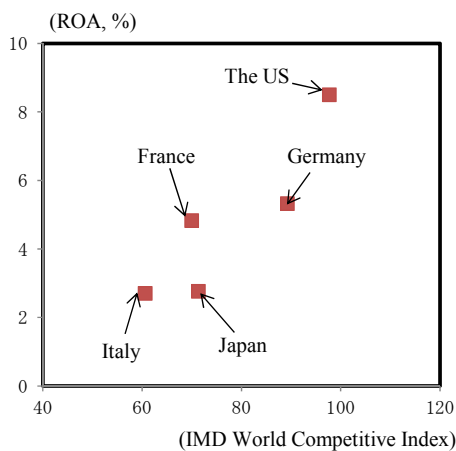
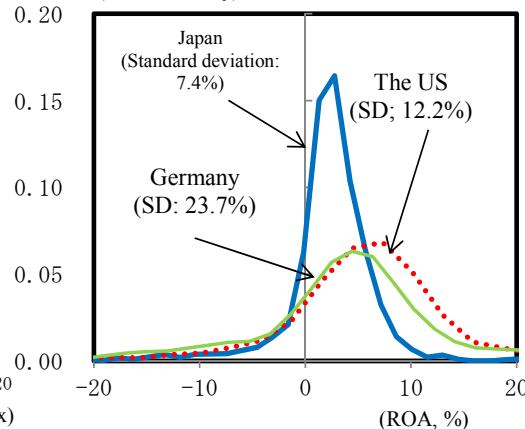
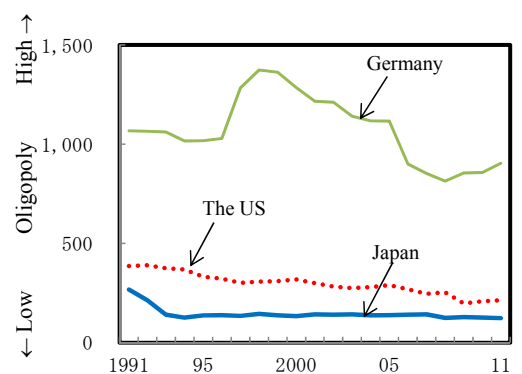


Figure 2-1-7 Differentiation between products, and the level of oligopoly in the market (listed manufactures)

(1) Distribution of ROA (end of 2011)
(Kernel density)



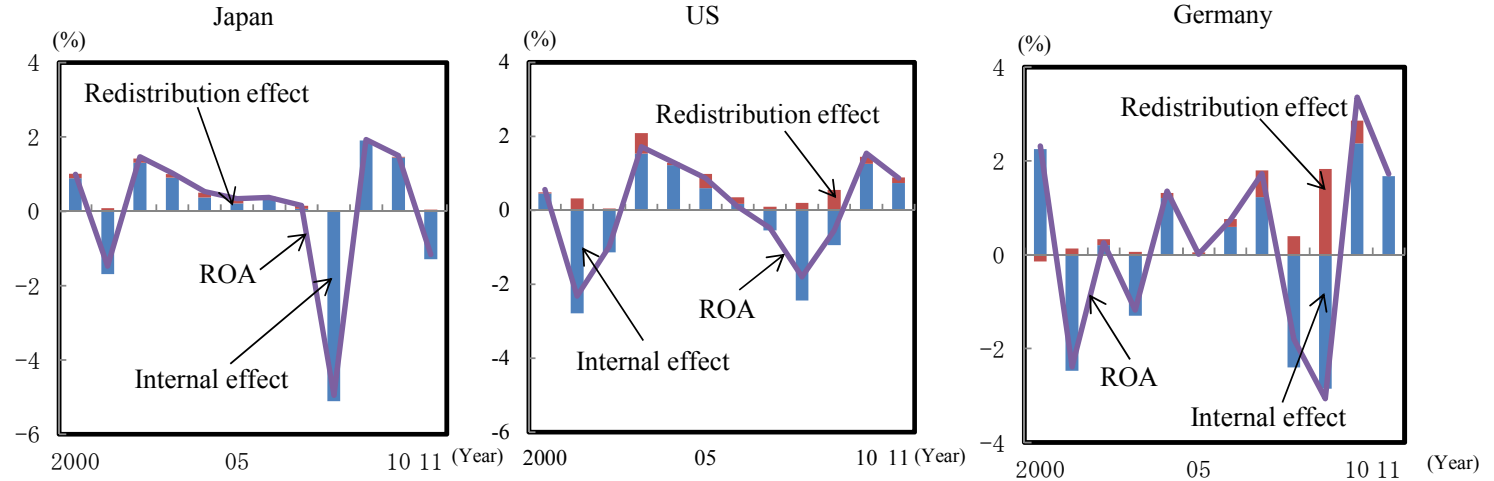
(2) Level of oligopoly in sales



- (Notes) 1. (Left) Compiled based on World Competitiveness Ranking 2012, IMD; Financial Statements Statistics of Corporations by Industry, Annual, the Ministry of Finance; Quarterly Financial Report, the U.S. Census Bureau; and Bach Database, the European Committee of Central Balance Sheet Data Offices.
2. (Figures on the Right) Compiled based on data from Bloomberg.
3. World Competitive Index translates into a form of index using a range of indicators selected from the viewpoints of "economic conditions," "efficiency of the government," "efficiency of business," and "infrastructure" to show how favorable a country is for business activity.
4. (Figures on the Right) For the level of oligopoly, the Herfindahl-Hirschman Index is adopted.

- The Japanese manufacturing industry is less efficient in the distribution of resources between companies than US and German manufacturers.

Figure 2-1-8 Effect of resource distribution on ROA (listed manufacturers)



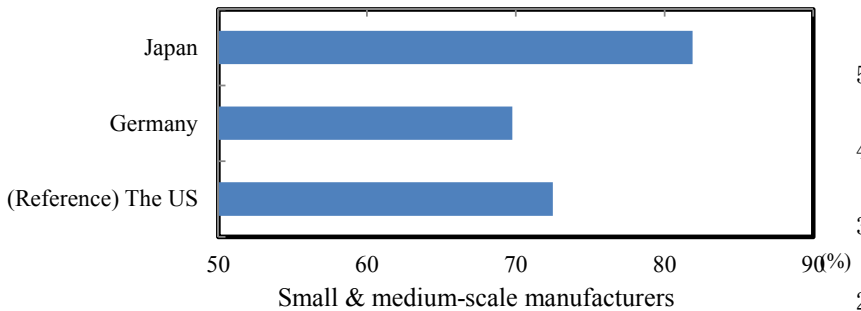
(Note) Compiled based on data from Bloomberg.

