Section 3 The growing economies of emerging countries

1. Emerging countries as a market

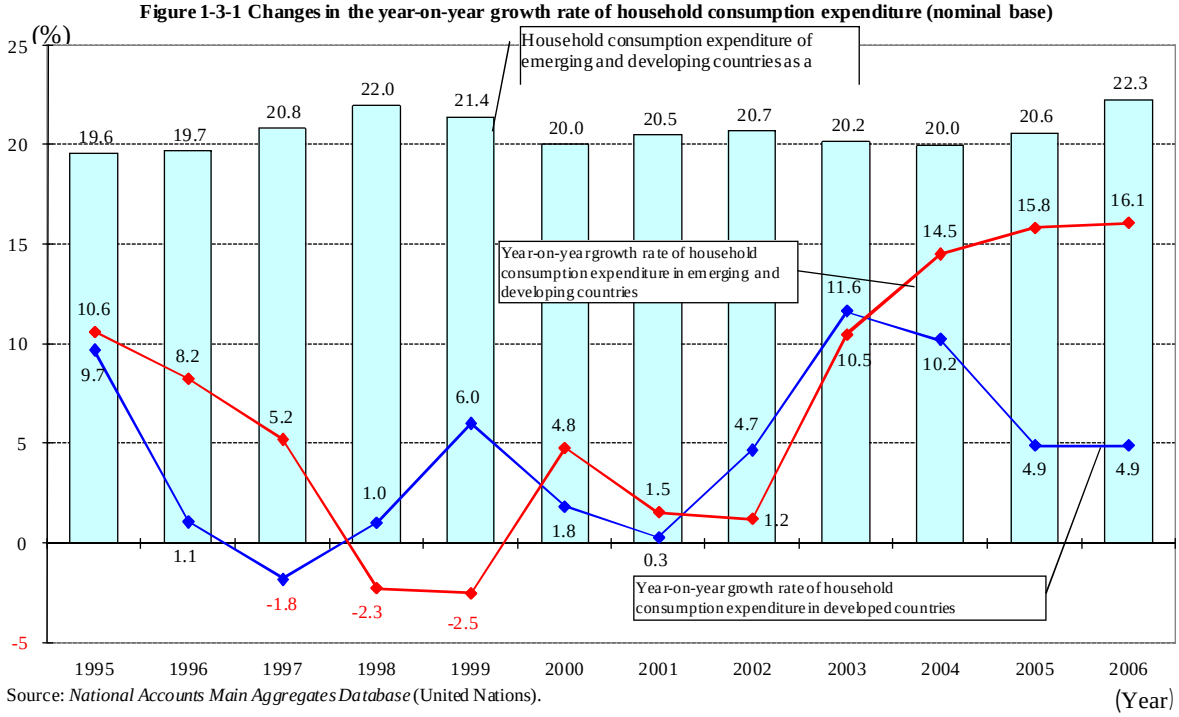
As emerging countries achieve strong economic growth, in recent years, their consumption and investment have been expanding rapidly. Amid the expansion of these emerging markets, trade and investment between emerging countries has increased, their connections have deepened, and this has led to further expansion of the emerging markets. This expansion has led to a “five billion population market” as a new world market.

(1) Characteristics of the economies of emerging and developing countries in recent years

(Rapidly growing consumption of emerging and developing countries)

As we have already shown, in recent years, growth of the world economy has been led by emerging and developing countries. Looking at the growth rate of household consumption expenditure, since 2004, as the growth of household consumption expenditure in developed countries has slowed, in emerging and developing countries, it has shown vigorous growth. Even from a consumption perspective, we can see that emerging and developing countries are leading the way in the world (see Figure 1-3-1).

Figure 1-3-1 Changes in the year-on-year growth rate of household consumption expenditure (nominal base)



Source: *National Accounts Main Aggregates Database* (United Nations).

○ Improved incomes in emerging and developing countries brought about by increases in consumption

Underlying this expansion in household consumption expenditure is an improvement in incomes in emerging countries. The per capita GDP in emerging and developing countries has almost doubled from US$1,288 in 2000 to US$2,325 in 2006. For the most part, the purchasing power over goods and

services is increasing in emerging and developing countries, and its depth is also increasing in terms of income brackets that have a certain amount of purchasing power[1].

Looking at the movements in income brackets with purchasing power in emerging and developing countries, first, the rich, which are believed to have a universal orientation toward consumption, is definitely increasing in number. For example, according to a private-sector survey which estimates the number of high net worth individuals (HNWIs) holding financial assets of at least US$1 million, the global HNWI population grew 8.3% in 2006, and is estimated to have reached 9.5 million individuals[2]. 2.6 million people, or just under 30% of the number of HNWIs worldwide, live in the Asia-Pacific region[3], and the number of HNWIs is also rapidly increasing in emerging and developing countries. In terms of growth rate by country, the following countries increased at a pace above the worldwide rate in 2005-06: India 20.5% (HNWI population: 100,000), Indonesia 16.0% (20,000), Russia 15.5% (119,000), and the United Arab Emirates 15.4% (68,000). Meanwhile, in China, the HNWI population growth rate in 2006 was 7.8%. Although this is lower than the worldwide growth rate, given its large population, the number of HWI increased by 20,000, to amount 340,000 individuals[4].

Next, using the data produced by a private research organization that collects data and information on income distributions in all the countries of the world[5], we examine the number of people in households with disposable incomes of at least US$5,001[6], which are identified as having a certain amount of purchasing power, who live in the particularly populous BRIC emerging countries. The number of such people nearly doubled from approximately 120 million in 2000 to nearly 230 million in 2006, and this figure is expected to rise further (see Figure 1-3-2). To some extent, each region shares similar tendencies with regard to consumption by these consumer bases, and it is thought that this could serve as a barometer of the common consumption attributes for a region[7].

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[1] The *Global Economic Prospects 2007* (World Bank (2007b)) focuses on the per capita income adjusted for purchasing power parity (PPP) of US$4,000 in Brazil and US$17,000 in Italy. It states that the percentage of the world population accounted for by the "global rich" (income greater than US$17,000) and the "global middle class" (income between US$4,000 and US$17,000) was 10.5% and 7.6% respectively in 2000, but by 2030, this is expected to grow to 20.9% and 16.1% respectively. It goes further to state that the percentage share of the "global middle class" accounted for by emerging and developing countries will rise from 4.2% in 2000 to 14.9% by 2030.

[2] Capgemini, Merrill Lynch (2007), *World Wealth Report*.

[3] 1.48 million people, or more than half of this group, live in Japan.

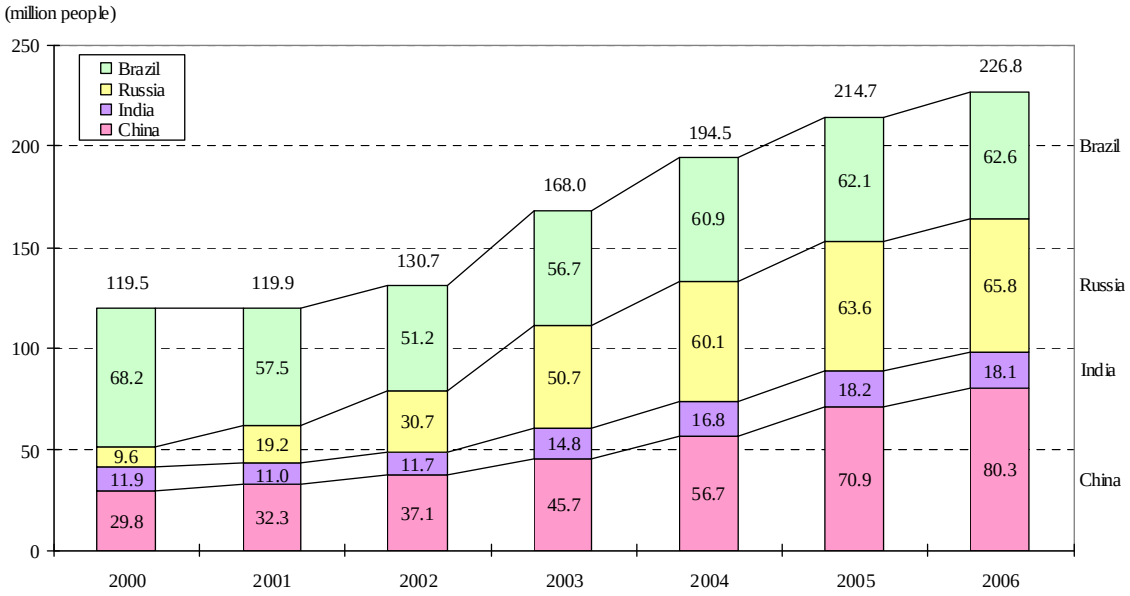
[4] According to Goldman Sachs (2004), in the BRIC countries, the number of individuals with annual incomes of at least US$15,000 is expected to more than double by 2025.

[5] Euromonitor International (2007), *World Consumer Lifestyles Databook 2007*.

[6] MasterCard International (2006) suggests that the income where the limit of consumption shifts from essential goods to discretionary goods is in the vicinity of US$5,000. It was also mentioned that Japanese-owned department stores with businesses in provincial cities in emerging countries target families with this income when determining their trading zones (based on local interviews).

[7] The integration of consumption characteristics in the Asian region is examined in Chapter 2.

Figure 1-3-2 Changes in the number of households in BRIC countries with disposable incomes of at least US$5,001



Note: The above figures have been calculated by multiplying the population by the ratio of households with disposable income of at least US$5,001.
Sources: Euromonitor International (2007), World Consumer Lifestyle Databook 2007; (IMF), World Economic Outlook database April 2008.

Furthermore, in recent years, attention has been directed to the so-called "Bottom of the Pyramid" (BOP) low-income group with annual incomes of less than US$3,000 (based on local purchasing power parity). A survey identifying the purchasing power of these low-income earners was conducted by the International Finance Corporation (IFC) and other institutions of the World Bank Group[8]. According to this survey, the BOP market comprises 4 billion people worldwide, with 2.28 billion people living in BRIC countries, and 2.27 billion people living in Asia[9]. The market is allegedly worth US$50 trillion (2005). Although it is thought that this group, despite being at the one income level, has diverse characteristics of consumption depending on each country and region[10], the survey pointed to overwhelmingly high food expenses and a course of rapidly increasing communication and transportation expenses.

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[8] Allan L. Hammond et al (2007), *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid*.

[9] Here, "Asia" refers to: China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. Furthermore, it is claimed that the majority of the BOP live in regional areas.

[10] An MIT survey on the same income group as the abovementioned BOP defined "middle class" in developing countries as those whose daily consumption is between $2 and $4 or between $6 and $10 (depending on the country). According to this survey, while there are vast differences in the propensity to consume between the middles classes and the poor, whose daily spending is less than US$1, there is a tendency for the consumption propensity of the middle classes to have resemblances within countries and contrasts across countries.

Abhijit V. Banerjee and Esther Duflo (2007), "What Is Middle Class about the Middle Classes around the World?"

○ **Diversification of consumption associated with improvements in income**

In emerging and developing countries, as a result of improvements in income like those mentioned above, there has been a growing popularity of durable consumer goods, such as televisions, washing machines and refrigerators, which were once known in Japan as the three sacred treasures[11]. Furthermore, as a consequence of progressively aging societies, higher income levels, and other factors, in China and India, it is expected that consumption will diversify. It is predicted that there will be increases in the consumption of non-essential goods, including expenditure related to transportation and communication, expenditure related to recreation and education, and expenditure related to healthcare[12]. Given this, it can also be predicted that demand for various goods and services will increase in emerging countries and regions.

The following looks at consumption trends in emerging and developing countries at the micro level, such as the consumption of individual items.

The mobile phone is the product that most symbolizes globalization. Looking first at the changes in the number of mobile phone subscribers[13], the average annual growth rate between 2000 and 2006 was 9.8% in developed countries, whereas emerging and developing countries showed sizeable growth of 40.7% (see Figure 1-3-3)[14]. Moreover, it is pointed out that, as a result of the rapid spread of mobile phones, they are becoming one of the most effective advertising media in Asia[15].

[11] See part 3 of this section for the spread of consumer durables in China.

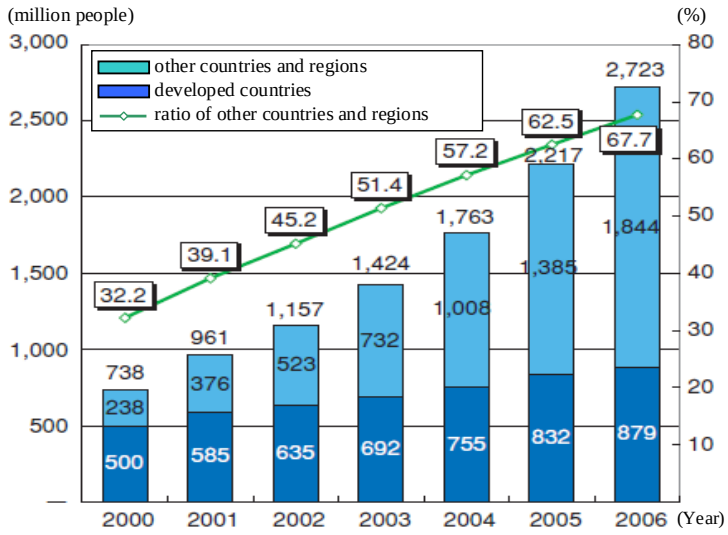
[12] The diversification of consumption in China and India is discussed in part 2 of this section.

[13] Mobile phones involve little in the way of initial costs compared to fixed-line telephones which require large investments in infrastructure such as telephone exchanges and lines. Given this, they have spread dramatically in emerging and developing countries in recent years.

[14] According to the International Telecommunication Union (2008), as of the end of 2007, the number of mobile phone subscribers worldwide had reached 3.3 billion, representing a 22% year-on-year increase. Asia overall demonstrated year-on-year growth of 28%, including an increase of 154 million subscribers in India, and 143 million subscribers in China.

[15] Euromonitor International (2008), “Advertising on mobile phone: Speaking to Asian consumers.”

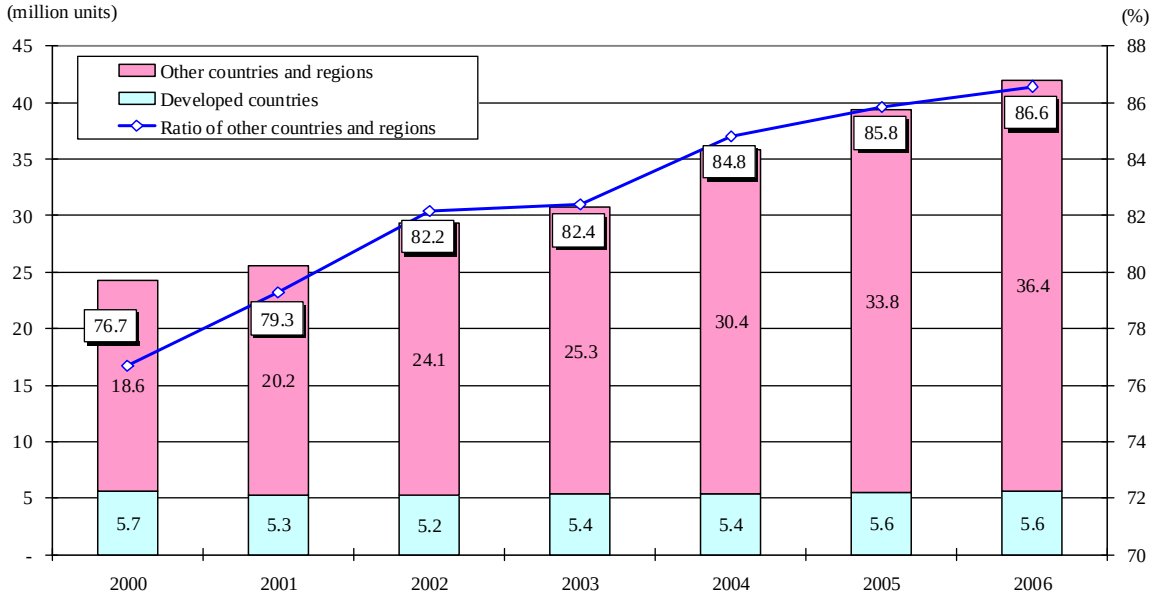
Figure 1-3-3 Changes in the number of mobile phone subscribers



Source: International Telecommunication Union website

Next, looking at the number of motorcycles sales, which is expanding in emerging and developing countries given that they are less expensive than cars[16], since 2000, sales in developed countries have remained virtually flat, whereas, in emerging and developing countries, sales are expanding, with an average annual growth rate of 11.8% between 2000 and 2006 (see Figure 1-3-4).

Figure 1-3-4 Changes in the number of motorcycles sold



Note: Each of the figures represents the total of units sold in countries and regions for which data is available.
Source: Japan Automobile Manufacturers Association (JAMA).

Furthermore, it has been pointed out that, in many emerging and developing countries, in response to the expansion of their middle classes and other factors, large shopping malls and supermarkets, as

[16] At his 2008 mid-year press conference, Honda CEO, Takeo Fukui, said, “In emerging countries, I want to compete in the motorcycle sector.” He declared measures to strengthen its motorcycle business as the next three-year growth strategy.

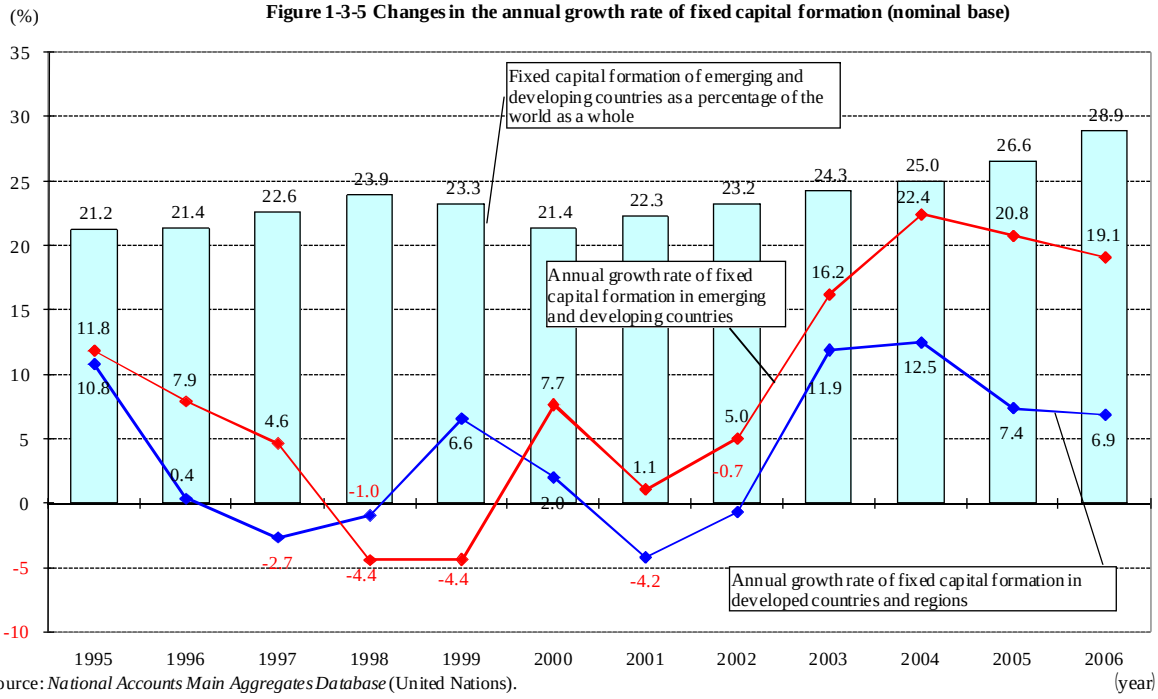
well as “organized markets” such as convenience stores, have developed rapidly mainly in large cities and their environs; and this has brought about significant changes, not only to consumption, but to forms of distribution as well. In addition to this, it has also been pointed out that, the permeation of consumer credit, such as the spread of credit cards, has enabled people to purchase products a notch above what they could have afforded on their past levels of income; there have been strong sales of color televisions and household appliances that are bigger and of better quality than before[17].

(Infrastructure and other capital investment expanding in emerging and developing countries)

Together with increased consumption, increased investment has also been seen in emerging and developing countries, and in terms of investment, they are leading the world economy.

Looking at the growth rate of fixed capital formation, just as for consumption, since 2004, as the growth in fixed capital formation in developed countries has flagged, fixed capital formation in emerging and developing countries has seen rapid growth. Moreover, the percentage of worldwide fixed capital formation accounted for by emerging and developing countries was 28.9% in 2006. This is even higher than their 22.3% share of worldwide household consumption expenditure for the same period (see Figure 1-3-5).

Figure 1-3-5 Changes in the annual growth rate of fixed capital formation (nominal base)



Source: *National Accounts Main Aggregates Database* (United Nations).

In emerging and developing countries, given that rapid economic growth and the concentration of the population in urban areas (urbanization) has caused the manifestation of a lack of infrastructure in a variety of areas, including deficiencies in communication, electricity, transport networks, water treatment facilities, and sanitation, of all the different types of investment, there is a particularly increasing need for investment in infrastructure.

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[17] JETRO (2008), *JETRO Sensor 2008.1*.

For example, in the BRIC countries, the amount of infrastructure-related investment[18] across the four countries between 2006 and 2010 has been estimated at approximately US$390.3 billion each year[19]. The magnitude of this investment is about 1.5 times greater than the total infrastructure-related investment of six developed countries[20], worth approximately US$262.3 billion. Furthermore, the total amount of new investment for the four BRIC countries has been estimated at approximately US$227.2 billion, which is roughly 2.5 times larger than the total amount for the six developed countries of approximately US$91.5 billion.

(Expansion of links between emerging and developing countries)

The growing links among emerging and developing countries in recent years can also be given as being behind the rapid growth of the world markets.

Total exports from developing countries as a percentage of total world exports increased rapidly from 31% in 1995, and had reached 45%, or about half of all world exports, as of 2006. At the same time, exports among emerging and developing countries as a percentage of total exports from emerging and developing countries had risen 3.5 times. Furthermore, there has also been a deepening of links among emerging and developing countries in terms of exports to emerging and developing countries[21]. For example, exports from emerging and developing countries have surpassed exports from developed countries.

It is China that is spearheading these links between emerging and developing countries. As a percentage of the volume of exports among developing countries (2006), China made up nearly two-tenths of the total. China accounted for 19%, India 3%, Russia 5%, and Brazil 3%. It appears that this has been driven by increases in the demand for resources and food in China, which is contributing to the rapid increases in the prices of resources and food. And as a result, the degree of each country's dependence on exports to China has been increasing dramatically (see Table 1-3-6).

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[18] The estimate covers investment related to telephone communication networks, mobile phones, power generation capacity and road paving, and is the total of maintenance and repair costs plus the amount of new investment.

[19] Goldman Sachs (2006), *Building the World: Opportunities in Infrastructure*.

[20] Six countries of: Japan, the United States, the United Kingdom, France, Germany, and Italy.

[21] According to statistics from *DOT* (IMF), between 1995 and 2005, total exports between emerging and developing countries increased from US$1.6 trillion to US$5.3 trillion (total world exports increased from US$5.1 trillion to US$11.9 trillion). Of this, total exports among developing countries had increased from US$0.7 trillion to US$2.5 trillion.

Table 1-3-6 The degree of each country's dependence on exports to China

	2006	2000	China's rank among exporters
Republic of Korea	26.7%	13.5%	1st
Philippines	25.4%	3.7%	1st
Taiwan	21.7%	2.9%	1st
Japan	17.7%	8.2%	2nd
Hong Kong	16.4%	15.5%	1st
Australia	15.4%	6.8%	2nd
Thailand	13.5%	6.0%	2nd
Peru	12.8%	9.1%	2nd
Malaysia	12.2%	4.7%	3rd
Vietnam	11.4%	6.6%	3rd
Singapore	11.0%	5.1%	2nd
Chile	9.8%	6.9%	3rd
Brazil	9.4%	2.8%	2nd
India	9.3%	3.0%	2nd
World total	6.8%	3.2%	3rd

Note: Degree of export dependence = exports to China ÷ total exports
Source: RIETI-TID2007, Research Institute of Economy, Trade and Industry (RIETI).

At the same time, China is also expanding its exports to other emerging and developing countries. In the five years between 2002 and 2007, China increased its exports to Africa by an annual average of 39.9%, to Latin America by an annual average of 40.4%, to Russia by 51.9%, and to the GCC countries by 27.9%. Although the increase in China's exports to Russia does not compare with Japan's annual average of 62.7%, the increases in its exports to other regions were about double Japan's. (Japan's exports to Africa increased by an annual average of 18.8%, to Latin America similarly by 17.7%, and to the GCC countries by an average of 18.8%) (see Figure 1-3-7).

In addition to this invigorated "South-South trade," "South-South investment" has also been thriving, beginning with the oil money of oil producing countries. According to the Multilateral Investment Guarantee Agency[22], which belongs to the World Bank Group, foreign direct investment from emerging countries has been increasing rapidly in recent years. For example, the value of foreign direct investment from emerging markets increased from US$12.0 billion in 1991 to US$99.0 billion in 2000, and is estimated to have reached US$210.0 billion in 2006[23]. It is also claimed that "South-South investment" in emerging countries increased dramatically from less than US$5.0 billion in 1994 to US$50.0 billion in 2000, or one third of the foreign direct investment flowing into emerging countries. One reason that can be given for this expansion of "South-South investment" is the fact that the multinational corporations of emerging countries have been investing in markets and resources,

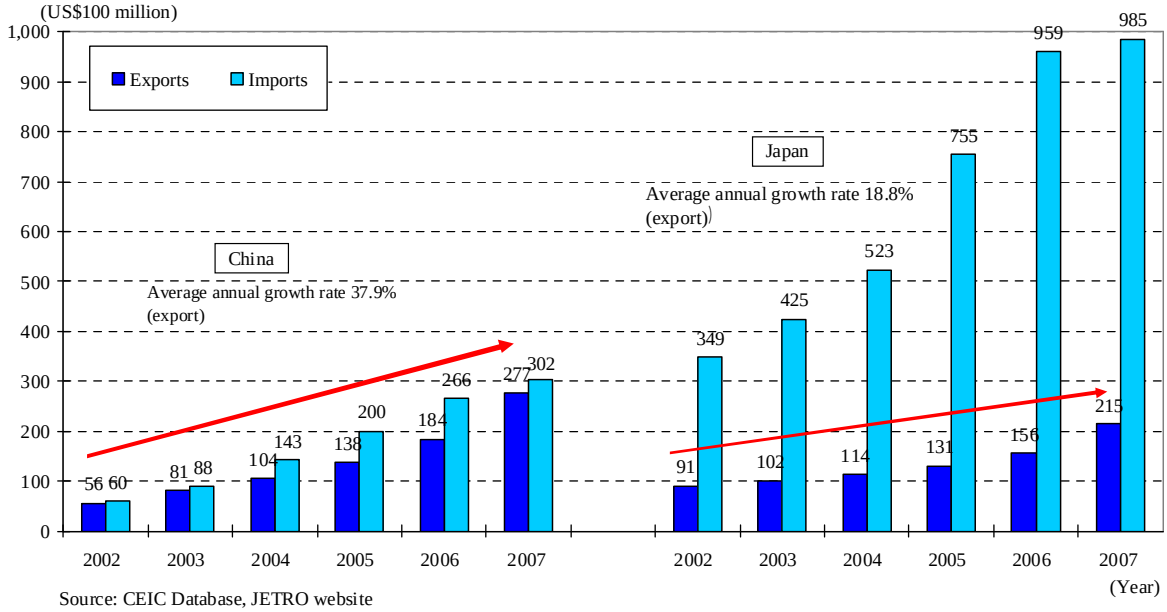
[22] Multilateral Investment Guarantee Agency (2008), *'South-South' FDI and Political Risk Insurance: Challenges and Opportunities*.

[23] China had been engaged in investing in developing countries prior to the reform and open-door policy. It is said that this is connected to the invigoration of the current South-South trade.

looking for lower costs[24]. Through this South-South trade and South-South investment, businesses in emerging countries are actively providing goods and services in emerging markets[25].

As stated above, links between emerging and developing countries are expanding, and it thought that this is reciprocally leading to increases in people's income and the expansion of markets in emerging and developing countries.

Figure 1-3-7 Changes in the value of Japan and China's imports from and exports to the GCC countries



Source: CEIC Database, JETRO website

(2) A five billion population market spreading throughout the world

(Concept of the "five billion population market")

As mentioned above, turning our attention to:

(a) Asia (ASEAN+6), in which Japanese companies have built production networks through direct investment, etc., and

(b) countries and regions, including developed countries, which have the potential to host a consumer base for Japanese products (those with nominal per capita GDP in 2006 of at least US$3,000 (calculated based on exchange rates))

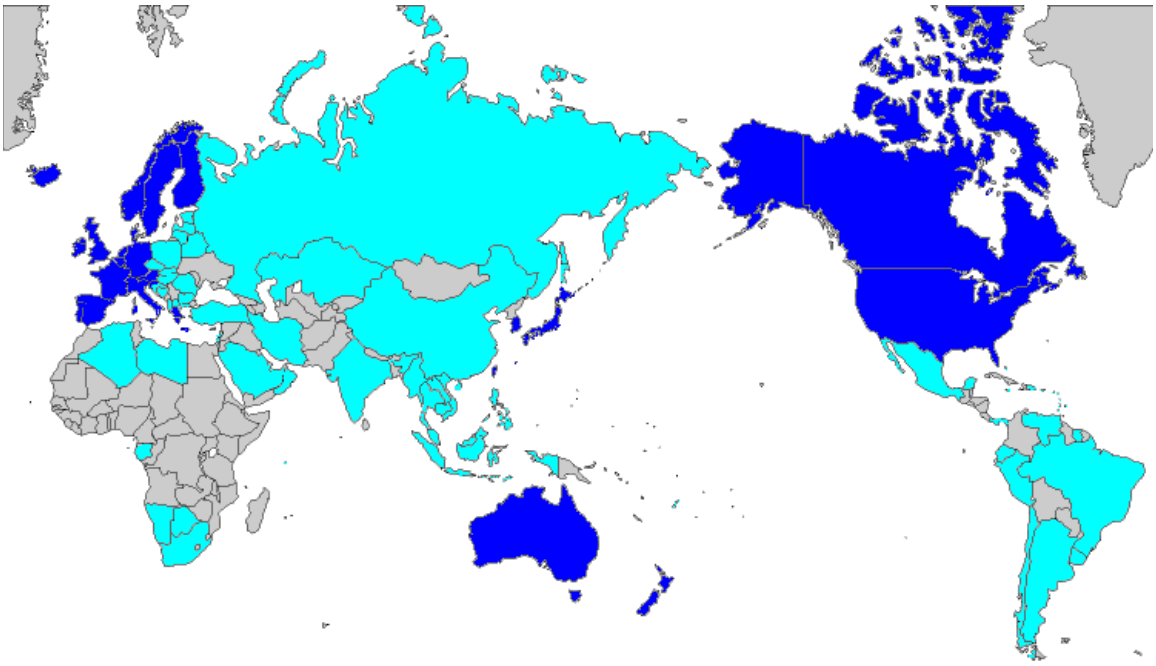
as markets which serve as the core of economic development in the world, and with prospects for new business expansion by Japanese industries, these countries have a total population of about five billion people (including one billion people in developed countries and 4 billion people in emerging

[24] In the communications industry for instance, 48% of direct inward investment in the Middle East and North Africa, 49% in the sub Sahara, and 28% in the Asia-Pacific is South-South investment. It is claimed that four of the top 30 multinational corporations in the world are from developing countries (two in South Africa, and one each in Mexico and Malaysia) (United Nations (2008), *Information Economy Report 2007-2008*).

[25] The trends of businesses in emerging countries are introduced in Section 3 of Chapter 2, and the trends of Chinese businesses in Africa are introduced in Section 5 of Chapter 3.

countries; 3 billion in Asia) (see Figure 1-3-8 and Table 1-3-9). Bearing in mind that there were 4 billion poor people in 2000, living on less than US$2 a day at the time, the rapid economic development of recent years shows that the trading zones of the world economy have expanded at a great pace.

Figure 1-3-8 Geographical distribution of the five billion population market



Source: *World Economic Outlook Database April 2008* (IMF).

Table 1-3-9 Breakdown of the five billion population market

Country/region	2006 population (million people)	Notes
Japan	127.7	
Republic of Korea	48.3	
China	1,314.5	
India	1,108.0	
Australia, NZ	24.9	
ASEAN	566.6	
U.S.	299.1	
Canada	32.6	
EU27	491.6	
Brazil	186.8	
Russia	142.8	
GCC	35.2	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates
Countries and regions with per capita GDP of at least US$5,000 (calculated based on exchange rates)	597.2	Mexico, Iran , Turkey, South Africa, Argentina, etc.
Total	4,975.2	

Source: IMF, *World Economic Outlook Database, April 2008* .

(Increasing presence of emerging countries)

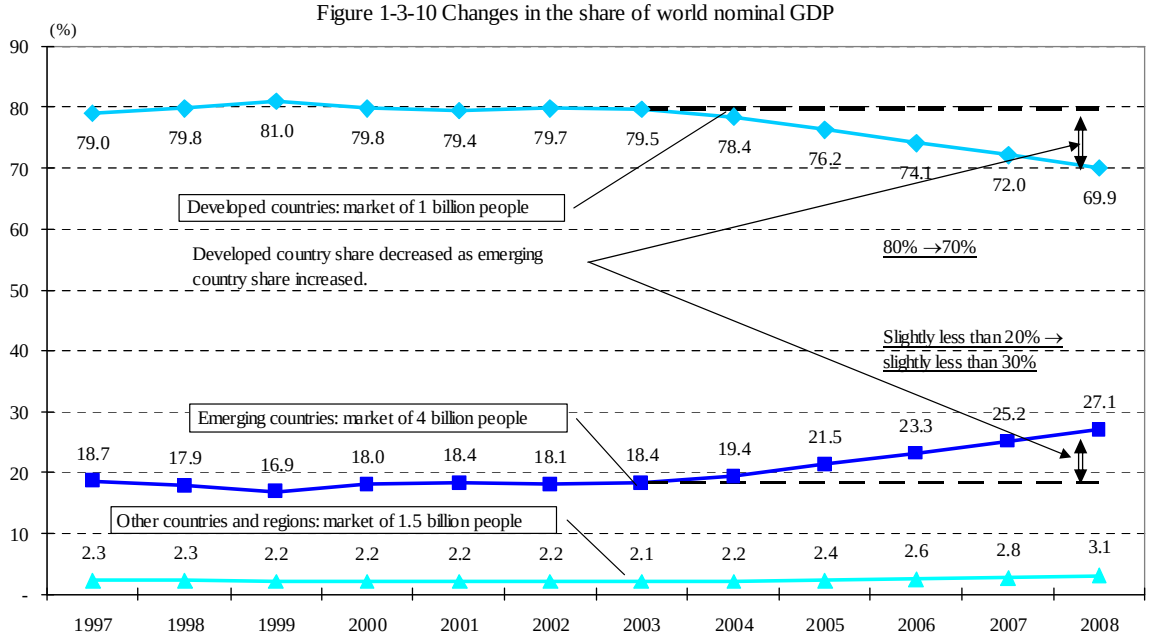
Looking at the shares of total world GDP accounted for by the nominal GDP of developed countries with one billion people and by the nominal GDP of emerging countries with four billion

people, the economies of the developed countries have reduced their share of a five-year period from 80% to 70%, whereas the economies of the emerging countries have increased their share from slightly less than 20% to slightly less than 30% (see Figure 1-3-10).

Looking next at the nominal GDP growth rates of the developed countries with one billion people and the emerging countries with four billion people, between 1997 and 2002, the average growth rates[26] were the same, but between 2003 and 2008[27], disparities have appeared between the growth of the economies in developed countries and the growth of the economies in emerging countries. For example, the average growth rate of the developed country economies was 8.2%, whereas the average growth rate of the emerging country economies was 18.3% (see Figure 1-3-11).

Furthermore, looking at real GDP growth rates, we can see that the economies of the emerging countries with four billion people have contributed to more than 50% of the worldwide growth in real GDP in 2008, thereby increasing their presence in the world economy.

Figure 1-3-10 Changes in the share of world nominal GDP

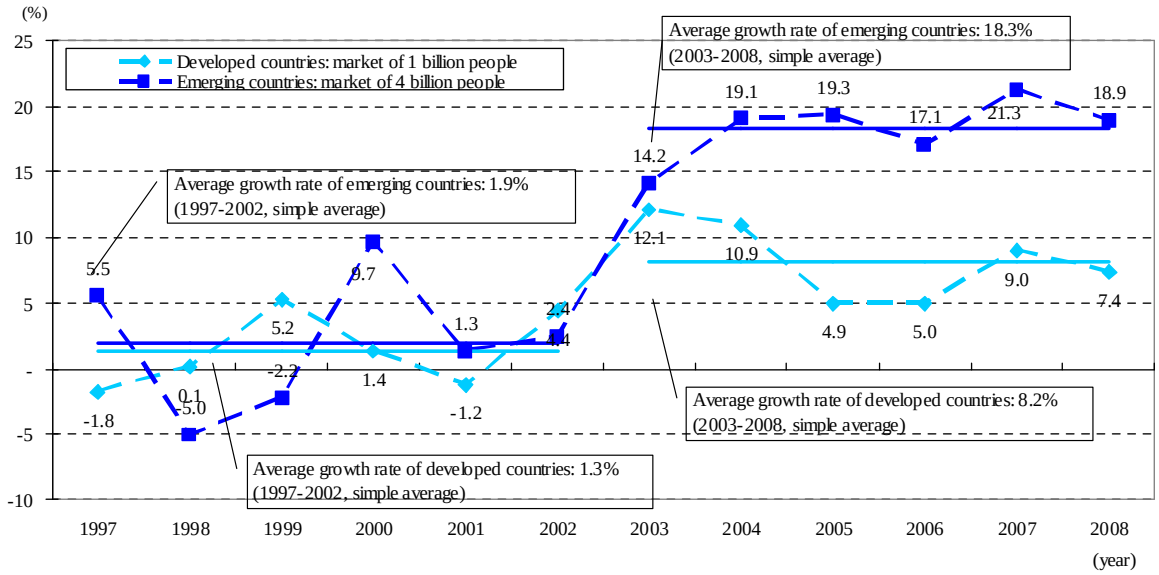


Source: IMF, World Economic Outlook Database, April 2008.

[26] Calculated as the simple average of each year's annual growth rate.

[27] The figures for 2008 use the predicted values from the *World Economic Outlook April 2008* (IMF (2008)). Figures for some countries prior to this also include IMF predicted values.

Figure 1-3-11 Changes in the nominal GDP growth rate for the developed country economies with 1 billion people and for the emerging country economies with 4 billion people



Note: Figures from 2007 are IMF predicted values. Figures for some countries prior to this also include IMF predicted values.
Source: IMF, World Economic Outlook Database April 2008.

(Suggestions for the future growth of Japan and Japanese companies)

In order for Japan to realize new economic development, it is important for it to strengthen its links with the booming emerging countries, and to introduce the benefits of this economic growth into the Japanese economy. To this end, in addition to business expansion targeting the "one billion population" market of the developed countries, Japanese companies need to expand their businesses in a way that captures the final consumers, by targeting the "five billion population" market that also includes the "four billion population" market incorporating the emerging countries throughout the world which have had remarkable growth in the Asian region.

In fact, Japanese companies are already showing an attitude of trying to expand into overseas markets, having switched from the past perspective of reducing production costs to a perspective of opening up emerging markets[28].

However, compared to markets in developed countries, these emerging markets have various attributes which make it difficult for businesses to yield profits[29], including:

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[28] According to Ushita, S. and N. Takahashi (2008), who investigated the motivation in the Japanese manufacturing industry for businesses expanding operations overseas, looking at the reasons why countries are considered promising for future overseas expansion, those businesses where overseas expansion was motivated by a "reduction of production costs" (cheap parts and materials, cheap labor) tended to decrease from 100% in 2003 to 70.8% in 2007, whereas those businesses where overseas expansion was motivated by the "opening up of overseas markets" (growth potential of local markets, current size of local markets) increased from 100% in 2003 to 108% in 2007 (multiple answers).

[29] These attributes are listed in "A Grassroots Approach to Emerging-Market Consumers" (Christopher P. Beshouri (2006)).

(a) a relatively low purchasing power;
(b) relatively high costs of transportation due to underdeveloped transport infrastructures; and
(c) difficulties in deciding whether to extend credit due to incomplete information.

Therefore, businesses in each country are devising ways to construct business models for creating profit, which also target low-income earners with limited purchasing power. To be more precise, it has been pointed out that it is necessary to incorporate information and networks of local community members into business models[30]. For example, it has been suggested that even within the Chinese market, consumers have an infinite variety of preferences, and so basic trials are essential to fully ascertain the distinctive qualities of what induces customers to make purchases[31]. Accordingly, it is thought that Japanese companies need to keep these points in mind when expanding into emerging markets.

In fact, there are already some Japanese companies that are, based on the points outlined above, developing new markets by:
(a) exploring community needs and developing products and services based on those findings; and
(b) increasing local consumption by carrying out their production activities locally, generating jobs, and consequently raising incomes.

A report by The Boston Consulting Group also offers the following important principles for keeping business on track in burgeoning markets that target low-income earners (BOP):
(a) Design and develop products with functions and prices that compensate for small living spaces, unreliable supplies of electricity and water, limited budgets, and other constraints.
(b) Leverage "ubiquitous distributions" by partnering with existing networks, such as the postal service, to ensure broad coverage, low cost, and reasonable control.
(c) Design educational marketing programs that explain the importance of a product's benefits and that foster new demand, for example, by communicating the advantages of other products and by leveraging advocacy networks.
(d) Unleash the organization: establish clear accountability for serving the next billion, encourage growth over short-term profitability, foster innovation, and embed low-cost processes.
(e) Collaborate with companies from other industries (even with competitors, on occasion) to enhance consumer programs (such as easy financing) and improve scale economics (for example, by sharing distribution costs).

[30] Christopher P. Beshouri (2006), "A Grassroots Approach to Emerging-Market Consumers."

[31] This is pointed out by Accenture (2007) "Why winning the wallets of China's consumers is harder than you think." The article suggests that a distinctive feature of consumers in the Chinese market is that, for instance, in the apparel market targeting young people and in the financial products market targeting older people, there is a tendency for product selection to be induced by "familiarity or closeness," and quite often, that reliability is something that is built by word of mouth.

[Case 1]

Daikin Industries, Ltd. is a company that manufactures air-conditioning equipment. It has been attempting to break new ground in overseas markets by adopting strategies that aggressively reduce the costs of products through collaborative strategies, such as tying up with rival businesses or conducting M&A, with an aim of disseminating its own industrial technologies, including environmental technology. The company's consolidated sales for the period ending March 31, 2008, was 1,290.9 billion yen, and of this, 829.5 billion yen, or 64.3%, was from sales made overseas.

One of the specific collaborative strategies that Daikin Industries adopted overseas was that it formed a business alliance with "Gree," the largest air-conditioning equipment manufacturer in China, with respect to inverters, which are the key component in making air conditioning more energy conservative. The result was that Daikin Industries married its inverter technology with Gree's low-cost production capacity. At present, the spread of energy-effective inverter air-conditioners is lagging overseas because they are more expensive than their non-inverter counterparts. In response to this, Daikin Industries has been attempting to convert the current emerging markets where non-inverter air-conditioners are mainstream, by promoting the adoption of inverters at a large number of businesses, including rival companies, and by increasing the production and distribution of inverter air-conditioners. As a consequence, by building a market in which it has a competitive advantage, Daikin Industries, which has an edge in inverter air-conditioners, is promoting the dissemination of environmental technology in China, and is producing steady profits.

[Case 2]

The overseas business expansion by the Yakult Honsha Co., Ltd. can be given as a case where a company has established a point of contact with local customers by taking root in local lifestyles, cultures and dietary habits.

Starting in Taiwan, where the company began operations in 1964, Yakult Honsha has conducted local production and local sales, not only in the Asian region, but in Oceania, the Americas, Europe and every corner of the world. In the year ending March 31, 2008, its consolidated sales were 317.3 billion yen, of which 76.4 billion yen, or 24.1%, was from overseas sales.

Based on the principle of local production and local sales, the company's international divisions also use "Yakult Ladies" to make home deliveries in many countries and regions. At present, there are more than 35,000 Yakult Ladies actively engaged around the world, and just as in Japan, with roots in local lifestyles, cultures and customs, they convey the goodness of lactobacillus directly to consumers and they make deliveries to each household every day.

In 2005, in a joint venture with Groupe Danone, Yakult Honsha established Yakult Danone India Pvt. Ltd. In January 2008, the factory was completed, and the company began the manufacture and distribution of "Yakult." In India as well, Yakult Ladies deliver Yakult every day to individual households. Thus, even in the Indian market, where one third of the population is poor[32], just as with other countries and regions, the company is promoting activities rooted in the local culture through business expansion that is suited to the local region.

[32] Here, "the poor" refers to the group of people living on less than US$1 per day (based on purchasing power parity).

2. Increasing environmental and resource constraints in emerging countries, urbanization and aging societies

(1) Environmental and resource constraints

In general, the industrial structures of emerging countries that continue to grow rapidly can mostly be regarded as having high environmental impacts and being energy-intensive. Many emerging countries also have a processing-trade-type trade structure which relies on imports for much of its resources and energy. Therefore, compared to developed countries, it could be said that emerging countries have economic structures in which environmental and resource constraints are more likely to become evident as production increases or as the supply and demand of resources and energy change. The following presents the current state of these kinds of environmental and resource constraints in emerging countries.

(Increasing environmental constraints in emerging countries)

○ **Environmental pollution problems**

In rapidly industrializing emerging countries, a variety of environmental problems are coming to light, including air pollution, waste, and the degeneration of water quality and soil. Environmental problems in emerging countries are worsening every year as a result of rapid industrialization centering on the heavy and chemical industries, insufficient investment in environmental measures, rapid urbanization, and inadequate infrastructure investment. For example, according to an estimation made by the World Bank, the economic burden associated with air pollution in China was 1.16% of GDP as of 2003[33]. Considering that environmental pollution will thus, in the long term, become a serious factor constraining growth, it could be said that it is an issue that emerging countries need to actively address (see Table 1-3-12).

