

White Paper on International Economy & Trade 2013

Achieving Productivity Enhancement & Economic Growth by Internalizing the Dynamism of the Global Economy

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First published on Aug. 15, 1949, the White Paper on International Economy and Trade has been issued every summer since. White Paper 2013 is the 65th edition.

White Paper 2013 analyzes the current state of Japanese productivity within a global context, based on the understanding that it is necessary to raise productivity through various measures in order to achieve mid- to long-term economic growth while dealing with an aging population and low birth rate. This is followed by an analysis of the respective productivity enhancement effects of outbound undertakings to secure overseas demand in rapidly emerging markets and the like and inbound undertakings to attract outstanding individuals and firms, and a prescription for overseas business development by Japanese players.

The State of Japanese Productivity in Comparison with Other Countries

Let's begin with an overview of the state of Japanese productivity in comparison with other countries. This summary provides an analysis that used labor productivity as the productivity index. The full White Paper also contains analysis using total factor productivity (TFP). The results of the two analyses show similar trajectories.

International Comparison of Productivity

Japanese productivity on an all-industries basis is approximately 57%, 66%, 75% and 84% of the United States, Germany, France and the United Kingdom figures, respectively. Japan had been catching up with the US through the mid-1990s but has since failed to close the productivity gap. The gap with the European countries has generally remained stable.

In manufacturing, Japanese productivity is about 70%, 90%, 94%,

and 110% of the US, Germany, France and the UK figures. Although the gaps are smaller than those for all industries, productivity is still lower than the US and Europe excepting the UK. Japan had been catching up with the US through the mid-1990s but the gap has been growing slightly since then. The gaps with the European countries excepting the UK have been trending down.

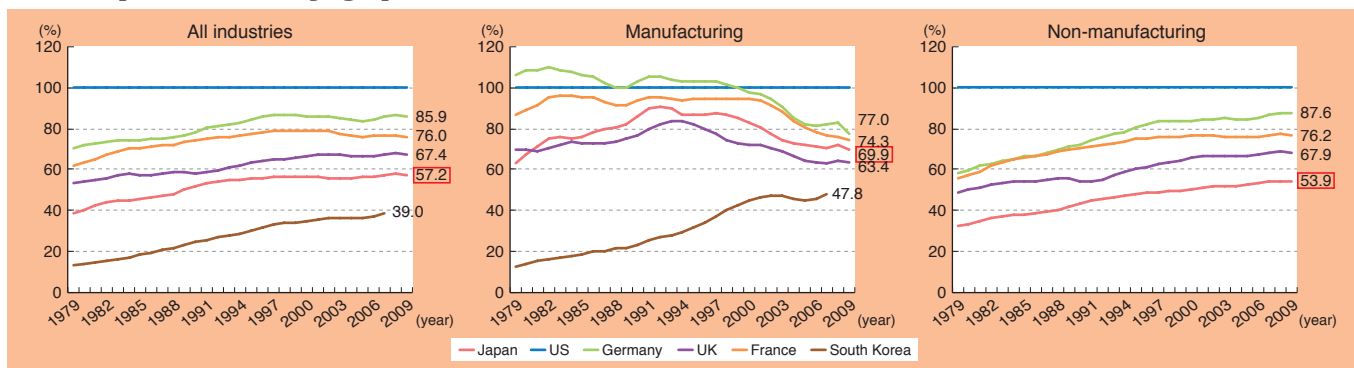
In non-manufacturing, Japanese productivity is about 54%, 60%, 70% and 80% of the US, Germany, France and the UK figures. Although the gaps are wider than the gaps in manufacturing, they have been trending down.

South Korea has the lowest productivity figures among the six countries in this comparison. However, productivity, led by manufacturing, has been rising continuously, shrinking the gap with the other countries surveyed.

As we have seen, Japanese productivity lags behind that of the other Western countries; there is plenty of room to narrow the gap (Chart 1).

