

White Paper on International Economy & Trade — Summary

By Policy Planning & Research Office, Trade Policy Bureau, Ministry of Economy, Trade & Industry (METI)

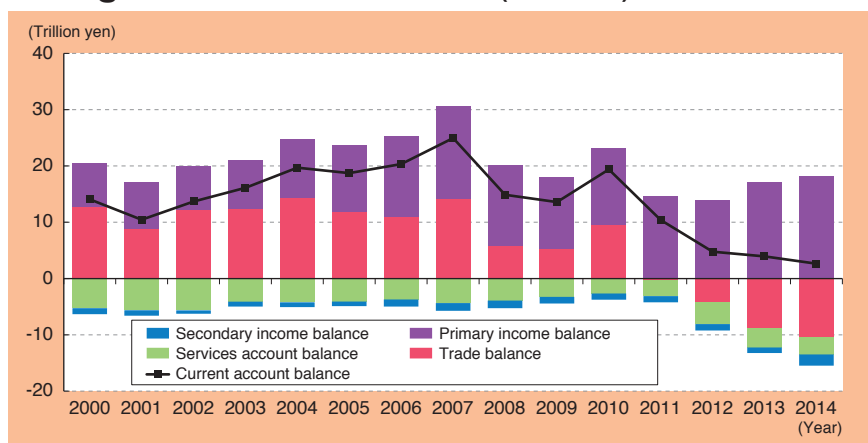
Part I: Changes in Japan's External Account & Global Economic Trends

Chapter 1 Changes in Japan's external account

Japan recorded its smallest current account surplus in 2014. While

CHART 1

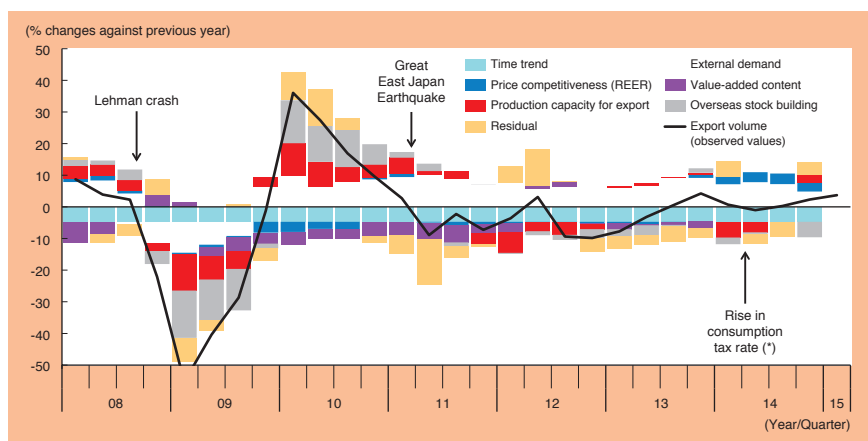
Changes in current account (2000-2014)



Source: Balance of Payments (Ministry of Finance)

CHART 2

Decomposition of changes in export volume (not seasonally adjusted)



Note: As regards the downward contribution by production capacity to exports in 1st and 2nd quarter of 2014, it had been considered as caused by the fact that domestic firms had temporarily reallocated a portion of their production capacity for exports to that for the domestic market in order to respond to the rush in demand precipitated by the rise in the consumption tax rate, which suggested there had not been any perpetual reduction in their production capacity for exports.

Source: Ministry of Finance "Trade statistics", Ministry of Economy, Trade and Industry "Index of industrial production capacity", "The Indices of Industrial Domestic Shipments and Exports", Bank of Japan "Export price index", IMF "International Financial Statistics", Bank of International Settlements, Oxford Economics, OECD "Economic Outlook Database"

the trade balance posted the highest deficit, a significant decrease in the service account deficit and a record-high primary income surplus contributed positively to the account (Chart 1). These changes may indicate reorganization of Japan's competitiveness in cross-border activities, namely: "competitiveness in exports", "competitiveness in attracting people and enterprises" and "competitiveness of Japanese multinationals" which are the main themes of this White Paper.

Chapter 2 Mega trends affecting the global business environment

Aging populations and urbanization, among other global mega trends, strongly affect the world economy. An aging society increases demand in the medical and healthcare sectors. Urbanization stimulates demand for infrastructure. In addition, increased demand in the services sector in expanded urban areas may further stimulate imports of services. Awareness of the need for sustainability triggers demand for high technology and innovation. Japan should take these global mega trends as an opportunity and take advantage of its high technologies and innovative power.