[33] World Bank (2007a), *Cost of Pollution in China: Economic Estimates of Physical Damages.*

Table 1-3-12 Environmental problems of Asian countries

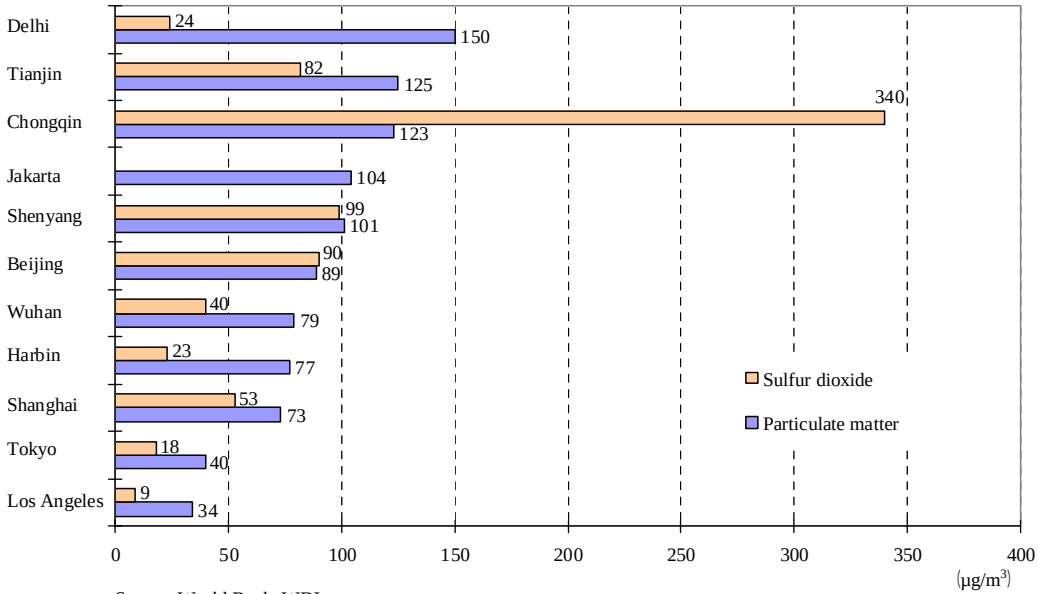
Country	Major environmental problems
China	The "three waste issues" of air pollution (coal use), waste (waste disposal), water contamination (including the occurrence of international problems caused by arsenic/fluorine pollution, industrial wastewater, and toxic effluence), desertification (overgrazing and overcultivation), acid rain, yellow dust, Three Gorges Dam, land subsidence, groundwater pollution, marine pollution (including in the Bohai Sea, Yellow Sea, and East China Sea), etc.
Republic of Korea	Air pollution (including exhaust gas in Seoul, and the Ulsan Industrial Complex), river pollution (domestic wastewater), marine pollution (including in Jinhae Bay and Gwangyang Bay), pollution-related diseases (Onsan disease), waste (waste disposal), Saemangeum reclamation project, etc.
Taiwan	Air pollution, waste (waste disposal), water contamination, soil contamination, dam construction, etc.
Malaysia	Waste (waste disposal), wastewater treatment (factory waste, palm oil, coconut oil, natural rubber, tin mining, etc.), mining-induced pollution, delays in installing sewer systems, inadequate water supply for tap water, air pollution (smoke and fog caused by forest fires), declining forests(oil palms), river pollution (agrochemicals and chemical fertilizers in Sabah and Sarawak), etc.
Thailand	Air pollution (Bangkok, coal-fired thermal power), waste (waste disposal), river pollution, water contamination, mining-induced pollution, pollution caused by fish farms, increased production of palm oil and forest conservation, deforestation / drought / flooding in northeast Thailand, etc.
Philippines	Air pollution (caused by the immense growth of cities such as Manila), waste (waste disposal), forestry management and declining forests (soil erosion, depletion and salination of groundwater), water contamination (Manila Bay, arsenic, cadmium, mercury, etc.), mining-induced pollution (mercury contamination from gold and copper mines, dumping and spills of waste slag), etc.
Indonesia	Air pollution (Jakarta, and smoke and fog caused by forest fires), waste (waste disposal), industrial wastewater (heavy-metal contamination), mining-induced pollution, forestry management and declining forests (migration policies, industrial afforestation: agroforestry, adaptation of land into paddy fields), water contamination and inadequate water supply and sewer systems, river pollution (industrial wastewater), marine pollution (including in the Malacca Strait, Jakarta Bay, and Surabaya Bay), etc.
Singapore	Fuel oil spills, etc.
Vietnam	River pollution (all major rivers, industrial effluent and domestic wastewater), deforestation (indiscriminate deforestation, defoliants), frequent flooding, flash floods, urbanization of Hanoi and Ho Chi Minh (air pollution, waste disposal, drainage), etc.
Myanmar	Mining-induced pollution, etc.
Bangladesh	Flood, soil erosion, damage caused by salt, water contamination, drainage, deforestation, etc.
India	River pollution (all sources of surface water are non-potable), dam construction, declining forests, air pollution of urban areas, mining-induced pollution, waste (waste disposal), desertification, damage caused by tsunami (including groundwater pollution), etc.

Source: Compiled by METI from Takeishi (2007), *Industrial Development in Asia and Issues on Environment*.

In fact, the amounts of sulfur dioxide and particulate matter in the atmosphere are higher in the major cities of Asia than in cities such as Tokyo and Los Angeles in the developed countries (see Figure 1-3-13). In particular, 64% of the urban population in China, or more than 200 million people are said to be exposed to air pollution[34]. Furthermore, the effects from the damage caused by acid rain originating in China are extending as far as the Korean peninsula and Japan. Yellow sand stemming from desertification in inland China is also drifting from the Chinese continent as far the Korean peninsula, Japan and even the Pacific. Thus, environmental problems affect not just one country but the broader Asian region as a whole.

[34] Speech by Tanabe, Y., Vice President of the Research Institute of Economy, Trade and Industry (RIETI), “Asian Response to Resource and Environmental Limitations,” June 3, 2005.

Figure 1-3-13 Air pollution in major cities in Asia



Source: World Bank, WDI.

○ **Problems of inadequate water resources**

It is also likely that the problem of water resources in Asia will continue to worsen in the future[35].

The volume of water resources per capita in China and India is less than the world average, and while they could hardly be said to have abundant water resources, their demand for water is increasing rapidly.

Furthermore, advances in industrialization and other factors have caused rivers and other bodies of water to become more polluted, and the decline in water quality has meant that some water systems can no longer be used. It is projected that investments for securing safe water resources will become important in the future.

○ **Climate change problems**

There is also the potential for climate change problems, which have been emerging as a global challenge in recent years, to become a constraint on economic growth in the Asian region[36].

In the six-year period from 2000 to 2005, while emissions of carbon dioxide in Japan, the United States, and the EU27 remained virtually flat, emissions of carbon dioxide in the emerging countries in Asia continued to rise, and they contributed greatly to the increase in the global emissions of carbon dioxide. The IEA predicts that the two countries of China and India, each of which have an enormous population in excess of one billion people, will account for more than half of the global increase in carbon dioxide between 2005 and 2030. Societies where environmental preservation and economic growth are compatible need to be built by creating and developing energy-saving technologies and new energy technologies, as well as social systems that utilize these technologies.

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[35] Water resources are discussed in detail in Section 3 of Chapter 3.

[36] Climate change problems are discussed in detail in Section 1 of Chapter 3.

(Increasing resource constraints in emerging countries)

As shown in Section 1 of this chapter, in recent years, amid sharp rises in the prices of food and resources, emerging countries have been expanding their consumption of energy and mineral resources, especially around Asia where high economic growth continues.

China has been increasing its presence in the consumption of many types of resources. It has pushed up global consumption, particularly for crude oil, steel and copper.

As many other countries head toward reducing their consumption of lead, China's consumption has increased dramatically. China's increase in its consumption of lead (an increase of 830,000 tons between 2000 and 2006) is greater than the entire global increase (687,000 tons) (see Table 1-3-14).

Table 1-3-14 Increases in consumption of principal resources by China, India and the entire world

	Period	Unit	Global increase in consumption	China's increase in consumption	India's increase in consumption	Percentage of the global increase	
						China	India
Primary energy	(2000-2005)	(Mtoe)	1,405	614	78	43.7%	5.5%
Steel	(2000-2006)	(1,000 tons)	383,182	246,234	18,372	64.3%	4.8%
Aluminum	(2000-2006)	(1,000 tons)	8,964	5,149	477	57.4%	5.3%
Copper	(2000-2006)	(1,000 tons)	1,874	1,681	195	89.7%	10.4%
Lead	(2000-2006)	(1,000 tons)	687	830	26	120.8%	3.7%
Zinc	(2000-2006)	(1,000 tons)	1,325	1,216	272	91.8%	20.5%
Nickel	(2000-2006)	(1,000 tons)	205	167	-5	81.8%	-2.5%

Sources: IEA (2007), *CO2 Emissions from Fuel Combustion 1971-2005; International Iron and Steel Institute (2007), Steel Statistical* Yearbook 2007; World Bureau of Metal Statistics (2007), *World Metal Statistics Yearbook 2007* .

The IEA estimates that China and India's consumption of crude oil in 2030 will exceed the total of Japan and the United States' current consumption. This also suggests the possibility that the increase in China's demand for coal in the wake of its economic growth will cause China, which is a net exporter of coal, to become a net importer in the future (see Figure 1-3-15).

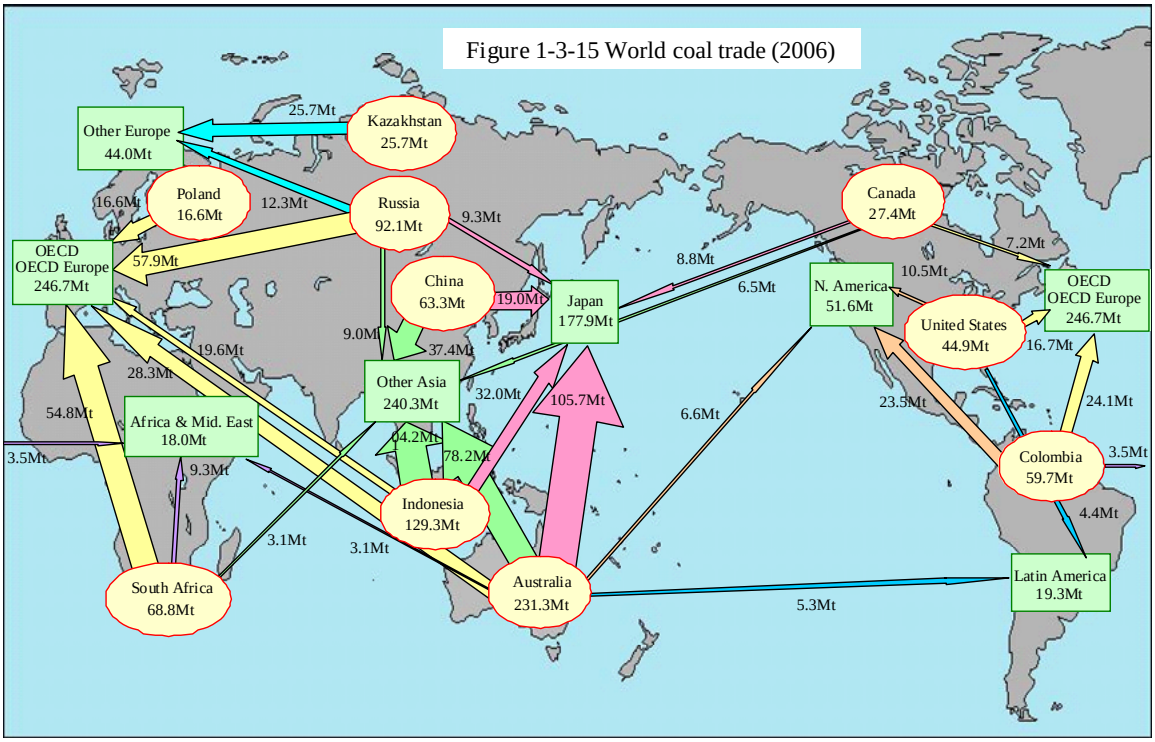


Figure 1-3-15 World coal trade (2006)

Note: In this graph, elipses indicate coal exporters as of 2006, and rectangles indicte coal importers. The figures in the graph refer to the amount of coal exported or imported by each of the countries and regions in 2006. Due to statistical errors, the total of exported volumes per destination does not equal the volume exported by exporters. Exports of less than 3 million tons have not been included.
Source: OECD/IEA, *Coal Information 2007*.

The dramatic rises in resource prices are having various effects on emerging countries.

Compared to the developed countries, industries such as the iron industry and heavy and chemical industries are growing more rapidly in China, India and many other emerging countries. The strong growth in emerging countries is being supported by a combination of this kind of energy-intensive industrial structure and a processing-trade-type trade structure which relies on imports for many of its resources such as crude oil and raw materials.

By consuming large amounts of natural resources and energy at the domestic manufacturing and processing stages, and by relying on imports for the majority of these resources, emerging countries are significantly affected by the world supply and demand of resources and energy, and they are also vulnerable to oil crises and other types of external shocks. This kind of economic structure has very strong resemblances to the Japanese economy during its high-growth period. In terms of demand, surging resources and energy prices curb consumption through decreases in real household income; but at the same time, in terms of supply, consumption is curbed because businesses pass any increases in production costs onto consumers through product prices. Furthermore, if a business is unable to fully pass on these increases, then it will reduce its production volume[37]. In fact, at the time of the first oil crisis in 1974, Japan's economic growth rate (real GDP) plummeted to -1.2% from 8.0% in the previous year.

[37] The IMF (2006) estimates that, "GDP growth in Asia might decline by ¾ percentage points for every $10/barrel increase in the price of oil." However, in fact, "the actual increase in costs was not as much as expected because of long-term contracts used by importers and because of falls in energy consumption due to higher prices."

Confronted by the environmental constraint of pollution and the resource constraint of the oil crisis, Japan and many other advanced industrialized countries are in the process of breaking away from the model of high economic growth, which was based on the high-environmental-impact and energy-intensive economic structure of a time when there were no resource or environmental constraints; and they are shifting to a model of low-environmental-impact sustainable growth, which is well suited to resource and environmental constraints and which is resource- and energy-efficient.

Amid growing concerns that resources and energy prices that continue to soar at an unprecedented pace will act as a growth constraint for non-resource-rich emerging countries, emerging countries are beginning to find it difficult to maintain their conventional high-environmental-impact and energy-intensive economic structures. In order for emerging countries to continue their sustainable development, they will need to shift to a low-environmental-impact model, which is well suited to the resource and environmental constraints described above and which is resource- and energy-efficient.

Furthermore, should the surge in energy prices and prices of crude oil and other resources become more acute, then this may give rise to social problems, such as an increase in the financial burden of governments caused by a cut in the duties on imported petroleum, or the outbreak of riots associated with the sharp increases in fuel prices (see Table 1-3-16).

Table 1-3-16 Effects on emerging countries of substantial rises in the prices of petroleum products

(a) Increases in the financial burden of governments	
China	(January) Lowered the import duties on gasoline, diesel fuel and jet fuel from 2% to 1% in order to alleviate the shortage of domestic supply. (January) Government adopted policy of freezing prices for some basic daily commodities including petroleum and gas.
Republic of Korea	(March) Uniformly lowered the elastic tax rate (adjusted tax rate) for oil products by 10%, and decided to exempt in full the tax on LPG for taxis (170 won per liter) as a two-year limited measure from May. (March) Reduced import duties on fuel oil, kerosene, etc. from 3% to 1% in order to reduce the cost of fuel.
Thailand	(February) The new Samak administration, inaugurated in February, declared it would maintain or lower prices for public busses and consumption goods.
Philippines	(February) Plan to switch from incandescent lights to fluorescent lights by 2010, out of concern for the environment and in order to save on electricity costs. (February) Lowered import duties on petroleum product from 3% to 1%.
Bangladesh	(March) Government subsidized US$157 million to oil companies struggling with soaring prices of imported fuel
Peru	(February) Government considered the establishment of a Fuel Price Stabilization Fund in order to mitigate the effects of soaring oil prices.
(b) Increases in the financial burden of consumers	
China	(February) Imposed a consumption tax of 0.1 yuan per liter for naphtha, solvent oil, lubricating oil, and fuel oil (heavy oil), in order to curb the consumption of fuel and to promote energy conservation.
India	(February) Raised the retail price of gasoline and diesel fuel in order to provide relief to the state-run oil company.
Indonesia	(February) Restricted the amount of subsidized regular gasoline sold per day to about 5 liters per vehicle, with the shortfall to be made up with sales of non-subsidized high octane gasoline.
Vietnam	(February) In the FY2008 budget, suspended the subsidy compensating the deficits of petroleum product importers and (February) Domestic gasoline retailers called on the government to lower the product retail price by about 10%.
(c) Outbreaks of riots and other disturbances	
Cameroon	(February) Strike by taxi drivers protesting rising fuel costs developed into a riot opposing soaring food prices, unemployment and revision of the constitution; also reports that more than 100 people died.
Mozambique	(February) Taxi drivers protesting rising fuel prices caused a riot; at least six people died.
Africa	Similar incidents occurred in countries including: Egypt, Senegal, Cote d'Ivoire, Mauritania, and Burkina Faso.

Source: Investigation by the Ministry of Economy, Trade and Industry.

As shown in Section 1 of this chapter, as the global prices of rice and other food continue to soar, in emerging countries where food accounts for a large portion of household expenditure, significant effects on the lives of citizens are beginning to appear. In particular, in emerging countries that rely on

imports for much of their food, the steep rises in food prices are striking, and it is possible that they could become a restriction on economic growth for these food importers, for instance, causing the financial burden of governments to increase, or riots to break out (see Table 1-3-17).

Table 1-3-17 Effects of soaring food prices on emerging countries

Lowering of import duties, etc.	
Indonesia	Reduced import duties on rice and soybeans. Exempted flour from import duties and value-added tax.
Philippines	・Signed a memorandum on the import of rice with the Vietnamese government (1.5 million tons). Currently coordinating with the Thai government. ・Temporarily abolished the private-sector import quota (300,000 tons) for rice and corn.
Saudi Arabia	・Lowered import duties on wheat.
Income support, etc.	
Indonesia	Increased the amount of subsidized inexpensive rice for low-income households. Provided subsidies for six months to businesses using cooking oil.
Protest movements, etc.*	
Indonesia	Strike by soybean manufacturers and distributors.
Philippines	Demonstration in Manila by 1,000 citizens protesting against rises in the price of rice.
Vietnam	Frequent strikes in Hanoi and other cities.

* Developed into riots in Haiti, Yemen and Egypt, and in some cases, there were casualties.

Source: Various media reports, investigation by the Ministry of Economy, Trade and Industry.

As shown above, as the economies of emerging countries have grown, various constraints have come to light, including dramatic rises in resource prices, environmental pollution, and shortages of water resources; and these issues will need to be appropriately addressed.

(2) Urbanization[38]

During the 20th century, the world's urban population rapidly increased 14-fold, from 220 million to 2.8 billion. Although there is an advantage of having the population concentrated in an urban area, namely, the promotion of economic growth via the convergence of production and consumption; at the same time, it also causes various issues, including environmental pollution and poverty. Therefore, in order to obtain the benefits of urbanization, both hard and soft infrastructure needs to be developed which addresses the challenges of urbanization.

(Urbanization centered around Asia)

According to the United Nations, the residential structure of the world population will mark a significant landmark in 2008: for the first time in history, 3.3 billion people, or half the people of the world will be living in urban areas[39]. The driving force behind this has been the rapid urbanization in Asia[40]. In 1950, the urbanization rate in East Asia was a mere 16.8%. Sharp rises continued on the back of favorable economic development, and in 2005, the rate had increased to 38.9%. It is expected to surpass 50% by 2025 (see Figure 1-3-18). Particularly in China and India, where there has been remarkable economic growth, the urban populations have increased rapidly (see Figure 1-3-19), and it is estimated that the total urban population of these two countries will increase by about 500 million

[38] "Urbanization" here refers to when the ratio of the urban population to the whole population increases.

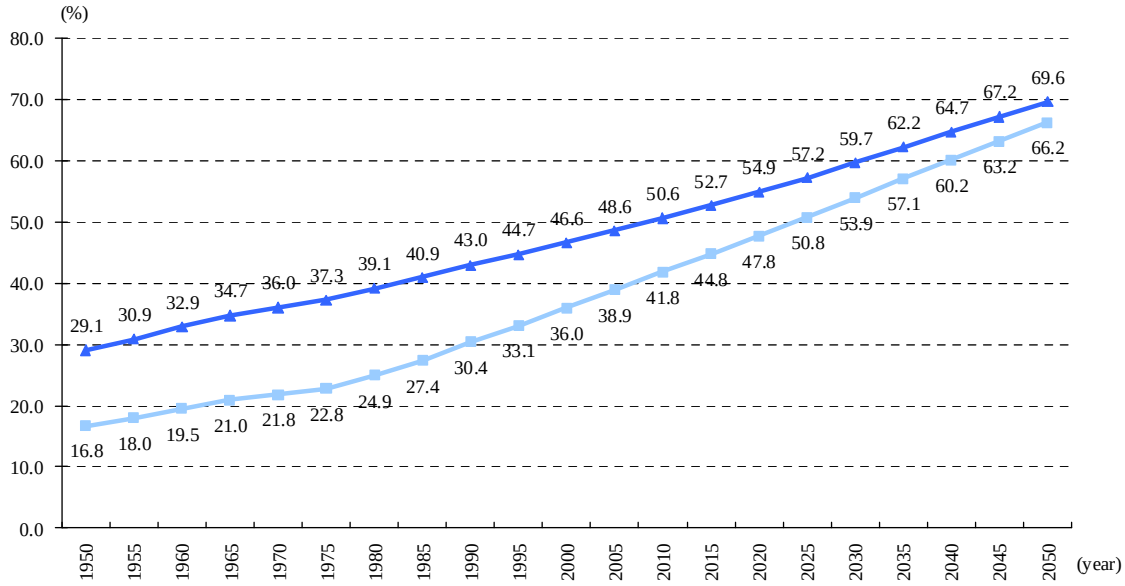
[39] *World Urbanization Prospects The 2007 Revision*, (United Nations (2007)).

[40] Here, "Asia" refers to the 16 "ASEAN+6" countries.

by 2025. Moreover, Asia's position in terms of urban scale has risen, and now 17 of the 25 most populated cities in the world are concentrated in Asia (see Figure 1-3-20).

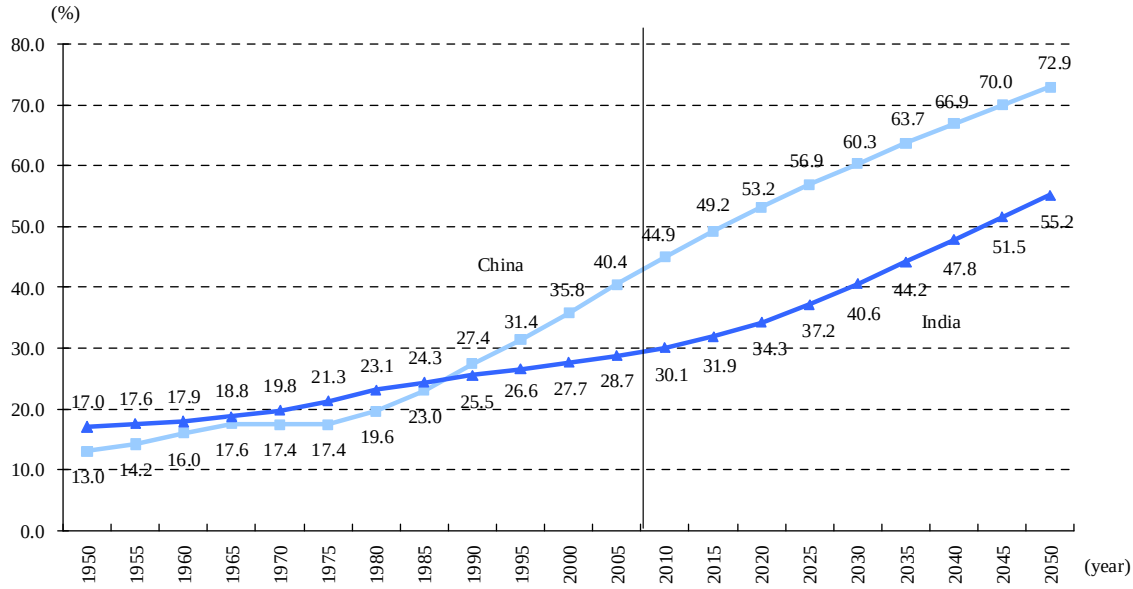
Urbanization in Asia can be characterized by the following two points: a demographic shift from rural areas to urban areas, and "urbanization" of the fringe districts around urban areas (enlargement of small urban areas with populations of less than 500,000).

Figure 1-3-18 Changes in global and Asian urbanization rates



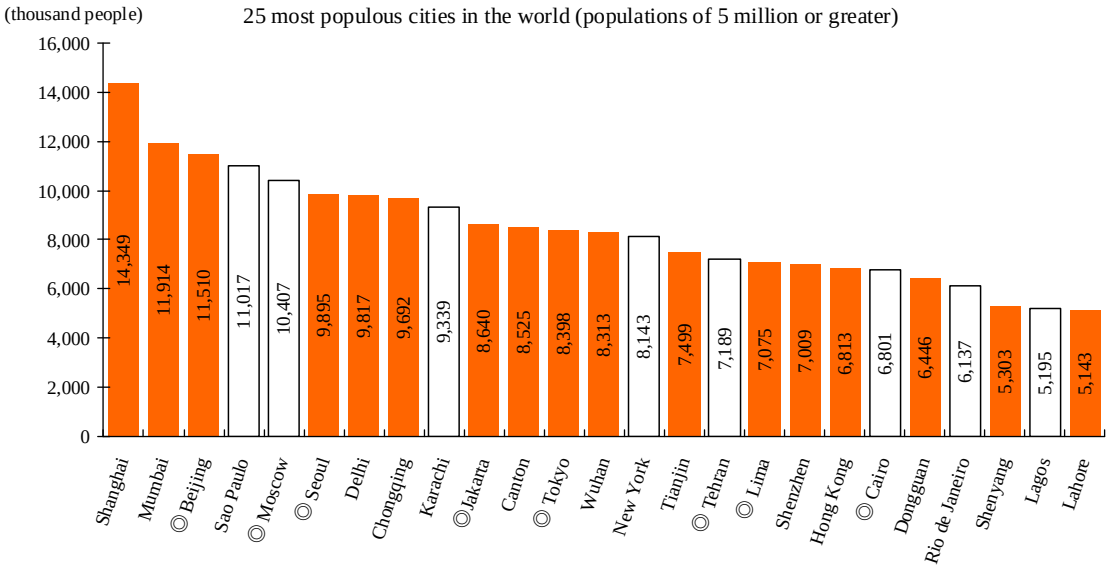
Note: "Asia" in this graph refers to the ASEAN+6.
Source: United Nations (2007), "World Urbanization Prospects: The 2007 Revision".

Figure 1-3-19 Changes in Chinese and Indian urbanization rates



Source: United Nations (2007), World Urbanization Prospects, the 2007 Revision.

Figure 1-3-20 Large cities concentrating in the Asian region
25 most populous cities in the world (populations of 5 million or greater)



Note: Shaded city names are in Asia. ◎ indicates the capital city. Census years (1986-2005) differ depending on the country (1986-2005). Japan was 2005.
Sources: United Nations, Demographic Yearbook System; Demographic Yearbook 2005 .

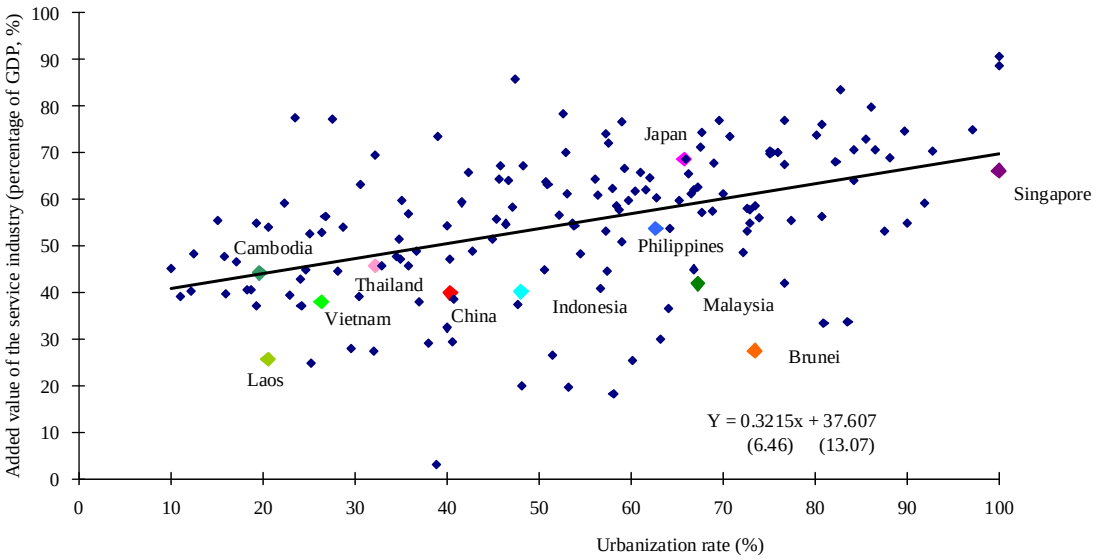
(Urbanization and the shift toward service economies)

As a consequence of urbanization, changes can be seen in the industrial structure of urban areas. Cities are both agglomerations of production and agglomerations of consumption, and as such, the accumulation and development of distribution, commerce and other service industries tend to be stimulated. In fact, a distinct positive correlation can be seen between service industries as a percentage of GDP and the rate of urbanization (see Figure 1-3-21).

In Asian countries and regions apart from Japan, the ratio of service industries to the urbanization rate has been lower than the average global trend. In Asia, further changes are expected in industrial structures as a consequence of urbanization[41].

[41] With Cambodia, although the ratio of the services industry to the urbanization rate is high, it is thought that this is due more to the effects of economic development than to urbanization.

Figure 1-3-21 Urbanization and the shift toward service economies



Note: The period covered is 2005. Figures within the parentheses under the estimate formula in the graph are t values.
Source: World Bank, WDI.

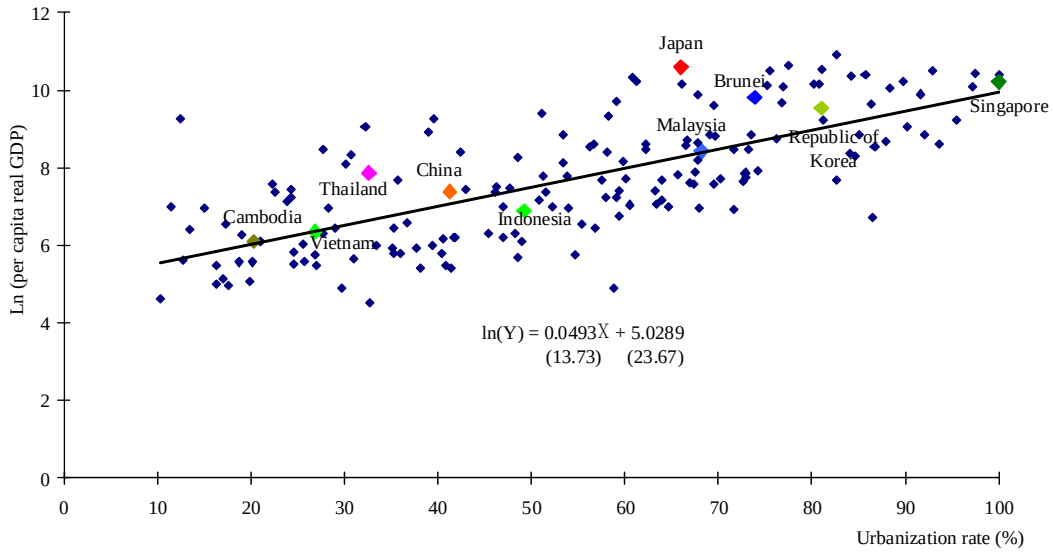
(Urbanization and economic growth)

The geographical concentration of production and consumption as a result of urbanization improves productivity and creates new employment through the advantages of "economies of agglomeration." These positive aspects of urbanization accelerate the inflow of people from regional to urban areas, and consequently, urbanization and the growth of production and consumption are also accelerated.

In fact, looking at the relationship between urbanization and economic growth (level of per capita real GDP), there is a distinct positive correlation between the two. As the urbanization rate increases by 1%, per capita real GDP increases by 0.05% (see Figure 1-3-22).

Of particular note is the fact that, in Asian countries apart from Indonesia, the level of per capita real GDP to the standard urbanization rate is higher than the world average. This suggests that, in Asia, the benefits of urbanization are generally being effectively utilized.

Figure 1-3-22 Urbanization and economic growth



Note: The period covered is 2006. Figures within the parentheses under the estimate formula in the graph are t values.
Source: World Bank, WDI.

(Issues associated with urbanization)

While the concentration of a population in urban areas brings about economic growth through "economies of agglomeration," various new issues are being brought to light in the cities of impoverished countries in particular, for example: air pollution, soil degradation and water contamination caused by increased emissions of sewage and waste matter; congestion and power shortages caused by a dense population; and an increase in the number of poor in inner urban areas.

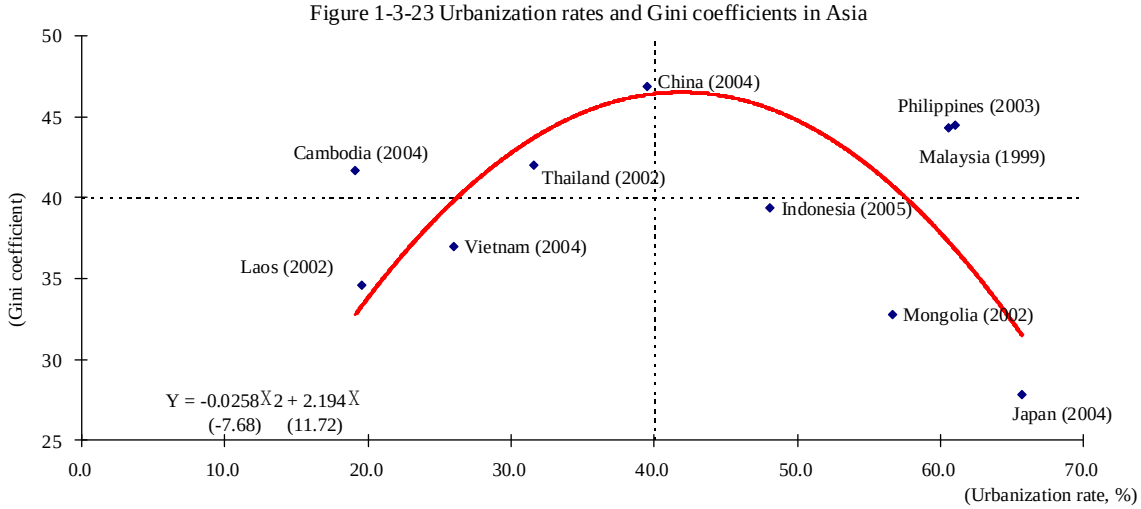
A reasonable amount of infrastructure investment will be needed to address these issues, including investment in waste treatment facilities, water purification plants, roads, and power generation facilities. Furthermore, institutional development, such as for social security, will also be needed to address the issues of poverty.

A particular characteristic of urbanization in Asia is that, in view of the fact that the demographic shift from rural areas and the "urbanization of urban fringe areas" has resulted in urban areas becoming fractionalized in the form of sprawls, it is conspicuous that, in the midst of ongoing urbanization, income disparities are widening. In fact, looking at the relationship between urbanization rates and income disparities (Gini coefficient) in major Asian countries and regions (see Figure 1-3-23), we can see that the Gini coefficient tends to rise as the urbanization rate rises[42], Accordingly, in

[42] By likening urbanization to a proxy variable of economic development, this trend could also be described as being consistent with the famous Kuznets hypothesis which posed that "inequality between economic development and income" would take the shape of an inverted U-shaped curve. In other words, the Kuznets hypothesis comments that, "Although income inequality will widen between social classes during the early stages of development, during the economic development process, 'positive external effects' from growth sectors will influence other sectors, and the benefits of economic development will extend across a variety

countries and regions such as Vietnam and Thailand, where urbanization is expected to progress further in the future, it can be supposed that income disparities will widen yet. On the other hand, in Asia, the Gini coefficient generally tends to fall once the urbanization rate exceeds 50%. In countries such as China, the Philippines and Malaysia, where both the urbanization rate and the income gap are high, efforts are needed to rectify the disparities in urban areas, such as measures to alleviate poverty and social security measures.

Figure 1-3-23 Urbanization rates and Gini coefficients in Asia



Notes: 1. Census years differ depending on the country. Figures within the parentheses under the estimate formula in the graph are t values.
2. The definition of the Gini coefficient differs from country to country. China and Malaysia use the Gini coefficient of per capita income; and Thailand, Vietnam, Laos, Indonesia, Mongolia and the Philippines use the Gini coefficient of per capita expenditure. Japan uses the Gini coefficient of annual disposable income (equivalent disposable income) for all households, including one-person households.
Source: United Nations (2006), *World Urbanization Prospects: The 2006 Revision* .
United Nations (2007), *World Urbanization Prospects: The 2007 Revisio* ; UNDP *Human Development Report 2007/08;*
Ministry of Internal Affairs and Communications, "National Survey of Family Income and Expenditure 2004"; World Bank *WDI.*

(3) Aging societies

(Rapidly aging societies)

Between the 1970s and the 1990s, birthrates in Japan and many other Asian countries continued to decline against a backdrop of rising incomes on the back of economic growth. The total fertility rate has been below 2.0 in Japan and Singapore since the 1970s, in China and South Korea since the 1980s, and in Thailand since the 1990s (see Figure 1-3-24)[43]. As such, looking at Asia as a whole, it is expected that the proportion of the working-age population will decrease from 2015, and the proportion of the elderly population will rise rapidly (see Figure 1-3-25). Even in India, Indonesia, the Philippines and Thailand, where there are relatively large numbers of young people, it has already been predicted that the proportion of the youth population will decrease sharply from 2010 (see Figure 1-3-26). Even in populous countries outside of Asia, for example, in Russia, where the birthrate

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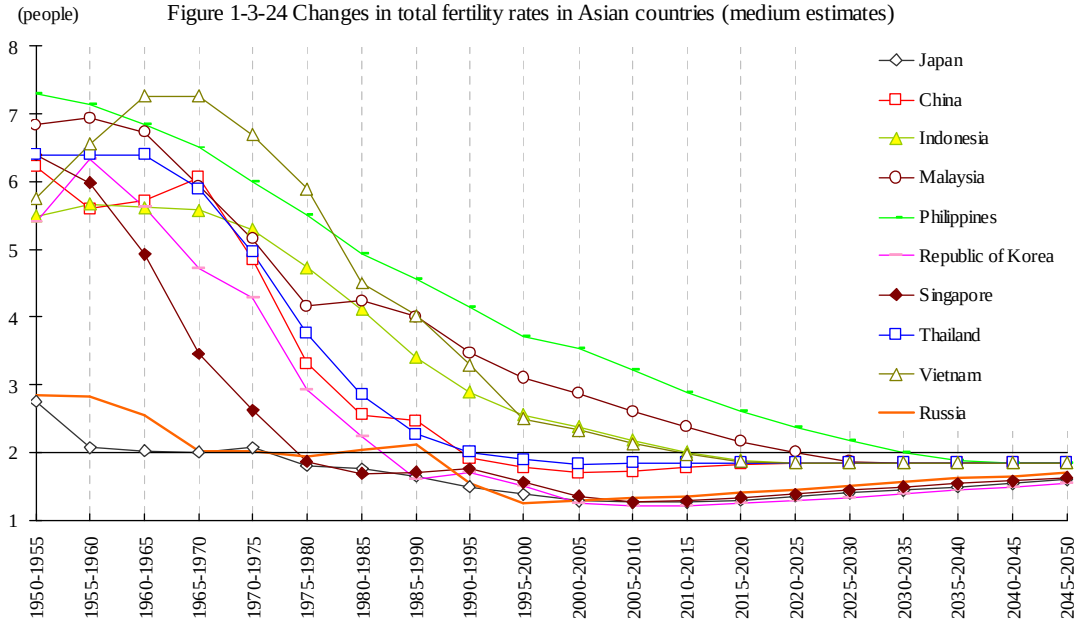
of social classes." Figure 1-3-23 can also be viewed as a Kuznets hypothesis, with "development" being replaced by "urbanization."

[43] As of 2005, there were nine Asian countries where the fertility rate had not dipped below 2.0: Malaysia, Indonesia, the Philippines, Vietnam, Myanmar, Cambodia, Laos, Indonesia, and India.

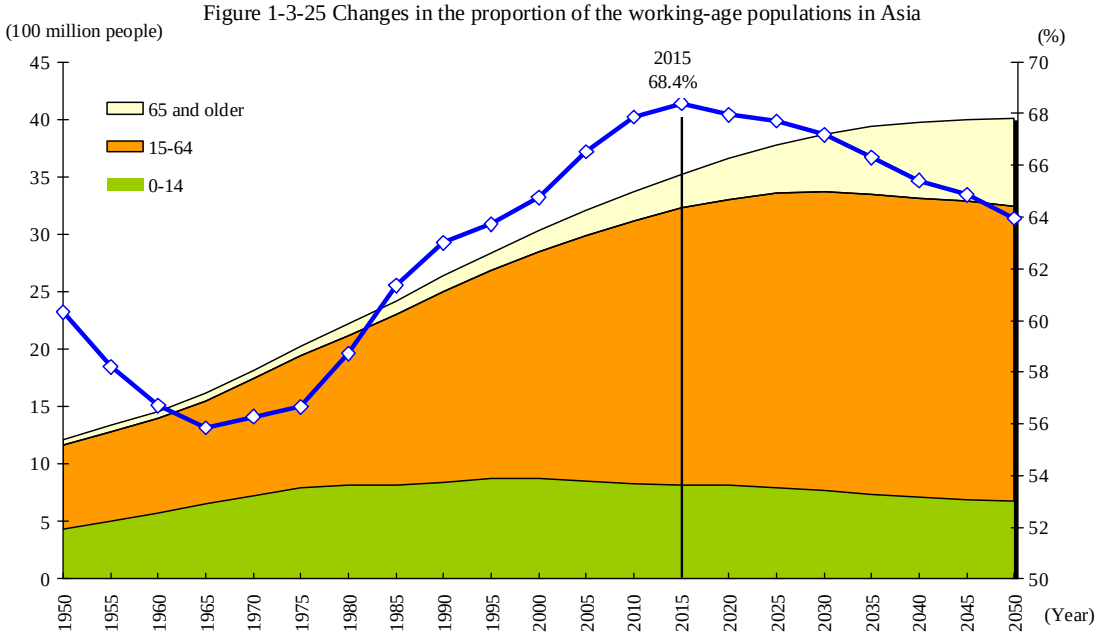
continues to decline markedly, the total population has been continuing to decline since it peaked in the early 1990s.

Figure 1-3-24 Changes in total fertility rates in Asian countries (medium estimates)



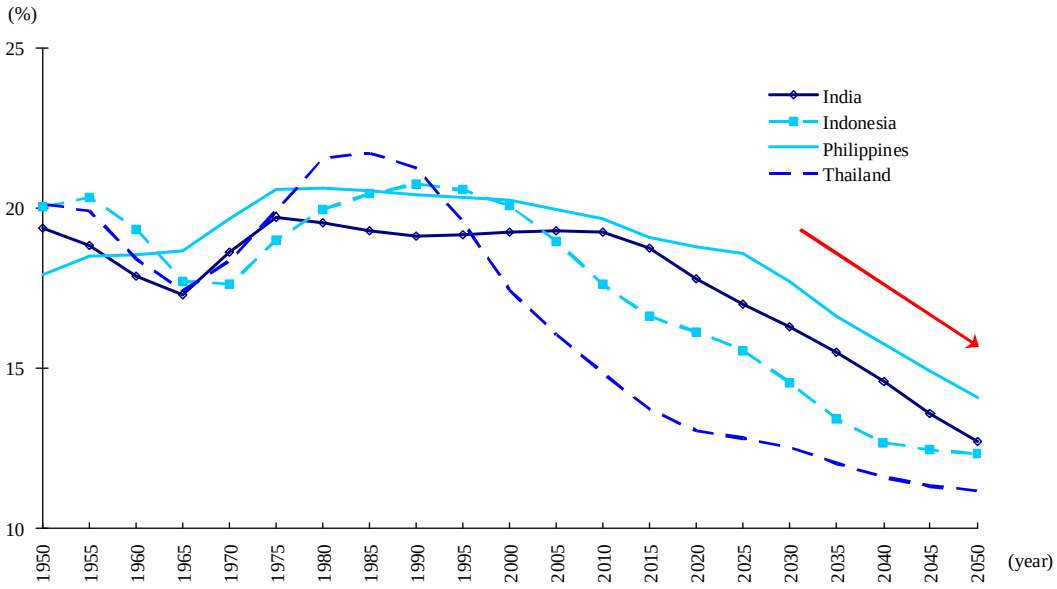
Source: United Nations, World Population Prospects: The 2006 Revision.

Figure 1-3-25 Changes in the proportion of the working-age populations in Asia



Source: United Nations, World Population Prospects: The 2006 Revision.

Figure 1-3-26 Changes in the proportion of the youth population in India, Indonesia, the Philippines and Thailand



Source: United Nations, World Population Prospects: The 2006 Revision .

(Economic growth and changes in demographic structure)

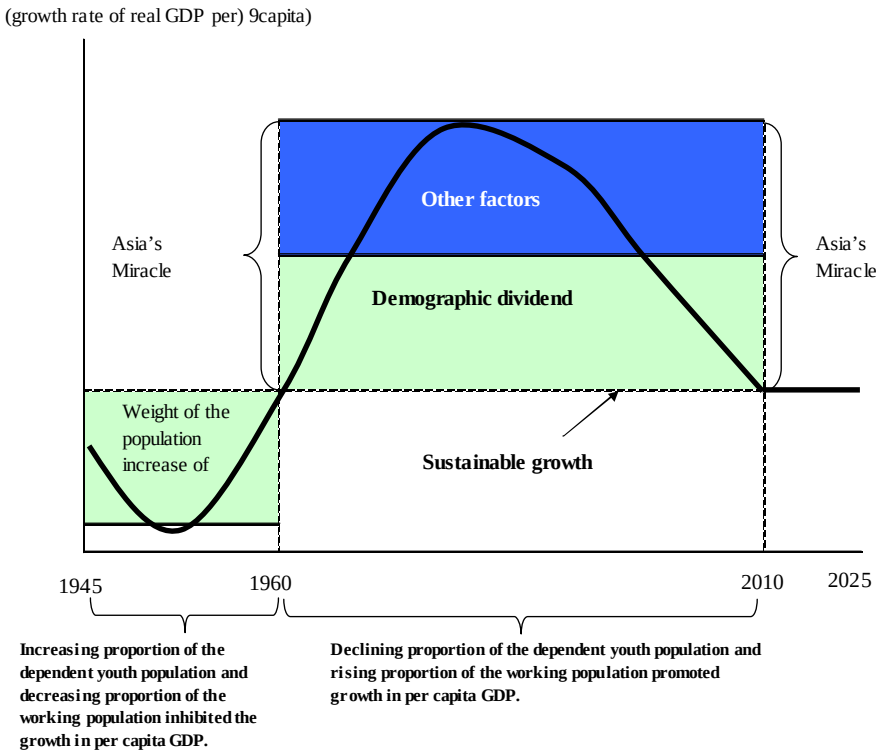
Blessed with "demographic dividends,"[44] from the 1970s, Japan and other Asian countries achieved sustained economic growth, known as "Asia's Miracle." The "demographic dividend" is where acceleration of economic growth is anticipated on account of the rate of increase in the labor force becoming higher than the rate of population increase following fluctuations in population composition, birthrates and mortality rates (see Figure 1-3-27). Other possible factors behind the economic growth of individual countries in Asia include the transfer of technology from overseas, and the movement of labor from agriculture and other less productive sectors to the manufacturing industry and other more productive sectors. According to estimates by Bloom and Williamson, between one quarter and one third of the growth rate of per capita GDP in Asia is due to increases in this kind of labor input (see Table 1-3-28)[45]. In his article published in the Foreign Affairs, titled "The Myth of Asia's Miracle,"[46] Krugman also emphasizes the contribution of increases in labor to the economic growth in Asia.

[44] Also known as the "population bonus."

[45] Bloom, D. E. and J. G. Williamson (1997), *Demographic Transitions and Economic Miracles in Emerging Asia*.

[46] Krugman P. (1994), "The Myth of the Asia's Miracle".

Figure 1-3-27 Economic growth and demographic dividends in Asia
(Schematic description of the relationship between population fluctuations and economic growth in Asia)



Source: Bloom, D. E. and J. G. Williamson (1997).

