### Section 3 Current situation and issues of Japanese service sector from an international perspective

In a background of increased global demand for services including in Asian countries, globalization of customers, advancing deregulation, etc., as internationalization of service transactions progresses rapidly, the global expansion of Japanese service sector lags far behind that of European and U.S., which are moving forward at a pace exceeding their domestic growth. It is thought that this situation partly reflects the lack of international competitive strengths, such as the stagnation of progress in the productivity, of Japanese service sector. As mentioned in the previous section, if one also considers that obtaining economies of scale through global expansion leads to improved competitiveness, it is urgent that Japanese service sector work to raise productivity, along with active global expansion.

#### 1. Significance of global expansion of Japanese service sector

The global expansion of service sector also holds important significance from the aspect of the entire national economy, as Japan receives direct investment income which returns to Japanese "wealth."<sup>14</sup>

Japanese direct investment income (receipts) has been in an increasing trend for the last several years (Figure 3-3-1).



However, comparing the ratio of direct investment income (receipts) to nominal GDP, Japan was at 0.80% as of 2006, with the U.S. at 2.23%. It can be said that Japanese direct investment income was still at a considerably low level compared to the U.S. (about 1/3) (Figure 3-3-2).

<sup>&</sup>lt;sup>14</sup> As it will be mentioned in Chapter 4, Section 1, Japanese income account has been growing rapidly in recent years, as wealth obtained from the foreign assets is in an increasing trend.



Moreover, by estimating the direct investment income<sup>15</sup> in service sector and manufacturing sector separately based on the structure of foreign direct investment (FDI) balances, it is indicated that the U.S. and Japan are at the same level for the value of receipts in the manufacturing sector, contrasted with the possibility of a large gap arising in the service sector (Figure 3-3-3).



Figure 3-3-3 Changes in direct investment income(receipts) as a share of nominal GDP, by sector

comprising total direct investment income. Source: Balance of Payment Statistics, Japan's Balance of Payments and International Investment Position (Ministry of Finance, Bank of Japan), US BEA website.

As seen in Section 1, the ratio of FDI balance to nominal GDP of service sector is extremely small

<sup>&</sup>lt;sup>15</sup> Assuming that the rate of return for FDI by service industries equals that for manufacturing industries.

in Japan compared to that of the U.S. and European countries<sup>16</sup>, and it is important to increase the amount of direct investment income (receipts) by dramatically increasing direct investments of service sector. For example, if Japan achieves a ratio of direct investment income to GDP which is equal to that of the U.S., this would add ¥7.3 trillion to its current ¥4.1 trillion of direct investment income (receipts), will be expanded to ¥11.4 trillion, thus the effect of expanding Japanese disposable income (GNI) by over 1%.<sup>17</sup> Of this ¥7.3 trillion, ¥6.9 trillion would be due to reaching U.S. levels for the ratio of service sector' FDI balance to nominal GDP and for the FDI rate of return.<sup>18</sup>

As mentioned above, in order to expand the FDI of service sector, which is also important from the perspective of the national economy, it may be important to cultivate high productivity and profitability in Japan before entering overseas markets. So in this section, a general view will be first obtained in regards to the situation of Japanese service sector. It will be analyzed and compared to Europe and the U.S., to investigate the tasks required to increase productivity and profitability.

#### 2. Characteristics of service sector which are entering overseas markets from Japan

Here, the characteristics of Japanese service sector which are entering overseas markets will be compared to manufacturing sector. Specifically, the indices which show company characteristics are reviewed: (a) Productivity (TFP-Total Factor Productivity); (b) Company size, as shown by number of employees; (c) Profitability, as shown by the ordinary income/net sales ratio; and (d) Size of research and development activities, as shown by the R&D/net sales ratio. The companies' microdata were used to analyze the kinds of characteristics of the companies which are entering overseas markets.

For the service sector, it was found that the productivity of companies entering overseas markets was higher than that of companies which did not enter overseas markets during the same time period (Table 3-3-4). It can be said that a certain degree of productivity is one of the conditions for service companies to enter overseas markets.

On the other hand, in the manufacturing sector, it was found that the companies entering overseas markets were larger in scale and more profitable than companies which did not enter overseas markets in the same period. But for service sector, there was no clear connection between these indices and the conditions to enter overseas markets. Comparatively for the service sector, company size is not a precondition to enter overseas markets, indicating that even among relatively small size companies, a certain percentage of companies enter overseas markets by raising productivity.

<sup>&</sup>lt;sup>16</sup> Refer to this chapter, Section 1, Table 3-1-10.

<sup>&</sup>lt;sup>17</sup> (Japanese 2006 nominal GDP) X [(U.S. FDI income/nominal GDP).

<sup>- (</sup>Japanese FDI income/nominal GDP)] = 507.8 trillion yen. 507.8 X (2.23% - 0.80%) = \$7.3 trillion. <sup>18</sup> (Japanese 2006 nominal GDP) X [(U.S. FDI income/nominal GDP) X (U.S. share of service industries in FDI balance) - (Japanese FDI income/nominal GDP) X (Japanese share of service industries in FDI balance)] = ¥507.8 trillion. 507.8 X (2.23% X 73.9% - 0.80% X 35.2%) = ¥6.9 trillion.

	Manufactu	ring sector	Service sector			
	Coefficient	z-value	Coefficient	z-value		
<b>Fotal Factor Productivity (TFP)</b>	0.99	1.10	1.47	2.89***		
Scale of employment	0.42	8.67***	0.04	0.72		
Profit-to-sale ratio	2.25	2.95***	-1.18	-1.15		

Table 3-3-4	The relationship between entering overseas markets and	d
	enterprise characteristics	

Notes:

1. The period for estimation is 1980 to 2005.

2. \* indicates 10% significance, \*\* indicates 5% significance, and \*\*\* indicates 1% significance. The z-value tests whether the null hypothesis is true, i.e., whether the regression coefficient of an explanatory variable is 0 (the explanatory variable has no explanatory value). In this case, the null hypothesis that an absolute value of z greater than 1.96 indicates a 5% significance level, and greater than 1.64 indicates a 10% significance level, and greater than 2.57 indicates 1% significance level and an explanatory variable is 0, is rejected. It can be concluded that the explanatory variable has explanatory value.
3. "Coefficient" indicates the degree to which the probability of overseas market expansion changes given a 1-point change in

enterprise characteristics.