- Japanese manufacturers operate with a higher ratio of cost to sales.
- In Japan, distribution channels with multiple stages through them result in a high-cost structure, weighing down profitability.

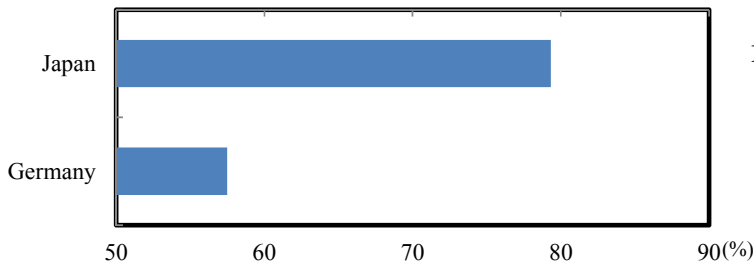
Figure 2-1-10 Cost structure of manufacturers

(1) Ratio of cost to sales (2011)

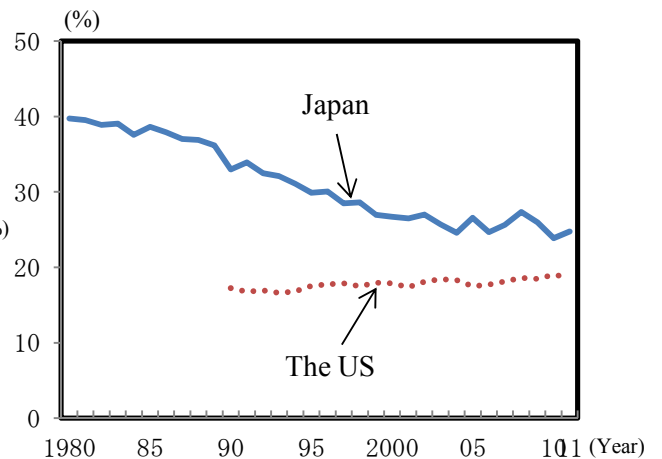
Large-scale manufacturers



Small & medium-scale manufacturers



(3) Share of wholesalers in sales for all industries



- (Notes) 1. (Left) Compiled based on Financial Statements Statistics of Corporations by Industry, Annual, the Ministry of Finance; Bach Database, the European Committee of Central Balance Sheet Data Offices; and data from Bloomberg.
 2. (Right) Compiled based on Financial Statements Statistics of Corporations by Industry, Annual, the Ministry of Finance; and Quarterly Financial Report, the U.S. Census Bureau.

- Small and medium-scale manufacturers operate with production equipment with low profitability. Decrepit equipment is a likely cause of lower TFP.
- Small and medium enterprises are still heavily in debt, restraining capital investment.

Figure 2-1-11 International comparison of production equipment ROA of manufacturers (2) TFP of small & medium-scale manufacturers

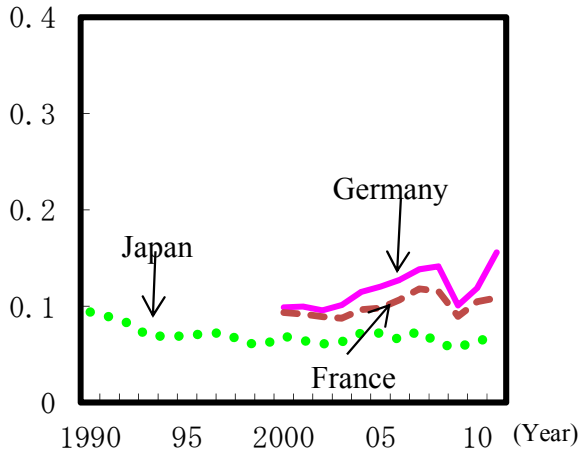
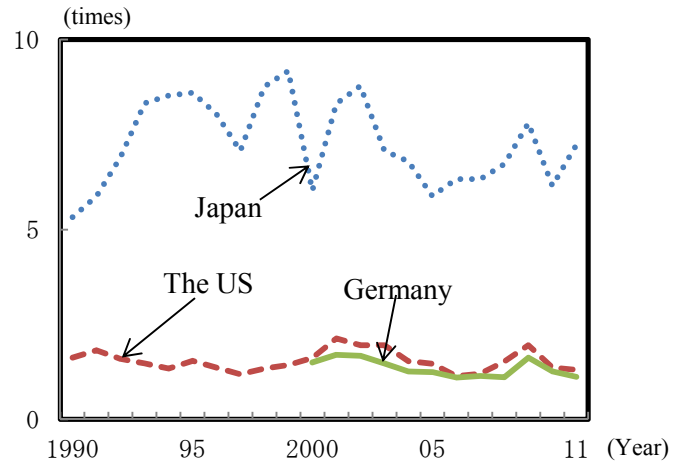


Figure 2-1-12 (3) Ratio of interest-bearing outstanding debts to cash flow Small & Medium-scale manufacturers

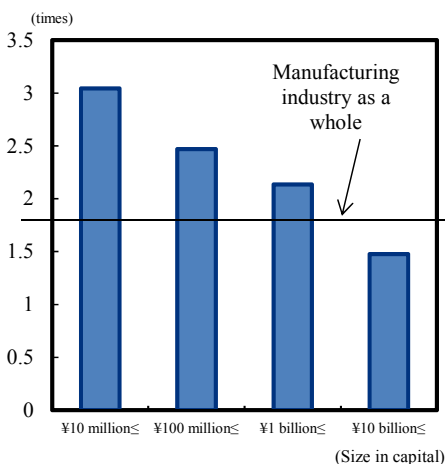


(Note) Compiled based on Financial Statement Statistics of Corporations by Industry, Annual, the Ministry of Finance; OECD.Stat; Quarterly Financial Report, the U.S. Census Bureau; and Bach Database, the European Committee of Central Balance Sheet Data Offices.