Part II: Strengthening Japan's Competitiveness by Taking Advantage of Its Robustness

Chapter 1 Analysis: Japan's competitive advantage in cross-border activities

Section 1 — Competitiveness in exports

Even under the yen-weakening environment since late 2012, Japan's export volume has remained flat because of, according to a widely held view, weak demand in emerging markets, companies' behavior in keeping prices high, and expansion of overseas production.

In order to measure the degree of impact from these factors, we estimated the contributions of the following five factors to the volume of exports using the export function:

- Price competitiveness (real effective exchange rate of the Japanese yen);
- External demand (an aggregated overseas real GDP);
- Value-added content of export goods (real exports divided by export volume);
- Domestic production capacity (domestic capacity multiplied by export ratio); and
- Overseas stock building (overseas inventory changes).

The result shows that while there were positive contributions from an increase in external demand and improvement in price competitiveness, they could not outweigh the negative impacts from the shift to more expensive goods, reduction of production capacity and reduction of overseas stock (Chart 2). Although the shift to more expensive goods has negatively impacted export volume at this point in time, it may also depend on income levels in importing countries. Therefore, Japan should explore ways to expand export volume while increasing the value of goods.

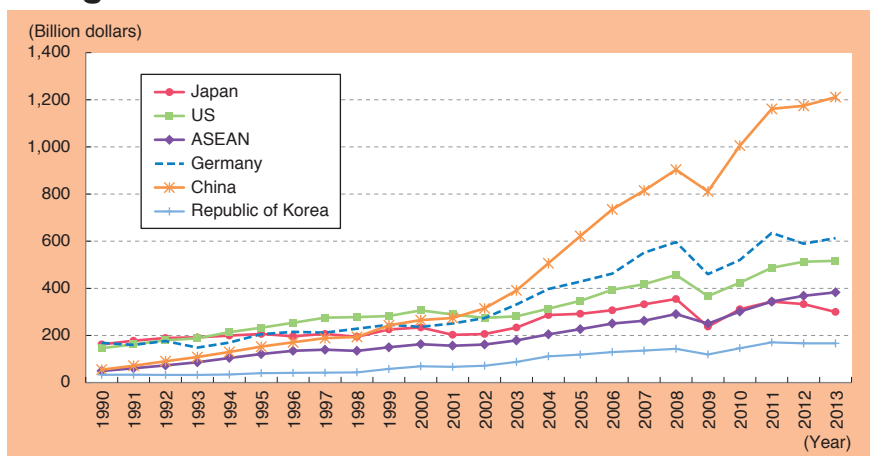
On the other hand, Japan's long-term export trend demonstrates a gradual decline in the global share of Japanese exports. At the same time, Japan's increase in exports mainly originates in intermediate goods, unlike the United States and Germany whose increases in exports of intermediate and final goods are well balanced. Japan's exports of final goods are stagnating (Charts 3 & 4).

What causes such a difference among countries? To answer this question, the White Paper made an international comparison of exports by sector and by item. Firstly, over 70% of exports from China, the US, and Republic of Korea belonged to categories (defined by HS code 6 digit level) whose global demand had been increasing, compared to only 47% in Japan. This fact indicates that Japan has not been able to capture increasing global demand.

Secondly, Japan tends not to hold a higher share in the categories where both export volume and price are increasing. In China, for example, Germany holds a higher share in such growing categories in all sectors compared to Japan (Table 1). This White Paper compares the share of growing categories among exporters in various regions (Tables 1-3). The existence of categories where both price and export volume are increasing indicates that

CHART 3

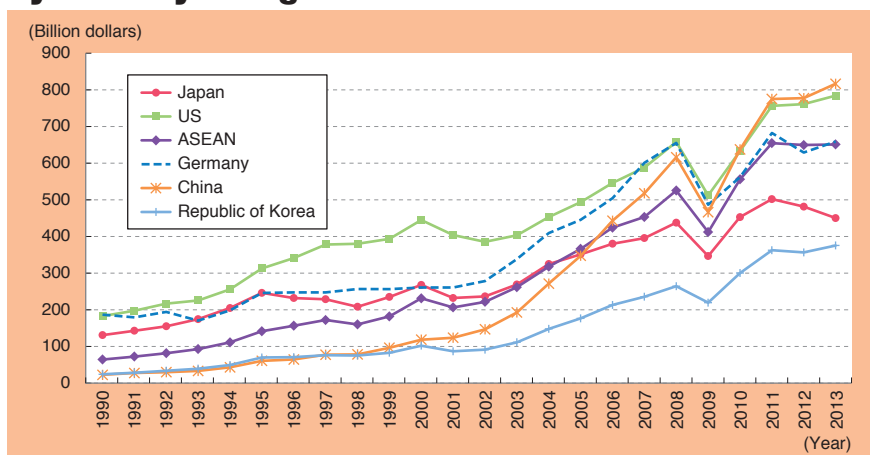
Changes in export value of final goods by country & region