4. The R&D/profit ratios for manufacturing and the service sector were not significant and are not given here.

5. Please see Note 3-1 for details on these estimations.

Source: KAIGAITENKAI NO SENTAKU TO SONOGO NO SEISANSEIHENKA (forthcoming, Ito 2007).

Also, the disparity between "average productivity of companies entering overseas markets at time of entry" and "average productivity of companies not entering overseas markets in the same period" is larger in service sector than for manufacturing sector (Figure 3-3-5). This shows that for entry into overseas markets, productivity may play a more important role for service sector than for manufacturing sector.



Figure 3-3-5 Comparison of productivity between companies entering overseas market and those not entering

From the above analysis, it is clear that raising productivity is one important precondition for the progress of global expansion of Japanese service sector. Thus the following will clarify the current situation of productivity of Japanese service sector by international comparison, along with consideration of policies to raise productivity.

3. Stagnated real value added growth rate of Japanese service sector and its causes

By breaking down the annual average growth rate in real value added of Japanese service sector

over the four years from 2001 to 2004,<sup>19</sup> into contribution of the increase in labor input (considering labor quality in addition to the number of employers and the total working hours) and that of labor productivity, it is clear that only three industries achieved the real value added growth by raising labor productivity: financial intermediation, communications, and real estate (Figure 3-3-6).<sup>7</sup> In hotels, restaurants, medical care/welfare, public services, education, business services, and personal services, their labor productivity fell while raising the real value added by increasing the labor input. In the wholesale and retail,, the real value added fell as the rise in labor productivity failed to cover the decrease in labor inputs. In the transport industry, the real value added fell as both labor productivity and labor inputs decreased. In this way, it is indicated that none of Japanese service sector raised its real value added by achieving both higher labor productivity and increased labor inputs at the same time.

In the meantime, many U.S. service industries increased the real value added by achieving both higher labor productivity and increased labor inputs at the same time (Figure 3-3-7). On the other hand, in some industries such as communications, wholesale, financial intermediation, and transport, labor inputs fell, but real value added rose as they achieved even greater increased labor productivity.

Real value added rose in service sector of the UK (Figure 3-3-8) and France (Figure 3-3-10), due to the increase in both labor productivity and labor inputs, similar to the U.S.

As mentioned above, 1.0% average real value added growth rate of Japanese service sector from 2001 to 2004 is far below the U.S. (3.5%), U.K. (3.4%), and France (1.6%).

<sup>&</sup>lt;sup>19</sup> For details, refer to Appendix 3-2. A problem pointed out is that for real value added of service industries, there is an upward bias in the service prices used to calculate real values, which results in a downward bias in this calculated real value added price index. In other words, for services, in contrast to goods, it is difficult to measure quality, so the portion of price increases accompanying higher quality is not excluded from the statistical inflation rate. It is therefore necessary to keep in mind that, compared to the case of goods which calculates a real price index by excluding the portion of price increases accompanying higher quality, it is possible that real value added of service industries becomes lower.

<sup>&</sup>lt;sup>7</sup> This analysis used the EU KLEMS Database (released March 15, 2007), which was funded by the European Commission, and created through cooperation of universities and think tanks in various countries, led by the University of Groningen in the Netherlands. This database enables international comparisons of growth accounting and productivity, by broad introduction of the chain-linked index, and uniform methods to measure labor quality, capital services inputs, IT investments, etc.



Figure 3-3-6 Decomposition of real value added growth rate in Japanese service sector (2001-2004 avg)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.





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Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.



Figure 3-3-9 Decomposition of real value added growth rate in Germany service sector (2001 to 2004 avg) (%, % points)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database.March 2007, http://www.euklems.net.



Figure 3-3-10 Decomposition of real value added growth rate in France service sector (2001 to 2004 avg)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.



Figure 3-3-11 Decomposition of real value added growth rate in EU service sector (2001 to 2004 avg) (%, % points)

Notes: 1. Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. 2. Totals for Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, and the UK. Source: EU KLEMS Database, March 2007, http://www.euklems.net.

4. Productivity growth in Japanese service sector: issues and measures

(1) Causes of stagnated labor productivity growth in Japanese service sector

As already seen, the stagnating labor productivity growth rate in Japanese service sector is one of the reasons that the real value added growth rate of Japanese service sector is relatively low compared to the U.S. and other countries.

Here, the causes of the stagnated labor productivity growth rate are sought by using growth accounting. Labor productivity growth rate in Japanese service sector is broken down into the portion contributed by IT capital deepening, the portion contributed by non-IT capital deepening, and the portion contributed by higher TFP<sup>20</sup> (Table 3-3-12).<sup>21</sup> A similar analysis of labor productivity growth rates is also conducted for the service sector in the U.S. and major European countries in comparison to that of Japan.



<sup>&</sup>lt;sup>20</sup> It is difficult to measure TFP directly, so actually, TFP changes are measured as the amount remaining after deducting the contributions of production factors such as capital and labor force from the real value added growth rate. In general, it is pointed out that TFP increases due to technological advances, in addition to introduction of innovative business models and production methods, organizational reform to improve efficiency of companies, etc.

<sup>&</sup>lt;sup>21</sup> For details on analysis of degree of contribution to labor productivity, refer to Appendix 3-2.

First, among Japanese service sector, there is a remarkable labor productivity growth in industries such as financial intermediation, communications, wholesale, and real estate. With the exception of the real estate industry, there are contributions to the higher labor productivity from all of these factors: higher TFP, IT capital deepening, and non-IT capital deepening. Lower TFP had a negative contribution in the real estate industry (Figure 3-3-13).

Meanwhile, looking at the prominent drops in labor productivity in medical care/welfare, public services, education, business services, and personal services, it is indicated that TFP was a main cause in all of these industries. There are also extremely small contributions to these industries from IT capital deepening and non-IT capital deepening.

Next, looking at the U.S., the labor productivity rose in each industry except for education, and higher TFP contributed to higher labor productivity in almost all of these industries. There were relatively small contributions by IT capital deepening and non-IT capital deepening in these industries. On the other hand, business services had the greatest contribution from IT capital deepening, with a relatively small contribution from higher TFP (Figure 3-3-14).

In the U.K., in financial intermediation, wholesale, retail, communications, business services, etc., both IT capital deepening and higher TFP made large contributions to higher labor productivity (Figure 3-3-15). In France, remarkable contributions from higher TFP are seen in communications, personal services, public services, etc (Figure 3-3-17).



Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. (%) Source: EU KLEMS Database, March 2007, http://www.euklems.net.



Figure 3-3-14 Decomposition of labor productivity growth rate in US service sector (2001-2004 avg)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry.





Figure 3-3-15 Decomposition of labor productivity growth rate in the UK service sector (2001-2004 avg) (%, %points)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.



Figure 3-3-16 Decomposition of labor productivity growth rate in Germany service sector (2001-2004 avg) (%, % points)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.



Figure 3-3-17 Decomposition of labor productivity growth rate in France service sector (2001-2004 avg) (%, %points)

Notes: Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. Source: EU KLEMS Database, March 2007, http://www.euklems.net.





From the above, it is clear that stagnating labor productivity growth rates in Japanese service sector are caused by a lack of IT capital deepening and stagnating TFP growth rates. In Japanese service sector, only limited increases in TFP and IT capital deepening are seen in financial intermediation, communications, and wholesale, so future efforts are required for these aspects to raise labor productivity in a wide range of service industries.

#### (2) Lack of IT capital accumulation

(Growing gap between IT capital stock ratios of U.S. and Japan)

Comparing the share of IT capital stock in the total capital stock of Japanese service sector with U.S., the accumulation of IT capital stock had accelerated since 1996 in U.S. service sector, and there is a steadily growing gap with that of Japan (Figure 3-3-19). This contrasts with the manufacturing industry, where Japan is surpassing the U.S.

Notes: 1. Service industry averages were calculated by using the weighted averages of nominal value-added 2004 shares for each industry. 2. Totals for Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, and the UK. Source: EU KLEMS Database.



Figure 3-3-19 Percentage of IT capital stock in total capital stock in Japan and US

prices). 2. US: IT capital stock percentage = IT capital stock (based on 2000 real prices) / total capital stock (based on 2000 real prices). Source: *JIP DATABASE 2006* (Research Institute of Economy, Trade and Industry (RIETI)), US BEA website.

Also, comparing IT capital stock ratios by industry, it is clear that in Japanese service industries such as finance and communications which achieved relatively high labor productivity increases, IT capital stock accumulation has progressed to the same levels as in U.S. service industries. But IT capital stock accumulation lags behind the U.S. in many Japanese industries (Figure 3-3-20).



Figure 3-3-20 Percentage of IT capital stock in total capital stock in Japan and US (by industry)

Notes:

1. Japan: IT capital stock percentage = IT capital stock (based on 1995 real prices) / total capital stock (based on 1995 real prices).

2. US: IT capital stock percentage = IT capital stock (based on 2000 real prices) / total capital stock (based on 2000 real prices).

Source: JIP DATABASE 2006 (Research Institute of Economy, Trade and Industry (RIETI)), US BEA website.

As stated, there are large gaps in IT capital stock levels between U.S. and Japan service industries. Same as the general capital accumulation, if the existing production method is maintained, then there is a high probability of reduced effect along with the progress of the accumulation as the law of diminishing returns holds true. However, when accumulating the IT capital, it is required to strategically review the production methods to maximize utilization of accumulated IT capital, then one can expect rapid or continuous improvements in the production efficiency. In other words, from a growth accounting perspective, it is important to both accumulate IT capital and raise TFP at the same time.

To check whether IT investments and increased TFP occur at the same time in Japan and the U.S., the following factors related to the productivity growth rates were converted into a scatter diagram: (a) Contributions by IT capital, and (b) Contributions by TFP (Figure 3-3-21).





Source: EU KLEMS Database.

Looking at this, in contrast to both IT capital deepening and higher TFP achieved in many U.S. service industries, IT deepening progressed in very few of Japanese service industries, and there is no increase in TFP.

(Overemphasis on hardware in IT investments by Japanese service sector)

Comparing a breakdown into components of IT investments by Japanese manufacturing and service sector, the share of software investments by manufacturing sector grew quickly in recent years, comprising 70% of total IT investments in 2004.

On the other hand, looking at service sector, a large change is not seen in the share of software. Hardware such as computers and communications equipment still comprises 70% of the total, so it appears that the software investments by service sector are lagging behind (Figure 3-3-22).





Source: CIO IKUSEI KATSUYO NO TAME NO IT TOUSHI NO GENJOU KADAI BUNSEKI CHOUSA JIGYOU HOUKOKUSHO (METI 2006).

Also, even comparing the breakdown of IT investments in the U.S. and Japan by narrowly defined service sector,<sup>22</sup> Japan leans towards hardware, while software comprises an extremely large percentage in the U.S. which is growing yearly (Figure 3-3-23).



Figure 3-3-23 Changes in IT investment breakdown of Japanese and US (narrowly defined) service industry

As Moore's Law<sup>23</sup> indicates, hardware quality improves each year, and it is thought that software will become increasingly important for advancing broad utilization of IT in service sector. However, the trend of increasing software investments is not seen in Japanese service sector, so in the future, it is hoped that the advances in strategic IT investments which actively utilize software, will achieve both IT capital accumulation and higher TFP at the same time.

(3) Issues for developing the market environment of Japanese service sector

To stimulate the economy, there is a need to frequently launch new businesses which are full of creativity, efficiently utilize business resources such as human resources, facilities, and capital, and generate high value added. A sound market environment must be built to continually give incentives to managers for such activities. The following two market environment developments are needed to raise productivity of Japanese service sector: (a) Market environment which promotes regeneration through entry of high productivity companies, and (b) Market environment which promotes healthy

Source: CIO IKUSEI KATSUYO NO TAME NO IT TOUSHI NO GENJOU KADAI BUNSEKI CHOUSA JIGYOU HOUKOKUSHO (METI 2006)

<sup>&</sup>lt;sup>22</sup> Generally corresponding to categories M to Q in the Japan Standard Industrial Classification (refer to this chapter, Section 1, Footnote 1).

<sup>&</sup>lt;sup>23</sup> Moore's Law is a law of experience that states: the number of components on a single semiconductor chip doubles each 18 to 24 months.

competition between participating companies in pricing and quality. Thus the following discusses the current status and issues in the market environment for Japanese service sector.