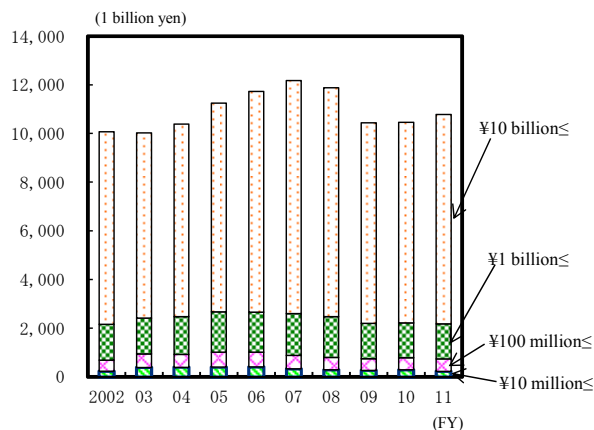
- Small and medium enterprises, more efficient in research and development, account for only a small portion of R&D investment.
- In Japan, investment in research and development stands at a high level. However, there is room for improvement in efficiency of R&D.

Figure 2-1-13 Efficiency of research and development, and R&D investment of small and medium enterprises (manufacturing industry)

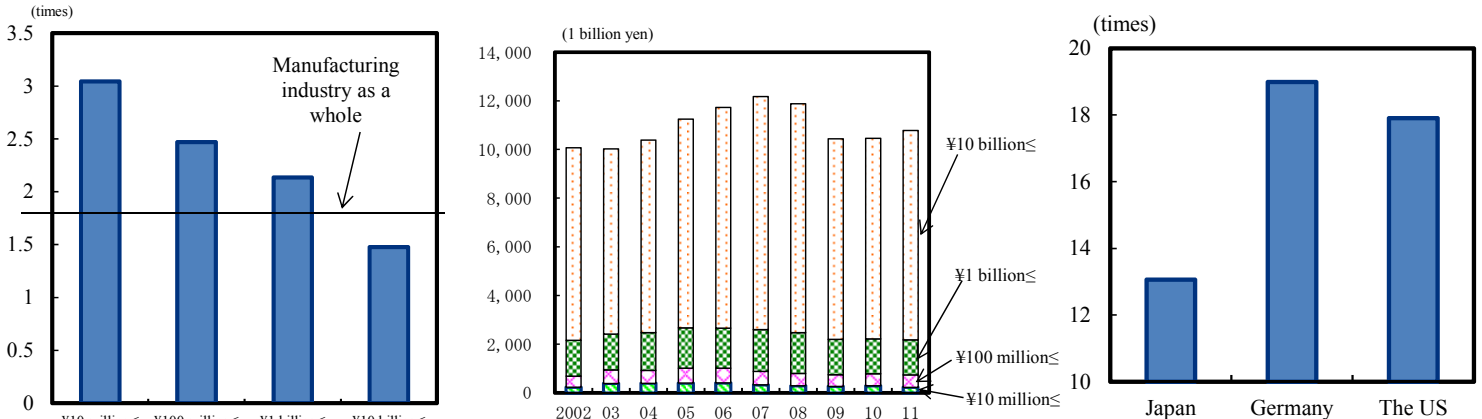
(2) R&D efficiency by size of company



(3) R&D expenditure by size of company



(4) R&D efficiency of countries

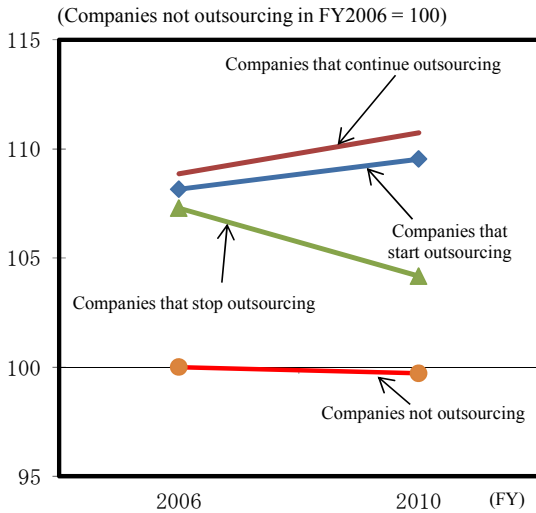


- (Notes)
1. Compiled based on Report on the Survey of Research and Development in Japan, the Ministry of Internal Affairs and Communications; and Research and Development Statistics, and Annual National Accounts, OECD.
 2. For Figure (2), R&D efficiency in a year is calculated as cumulative operating profits over past four years divided by cumulative R&D expenditure during a period between six and eight years before. Numbers in Figure (2) are averages between 2002 and 2012.
 3. For Figure (4), R&D efficiency in a year is calculated as cumulative added value over past four years divided by cumulative R&D expenditure during a period between six and eight years before. Numbers in Figure (4) are averages between 2003 and 2010.

- Outsourcing of manufacturing processes contributes to higher productivity.
- Outsourcing to local companies overseas helps improve productivity.

Figure 2-1-17 Effect of outsourcing on TFP

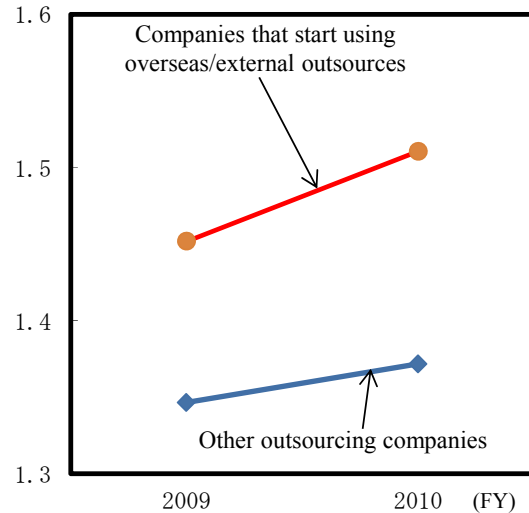
(1) Large-scale manufactures



(Note) Compiled based on questionnaires for the Basic Survey of Japanese Business Structure and Activities, the Ministry of Economy, Trade and Industry.

Figure 2-1-18 Characteristics of companies using overseas and/or external entities for outsourcing

(2) TFP of large-scale manufacturers



Section 2 Overseas Expansion for Taking in the Vigor of the Global Economy

- More manufacturers are expanding overseas. Many companies go overseas to capture local markets.
- Many subcontractors go overseas even without a request from their subcontracting entrepreneurs.