Source: RIETI-TID2013 Database

CHART 4

Changes in export value of intermediate goods by country & region



Source: RIETI-TID2013 Database

TABLE 1

Trends of volume & unit price of exported items (exports to China, category of volume+)

Exports to China (major 8 sectors)	Japan (%)										Germany (%)									
	Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)				Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)			
			volume+	volume+	unit price±	unit price±	unit price±	unit price±	unit price±	unit price±			unit price±	unit price±	unit price±	unit price±	unit price±	unit price±	unit price±	
Chemicals & plastics	58.9	72.3	3.7	37.3	13.7	4.2	285	155	114	46	81.4	60.2	17.8	29.8	18.3	15.5	321	133	246	216
Textiles & textile articles	36.3	47.8	3.2	12.2	12.1	8.8	508	110	89	109	76.5	55.7	7.8	30.3	13.4	25.0	385	219	189	139
Iron & steel products	60.1	34.7	0.6	15.2	29.9	14.5	290	84	86	32	78.8	36.4	1.8	27.4	14.0	35.6	304	156	61	138
Nonferrous metal	23.6	31.3	0.0	3.0	10.7	9.8	317	62	106	79	44.7	75.9	2.1	28.1	6.6	8.0	450	70	75	75
General machinery	48.3	49.5	2.1	12.4	8.0	25.8	198	191	88	124	70.4	40.9	2.8	24.1	7.7	35.8	209	148	106	89
Electrical machinery	50.3	33.1	4.3	6.3	14.0	25.6	202	67	228	61	77.9	43.1	4.3	28.0	11.2	34.5	343	137	260	136
Precision machinery	41.9	35.1	8.4	8.4	4.2	20.8	174	114	135	95	84.4	37.8	3.5	22.5	16.3	42.1	235	185	219	204
Transportation equipment	56.2	83.8	1.1	48.5	0.8	5.8	667	199	76	73	80.0	68.9	0.5	52.5	14.1	12.9	1432	723	443	285

Source: Global Trade Atlas

TABLE 2

Trends of volume & unit price of exporting items (exports to US, category of volume+)

Exports to US (major 8 sectors)	Japan (%)										Germany (%)									
	Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)				Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)			
			volume+	volume+	volume+	volume+	unit price+	unit price+	unit price+	unit price+			volume+	volume+	volume+	volume+	unit price+	unit price+	unit price+	unit price+
Chemicals & plastics	40.9	58.4	3.7	11.3	12.9	13.0	492	66	64	-22	72.8	68.6	2.4	48.3	8.8	13.2	124	93	70	-2
Textiles & textile articles	56.4	64.6	0.9	36.3	8.0	11.1	97	82	72	127	69.2	44.4	1.6	17.8	12.1	37.7	200	65	5	122
Iron & steel products	45.1	33.5	0.9	2.9	30.5	10.9	91	81	49	67	68.9	34.0	0.5	14.0	36.0	18.4	742	31	64	63
Nonferrous metal	77.9	21.6	0.7	11.0	29.1	37.1	51	316	98	76	63.4	23.9	2.3	7.2	32.3	21.5	61	59	90	8
General machinery	48.2	35.2	3.2	7.5	25.1	12.4	104	32	36	-2	66.0	31.5	1.4	10.0	28.3	26.3	73	25	38	16
Electrical machinery	49.7	33.7	0.5	4.4	32.3	12.4	119	66	36	10	77.1	22.4	0.3	9.5	24.6	42.6	191	60	63	81
Precision machinery	40.8	64.6	6.4	16.7	9.7	8.0	207	40	-1	-7	31.9	59.9	0.5	13.3	3.1	14.8	187	70	55	7
Transportation equipment	58.8	82.6	0.0	48.6	2.3	7.9	2418	40	-6	16	89.1	70.0	0.2	62.5	15.1	11.3	280	22	81	68

Source: Global Trade Atlas

TABLE 3

Trends of volume & unit price of exporting items (exports to EU, category of volume+)