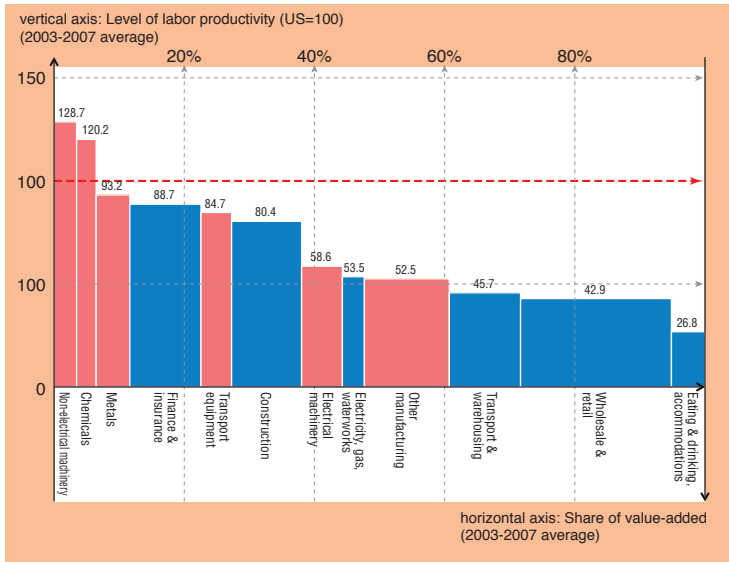
CHART 1

Labor productivity gap in relation to US (US=100)



Note: The figures represent five-year retrospective averages.
Source: EU KLEMS

CHART 2
Productivity in Japan & relative shares of value-added

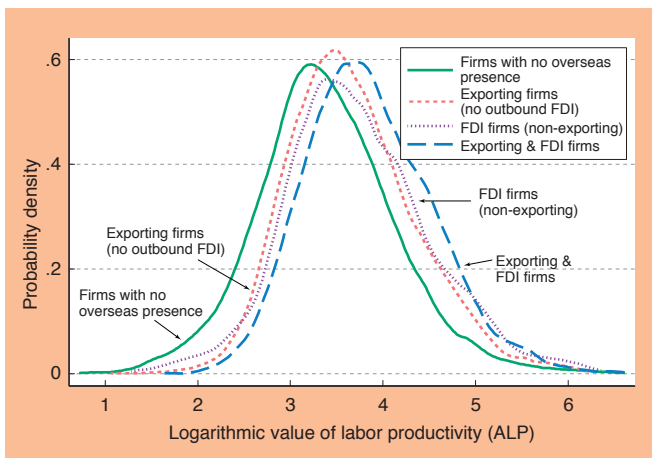


Note: Manufacturing in red, non-manufacturing in blue.
 Source: EU KLEMS

Analysis of Cross-industrial Productivity

Next, we conducted a cross-sectional productivity analysis in conjunction with industrial composition. *Chart 2* uses the horizontal axis to represent the value-added in each industry as a proportion of value-added (for the market economy excluding agriculture) and the

CHART 3
State of overseas business development & productivity distribution of Japanese firms



Note: Labor productivity (aggregate labor productivity; ALP) is defined as the value of sales per worker. The chart displays the distribution of labor productivity (ALP) for firms with no overseas presence, exporting firms (no outbound FDI), outbound FDI firms (no exports), and exporting and outbound FDI firms.
 Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

vertical axis to represent the Japan/US ratio for labor productivity in each industry, with the industries charted in descending productivity order.

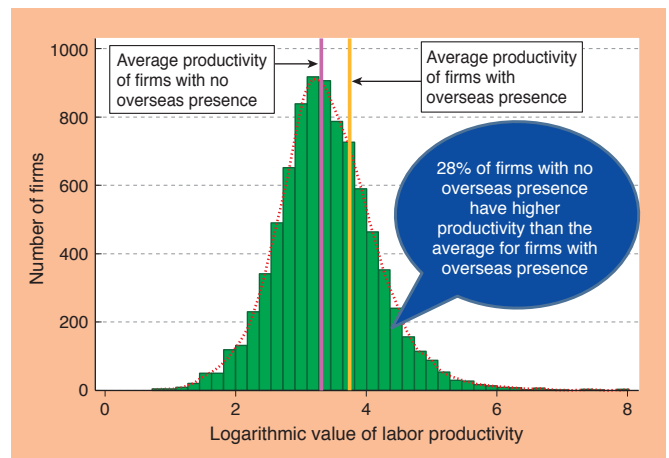
Japanese industries generally have lower productivity than their US counterparts. However, there are Japanese industries, such as non-electric machinery, chemicals, metals and transport equipment among manufacturing sectors and finance and insurance among non-manufacturing sectors, whose productivity is equal to or higher than that of their US counterparts. Nevertheless, value-added in sectors whose value-added is 80% or higher as a ratio of the value-added of their US counterparts comprises a mere 38% of the total value-added, while the share of value-added in low-productivity sectors such as retail (23%) and transport and warehousing (11%) is high, dragging down the productivity of the overall economy.