Figure 2-2-1 Share of companies expanding overseas among manufacturers

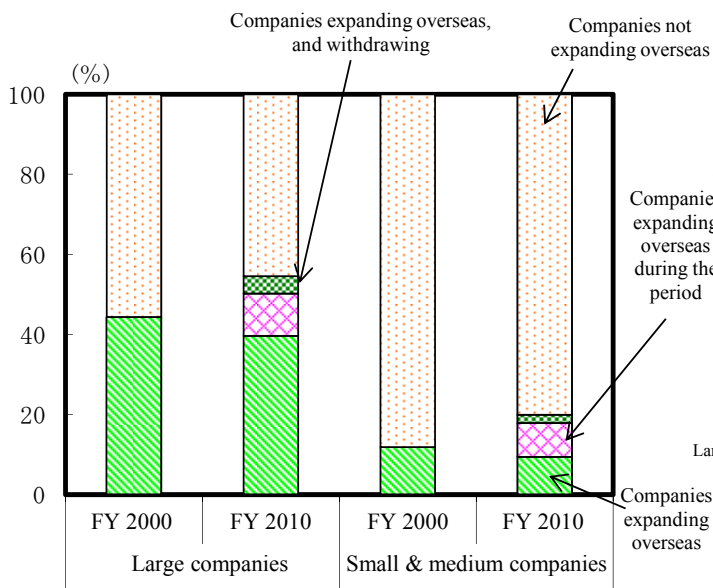


Figure 2-2-2 Purposes of companies for overseas expansion (After the Lehman Crisis)

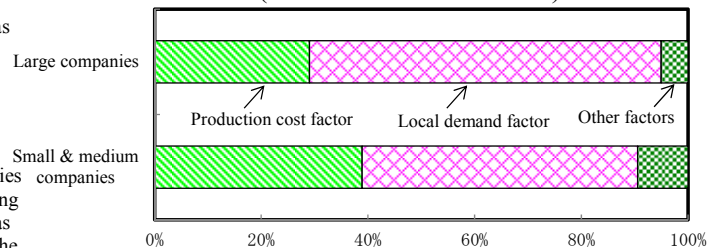
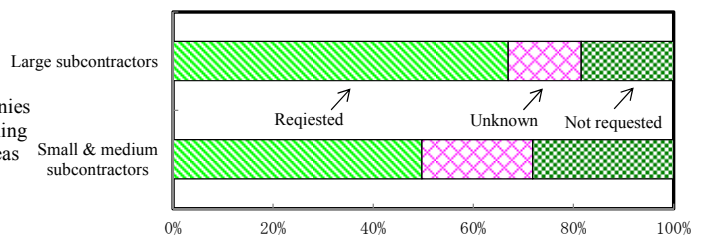


Figure 2-2-3 Whether going overseas with or without a request from subcontracting companies (After the Lehman Crisis)



(Notes) 1. (Left) Compiled based on questionnaires for the Basic Survey of Japanese Business Structure and Activities, the Ministry of Economy, Trade and Industry.
2. (Right) Compiled based on the Survey of Opinions of Companies on the Hollowing-out of Industry, the Cabinet Office.

- After the Lehman Crisis, there is only a relatively smaller deterioration seen in business conditions among subcontractors that expanded overseas without a request from their subcontracting entrepreneurs.
- Business conditions remain better among companies that expanded overseas to capture local markets than among those that went overseas in replacement for production in Japan.

Figure 2-2-6 Change in overseas business conditions DI among subcontractors that expanded overseas with and without a request from subcontracting

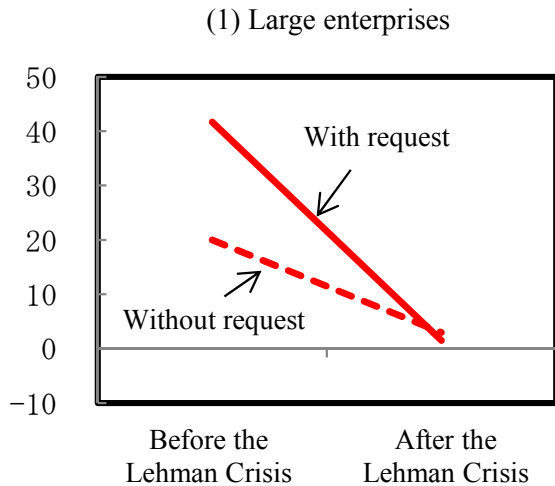
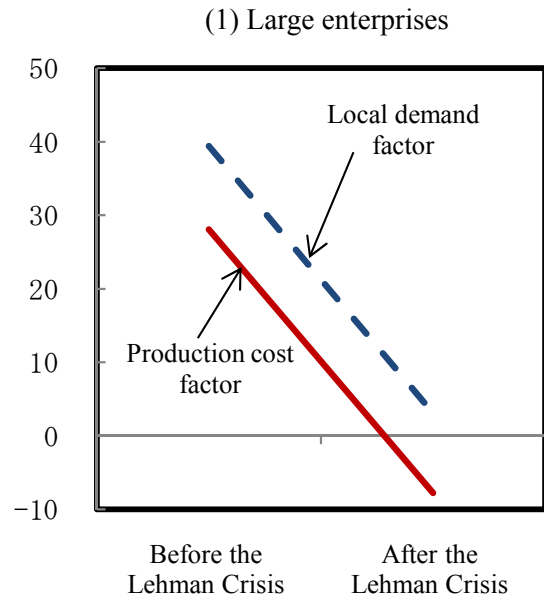


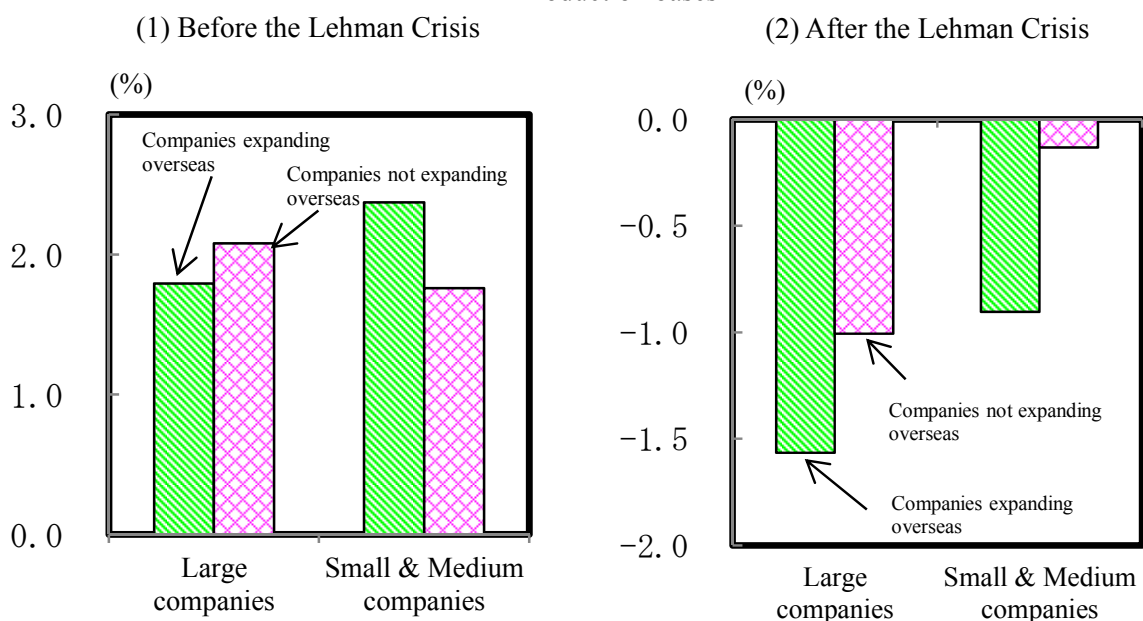
Figure 2-2-7 Change in overseas business conditions DI among companies that expanded overseas for different purposes