Table 1-3-28 Contribution of population fluctuations to the growth rate of per capita GDP (1965-1990)

Region	Growth rate of real GDP per capita	Contribution of population fluctuations
Asia	3.33	0.73 - 1.64
East Asia	6.11	1.37 - 1.87
Southeast Asia	3.80	0.91 - 1.81
South Asia	1.71	0.41 - 1.34
Africa	0.97	-0.07 - 1.10
Europe	2.83	0.33 - 0.52
South America	0.85	0.74 - 1.54
North America	1.61	0.69 - 1.34
Pacific states	1.97	0.53 - 1.14

Note: The growth rate of real GDP per capita is the simple average of each country's growth rate.
Source: Bloom, D. E. and J. G. Williamson (1997).

(New challenges accompanying an aging society)

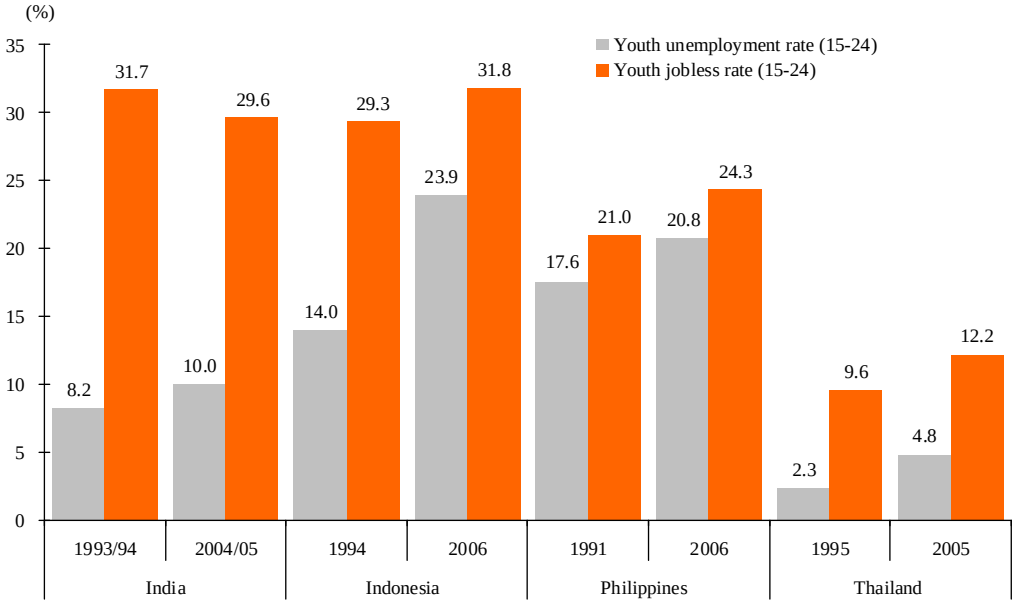
As shown above, it is anticipated that Asian countries will generally head toward decreases in their working-age populations in around 2010, and the benefits of the demographic dividends that drove the high growth of the past will vanish. In order to avoid any slowdown in growth caused by the disappearance of the demographic dividends, and in order to prepare for the coming of an aging

society, it is essential to accelerate additional improvements in productivity and to accelerate the development of social security systems, such as pension and health insurance systems.

As far as productivity improvements go, the key will be to improve the quality of labor. To this end, job security for the youth and the enrichment of educational investment will be extremely important[47].

However, youth employment rates are generally low in emerging countries in Asia. Looking at the jobless rate (which combines the number of people who have lost their jobs and the number of people who are not looking for work) for youths aged 15-24 in the four countries of India (2004-2005), Indonesia (2006), the Philippines (2006) and Thailand (2005)[48], between 10% and 30% of young people are not working (see Figure 1-3-29). The jobless rate for youth in India is particularly high, reaching 29.6%, or about three times more than the unemployment rate (10.0%).

Figure 1-3-29 Youth unemployment rates and jobless rates



Source: ADB, Asian Development Outlook 2008.

Although the number of years that young people spend at school is more than before for all four countries, for example, in India, the 56.0% of the population of young working people (FY2004-2005) have not graduated from elementary school. The ratio of graduates from higher education is also generally low, between 2.1% (Indonesia, 2004) and 11.3% (Thailand, 2005) (see Figure 1-3-30).

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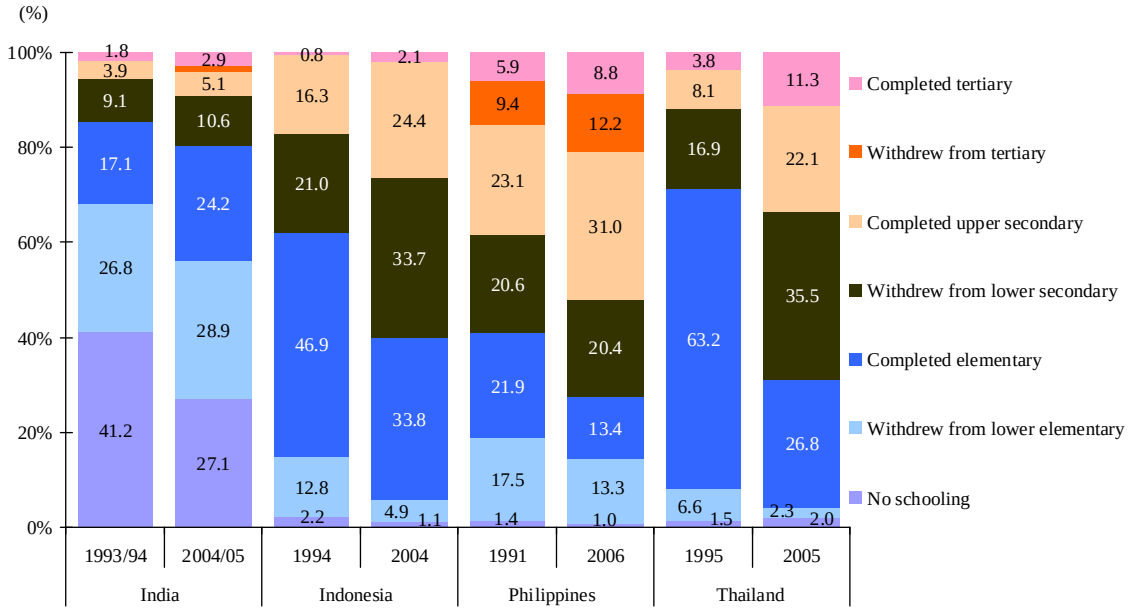
[47] From a macroeconomic perspective, the increase in the number of young people not engaging in work causes a decline in productivity in the overall economy, as well as a slowdown in economic growth. A young person who does not find work will, before long, stop looking for work. The longer a person is unemployed the more motivation and opportunities they lose to acquire knowledge and skills.
There are also concerns that the increasing number of long-term unemployed young people will destabilize society as a whole. Furthermore, the probability that a person will leave their job as they get older tends to be higher for people who have had less schooling (ADB (2008b)).

[48] These four countries account for nearly half the population of emerging countries in Asia.

Based on the above, and considering that the percentage of young people will rapidly decrease from 2010, even within Asia, support measures, such as those securing employment and educational opportunities for young people, need to be enriched and enhanced in India, Indonesia, the Philippines and Thailand, where there are relatively large numbers of young people.

It is also anticipated that, as societies in Asian countries age rapidly, consumption relating to healthcare, recreation and education will increase, especially among the elderly (see Table 1-3-31).

Figure 1-3-30 Educational profile of working youth



Source: ADB, Asian Development Outlook 2008.

Table 1-3-31 Itemized share of household consumption expenditure in China and India

	China		India	
	2005		2005	
	Share of total household consumption expenditure (%)	2025/2005 (times)	Share of total household consumption expenditure (%)	2025/2005 (times)
Food	34	2.9	42	1.8
Apparel	11	3.2	6	2.5
Household products	6	3.9	3	3.0
Personal products	3	4.7	8	4.3
Transportation and communication	14	6.8	19	4.2
Education and recreation	15	6.3	5	5.3
Healthcare	7	9.7	7	5.5
Housing and utilities	9	9.2	12	2.6
Household consumption expenditure per capita	100	5.2	100	3.0

Source: McKinsey & Company, *The Rise of India's Consumer Market*.

(4) Natural disasters

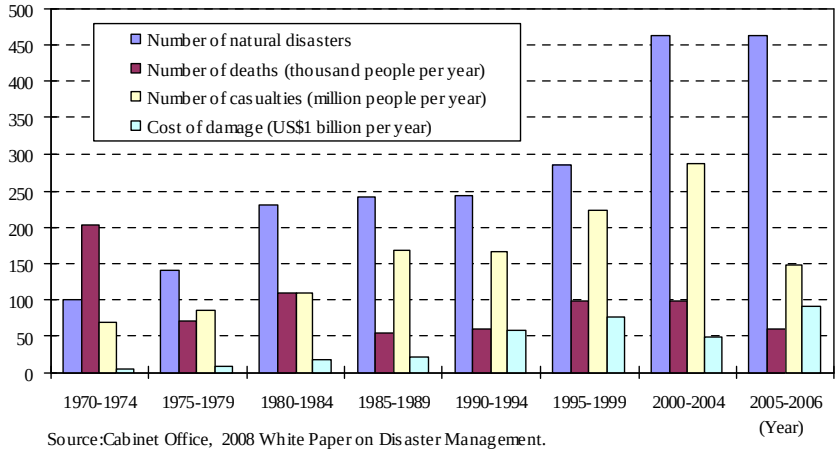
In recent years, there has been an increasing trend of natural disasters in the world. Looking at the changes in the five-year averages since 1970 for the number of natural disasters and for the number of

casualties, according to the Cabinet Office (2008), the five-year period between 2000 and 2004 had the greatest number of both natural disasters and casualties (see Figure 1-3-32).

Moreover, the growth rate for the amount of damages caused by natural disasters has well exceeded the growth rate of per capita GDP. According to Freeman et al (2003), between 1950 and 1999, world GDP per capita increased at an annual average of 3.4%, whereas the amount of damages caused by natural disasters has increased at an annual average of 7.4%. The increase in the amount of damages caused by natural disasters is not only affected by the actual increase in the number of natural disasters[49]. It is also affected by the fact that, as urbanization proceeds forward the world over, the number of people living in cities that are susceptible to disasters is increasing[50].

Large-scale natural disasters have also been occurring in Asia as well recently. In May 2008, a large cyclone made land in southern Myanmar, and in China, a major earthquake struck the Sichuan Province. In both of these incidents, large numbers of people were left dead, missing or suffering.

Figure 1-3-32 Number of natural disasters in the world, number of deaths, number of casualties, and cost of damage



Source:Cabinet Office, 2008 White Paper on Disaster Management.

In Asia still, and the spread of infectious diseases such as avian influenza and SARS shows that preventing the spread of such diseases and other types of illness following a natural disaster is an important challenge. It is imperative that every country work together in dealing with these kinds of large-scale natural disasters and infectious diseases. In view of the importance of cooperation, Prime

[49] Issues of climate change, which were introduced in Section 1 of this chapter, also appear to have a significant influence on the occurrence of disasters. For example, a working group of the Intergovernmental Panel on Climate Change (IPCC) has more or less affirmed that warming is occurring in the Earth's climate systems, and as a result, it predicts that the frequency of torrential rainfalls and the intensity of tropical cyclones will increase.

[50] According to Freeman et al (2003), 13 of the 20 most populous cities in the year 2000 are located along coastal areas that are susceptible to typhoons and floods. Furthermore, according to the Swiss Reinsurance Company (1997), more than 70 of the world's 100 most populous cities are located in earthquake-prone zones (Pacific coastal areas, Turkey and other parts of West Asia, Pakistan, Afghanistan and other parts of South and Central Asia, etc.).

Minister Fukuda also called for the creation of a "Disaster Management and Infectious Disease Control Network in Asia" at the 14th International Conference on "The Future of Asia," which was held in May 2008.

3. Chinese economy: toward a new stage of development

The Chinese economy already has a considerable presence in the world economy. China's nominal GDP in 2007 was US$3,250.8 billion, making it the fourth largest in the world. In the five years since its accession to the WTO, China has also dramatically increased its presence in terms of trade. In 2006, its share of world exports and imports was 8.0% (third) and 6.4% (third) respectively[51].

Although the Chinese economy already boasts an enormous size, it is continuing to achieve rapid growth. In 2007, China's growth rate of real GDP was 11.9%, allowing it to record its fifth consecutive year of double-digit growth. The real growth rate of the world economy in 2007 was 4.9%, and of this, China's contribution was in fact 1.2%.

On the other hand, however, this kind of rapid economic growth has also brought about various kinds of strains and imbalances to China.

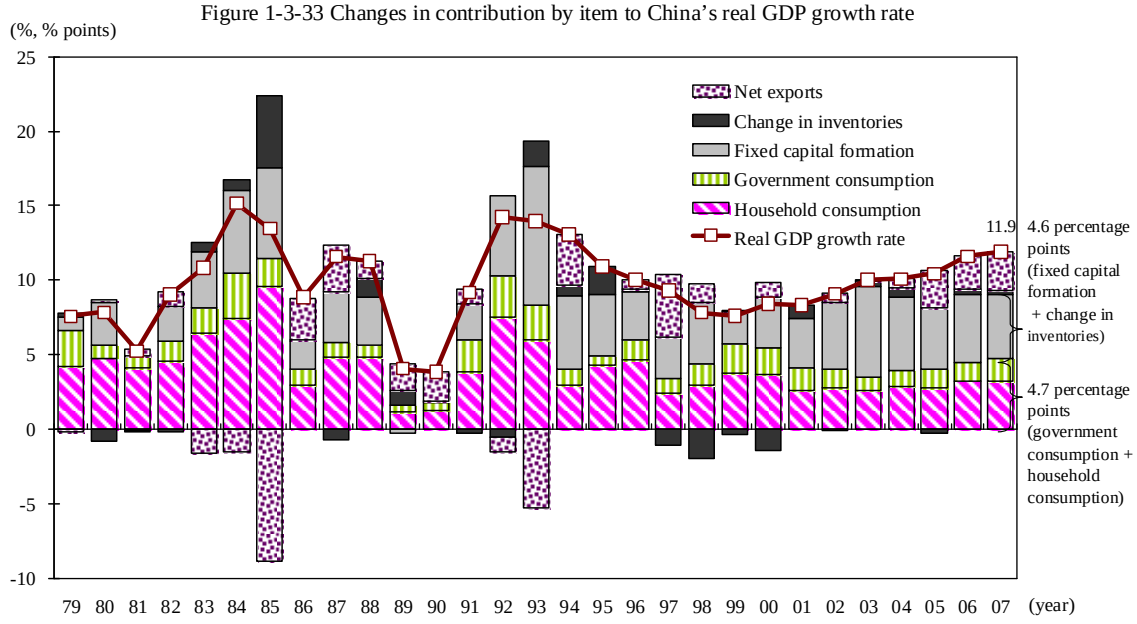
(1) China increasing its presence in the world economy

In 2007, China's growth rate of real GDP was 11.9%, meaning that it has maintained a high growth rate since recording 13.1% in 1994. Looking at the itemized contribution, the contribution of net exports has grown compared to 2006. Furthermore, for the first time since 2001, the contribution by final consumption expenditure, which combines household consumption and government consumption, was higher than the combined contribution by investment of fixed capital formation and change in inventories[52]. Although the degree of contribution by final consumption expenditure has increased steadily since 2003, in 2007, the contribution by the government expenditure portion increased more. Attention will focus on the question of whether the Chinese economy, which has been led by investment up until now, will switch to growth that is led by consumption (see Figure 1-3-33).

[51] China's share of the world's direct inward investment and foreign direct investment was 5.3% (fifth) and 1.3% (18th) respectively. Furthermore, in 2006, China overtook Japan to take second place in the world in terms of the amount of added value in the manufacturing industry (see part 3 of Section 1, Chapter 2).

[52] Contribution of final consumption expenditure was 4.7 percentage points, and the contribution o investment was 4.6 percentage points.

Figure 1-3-33 Changes in contribution by item to China's real GDP growth rate



Source: National Bureau of Statistics of China, China Statistical Yearbook 2007; National Bureau of Statistics of China website.

(Strengthening ties with the world economy)

Since 2005, the contribution of China's net exports to its GDP growth rate has been increasing. Its dependence on trade ((exports + imports) / nominal GDP) also increased significantly from 38.5% in 2001, when China joined the WTO, to 66.6% in 2006. Such figures show that the links between the Chinese economy and the world economy are strengthening.

○ **China's rising dependence on exports**

In 2007, China's exports amounted to US$1,218.5 billion, a year-on-year increase of 25.7%. Backed by its accession to the WTO in 2001, China's degree of export dependence (exports / nominal GDP) has continued to increase from 20.1% to 35.0% in 2006, reaching a level far in excess of Japan's degree of export dependence of 16.1% (2006).

○ **China's diversifying export partner countries and regions**

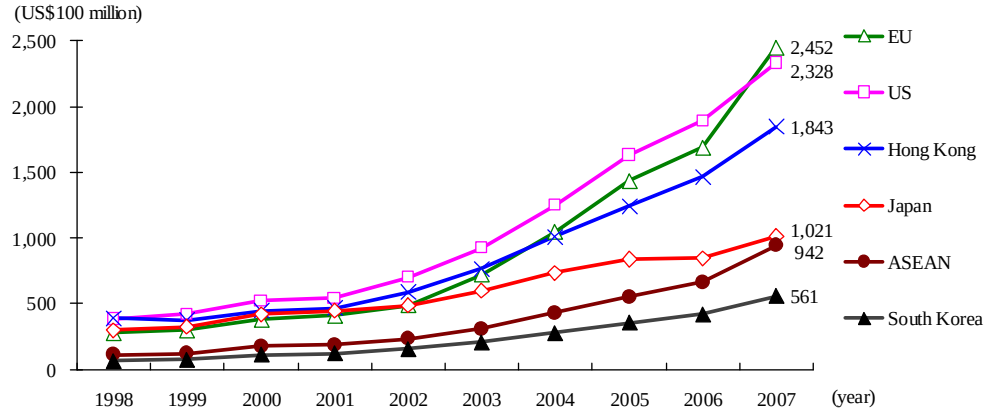
Looking at China's export partner countries and regions, in 2007, exports to the EU (US$245.2 billion, 34.8% year-on-year increase) surpassed exports to the United States (US$232.8 billion, 14.4% year-on-year increase), and the EU became China's largest export partner. Against a backdrop of slowing personal consumption in the United States[53], growth in exports here has been sluggish. Meanwhile, exports to the rapidly growing emerging countries have increased dramatically. Exports to the ASEAN countries increased 32.1% from the previous year, exports to India increased 64.8%, and exports to Russia increased 79.9% (2007)[54]. China is continuing to diversify its export partner countries and regions. In terms of export destinations, as the shares held by United States and Japan

[53] See part 1 of Section 2 in this chapter.

[54] See part 1 of Section 3 in this chapter.

fall, the shares occupied by ASEAN and other emerging countries are gradually expanding (see Figure 1-3-34).

Figure 1-3-34 Diversifying export partner countries and regions



Source: CEIC Database.

		2000	2001	2002	2003	2004	2005	2006	2007
EU	Value of exports (US$ million)	38,190	40,965	48,185	72,080	104,574	143,753	181,927	245,231
	Export share (%)	15.3	15.4	14.8	16.4	17.6	18.9	18.8	20.1
U.S.	Value of exports (US$ million)	52,142	54,319	69,959	92,510	124,973	162,939	203,516	232,761
	Export share (%)	20.9	20.4	21.5	21.1	21.1	21.4	21.0	19.1
Hong Kong	Value of exports (US$ million)	44,530	46,503	58,483	76,324	101,126	124,505	155,435	184,289
	Export share (%)	17.9	17.5	18.0	17.4	17.0	16.3	16.0	15.1
Japan	Value of exports (US$ million)	41,611	45,078	48,483	59,454	73,536	84,097	91,772	102,116
	Export share (%)	16.7	16.9	14.9	13.6	12.4	11.0	9.5	8.4
ASEAN	Value of exports (US$ million)	17,288	18,571	23,574	30,935	42,903	55,459	71,324	94,243
	Export share (%)	6.9	7.0	7.2	7.1	7.2	7.3	7.4	7.7
Republic of Korea	Value of exports (US$ million)	11,287	12,544	15,508	20,105	27,809	35,117	44,558	56,129
	Export share (%)	4.5	4.7	4.8	4.6	4.7	4.6	4.6	4.6
Russia	Value of exports (US$ million)	2,231	2,715	3,522	6,039	9,071	13,211	15,829	28,484
	Export share (%)	0.9	1.0	1.1	1.4	1.5	1.7	1.6	2.3
India	Value of exports (US$ million)	1,569	1,903	2,673	3,345	5,926	8,937	14,588	24,036
	Export share (%)	0.6	0.7	0.8	0.8	1.0	1.2	1.5	2.0

Note: Export share refers to the value of exports from China to the specific country or region as a percentage of China's total exports.
Source: CEIC Database.

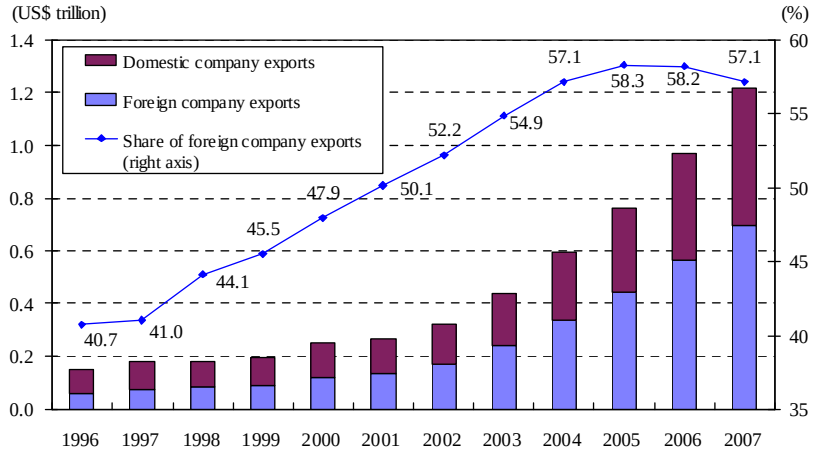
(China's changing trade structure)

Up until now, China's exports have been led by foreign companies that account for about 60% of all exports (see Figure 1-3-35). However, in 2006, the percentage of exports accounted for by these foreign companies began to decrease, and there has since been an increasing proportion of exports being made by domestic Chinese companies with improved production capacities and technological levels.

China's typical trade structure is the processing trade, where goods are processed and assembled domestically using parts, components and intermediate goods procured from overseas, before shipping the finished goods overseas again. The processing trade in China accounted for about 50% of all exports in 2007, and about 40% of all imports (see Figure 1-3-36). However, in order to curb the export of products that consume a lot of energy and the export of products with little added value or

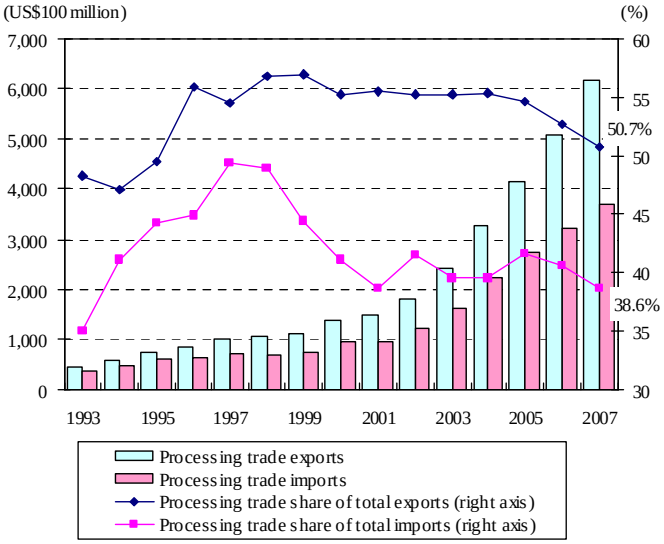
low technical content, the processing trade has been kept in check[55]. In recent years, the percentage of processing trade has been trending downward.

Figure 1-3-35 Changes in the share of foreign companies in China's exports



Source: CEIC Database.

Figure 1-3-36 Changes in processing trade



Note: The value of processing trade is the total of goods processed and assembled plus goods assembled with imported materials.
Source: CEIC Database.

It is not just the restraints on the processing trade that are causing the decline in the proportion of processing trade. Another possible factor is the fact that the technical levels of China's domestic industries are rising. For example, some parts, components and intermediate goods that were previously being procured from overseas are now being secured from within China.

In 2007, China's value of imports amounted to US$955.8 billion (20.8% year-on-year increase). Looking at its imports by type of goods, the value of imported materials increased 9.5-fold during the

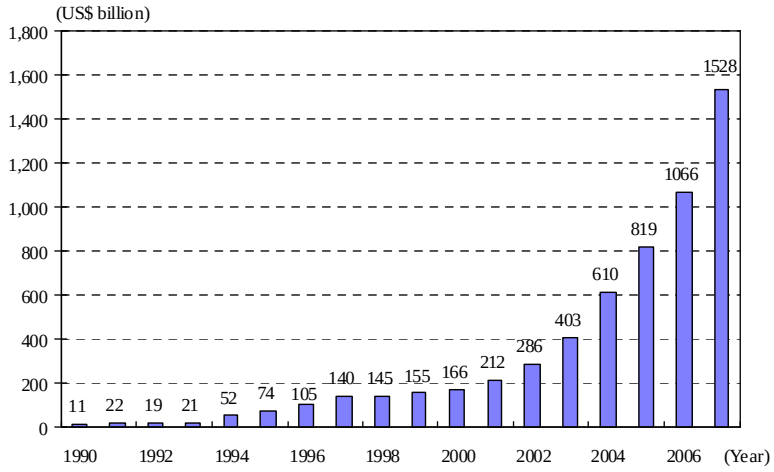
[55] Under the processing trade system, where import duties and value-added tax are reduced or exempted when exporting finished goods produced through the processing trade, up until April 5, 2008, 1,816 items had been excluded, and from August 31, 2007, the system required that deposit guarantees be arranged when importing raw materials for 1,853 items.

ten years to 2006; far higher than the 5.4-fold for intermediate goods. Against a background of expanding domestic consumption, imports of resources, farm produce and the like are rapidly increasing. China has been a net importer of crude oil since 1993, and of farm produce since 2004, and this is one of the reasons underlying the global tightening in supply and demand and the soaring prices of resources and food[56].

○ **Ever-increasing foreign currency reserves**

In 2007, China's trade surplus was US$262.2 billion (47.7% year-on-year increase), and its current account surplus reached US$371.8 billion. China's current account surplus is equivalent to about four tenths the size of the United States' current account deficit. In 2006, China surpassed Japan to become first in the world in terms of foreign currency reserves. As of the end of 2007, China's foreign currency reserves had increased to US$1,528.2 billion (see Figure 1-3-37)[57].

Figure 1-3-37 Changes in China's foreign currency reserves



Source: CEIC Database.

(Greater overseas expansion by Chinese companies)

Since implementing its reform and open-door policy, China has actively accepted direct inward investment from foreign-owned companies. On the other hand, there had been very little in the way of foreign direct investment by Chinese companies. But now, foreign direct investment is being aggressively promoted following the presentation of the "Going Abroad" Strategy[58], the aims of which include: to alleviate any shortages of domestic resources by utilizing overseas resources, and to rectify the imbalance of China's current account (reducing the current account surplus) through capital outflows.

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[56] See Section 1 of this chapter.

[57] For comments on the movements surrounding the management of foreign currency reserves, see Section 1 of Chapter 4.

[58] Aims to expand foreign direct investment. Also presented in the 11th Five-Year Plan (2006-2010). Details are described in Section 1 of Chapter 4.

In fact, buoyed by greater profits, the internal reserves of domestic companies have been increasing in recent years; and backed by this greater capital strength of domestic companies, there has been a drastic increase in these Chinese companies expanding their operations overseas. In 2006, China's foreign direct investment increased around the mining industry, amounting to US$17.6 billion. From US$2.9 billion in 2003, this represents an increase of almost six fold in three years (see Figure 1-3-38).

Mergers and acquisitions of foreign companies and the launch of joint ventures are also being actively trialed now. Key examples in recent years include the buyout by Lenovo of the PC business belonging to the United States company, IBM (2005)[59], the establishment of a joint venture company by TCL with the French company, Thomson, to manufacture televisions and DVD players (2004); and the buyout of the British company, MG Rover Group, by the Nanjing Automobile Corporation (2005)[60]. There has also been an increasing number of buyouts and equity investments designed to procure foreign resources. For example, the plan by China National Offshore Oil Corporation (CNOOC) to buy out the United States company, Unocal Corporation (2005)[61], the purchase by China National Petroleum Corporation (CNPC) and China Petroleum and Chemical corporation (SINOPEC) of the rights and interests in oil fields held by the Canadian company, EnCana (2005); the purchase of oil interests by China International Trust and Investment Company (CITIC) from the Canadian company, Nations Energy (2006)[62]; and the equity investment by the Aluminum Corporation of China (Chinalco) in the British and Australian joint venture company, Rio Tinto (2008, joint investment together with the United States company, Alcoa)[63].

It is thought that Chinese companies have a strong appetite for acquiring the technologies, market shares and brand power of the companies they take over through mergers and acquisitions, and future movements in this appetite will be watched with interest.

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[59] However, although the buyout itself was approved, the US Department of State withdrew its plan to purchase Lenovo computers, thereby striking a major blow against Lenovo (Kwan, C.H. (2008) "HONKAKUKA SURU CHUUGOKU KIGYOU NO TAIGAI CHOKUSETSU TOUSHI").

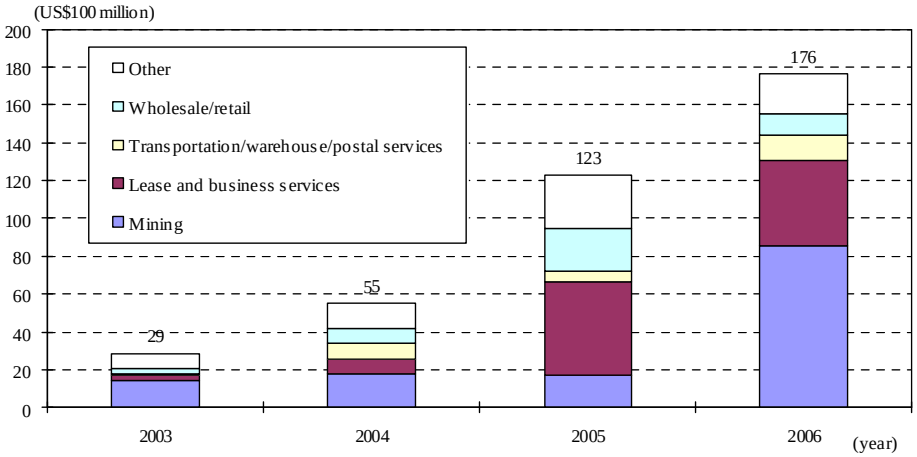
[60] *JETRO White Paper on International Trade and Foreign Direct Investment* (2005, 2006, 2007).

[61] Given the importance of petroleum as a natural resource, as well as other security reasons, the plan met with opposition from the US Congress, and ended in failure.

[62] Above-mentioned *JETRO White Paper on International Trade and Foreign Direct Investment* (2005, 2006, 2007).

[63] Websites of Rio Tinto, Alcoa, and Aluminum Corporation of China (February 2008).

Figure 1-3-38 Changes in (flow of) foreign direct investment (excluding finance)



Source: Institute for International Trade and Investment,
"SEKAI SHUYOUKOKU NO CHOKUSETSU TOUSHI TOUKEISHUU"

○ **Overseas expansion of the financial industry**

The financial industry is also continuing to expand into overseas markets. In the early 2000s, Chinese banks were carrying massive amounts of non-performing loans, and were in deep financial difficulty; but since the end of 2003, the Chinese government disposed of non-performing loans through China Asset Management Companies, injected capital such as by way of foreign currency reserves, restructured listed companies, ushered in strategic institutional investors from overseas, and listed on domestic and international stock markets[64]. As a result of these measures, the cash flow of China's banks has become plentiful, and a number of banks have made it into the top ranks of equity capital[65].

In recent years, the Chinese financial industry has embarked on opening up overseas markets. In addition to the M&A of overseas banks[66], equity contributions have also been made to banks in Europe and the United States which have performed poorly due to the losses brought about by the American subprime mortgage crisis[67]. Possible reasons for trying to expand operations overseas include: support for policies of getting foreign currency reserves to flow back overseas; the decentralization of management throughout the global market; and the acquisition of financial

[64] Reforms based on the three steps of financial restructuring, better corporate governance and publicly listing of shares.

[65] According to the British magazine, Banker (July 2007), the top 25 banks viewed in terms of core equity capital include the Industrial and Commercial Bank of China (ICBC) (7th), the Bank of China (9th), and the China Construction Bank (14th) (Jin, J. (2007) "CHUUGOKU GINKOUGYOU NO YAKUSHIN TO KASOKU SURU KAIGAI SHINSHUTSU").

[66] Such as the contribution of equity by the Industrial and Commercial Bank of China into Bank Halim Indonesia (2006 December) (Jin, J. (2007) above).

[67] Such as the contribution of US$3 billion by the China Construction Bank to the British firm, Barclays (August 2007).

technologies and management expertise that is more advanced overseas. The aggregate market value of stocks of financial institutions in China has risen, and as of April 2008, three of the world's top ten financial institutions in terms of market capitalization were from China[68].

As described above, the Chinese economy continues to grow in size as it deepens its relationships of interdependence with the world economy through the expansion of trade and the expansion of corporate operations overseas. Accordingly, the sustainable development of the Chinese economy is also important for the world economy.

(Changes in the structure of demand attributable to increases in domestic demand)

○ **Ever-increasing investment**

In 2007, total investment in fixed assets in China was 13.7 trillion yuan, representing a 24.8% year-on-year increase. In urban areas in China, growth of investment has continued at more than 20%, and in the four years leading up to 2007, the value of fixed asset investments increased about 2.6-fold. Looking at the industry-by-industry breakdown of fixed asset investments, investment is being led by the manufacturing industry, the real estate industry, and rail and other infrastructure-related investment.

One of the factors underlying the increasing investment in China is the ongoing rapid urbanization; for example, every year, tens of millions of people flow from rural communities to urban areas. The advance of urbanization not only leads to investments in real estate due to increases in the demand for housing, but also to other infrastructure-related investments such as for communication, electricity and water[69].

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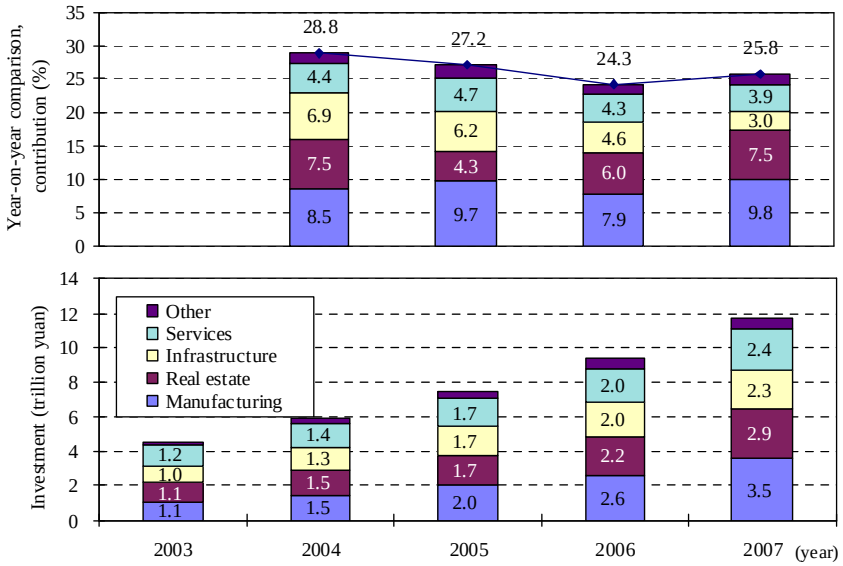
[68] Forbes Global 2000. Industrial and Commercial Bank of China (ICBC) (1st), Bank of China (4th), China Construction Bank (6th).

[69] For example, investment in the construction of rail infrastructure has been increasing rapidly since 2005. Although China had been attempting to speed up rail transportation since 1997, because the existing lines were nearing their limit in terms of faster services, investment has focused on high-speed passenger railways. In its 11th Five-Year Plan (2006-2010), the government has decided to invest 1.25 trillion yuan, which is 3.6 times more than the investment in the preceding 10th five-year plan. This is one of the factors in the increase in infrastructure-related investment.

Figure 1-3-39 Changes in fixed asset investment by industry, and contributions to the changes (urban areas)



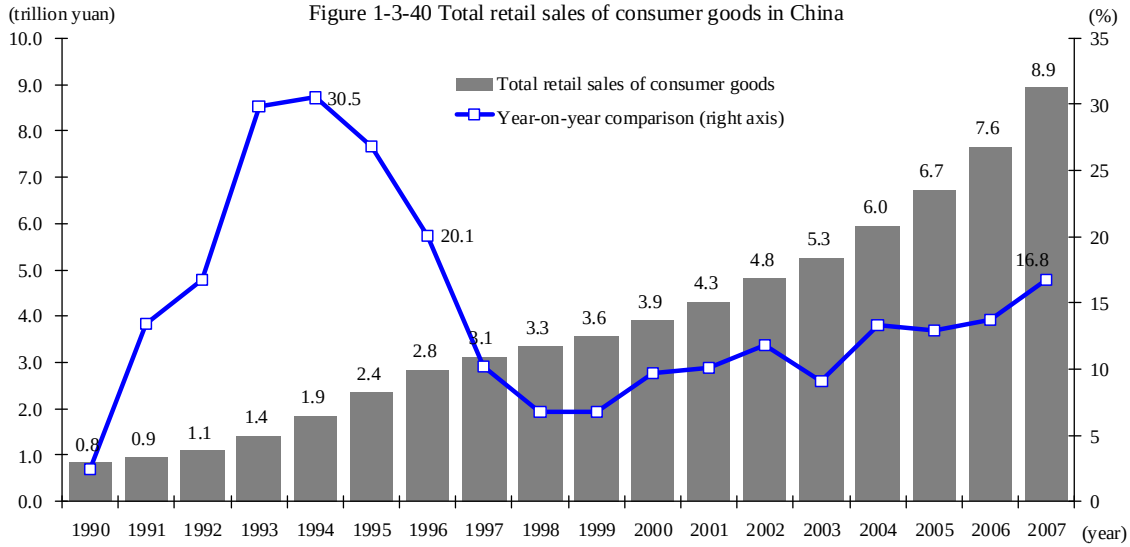
Note: "Infrastructure" refers to investment in the industries related to transportation/communication, electricity/gas/water and construction. "Services" refers to investment in the tertiary industries not included in infrastructure.

Source: CEIC Database.

○ **Moderate increases in consumption**

In 2007, the total retail sales of consumer goods[70] amounted to 8.9 trillion yuan, representing a 16.8% year-on-year increase. Although consumption growth is small when compared to the 20%+ growth of investment and exports, the rate growth is trending upward. The rate of growth in 2007 was at its highest since 1996 (see Figure 1-3-40).

Figure 1-3-40 Total retail sales of consumer goods in China

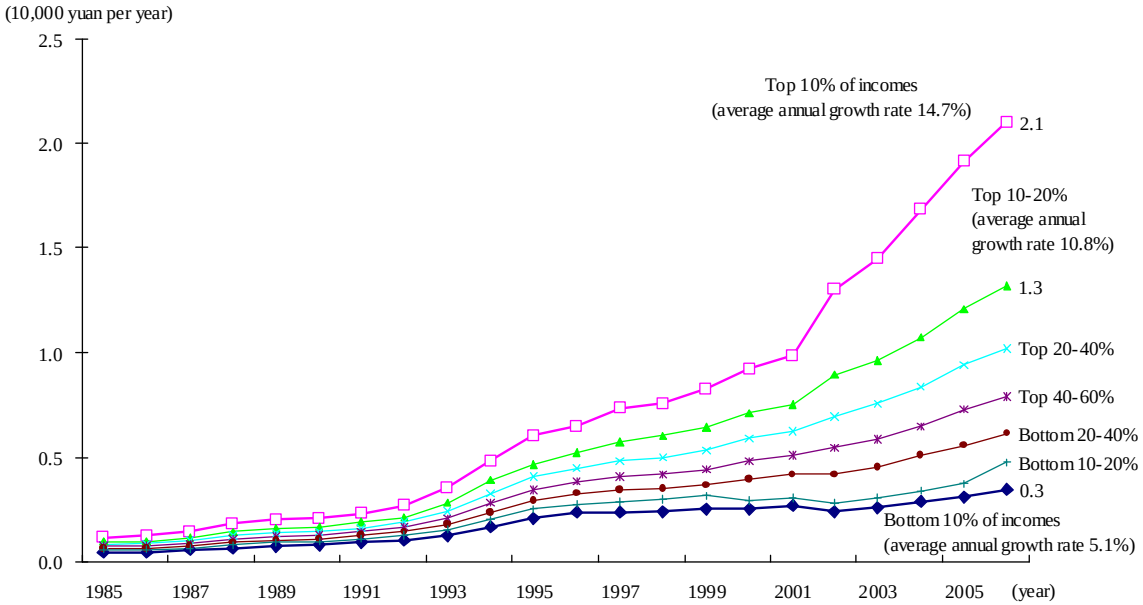


Source: National Bureau of Statistics of China.

[70] This is the total value of consumption goods sold directly to residents or social groups by various types of businesses in the national economy. The majority is consumption by households.

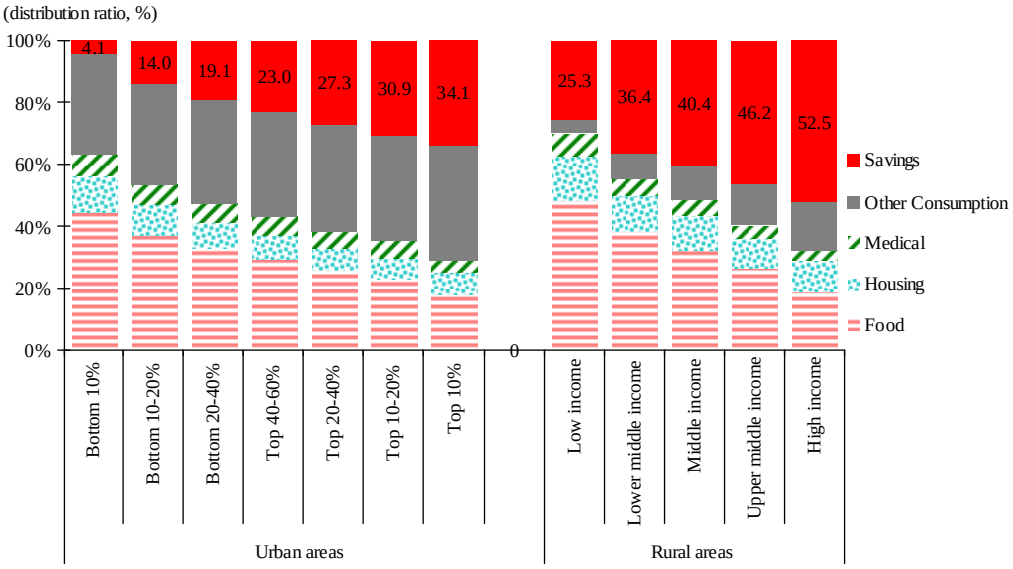
One of the factors pointed out as to why consumption growth is lower than the growth of investments or exports is the fact that the distribution of wealth arising from economic growth is concentrated in high-income groups which have a higher propensity to save (see Figures 1-3-41 and 1-3-42)[71].

Figure 1-3-41 Changes in consumption expenditure per income bracket (urban areas)



Note: Average annual growth rates have been used since 2000.
Source: CEIC Database.

Figure 1-3-42 Breakdown of consumption expenditure per income bracket in urban and rural areas (2006)



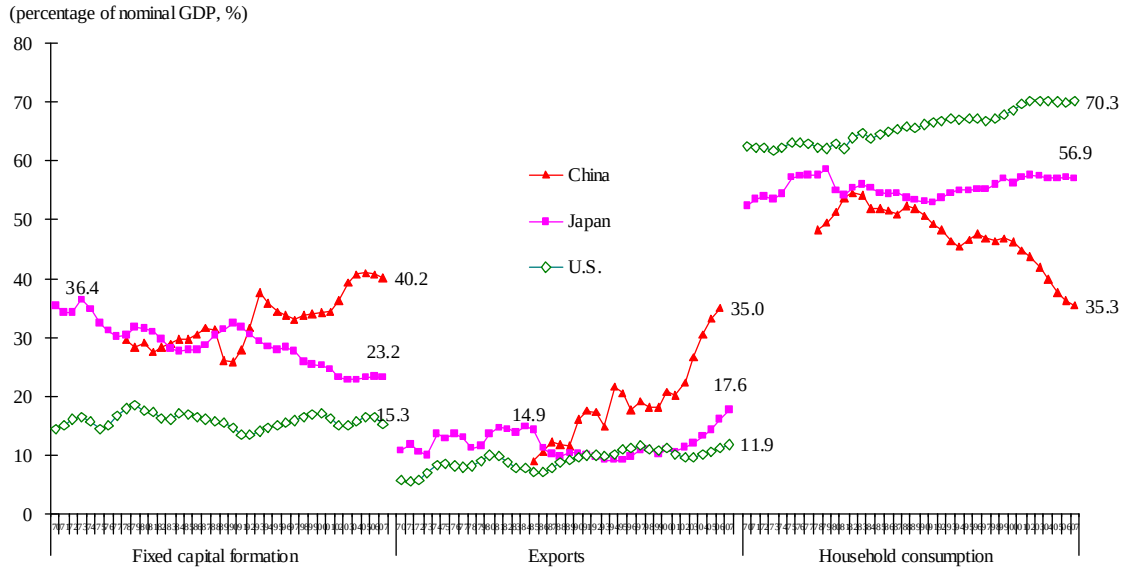
Source: CEIC Database.

[71] It is also believed that the fact that the social security system is still in a development phase, and the fact that consumer credit has not yet become widespread also act to raise the household savings rate and inhibit increases in consumption.

(Shift to a structure of demand where there is a balance between the necessary investment, exports and consumption)

Looking at investments and exports as a percentage of nominal GDP, China is at a level much higher than Japan or the United States ever was in the past. On the other hand, as investments and exports increase, the ratio of household consumption to nominal GDP tends to decline (see Figure 1-3-43).

Figure 1-3-43 Changes in investment, consumption and exports as percentages of nominal GDP (Japan, United States, China)



Source: System of National Accounts (Cabinet Office), Bureau of Economic Analysis website, United States Department of Commerce, CEIC Database.

Although these increases in investments and exports have brought about growth to the Chinese economy, because one of the drivers of investment has been the real estate industry, indications can be raised regarding a real estate bubble. Furthermore, given the fact that an over-reliance on external demand makes an economy vulnerable to the effects of fluctuations in economies overseas, there is also the risk that this may give rise to a problem of external imbalances or a problem of trade friction. Therefore, in order that the Chinese economy can achieve sustainable development in the future, a structure of demand needs to be realized in which investment, exports and consumption are well balanced.

(Soaring food/energy prices and inflationary pressures)

As the Chinese economy continues to grow rapidly, in 2007, the consumer price index rose 4.8%, the highest growth in 11 years. Accordingly, “anti-inflation” was taken up as the new economic management issue at the Central Economic Working Conference[72], which was held n December 2007.