Exports to EU (major 8 sectors)	Japan (%)										US (%)									
	Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)				Share of items (volume increased)	Share of items (unit price increased)	Share of items (2014)				Ratio of export value (last 4 years/2005-8)			
			volume+	volume+	volume+	volume+	unit price+	unit price+	unit price+	unit price+			volume+	volume+	volume+	volume+	unit price+	unit price+	unit price+	unit price+
Chemicals & plastics	38.6	46.8	0.7	6.2	19.4	12.3	236	114	54	-4	61.0	47.2	0.5	16.8	32.5	11.1	386	44	64	30
Textiles & textile articles	50.2	42.6	0.4	16.5	21.2	12.1	119	51	60	60	52.7	58.0	5.3	22.9	7.3	17.3	78	54	85	44
Iron & steel products	32.7	33.4	1.5	3.9	20.8	6.5	167	123	36	54	61.1	26.5	0.1	11.9	22.0	27.1	58	68	53	25
Nonferrous metal	45.2	29.8	4.2	8.3	13.3	19.3	91	255	24	82	66.9	39.3	0.2	10.8	24.7	31.1	93	47	13	33
General machinery	27.3	43.1	0.2	12.5	5.0	9.7	37	67	-6	25	34.7	60.7	0.7	14.3	8.9	10.8	40	42	21	3
Electrical machinery	23.9	52.6	1.4	6.1	13.5	2.9	205	82	59	7	29.8	46.9	0.1	11.5	6.6	11.7	-1	80	86	26
Precision machinery	54.6	25.6	1.9	11.1	22.7	18.9	146	64	51	20	34.1	60.3	0.1	10.4	9.7	14.0	306	55	66	7
Transportation equipment	31.4	44.4	0.0	14.9	8.2	8.4	-26	18	69	60	67.9	14.1	1.0	7.9	56.8	2.3	289	135	55	-6

Source: Global Trade Atlas

well-organized differentiation enables expansion in exports of expensive goods.

Section 2 — Competitiveness in attracting people and enterprises

The record-high number of foreign visitors to Japan in 2014, as well as the record amount of money they spent, demonstrates Japan's improving competitiveness in attracting people. In addition to improvements in Japan's tourism environment including relaxed visa requirements, such a trend may be due to the increased recognition

TABLE 4

Expenditure of foreign visitors by region (estimated)

	Total (Billion yen)										
	Hokkaido	Tohoku	Kanto	Hokuriku	Chubu	Kinki	Chugoku	Shikoku	Kyushu	Okinawa	
2011	578.2	38.4	6.3	289.9	21.4	37.6	118.9	10.6	2.6	39.7	12.7
2012	769.2	40.8	7.6	373.0	21.2	47.8	206.7	16.0	4.1	36.1	16.0
2013	982.7	55.6	9.9	473.4	34.9	64.5	255.6	16.8	5.2	42.0	24.7
2014	1,390.3	79.6	13.3	733.6	36.6	83.3	302.3	21.0	6.7	71.6	42.4

Note: The number of Total is different from the total of the Consumption Trend Survey for Foreigners Visiting Japan and the credit of travel in the Balance of Payments, because it's calculated from the expenditure "by Main Area of Stay" in the Consumption Trend Survey for Foreigners Visiting Japan, and does not include expenditure for package tours.

Source: Consumption Trend Survey for Foreigners Visiting Japan (Japan Tourism Agency), Statistics on Overnight Travel (Japan Tourism Agency), Foreign Visitors & Japanese Departures (Japan National Tourism Organization)

of attractions such as Japanese food and culture, and the reliability of goods sold domestically. Such a tendency can be commonly observed in all regions: the number of foreign visitors increased by over 10% and their expenditure has been steadily increasing (Table 4).

Japan's competitiveness in attracting foreign enterprises has also been increasing, as shown in the rankings in the WEF Global Competitiveness Index. Continuous improvement of the business environment is critical, as many other countries are also making hard efforts for a better business environment. Our survey shows that, setting aside the general business environment such as business costs, foreign multinationals in Japan appreciate Japan's high technologies, accumulation of industries, human resources and consumers with strong purchasing power as primary incentives to locate in Japan. Development in strengths other than cost advantages leads to sustainable locational competitiveness. Japan should take full advantage of its strengths, such as human resources, technologies, and purchasing power, and create systems that expand businesses by integrating its strength and incubating ideas from all over the world.