#### • Rejuvenating market environment

(Necessity of market environment developments to increase the ratio of new businesses)

First, to measure the degree of regeneration in Japanese service sector, comparing the business start-up ratio<sup>24</sup> of service sector, Japanese ratio is far lower than in the U.S. (Figure 3-3-24). There is a low rate of entry to the market by new companies which are said to have relatively high productivity<sup>25</sup> and possess new business models not found in existing businesses. It indicates that the mechanism to raise productivity of Japanese overall service sector is not functioning sufficiently.



Notes: The business establishing rate of Japan was calculated from taking the simple average of the business establishing rate of service sectors in the 2007 White Paper on Small and Medium Enterprises in Japan. The business establishing rate is found from the NTT town page database, and services sectors were established as the 7 sectors, information, communication, eating and drinking, accommodation, life related services, business related service, transportation, finance, education, medical and welfare, and other services, appearing in the White paper on Small and Medium Enterprise in Japan. The business establishing rate for the US was found from the US Census Bureau. Source: 2007 White Paper on Small and Medium Enterprises in Japan (METI), Website of US Census Bureau.

The regulation such as restrictions on market entrants are one of the factors raised that hold back

<sup>&</sup>lt;sup>24</sup> Japanese business start-up ratio was calculated from the yellow pages database, so businesses with no employees are also regarded as start-ups when they open for business. Also, businesses that had transferred their locations are counted as new businesses. In contrast, the U.S. business start-up ratio is calculated from data on businesses which have employees, so a simple comparison cannot be made. But since there is a large gap between them, therefore it is thought that the fact does not change that the U.S. start-up ratio exceeds Japanese start-up ratio.

<sup>&</sup>lt;sup>25</sup> SHINKI SANNYU KIGYOU NO SEISANSEI TO SHIKINCHOUTATSU (Miyagawa and Kawakami, 2006) is an example of Japanese domestic research which verifies that new companies entering markets have higher productivity.

new market entrants. When classifying Japanese service sector into ones with progress in deregulation and those without progress from 1995 to 2002, and comparing their rates of TFP increases in the same period, TFP falls dramatically in sector without progress in deregulation, while TFP only fell a little in sector with progress in deregulation. It is clear that deregulation has the effect of raising TFP (Figure 3-3-25).





Manufactu	iring sector	Service sector			
Industries that promoted deregulation	Industries that did not promote deregulation	Industries that promoted deregulation	Industries that did not promote deregulation		
Textile products	Lumber/wood products	Information service industry (internet attached services sector)	Household		
Rubber products	Furniture/fitments	Telegraph and telephone industry	Postal service		
Glass/glass products	Pulp/paper/cardboard/processed paper	Road haulage industry	Rental of goods for institutional use		
Oil products	Paper processed products	Wholesale	Other visual, auditory, textual information production sectors		
Applied electronic devices/electric measuring instruments	Printing/plate making/binding	Retail	Other personal services		
Precision machinery	Leather/leather products/fur	Restaurants	Cleaning, Hair Dressing, Cosmetics, Bath house sectors		
Final chemical goods	Basic organic chemical products	Automobile mechanics and repair industry	Other public services		
Basic inorganic chemical products Basic inorganic chemical products Other manufactured products Nonferrous metal processed Heavy electrical machinery Household electronic appliances/electric equipment Electronic parts Other electric equipment Other articles of food Tobacco Beverage Other metal products Seafood Cool en ducts	Chemical fiber Chemical fiber Cement/cement products Ceramics Pie iron/crude steel Construction/Architectural metal products Special industry machinery Other general machinery Equipment for business and service Computers/accessories Communication devices Semiconductor device/Integrated circuit Plastic products	Valet transportation industry Other business services Railroad industry Broadcasting industry Real estate Insurance Other transporting industries/packaging Air transport industry Finance Publication/newspaper industry Advertisement Entertainment Research institute (private)	Education (Private/nonprofit) Health services (industry) Hotels		
Coal products Other transport equipment Livestock products Non-metal smelted/refined Vehicles Vehicle parts/accessories General industrial machinery Other ceramic/stone products	Gran cleaning/flour milling Other steel Fodder/organic fertilizer Chemical fertilizer				

TFP growth rates are average growth rates from 1995 to 2002.

Progress in deregulation is based on comparing 1995 and 2002 figures in the KOUZOU KAIKAKU HYOUKA HOUKOKUSHO 6 (Cabinet Office) table presenting data on indications of regulation in 97 industries. Industries for which degree of regulation decreased even slightly since 1995 were designated as industries that promoted deregulation, industries for which degree of regulation were the same as or greater than in 1995 were designated as industries that did not promote deregulation. Please see below for details on the breakdown of industries.

Figures inside parentheses are the number of industries in that category.

Source: JIP DATABASE 2006 (Research Institute of Economy, Trade and Industry (RIETI)), KOUZOU KAIKAKU HYOUKA HOUKOKUSHO 6 (Cabinet Office).

#### In Japan, the Deregulation Action Program approved by the Cabinet in 1995 was the motive to

actively promote anew a variety of deregulations and regulatory reforms. Looking at the trend of a deregulation index, deregulation is advancing in many industries, such as the information and communications (Figure 3-3-26). In recent years, there have been new deregulations such as open access to public facilities and services, measures to approve the sale of medical supplies with relatively light effects on the human body in general retail shops as non-medical supplies, schools and hospitals managed by corporations in special structural reform zones, lifting of the ban on management of special elderly nursing homes, etc. On the other hand, the degree of regulation has increased for some industries which provide personal services and public services, and even if deregulation has progressed in the education and medical sectors, the extent of its progress is small in some sectors compared to other industries.

To promote entry into service markets and regenerate the entire industry in its growth, it is necessary to remove factors that suppress new entrants by improving the market environment. Among the regulations, some are required to ensure safety and health, environmental conservation, and fair trading, etc. But, for example, there are also regulations which were necessary at the time of introduction, but their significance became unclear with the changes over time. Based on their necessity and rationality, regulations working as barriers to new entrants into service markets should be relaxed or eliminated.





Notes: 1. The degree of regulation of the end of March 1995 is set as the regulatory index1, and the value at the end of each March is calculated from it. 2. The closer the value is to 0, the more there is a development toward regulatory reforms compared to the end of March 1995. Source: Structural Reform Evaluation Report 6 (Government of Japan).

(Low level of entry by foreign service companies into Japan markets, compared to in Europe and the U.S.)