○Soaring food prices

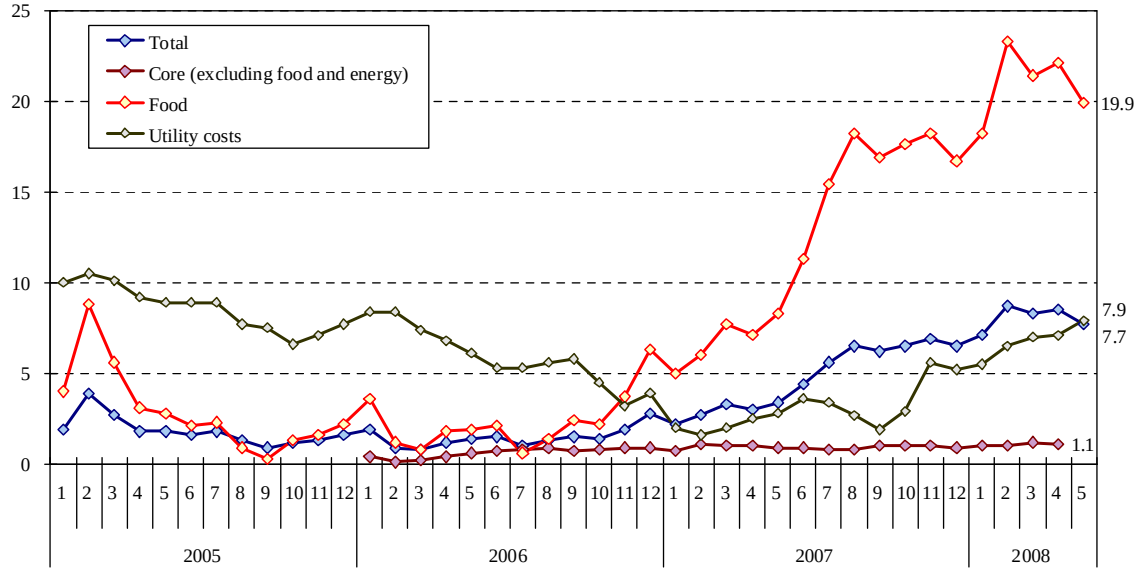
In China at present, skyrocketing prices have been particularly conspicuous for food. The year-on-year rate of food price increases, which exceeded 10% in June 2007, surpassed 20% in February 2008 (see

[72] Conference jointly sponsored by the Communist Party of China (CPC) Central Committee and the State Council to determine the basic course for economic policy in 2008.

Figure 1-3-44). Above all, the foods that have had the most remarkable price increases have been meats such as pork (see Table 1-3-45). The following points have been raised as being behind the soaring prices of pork: downsizing of production following the 2005 drop in pork prices; undersupply of pork due to a porcine disease that broke out in the first half of 2007; and the rising prices of corn and other feed.

(compared to the same period of the previous year: %)

Figure 1-3-44 Changes in consumer prices



Source: CEIC Database.

Table 1-3-45 Distinct rises in the price of meat

(year-on-year comparison, %)

	2007												2008			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Food total	5.0	6.0	7.7	7.1	8.3	11.3	15.4	18.2	16.9	17.6	18.2	16.7	18.2	23.3	21.4	22.1
Grain	6.9	6.8	6.4	6.1	5.9	6.1	6.0	6.4	6.5	6.7	6.6	5.5	5.7	6.0	6.8	7.4
Cooking oil	16.7	17.4	17.2	18.6	21.4	27.6	30.1	34.6	34.5	34.0	35.0	32.0	37.1	41.0	50.7	46.6
Meat and meat products	13.5	15.4	16.5	17.6	26.5	35.7	45.2	49.0	43.0	38.3	38.8	38.8	41.2	45.3	45.8	47.9
Eggs	19.0	26.7	27.0	27.2	33.4	34.8	28.9	23.4	18.2	15.0	11.0	5.4	6.0	7.4	4.9	5.1
Vegetables	-9.2	-7.9	3.4	3.9	-0.8	5.3	17.0	20.8	12.4	27.3	26.2	9.9	13.5	41.6	21.3	13.6
Milk and dairy products	1.6	1.6	1.5	1.3	1.7	1.7	1.7	2.1	2.5	3.2	5.0	8.4	12.8	16.4	17.9	19.2

Source: CEIC Database.

Other possible factors behind the soaring prices of food include the fact that the demand for meat and vegetables is increasing on the back of rising incomes; and the fact that there is a growing interest in chemical-free vegetables and other expensive foods[73], and hence sales volumes are increasing[74].

In China, where expenditure on food reaches about 40 percent of all household expenditure, there are concerns over the adverse effects being caused by rapidly rising food prices, including the scope for selective consumption expenditure being narrowed, personal consumption being moderated further, and the lives of low-income earners being reduced to poverty.

[73] Based on interviews with local distributors.

[74] There are also concerns that extra pressure is being applied on rising prices by the heavy snowfalls that hit central and southern China in early 2008 for the first time in 50 years, and by the major earthquake that struck the Sichuan Province in May 2008.

Meanwhile, given that grain production has increased for four consecutive years, it is possible that a problem in China's food production system may also underlie the rising food prices, in that supply cannot keep up with the rapidly expanding demand for food.

In order to alleviate the tight supply and demand for food, and to ensure a stable supply of food, agricultural productivity needs to be further improved, and a flexible food production system needs to be built which is responsive to the diversifying demand for food.

The Chinese government has implemented a range of measures to control the ever-rising prices of food, including: (a) abolished value-added tax rebates on the export of 84 items such as grain, soybeans and their associated flours; (b) added a total of 11 grain flours, such as wheat flour, corn flour, and rice flour, to the list of commodities subject to the Export Quota License Administration[75]; and (c) imposed a provisional export tariff on cereals and soybeans (limited to only one year in 2008)[76].

○ **Soaring energy prices**

Second after food, energy prices have also been rising, such as for utilities and gasoline (see Figure 1-3-44). The utility costs portion of the consumer price index first began rising in October 2007, and by April 2008, the year-on-year increase had reached 7.1%. Underlying this has been a dramatic global rise in the prices of resources. As shown in Section 1 of this chapter, in 2006, China, which had become the world's second largest energy consumer as a consequence of its economic expansion[77], accounted for 71.7% of the world's increase in coal consumption (year-on-year difference) and 77.3% of the increase in oil consumption[78]. It has substantially increased its imports of crude oil and other energy resources. In particular, its dependence on oil imports had reached about 50% by 2006[79], and according to the IEA, China's dependence on oil imports is expected to reach about 80% by 2030[80],

---

[75] Previously the three items of wheat, corn, and rice had been subject to Export Quota License Administration.

[76] In addition to this, in January 2008, based on the "Rules on the Implementation of Temporary Price Intervention Measures on Some Important Commodities and Services" announced by China's National Development and Reform Commission (NDRC), new regulations were promulgated requiring food companies of a certain size to report on applications and so forth prior to increasing prices on seven items, including processed grain and grain products, and pork, beef, mutton and their associated products. Furthermore, according to the NDRC's "Report on the Implementation of the 2007 Plan for National Economic and Social Development and on the 2008 Draft Plan for National Economic and Social Development," production incentives have been implemented to strictly protect arable lands, to devote much energy to the provision of assistance to food producing districts and grain growers, and to stabilize total food production.

[77] As of 2005, China's dependence on coal as a primary energy source was 60%, and oil was 19%.

[78] British Petroleum (2007), *Statistical Review of World Energy June 2007*.

[79] In 2007, China's oil imports amounted to US$79.8 billion. This is equivalent to 2.5% of its nominal GDP flowing overseas.

[80] IEA (2007b), *World Energy Outlook 2007*.

China's increasing consumption of energy has become one of the factors underlying the rise in the international prices of crude oil and other energy resources.

Meanwhile, the Chinese government has also exercised control over the retail prices of gasoline and other petroleum products. As a result, in some cases, petroleum importers and refineries have been unable to pass on the increases in the cost of raw materials through retail prices, and so have kept their shipments in check, causing shortages in the distribution of gasoline and other petroleum products[81].

In order for China to achieve further growth in the midst of limited resources, countermeasures are needed, such as the promotion of further energy-saving policies. At the same time, a review is also essential for the overseas resources development and the current price control being promoted by the Chinese government.

○ **Trend of consumer prices, excluding food and energy**

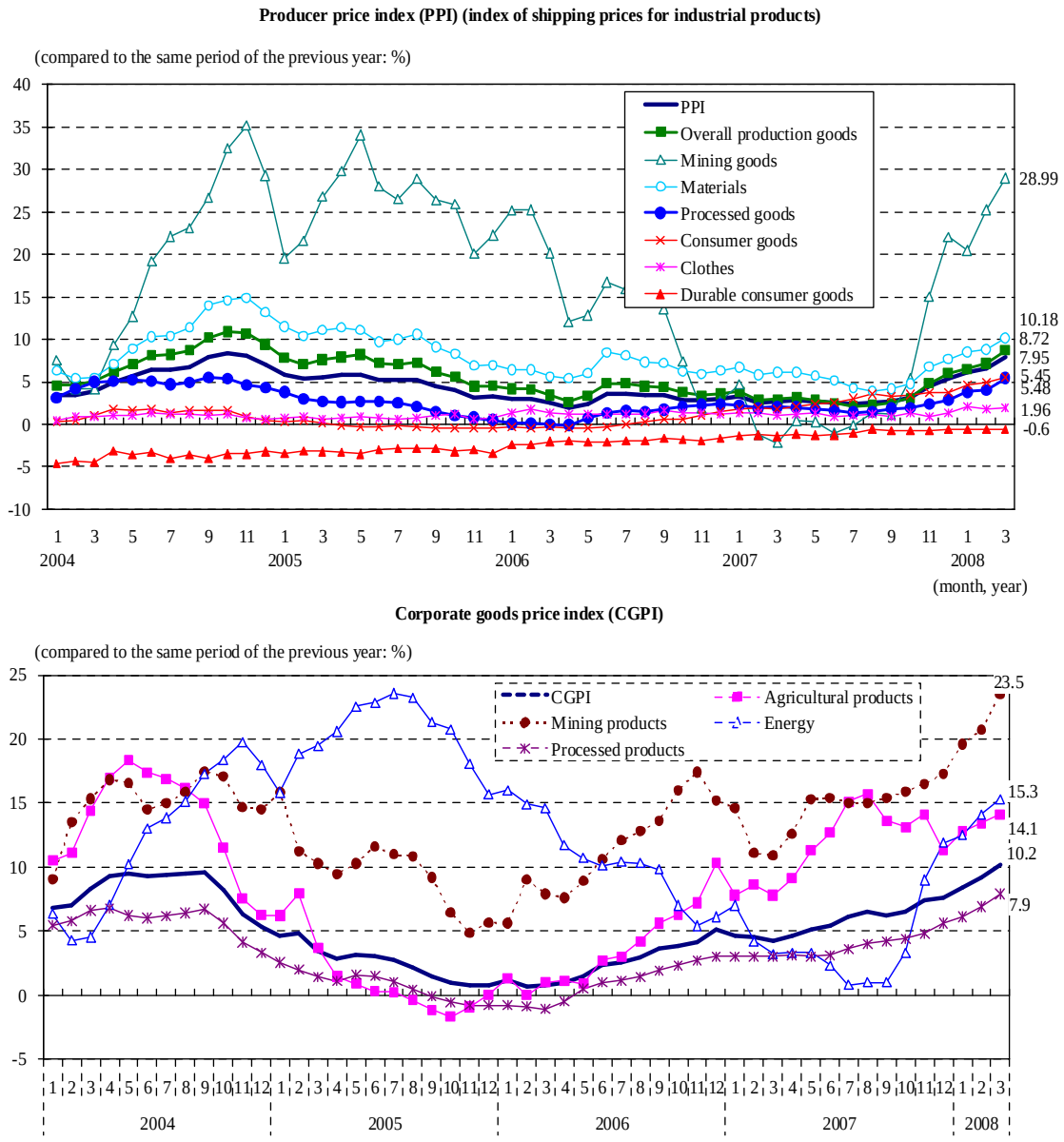
Up until now, the so-called core consumer price index, which excludes food and energy, has demonstrated a relatively stable trend of around 1.1% (year-on-year comparison) (see Figure 1-3-44). However, amid the ongoing soaring prices of energy and materials[82], the corporate goods price index (CGPI) for processed products has recently begun to rise little by little.

Looking at recent CGPI figures, in addition to the items related to food and resources, such as agricultural products, mining products and energy, which had previously been surging in price, recently the prices of processed products have also begun to rise (see Figure 1-3-46). As a result, by April 2008, the CGPI had reached an annual rate of increase of 10.2%, and there are concerns that this will have repercussions for core consumer prices downstream.

[81] These kinds of government-imposed price controls prevent excess demand from being restrained and cause inflationary pressures to increase.

[82] As shown in Section 1 of this chapter, in response to China increasing its domestic consumption of crude steel and copper, it has dramatically increased its imports of iron ore, copper ore and other metal resources. This has become one of the primary causes for the worldwide surge in the prices of iron and copper ore.

Figure 1-3-46 Corporate goods price index (CGPI) and producer price index (PPI)

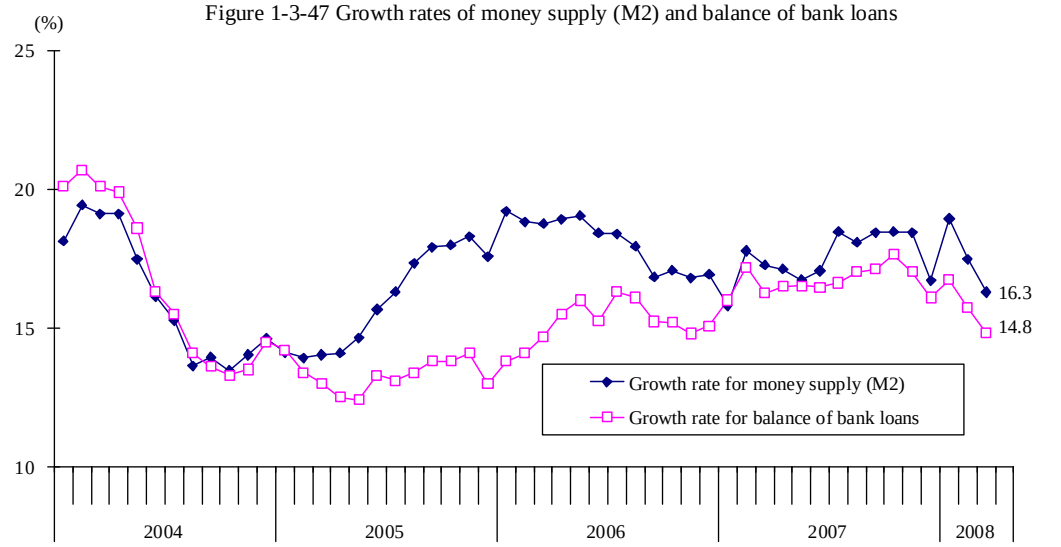


○ **Soaring real estate and other asset prices due to excess liquidity**

Money supply in China has recently been growing at an extremely high rate. Since the middle of 2005, money supply (M2) has increased at a high growth rate of 15%-20%, and in 2007, the rate was well above the target[83] set by the Chinese government of keeping the growth of money supply to no more than 16%. As a consequence, the balance of bank loans has also been continuing to grow at a rate in excess of 15% since 2006 (see Figure 1-3-47).

[83] Control targets for 2007 were set at the working conferences held by the People's Bank of China during 2007, but there was no specific control target for 2008 established at the working conference held by the People's Bank of China in January 2008.

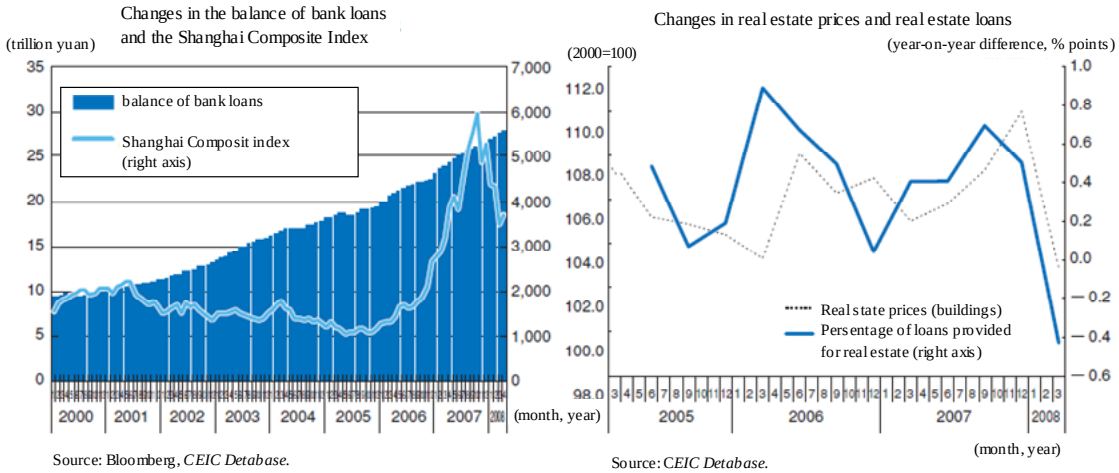
Figure 1-3-47 Growth rates of money supply (M2) and balance of bank loans



Source: CEIC Database.

The biggest factor underlying the increase in the money supply has been the frequent intervention by the People's Bank of China of selling yuan and buying US dollars on the foreign exchange market in order to avert the sudden appreciation of the renminbi. The huge amount of liquidity accumulated in private financial institutions as a result of the People's Bank of China selling yuan and buying US dollars, is released into the market by way of loans, resulting in the formation of excess liquidity. Much of these funds lent to the market has been injected into real estate investments and stock investments, thereby inducing real estate prices to soar and the stock market to overheat (see Figure 1-3-48).

Figure 1-3-48 Changes in the balance of bank loans, the Shanghai Composite Index, and real estate prices



Source: Bloomberg, *CEIC Database.*

Source: *CEIC Database.*

○ **Monetary policy response to inflationary pressures**

The government and the People's Bank of China are trying to control these inflationary pressures through financial tightening and other such means. At the December 2007 Central Economic Working Conference, the top-priority short-term issues adopted for money control was to prevent economic growth from accelerating from an already fairly fast pace to overheating, and to prevent commodity

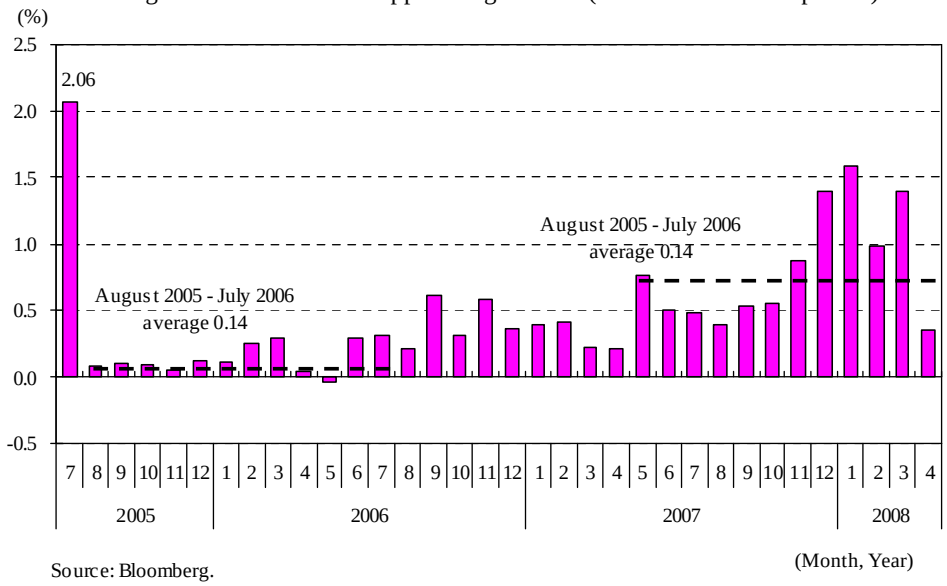
prices from shifting from fractional rises to all-out inflation. To this end, they have resolved to further demonstrate the important role of monetary policy in macro control, by switching the stance of monetary policy from the previous "moderation" to one of "tightening," by rigidly controlling the total volume and tempo of loans, by further coordinating the improvement of the balance of international payments with the total demand of society, and by maintaining the stability and security of finance.

To be more precise, as a means of alleviating the impact of the ever-increasing prices of crude oil, grain and so forth on domestic commodity prices, on May 21, 2007, the range of daily exchange fluctuations against the US dollar was increased from a maximum of 0.3% to 0.5%. One of the aims of this was to control the climbing prices of yuan-denominated imports of crude oil and grain, settlements of which are predominantly in US dollars, by accelerating the appreciation of the renminbi against the US dollar. The renminbi has been appreciating at a gradually expanding range since November 2007 (see Figure 1-3-49).

As a means of countering excess liquidity, effort have been made to absorb the liquidity released into the market, such as by the People's Bank of China issuing promissory notes[84], and by raising lending rates and the deposit reserve requirement ratio (see Figure 1-3-50)[85].

As a result of these measures, there are signs at last that the money supply and the balance of bank loans will slow in 2008 and beyond (see Figure 1-3-47).

Figure 1-3-49 Pace of the appreciating renminbi (month-on-month comparison)

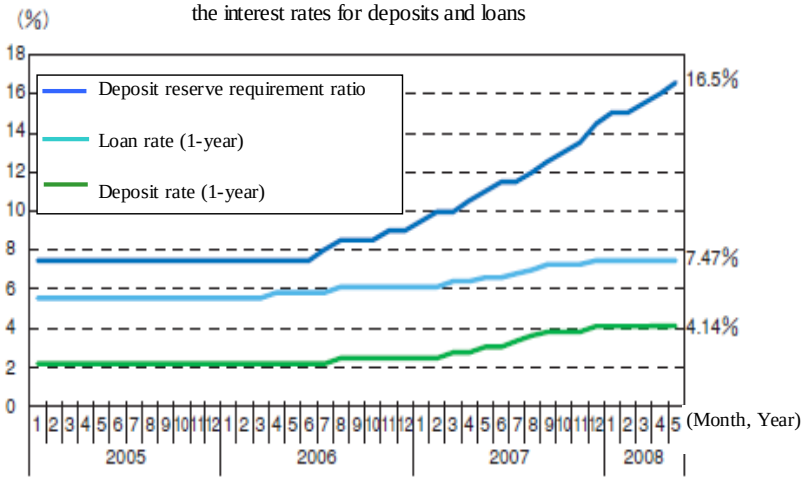


Source: Bloomberg.

[84] As at the end of 2007, the outstanding balance of promissory notes issued by the People's Bank of China had reached approximately 4 trillion yuan, a year-on-year increase of approximately 700 billion yuan.

[85] The deposit reserve requirement ratio was raised ten times in 2007, and had been raised a further four times up until May 2008. As of May 31, 2008, it had reached a record high level of 16.5%.

Figure 1-3-50 Changes in the deposit reserve requirement ratio and the interest rates for deposits and loans



Source: CEIC Database.

(2) China as a market

(Expansion of the high-income group as a consequence of economic growth)

Economic growth in China has led to the expansion of the high-income group, especially in the three coastal metropolitan areas centering around Shanghai, Beijing and Canton. By using data from a survey on household budgets by income bracket, which was conducted by the National Bureau of Statistics of China, to estimate the number of high-income earners in urban areas, which are considered to be the pillars of consumption, in 2002, across the nation, there were 44 million high-income earners, equivalent to the top 10% of income earners (16.5 million households), and their average annual income was approximately 19,000 yuan[86]. By 2006, income groups at the same level or higher had increased to approximately 103.87 million people nationwide (39.12 million households), and now extended to the top 20% of income earners.

Furthermore, by using the statistical yearbooks of each province and city to estimate the regional distribution of the high-income group, between 2002 and 2006, the number of high-income earners in the Pearl River Delta located in Guangdong Province increased from approximately 8.9 million to 16.2 million. In the Yangtze Delta, which combines Jiangsu Province and Zhejiang Province with Shanghai, the number increased from approximately 8.8 million to 16.7 million. In the Bohai Sea Rim region, which combines Liaoning Province, Shandong Province and Hebei Province with the cities of Beijing and Tianjin, the number increased from approximately 8.1 million to 19.0 million. Accordingly, as of 2006, approximately 51.9 million high-income earners, or half (50%) of the nationwide population, were concentrated in these three coastal metropolitan areas (see Table 1-3-51 and Figure 1-3-52).

[86] Equivalent to approximately US$2,400 converted at the average exchange rate for 2006.

Table 1-3-51 Income conditions per income bracket in coastal areas

(2002)

	Per capita annual disposable income (yuan)				Shaded areas	
	Top 10%	Top 10-20%	Top 20-40%	Top 40-60%	Population (10,000 people)	Number of households (10,000 households)
China total	18,995	11,772	8,869	6,656	4,400	1,650
Shanghai	31,619	18,750	14,488	11,629	224	84
Jiangsu Province	24,335	13,191	9,646	6,938	392	146
Zhejiang Province	25,695	17,618	13,725	10,413	267	100
Guangdong Province	35,605	18,829	12,857	8,713	894	333
Beijing	23,349		14,210	11,315	178	66
Tianjin	23,497	14,503	10,863	8,326	54	20
Shandong Province	20,104	11,836	8,924	6,820	453	169
Fujian Province	20,337	13,216	10,309	7,907	147	55

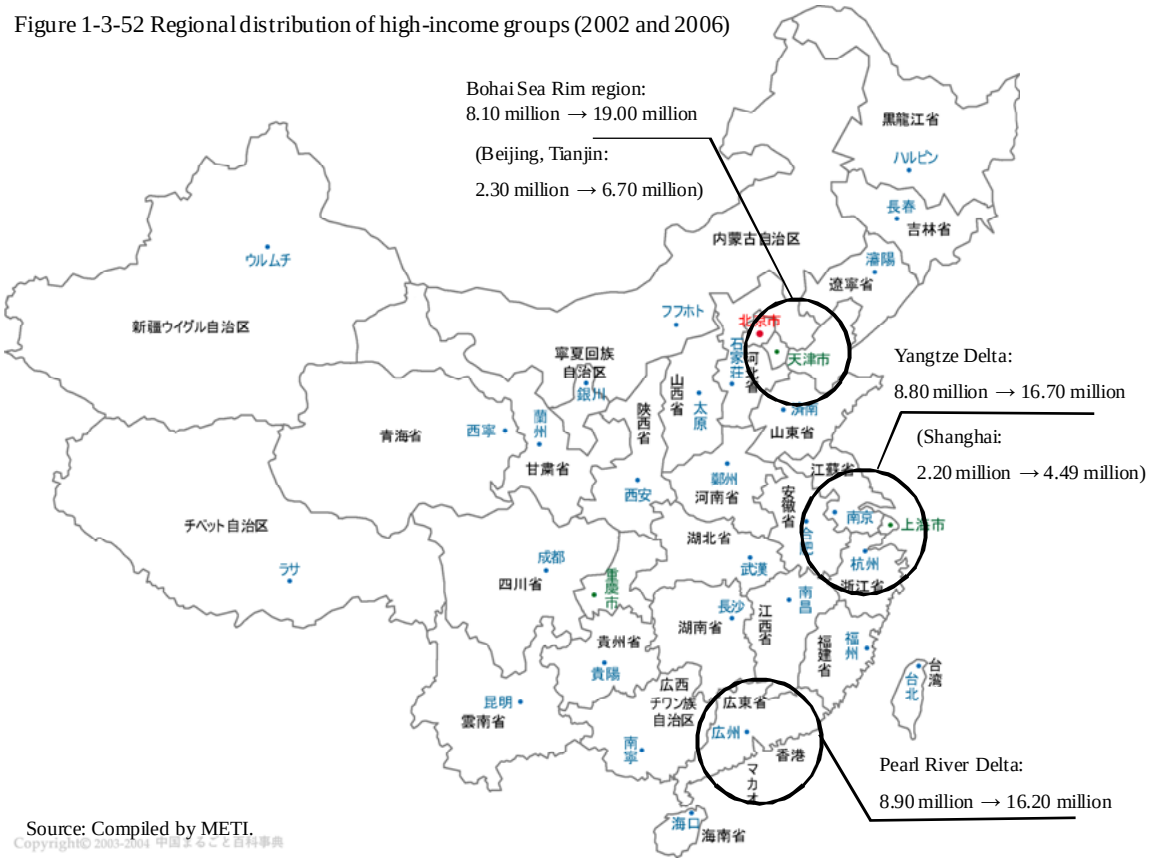
(2006)

	Per capita annual disposable income (yuan)				Shaded areas	
	Top 10%	Top 10-20%	Top 20-40%	Top 40-60%	Population (10,000 people)	Number of households (10,000 households)
China total	31,967	19,069	14,049	10,270	10,387	3,912
Shanghai	42,884		22,994	16,774	449	164
Jiangsu Province	38,527	22,746	16,397	11,864	705	266
Zhejiang Province	44,544	27,951	20,798	15,370	519	191
Guangdong Province	44,047	26,615	19,107	13,319	1,623	596
Beijing	36,616		23,095	18,369	378	136
Tianjin	34,890	22,256	16,888	12,670	293	110
Shandong Province	29,646	19,961	15,306	11,352	772	291
Fujian Province	31,140	19,888	15,226	11,424	307	116

Note: Refers to China Statistical Yearbook 2003, 2007 for the urban population of each province and city, the average size of urban households, and the average size of all households.

Source: Compiled using the 2003 and 2007 statistical yearbooks of each province and city based on Shigenami, T. (2003).

Figure 1-3-52 Regional distribution of high-income groups (2002 and 2006)



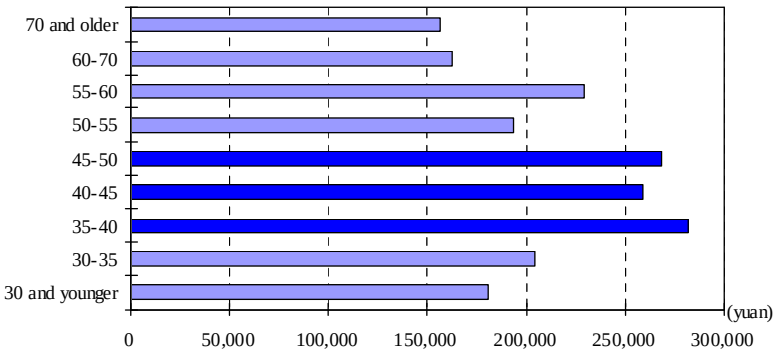
Source: Compiled by METI.

Behind the expansion of the high-income group in the three coastal metropolitan areas is the development of industry in each of the urban areas. As the number one growth engine of the Chinese economy, the Pearl River Delta was developed from the 1980s as an agglomeration of small and medium-sized factories from the IT industry and light industries led by the apparel industry. The area grew, with neighboring Hong Kong providing advanced technologies and human resources in the three areas of finance, trade and distribution, essential for developing the processing trade. As the number two growth engine of the Chinese economy, the Yangtze Delta developed from the 1990s around the IT industry and around areas related to finance, trade and distribution. The manufacturing plants and service centers of global companies in these sectors have concentrated in this region. The region has grown on the back of

the advanced technologies and human resources of Shanghai, the most highly developed economic center in China. Unlike the above two regions that have developed through the processing trade, the Bohai Sea Rim region has developed around heavy and chemical industries, such as the steel, petrochemical and machine industries, which are needed for the development of domestic industries targeting domestic markets. Given that the area is blessed with a good deep harbor, it has conditions favorable for the procurement and distribution of iron ore, crude oil and other raw materials. Consequently, in recent years, the area has been the focus of attention as the number three growth engine of the Chinese economy[87].

Next, looking at the ownership of household assets in China, broken down by age bracket, households with members in their 30s and 40s own the greatest amount of assets, and also the high-income group is focused in these age groups (see Figure 1-3-53). Looking at the ownership of consumer durables by income bracket, characteristics of the high-income group include that cameras, personal computers and other durable consumer goods for entertainment are widespread, and that households own two air-conditioners and two mobile phones (see Figure 1-3-54). Furthermore, basic household consumer durables such as washing machines, refrigerators and color televisions have permeated into almost all households.

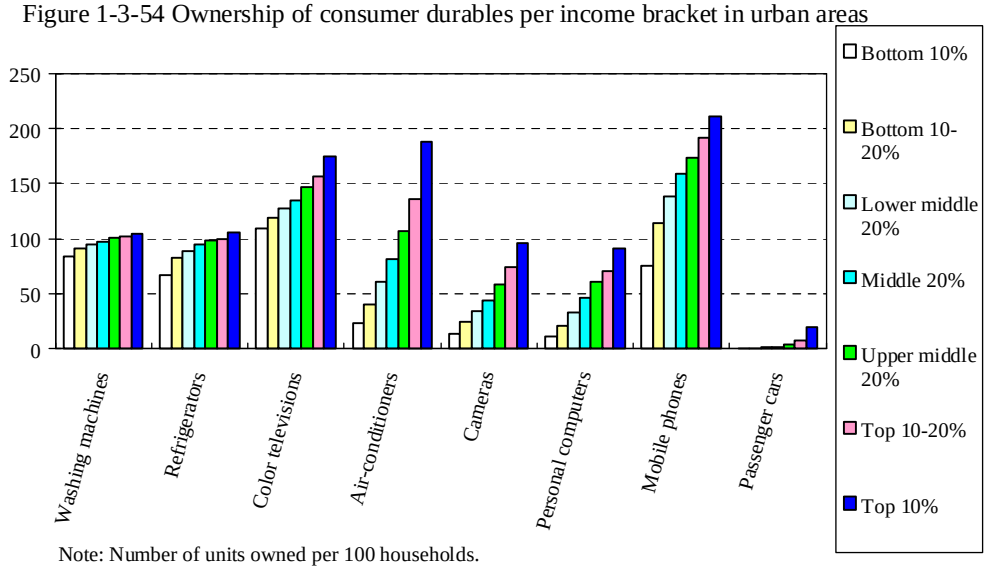
Figure 1-3-53 Ownership of household assets by age bracket (2001)



Source: Ke, L. (2007) , "CHUUGOKU NO FURYOU SAIKEN MONDAI".
Original source: National Bureau of Statistics of China "Obvious Enhancement of Investment Awareness of Urban Citizens: Series Investigation Reports on the Assets of Urban Families in China."

[87] Since it is not blessed with a hinterland rivaling Hong Kong or Shanghai, the Bohai Sea Rim region lacks any provinces or cities with top 10% disposable incomes in 2006 greater than 40,000 yuan like Shanghai, Zhejiang Province or Guangdong Province in the Pearl River Delta and Yangtze Delta regions; and so in terms of income levels, the region compares poorly against the Pearl River Delta and Yangtze Delta regions.

Figure 1-3-54 Ownership of consumer durables per income bracket in urban areas



Note: Number of units owned per 100 households.
Source: National Bureau of Statistics of China, China Statistical

(Expansion of the Chinese market)

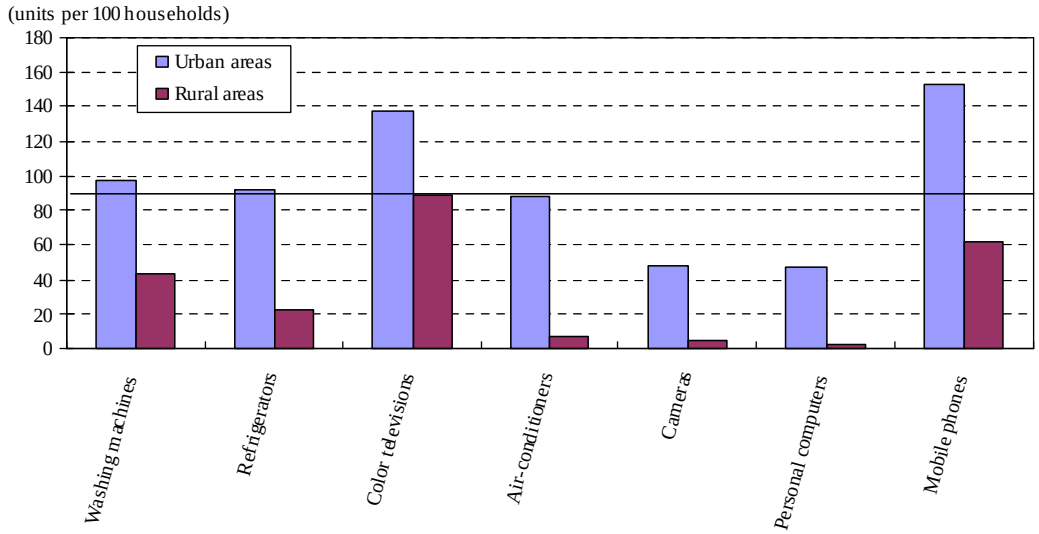
China is increasing its presence as a market of the world. The widespread use of consumer durables such as home electric appliances and automobiles is expanding, especially in urban areas, and sales in China account for a large share of global sales. China has the greatest share of global sales of many home electric appliances, including color televisions and air-conditioners. In terms of passenger cars, in 2006, China overtook Japan to become the world's second largest market. It is worth noting that, as annual sales of passenger cars in the top-ranked United States, third place Japan and fourth place Germany are declining, sales in the Chinese market are expanding (see Table 1-3-55).

Table 1-3-55 China's share of the global sales of various consumer durables (2006)

Item (1,000 units)	Number of units sold in China	Number of units sold globally	China's share	China's rank	Source
Color televisions	34,400	170,709	20.2%	1st	Japan Electronics and Information Technology Industries Association (JEITA)
DVD players (record and playback)	14,000	110,979	12.6%	2nd	JEITA
Room air-conditioners	18,540	54,806	33.8%	1st	The Japan Electrical Manufacturers' Association (JEMA)
Electric refrigerators	12,180	79,287	15.4%	1st	JEMA
Electric washing machines	17,049	72,095	23.6%	1st	JEMA
Automobiles	7,216	67,443	10.7%	2nd	*FOURIN Sekai Jidousha Chousa Geppou*

However, disparities in consumption can be observed between urban and rural areas. For example, whereas in urban areas, there is a high ownership of consumer durables such as washing machines, refrigerators and air-conditioners, in rural areas, insufficient progress has been made in the spread of these consumer durables (see Figure 1-3-56). In rural areas, although some incomes have increased as a consequence of the complete abolishment of agricultural taxes in 2006 and as a result of increases in crop prices, various challenges remain in order to further expand the Chinese market via raising the level of consumption in rural areas, including the enhancement of social security systems in rural areas.

Figure 1-3-56 Disparity in the number of consumer durables owned in urban and rural areas (2006)



Source: Compiled based on the China Statistical Yearbook 2007 (National Bureau of Statistics of China) with reference to TAIKYUU SHOUHIZAI NO FUKYUU KARA MITA CHUUGOKU SHIJOU NO TOKUSEI (Japan Small Business Research Institute).

With respect to social security in China, it has been pointed out that the development of the social security system in rural areas is lagging. There is a sharp distinction in the social security system depending on whether a person's family register is in an urban area or rural community. For example, persons registered in rural communities have been left out of public guarantees. Furthermore, in rural areas, given there are poor people who find it difficult to pay insurance premiums, the ratio of persons covered by social insurance is low[88]. Consequently, uncertainty for the future over soaring medical costs and contributions to medicines is a factor underlying the rise in the rate of savings. This is also thought to be inhibiting the expansion of consumption in China.

(Market share of Japanese companies)

Many global companies from all over the world and from all types of business are making inroads into the broadening Chinese consumer market. The growth of foreign companies in China is remarkable. For example, total sales for the top 500 foreign companies ranked by sales revenue (2006)[89] amounted to 3,684.9 billion yuan, a year-on-year increase of 24.1%. This is greater than the 20.4% growth rate of operating revenue achieved by the top 500 Chinese companies ranked by operating revenue[90].

[88] In terms of the ratio of workers in urban areas in China covered by social insurance in 2007, the participation rate in the old age pension insurance is 51.7%. Meanwhile, the participation rate in the rural social endowment insurance is low at less than 10%.

[89] China Association of Foreign-Funded Enterprises.

[90] China Enterprise Confederation and China Enterprise Directors Association.

Japanese companies account for about 20% of the top 500 foreign companies ranked by sales revenue (96 companies), but only 15.9% of the total sales of the top 500 companies[91]. Looking next at the top 20 foreign companies, in addition to computer, mobile phone, automobile and other global companies based in Europe and the United States, the list also includes Taiwanese companies and Chinese-funded companies listed on overseas exchanges. On the other hand, Japanese companies have a weak presence, with only two automobile manufacturers making the list (see Table 1-3-57).

Table 1-3-57 Top 20 foreign companies (2006)

Rank	Company name	Financing company	Investing country	Business	Sales revenue (100 million yuan)	Year-on-year comparison (%)
1	Hong Fu Jin Precision Industry (Shen Zhen) Co. Ltd.	Hon Hai Precision Industry	Taiwan	PC peripheral devices, mobile phones components (EMS)	1256	75.4
2	Motorola (China) Electronics Ltd.	Motorola	U.S.	Manufacture of mobile phones, semiconductors and electronic components	736	14.2
3	CNOOC China Ltd.	-	-	Mining of crude oil and natural gas	582	43.8
4	Shanghai General Motors Co., Ltd.	GM	U.S.	Manufacture of automobiles	459	13.1
5	Lenovo International Information Products (Shen Zhen) Co., Ltd	Lenovo Singapore	Singapore	Manufacture of personal computers	429	1079
6	Huaneng Power International, Inc.	-	-	Thermal power generation	402	32.9
7	Dongfeng Motor Co., Ltd.	Nissan Motor Company	Japan	Manufacture of automobiles	392	23.1
8	Tech-Front (Shanghai) Computer	Quanta Computer Inc.	Taiwan	Manufacture of notebook computers	363	-18.9
9	Inventec Corporation	Inventec Group	Taiwan	Manufacture of notebook computers	357	161.1
10	FAW-Volkswagen Sales Co., Ltd.	Volkswagen	Germany	Sale of automobiles	349	-19.3
11	Dell (China) Co. Ltd.	Dell	U.S.	Manufacture of personal computers	349	14.8
12	Guangzhou Honda Automobile Co., Ltd.	Honda Motor Co., Ltd.	Japan	Manufacture of automobiles	343	5.2
13	FAW-Volkswagen Co., Ltd.	Volkswagen	Germany	Manufacture of automobiles	331	-23.4
14	LG.Philips LCD Nanjing Co., Ltd.	LG.Philips	Republic of Korea, Netherlands	Manufacture of LCD displays	326	118.7
15	Maanshan Iron & Steel Co. Ltd.	-	-	Manufacture of iron	321	19.9
16	Best Foods Guangzhou Ltd.	Best Foods	U.S.	Manufacture of Knorr food products	318	—
17	Dalian West Pacific Petrochemical Co., Ltd.	Total Fina Elf	France	Petrochemical	302	
18	SAIC-Volkswagen Sales Co., Ltd.	Volkswagen	Germany	Sale of automobiles	298	-30.8
19	Shenzhen Futaihong Precision Industry Co., Ltd.	Foxconn Technology Group	Taiwan	Manufacture of mobile phones	297	109.7
20	Nokia (China) Investment Co., Ltd.	Nokia	Finland	Telecom services	297	45.6

Source: The 21st Century China Research Institute, "*CHUUGOKU JOUHOU HANDOBUKKU [2007 NENBAN]*".

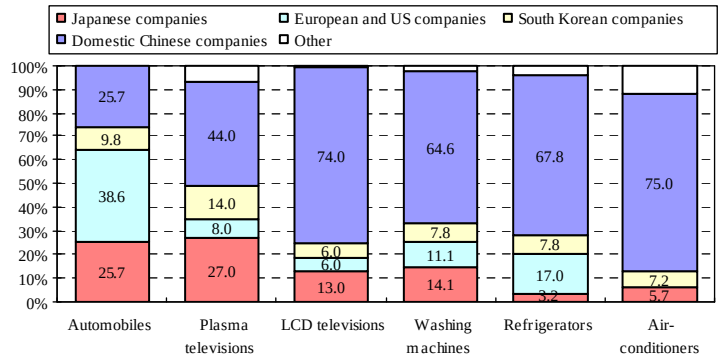
Looking at the distribution of unit sales by product, Japanese companies account for a fair share of automobile sales and plasma television sales, at 25.7% and 27.0% respectively. But in contrast, they only account for a small share of the sales of items with high ownership rates, namely, washing machines, refrigerators and air-conditioners (Figure 1-3-58)[92]. In China, Japanese companies are

[91] According to a statement by the China Association of Foreign-Funded Enterprises, there are 76 Japanese companies, but according to research by the 21st Century China Research Institute, this figure should be 96 if indirect investments through the Virgin Islands and so forth are included.

[92] Television sales in the Chinese market are comprised of cathode-ray tube televisions (83.3%), LCD televisions (11.9%), and plasma televisions (4.8%). The low-price competition for cathode-ray tube televisions, which account for the largest share of sales, has overheated, and foreign companies hold almost no market share.

tending to increase their sales through high-quality, high-price products such as plasma televisions, which require high levels of technology and which are targeted at the high-income group; but with the marked improvement in the technical strength and selling power of Chinese companies, Japanese companies need to strengthen their brand power through promotions of their local sales and services, and they need to revise their strategy from China as a production base to China as a consumer market.

Figure 1-3-58 Country-by-country share of consumer durables sold in the Chinese market



Note: Figures for automobiles are from 2006; and other figures are from 2005.
Source: Data for automobiles is from the China Association of Automobile Manufacturers; and other data is from *CHUUGOKU SHINSHUTSU KIGYOU CHIZU* (Inagaki, K., The 21st Century China Research Institute).Original source (non-automobiles): China's State Information Center.

(Potential for Japanese companies to expand their business operations, especially in the field of infrastructure development)

In China, there are also increasing demands centered around infrastructure development. Infrastructure investment in China between 2006 and 2010 is estimated at US$132.0 billion, which is almost four times as much as the total investment of the Asia-Pacific nations[93] of US$33 billion[94]. It is forecast that particular progress in infrastructure development in China will be made in electricity (US$72.4 billion between 2006 and 2010) and roads (US$26.8 billion).

For example, sewer systems in urban areas in China are spreading rapidly, with the penetration rate rising 36 percentage points between 1995 and 2006, to reach 57%[95]. As the proportion of industrial wastewater in urban sewage decreases, the proportion of domestic wastewater is increasing, and so the need for sewer systems to be installed is increasing. The Chinese government also states, "We will increase the urban sewage treatment capacity and strive to reach the goal of 100% collection and treatment of sewage in 36 large cities within two years."[96] Thus, it appears that infrastructure needs such as for sewer systems will continue to increase in China as urbanization moves forward.

(3) Responding to the common issues surfacing in Asia

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[93] Indonesia, Laos, Malaysia, Mongolia, Papua New Guinea , the Philippines, Thailand, Cambodia, Fiji , Kiribati , the Marshall Islands , Micronesia , Myanmar, Palau, Samoa, the Solomon Islands, Timor-Leste, Tonga, and Vanuatu.

[94] "Connecting East Asia: A New Framework for Infrastructure" (ADB, JBIC, and the World Bank (2005)).

[95] China's Ministry of Construction.

[96] "Report on the Work of the Government (2008)" delivered at the National People's Congress.

(Environmental and resource constraints)

○ **Water pollution and water shortages**

Problems relating to water resources are becoming more and more urgent, both in terms of quality and quantity. Looking at the state of water resources in China's seven main river systems, while differing in degree the proportion of water sources that are fit to drink is low, and the issue of water pollution is becoming more critical (see Table 1-3-59). In its 11th Five-Year Plan, the Chinese government declared a target to reduce the chemical oxygen demand (COD), an indicator of how much pollution is in water, by 10% from the 2005 level. In 2007, the measure decreased for the first time since 2003, marking a year-on-year decrease of 3.14% (see Figure 1-3-60). Furthermore, the amount of water resources per capita in China is about one third the world average, and there tends to be shortages especially in regions where industry and people have concentrated in the course of urbanization.