Section 3 — Competitiveness of Japanese multinationals

This White Paper analyzes individual respondent data from the "Basic Survey of Overseas Business Activities" to study overseas activities of Japanese multinationals, focusing on payments (i.e. dividends and royalties) from overseas Japanese affiliates to headquarters in Japan, by countries and sectors. Overall, payments from Japanese affiliates show an upward trend (Chart 5). Although yearly fluctuations should be noted, dividends from China are now almost equal to those from the US. In addition, it was found that the dividend payment ratio of Japanese affiliates in China is higher than that of the Japanese affiliates in the US and the rest of the world (Chart 6).

With regards to the dividend repatriation policies of multinationals, it is possible to assume that foreign affiliates with more investment opportunities may reduce dividends to parent companies if there are no other considerations or restrictions. As a result, it is always important to maintain a fair business environment where such business judgments are not unreasonably interrupted. In addition, a competitive business environment is critical to receiving dividends from abroad in order to be utilized as capital for future growth.

Next, we compared the competitiveness of Japanese, US, European, and Asian multinationals by analyzing their financial data. Between 2006 and 2013, the records of Japanese multinationals were weaker than other multinationals in terms of growth rate of sales and operating profits and operating income to sales. In addition, the share of Japanese companies' sales decreased in all regions (Chart 7). For further analysis, the White Paper categorized multinationals into two groups by the degree of diversification (diversified companies and specialized companies) in addition to home countries. The result shows that Japanese diversified companies are the weakest among all categories (Chart 8). In order to compete in the global market, it is necessary for those companies to evaluate and restructure their business portfolios as fast as other global companies.

Chapter 2 Towards stronger business environment & improved managerial capability

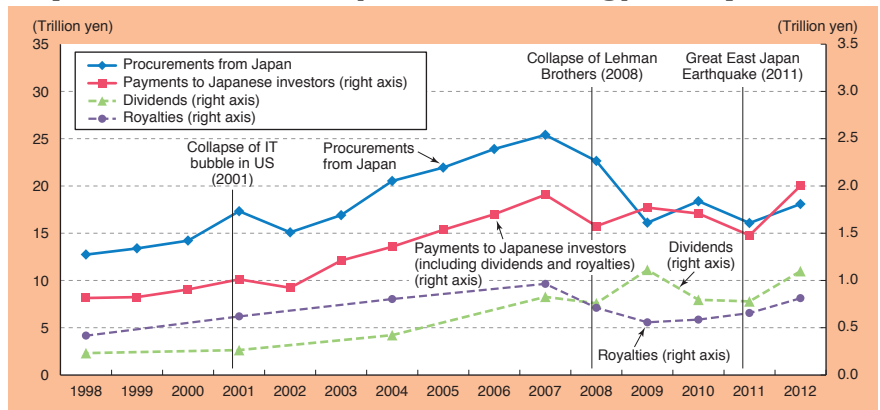
In order to strengthen our "competitiveness in exports", "competitiveness in attracting people and enterprises" and "competitiveness of Japanese multinationals", Japan's business environment should become more attractive and companies should improve their managerial capabilities. From this viewpoint, we will outline changing business models which would affect a wide range of businesses, and some countries' policies which promote innovation and issues of global management.

Section 1 — Changing business models and policies that support change

Industrie 4.0 is Germany's strategic initiative to make its domestic industries more competitive by factory automation and other

CHART 5

Changes in transactions between overseas Japanese affiliates (manufacturing) & Japan

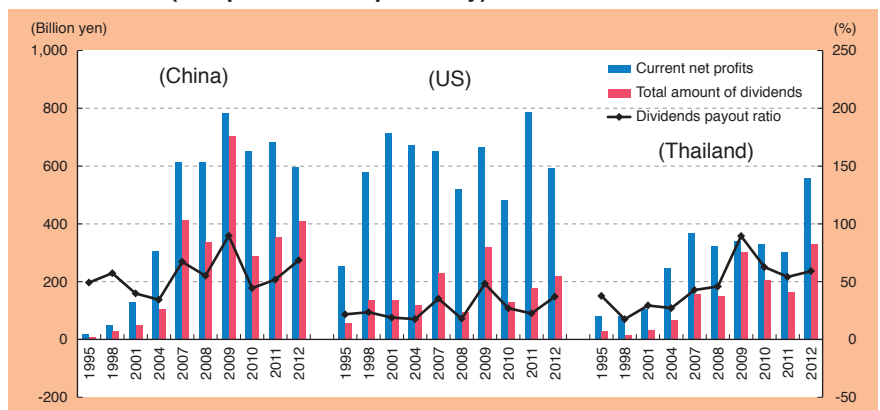


Notes: 1. Payments to Japanese investors include dividends and royalties.
2. The survey with breakdown of payments (dividends and royalties) was conducted every 3 years until 2007, and every year in and after 2008.