Entry by foreign companies which developed under different economic environments and business cultures can introduce new business models and resources which can increase productivity. Such entry can also provide greater benefits to consumers through introduction of new services that never existed in Japan. Looking at the FDI balance into Japanese service sector as a percentage of nominal GDP, the entry by foreign service companies into Japan market is extremely small compared to the U.S. and European countries (Figure 3-3-27). Greater FDI into Japan by foreign companies is thought to be important for the development of Japanese service sector and greater consumer benefits.



Source: SEKAISHUYOUKOKU NO CHOKUSETSU TOUSHI TOUKEISHUU (2007) (Institute for International Trade and Investment), WDI (World Development Bank), Japan's Balance of Payments and International Investment Position (Ministry of Finance, Bank of Japan), System of National Accounts (Cabinet Office).

Comparing FDI into the service sector of several countries by industry, FDI into commerce such as wholesale and retail was large compared with other industries in Europe and the U.S. In contrast, FDI into Japan was largely focused on the finance and insurance, with little in other industries (Figure 3-3-28).



Figure 3-3-28 The inward direct investment of services in major countries and regions

Regulations on entry of foreign capital is cited for the lack of progress of FDI into several other countries, but in Japan case, regulations on entry by foreign companies is at a lower level than the world average, except for in the fixed-line telephone and the airline industries, and less than in the U.S. overall (Table 3-3-29). Thus in Japan case, the market is said to be open to foreign companies except for a few industries, so it is thought that factors other than foreign capital regulations are keeping FDI into Japan at a low level.

		Japan	Germany	UK	France	US	South Korea	Australia	World ave
Business service	Legal	0.100	0.022	0.017	0.233	0.075	0.075	0.250	0.239
	Accounting	0.100	0.022	0.017	0.033	0.025	0.075	0.250	0.191
	Architecture	0.025	0.022	0.017	0.033	0.025	0.050	0.200	0.110
	Engineering	0.025	0.022	0.017	0.033	0.025	0.050	0.200	0.087
	Total	0.063	0.022	0.017	0.083	0.038	0.063	0.225	0.160
Felecommunicatio	Fixed	0.286	0.122	0.017	0.072	0.025	0.400	0.700	0.196
	Mobile	0.025	0.122	0.017	0.072	0.025	0.400	0.200	0.152
	Total	0.221	0.122	0.017	0.072	0.025	0.400	0.575	0.185
C	irculation	0.025	0.022	0.017	0.022	0.025	0.050	0.200	0.092
Finance	Insurance	0.025	0.116	0.083	0.138	0.175	0.050	0.200	0.152
	Bank	0.075	0.072	0.067	0.094	0.275	0.050	0.300	0.172
	Total	0.064	0.082	0.070	0.104	0.252	0.050	0.277	0.167
Hotels and restaurants		0.025	0.022	0.017	0.022	0.025	0.050	0.200	0.071
Fransportation	Air	0.675	0.248	0.267	0.198	0.650	0.350	0.650	0.454
	Sea	0.275	0.198	0.361	0.198	0.275	0.450	0.500	0.270
	Land	0.025	0.022	0.017	0.072	0.025	0.050	0.200	0.128
	Total	0.356	0.177	0.256	0.171	0.346	0.333	0.486	0.302
Ele	ectric power	0.025	0.122	0.017	0.322	0.125	0.400	0.200	0.376
C	onstruction	0.025	0.022	0.017	0.022	0.025	0.050	0.200	0.080
Ma	nufacturing	0.025	0.022	0.017	0.072	0.025	0.050	0.200	0.086
Al	l industries	0.101	0.063	0.065	0.094	0.119	0.120	0.280	0.159

ple 3-3-29 The strength of regulation towards inward investment by country and indus

Notes: The ones in red for Japan are the ones which are not as open as the world average. Using the trade and investment weight (FDI weight) dependent on the screening for the proportion of foreign capital regulation, foreign investors, the degree of regulatio 3 areas of the management and operation after the emergence, the strength of regulation is put into an index between 0 and (the closer to 1, the less open it is. The closer to 0, the more open it is). Quoted by: OECD'S REGULATORY RESTRICTIVENESS INDEX (December 2006)(OECD).

Then looking at the results of a questionnaire survey<sup>26</sup> of foreign service companies in Japan about disincentives for their business operations, the top two barriers in service industries are: (a) Difficulty to secure human resources, and (b) High business costs (Figure 3-3-30).



Figure 3-3-30 Disincentives for foreign companies operating business in Japan (Service sector)

Source: "TAINICHI CHOKUSETSU TOUSHI NI KANSURU GAISHIKEI KIGYOU ISHIKI CHOUSA 2007." (JETRO (2007)).

## <sup>26</sup> JETRO (2007), *HEISEI 18 NENDO TAINICHI CHOKUSETSU TOUSHI NI KANSURU GAISHIKEI KIGYOU ISHIKI CHOUSA*.

Regarding (a), it is important to increase mobility of human resources and to put efforts into nurturing excellent personnel who can respond to the needs of the international service industry in both management and technical aspects, such as abilities in foreign language. It is also necessary to develop an environment for active introduction of excellent human resources from foreign countries.<sup>27</sup>

Regarding (b), it has long been pointed out that Japan has a high cost of living and a large gap between domestic and foreign prices. Although Japan has a very convenient business environment and attractive market<sup>28</sup>, this high cost structure may be making foreign companies hesitate to enter the market or expand their operations.

According to the same questionnaire survey, foreign companies list some costs of the business services as which they think are the disincentives for their business, such as real estate, personnel, and transport/communication/information. Regarding the costs of business services, it is possible to deregulate the industries for their competition in a free market environment which would reduce the prices. In fact, the prices have fallen dramatically for communication had taken place (Figure 3-3-31). However, according to results of a survey<sup>29</sup> conducted by the Ministry of Economy, Trade and Industry on the gap between Japanese and foreign prices for intermediate industrial inputs, as of 2005, prices of intermediate manufactured goods inputs in Japan equaled prices in the U.S. and developed European countries. In contrast, prices of intermediate service inputs in Japan were 1.59 times U.S. prices, and 1.91 times the prices in Germany, so there are still large gaps between domestic and foreign prices.

Therefore, there is a need for even more structural reform in the future to continue further reducing the business costs such as the costs of business services, thereby promoting more new investment and expansion of operations by existing foreign companies in Japan.