In response to these problems of water pollution and water shortages, water utilization and supply systems need to be improved, beginning with water-saving plants and factories.

However, environment-related investment in China as a percentage of nominal GDP remains low [97], Therefore, environmental investment needs to be expanded, by continually improving environmental laws and supporting their enforcement, and by developing China's environment market.

Table 1-3-59 State of water resources in China

State of water resources in China - Water pollution

Catchment area	Yangtze	Yellow River	Songhua River	Liao River	Hai River	Huai River	Pearl River
Annual average BOD (mg/l)	0.55–2.59	1.17–3.8	1.86–4.31	1.61–32.23	1.0–89.59	1.43–31.75	0.3–4.43
Percentage able to be used to supply water	50 %	30 %	25 %	25 %	20%	20%	80%

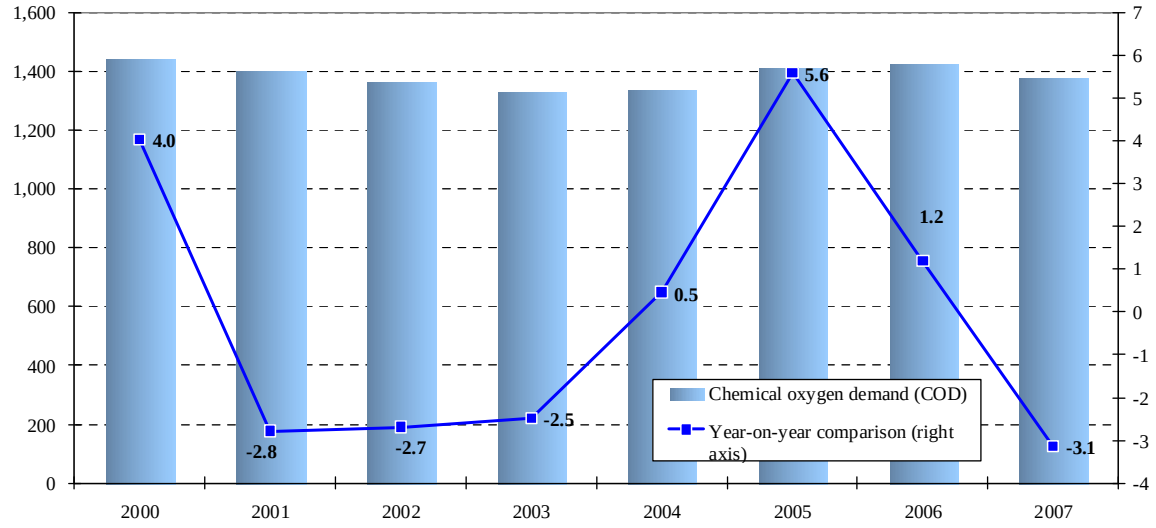
- **The extent of pollution in China's seven main river systems has become acute. The proportion that is fit for drinking is now less than 40%.***
- **Eutrophication has become a serious problem in about 20% of the major inland waters, and it is becoming more and more difficult to use some of the lakes and marshes as sources of water supply.**
- **In some waters, phytoplankton such as Alexandrium, Gymnodrium, or other types of toxic red tide algae are being repeatedly detected.**

* Comparison: biochemical oxygen demand (BOD) of Environmental Standard B rivers (Class 3 water supply) in Japan = 3mg/l or less

Source: Research by the New Energy and Industrial Technology Development Organization (NEDO) based on material from private-sector companies.

[97] In 2003, the value of environmental investment as a percentage of nominal GDP was 1.4%, and in 2006, it was 1.2%.

Figure 1-3-60 Changes in chemical oxygen demand (COD)



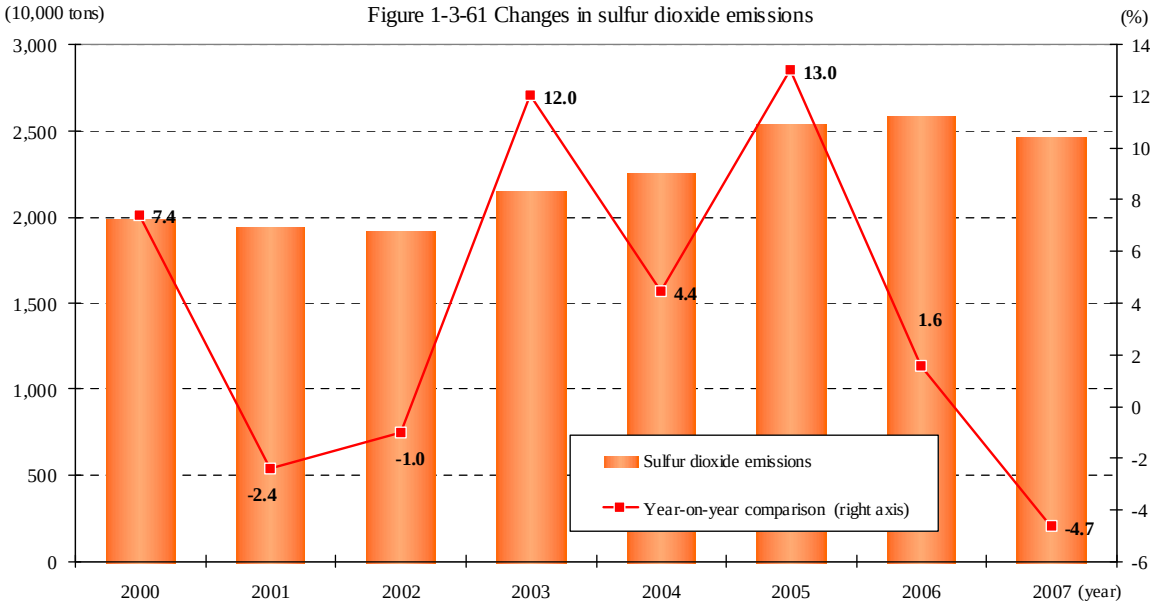
Note: Chemical oxygen demand (COD) is an index for the amount of pollution in water. It indicates the concentration of oxygen that is used when pollution is chemically degraded.
Sources: National Bureau of Statistics of China, China Statistical Yearbook (annual editions) ; China's Ministry of Environmental Protection website.

○ **Air pollution**

The state of air pollution is also becoming graver. In 2005, emissions of sulfur dioxide, the cause of acid rain, amounted to 25.49 million tons, making China the world's number one emitter. Under the 11th Five-Year Plan, a target has been set to reduce China's emissions of sulfur dioxide by 10% from the 2005 level. In 2007, sulfur dioxide emissions decreased 4.7% from the previous year, marking the first decrease since 2002 (see Figure 1-3-61)[98].

[98] According to the *International Co-operative Survey to Clarify the Trans-boundary Air Pollution across the Northern Hemisphere* (Murano, K. (2004)), 49% of the sulfur oxide that is observed in Japan is said to originate from China.

Figure 1-3-61 Changes in sulfur dioxide emissions



Source: National Bureau of Statistics of China, China Statistical Yearbook (annual editions), China's Ministry of Environmental Protection website.

○ **Diminishing agricultural land**

The area of agricultural land that China has secured to provide for its citizens, who account for 22% of the world population, is a mere 7% of the world's agricultural lands. The size of China's agricultural land has been trending downward as a result of urbanization and the rezoning of land for industrial use. Agricultural land measured 130.04 million hectares in 1996, but by 2007, this had decreased to 121.74 million hectares[99].

(Advance of urbanization)

○ **Increased urbanization and greater domestic demand**

In China, urbanization is proceeding at a rapid pace. Since the 1978 reforms and opening up of China, the urban population has increased from 170 million to 590 million in 2007, and the urbanization rate has risen from 17.9% to 44.9%. Two features of urbanization in China since the 1980s have been that rural communities have transformed into urban communities as a result of rural communities on city fringes having been urbanized, and that it is becoming harder to tell the difference between urban and rural communities, particularly in coastal regions[100]. Another feature is that, every year, people are flowing from rural communities into urban areas in the tens of millions (see Figure 1-3-62).

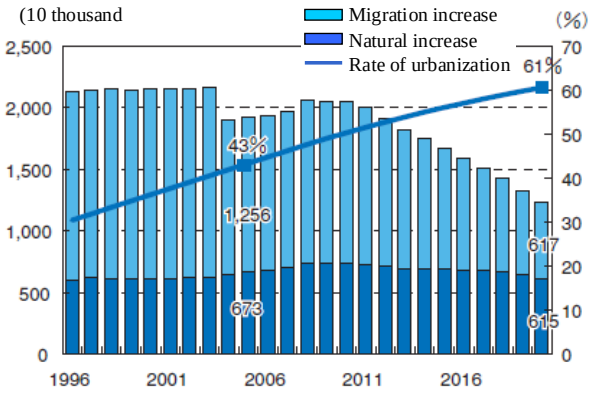
With the advance of urbanization, per capita GDP is increasing in each of China's provinces and cities, and incomes are rising (see Figure 1-3-63). Increases in income associated with urbanization are linked to increases in consumption. Moreover, urbanization is an effective means of increasing

[99] This is equivalent to a decrease of 8.3 million hectares, which corresponds to approximately 1.7 times the area of agricultural land in Japan.

[100] *State of World Population 2007* (United Nations Population Fund (2007)).

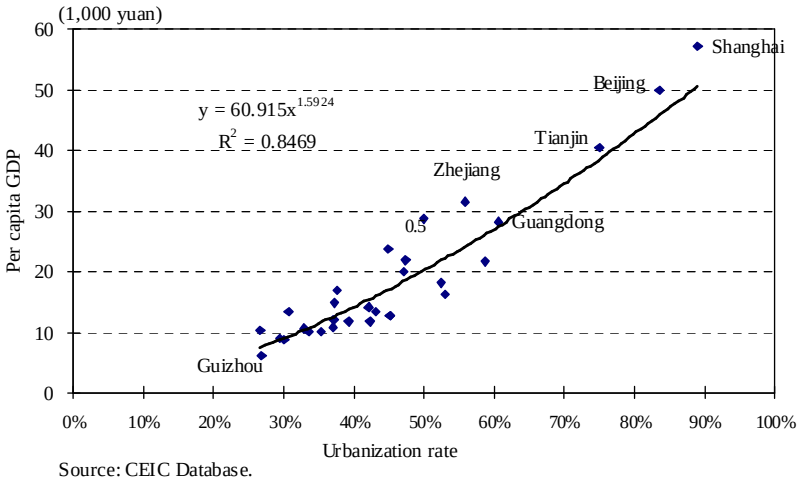
domestic demand. This is because, in response to the inflow of people into urban areas, these cities enrich education, health and other public services while increasing their investment in areas of infrastructure such as transportation, electricity and water supply.

Figure 1-3-62 Factor Analysis for increase in urban



Source: China Statistical Yearbook;
Mizuho Research Institute, "NICCHU KEIZAI BOUEKI KANKEI NO HATTEN NO YOSOKU"

Figure 1-3-63 Urbanization rate and nominal GDP per capita by region (2006)



Source: CEIC Database.

○ **Increased urbanization and widening disparities**

Regional disparities have emerged in China as a result of the differences in how urbanization has been advanced in each region. Since urbanization is also the result of inflows of labor from rural communities into cities, disparities have also emerged between rural communities, with their decreasing workforces, and cities, into which the labor force has flowed. Furthermore, disparities have also emerged within urban areas, between migrant workers from rural communities and their city-dweller counterparts.

China's Gini coefficient has reached a high level of 0.469[101]. Hence there is a need to rectify the inter-regional disparities attributable to fiscal transfers, and to rectify the disparities by raising the

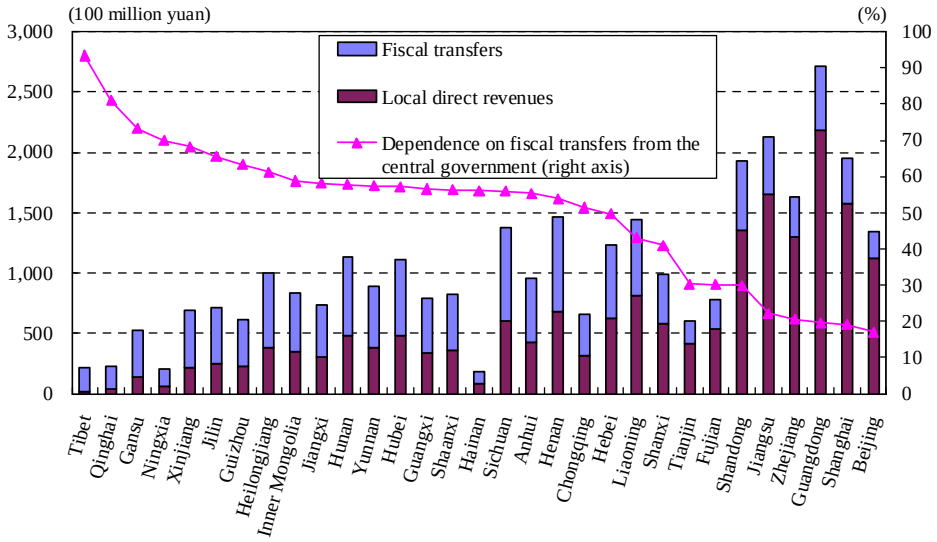
[101] See Figure 1-3-23. China has the highest Gini coefficient in Asia.

level of low-income earners through the development and enhancement of social security systems and safety nets and through income redistribution.

(a) Disparities between regions

It is possible to reduce regional disparities by means of fiscal transfers and the like. Ever since the tax-sharing reform of 1994[102], a system has been adopted where public finances are transferred from the central government to local governments, and now, fiscal transfers from the central government are weighted toward the central and western regions (see Figure 1-3-64). However, there are still large regional disparities between coastal areas and inland areas, with the largest regional disparity seen between provinces and cities being close to 10-fold (see Figure 1-3-65). In China, along with fiscal transfers, disparities also need to be corrected from the perspective of tax revenues.

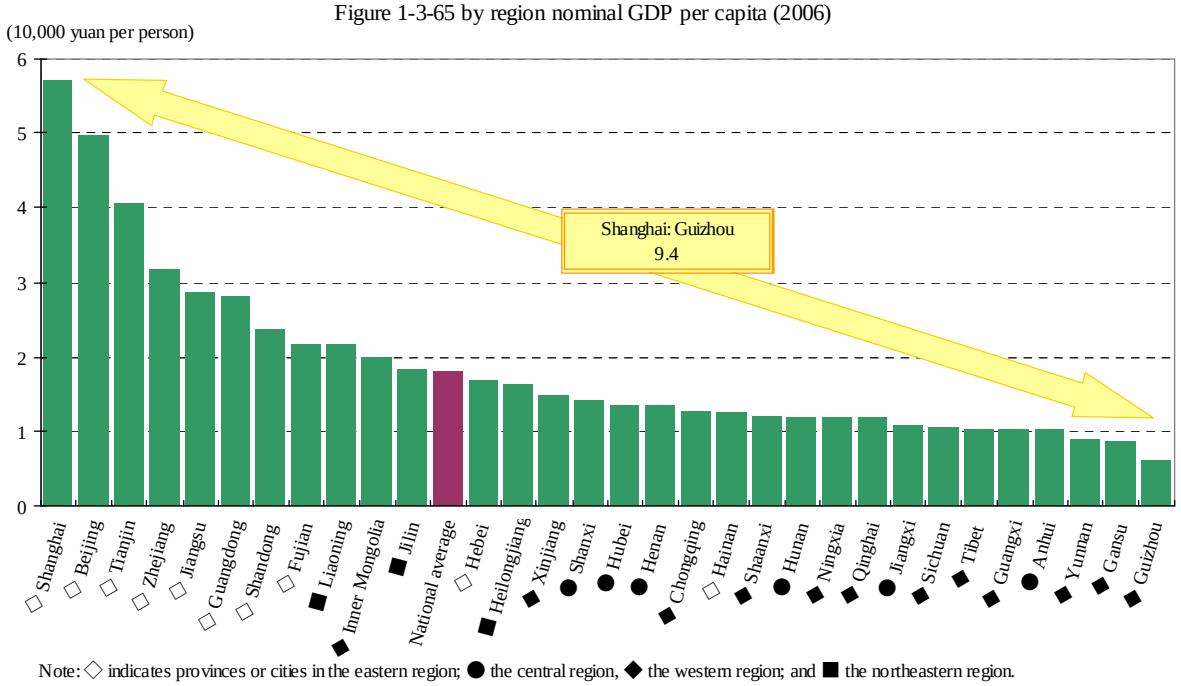
Figure 1-3-64 Dependence on fiscal transfers by region (2006)



Sources: National Bureau of Statistics of China, China Statistical Yearbook 2007; CEIC Database.

[102] The aim of the tax-sharing reform was to strengthen the financial revenues of the central government. Various measures were implemented, such as making value-added tax, which had been a local tax item prior to the reform, into a 75% central, 25% local shared tax.

Figure 1-3-65 by region nominal GDP per capita (2006)



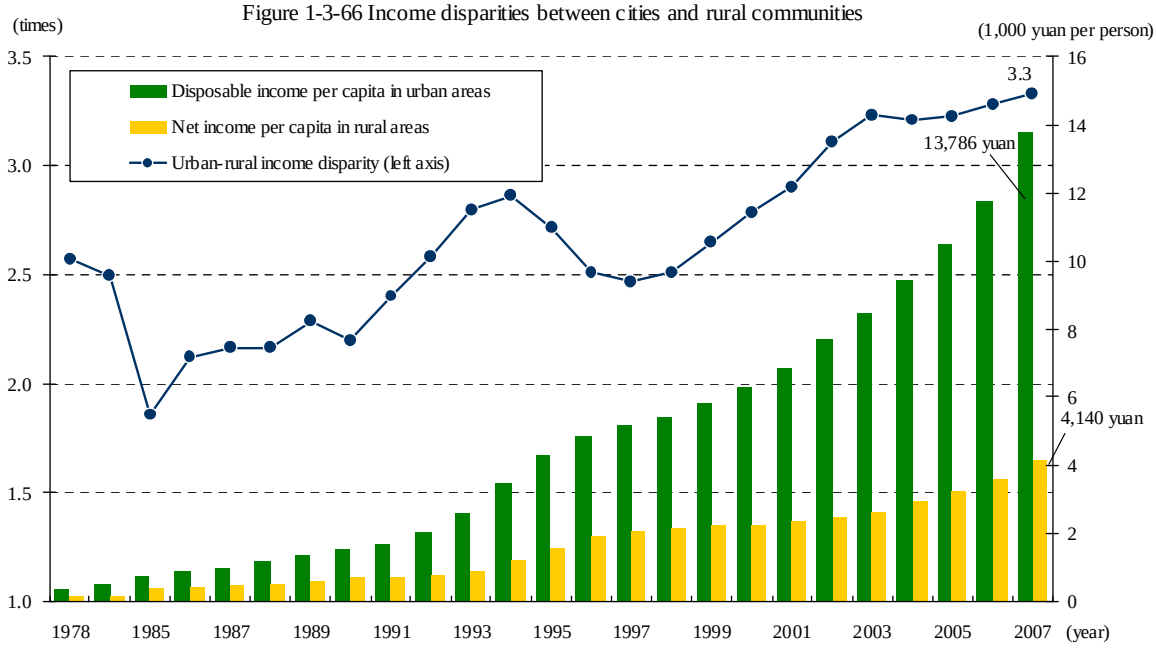
Note: ◇ indicates provinces or cities in the eastern region; ● the central region, ◆ the western region; and ■ the northeastern region.
Source: National Bureau of Statistics of China, China Statistical Yearbook 2007; CEIC Database.

(b) Disparities between urban and rural areas

Disparities between cities and rural communities have been widening. The income disparity between cities and rural communities has reached a factor of 3.3 (see Figure 1-3-66). As a result, despite the fact that rural communities account for about 60% of the entire Chinese population, their household consumption does not even account for 30% of the nation's total.

It is believed that raising the level of income in rural communities is vitally important for achieving strong economic growth led by domestic demand.

Figure 1-3-66 Income disparities between cities and rural communities

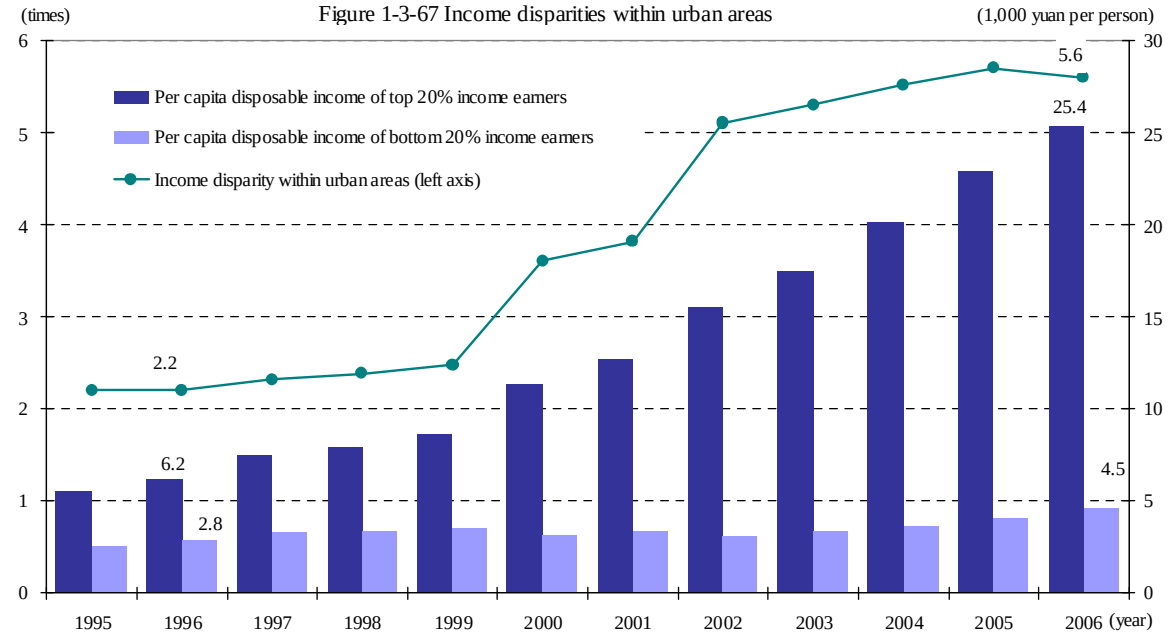


Source: National Bureau of Statistics of China, China Statistical Yearbook 2007, National Bureau of Statistics of China website.

(c) Disparities within urban areas

Even within urban areas, disparities are also widening. In 1996, the disparity between the disposable income of the top 20% high-income earners living in cities and the disposable income of the bottom 20% low-income earners was a factor of 2.2; however, in the ten years until 2006, this figure had blown out to 5.6 (see Figure 1-3-67). The income disparity within urban areas is also having an effect on consumption. While the consumption of high-income earners is increasing, the consumption of low-income earners is failing to grow (see Figure 1-3-41).

Figure 1-3-67 Income disparities within urban areas



Source: National Bureau of Statistics of China, China Statistical Yearbook 2007; CEIC Database.

The overall household propensity to consume (consumption / disposable income) has declined from 88.1% in 1989 to 74.0%. It is thought that the decline in consumption propensity is partially attributable to an increase in household savings caused in part by anxiety about the disparity and about the future[103]. Therefore, the income levels of low-income earners needs to be raise, such as through the development and enhancement of safety nets. Furthermore, in China, since there is no inheritance tax, there is also a need to revise the tax system from the perspective of strengthening the wealth redistribution function through the tax system.

(Smaller workforce due to an aging society)

Against a backdrop of the “one-child policy” and rising education costs, the birthrate in China is rapidly declining, and the population is rapidly aging (see Figure 1-3-41). According to the United Nations, while China’s total population will slowly increase until 2030, as a consequence of the

[103] With the collapse of China’s former social security system as a consequence of the state-owned enterprise reforms, in 1997, a government-run nationwide social security system was instituted; however, the proportion of persons covered by social insurance is low, and it is in a transitional period.

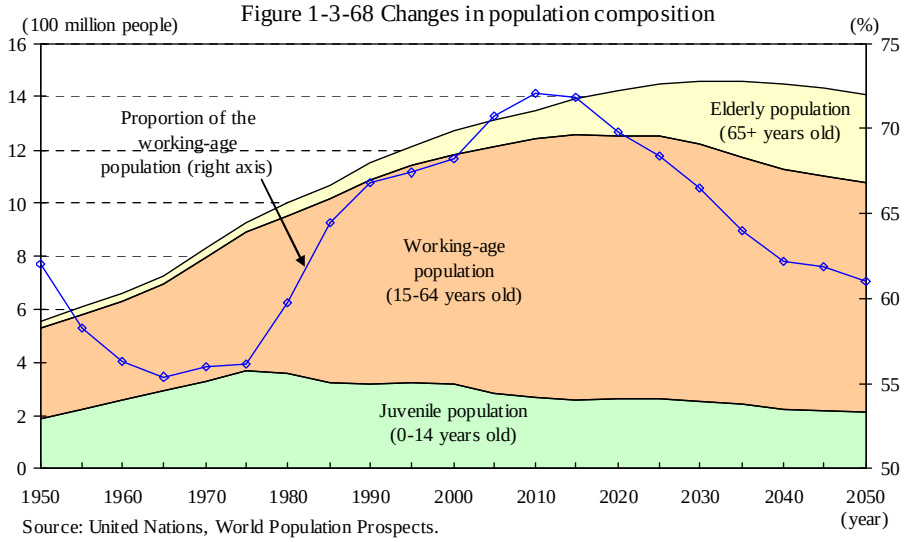
declining birthrate and aging population, the labor force is expected to peak between 2015 and 2020, before taking a downward turn (see Figure 1-3-68).

In 2005, China's elderly population reached 7.7%, making it an "aging society," and it is predicted that China will attain the status of an "aged society" in about 25 years[104]. This means that China, which is home to about 1.3 billion people, is heading toward an aging society at either the same pace or even faster than Japan. The rapid advance of an aging society signifies a rapid decline in the number of working-age people for every elderly person. Thus, for China, where the development of its social security and pension systems are in a period of transition, it is possible that future uncertainties will cause the household savings rate to rise and consumption to be curbed in comparison.

Declines in the labor force in China will be further exacerbated by increases in the percentage of students who go on to higher levels of education. Any increase in the level of academic achievement due to increases in the percentage of students who go on to higher levels of education will also become a factor in causing shortages in the unskilled labor market[105].

Given that there is a possibility that the number of new entrants into the labor force may decrease substantially from 2013 as a result of a declining birthrate and aging population, and that the demographic shift to urban areas may decline from 2010[106], in order for the Chinese economy to continue growing in a sustainable manner, amid declines in the workforce, there is a need for labor productivity per capita to be improved.

Figure 1-3-68 Changes in population composition



Source: United Nations, World Population Prospects.

[104] According to the World Health Organization (WHO), an "aging society" is a society where the elderly population aged 65 years and over exceeds 7% of the total population, and an "aged society" is one where it exceeds 14%.

[105] Meanwhile, a labor market mismatch is emerging. There is an oversupply of job seekers looking to enter the white-collar labor market centering around office work, and problems have been surfacing since 2004 of university graduates finding it difficult to find employment.

[106] See Figure 1-1-62 in this section.

(4) Toward a new stage of development

While consumption slowly increases with the expansion of the high-income group, rises in consumption are being contained by increases in savings rates and disparities. In addition to this, various issues are also surfacing in the Chinese economy which are common to the Asian region, including environmental and resource constraints, urbanization, and aging societies. In order to address these issues and to achieve sustainable development, economic structural adjustment for a new stage of development is needed. And for this economic structural adjustment, industrial structures need to be made more advanced, such as the expansion of service industries with high employment absorbency, the conversion to energy-saving industrial structures, and the nurturing of highly productivity industries. Up until now, foreign capital has played a certain role in the sophistication of China's industrial structures, and looking forward, foreign capital will continue to be necessary for China in making its industrial structures more advanced. As such, there is a need for the development of an attractive investment environment.

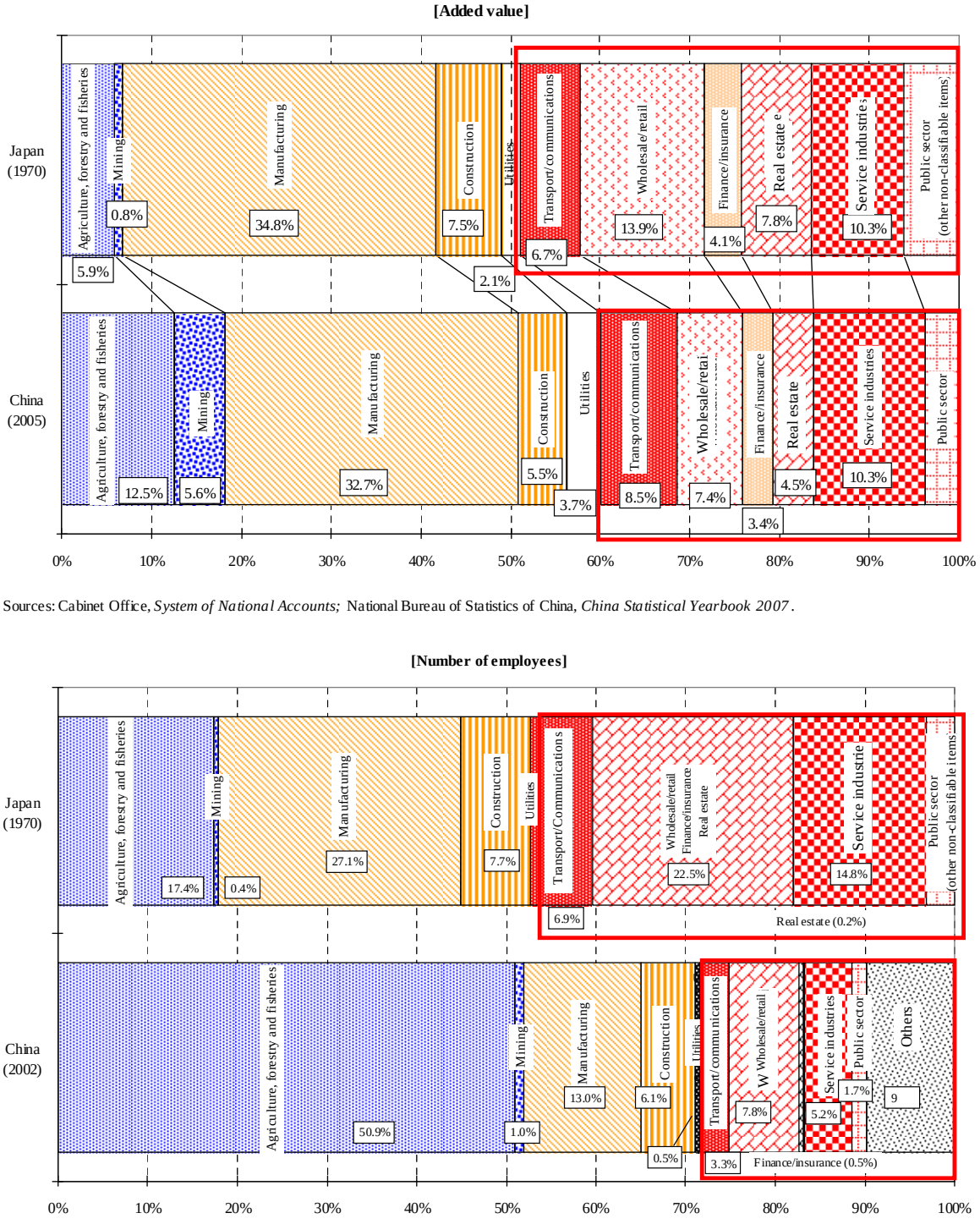
(Need for economic structural adjustment)

○ **Expansion of service industries and small and medium enterprises in order to increase the incomes of low-income earners**

Looking at the breakdown of China's employees by industrial structure, the ratio of employees working in primary industry is extremely high, and the ratio of employees in the tertiary industries is small compared to Japan's high-growth period. Looking next at the breakdown by added value, the proportion of secondary industries is high, and the industrial structure of economic growth is disproportionately biased toward the manufacturing industry[107]. The weight of the service industries, such as finance and insurance, is small (see Figure 1-3-69).

[107] In Japan, the ratio of employees working in secondary industries was highest at 43.1% in 1970.

Figure 1-3-69 Weight of the service industries: a comparison between China and Japan (high-growth period)



Sources: Cabinet Office, *System of National Accounts;* National Bureau of Statistics of China, *China Statistical Yearbook 2007*.

Source: *Labor Force Survey* (Ministry of Internal Affairs and Communications), *China Statistical Yearbook 2007* (National Bureau of Statistics of China).

In order to increase the incomes of low-income earners, employment needs to be facilitated through the promotion of service industries with high employment absorbency and the promotion of small and medium enterprises. The enhancement of measures for small and medium enterprises is also important from the perspective of building a foundation for enabling the autonomous starting of

businesses, and the promotion of service industries is expected to help the advancement of manufacturing industries and contribute to the stimulation of consumption.

○ **Switch to energy-saving industrial structures**

China's primary energy consumption per unit of GDP is about nine times higher than Japan[108]. It needs to switch from resources-intensive and energy-intensive economic growth to energy-saving economic growth.

For this reason, as part of its 11th Five-Year Plan, which was adopted in March 2006, the Chinese government has set a target to reduce the energy consumption per unit of GDP by 20% of the 2005 level by 2010. In September 2006, energy-saving targets were also set, and even the report from the 17th National Congress of the Chinese Communist Party, which was convened in October 2007, exhibits a similar stance, for instance, declaring to enhance the conservation of energy and resources (see Table 1-3-70).

Table 1-3-70 Energy consumption per unit of nominal GDP and reduction targets, broken down by region

Region	2005 (ton SCE per 10,000 yuan)	2006 (ton SCE per 10,000 yuan)	Year-on-year comparison (%)	2010 target (ton SCE per 10,000 yuan)	Reduction rate (%)
China	1.22	1.162	-4.8	0.98	20
Beijing	0.80	0.760	-5.0	0.64	20
Tianjin	1.11	1.069	-3.7	0.89	20
Hebei	1.96	1.895	-3.3	1.57	20
Shanxi	2.95	2.888	-2.1	2.21	25
Inner	2.48	2.413	-2.7	1.86	25
Liaoning	1.83	1.775	-3.0	1.46	20
Jilin	1.65	1.591	-3.6	1.16	30
Heilongjian	1.46	1.412	-3.3	1.17	20
Shanghai	0.88	0.873	-0.8	0.70	20
Jiangsu	0.92	0.891	-3.2	0.74	20
Zhejiang	0.90	0.864	-4.0	0.72	20
Anhui	1.21	1.171	-3.2	0.97	20
Fujian	0.94	0.907	-3.5	0.79	16
Jiangxi	1.06	1.023	-3.5	0.85	20
Shandong	1.28	1.231	-3.8	1.00	22
Henan	1.38	1.340	-2.9	1.10	20
Hubei	1.51	1.462	-3.2	1.21	20
Hunan	1.40	1.352	-3.4	1.12	20
Guangdong	0.79	0.771	-2.4	0.66	16
Guangxi	1.22	1.191	-2.4	1.04	15
Hainan	0.92	0.905	-1.6	0.81	12
Chongqing	1.42	1.371	-3.5	1.14	20
Sichuan	1.53	1.498	-2.1	1.22	20
Guizhou	3.25	3.188	-1.9	2.60	20
Yunnan	1.73	1.708	-1.3	1.44	17
Tibet	1.45	-	-	1.28	12
Shaanxi	1.48	1.426	-3.6	1.18	20
Gansu	2.26	2.199	-2.7	1.81	20
Qinghai	3.07	2.121	-30.9	2.55	17
Ningxia	4.14	4.099	-1.0	3.31	20
Xinjiang	2.11	2.092	-0.9	1.69	20

Note: SCE = Standard Coal Equivalent. Reduction rate is the 2010 target compared to the 2005 actual consumption.

Sources: *State Council Gazette* (Guo Han [2006] No.94), National Bureau of Statistics of China, "2006NEN KAKUSHOU, JICHIKU, CHOKKATSUSHI TANI GDP NOUKOUTOU SHIHYOU KOUHOU".

[108] IEA (2007a), *CO_2 Emissions from Fuel Combustion*.

Furthermore, in March 2006, in its "Circular on Promoting the Structural Adjustment for Industries with Excess Production Capacity," the Chinese State Council described the six industries of steel, electrolytic aluminum, carbide, iron alloy, coke and automobiles as industries with excess production capacity; and the four industries of cement, coal, electricity and textiles as industries with potential excess production capacity. It presented a stance of breaking away from high energy consumption, indicating preventing a resurgence in fixed asset investment, restricting new projects, and scrapping obsolete production facilities, and so forth.

However, the production output of energy-intensive industries is still increasing, such as in the heavy industries of steel, nonferrous metals, construction materials and electricity, and in the chemical industries of petrochemicals and coke[109].

○ **Foreign companies and more advanced industrial structures**

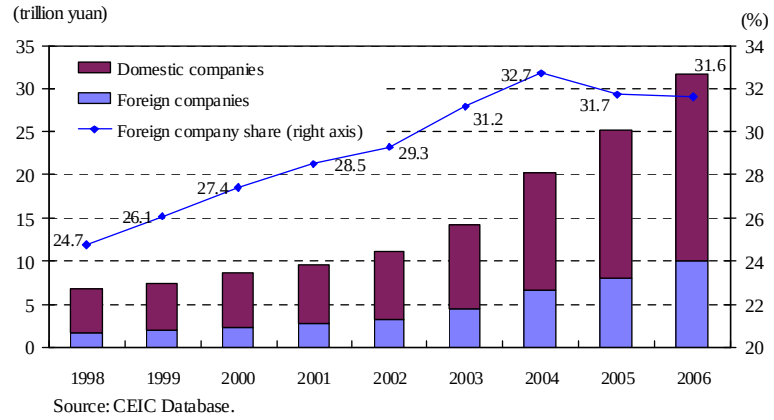
With the slow growth of the labor force, China's potential growth rate is predicted to decline. Decreases in the potential growth rate are also forecast as a result of declines in technological innovation factors caused by foreign investment in the manufacturing industry returning overseas.

Up until now, China has needed the capital, technology and management expertise of foreign companies for its economic expansion, and it has grown by implementing preferential policies in the tax system and for new entrants to the Chinese market, and by actively accepting foreign companies.

Considering that approximately 60% of China's total exports are made by foreign companies (Figure 1-3-35), and that direct inward investment through foreign companies has led to investment by domestic Chinese companies with which they have business relationships and to the development of industrial infrastructure by government; the role played by foreign companies contributing to the economic growth of China has been large. Furthermore, considering also that the share held by foreign companies in the added value of industrial production increased from 24.7% in 1998 to 31.6% in 2006 (Figure 1-3-71), we can see that foreign companies have contributed to the sophistication of China's industrial structure.

[109] For example, with regard to the steel industry, in July 2005, the National Development and Reform Commission promulgated the "Steel Industry Development Policy," which included the scrapping of old production facilities. At the tenth National People's Congress in March 2007, Premier Wen Jiabao declared the disposal of 150 million tons of equipment and facilities as one of the key policies in the 11th Five-Year Plan, and also presented a policy of disposing 6 million tons of facilities at the 11th National People's Congress in March 2008. However, despite these affirmations, China's production output of crude steel has continued to boom, and so China needs to be unfailing in implementing its plan.

Figure 1-3-71 Changes in the foreign company share of industrial production added value



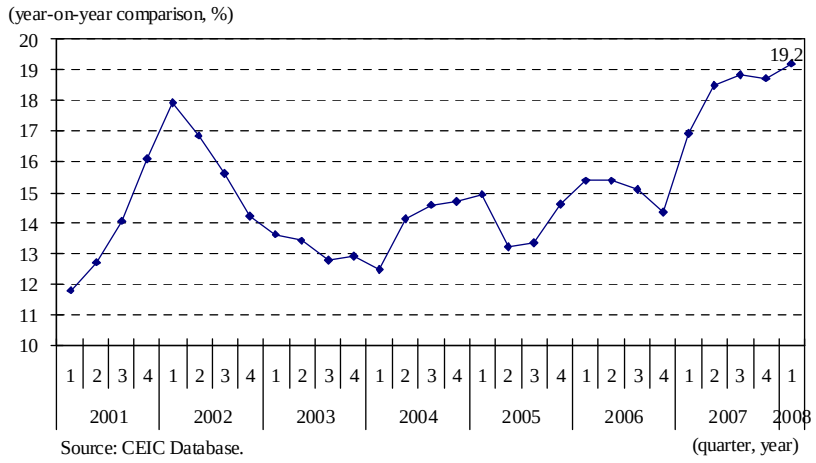
Source: CEIC Database.

However, the easing of capital shortages and the improvement in technical levels within China have contributed to changes in the investment environment being observed, such as the abolishment of the preferential tax system for foreign companies[110]. Restrictions on processing-and-assembly exports and increases in wages as a consequence of the Labor Contract Law[111] have worsened the environment for investing in China for those foreign companies based in the textile industry or other labor-intensive industries. Accordingly, investments from such countries as Japan, Europe, the United States and South Korea have been decreasing (see Figures 1-3-72 and 1-3-73). At the same time, direct investment from foreign countries into countries and regions in Asia has been increasing rapidly, and in particular direct investment into countries and regions surrounding China has picked up pace. For example, in 2007, the value of direct investment into the six ASEAN nations (Thailand, Singapore, Malaysia, Indonesia, the Philippines and Vietnam) exceeded the value of direct investment into China (see Figure 1-3-74).

[110] Revisions to the Enterprise Income Tax Law means that between 2008 and 2012, the income tax rate for many foreign companies will increase from 15% to 25%, bringing it in line with the income tax rate for domestic companies which will decrease from 33% to 25%.

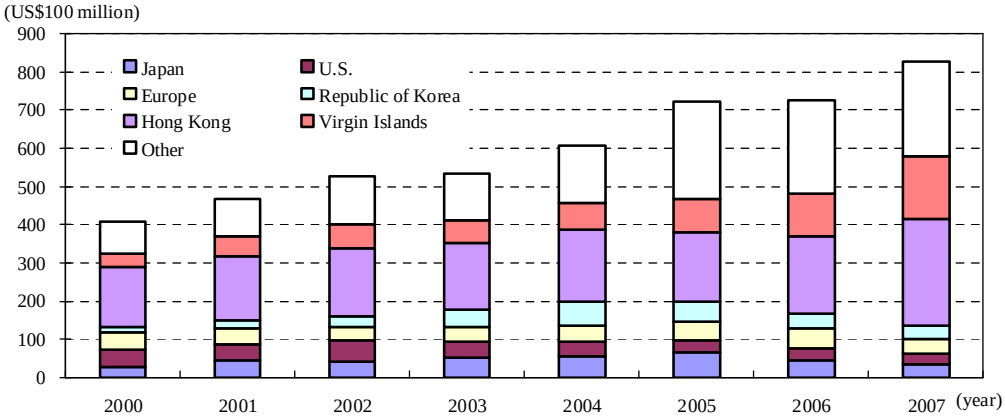
[111] Under this law, any worker who has worked for an employer for an uninterrupted term of ten years or more, and any worker who has renewed his/her employment contract at least twice shall have the right to enter into an employment contract with no fixed term. Other provisions include that, when the term of employment expires, the employer shall pay financial compensation to the employee equivalent to one month's wage for every year of employment.

Figure 1-3-72 Changes in the increase rate of wages



Source: CEIC Database.

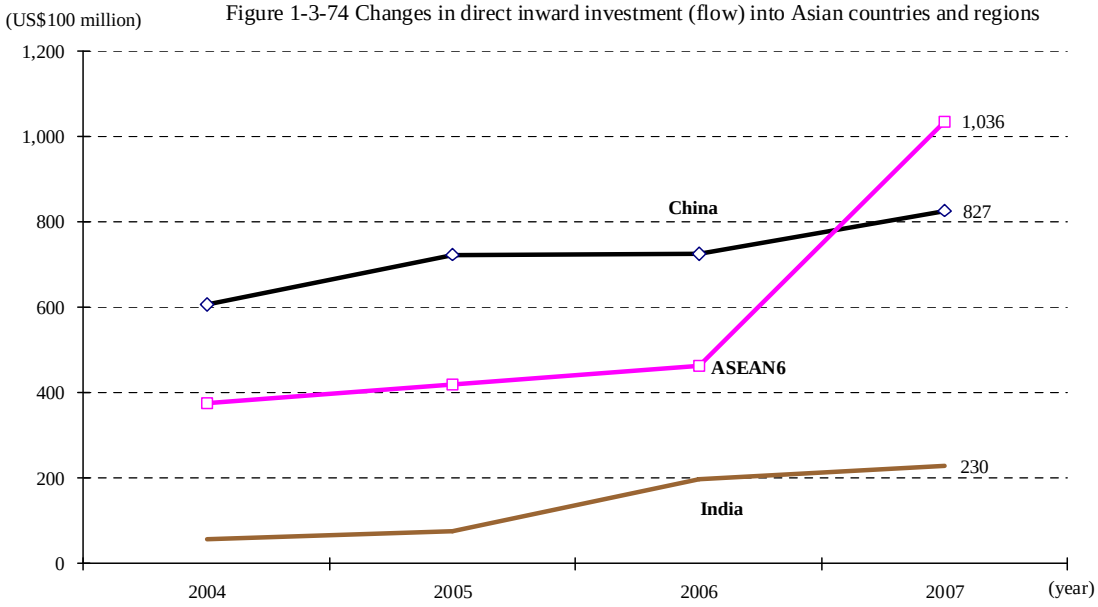
Figure 1-3-73 Direct investment in China by foreign countries and regions



Note: Based on actual costs of investment. Investment in 2004 and prior does not include figures for the bank, securities and insurance sectors.

Source: CEIC Database.

Figure 1-3-74 Changes in direct inward investment (flow) into Asian countries and regions

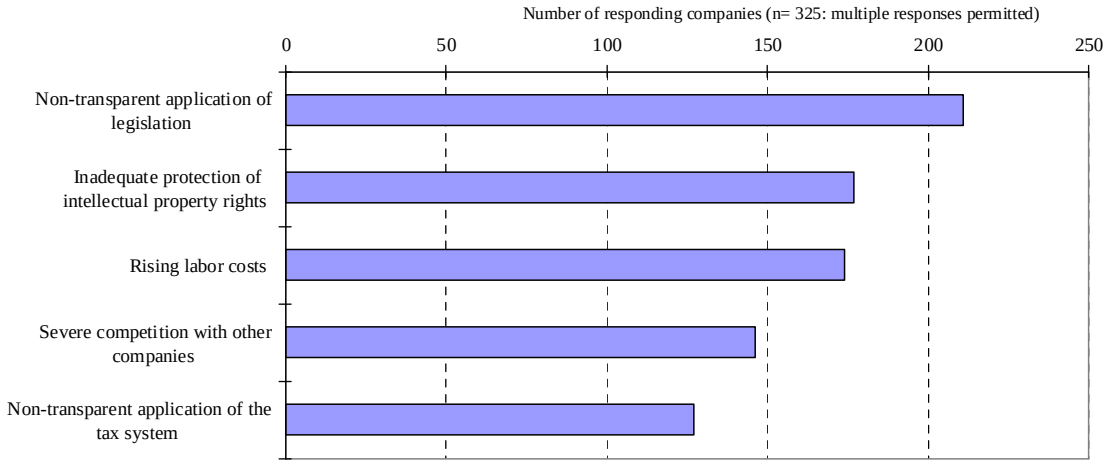


Note: CEIC Database.
Source: "ASEAN6" refers to the six countries of: Indonesia, Malaysia, Thailand, the Philippines, Singapore, and Vietnam.