To enhance the overall productivity of the Japanese economy, it would be effective to raise the proportion of high-productivity sectors by expanding their economic activity through economic partnerships and other outbound undertakings, as well as enhancing the productivity of each individual sector.

The Significance of International Expansion in Enhancing Productivity

This section offers an analysis of the significance of international

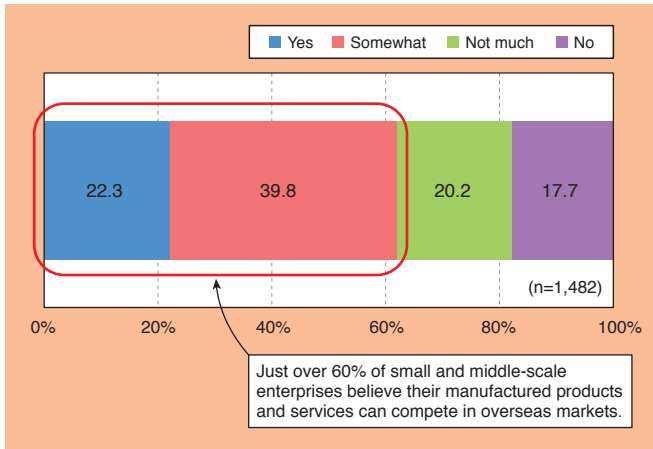
CHART 4
Labor productivity of Japanese firms with no overseas presence (manufacturers with 50 or more employees)



Note: Labor productivity (aggregate labor productivity; ALP) is calculated as the value of sales per worker.
 Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

CHART 5

Do you think your firm's manufactured products and/or services are competitive in overseas markets?



Source: *Tsūshōseisaku no kentō no tame no wagakuni kigyō no kaigaisenryaku ni kansuru ankēto (Questionnaire concerning the Overseas Business Strategies of Japanese Firms for the Purpose of Considering Trade Policies) (2013), Teikoku Databank, Ltd.*

expansion in enhancing productivity. White Paper 2013 identifies the factors that affect the level of corporate productivity through regression analysis. Here we have room for just the conclusions, which reveal that there are positive correlations between innovation activities such as international expansion, R&D and IT investments on the one hand and corporate productivity on the other, and that foreign affiliates in Japan have higher productivity than Japanese firms. It appears that increasing the economic activities of these kinds of businesses can enhance the overall productivity of the Japanese economy. Innovation activities can also be expected to raise the productivity of individual businesses.

The role of overseas business development in enhancing productivity is explained in more detail below.

Firms with Potential that Nevertheless Are Not Moving into Overseas Markets (Small & Medium-Scale Enterprises & Services)

As we have seen, there is a positive correlation between corporate productivity and overseas business development. A look at the productivity distribution of Japanese firms in conjunction with the state of their overseas business development shows that firms that conduct both exports and foreign direct

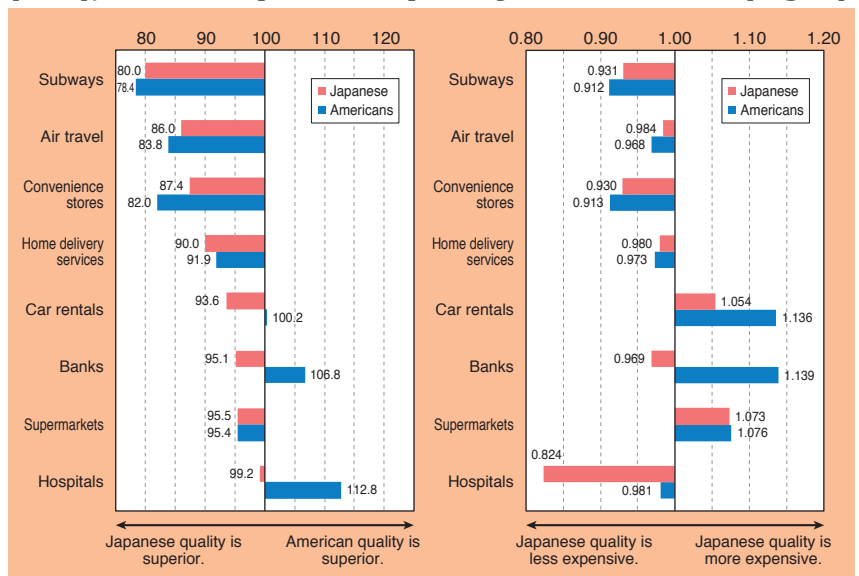
investment (FDI) have the highest productivity, followed by firms that conduct FDI only, firms that conduct exports only, and firms that do neither, in descending order (Chart 3). On the other hand, there is a certain proportion of firms that have no overseas presence whose productivity is higher than the average for firms that do. These high-productivity firms should have the potential for overseas business development (Chart 4).