- (Notes) 1. Compiled based on the Survey of Opinions of Companies on the Hollowing-out of Industry, the Cabinet Office.
 2. "Before the Lehman Crisis" and "After the Lehman Crisis" refer to one period between 2004 and 2007, and one period between 2009 and 2012, respectively.

- After the Lehman Crisis, companies that had expanded overseas reduced employment at their production bases in Japan.

Figure 2-2-10 Changes in employment at domestic bases before and after the Lehman Crisis <Production bases>

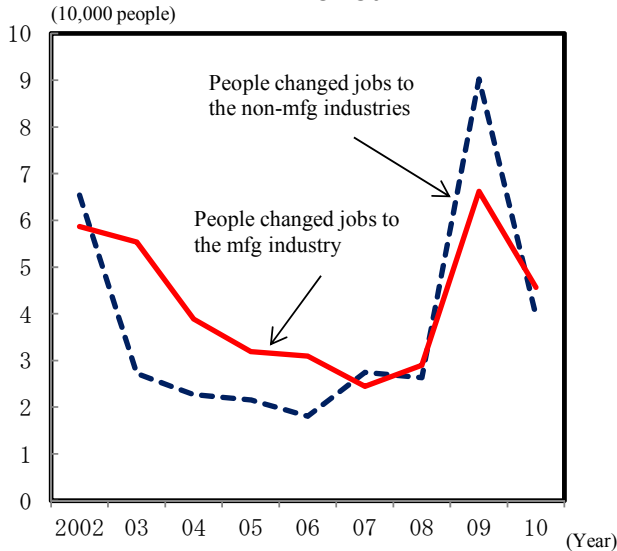


- (Notes) 1. Compiled based on the Survey of Opinions of Companies on the Hollowing-out of Industry, the Cabinet Office.
 2. "Before the Lehman Crisis" and "After the Lehman Crisis" refer to one period between 2004 and 2007, and one period between 2009 and 2012, respectively.

- After the Lehman Crisis, a larger number of people who had worked at manufacturing processes changed jobs in order to move to non-manufacturing industries.
- Job changes increased mainly in younger age groups, who experienced only limited declines in wages after changing their jobs.

Figure 2-2-14 Trends of job changes among people working at manufacturing processes in the manufacturing industry.

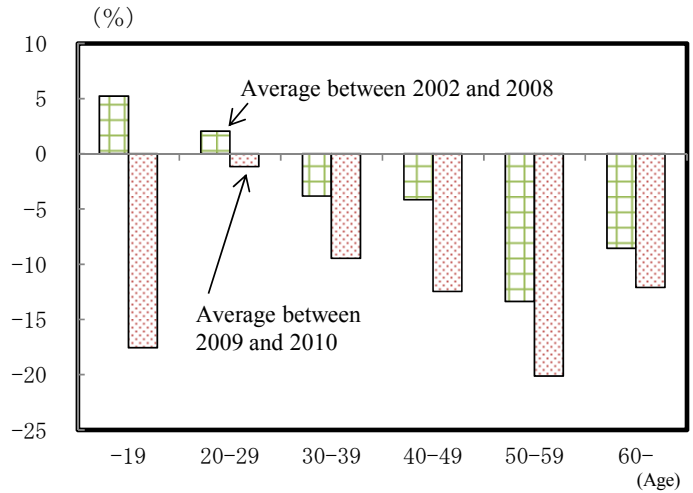
(2) Which industry they moved to when changing jobs



- (Notes) 1. Compiled based on questionnaires for the Survey on Employment Trends, the Ministry of Health, Labour and Welfare.
2. Based on data of people whose previous job was as a worker at a manufacturing process in the manufacturing industry who left their company to change jobs at their convenience.

Figure 2-2-16 Changes in wages of people who had worked at manufacturing processes in the manufacturing industry after changing their jobs to move to non-manufacturing industries.

(1) Change in wages by age group



- The United States and Germany see a higher percentage of their manufactures expand overseas than Japan.
- In the manufacturing industry, the number of employees has declined, while jobs have shifted to more productive sectors.

Figure 2-2-17 (1) Overseas production ratio

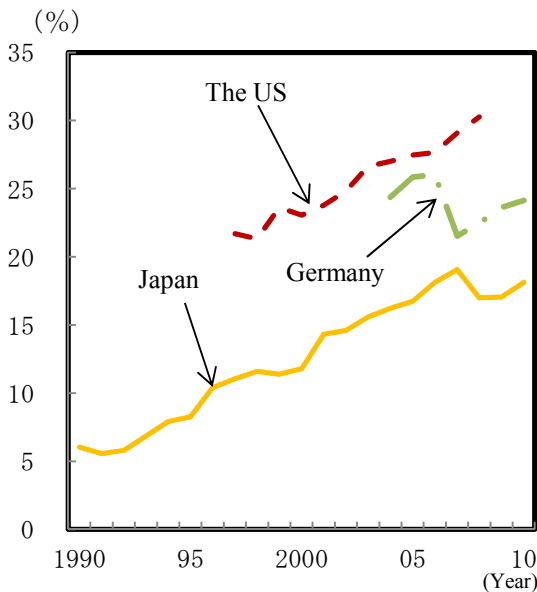
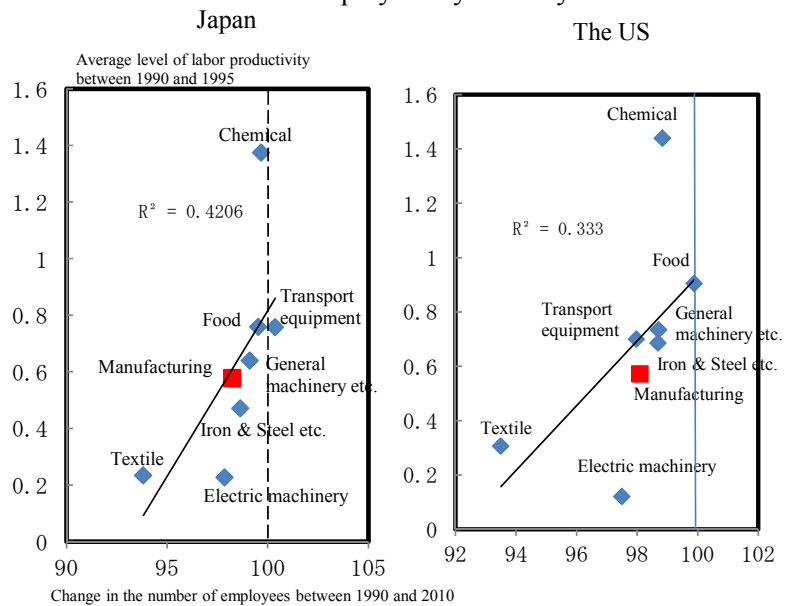