Based on the notion of switching from quantity to quality in economic growth and on the spirit of environmental protection and resource conservation, and in conjunction with its 11th Five-Year Plan, the Chinese government has also established a 2006-2010 five-year plan regarding the use of foreign capital. The emphasis of the five-year plan is on the introduction of advanced technologies for making China a manufacturing base of high-value-added products. Accordingly, it encourages foreign capital in the areas of advanced agriculture, electronic communications, petrochemistry and chemistry, automobiles, and infrastructure construction. It also actively promotes the use of foreign capital in the area of environmental protection, such as in recycling and in the conservation of water and resources. Moreover, the plan also encourages large-scale distributors and travel agencies, and it aims to further open the consulting and other service industries to foreign participation.

For China, whose industrial structure needs to be made more sophisticated, foreign capital will continue to be a necessity. Its legal system will need to be applied, and its business environment will need to be developed, including measures to counter counterfeit goods (see Figure 1-3-75).

Figure 1-3-75 Challenges for business development in China



Source: Ushita, S. and N. Takahashi (2008), " Report on Japanese Manufacturers' Overseas Business Operations -- FY2007 (the 19th) Survey on Foreign Direct Investment –."

4. Indian economy: Toward self-sustaining development

(1) The growing Indian economy

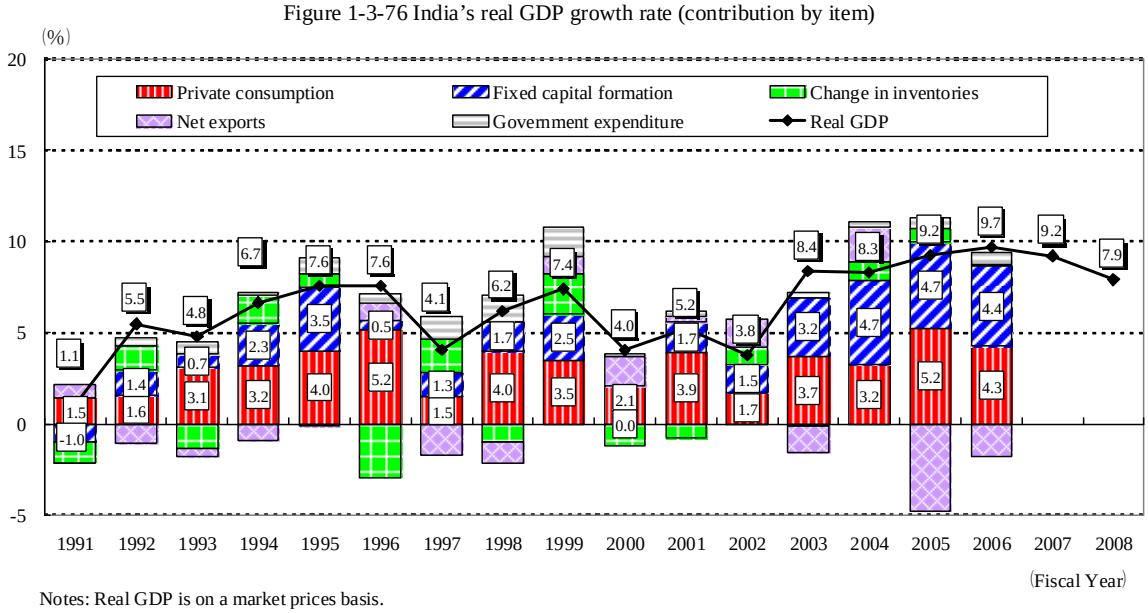
(Continuing rapid growth of the Indian economy)

Ever since the economic reforms of 1991, the Indian economy has generally continued to grow strongly. In particular, since FY2003[112], it has achieved a rapid growth in excess of 8% (see Figure 1-3-76). The Indian government anticipates that the Indian economy will continue to grow. In its 11th Five-Year Plan, which began in FY2007, the government set a target for five-year annual growth of 9%[113].

112 India's fiscal year is from April to the following March.

113 In the World Economic Outlook April (IMF (2008)), the forecast for India's economic growth rate is 9.2% in FY2007 and 7.9% in FY2008; and in the Asian Development Outlook 2008 (ADB (2008b)), the forecasts are 8.0% and 8.5% respectively.

Figure 1-3-76 India's real GDP growth rate (contribution by item)



Notes: Real GDP is on a market prices basis.
The real GDP growth rates for 2007 and 2008 are IMF estimates (calendar year basis).
Sources: CEIC Database; IMF, *World Economic Outlook April 2008*.

(Economic growth centered on the service industries)

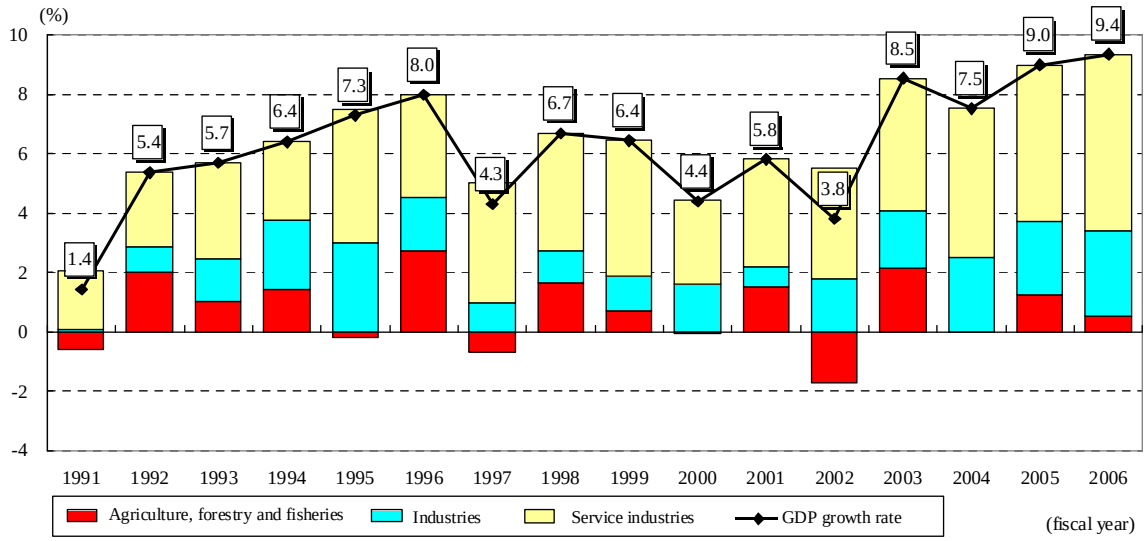
Looking at the factors underlying India's economic growth in terms of industrial structure, a characteristic has been that, in comparison with China, economic growth has centered around the service industries, with more than half of the growth in GDP being due to the rapid growth of the service industries (see Figure 1-3-77).

This expansion of the service industries has also been apparent in the current account balance. Looking at India's current account balance, while the trade balance has continued to run in deficit, the surpluses of "other services" and "current transfers" have increased, clearly contributing to reduce the size of the current account deficit (see Figure 1-3-78).

There has also been vigorous direct investment from overseas into India's rapidly growing service industries. Looking at the cumulative direct inward investment since 2000, the top 3 positions are occupied by the service industries, such as the "service industries including the financial industry," the "computer industry including software" and the "telecommunications industry."[114] Because of this, it is conceivable that the increase in direct investment from overseas has made a certain contribution to the development of the services industry in India.

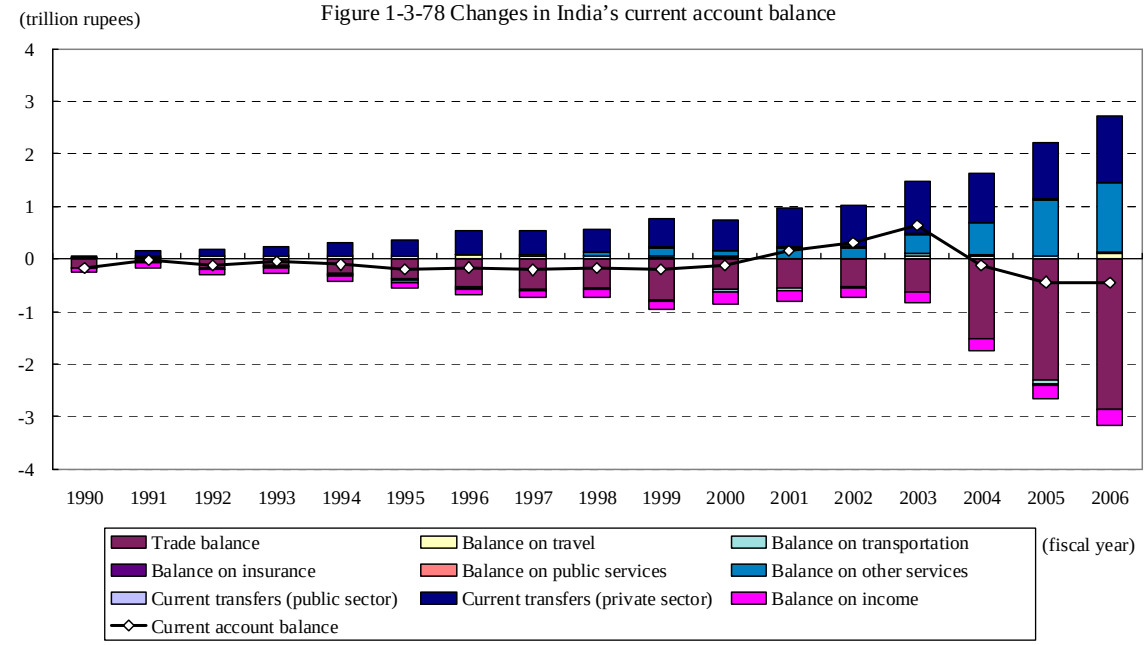
114 Indian Department of Commerce website.

Figure 1-3-77 India's real GDP growth rate (contribution by industry)



Notes: 1. Real GDP is on a market prices basis.
2. "Industries" is the total of industry, manufacturing, utilities and construction. "Service industries" is the total of: commerce, hotels, transport & communications; finance, real estate & business services; and regional & community services.
Source: CEIC Database.

Figure 1-3-78 Changes in India's current account balance



Source: CEIC Database.

○ **Rapid growth achieved by the Indian IT services industry**

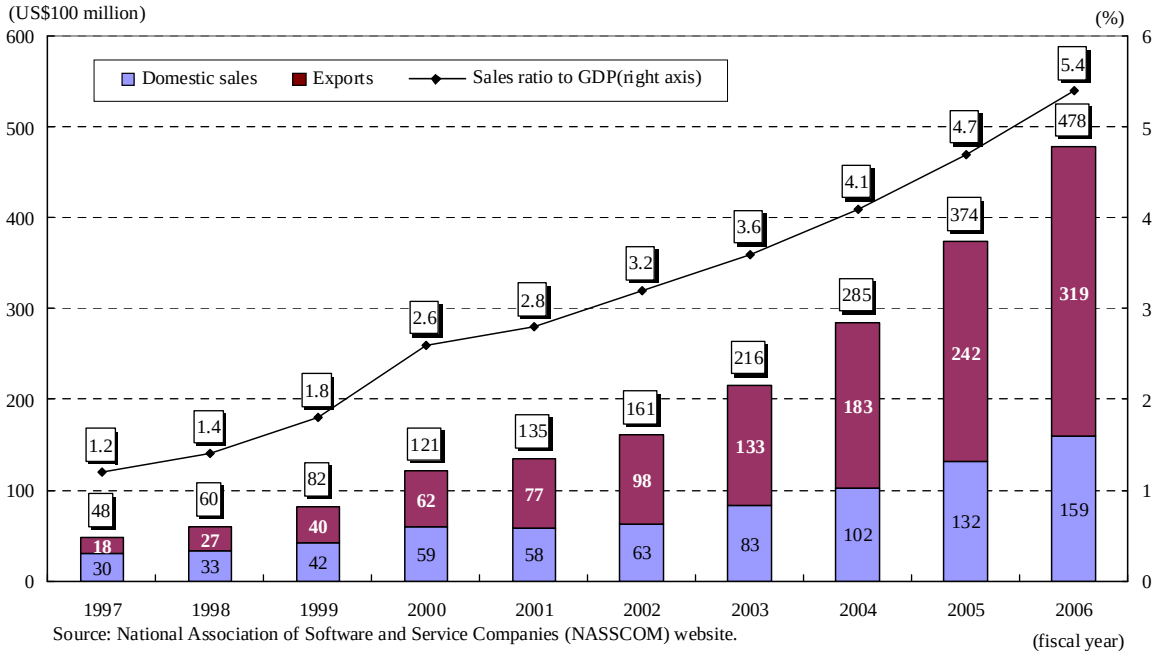
The service industry in India that has achieved recent rapid growth is the IT services industry which has captured the offshore demand from overseas. Between FY1996 and FY2006, India's IT

services industry expanded its sales 10-fold, and in particular, export sales have boomed (see Figure 1-3-79)[115].

Economic growth in India has been driven by the financial industry in close association with the growth of the IT services industry. Financial institutions in Europe and the United States began using India around the year 2000, when Indian engineers were employed to rework financial programs relating to the Y2K problem. Following this, financial institutions gradually increased their use of India for a number of reasons, including: India has a wealth of mathematics and science engineers suited for both the IT and finance fields, and India's cost of labor is relatively low; there are no language barriers for the European and United States financial institutions because India is an English-speaking country; and geographical attributes such as that the time difference between India and the US/Europe means that their work hours are back to back with each other. At present, more than 30 European and United States financial institutions have bases in India (see Figure 1-3-80)[116].

Looking also at the number of employees in India broken down by industry (as of 2003), the "finance, insurance and real estate industry" was ranked fourth with 1.931 million workers[117]. This corresponds to an increase of 16.8% since 2000, which was the highest growth rate among all industries. Employment in this sector is expected to continue growing in the future.

Figure 1-3-79 Changes in the sales of India's IT services industry



Source: National Association of Software and Service Companies (NASSCOM) website.

115 Although exports to the United States account for just under 70% of India's IT services industry exports, as the United States economy enters into an adjustment phase, trends of developing domestic markets are being observed (local interviews).

116 Center of the International Cooperation for Computerization (CICC), "Singapore News, March 4, 2008".

117 The number of employees has been extracted from Table 3-3 of the Databook of International Labour Statistics 2008 (The Japan Institute for Labour Policy and Training (JILPT)).

Table 1-3-80 Examples of offshoring to India by financial institutions in Europe and the United States

Financial institution	Example of offshoring
Goldman Sachs (U.S.)	Built 700-person strong captive site. 300 of them are in charge of account settlement.
JPMorgan Chase (U.S.)	Plans to increase operational personnel in India to 9,000 by the end of 2007.
HSBC (U.K.)	Established Global Service Center in 1996. Increased personnel to a total of 18,500 by the end of 2005.
UBS (Switzerland)	Established new UBS-India Service Centre in 2006. Plans to increase initial 500-strong personnel to 2,500.
Deutsche Bank AG (Germany)	Established Deusche Network Services in 1995. Plans to increase back-office personnel to a total of 2,000 by 2007.
ABN Amro (Netherlands)	Built captive site. Plans to transfer back office.

Source: Extract of the portion relating to India from Shimada, H (2006), "GAISHIKEI SHOUKENGAISHA NO BIJINESU PUROSESU OFUSHOARINGU", *Financial Information Technology Focus September 2006* , Nomura Research Institute.

(The transforming knowledge-based economy)

In recent years, with the substantial increases in wages and the appreciation of the rupee, more than for the purpose of utilizing low labor costs, offshoring to India has been expanded to strategic businesses for the purpose of accommodating advanced services globally. For example, in the IT services industry, rather than simply undertaking offshoring arrangements, companies are changing their business, such as developing software themselves[118].

Supporting this trend is the highest level of educational institutions, represented by the Indian Institutes of Technology (IIT), and the graduates from these institutes of learning. An increasingly popular trend has been to utilize these outstanding human resources and, in recent years, establish research and development divisions in India.

(Economic growth led by domestic demand)

As described above, the IT services industry, which led India's economic growth, grew in line with the demand from Europe, the United States and other overseas countries. Meanwhile, if we look at India's economic growth broken down by demand component, the overall contribution made by net exports is negative. Looking at exported goods and services in 2006 as a percentage of GDP, whereas China was 40.1%, India was lower at 23.0%[119]. This demonstrates that, rather than being driven by external demand, economic growth in India was driven by private consumption (domestic demand).

Another feature of India's economic growth has been the increase in fixed capital formation, which began surging in 2003. Looking at fixed capital formation as a percentage of real GDP, compared to China (40.8% in 2006), in India, it was considerably lower at 30.6% in FY2006; but in terms of its contribution to economic growth, the contribution of fixed capital formation in FY2006 surpassed the contribution of private consumption (see Figure 1-3-76 above).

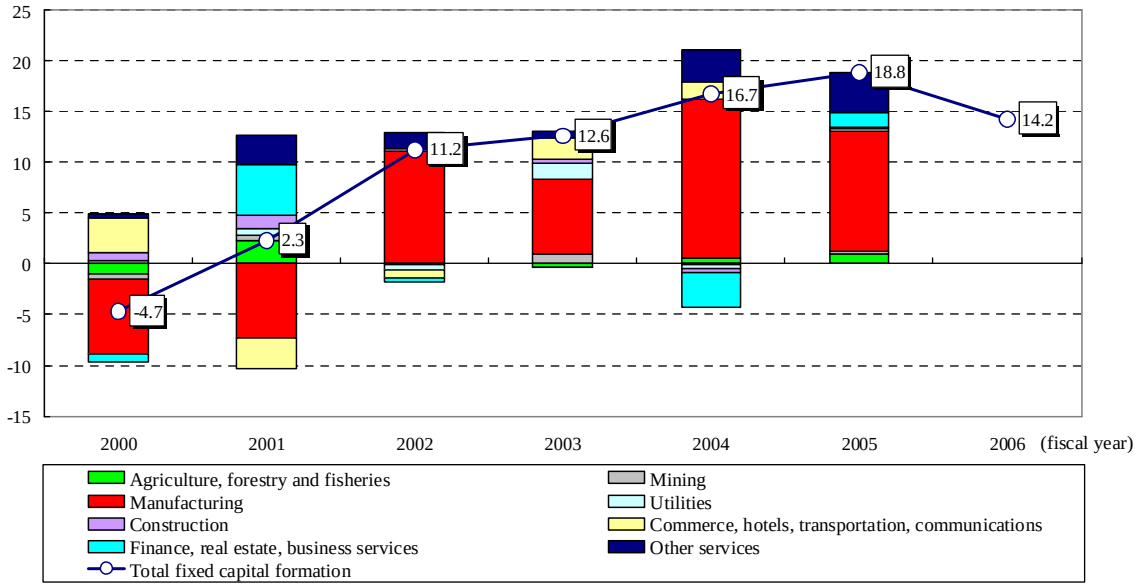
118 The results of a field interview with a certain IT firm in India has shown that, while at present 60% of its sales are from offshore business and 40% are from R&D business, it would in fact prefer to increase the latter's share of total sales while keeping the former as a stable source of revenue. Moreover, the firm is stepping up its efforts for Japan and Germany as new markets, and it is educating its employees in local languages and local cultures at an in-house language center set up within the company.

119 World Bank, *WDI*.

Comparing industries, while investment in the service industries and in water, gas, electricity and other infrastructure managed only minor increases, investment in the manufacturing industry has increased at a rate exceeding about 30% (FY2005) each year (see Figure 1-3-81). In fact, given, for instance, that the domestic production and domestic sales of automobiles in India have demonstrated virtually the same upward trend[120], it can be surmised that capital is being invested in India's domestic manufacturing industry in proportion to the vigorous expansion of private consumption.

Based on these points, it can be supposed that, in India, where the contribution of exports to economic growth is limited, vigorous private consumption is inducing investment by the domestic manufacturing industry, and is driving greater fixed capital formation.

Figure 1-3-81 Annual growth rate of real fixed capital formation in India (contribution by main industries) (fiscal year)



Source: CEIC Database.

(Increasing foreign direct investment in the manufacturing industry)

A distinctive trend of recent years in India's manufacturing industry has been India's aggressive buyout of foreign companies especially by India's homegrown conglomerates. For example, in January 2007, the Indian company, Tata Steel, bought out Corus, Europe's second largest steel company in terms of crude steel production, thereby elevating it from 53rd in the world to second (23 million tons), and to sixth in the world in terms of sales (US$23 billion)[121]. Then, in March 2003, the Indian company, Tata Motors, formally agreed to purchase the two Jaguar and Land Rover brands

[120] Society of Indian Automobile Manufacturers (SIAM) website.

[121] In TATA ZAIBATSU (Kojima, M. (2008)), the author suggests that, "Tata, which had a strong presence as the world's lowest-cost steel manufacturer, and Corus, whose forte had been the production of high-value-added products as a steel manufacturer in a specific area, could be described as having been in a mutually complementary relationship; and so the merits of integrating these entities are considerable in terms of being able to realize a management strategy that makes the most of their respective strengths.

from Ford for the sum of US$2.3 billion, thereby acquiring the plants and intellectual property rights of both brands[122].

Aside from the buyouts by the Tata Group, other parts of India's manufacturing industry have also been active in implementing M&A and forming alliances, such as the buyout of a Japanese generic drug manufacturer and equity participation by Indian businesses. It is thought that this is a manifestation of Indian companies trying to improve their international competitiveness by means of strategic M&A.

(Dramatic rises in food/resource prices and inflationary pressures)

The wholesale price index, which is an indicator of inflation in India, has tended to be relatively stable. For example, since 2005, the year-on-year comparison has hovered around 5%. However, since February 2007, wholesale prices have been trending upward[123], and in March 2008, the increase rate for the wholesale price index was recorded at 7.57%. On the back of soaring resource and food prices, there are concerns over inflation in India as well[124].

In India, petroleum products are price regulated, and are kept at low prices. Moreover, as described below, the Indian government's public finances are in a chronic deficit, and so if resource prices continue to soar internationally, there is also a chance that the fiscal burden will swell further due to the subsidies used in controlling prices. Therefore, there is a possibility that the dramatic rise in resource prices may act as a constraint on sustainable growth for India in the future.

In fact, in view of this situation, in February 2008, the government resolved to raise the retail prices of gasoline and diesel, and concerns are continuing over rising fiscal burdens[125].

Food shortages have already begun to have an effect on the grain exporting nation of India. A food control system has been adopted in India, and just as for petroleum products, to a certain degree, domestic food prices are cut off from the price effects of rising international prices. However, exports, which had flourished up until now on the back of foreign prices being higher than domestic prices, are gradually beginning to be affected, such as restrictions being placed on some grains.

(2) Market expansion led by economic growth

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[122] (http://www.tatamotors.com/index.php) As a result of this acquisition, Tata Motors now has a portfolio of wide-ranging products: from "Nano" the world's least expensive one lakh car (dubbed the "People's Car") which was unveiled in January 2008; and conventional passenger cars, SUV, trucks and busses; to luxury brands.

[123] Interviews with experts also raised the remark that soaring food prices in India have the potential for considerable speculative reason based on the futures market becoming upbeat.

[124] The Indian Finance Minister, Palaniappan Chidambaram, comments that the current rising inflation can be attributed to the soaring prices of world crude oil and commodities (Reuters, May 2, 2008).

[125] According to local interviews, the tone of the press and experts in India is that there are concerns over the effects on food shortages, given that a substantial rise in oil prices could generate a high cost structure in the agricultural sector due to increases in the costs of fertilizers and irrigation, and that this may induce a shift toward biofeuls.

(Expectations as a consumer market)

Since 1991, in the wake of India's economic growth, the Indian consumer market has also achieved an annual growth rate of approximately 5%[126]. Coupled with a massive population, the consumer market in India is ranked 13th in the world in terms of final consumption expenditure, and 12th in the world in terms of household consumption expenditure[127]. Further growth is predicted, with forecasts suggesting that the India consumer market will become fifth in the world by 2015.

Moreover, given the following points, there are more growing expectations for the future of the Indian market compared with China:

(a) the consumption propensity in India (0.67 in 2005) is higher than in China (0.54 in 2006); and
(b) the proportion of the population aged 24 and under is higher in India (52.3% in 2005) than in China (38.2% in 2005), there are more young people with a high propensity to consume in India, and it is predicted that the total population of India will exceed China's population by 2025.

(Expansion of the wealthy and middle classes as a consequence of economic growth)

The expansion of the consumer market is also affecting steady changes in the distribution of income. According to the results of a survey conducted by India's National Council for Applied Economic Research (NCAER), given the following points[128], it is predicted that the rich and middle classes will continue to expand (see Table 1-3-82):

(a) both the rich and middle classes steadily expanded between FY1995 and FY2005, with the proportion of households in the middle class (0.2-1.0 million rupees[129]) increasing by about three-fold between FY1995 and FY2005, and similarly, the rich (more than 1.0 million rupees[130]) increasing 8.5-fold; and

both the rich and middle classes are expected to expand between FY2005 and FY2009, with the proportion of households in the middle class increasing by approximately 1.5-fold, and the

As the rich and middles classes with purchasing power have expanded in this way, in recent years, the Indian retail industry, which was predominantly small, family-run businesses, has witnessed the formation of large-scale, organized business types like shopping malls[131, 1320]. With it consequently

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[126] Based on the CEIC Database.

[127] Based on United Nations statistics.

[128] It has also been projected that the population of the middle class will reach about 580 million by 2025 (JETRO (2007), *2007 JETRO White Paper on International Trade and Foreign Direct Investment*).

[129] Between approximately US$5,000 and US$24,000.

[130] More than approximately US$24,000.

[131] It was suggested that with development having begun on the Delhi metro and other transportation networks, there are expectations for complex commercial facilities in line with this development (interview with experts).

becoming easier to access merchandise, and as the range of available choices widens, new demand is being stimulated within the rich and middle classes[133].

Table 1-3-82 Changes in household income distribution in India

Annual income(thousand rupees)	NCAER income class	FY1995		FY2001		FY2005		FY2009 (estimate)	
		Number of household (thousand)	Proportion	Number of household (thousand)	Proportion	Number of household (thousand)	Proportion	Number of household (thousand)	Proportion
less than 90	Deprived	131,176	79.6%	135,378	71.9%	132,249	64.9%	114,394	51.5%
90-200	Aspirers	28,901	17.5%	41,262	21.9%	53,276	26.2%	75,304	33.9%
200-1,000	Middle Class	4,532	2.7%	10,746	5.7%	16,395	8.1%	28,441	12.8%
more than 1,000	Rich	268	0.2%	807	0.4%	1,731	0.8%	3,806	1.7%
Total		164,877	100.0%	188,193	100.0%	203,651	100.0%	221,945	100.0%

Source: National Council for Applied Economic Research (NCAER) (2005), "The Great Indian Market-Results from NCAER's Market Information Survey of Households".

(Expectations of Japanese companies)

As mentioned above, Japanese companies are increasing their interest in India, a country where consumption is expected to increase. According to the results of a survey conducted by the Japan Bank for International Cooperation (2007)[134], more than 50% of companies responded that they regard India as a promising target for business development in the medium-term (next three years). Furthermore, in terms of where companies think the most promising target market for business development would be in the long term (next ten years), India has surpassed China to take top place for the first time.

Looking at the reasons why companies regard India as promising, more than 80% gave "future growth potential of the local market" as one of their responses. This shows that Japanese companies also have high expectations for the future of the Indian market, and regard India highly as an investment target (see Figure 1-3-83).

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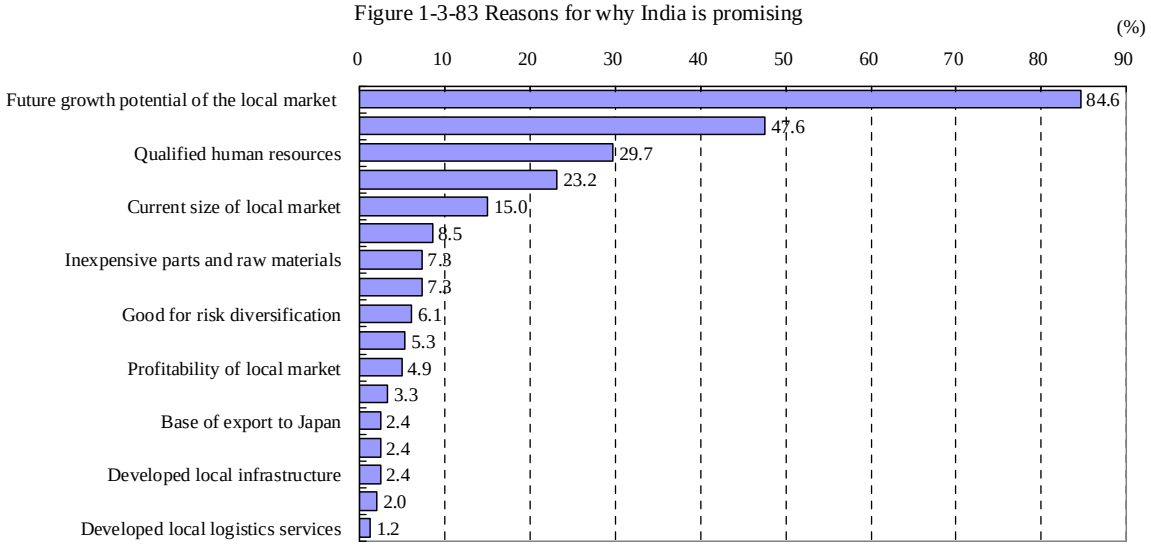
[132] According to JETRO (2007) above, in addition to the 100 large shopping malls in operation in 2006, there are another 600 malls either being constructed or planned, and within the next four to five years, it is expected that 20 million square feet of new malls will be established every year (original source: *India Retail Repot 2007*).

[133] A survey conducted by McKinsey & Company looked at the characteristics of purchasing behavior in the apparel markets of BRIC nations. Features of the Indian market include that there is a high proportion of people who go shopping with their family and friends, and that purchasing behavior is largely influenced by weddings, festivals and other such events. "How half the world shops: Apparel in Brazil, China and India" (McKinsey & Company (2007)).

[134] Report on Japanese Manufacturers' Overseas Business Operations -- FY2007 (the 19th) Survey on Foreign Direct Investment -- (Ushita, S. and N. Takahashi (2008)). Number of respondents: 600 companies. Survey conducted in July-August 2007.

Figure 1-3-83 Reasons for why India is promising



Note: Companies which responded that India was a promising target for business development selected multiple reasons why India is promising. Number of respondents: 246 companies.
Source: Ushita, S. and N. Takahashi (2008), " Report on Japanese Manufacturers' Overseas Business Operations -- FY2007 (the 19th) Survey on Foreign Direct Investment --."

(Characteristics of the Indian consumer market)

In comparison to China, where development was predominantly in the large coastal cities, and in comparison to other Asian countries, the consumer market in India could be characterized by the following points:

(a) India's large cities are geographically dispersed (see Figure 1-3-84);
(b) As often pointed out by Japanese companies, there is insufficient development of infrastructure for long distance transportation between each of the cities (see Figure 1-3-85); and
(c) India's per capita GDP is at a relatively low standard compared to other Asian countries, and it could be envisaged that consumption goods in circulation in other Asian countries are regarded as relatively expensive items in India.

Given these points, we could assume that, even if Japanese companies were to release products into India from production bases in other Asian countries outside of India, this may not necessarily be appropriate for reasons of shipping costs and product prices.

Furthermore, according to a questionnaire survey that was conducted by the Nomura Research Institute in the three cities of Delhi, Mumbai and Chennai (hereinafter referred to as "Nomura Research Institute (2008)")[135], it is clear that the increasing consumption of home electric appliances and so forth in recent years has been by the middle class earning an annual income of 250,000 rupees (approximately US$6,250), and that it has been a balance of brand image (advertising, etc.), quality and price that is having a great influence on this consumer behavior (see Table 1-3-86 and Figure 1-3-87).

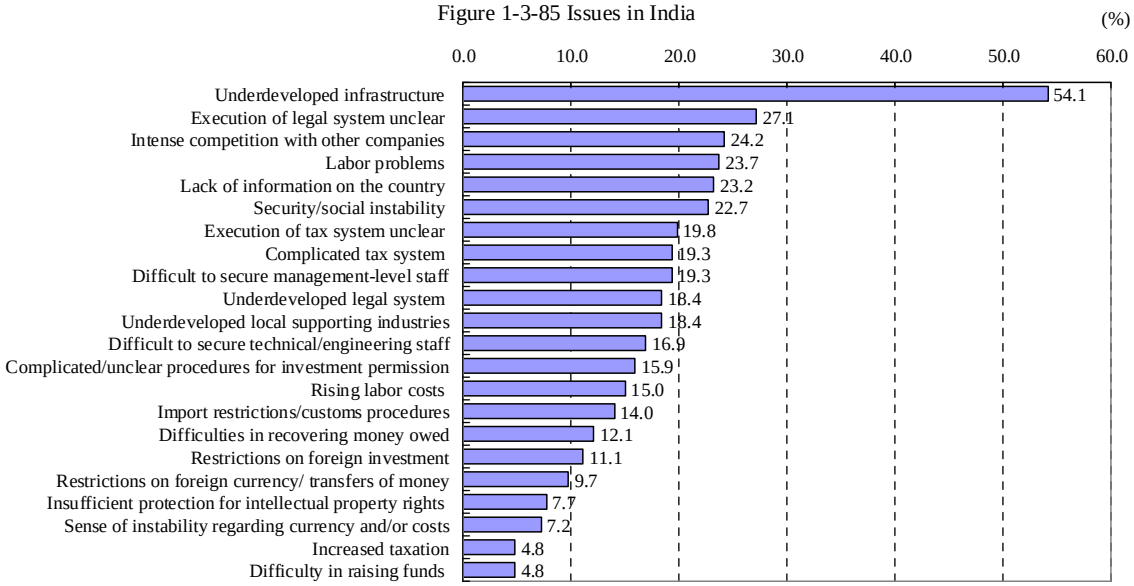
[135] *CHITEKI SHISAN SOUZOU* (Nomura Research Institute). This survey polled a sample of about 500 people in each of the three cities of Delhi, Mumbai and Chennai. From these samples, respondents with annual incomes of at least 250,000 rupees were extracted and aggregated. The polls were conducted in July and August 2007.

In India, large cities are scattered far and wide, the consumption mindset as well as the ownership of household property and personal goods are different from city to city, and more than one language is needed. In light of this, considerable costs are required to carry out advertising and marketing. Therefore, in order to offset these costs, it seems that companies have to capture a consumer segment (critical mass) larger than usual.

Figure 1-3-84 Distance between major cities in India

Note: Shows the top five cities as at the time of the 2001 census.
Source: Uemura, T. (2006), Ministry of Foreign Affairs website, "KYUUSEICHOU SURU INDO NO EREKUTORONIKUSU SHIJOU"
Original source: Map of India.

Figure 1-3-85 Issues in India



Note: Companies which responded that India was a promising target for business development selected multiple responses for the issues facing India. Number of respondents: 207 companies.
Source: Ushita, S. and N. Takahashi (2008), "Report on Japanese Manufacturers' Overseas Business Operations -- FY2007 (the 19th) Survey on Foreign Direct Investment --."

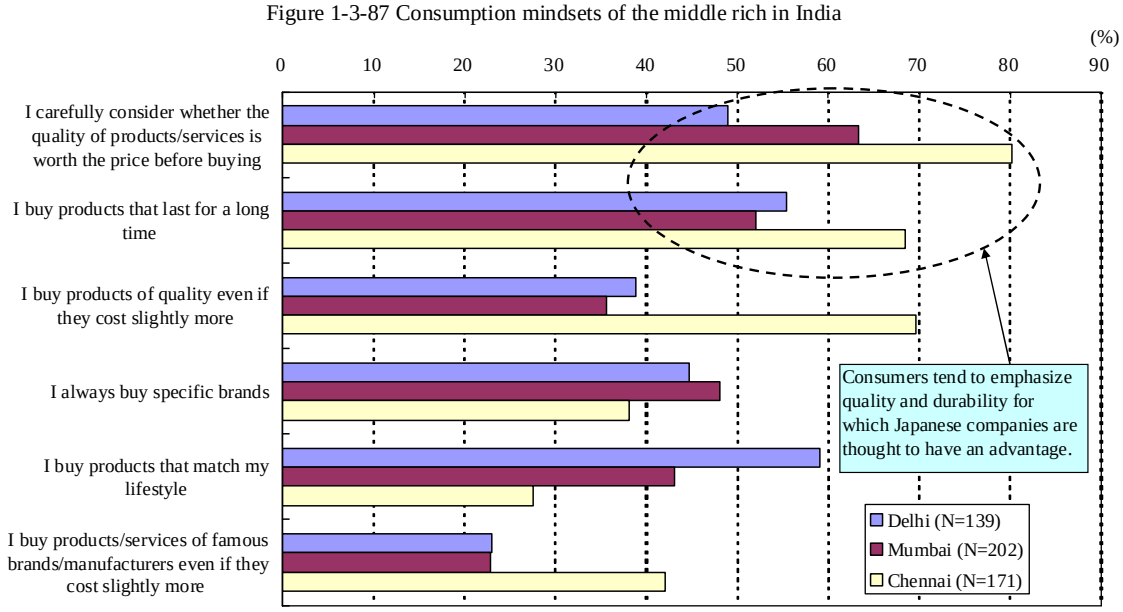
Table 1-3-86 Ownership of household property and personal goods by the middle rich in India

(multiple choices, unit: %)

		Delhi (N=139)	Mumbai (N=202)	Chennai (N=171)
Household property	Motorbike	52	47	95
	Bicycle	26	11	10
	Car	50	17	15
	Vacuum cleaner	14	3	13
	Washing machine	91	86	46
	Clothes dryer	26	10	10
	Refrigerator	97	96	85
	Microwave	19	7	4
	Oven	12	34	1
	Air-conditioner	29	12	16
	Color television (CRT)	98	95	91
	Color television (LCD or other type of flat	4	2	9
	DVD player / DVD recorder	58	32	84
	Camera	51	54	22
	Digital camera	21	17	6
Personal goods	Mobile phone	73	88	91
	Credit card (gold)	13	15	11
	Credit card (regular)	15	3	4
	Debit card	29	22	73

Note: Annual household income of 250,000 rupees or more.
Shaded area indicates the city with the highest ownership of each good or property.
Source: Nomura Research Institute, CHITEKI SHISAN SOUZOU, May 2008.

Figure 1-3-87 Consumption mindsets of the middle rich in India

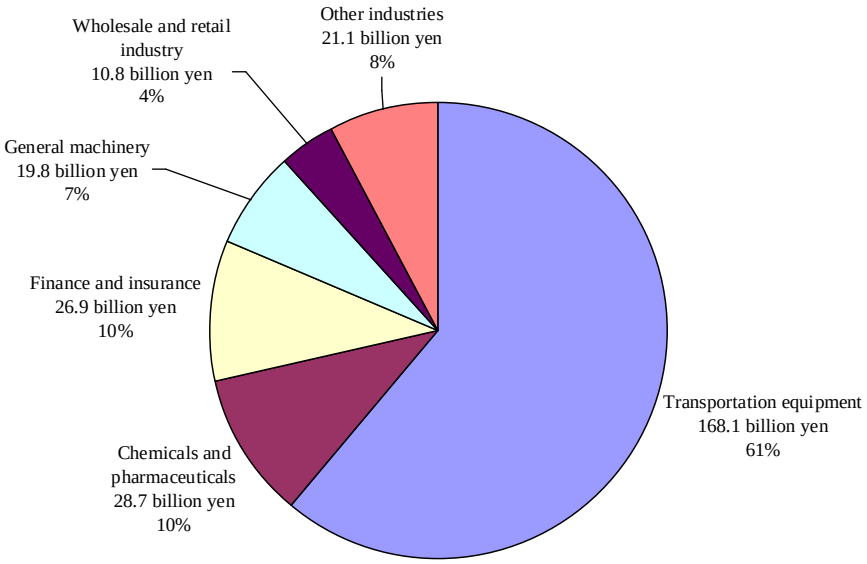


Note: Annual household income of 250,000 rupees or more.
Source: Nomura Research Institute, CHITEKI SHISAN SOUZOU, May 2008.

(Response of Japanese companies in the India consumer market)

Looking at the trend of Japanese companies making inroads into the Indian market, with respect to the balance of foreign direct investment from Japan into India, there is a bias toward the transportation equipment industry, whereas direct investment in electrical machinery is comparatively small (see Figure 1-3-88).

Figure 1-3-88 Japan's balance of foreign direct investment into India (2006)



Note: Shows the top five industries.
Source: International Investment Position (Ministry of Finance / Bank of Japan).

Looking at the breakdown of shares in the domestic car market in India, we can see that among the vehicles made by manufacturers that entered into the Indian market relatively early on[136], Japanese companies have captured a large share of the market (see Figure 1-3-89). However, with Tata Motors (the giant Indian conglomerate mentioned above) ranked second in this industry, it could not necessarily be argued that Japanese companies have captured enough of the market. The South Korean car maker, Hyundai, began production in India in 1998, and it now commands the third largest market share[137].

In the electrical machinery industry, South Korean companies control a large share of ordinary color televisions. On the other hand, Japanese companies rank highly in high-value-added LCD and plasma televisions, but have been unable to capture a reasonable share of the ordinary color televisions (see Figure 1-3-90).

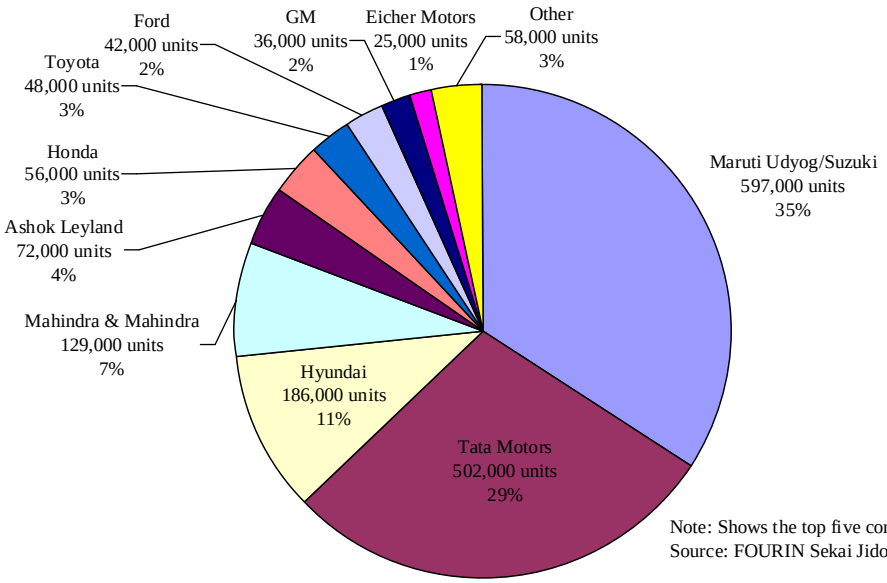
In the Indian car market, a possible reason why the Japanese car industry has captured a comparatively large share of the market is due to the fact that companies have increased their publicity by expanding their businesses into India. In contrast, in other industries where companies have not invested directly, it would appear that they are attempting to make inroads into the Indian market by means of exporting; but bearing the characteristics of the Indian market in mind, this avenue would

[136] The Suzuki Motor Corporation has been participating in this market for the last 25 years.

[137] Hyundai actively tries to understand the needs of the local market. While other foreign car manufacturers were selling their old models in India, Hyundai was rolling out the same models as back in Republic of Korea. Also, Hyundai designed a model suited to India's road conditions and high temperatures, and not only sold this model locally, but also sold it back in Republic of Korea (Bhattacharya, A. and D.C. Michael (2008), "The BCG 50 Local Dynamos".

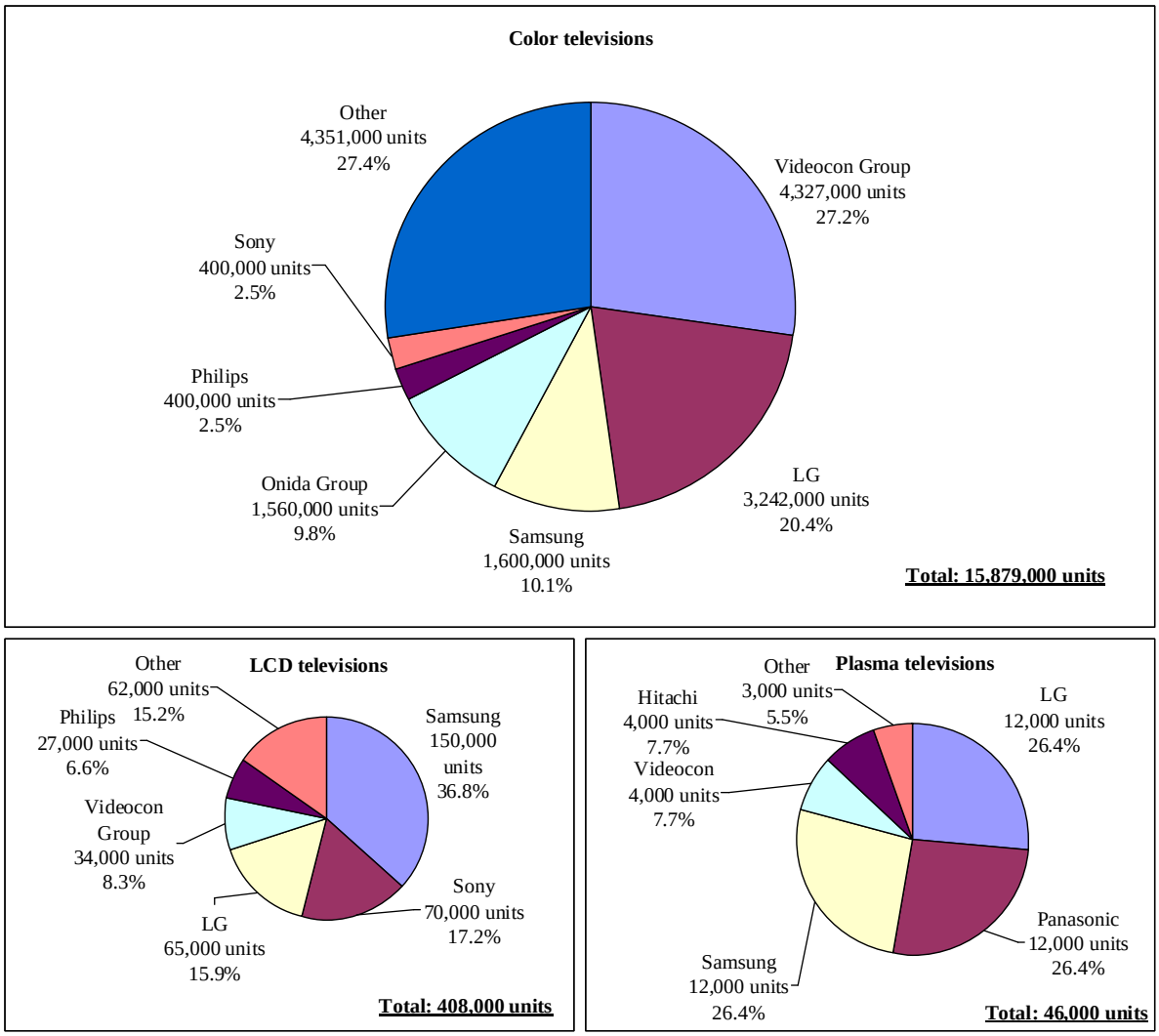
make implementing careful marketing and providing considerable after-sales service difficult, and so capturing any significant market share would also be difficult.

Figure 1-3-89 Distribution of market share in the Indian car market



Note: Shows the top five companies by sales volume.
Source: FOURIN Sekai Jidousha Toukei Nenkan 2007.