When we look at the actual state of overseas business development, small and middle-scale enterprises and non-manufacturing firms have been relatively slow in going out. There is room for these firms to increase their overseas business presence.

In response to a questionnaire sent out to businesses, almost two-thirds of small and mid-sized enterprises that currently do not have transactions with overseas firms state that they “believe” or “think” their manufactured products and/or services can be competitive in overseas markets, showing that they have confidence in their manufactured products and services (Chart 5). Another questionnaire that compares quality between the Japanese and US service industries shows that, although there are fields where Japanese services are considered to be less cost-effective, they are generally given higher marks in term of quality, indicating that Japanese service industries have the potential to secure overseas demand (Chart 6).

CHART 6

Japan-US comparison of quality in services (left), relative price & quality for services (right)

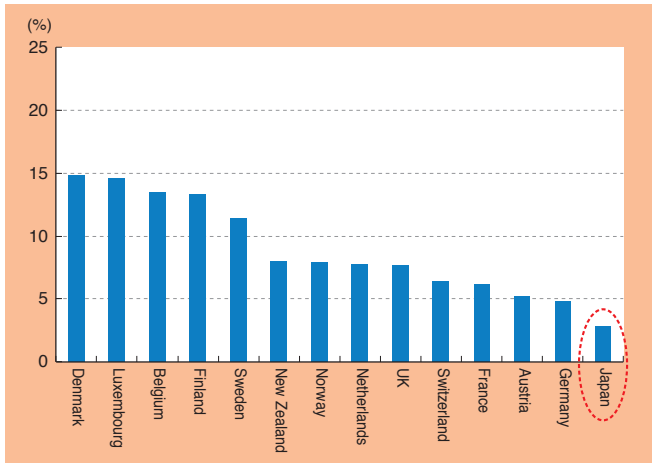


Note: The survey asked respondents to rate the quality of services experienced in the US against the quality of the same services in Japan, fixed at 100. Number of valid responses: Japanese 555; Americans 500 (left chart). The ratio of money required to purchase the same quality of services in Japan and the US is calculated. If the figure is lower than 1.00, Japanese services are less expensive, if higher, more expensive; at 1.00, Japanese and American services are equal (right chart).

Source: *Dōitsu sābisu bunya ni okeru binshitsu suijun no chigai ni kansuru nichibei hikaku chōsa kekka (Results of the Japan-US Comparative Survey concerning the Difference in Quality Levels within the Same Services Sector), March 31, 2009, Service Productivity & Innovation for Growth (SPRING).*

CHART 7

Proportion of firms that have cooperated with non-affiliated overseas institutions



Note: Japan 2006-2008, Switzerland 2003-2005, New Zealand 2003-2005, others 2002-2004.

Source: Kobei Nishikawa and Hiroshi Ohashi, *Kokusai Hikaku wo Tsujita Wagakuni no Inobeeshon no Genjo (Current State of Japanese Innovation Based on an International Comparison)*, 2010.

If these high-productivity firms, currently with or without an overseas presence, expand their businesses by capturing overseas demand while maintaining and enhancing their productivity, this will help raise the productivity of the overall economy.

Taking in Exceptional Human Capital & Firms from Overseas

In order to enhance Japanese productivity, it is crucial not only to develop overseas business but also to reinvigorate domestic innovation by moving firmly to take in outstanding firms, human capital and technology from overseas.