<sup>&</sup>lt;sup>27</sup> Refer to the following discussion for specific measures to develop human resources in service industries.

<sup>&</sup>lt;sup>28</sup> In the same survey, there were questions on forecasts for market growth in Japan. Fifty-eight percent of service industry companies responded that the market would "grow", along with 43% of companies in the manufacturing, wholesale, and retail industries.

<sup>&</sup>lt;sup>29</sup> Ministry of Economy, Trade and Industry (2006), *SANGYOU NO CHUKAN TOUNYU NI KAKARU NAIGAI KAKAKU CHOUSA*. This survey measured international price differentials for 152 manufactured products and 36 services for industry in six countries: U.S., Germany, China, South Korea, Taiwan, and Hong Kong.



In addition, there is also progress in development of the system infrastructure for direct investment by foreign companies in Japan, as the prohibition on triangular mergers in Japan was lifted in May 2007.<sup>30</sup> An example is the establishment of the Invest Japan Business Support Centers by JETRO. These function as central points of contact to obtain information on various investment procedures, such as establishment of corporations, factories, and stores, and are actively providing information. There is a need to promote utilization of these kinds of system infrastructure and places which provide information, in order to increase FDI into Japan.

# • Market environment which promotes healthy competition in price and quality between market entrants

As was discussed earlier, while working on domestic deregulation, correcting international price differentials, and building a regenerating market environment, it is important to maintain appropriate competition in price and quality between companies which are currently participating in the market. The following discusses current situation and issues from these aspects in Japan.

(Framework for appropriate evaluation of service quality: efforts in the U.S.)

In comparison to goods, the intangible character of services results in the larger asymmetry of information between producers and consumers, so it is difficult to evaluate quality. And thus it becomes difficult for quality to be reflected in the price.<sup>31</sup> This asymmetry of information causes mismatches and difficulties between providers and consumers, and causes consumers to lose their

<sup>&</sup>lt;sup>30</sup> Regarding triangular mergers, refer to Chapter 4, Section 4.

<sup>&</sup>lt;sup>31</sup> It is also said that in Japan, the idea that service is free is deeply rooted in culture, making it even more difficult to reflect quality in price.

trust in services, in addition to reducing the incentives for producers to provide higher quality services. As one measure to eliminate asymmetry of information, the American Customer Satisfaction Index (ACSI) was created in the U.S., promoting visibility of service quality.<sup>32</sup> The ACSI index was developed in 1994 by the School of Business at the University of Michigan to measure the satisfaction of consumers, and since then surveys of various industries and government services have been released every year. Specifically, they perform a questionnaire survey by telephone or the web with 250 consumers per company; evaluations and complaints are collected on the quality and price of the products and services provided by the company to calculate the company's score (100 points maximum). Moreover, a weighted average is calculated using the company's score and sales, for calculating scores at the level of industry or sub-industry.

Correlation coefficients can be seen between macro indices such as ACSI, GDP, and individual consumption expenditures, so one can visualize customer satisfaction. Improving customer satisfaction may benefit the macro economy (Figure 3-3-32).



Figure 3-3-32 American Customer Satisfaction Index (ACSI) as an economic indicator

On the other hand, comparing ACSI by sector, it is clear that service sector have a lower index than for manufacturing sector (Figure 3-3-33). This suggests that it is difficult to raise customer satisfaction in service sector, along with the significance of promoting even higher efficiency and higher value added, and that there is large room for differentiation.

(Active information delivery towards elimination of regional monopolistic aspects)

It is clear from ACSI that customer satisfaction indices tend to be low in sector with strong monopolistic aspects and sector with high switching costs (Figure 3-3-33). Even for services, their simultaneity of supply and demand tends to narrow the range of choices for consumers, and so the customer satisfaction tends to be relatively low compared to manufacturing sector.

<sup>&</sup>lt;sup>32</sup> The following discussion referred to *SERVICE SANGYO NI OKERU INNOVATION TO SEISANSEI KOUJOU NI MUKETE* (2007, Service Sangyo Innovation To Seisansei Ni Kan Suru Kenkyukai).



Figure 3-3-33 Movement of ACSI seen by industry



Source: Website of ACSI.

To provide incentives to raise productivity in service sector, which have the problem of regional monopolistic aspects, it is important to promote active delivery of information to broaden the range of choices for consumers. For that purpose, utilization of IT is raised as one of the measures. The number of internet users reached 85.29 million (66.8% of the country's total population) at the end of 2005,<sup>33</sup> and is now becoming an important information collection tool for people. In recent years, web sites providing comprehensive information enabling comparison of quality and prices of goods and services are improving, with growing numbers of affiliated shops and access numbers (Figure 3-3-34).

<sup>&</sup>lt;sup>33</sup> Ministry of Internal Affairs and Communications (2006), *HEISEI 17 NENDO TSUSHIN RIYOU DOUKOU CHOUSA* 



Figure 3-3-34 Changes in the number of accesses and member chain stores in the company C information providing website

Source: Data from Company C.

Also, the Internet's status as a useful advertising tool is improving. Active dissemination of information via means such as the Internet is expected to bring a competitive environment to service sector in regions where the market is easily limited, in addition to a broader range of choices of services for consumers.

#### (Customer Satisfaction Index (CSI) also being investigated in Japan)

The Customer Satisfaction Index has already been introduced in the U.S., South Korea, Sweden, etc., and research is also being conducted in various parts of the world: the EU, Singapore, New Zealand, Taiwan, etc. With this trend, the introduction of a cross-sectional benchmark similar to that in the U.S. which enables comparison between companies and industries (a "Japan Customer Satisfaction Index") is also being investigated in Japan by the Ministry of Economy, Trade and Industry.

#### (4) Efforts for human resource development in service sector

In this way, while building a framework for ensuring quality of services and promoting fair competition between companies, efforts to directly raise quality of services are also important. As mentioned earlier, utilization of IT enables the provision of services without personal contact in some service sector, but services are still produced and provided by people in many service businesses, where quality and efficiency of services largely rely on people. Thus to raise quality and efficiency of service sector and improve customer satisfaction, it is necessary to obtain and develop appropriate human resources corresponding to the characteristics of services provided. However, the following issues are pointed out from the perspective of obtaining and developing human resources in Japanese service sector.