Figure 2-2-19 Shift in the employment structure from the manufacturing industry to non-manufacturing industries

(2) Labor productivity and numbers of employees by industry



- (Notes) 1. (Left) Compiled based on the Survey of Overseas Business Activities, the Ministry of Economy, Trade and Industry; Financial Statements Statistics of Corporations by Industry, Annual, the Ministry of Finance; International Data Direct Investment & Multinational Companies, the U.S. Bureau of Economic Analysis; Quarterly Financial Report, the U.S. Census Bureau; and Annual Detailed Enterprise Statistics, and Foreign Affiliates of EU Enterprises - Outward Facts, Eurostat;
2. (Right) Compiled based on the System of National Accounts, the Cabinet Office; National Economic Accounts, U.S. Bureau of Economic Analysis; and EU KLEMS.

Section 3 Challenges to Address for Strengthening the Competitiveness of Non-manufacturing Industries

- Japan generally sees labor productivity of its non-manufacturing industries improve only at a slower pace than the United States and Germany.
- Service trade in a narrow sense, such as cross-border supply and consumption abroad, has expanded in scale, and tradability of service has grown, though Japan's service trade still stands at a low level.

Figure 2-3-1 International comparison of improvement in labor productivity in non-manufacturing industries

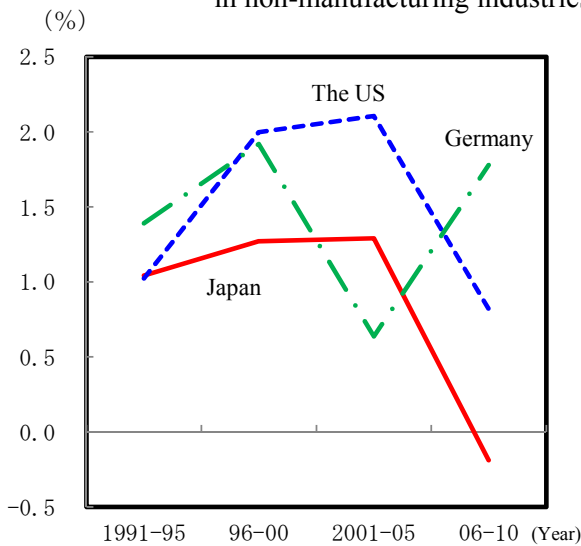
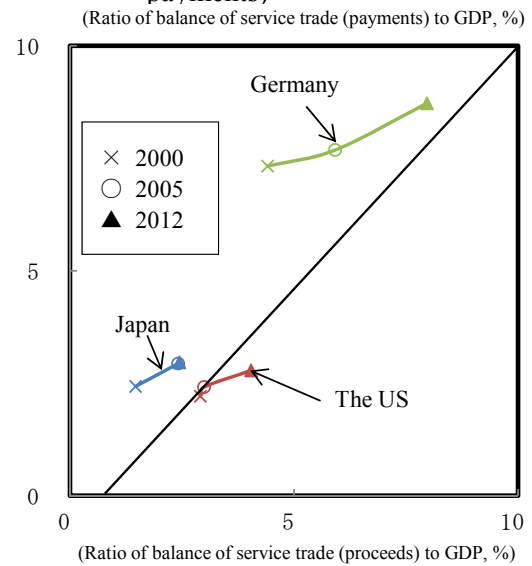


Figure 2-3-3 International comparison of service trade in a narrow sense (proceeds and payments)



- (Notes) 1. (Left) Compiled based on EU KLEMS; and JIP Database, the Research Institute of Economy, Trade and Industry.
2. (Right) Compiled based on OECD.Stat.

- Japan still stands at a lower level in commercial presence across the board, trade in services in a broad sense, than the United States, the United Kingdom and Germany, though it is becoming more active.

Figure 2-3-6 Trends of foreign direct investment of the non-manufacturing industry

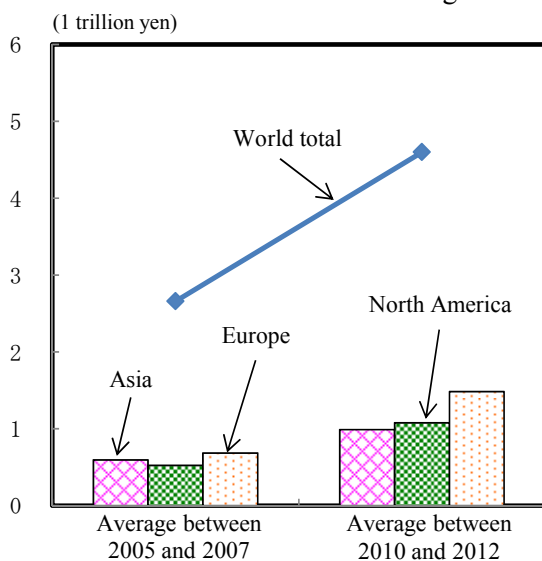
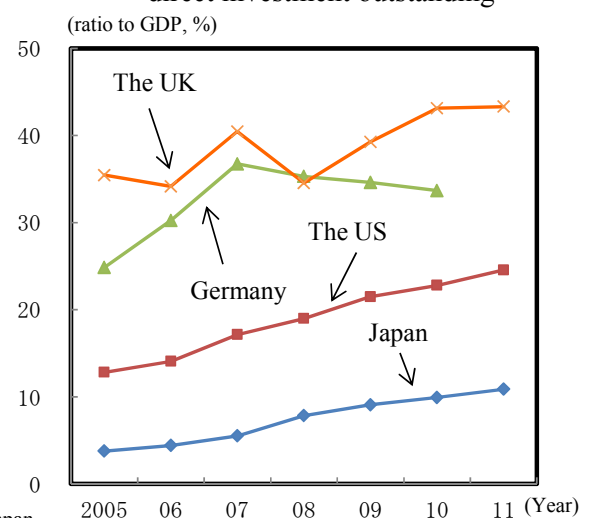


Figure 2-3-7 International comparison of trade in services through commercial presence across the board

(1) International comparison of foreign direct investment outstanding



- (Notes) 1. (Left) Compiled based on Balance of Payments Statistics, Bank of Japan.
2. (Right) Compiled based on OECD.Stat.