Sources: "Basic Survey of Overseas Business Activities" (Ministry of Economy, Trade and Industry)

CHART 6

Dividend payment ratio of overseas Japanese affiliates (companies in surplus only)

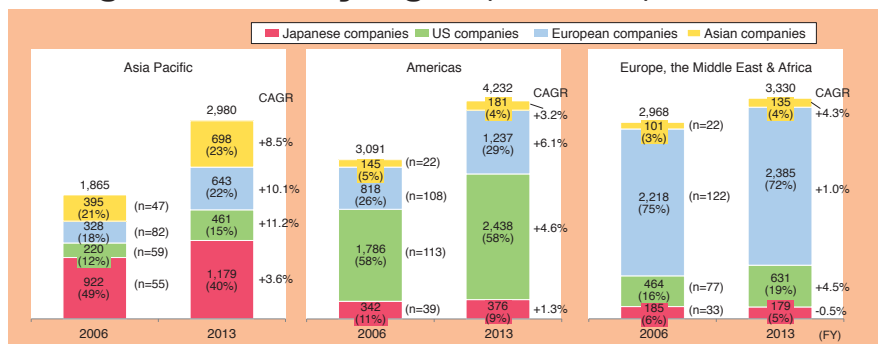


Notes: 1. Dividend payout ratio = total amount of dividends/current net profits.
2. The figures are based on the samples of affiliates, which are operating with black-ink balances of net profits and fulfill all the questions such as ratio of capital contribution, sales amount, ordinary profits, net profits, payments to Japanese investors, dividends, royalties, current retained earnings and year-end balance of retained earnings.
3. The survey with question on dividends was conducted every three years until 2007, and every year in and after 2008.

Source: "Basic Survey of Overseas Business Activities" (Ministry of Economy, Trade and Industry)

CHART 7

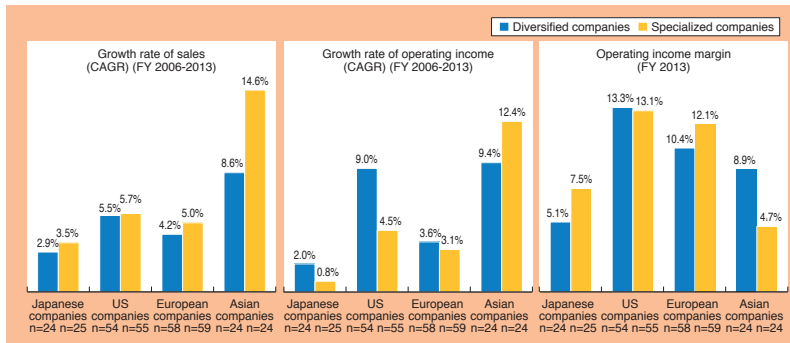
Changes in sales by region (FY 2006-2013)



Notes: 1. Data of sales is calculated based on the sales of the companies' operating department where consecutive fiscal year figures can be obtained from 2006 to 2013, by region.

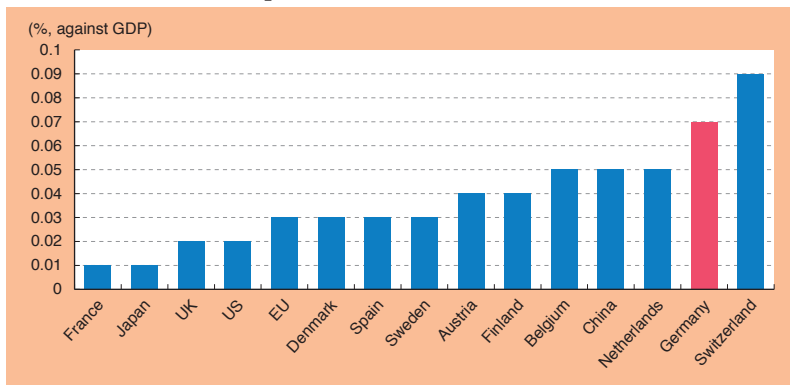
2. Percentage in () means share.
3. CAGR: Compound Annual Growth Rate
Source: Data from Deloitte Tohmatsu Consulting Co., Ltd based on "Research and Analysis on the Overseas Deployment and Methods for Risk Management of Global Companies" (a survey commissioned by METI)