Figure 1-3-90 Distribution of market share in the Indian television market (2007)



Note: Shows the top five companies by sales volume for each type (Top six companies shown for color televisions as two companies were ranked equal fifth).
Source: TV Veopar Journal (ADI Media).

(Trend of foreign companies actively expanding into India)

In the case of South Korean companies, there are also institutional factors. For example, when the head office of a South Korean company bears the advertising and publicity costs of its overseas subsidiary, these costs are treated as general and administrative expenses, and the South Korean tax authority does not tax the head office[138]. Thus, it is believed that South Korean companies advertise and publicize aggressively. The gap between the market shares of South Korean companies and Japanese companies in the electrical machinery industry is also presumably influenced by the effort that the companies commit to advertising and publicity.

(Potential of Japanese companies in the Indian consumer market)

[138] Uemura, T., H. Bae, et al. (2007), "NIKKAN KIGYOU NO INDO BIJINESU NO KADAI TO KANOUSEI".

Nomura Research Institute (2008) above also suggests the possibility that Japanese companies could demonstrate their strengths in the Indian market. Notions of "durability" and "balance between quality and price" are ranked high in the consumption mindset of Indian consumers, and it is believed that Japanese companies can demonstrate an ascendency in these areas. The paper also suggests an apparent tendency for Indian consumers to be concerned with "safety and security,"[139] and Japanese companies could demonstrate excellence in this area as well.

Rather than penetrating the Indian market only after waiting for income levels in the market to rise and reach the consumer base of products provided by Japanese companies, it is hoped that the companies will accumulate know-how on the cultivation of emerging markets, by recognizing the populous Indian market as an experimental market, and then actively developing and releasing new products and services that are oriented to the Indian market[140].

In fact, many of the companies that have been successful in India had made aggressive prior investments. For example, at a time when India still had the least number of mobile phone subscribers amongst the BRIC countries, Nokia launched into the market having determined that it could reduce overall costs to 11% lower than in China. Nokia's Chennai plant is its largest in the world. Products intended for the Indian market are manufactured here. As a result of this, Nokia as captured more than 60% of the market[141].

(The growing market for infrastructure construction and expansion by Japanese companies)

It is not only India's consumer market that is expanding. As a result of economic growth, India's lack of infrastructure emerged as an issue, and so an infrastructure construction boom has transpired. The magnitude of the required infrastructure is great, with the demand for infrastructure such as power plants, roads, harbors and airports estimated at US$500 billion over the next five years[142]. Faced with fiscal

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[139] In 2006, a rumor was spread that certain soft drink manufacturers had used water contaminated with pesticides, and this has resulted in consumers boycotting against the products of those manufacturers (local interview).

[140] There are cases of how companies have succeeded in breaking into the Indian consumer market by being creative with their point of contact with customers. India's regional markets are vast and hence problematic for distribution and delivery. However, Perfetti Van Melle, an Italian manufacturer of confectionery, raised sales from these regional markets in India to 40% of its global sales by using the game of cricket as a sales opportunity and by being creative with store displays. Moreover, as a result of this company's aggressive marketing strategies, India has become the second largest confectionery market in the world (Bhattacharya, A. and D.C. Michael (2008) above).

[141] Bhattacharya, A. and D.C. Michael (2008). See part 3 of Section 1 in Chapter 2 for more about Nokia's global strategies.

[142] Excerpt from an article of the Financial Times, December 11, 2007.

deficits, the Indian government is handling the extremely costly infrastructure development using public-private-partnerships (PPP), and in particular, BOT[143] financing is the common method being used.

In response, companies are participating in the infrastructure construction market. It is believed that, in the past, foreign companies had not actively participated in the market due to the severity of the cost aspects of the bidding conditions[144]. However, as described below, foreign companies have become more active; for instance, a new airport is being constructed by a consortium of Western companies.

It used to be thought that it was difficult for Japanese companies to win project tenders because of cost competitiveness, but now Japanese companies are also regarding the infrastructure construction boom as a business chance, winning contracts from Indian companies for equipment used in power plants and so forth. Since the demand for construction equipment is strong on account of the construction of infrastructure, there has been a rise in the participation in the Indian market by construction equipment manufacturers, and further growth is expected.

(India's legislation and regulation inhibiting Japan's direct investment in India)

However, there are still many institutional problems in entering the Indian market. Some regulations regarding market entry by foreign-owned entities still remain in India, and have become a barrier to investment. For example, in the retail distribution industry, although the market was partially opened up to foreign-owned businesses in 2006, if the guidelines are followed, brand name companies are only permitted to operate retail stores for that single brand, and they can only have a maximum 51% stake in the business. Entry into the market by supermarkets and other large-scale retail chains is not permitted[145].

Furthermore, issues have been pointed out relating to the local execution of legislation. In India, the authority of the central government and among state governments is decentralized. Hence, the authority of the central government does not extend to state government administrations in the area of protection for private-sector business activities[146].

(3) Response required for Asia's common issues

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[143] Method whereby private-sector operators BUILD and OPERATE the project, and ultimately TRANSFER ownership to the government.

[144] Sako, K. (2007),"INDO SHIJOU NI IDOMU NIKKEI KIGYOU".

[145] Ministry of Economy, Trade and Industry (2008), *The 2008 Report on Compliance by Major Trading Partners with Trade Agreements*. According to a government announcement dated February 10, 2006 (Press Note No. 3): (1) prior approval must be obtained from the Foreign Investment Promotion Board (FIPB); and (2) the maximum percentage of foreign equity participation is 51%. In addition, the following guidelines were established: (a) products sold are to be limited to "single brand" products; and (b) the brand name of the products to be sold will be assigned in the manufacturing process of the product.

[146] It has been pointed out that the policies of a previous administration may be completely scrapped depending on the election results in each state (above-mentioned Sako, K. (2007)).

(Environmental and resource constraints)

India is rich in mineral resources. It is the world's fourth largest producer of iron ore and sixth largest producer of bauxite (2006). On the other hand, looking at India's energy resources, out of its total energy supply, India relies on imports for approximately 10% of its coal and 17% of its natural gas. Furthermore, India relies on imports for approximately 71% of its crude oil, which accounts for about 26% of its total energy supply. Amid expectations that demands for energy will increase as a consequence of rapid economic growth, since India is reliant upon imports for its energy supplies, there is the potential for soaring energy prices and other such factors to become a constraint on economic growth.

Another serious issue for India is its problem of water resources[147]. In India, where agriculture still accounts for a high proportion of GDP and employment, water shortages can have adverse effects on agriculture, and may lead to poverty. Scarce water resources are a problem that is directly linked with economic growth.

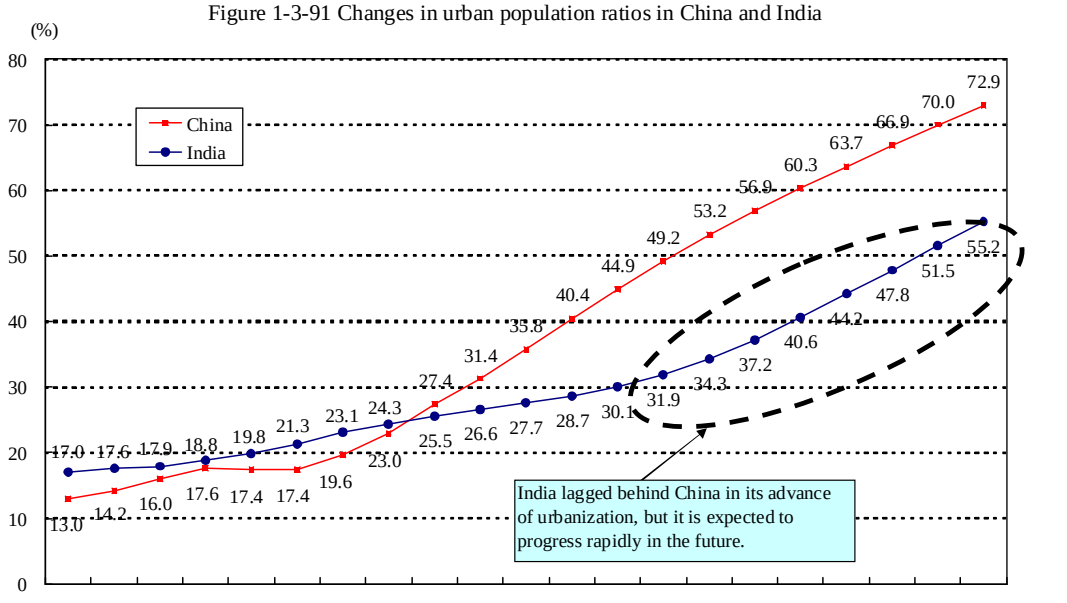
(Advance of urbanization)

One of the characteristics of India's cities is that, as shown earlier in Figure 1-3-20, there are several cities with populations in excess of 10 million people[148]. Looking to India's future, and although there will still be many farmers in rural communities, it is thought that, like China, urbanization will continue, with the urban population rising as a percentage of the total population (see Figure 1-3-91).

[147] Some forecasts predict that annual water consumption in India will reach 396km^3 by 2025. This is about double the magnitude of the United States where it is predicted that water consumption will reach 191km^3, and it accounts for approximately 20% of the estimated global demand for water (The International Food Policy Research Institute website).

[148] India has several large dispersed cities. According to the United Nations World Urbanization Prospects, as of 2007, India accounted for three of the world's ten largest cities: Mumbai 4th (19.0 million), Delhi 6th (15.9 million), and Kolkata 8th (14.8 million).

Figure 1-3-91 Changes in urban population ratios in China and India



Source: United Nations, World Population Prospects.

○ **An emerging lack of infrastructure**

As mentioned above, a lack of infrastructure has surfaced as an issue for India as a result of economic growth associated with urbanization. In a questionnaire survey of Japanese companies, they pointed to a lack of infrastructure related to roads and electricity.

(a) Roads in India

In India, road transport is the most widely used means of transportation, carrying about 65% of freight and 80% of passengers. However, several points have been raised with regard to India's roads, including:

- Despite having the world's second most extensive road network, stretching 3.34 million kilometers, outside of the major urban and suburban areas, many of the roads are narrow, and they are poorly paved;
- Even where roads have been paved, because they are in poor repair, there are only certain roads that trucks can use. In fact, a mere 66,590km of national roads cover about 40% of all freight traffic[149].

(b) Electricity in India

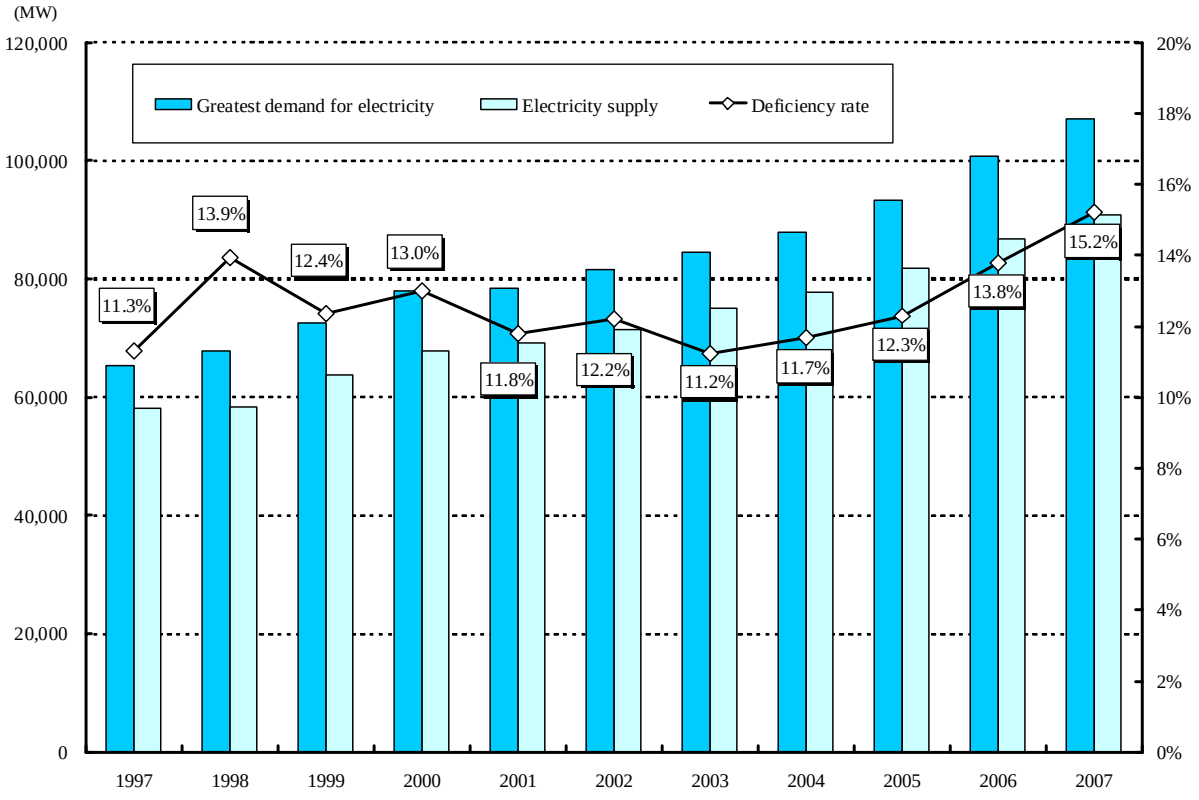
With regard to electric power, the problem is that the actual supply of electricity is inadequate. Looking at the gap between the supply and demand of electricity at peak times, although there had been a trend toward improvement in recent years, as of January 2008, the deficiency rate had reached

[149] Japan Small Business Research Institute (2007), *WAGAKUNI CHUUSHOU KIGYOU NO INDO TENKAI NO KANOUSEI NI KANSURU CHOUSA KENKYUU*. The figures have been updated from the National Highways Authority of India website to data correct as of March 31, 2008.

15.2%, suggesting that the supply of electricity has failed to keep pace with the increase in demand that has accompanied economic growth (see Figure 1-3-92). Another significant problem is the fact that the transmission and distribution loss rate is overwhelmingly higher in India than in other Asian countries (see Figure 1-3-93). While headway is being made in the construction of power plants to expand the supply of electricity, a radical solution for the short supply will be difficult unless efforts are made to reduce the transmission and distribution loss.

As a result, apart from in New Delhi, electricity rates in each city in India are relatively higher than in Chinese cities, and this is a cost factor for companies developing their operations in India[150].

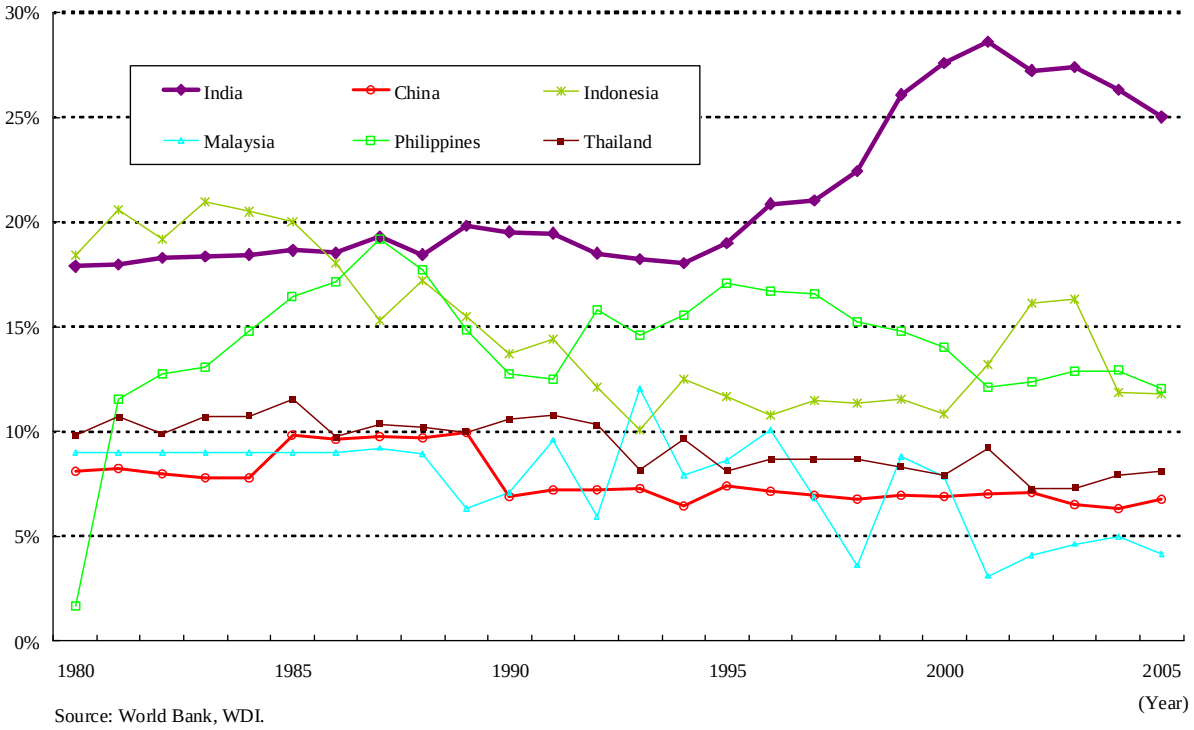
Figure 1-3-92 Changes in the gap between supply and demand of electricity at peak times in India



Note: Figures for FY2007 include actual results up until January 2008.
Source:Ministry of Power, India, *Annual Report 2007-2008*.

[150] JETRO website and interviews with experts.

Figure 1-3-93 Transmission and distribution loss rates in India, China and ASEAN4



Source: World Bank, WDI.

(c) Railways in India

The total length of railways in India is 63,465km. This is longer than in France, Germany and Japan; and is even longer, albeit only slightly, than the more expansive China. India's railway system is ranked high both in terms of freight traffic and passenger traffic.

Railroads in India are operated by the state-run enterprise, Indian Railways. Although it had been operating at a loss for some time, based on the management reforms of recent years and thanks to increases in the shipping of iron ore for export and of raw materials used in making iron, at present it is operating in the black, and there are plans for further investment[151]. On the topic of a Dedicated Freight Corridor (DFC), during his trip to India in August 2007, the (then) Prime Minister Shinzo Abe announced that he would like to consider cooperation from Japan based on a yen-denominated loan using a Special Terms for Economic Partnership (STEP)[152]. Attention will need to be paid to India's railway infrastructure, including the possibility of Japanese cooperation.

(d) Airports in India

With the number of airline passengers increasing in India year by year, and with that number expected to increase further, construction of international airports is underway. Recently, in May 2008,

[151] Kondo, M. (2007), "TAIIN KEIZAI KYOURYOKU - PPP TO SEZ WO CHUUSHIN NI".

[152] Excerpt from the Ministry of Foreign Affairs website. http://www.mofa.go.jp/mofaj/kaidan/s_abe / iim_07/india_gai.html

the new Bengaluru (Bangalore) International Airport was opened[153]. The plan is for this airport to be constructed and operated under a BOT arrangement by a joint public-private consortium led by Siemens[154]. However, there is no forecast for when the new road connecting downtown with the new airport will be completed; the new airport is a considerable distance from Electronics City, where Infosys and other IT firms are located; and the handling of the current airport once the new airport has opened is a point of contention[155].

In addition to the lack of physical provisions in the "hard" aspects of the airport, a number of problem areas have been raised with respect to the lack of infrastructure, including: inadequate overall design capacity, starting with the abovementioned transport access between the city and the new Bengaluru (Bangalore) International Airport; and the fact that the "soft" aspects of the airport have not kept up with the developments made in the "hard" aspects[156].

○ **Disparities and poverty**

Rapid economic growth and increased urbanization have given rise to regional disparities between urban and rural areas. Comparing the per capita GDP for each of the states, in FY1999, the first ranked Union Territory of Chandigarh was approximately seven times greater than the bottom ranked state of Bihar; whereas, in FY2005[157], this disparity had increased to about 11 times[158]. Furthermore, the number of poor living on less than US$1 per day accounts for 34.3%, or one third, of the total population, and it said that the majority of these poor are living in rural communities[159]. Just as with China, it can be surmised that the economic growth in rural areas in India have not kept up with the growth in their urban counterparts.

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[153] In Bangalore, the number of airline passengers is increasing at a rate of about 40% each year. The old airport had the capacity to handle only three million passengers annually, and with that number having exceeded 10 million, the airport was almost bursting. The new airport has been designed to currently cope with 11 million passengers each year, and there is a master plan that will allow it to accommodate 50 million passengers in the future.

[154] The name of the company managing the new airport is Bangalore International Airport Ltd. (BIAL), and the total project investment is worth 24.7 billion rupees. The project is being run under a BOT arrangement, with funds being contributed by the German Siemens Group (40%), Zurich International Airport (17%), Larsen and Toubro (17%), Karnataka State Government (13%), and the Airport Authority of India (13%). The term of the project is for 30 years after the opening of the airport, with further 30-year options.

[155] Based on an article of the Financial Times, May 1, 2008, and on local interviews.

[156] For example, problems have been pointed out concerning the new Bengaluru (Bangalore) International Airport, such as that the management system for air cargo has not been developed even after the airport has opened (local interviews).

[157] The top and bottom ranked regions were the same as in FY1999.

[158] Ministry of Finance, Government of India (2008), *Economic Survey 2007-2008*.

[159] Suda, T. (2007), "INDO NI OKERU NOUGYOU / NOUSON NO GENJOU TOKADAI".

○ **Worsening pollution**

Again, just as with China, the rapid economic development and the concentration of people into urban areas has given rise to a decline in pollution in India. Specifically, it has been suggested that:

(a) The rapid inflow of people into the cities has caused an increase in the amount of vehicular traffic, such as cars and busses. These have led to economic losses attributable to traffic congestion, and to health damage attributable to air pollution, etc.[160], and

(b) Industrialization has led to more liquid waste being emitted than can be treated, and clearly more sewage being discharged into the rivers and other waterways than can be naturally purified. As a result of this, not only is the living environment being deteriorated, but a threat has arisen of infectious disease being carried by polluted water[161].

In light of this situation, infrastructure development of transport systems, sewage treatment facilities and so forth is needed in India, and the Indian government has incorporated these concerns for the environment into its 11th Five-Year Plan.

(Response to the aging society)

Looking to the future, and with its large general population and youth population, active human resources development is needed in India.

○ **Issues in human resources development**

In India, the IT services industry achieved rapid growth, and its human resources are said to have contributed to this development. Moreover, India's qualified human resources are generally said to be one of its strengths. For example, in the earlier questionnaire survey conducted by JBIC, about 30% of companies which responded that they thought India was a promising target for business development gave the presence of qualified human resources as one of the reasons for why India is promising.

However, according to the ADB, even in India, where there is a large proportion of youth in the demographic structure, it is predicted that the population aged 15-24 will begin to decline in about 2010. With regard to IT human resources, it is thought that a number of higher education institutions, typified by IIT, have produced large numbers of specialized graduates that are in demand both domestically and abroad, and have given India the lead over the rest of the world in the IT services and offshoring services sectors. However, in order to maintain this current advantage, India will require human resources in the fields of ICT and business process outsourcing (BPO) numbering 2.3 million by 2010. Current forecasts estimate a deficit of 500,000 such workers. The shortage in skilled labor is also in a critical situation, with apparently only 30% of IT graduates working in the IT sector[162].

At 61% (2004), India's literacy rate is still low. Whilst in recent years, the Indian government has increased education expenditure for the development of human resources, there are also suggestions that the provisions for vocational training have not been enough, and that there have been no real

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[160] JBIC (2007), *Ex-ante Project Evaluation* http://www.jbic.go.jp/japanese/oec/before/2006/pdf/indo03.pdf .

[161] JBIC (2007), *Ex-ante Project Evaluation* http://www.jbic.go.jp/japanese/oec/before/2006/pdf/indo10.pdf .

[162] Data in this paragraph has been extracted from *Asian Development Outlook 2008* (ADB (2008b)).

substantial benefits[163]. Efforts are needed for effective industrial human resources development, and the overall level of education needs to be improved.

(4) Toward self-sustaining development

(Formation of a well-balanced industrial structure)

In order for India to further increase its attractiveness as a market, it appears that it is important for a society to be built where the entire country can receive the benefits of growth, not just a particular industry or income bracket.

To this end, measures to fight poverty in rural areas are needed, and these need to result in growth in per capita GDP being raised across all of India. Consequently, an industrial structure needs to be formed in which there is a balance between improvements in the productivity of rural agriculture, where 72.2% (FY2001) of the population resides, and movements of the resultant surplus labor from rural areas to the manufacturing industry and service industries.

(Rural communities and measures to alleviate poverty)

In order to reduce the number of people living in poverty in rural communities, the government has implemented debt relief and other measures, and has introduced policies for poverty reduction, such as the expansion of rural community finance and infrastructure development programs that encourage job creation.

An example of rural community finance is the so-called "microcredit" small loans for the underprivileged, which have been put into practice on a large scale in India. These programs used to be run, but because they did not result in increased incomes for the recipient households, and because the repayment rates were low, the programs were considered to be substandard both in terms of alleviating poverty and in terms of financial soundness. However, SHG-Bank Linkage Programs (hereinafter referred to as "SHGs") are a new microfinance initiative that began in the 1990s. Under these programs, groups of impoverished women are formed, and banks provide deposit, loan and other financial services to the groups. It has been confirmed that the incomes of groups receiving financial services through SHGs have increased, and the repayment rate is high. SHGs are considered to have produced considerable benefits (see Figure 1-3-94)[164].

The positive effects of SHGs have also been recognized by the Indian government in a report produced by a group of experts commissioned to conduct a general analysis of the debt problems of farmers. However, there are still various issues facing rural community finance in India[165]. Some of the SHGs formed through financial intermediaries are charging exorbitant amounts of interest, and so it has been claimed that maximum interest rates should be enforced for microfinance organizations[166]. On the other hand, loans provided by the National Bank for Agriculture and Rural Development

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[163] Interviews with experts.

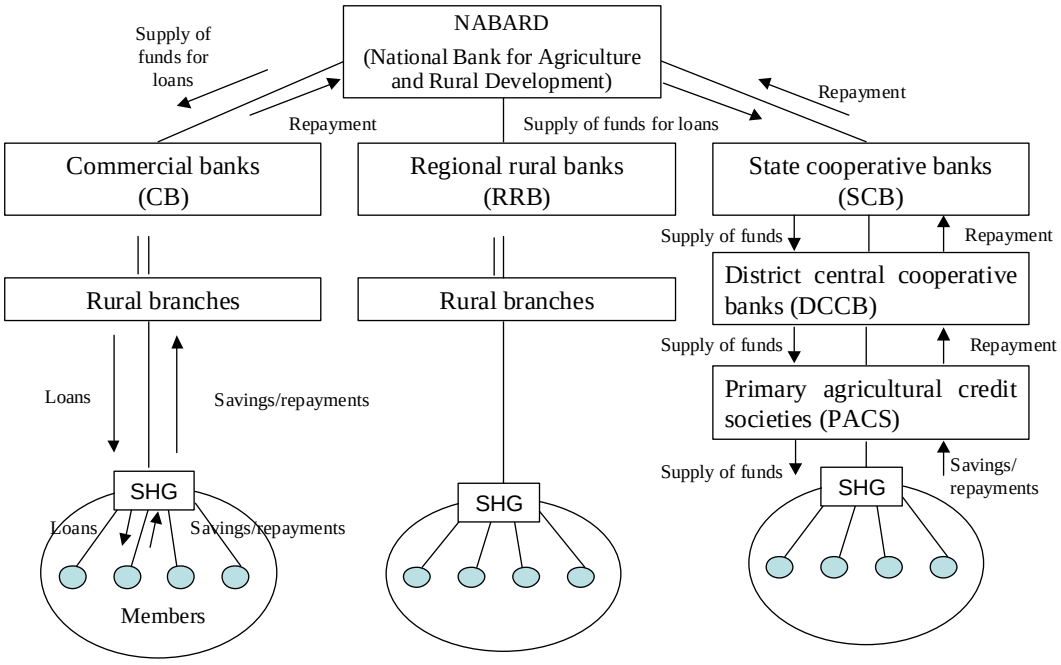
[164] Suda, T. (2007) above and Suda, T. (2001), "INDO NI OKERU MAIKUROFAINANSU NO SHINTENKAI".

[165] Suda, T. (2001) above.

[166] Ministry of Finance Government of India (2007), Report of the Expert Group on Agricultural Indebtedness.

(NABARD), which supplies the largest amount of capital funds, charges extremely low interest rates, and, because over the long term, the market may become distorted, there are also suggestions that the interest rate structure needs to be improved.

Figure 1-3-94 Organization of SHG programs and the flow of funds



Source: Suda, T. (2001),"INDO NI OKERU MAIKUROFAINANSU NO SHINTENKAI."

(Rigid labor legislation)

With respect to the Indian labor market, rather than facilitating employment, restrictions on dismissals and other strict labor legislation works to stymie employment. Plentiful labor is unable to be utilized in the areas covered by the labor laws, and as a result, they become capital-intensive. Consequently, it has been pointed out that better labor laws are needed in order to expand employment in the extensive areas of high productivity[167].

(Need for infrastructure development)

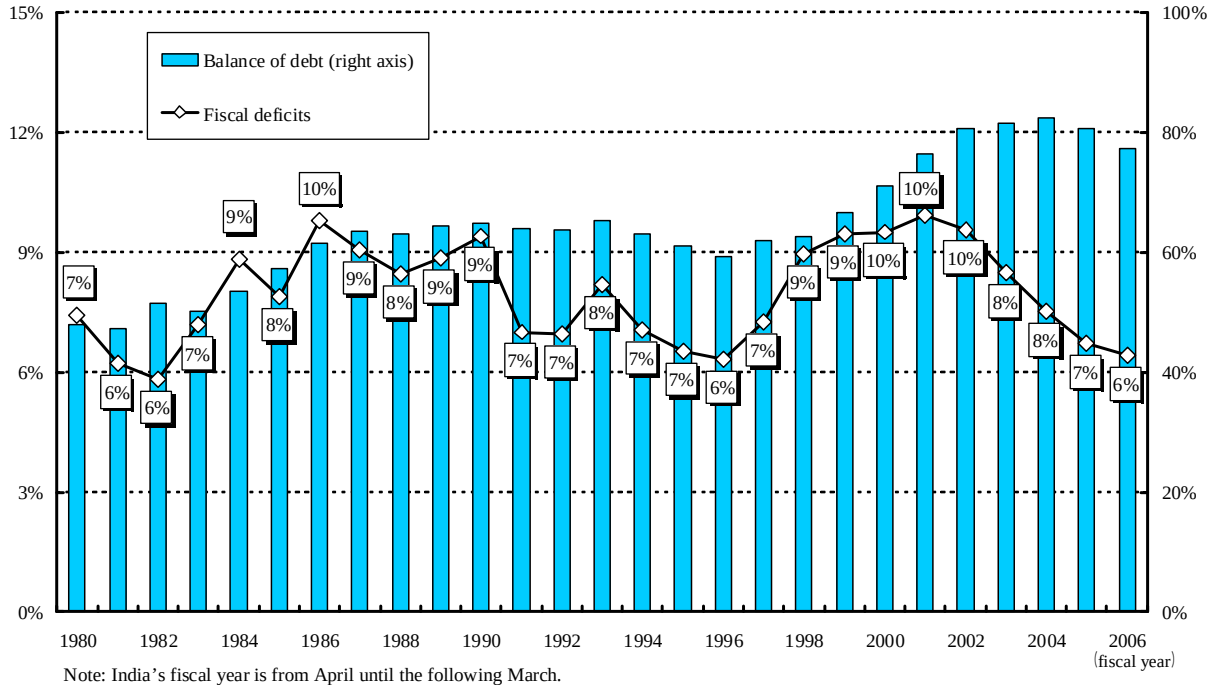
From the perspective of making the industrial structure more advanced, it is important to promote the manufacturing and service industries to locate in rural areas. For this reason, there needs to be further improvement to the infrastructure of transport networks such as roads and railways connecting urban and rural areas, not just those connecting urban areas with other urban areas. Moreover, with respect to electricity, power generation capacity needs to be urgently enhanced, not only because charges are high even in urban areas, but also because of the potential for businesses in urban areas to be brought to a standstill because of power shortages.

(Fiscal deficits)

[167] OECD (2007), Economic Survey of India 2007.

If the above-mentioned rural community measures and policies aimed at infrastructure development were implemented, an important source of funds would be government finances. However, government finances have been running deficits (see Figure 1-3-95). Looking at the fiscal deficits of Indian governments (total of central government and local governments) as a percentage of GDP, in recent years, the deficit can be seen to be contracting. However, the deficit attributable to subsidies for petroleum, fertilizer and food is claimed to be 4-5% of GDP[168], and there are also suggestions that the deficits of public enterprises, which are not recorded in the government's fiscal deficits, have been increasing in recent years[169]. If fiscal deficits were to continue, there is a chance that they would become an uncertain factor in India's sustainable growth.

Figure 1-3-95 Changes in the fiscal deficits and balance of debt of Indian governments (central government + state governments) as a percentage of nominal GDP



Note: India's fiscal year is from April until the following March.
Source: Reserve Bank of India website.

(Japan's contribution to India's self-sustaining development)

As described above, India still has issues that it needs to deal with, and it is thought that Japan needs to make a contribution which makes the best use of its own experiences and the technologies and social systems it has built up. At present, Japan is engaged in cooperation aimed at resolving India's issues; for instance, providing cooperation through the ODA and other agencies, such as for the development and improvement of India's business environment or for its environmental measures[170].

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[168] Article in The Times of India, dated April 20, 2008.

[169] Suggestions that arose in our interviews with experts.

[170] According to the Ministry of Foreign Affairs website, the total amount of yen-denominated loans provided in FY2007 was 225.13 billion yen.

In the future, it will be necessary to resolve the problem of inadequate infrastructure in order to encourage direct investment by Japanese industry[171]. For the purpose of promoting infrastructure development, both the Japanese and Indian governments are proceeding with the development of the "Delhi-Mumbai Industrial Corridor (DMIC)." The objective of this project is to implement the high-priority development of infrastructure by utilizing private-sector capital and PPP arrangements to develop the district between Delhi and Mumbai as a major industrial base[172]. Via this concept, Japan will promote greater investment in India from Japan, and will assist in strengthening India's infrastructure and manufacturing capacity.

Furthermore, the construction boom associated with infrastructure development and so forth could also be perceived as being a business chance for Japanese companies to sell equipment, plants or other such assets.

India has already signed a comprehensive EPA with Singapore, and is currently working on concluding other regional economic agreements and so forth with countries neighboring Asia, ASEAN, Mercosur, the EU and SACU. In expanding into the Indian market, it is important that businesses include the utilization of these agreements in their considerations. In addition, it is hoped that India's outstanding IT industry and human resources will be utilized with respect to the globalization of Japanese companies, and there are expectations for various future possibilities between Japan and India.

5. The economies of each Asian country and region

Bearing the fruit of their aggressive measures to attract foreign investment, countries and regions in Asia have continued to grow strongly since 2002 when the impacts from the collapse of the IT and stock price bubbles had come full circle. In 2007, each and every country and region realized real GDP growth rates from around 4% to more than 10% (see Figure 1-3-96).

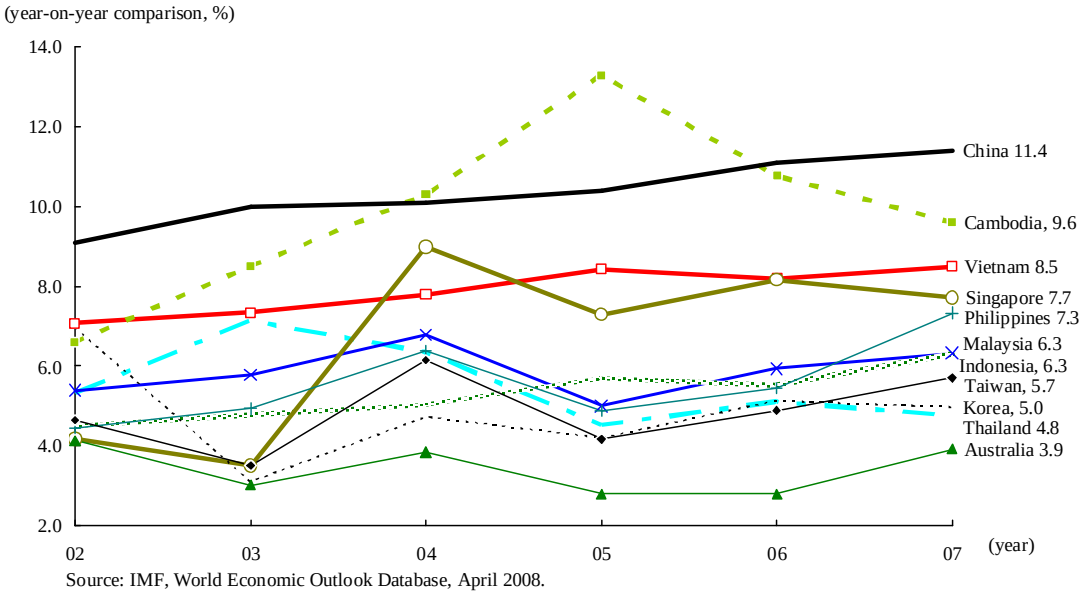
Another characteristic of these countries and regions is that the ratio of young people aged between 15 and 29 is generally high (see Figure 1-3-97). Vietnam and Cambodia in particular have especially high youth ratios. Due to cheap and plentiful labor, Japanese and other foreign companies have recently been turning their attention to these two countries as places to which to disperse the risk currently overconcentrated in China (the so-called "China plus one" strategy). As their economies grow rapidly, given their generally high proportions of youth and their concentrations of the middle classes in urban areas, attention is also turning to their potential as consumer markets.

(http://www.mofa.go.jp/mofaj/gaiko/oda/data/zyoukyou/h19/y080310_1.html).

[171] As shown in Figure 1-3-85, Japanese companies list underdeveloped infrastructure as India's number one issue.

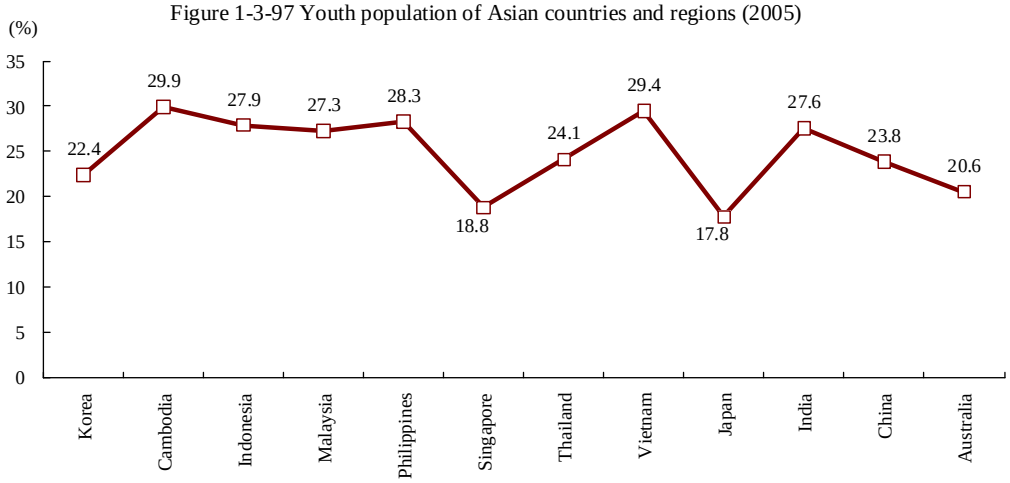
[172] In January 2008, the Indian government established the Delhi Mumbai Industrial Corridor Development Corporation, and at present is pushing ahead with the preparation of a national development plan (master plan) that specifies the particular infrastructure schemes to be developed.

Figure 1-3-96 Real GDP growth rate of Asian countries and regions



Source: IMF, World Economic Outlook Database, April 2008.

Figure 1-3-97 Youth population of Asian countries and regions (2005)



Note: The youth ratio is the population of people aged between 15 and 29 as a percentage of the total population.
Source: United Nations, World Population Prospects.

(1) Movements in Asian countries and regions

(Movements in direct investment)

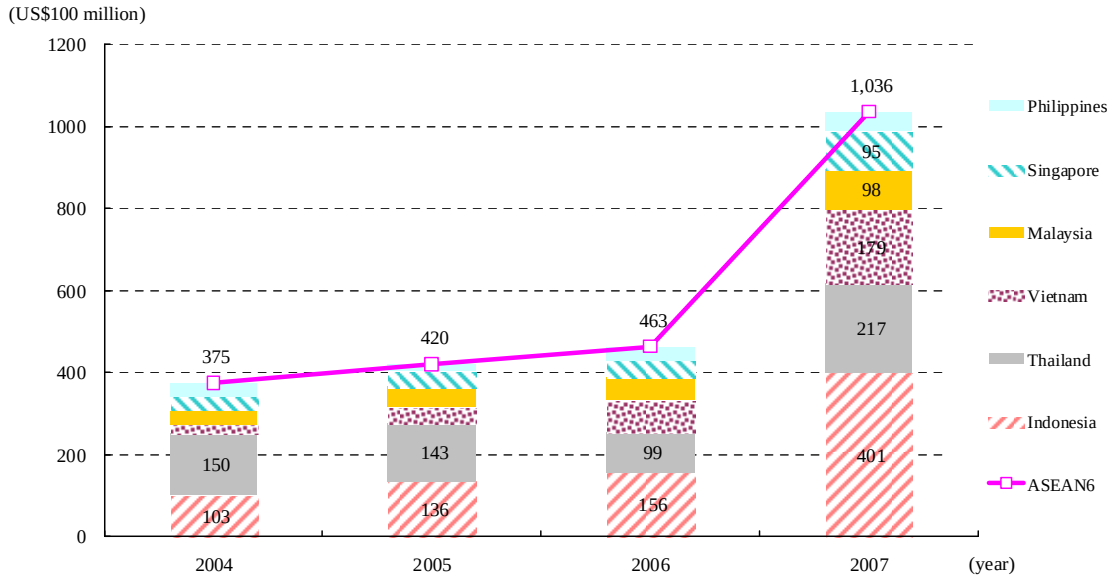
Looking at the direct investment (flows) from foreign countries into Asian countries and regions, in 2007, the total investment in the ASEAN6 countries[173] surpassed the investment in China[174]. This turnaround is in part due to the fact that foreign direct investment in Indonesia has increased rapidly, in fact more than doubling in the year to 2007, and the fact that foreign direct investment in Thailand and Vietnam has also increased. Indonesia is a resource-rich country, and backed by political stability on top of a resources and environment boom, direct investment from overseas has increased rapidly in such fields as biofuel development and the development of liquefied natural gas, coal and petroleum.

[173] Six countries of: Thailand, Singapore, Malaysia, Indonesia, the Philippines, and Vietnam.

[174] See Figure 1-3-74.

Vietnam has seen a rapid increase in direct investment from overseas following its accession to the WTO in January 2007. In Thailand, which is a focal point for the car industry, there has been an increase in capacity building investment in the car and other industries (see Figure 1-3-98)[175].

Figure 1-3-98 Changes in foreign direct investment (flow) to the ASEAN6 countries



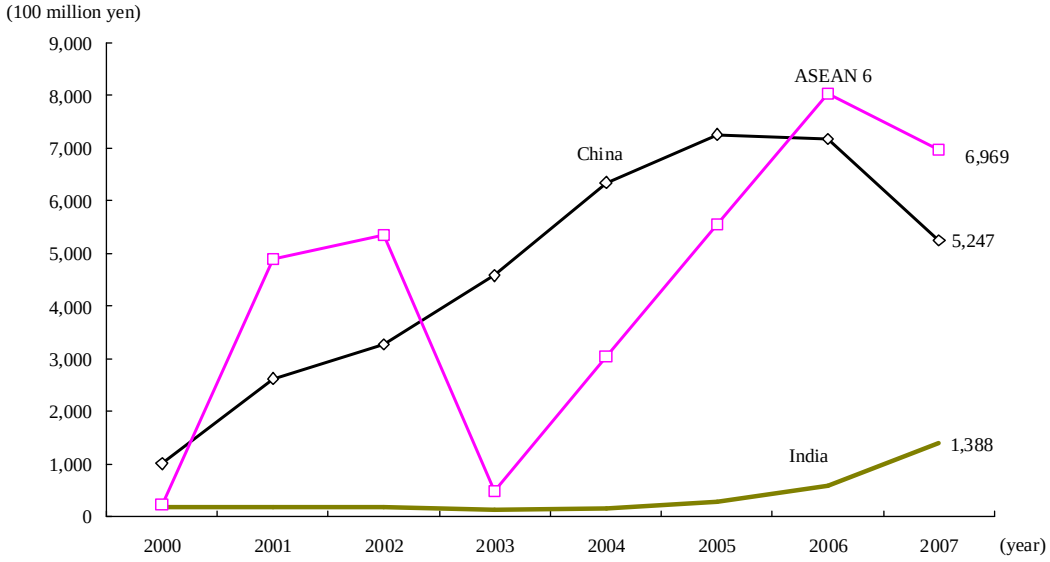
Note: "ASEAN6" refers to the six countries of: Indonesia, Malaysia, Thailand, the Philippines, Singapore, and Vietnam.
Source: CEIC Database.

[175] *Nihon Keizai Shimbun*, dated December 31, 2007.

Furthermore, in the IT services industry, which has experienced remarkable global growth, IT service providers that have their headquarters located in developed countries, etc.[176] have been recently strengthening their "offshoring" arrangements whereby they actively roll out their operational bases, such as call center operations, customer support operations and software development operations, to emerging and developing countries. As a result, direct investment related to the IT services industry flowing from developed countries to emerging and developing countries has risen suddenly, and in China, India, the Philippines and various other Asian countries and regions, the IT services industry is becoming entrenched as an important domestic industry.[177] This kind of growth of the IT services industry in emerging and developing countries can also be seen in Central and Eastern European countries such as Croatia, Poland and Romania. Characteristics common to both groups are that they are proficient in the English language, they have high levels of education, labor is in plentiful supply, and their labor costs are low.

Similarly, looking at the direct investment from Japan into Asian countries and regions, the total investment in the ASEAN6 countries has surpassed the investment in China (see Figures 1-3-99 and 1-3-100). Moreover, the growth in investment in ASEAN countries is even more striking than that for China[178] and India.

Figure 1-3-99 Changes in direct investment (flow) from Japan to Asian countries and regions



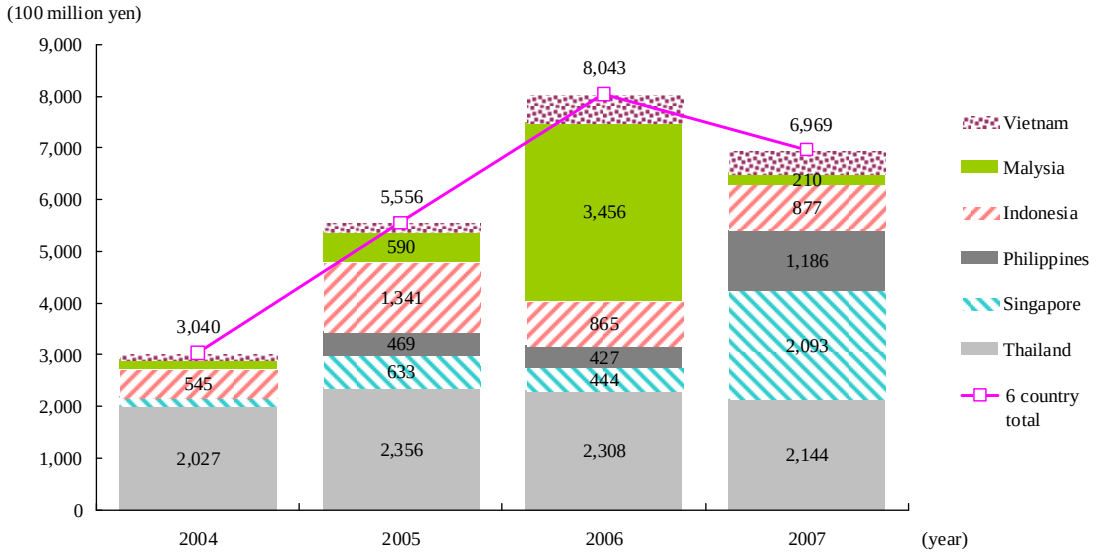
Note: "ASEAN6" refers to the six countries of: Indonesia, Malaysia, Thailand, the Philippines, Singapore, and Vietnam.
Source: Ministry of Finance, Balance of Payments.