- Recently direct outstanding investment has increased in the financial and insurance industry, as well as the wholesale and retail industry.
- For non-manufacturing companies, profitability tends to improve after starting to expand overseas.

Figure 2-3-7(2) Breakdown of foreign direct outstanding investment of Japanese non-manufacturers by industry

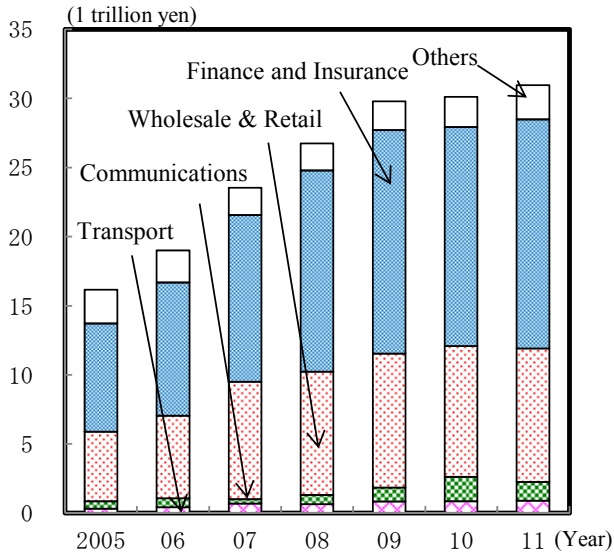
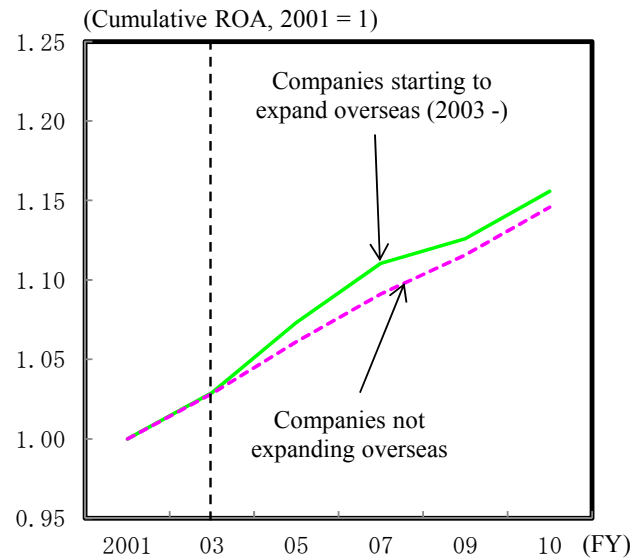


Figure 2-3-8 Comparison in profitability between companies starting to expand overseas and those not going overseas in (All sizes)



- (Notes)
1. (Left) Compiled based on Balance of Payments Statistics, Bank of Japan.
 2. (Right) Compiled based on questionnaires for the Basic Survey of Japanese Business Structure and Activities, the Ministry of Economy, Trade and Industry.
 3. The figure on the right shows cumulative profit rates, or annual returns on assets (ROA), proxy for the rate of return, accumulated over a period of up to a year. A cumulative profit rate of up to a year is calculated by multiplying together returns on assets until that year, with the ROA in 2001 set as one. Companies starting to expand overseas refer to those that started going overseas in 2003, and companies not expanding overseas refer to those that have not yet.

- In non-manufacturing industries, slower improvement in labor productivity comes partly from poor capital accumulation for ICT.
- For ICT investment, expenditure on software, such as procurement management systems and customer management software, has failed to catch up with spending on hardware, such as computers and communication equipment.

Figure 2-3-10 Breakdown of improvement in labor productivity in non-manufacturing industries

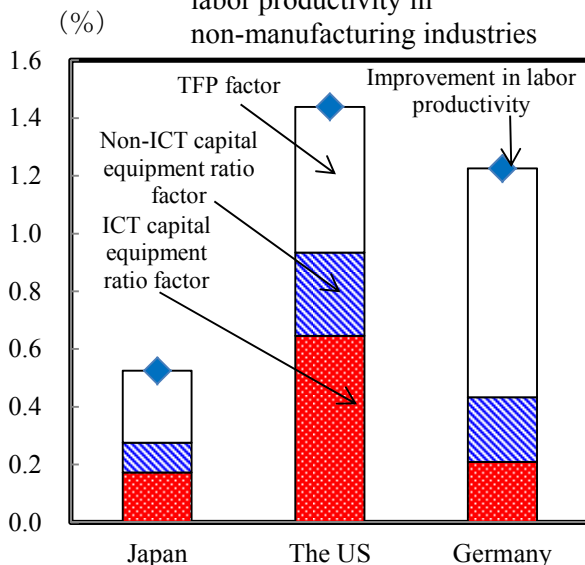
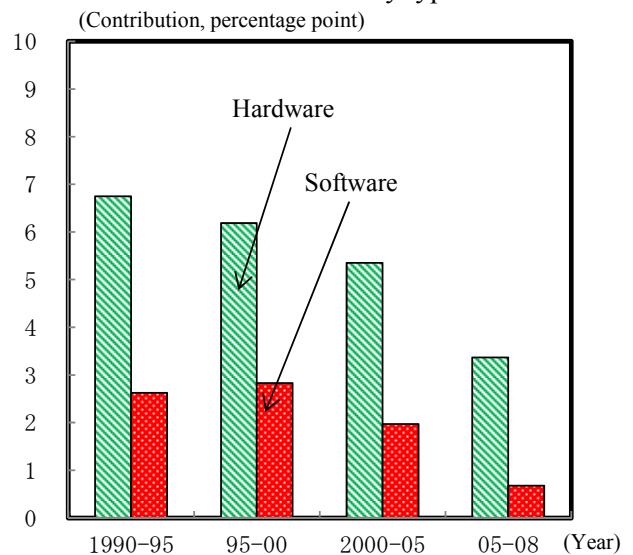


Figure 2-3-12 (3) Contribution of ICT capital to growth of added value by type



- (Notes)
1. (Left) Compiled based on EU KLEMS; and JIP Database, the Research Institute of Economy, Trade and Industry. The average rates of growth between 2001 and 2010
 2. Compiled based on JIP Database, the Research Institute of Economy, Trade and Industry.