- (a) Along with changing consumer needs, new services are constantly created and provided by service industries, and these industries have many relatively new industries, so a system of study which the industries can rely on is not sufficiently established. Also, an image of the human resources sought by service industries is not clearly defined.
- (b) In Europe and the U.S., research and education in services engineering is actively promoted, and services engineering is already recognized as a field of study, with curricula utilized in some universities. In Japan on the other hand, research institutions have just recently begun to appear which place emphasis on research and education in services engineering, and research and education in services engineering lags behind Europe and the U.S.. It is also difficult to say that there is enough progress in utilization of services engineering techniques in service sector.
- (c) Although there is sufficient education in knowledge and skills in some specialized fields such as the medical care and tourism sectors, there is not always enough education provided for management aspects.
- (d) In recent years, as forms of employment are diversifying in entire sector including in manufacturing, particularly in relatively young service sector, many businesses are seen to largely rely on work forces comprised of highly flexible irregular employees such as part time workers. Thus in service sector, there are weak incentives to invest in long term human resources development in companies, through cooperation with customers or suppliers, etc.

Towards resolution of the above issues, the Service Productivity & Innovation for Growth conference was launched on May 10, 2007 (Representative: Jiro Ushio, Chairman and Ushio Group Representative, Ushio Inc.). This conference, "Towards Innovation and Productivity Improvement in Service Sector", focuses on industry and plays the role of a common platform for industry, academia, and government to work together, as a place to deal with issues faced by diverse service industries. The Ministry of Economy, Trade and Industry is utilizing these kinds of places to promote various efforts for human resource development in service sector.

First, mainly to resolve issues mentioned in (a) to (c) above, it is necessary to promote systematic improvements in education structures, and dialogue between industry and academia.

Thus, places such as the Service Productivity & Innovation for Growth conference are being used to understand needs for human resources in service sector, and to advance efforts to clarify an image of people in demand (knowledge, skills, technology, etc.) and career paths in companies, etc. There is also work to promote dialogue between industry and educational institutions such as universities, in addition to support for efforts towards improved development of management human resources with specific specialized knowledge, for example research and education in services engineering, medical care management in medical faculties, hotel management in tourism faculties, and those who are also expert in management techniques, etc.

Next, to resolve issue (d), it becomes necessary to clarify skills and know-how common within

each industry and across industries, and develop systems to develop human resources more strategically.

Thus the following measures are being implemented: (1) Create skill standards which clarify the skills and know-how appropriate for the special qualities of services provided, through efforts of organizations such as the Service Productivity & Innovation for Growth conference, (2) Support establishment of a skills evaluation system (testing and certification) as a common platform for human resource development, (3) Promote utilization of Job Cards,<sup>34</sup> which are also incorporated into a "Bottom-up Growth Strategy", (4) Provide support to develop a common education program and education materials for each industry and job type, etc. It is thought that implementation of these measures will enable efficient human resource development, even in service sector which have highly mobile human resources.

It is important to raise the quality of human resources in Japanese service sector through the efforts described above, thereby achieving higher quality, customer satisfaction, efficiency, and productivity of services provided.

#### 5. Raising productivity of Japanese service sector and overseas expansion

(Examples of success: Raising productivity of Japanese service companies and overseas expansion)

As described above, there are issues in Japanese service sector when viewed as an entire sector, but within Japanese service sector, some companies are successfully expanding overseas through utilization of the company's own business model and advanced utilization of IT. Some examples are introduced below.

#### (Example of retailer D)

First example is a Japanese company's excellent business model which is also valued overseas, and its differentiation with competitors that led to success overseas.

Retailer D's product development concept: "Utilize raw materials to create simple, reasonably priced products, while considering environmental and energy issues" differentiates the company's products from other companies' products, both in Japan and overseas. This concept is also highly valued overseas, yielding secondary benefits such as famous foreign designers asking to participate in planning product development, overseas media requesting interviews, etc.

This company's business model is to sell general lifestyle products developed through this kind of concept, such as clothing, furniture, stationery, and small household items. It is expanding overseas, similar to in Japan. It opened its first overseas store in London in 1991, expanding to a total of 69 stores as of February 2007, focusing on Europe including the UK and France, and Asia including Taiwan and Hong Kong.

This company expands in markets where it can exhibit its strengths, with conditions when deciding on overseas expansion locations such as ability to understand the company's concepts, a

<sup>&</sup>lt;sup>34</sup> A "Job Card" notes the certified evaluation regarding participation and actual results of "Vocational Skills Formation Program" as part of the "Bottom-up Growth Strategy". The card holder can present this for use in job search activities.

mature market with a certain income level, etc. In other words, it seems that the company established its business model, accurately recognizes its strengths, and is implementing this to successfully expand its business overseas.

#### (Example of Barber Shop Company E)

Next example is a company which uses the same business model to expand both in Japan and overseas, with different aspects valued by consumers depending on the country.

Barber Shop Company E is a haircut chain providing a fixed price haircut package service throughout Japan. By eliminating services other than the haircut, and by thorough utilization of IT in accounting and other office work to raise efficiency, this company's business model provides a barber service in a short time at low cost, combining its haircut skills, customer handling, shop cleanliness, etc. This new option in barber service which did not exist previously has been popular among consumers. As a result, since opening its first shop in 1996, the company has continually grown, reaching 353 shops at the end of March, 2007.

Starting with its Singapore shop in 2002, the company has actively opened shops overseas with similar business models in Hong Kong, Thailand, etc., reaching 30 shops overseas at the end of March, 2007. The company also trains its overseas employees in Japan, providing the same service overseas as in Japan. In Southeast Asian and other countries it enters, its excellent barber skills, polite customer handling, clean shop interior, etc., are differentiating it from competing barbers, leading it to success in overseas expansion. This is an example of efficiency and other factors developed in Japan, where the same service is valued from different viewpoints by consumers in overseas locations.

Requests are said to have come to the company for opening shops from over 20 countries, including developed countries. It plans to continue opening shops overseas, focusing on large East Asian cities.

#### (Example of Education Company F)

Due to the differences in educational environment caused by the cultural and systematic differences in each country and region, the global expansion for education service industry is known to be difficult. This is an example of an educational service company achieving its global expansion by bringing its education and business model which works in various regions overseas, and through various localization efforts.

Company F provides an individualized self-study system education service to consumers. The special feature of this company's service is providing education which suits each student's level and learning pace, regardless of age or grades in school. It does this by utilizing education materials in each subject which are divided into various stages, from the essential basics through advanced levels. Having to provide this kind of education method in Japan, the company has built up its know-how on providing detailed education suited to individual abilities.