CHART 8
Relational analysis on growth rate, profitability & diversification



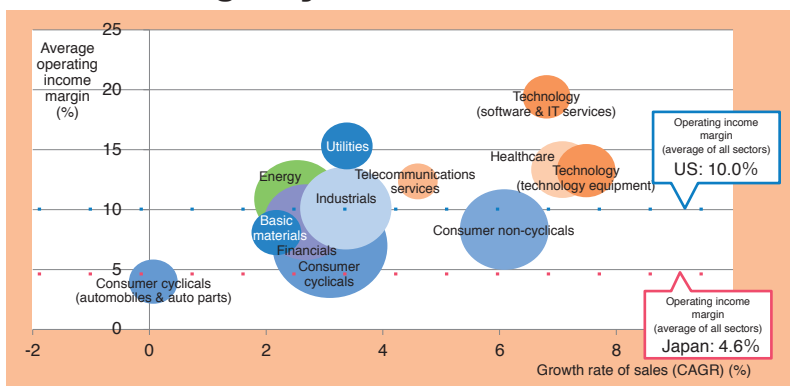
Notes: 1. Data is calculated based on the companies from which more than 70% of sales by operating departments can be obtained and sales can be obtained for the consecutive fiscal year period from 2006 to 2013.
 2. "Herfindahl-Hirschman Index (HHI)" is calculated as the diversification index, based on data from Bloomberg L.P. The companies were divided into two groups: the upper half of the diversification index as "diversified companies" and the lower half of the diversification index as "specialized companies" in each company group by region.
 3. CAGR: Compound Annual Growth Rate
 Source: Data from Deloitte Tohmatsu Consulting Co., Ltd based on "Research and Analysis on the Overseas Deployment and Methods for Risk Management of Global Companies" (a survey commissioned by METI)

CHART 9
Funds for R&D in higher education from business enterprise sector



Notes: 2013 or latest available figure (2012 for EU, China, France, Germany, Switzerland & US, 2011 for Austria, Belgium & Japan).
 Source: Eurostat

CHART 10
Income margin by sector



Note: 1. Data is aggregated subject to the companies from which sales and operating income margin have been acquired for eight consecutive fiscal years before FY 2014 (3,318 companies/mid-April, 2015).
 2. Average operating income margin is totalized financial data of the last eight fiscal years. Growth rate of sales is calculated using the rate during the last eight fiscal years. The bubble charts indicate the sales volume in the latest fiscal year. Consumer cyclical include automobiles & auto parts.
 Source: Data from Thomson Reuters EIKON

measures. Germany's initiative is of relevance to Japan since both countries face the same challenges posed by aging societies and relatively high business costs. In Germany, research institutes, academia and industrial clusters closely collaborate, which has enabled cooperation across industry and innovation by small and medium enterprises (Chart 9).

In the US in circumstances where venture risk appetite is strong, innovative business activities have driven the economic growth of the country. US companies are quick to develop business models that use the Internet of Things (IoT) and Artificial Intelligence (AI). This can be regarded as the driver to enhance the dominance of US companies by integrating the existing platform of businesses with other businesses. The US government supports these business activities by upgrading this innovative environment and enhancing base technology (Chart 10).

In order not to lag behind the policy courses found in Germany and the US, Japan needs to enact its competitiveness enhancing measures as rapidly as possible.

Section 2 — Distinctive policies of countries and regions which enhance innovation

We analyzed the distinctive innovation policies of Israel, Switzerland, and Taiwan as examples of successful efforts.

Israel attracts investment for venture companies and technology from abroad and the government supports startup companies by taking on some of the risks of early-stage ventures. This enables the country to incubate innovative technology and startup enterprises.

Switzerland attracts global companies, foreign students and workers, and the federal government provides a bridge from industry to academia and research institutions in order to support applied research and startup businesses.

Taiwan invites and gathers entrepreneurial people to research institutions and enterprises. The government intensively invests in the high-tech industry and government-related agencies afford a variety of services needed for commercialization. This can be characterized as a government initiative to enhance opportunities for high-tech people to work and start businesses.

These are good examples of innovation policies combined with competitiveness to attract people and enterprises. It should be noted that the policies with effective support mechanisms are totally different from cost advantages.

Section 3 — Toward improved global management

Improvement of global management of Japanese companies is necessary for Japan to assert a competitive edge in constantly changing global markets. “Internal Globalization” by gathering global talent and advancing the diversity of human resources is urgently needed. For example, foreign students should be able to find more jobs and find it more comfortable to work for a longer term in Japan. We conducted a survey and found that only a small percentage of Japanese companies conduct hiring in English and that there is a wide gap between what companies and foreign workers consider necessary to facilitate longer-term employment.