- Non-manufacturing companies with a higher percentage of software assets achieve greater profitability.
- Expansion overseas and software investment develop synergetic effect between them for higher profitability.

Figure 2-3-13 Comparison of profitability between companies with different percentages of software assets (non-manufacturers)

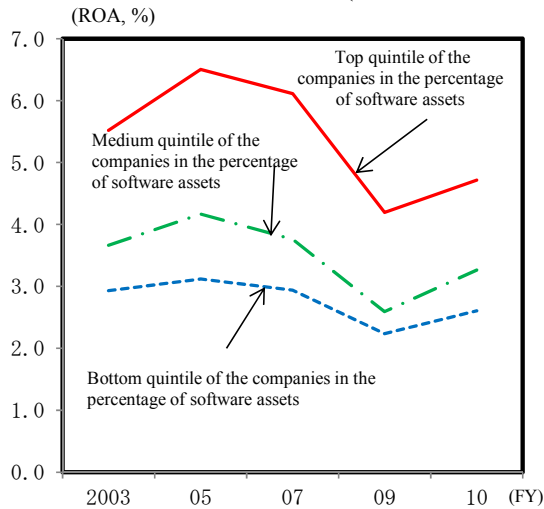
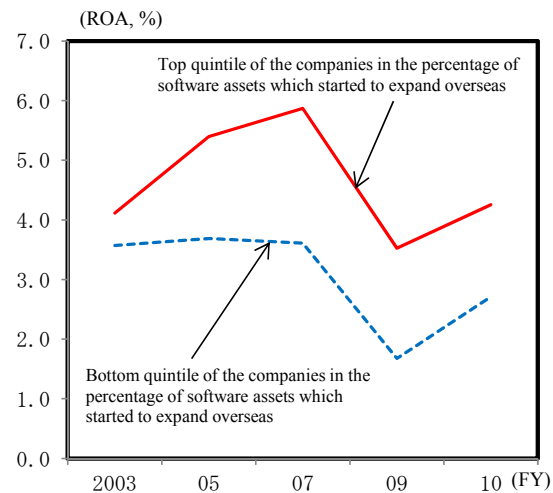


Figure 2-3-14 Percentages of software assets and the profitability of companies starting to expand overseas (non-manufacturers)



- (Notes) 1. Compiled based on questionnaires for the Basic Survey of Japanese Business Structure and Activities, the Ministry of Economy, Trade and Industry.
 2. The top (medium/bottom) quintile of the companies in the percentage of software assets refers to those that belong to the top (third/fifth) group when they are divided into five strata based on the ratio of software assets to total assets they hold. Companies starting to expand overseas refer to those that started going overseas in 2003.

- With the accumulation of ICT capital, companies employ a higher percentage of people working with high-level expertise for planning, research, and analysis, among others (non-routine work).
- Together with investing in ICT, non-manufacturers can carry out organizational reform, and employ a larger percentage of people engaged in highly intellectual work for further improving their productivity.

Figure 2-3-15 Introduction of ICT and change in work (non-manufacturers, 1985 - 2010)

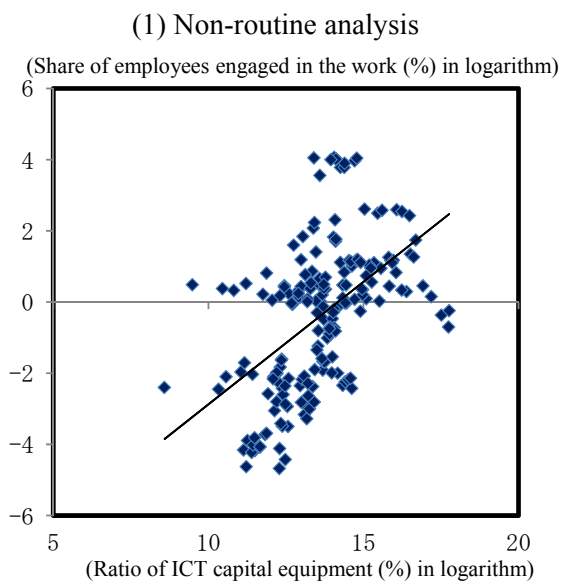
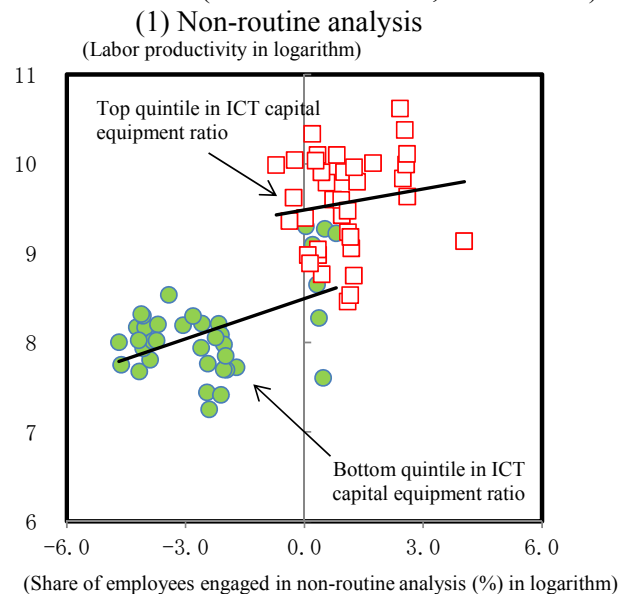


Figure 2-3-16 Non-routine work and labor productivity (non-manufacturers, 1985 - 2010)



- (Notes) 1. Compiled based on the Population Census, the Ministry of Internal Affairs and Communications; and JIP Database, the Research Institute of Economy, Trade and Industry.
 2. The top (bottom) quintile of the companies in the ICT capital equipment ratio refers to those that belong to the top (fifth) group when they are divided into five strata based on the ICT capital equipment ratio.