The company's overseas expansion began with its entry into the U.S. in 1974. The initial purpose was to provide services to children of Japanese working in the U.S., and when it built its reputation through the improved achievements of children of Japanese workers, local students also steadily came

to use it. Further, when the company's education methods were introduced into school education, the students' grades rapidly improved. This was taken up by the local media, and the company's education methods were thus highly evaluated overseas. The company's education methods are therefore proven to be suitable for different education systems overseas. Thereafter, in addition to the U.S. where it first entered, it is said that requests for the company came from many countries and regions in Europe, Central and South America, Asia, etc. It has achieved global expansion with locations in 44 countries and regions, mainly as a result of the company entering overseas markets in response to such requests.

As the company's locations spread to new areas, it uses various techniques to boost students' motivation to study in an effort to suit the different educational environments in each country and region.<sup>35</sup> It shares the education know-how practiced in its classrooms in each country and region, not only through the Internet, but through the exchange of opinions where various classroom managers are given the opportunity to meet altogether. This contributes to instruction methods that are different from the manualized teaching method using education materials, upgrades the teaching abilities of instructors, and leads to further development of the entire company's education methods.

#### (Example of Retailer G)

Also introduced is an example of a Japanese company which built a business model with high productivity through advanced IT utilization, then successfully expanded overseas.

Retailer G is achieving higher efficiency through active utilization of IT, such as thoroughly eliminating any unnecessary steps that occur from manufacturing to sales to raise efficiency. It also introduced IT in the affiliated stores for their order handling system since 1978.

The company has been renewing its order handling system about once every three years. In 1999, it switched from its previous system which used a pen to scan product barcodes of the product ledger, to development and introduction of a handheld device. It displays product images and enables placement and adjustment of orders such as an increase or decrease of quantities by pushing the required buttons. This kind of advanced utilization of IT between its various facilities brought standardization of work in the company, and also led to higher profitability. Currently, the corporate group is aiming to actively advance its utilization of IT even further.

Moreover, the company opened its first shop in Beijing in China in 2004 and it is expanding overseas into East Asia, looking into the future. A main factor for choosing overseas locations is to find a place to expand without changing its business model including standardization of work through advanced utilization of IT. It is thought that the company's competitive strength based on IT utilization is leading it to success in overseas expansion.

#### (Example of Logistics H)

Another example is achieving overseas expansion by advanced IT utilization and successful

<sup>&</sup>lt;sup>35</sup> In Thailand for example, students who have completed certain courses go on a trip where they lodge together, and share their study goals by interacting with other students who completed their courses. This becomes a way to boost their desire to study.

differentiation from competitors in overseas locations.

Distributor H began its overseas expansion long ago, for example by establishing a U.S. subsidiary in 1962. Since the end of September, 2006, it has been carrying out business activities globally in 193 cities in 37 countries.

European and U.S. logistics companies are making efforts to provide services to customers, and are achieving overseas expansion by thoroughly pursuing efficiencies in operation the main distribution routes that the companies built themselves, while differentiating themselves from local competitors. On the other hand, in addition to simple transport and storage operations, this company is putting efforts into receiving contracts from overseas for outsourcing of entire distribution operations from client companies (3PL work), by handling consulting work which presents optimal distribution strategies for the entire supply chains of client companies (logistics solutions). This company (a) Utilized distribution know-how built up by the company to construct the WMS<sup>36</sup> and TMS<sup>37</sup> distribution information systems, enabling it to provide this information in a form which suits the client company's situation, (b) In addition to its global locations, established a complete distribution network which can deliver from Shanghai to about 80 locations in China, meeting the needs of customers beyond the main distribution routes, and (c) Recognizes its strength to build an organization which can analyze and propose issues and measures for building optimal distribution for client companies, for example by utilizing the corporate group's think tank to analyze distribution costs. It has expanded overseas while steadily differentiating itself from other companies by actively utilizing these strengths to flexibly handle customer needs.

This company actively utilizes IT, for example networking all of its Japan locations in 1969. For example, it created a new system in 2004 which simplifies shipping and handling work and stores shipping history data, etc., enabling more efficient export operations of client companies. It is thought that also utilizing IT overseas has led to a successful overseas expansion.

#### (Example of Boiler Manufacturer I)

Finally, though it is not technically in the service industry, this is an example of a Japanese manufacturer providing overseas service and maintenance (after-service) related to its own products.

Boiler Manufacturer I currently has over a 50% market share in Japan for small once-through boiler products. Its boilers enable energy efficiency and lower cost, and a technician's license is not required for installation, inspection and handling. The company handles sales and maintenance work on its own boilers. It has implemented preventative measures which can detect a small defect, such as over 80 operating data points collected from inside its own boilers and sent online to its information center 24 hours a day/365 days a year. This company is putting effort into maintenance work on its boilers with more and better service engineers.

Since opening a coordination office in Taiwan in 1980, this company has expanded overseas. It currently has factories in China, South Korea, Taiwan, the U.S., and Canada from mergers and by independent entry into these countries, and is carrying out product sales and maintenance work.

<sup>&</sup>lt;sup>36</sup> Warehouse Management System.

<sup>&</sup>lt;sup>37</sup> Transport Management System.

Moreover, in addition to performing the maintenance work in the countries of operation, it has made efforts focused on East Asia to find and train local agents who can provide the same level of maintenance as the company. Thus it is achieving global expansion of both product sales and maintenance work even outside of their locations. When the company chooses locations to enter, the condition is whether a maintenance organization can be built as part of their business model. Though it is a manufacturing business, service work is part of the company's business model, and it expands into markets where it can exhibit this strength.

In addition to the examples mentioned above, Japanese major retailer J established a wholly owned subsidiary in China. It announced that it aims to operate a large shopping center by 2008, and, moreover, build a 30 store organization within five years in Northern China. More and more companies are moving to expand overseas in the future.

(Towards achieving higher productivity in Japanese service sector and overseas expansion)

Service sector comprise 70% of GDP and employment. For sustainable development of Japanese service companies, it is important to implement various measures to overcome the issues described in this chapter. It is necessary to strengthen international competitiveness by raising productivity of Japanese service sector, and at the same time, to achieve further growth by actively achieving overseas expansion in places achieving growth such as East Asia.