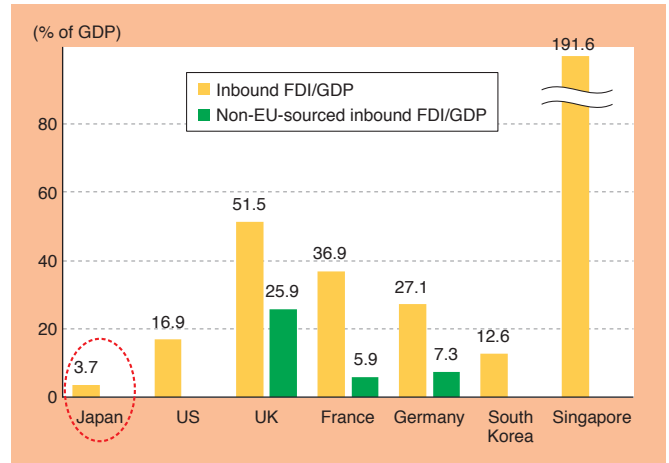
However, the proportion of Japanese firms that promote innovation in cooperation with non-affiliated overseas institutions is low (Chart 7). Moreover, transfer of technology and know-how from foreign affiliates in Japan, which, as the above-mentioned regression analysis shows, have higher productivity than their Japanese counterparts, is desirable, yet Japan's inbound FDI (as a percentage of GDP) is at an internationally low level (Chart 8). Further efforts to attract outstanding firms, human capital and technology are necessary.

Overseas Engagement from Japanese Perspective

In the previous section, we analyzed the role of overseas expansion in enhancing productivity. In proceeding with overseas expansion, it is necessary to focus efforts on three core undertakings: 1) promoting economic partnerships, 2) strategic engagement with emerging markets, and 3) attracting outstanding individuals and firms from overseas.

CHART 8

Inbound FDI outstanding by host country (% of GDP)



Note: Singapore and "inbound FDI/GDP" are all actual results as of Dec. 31, 2010.

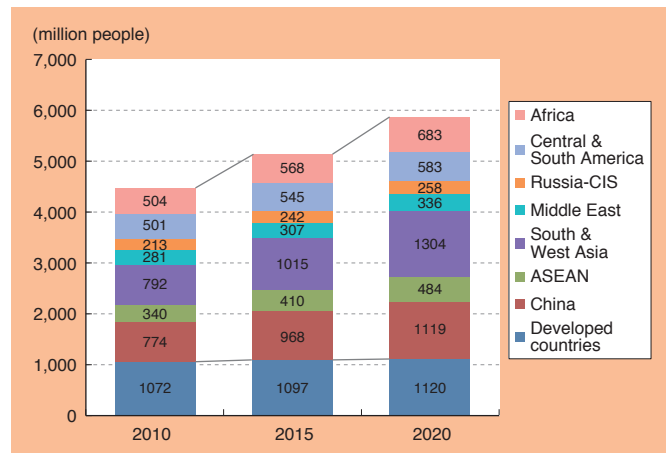
Source: FDI (book value) – Japan: *International Investment Position*; UK, Germany, South Korea, Singapore: *IMF, International Financial Statistics*; US: *Department of Commerce, Survey of Current Business*; France: *Bank of France, The French Balance of Payments and International Investment Position*; GDP, exchange rates

Promoting Economic Partnerships

With regard to economic partnerships, it is important to promote the TPP, RCEP, Japan-China-South Korea FTA, Japan-EU EPA and other economic partnership negotiations on multiple fronts, with securing national interests as the premise. It is also necessary to undertake investment agreements and tax treaties in order to secure a stable business environment in which Japanese firms can conduct their activities.

CHART 9

Size of the middle class & the rich

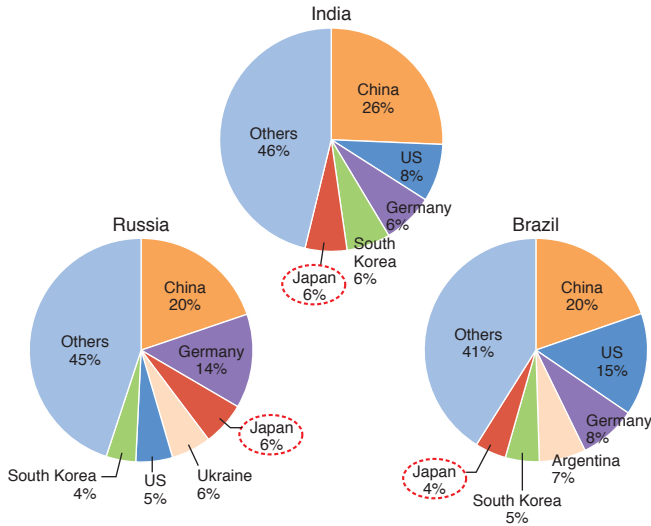


Note: Household population divided into disposable household income brackets. Calculated by multiplying the population by the ratio of households in the income bracket. The household ratio for each income bracket in 2015 and 2020 uses Euromonitor estimates.