Considering the expansion of Japanese companies’ global activities, the companies risk management may have to change. As risk taking and risk management are both needed to create value, we conducted a survey on risk management of Japanese global companies. We found some progress in the headquarters’ perception of the need for risk management and actions taken for it in general. On the other hand, we found a potentially problematic situation in that the risk management of foreign subsidiaries and subsidiaries acquired via M&A are sometimes different from that of the home office. Another issue identified by the survey is the difficulty in deciding clear role-sharing in risk management (Chart 11).

Part III: International Economic Policy

Chapter 1 Worldwide expansion of economic partnership networks & the creation of the multilateral trading system

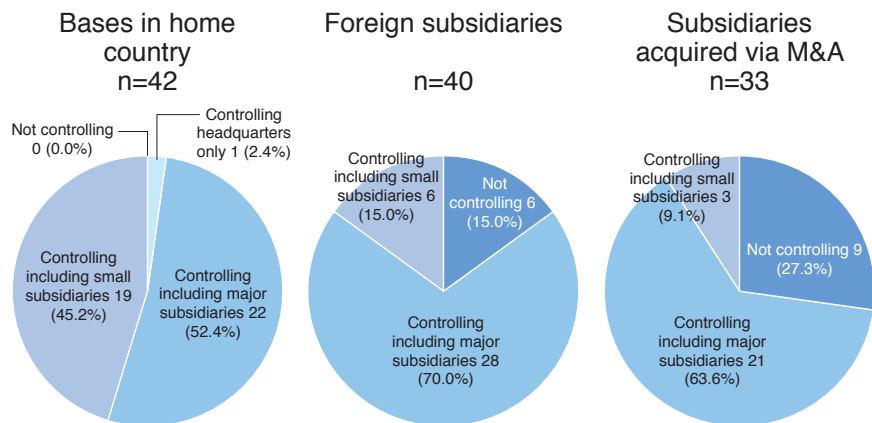
Promoting the expansion of free trade and economic partnerships is the key pillar of Japan’s international trade policy; in particular, it would be fair to say that tapping into the Asia-Pacific region’s growth and major markets by promoting such wide-area EPA/FTAs as the TPP, the RCEP, the China-Japan-ROK FTA, and the Japan-EU EPA/FTA, thereby drawing an economic partnership network across the entire globe, is essential to Japan’s growth. In addition, the creation of rules by international fora such as the WTO and APEC — as well as by countries acting voluntarily in individual fields — and compliance with those rules are vital.

Furthermore, with a view to promoting strategic business development by Japanese companies in emerging economies, it is necessary to work on concluding investment treaties and tax treaties, in order to put in place a stable business environment in those countries.

In parallel, recognizing the importance of the global value chain, “Regulatory Cooperation” has been discussed in various fora from the viewpoint of leading to global rulemaking in non-tariff measures, and we have also promoted such cooperation with the EU. Including

CHART 11

Ratio of level that risk management departments effectively control



Source: Data from Deloitte Tohmatsu Consulting Co., Ltd based on “Research and Analysis on the Overseas Deployment and Methods for Risk Management of Global Companies” (a survey commissioned by METI)

this, we need to actively participate in international rulemaking that enables appropriate evaluation of product performance in addressing social problems in order to contribute to actualizing the global “common good.”

Chapter 2 The emerging economies strategy

Capturing demand in emerging economies is necessary in order to enable Japanese companies to tap into growing worldwide demand and to circulate wealth into Japan, as well as to promote exports of products and procurement of components and materials from Japan.

In the course of efforts to promote our initiatives since 2013, the Japanese government classified emerging economies into three groups (China and ASEAN; Southwest Asia, the Middle East, Russia and CIS, and Latin America; and Africa), according to the degree of their economic development, the extent of expansion into those regions by Japanese companies, and the competitive environment with companies from other countries. It is planned to contribute to “high quality” urban development by engaging in projects from the planning stage and providing our knowledge and technology, particularly in emerging economies where rapid urbanization has raised serious urban problems.

Chapter 3 Promoting foreign direct investment (FDI)

Japan lags behind other countries in terms of FDI, and amid intensifying competition worldwide to attract foreign companies, encouraging FDI is essential to increase productivity by utilizing foreign companies’ management resources and to create new employment opportunities in Japan. With the Council for Promotion of Foreign Direct Investment to Japan as a central policy hub, the government seeks to improve the business environment through regulatory and institutional reforms as well as corporate tax reform. It is also strengthening the central governmental objective of attracting foreign companies in coordination with municipal governments. **JS**