Source: *Euromonitor International 2013*

CHART 10

Consumption expenditure growth by region (2012-2020)



Note: Food HS1-HS24, mineral fuels HS25-HS27, precious metals HS71.
Source: Global Trade Atlas

Strategic Engagement with Emerging Markets

The ranks of the middle class and the rich in emerging economies are expected to grow by 1.4 billion between now and 2020 (Chart 9). However, when we look at the proportion of imports by India, Russia and Brazil, three major emerging economies, Japan trails the US, Germany, China, South Korea and others, showing that Japan has not been able to fully benefit from the growth in these emerging economies (Chart 10).

In moving into emerging economies, it is important to engage strategically with each country based on its level of economic development, the state of business development by Japanese firms, and the competition environment *vis-à-vis* other foreign firms, focusing on 1) supporting overseas business development by outstanding small and middle-scale enterprises, 2) supporting overseas business development by service industries, and 3) infrastructure and systems exports and strategic economic cooperation.

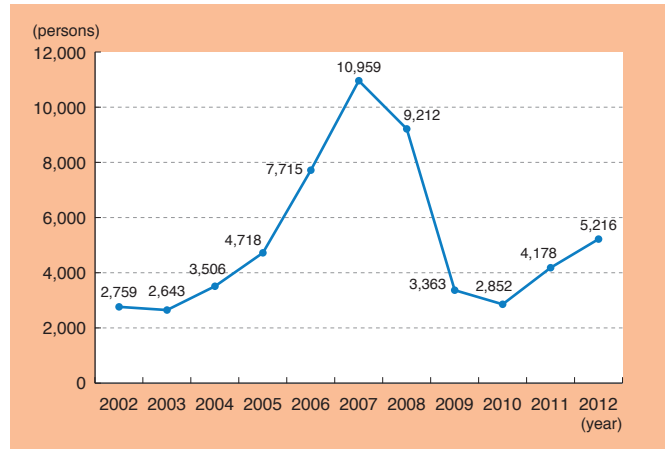
Attracting Outstanding Individuals & Firms from Overseas

The number of high-level individuals who have the technical status of residence saw a sharp decline in the wake of the Lehman shock and has yet to return to pre-shock levels (Chart 11).

Japan hosts 152 Asia-Oceania headquarters of foreign firms, which is a far cry from China, Singapore and Hong Kong, with 350, 343 and 286 respectively (Chart 12). In order to attract outstanding individuals and firms from overseas, it is necessary to improve the domestic business environment through such means as preferential treatment in immigration controls, regulatory reform and the

CHART 11

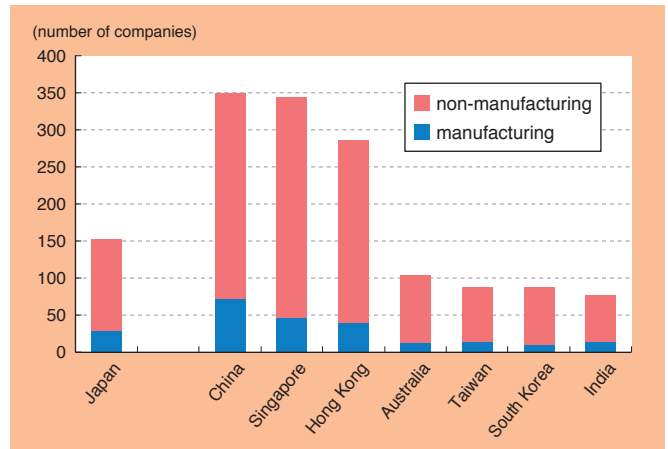
Foreigners with technical status of residence entering Japan for the first time



Note: Annual data except for 2012, where monthly data is aggregated using the difference between the numbers of all entrants and reentrants as the number of new entrants.
Source: Immigration Control Statistics, Ministry of Justice

CHART 12

Number of Asia-Oceania headquarters of foreign firms



Source: Survey of Trends in Business Activities of Foreign Affiliates 2011 (2010 results), Ministry of Economy, Trade and Industry

reinforcement and utilization of special zones.

As we have seen, it is necessary to enhance productivity in order for the Japanese economy to grow, with its aging population and low birth rate, and there remains significant room for growth by closing the productivity gap with other developed countries. It is necessary to steadily promote both outbound and inbound trade and investment policies since they are useful to the enhancement of Japanese productivity.