[176] A recent apparent trend has been for IT services located in India to be further outsourced overseas ("India outsources its own outsourcing," *Herald Tribune*, dated September 25, 2007).

[177] For example, in the Philippines, 72% of the IT services sector is held by foreign companies (of which, 30% are Japanese companies, 10% are South Korean companies, and 9% are United States companies). As of 2006, 146 call centers had been established in the Philippines, employing 150,000 people, and with annual sales amounting to US$2.7 billion (United Nations (2008a), *Information Economy Report 2007-2008*).

[178] As mentioned above, Japan's direct investment (flow) in China is decreasing.

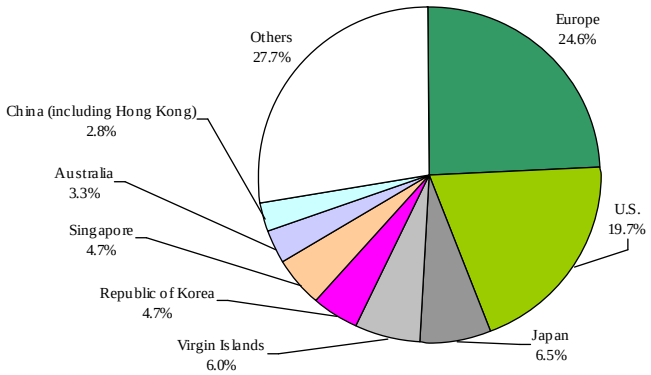
Figure 1-3-100 Changes in direct investment (flow) from Japan to the ASEAN6 countries



Source: Bank of Japan, Regional Balance of Payments.

Looking next at the breakdown of countries and regions that are investing directly into Asian countries and regions, in 2006, Europe commanded the largest share with 24.6%, followed by the United States with 19.7% (see Figure 1-3-101). Japan (6.5%) was ranked third, followed by the Virgin Islands (6.0%), which are known as a tax haven.[179]

Figure 1-3-101 Direct investment in Asian countries and regions (2006)



Notes: 1. "Asian countries and regions" refers to the nine countries of: China, Singapore, Thailand, Malaysia, Indonesia, Vietnam, the Philippines, Australia, and India.
2. All figures have been calculated based on US dollars. Except for China (actual basis), all figures are on an approval basis. Figures for Australia as an investee country are from FY2004/05 due to statistical constraints.
Source: JETRO, *2007 White Paper on International Trade and Foreign Direct Investment*.

[179] Including those Asian countries and regions contained in "Other," intra-regional investment, that is, the share of investment between Asian countries and regions, is confined to 27.3%.

(a) Assessment of the investment environment by Japan manufacturers

According to a survey on foreign direct investment, which was conducted in 2007 by the Japan Bank for International Cooperation (JBIC),[180] the countries targeted for diversifying investments from China, where there have been considerable rises in labor costs, have shifted from Thailand and Indonesia to India and Vietnam (see Table 1-3-102). While interest in Thailand is relatively declining, it is still attracting strong interest as a country for overseas business expansions. Underlying this is a high regard for Thailand's market growth and industry concentration. Meanwhile, issues indicated for Thailand include sharp increases in labor costs and difficulty in securing human resources. In terms of "countries or regions where local business profitability is higher than the group's average," Thailand has kept its number one ranking (at 34%), but due to such reasons as being unable to impute cost increases in sales prices, this percentage has slipped since the FY2006 survey (41%). Turning now to Indonesia, and while market growth and cheap labor were rated highly, some of the issues indicated for Indonesia were its underdeveloped infrastructure, instability of its security and social situation, the unclear execution of its tax system, and difficulty in securing human resources.

Table 1-3-102 Countries and regions viewed by Japan's manufacturing industry as being promising targets for business development in the medium-term

Rank	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07
1st	China	China	China	China	China	China	China	China
2nd	U.S.	U.S.	Thailand	Thailand	Thailand	India	India	India
3rd	Thailand	Thailand	U.S.	U.S.	India	Thailand	**Vietnam**	**Vietnam**
4th	Indonesia	Indonesia	Indonesia	**Vietnam**	**Vietnam**	**Vietnam**	Thailand	Thailand
5th	Malaysia	India	**Vietnam**	India	U.S.	U.S.	U.S.	Russia
6th	Taiwan	**Vietnam**	India	Indonesia	Russia	Russia	Russia	U.S.
7th	India	Taiwan	Taiwan	Republic of Korea	Indonesia	Republic of Korea	Brazil	Brazil
8th	**Vietnam**	Republic of Korea	Republic of Korea	Taiwan	Republic of Korea	Indonesia	Republic of Korea	Indonesia
9th	Republic of Korea	Malaysia	Malaysia	Malaysia	Taiwan	Brazil	Indonesia	Republic of Korea
10th	Philippines	Singapore	Brazil	Russia	Malaysia	Taiwan	Taiwan	Taiwan

Source: Japan Bank for International Cooperation, "Survey on Foreign Direct Investment (annual editions)."

(b) Comparison of investment costs

Underlying Vietnam's consideration as a promising investment target, is that, compared to the five countries of Thailand (Bangkok), Indonesia (Jakarta), Vietnam (Hanoi), China (Canton) and India (New Delhi), in general, Vietnam has lower wages by occupation, and it has lower infrastructure costs (see Table 1-3-103).

Table 1-3-103 Comparison of investment costs in urban areas in Asia

(unit: US$)

	Bangkok	Jakarta	Hanoi	Canton	New Delhi	Note
Wages (workers, industrial workers)	164	178	87-198	134-446	165-326	Per month
Wages (engineers, leading engineers)	383	311	243-482	282-604	394-799	Per month
Wages (middle management, section chiefs)	684	548	597-859	612-912	696-1,684	Per month
Minimum wage	5	89	54	99	73	Per month (However, Bangkok is daily rate)
Electricity rates (business)	0.046-0.047	0.05	0.049-0.056	0.04-0.1	0.11	Rate per 1KWh, excluding basic charge
Water rates (business)	0.27-0.58	1.2	0.28	0.2	0.5-1.65	Rate per $1m^3$
Corporate tax rate	30%	30%	28%	33%	33.66%	Indonesia is for sales in excess of 100 million rupiah

Source: JETRO "TOUSHI KOSUTO HIKAKU CHOUSA", November 2006.

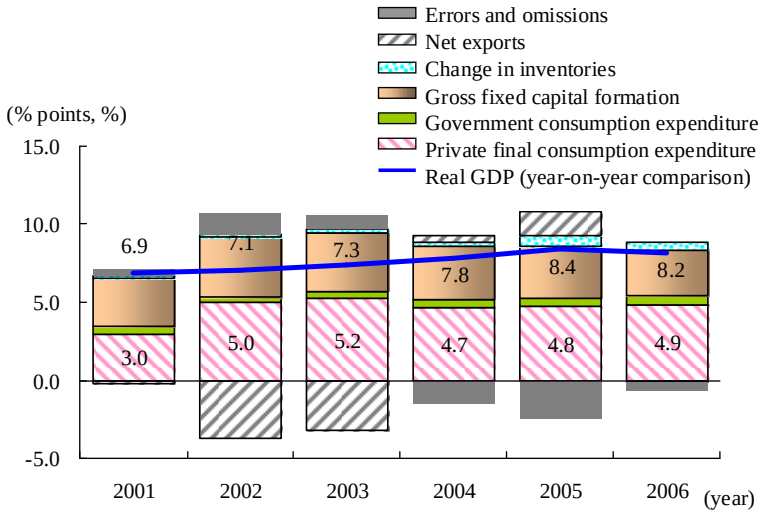
[180] *Report on Japanese Manufacturers' Overseas Business Operations -- FY2007 (the 19th) Survey on Foreign Direct Investment* -- (Ushita, S. and N. Takahashi (2008)). Survey conducted in July-August 2007. Number of respondents: 600 companies.

(2) The Vietnamese economy as a new base for production

(a) Real GDP growth rate

Looking at Vietnam's real GDP growth rate, although slight dips were shown around the time of the 1998 Asian currency and financial crisis, since then, it has continued to show high growth rate, consistently over 6%, and more recently in 2006, the economy achieved a sudden growth spurt of 8.2%. Amongst Asian countries and regions, this is the third highest growth rate behind China and Cambodia (see Figure 1-3-96). This high growth rate has consistently been led by gross fixed capital formation, comprised of private final consumption expenditure (private consumption) and private capital investment, etc. In recent years, although net exports have tended to decline, this is due to both imports and exports having shown strong growth (see Figure 1-3-104).

Figure 1-3-104 Vietnam's real GDP growth rate by demand component



Source: CEIC Database.

(b) Brisk private consumption and fixed capital formation

The composition of Vietnam's population is regarded as being a significant contributing factor to the growth of private consumption.

Vietnam has the highest proportion (29.4%) of young people of any Asian country or region (see Figure 1-3-97). Coupled with sustained increases in income on the back of strong economic growth, this population composition with a high propensity to consume has contributed to strong growth of private consumption which is second only to Malaysia in the Asian region.

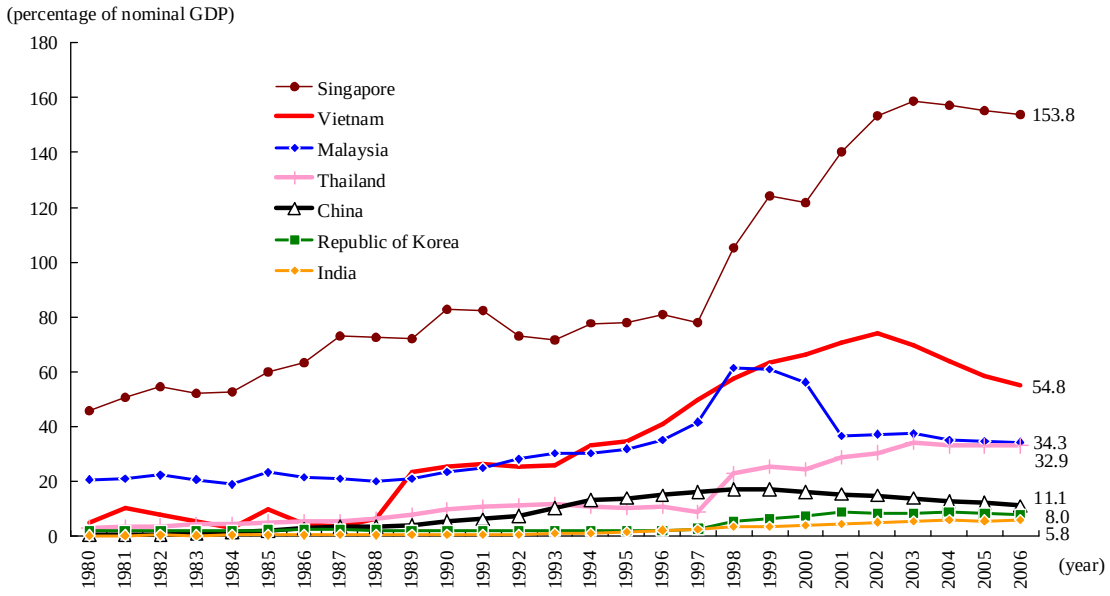
The strong increases in gross fixed capital formation suggest that efforts are being put into vigorous capital investment centered around the export industries and into the development of domestic infrastructure, which is regarded as lagging.

(c) Direct investment

Vietnam's brisk fixed capital formation and strong export growth is being supported by the direct investment of foreign companies. Looking at the balance of Vietnam's direct inward investment (as a percentage of nominal GDP) (see Figure 1-3-105), it has rapidly increased ever since the 1986

introduction of the Doi Moi (economic reforms) policy. Since 2003, the growth in nominal GDP has outstripped the growth in direct inward investment, and this has meant that the growth in the balance of direct investment (as a percentage of nominal GDP) has trended downward. Nevertheless, most recently in 2006, it was still 54.8%, second only to Singapore. Underlying this rapid growth in direct investment is Vietnam's cheap and abundant labor. Looking at the average monthly wages for general workers in Vietnam (Hanoi), they are the lowest among the major ASEAN countries and China (Canton), reflecting the abundant cheap labor. Furthermore, items other than wages, such as public utility charges and corporate tax rates are also relatively lower (see Table 1-3-99).

Figure 1-3-105 Changes in the balance of direct inward investment in major Asia countries



Source: UNCTAD, WIR; IMF, World Economic Outlook Database.

(d) Exports

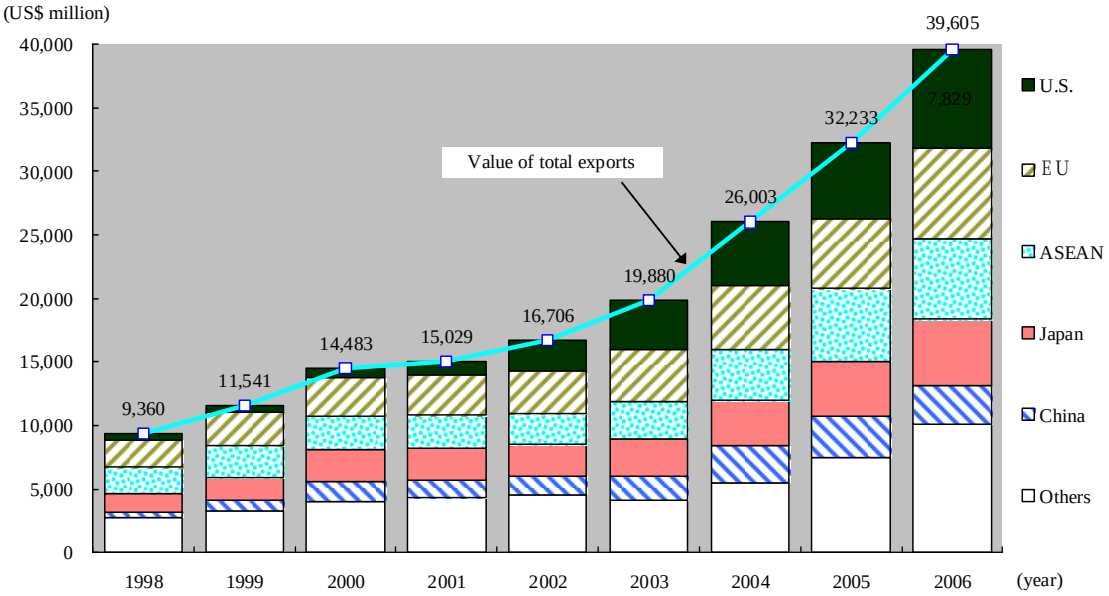
In recent years, Vietnam's exports have increased rapidly, especially those to the United States. The features of this rapid rise are: (a) as crude oil prices have soared globally, the value of Vietnam's crude oil exports, its largest export item, has increased substantially; (b) similar to China, the proportion of foreign companies in the export industries has been rising rapidly in recent years; and (c) unlike China, where the value of the renminbi continues to rise, the exchange rate against the United States dollar has continued to fall in value, meaning that Vietnam's export competitiveness has improved (see Figure 1-3-106 to Figure 1-3-108).[181]

Looking at Vietnam's major export items, the top positions are occupied by crude oil as well as textiles, clothing, footwear and other light industry products (see Figure 1-3-109). Apart from crude oil, the rest are labor-intensive export industries. It could be argued that this reflects the fact that the

181 Vietnam acceded to the WTO in 2007, and is in the process of developing and improving its export environment, such as receiving Most-Favored-Nation (MFN) treatment.

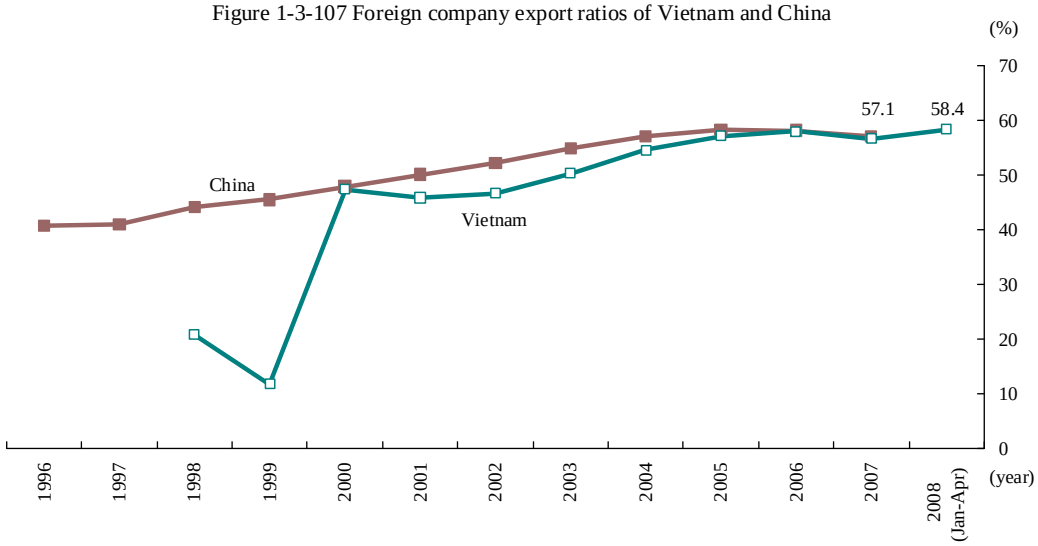
measures attracting the foreign capital of exporters to maximize the use of cheap and abundant labor have proven effective.

Figure 1-3-106 Vietnam's export destinations, by major countries and regions



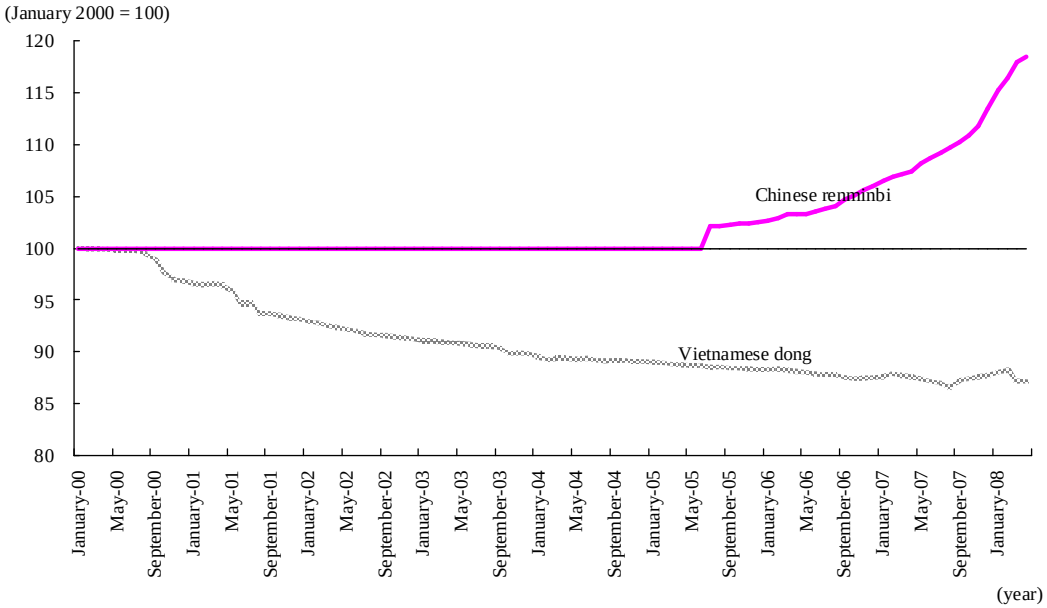
Source: CEIC Database.

Figure 1-3-107 Foreign company export ratios of Vietnam and China



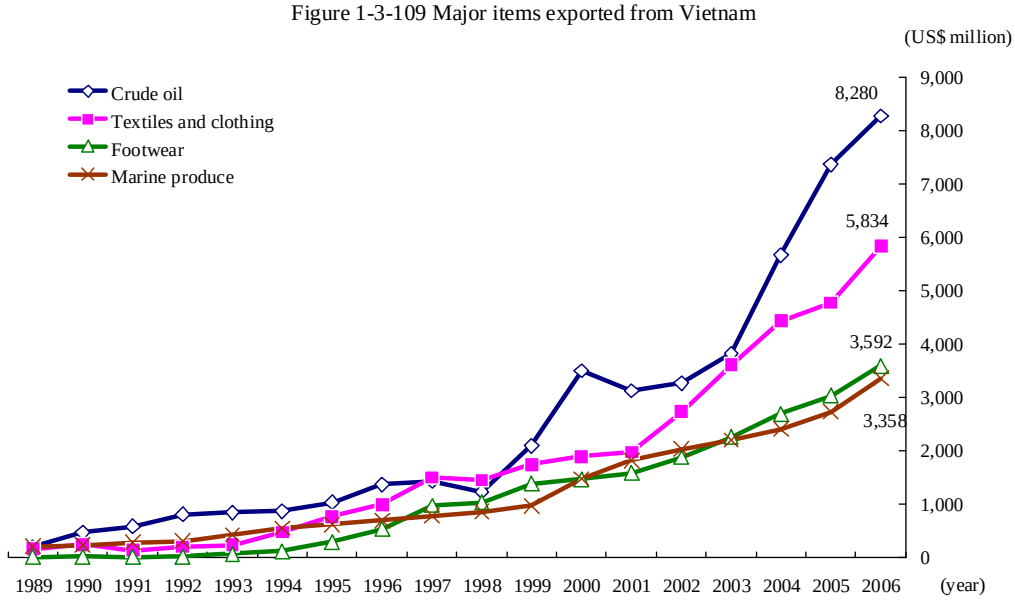
Note: Foreign company export ratio = value of exports by foreign companies / (value of exports by domestic companies + value of exports by foreign companies)
Source: CEIC Database.

Figure 1-3-108 Changes in the exchange rates of the Chinese renminbi and the Vietnamese dong against the United States dollar



Source: CEIC Database.

Figure 1-3-109 Major items exported from Vietnam



Source: CEIC Database.

(e) Commodity prices

In response to soaring material prices, domestic consumer prices are continuing to rise (see Figure 1-3-110).

Since 2004, the consumer price index in Vietnam had been continuing to rise strongly at an annual average rate of around 8%. In 2007, the rate was 8.3%. Then, since the beginning of 2008, the inflation rate has been escalating. In December 2007, the year-on-year inflation rate had been 9.1%, but by January 2008, it had risen to 11.9%, recording the first double-digit growth rate since 1995.

Even since then, prices have continued to rise, and most recently in April 2008, the figure had reached 19.5%. Looking at the rates of increase by item, food, housing, transportation and communication and so forth have recently shown double-digit growth rates. Food in particular has continued to grow at double digits since November 2007, and most recently in April, it had recorded an extremely high year-on-year growth of 36.8% (see Figure 1-3-111).

The inflation rate in Vietnam is well above the growth in average monthly income for 2007 (12.8%), and so the country is now in a situation where real income is decreasing. The key for Vietnam continuing sustainable economic development lies in the question of how to overcome inflation.

Figure 1-3-110 Vietnam's consumer price index

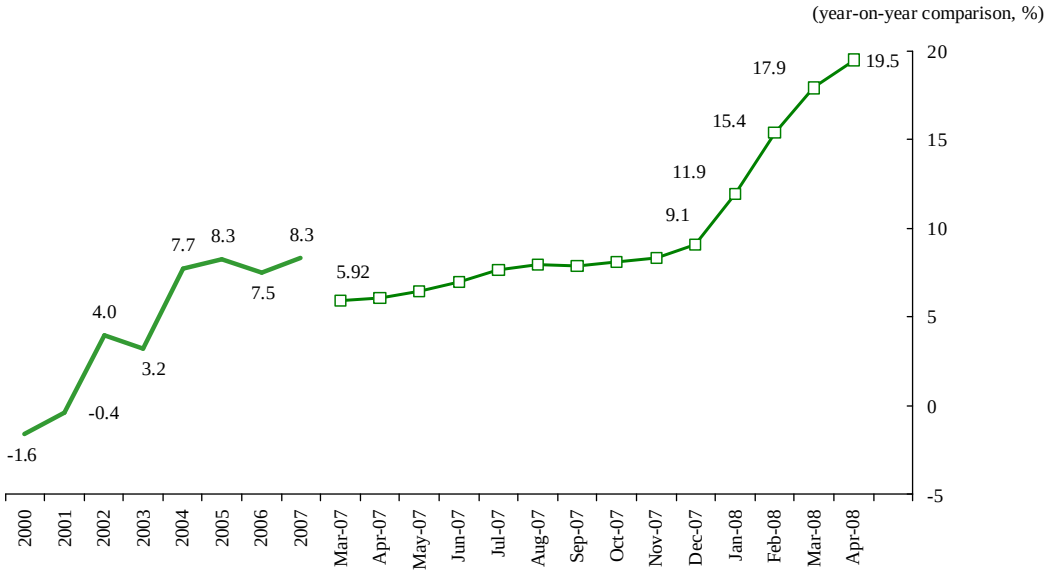
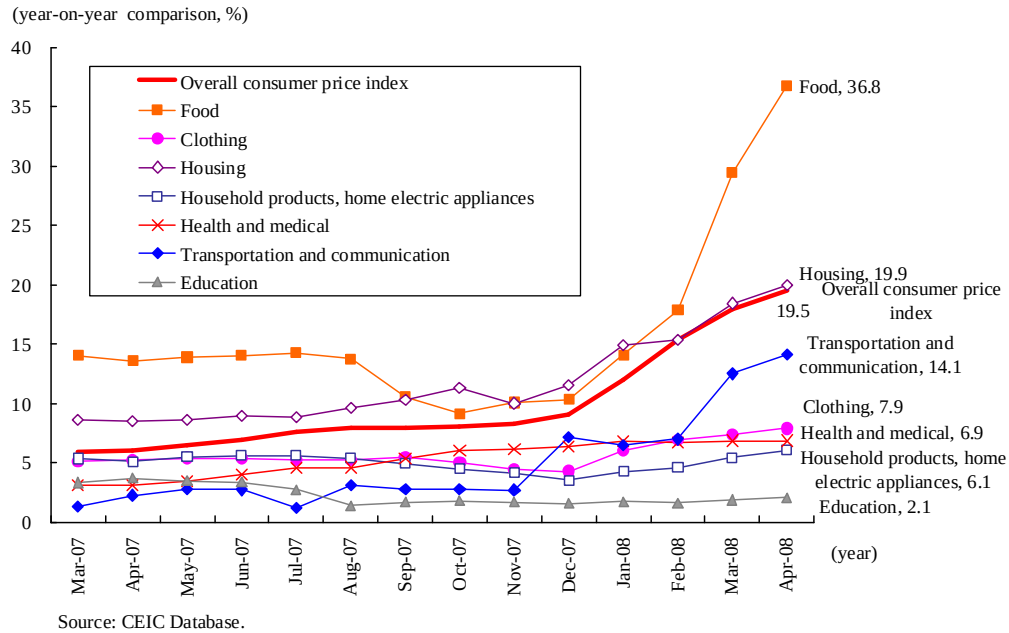


Figure 1-3-111 Changes in Vietnam's price indexes by item (year-on-year comparison)



Source: CEIC Database.

(f) Future outlook

Looking at the results of the survey on the countries and regions that the Japanese manufacturing industry considers promising as future targets of business development, Vietnam has been rising in rank every year; and in the latest 2007 survey, Vietnam had secured third place behind China and India (See Table 1-3-102).

Furthermore, according to a similar survey of Japan's small and medium enterprises (SMEs),[182] Vietnam had secured second place behind China, with nearly 30% of all Japanese SMEs viewing Vietnam as a promising medium-term investment target (see Figure 1-3-112). This suggests that, for the many SMEs in the textile industry and other labor-intensive industries, above all, Vietnam has been attracting attention as a promising investment target.

Figure 1-3-112 Countries and regions viewed by Japanese SMEs as promising medium-term investment targets

	2007 survey		2006 survey		Reason (2006 survey)
1st	China	52%	China	54%	Labor is cheap and abundant (66%)
2nd	Vietnam	29%	Vietnam	17%	Labor is cheap and abundant (73%)
3rd	India	6%	Thailand	7%	Labor is cheap and abundant (57%)
4th	Thailand	6%	India	4%	Qualified human resources can be secured (77%)

Source: Japan Finance Corporation for Small and Medium Enterprise, "7th & 8th CHUUGOKU SHINSHUTSU CHUUSHOUKIGYOU JITTAI CHOUSA"

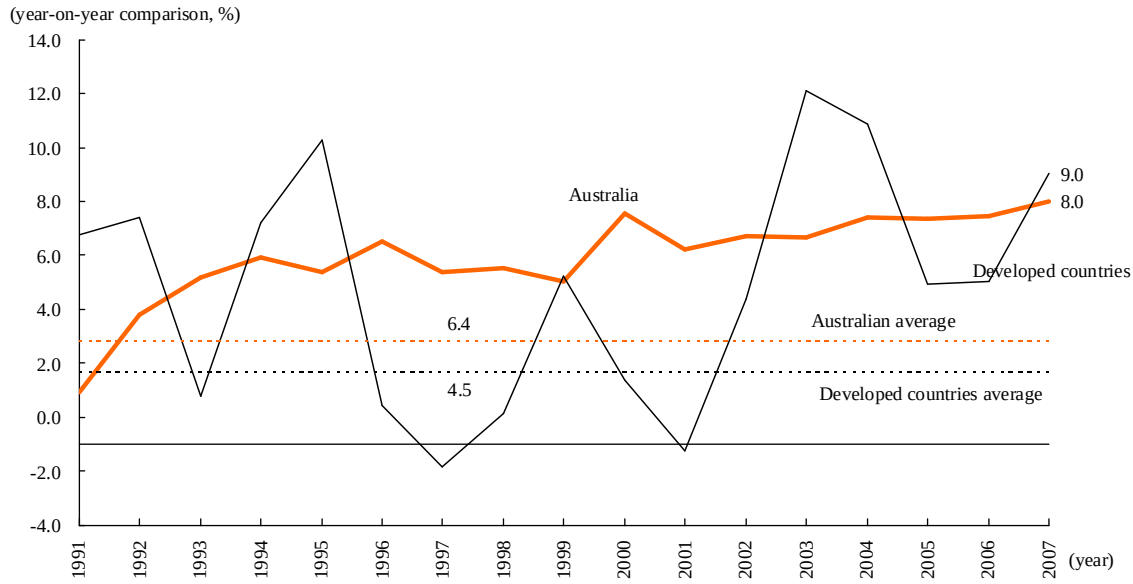
(3) Continuing rapid growth of the Australian economy

At present, Australia has the highest and longest growth among all developed countries. In the 15 years since 1992, nominal GDP has continued to grow at an annual average of 6.4%. This is almost 2 percentage points higher than the average for developed countries (4.5%) (see Figure 1-3-113). Furthermore, in contrast to the average growth rate of developed countries, which has fluctuated repeatedly and enormously during this period, the Australian growth rate has been extremely stable.

As a result of prolonged economic growth, nominal GDP per capita in 2007 was 2.1 times larger than in 1992. The unemployment rate is at the lowest level since 1980 (4.4% in 2007) on account of the stream of new jobs that has been generated.

182 Japan Finance Corporation for Small and Medium Enterprise, "DAI 8-KAI CHUUGOKU SHINSHUTSU CHUUSHOUKIGYOU JITTAI CHOUSA."

Figure 1-3-113 Changes in Australia's nominal growth rate



Note: The broken lines indicate the average annual growth rate between 1992 and 2007. 2007 data are predicted values.
Source: IMF, World Economic Outlook Database, April 2008.

(Strong resource exports)

Australia is one of the world's leading resource-rich countries, producing such resources as iron ore, coal, copper and uranium. It is one of the countries that have most enjoyed the benefits of an increased demand and soaring prices of resources in recent years. In Australia, resource exports account for about 31% of all exports (FY2006-07). Furthermore, in recent years, there has been a surge in the export of Australian coal, iron ore, copper and other minerals to China as it continues to experience rapid economic development.

However, Australia's rapid growth has continued for 15 years, from before the arrival of the resources boom. While the proportion of GDP attributable to the resources development sector has been trending upward in recent years, in FY2006-07, it still only accounted for about 5%. The percentage of workers employed in this sector is also small at 1.3%.

Even looking at the contribution of resource exports to the real GDP growth rate, their contribution to overall growth is minor, hovering around 1 percentage point in recent years.

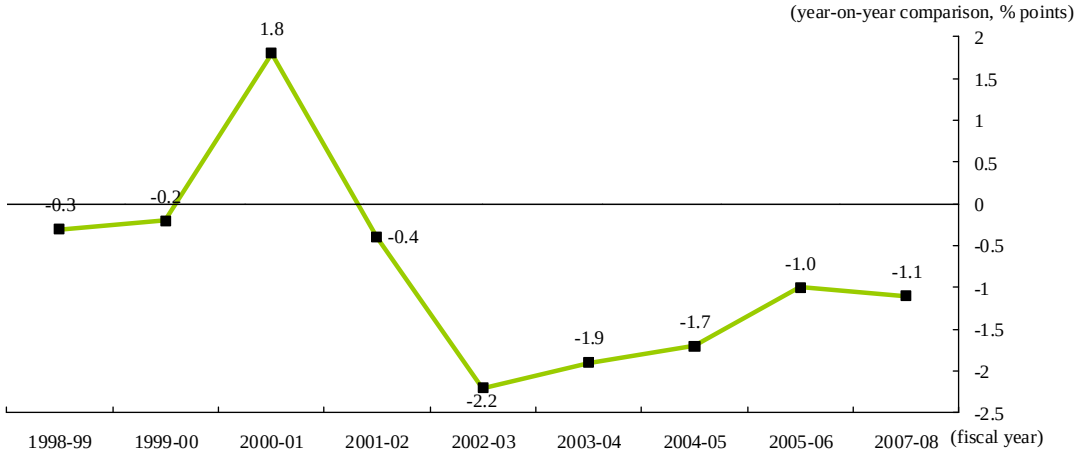
(Growth of the Australian economy supported by domestic demand)

Despite the fact that the contribution of net exports to the growth of real GDP has been negative since FY2001-02 (see Figure 1-3-114), the Australian economy has grown steadily, buoyed by vigorous domestic demand, such as in private final consumption and fixed capital formation (see Figure 1-3-115). Even as the contributions of oil field development and other types of resource development to fixed capital formation have declined in recent years, the contributions of machinery/capital investment and construction related to non-resource development have been increasing. Recently in FY2007, 0.7 percentage points of the 1.3% growth in gross fixed capital formation was due to investment related to non-resource development (see Figure 1-3-116).

Focusing on the contributions of specific industries, we can see that, in recent years, the industries accounting for a large share of real GDP are the five industries of: real estate and business services, resources development, construction, finance and insurance, and health and community. Growth in the real estate and business services industry in particular has been rapid. Its share of real GDP in FY2006-07 was 14.4%, making it Australia's largest industrial sector, ahead of the manufacturing industry which had been at the top in FY 1998-99. On the other hand, there have been declines across the board in the shares of real GDP accounted for by the manufacturing, agriculture, wholesale/retail, electricity and communications industries. The decline in the manufacturing industry's share has been especially prominent, dropping 3 percentage points in eight years, from 15.2% in FY1998-99 to 12.2% in FY2006-07 (see Figure 1-3-117).

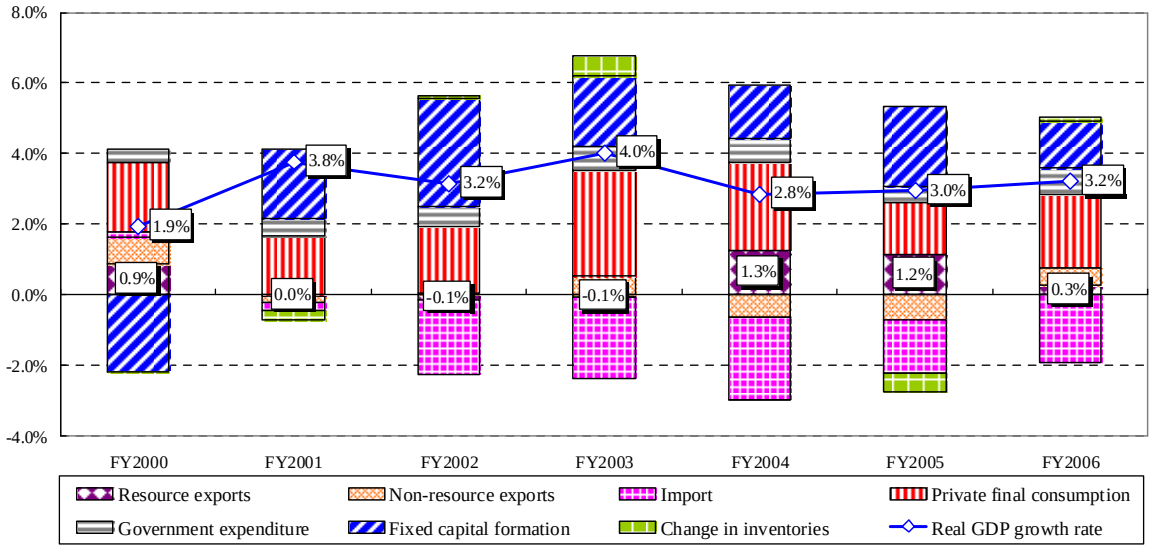
Thus, it seems that Australia's current growth is not export-dependent growth backed by a resources boom, but rather it is growth led by domestic demand, centered around such sectors as real estate investment and construction demand.

Figure 1-3-114 Australia's declining contribution of net exports to growth



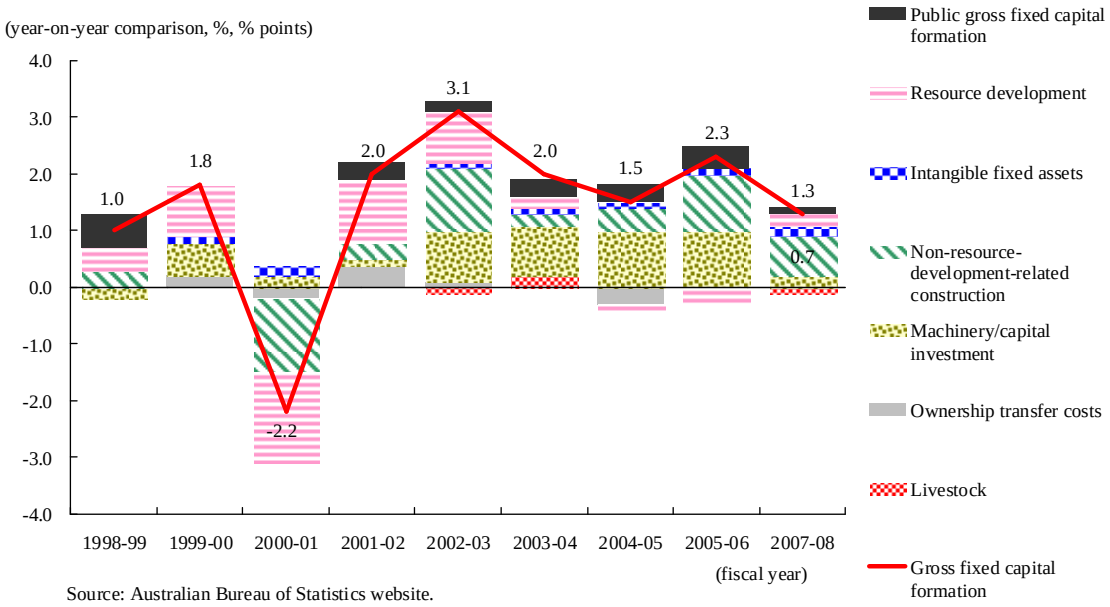
Source: Australian Bureau of Statistics website.

Figure 1-3-115 Australia's real GDP growth rate (contribution by item)



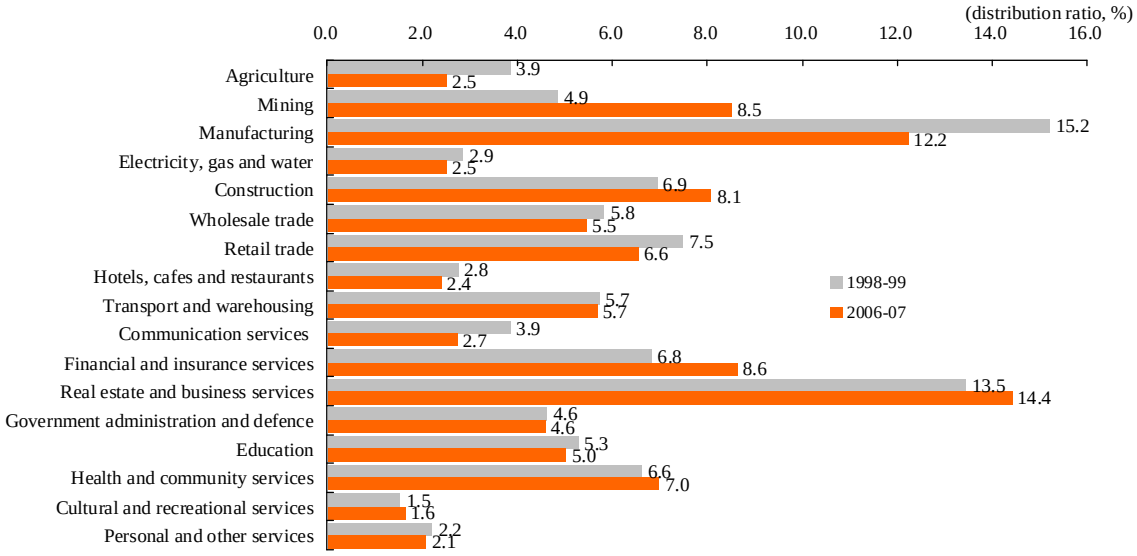
Note: "Resources" comprises base metals (ore) as well as coal, crude oil and natural gas.
Source: Australian Bureau of Statistics.

Figure 1-3-116 Shift in orientation of fixed capital formation in Australia from resource to non-resource development



Source: Australian Bureau of Statistics website.

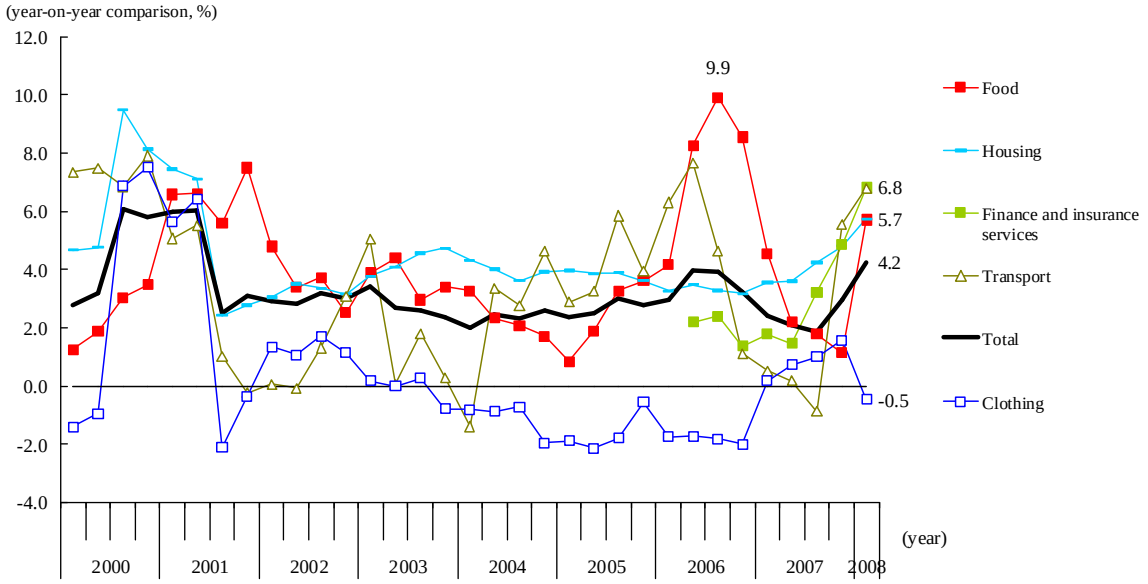
Figure 1-3-117 Changes in the industry shares of Australia's real GDP



(Rising inflationary pressures)

Australia's consumer prices, especially food prices, have continued to soar. Food prices began to surge in the second half of 2005, and by the third quarter of 2006, they had risen 9.9% compared to the same period of the previous year. Following this, growth slowed briefly at the beginning of 2007, but during the recent first quarter of 2008, prices had shot up again (5.7%). Outside of the food sector, upward trends in the housing, finance/insurance services and other sectors have picked up again since the second half of 2007. As a result, during the first quarter of 2008, the consumer price index, which had remained stable at around 3% since 2002, increased to 4.2% compared to the same period of the previous year (see Figure 1-3-118). Inflationary pressures are still strong.

Figure 1-3-118 Changes in Australia's consumer price index



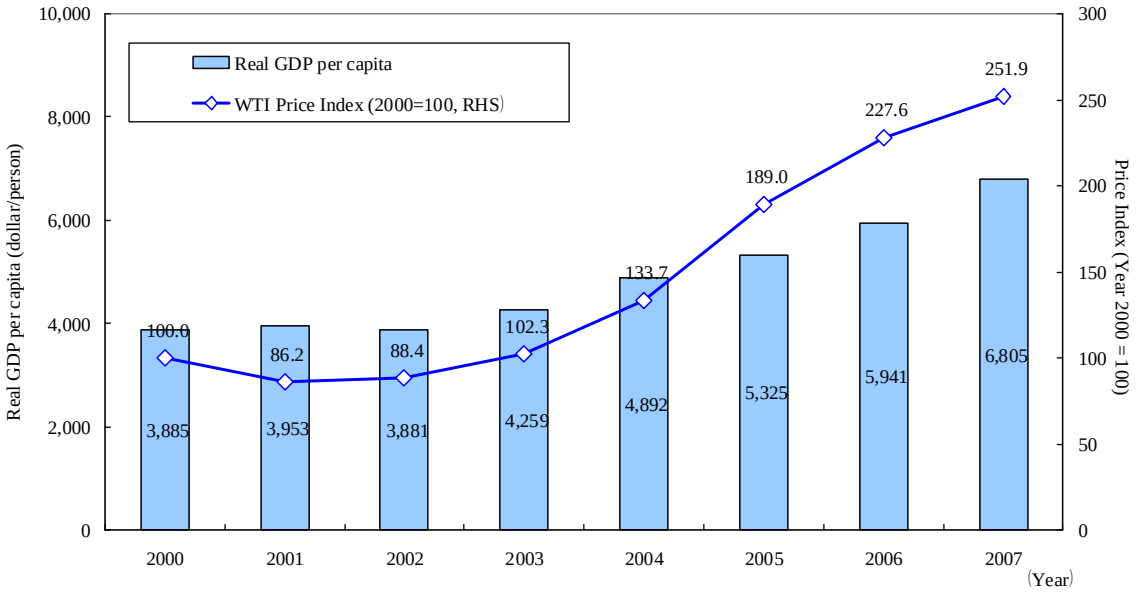
6. Market potential of the economies of resource rich countries (Economies of Russia, Brazil and GCC Countries)

The economies of resource rich countries are growing due to a sharp increase in resource exports, because of the soaring prices of commodities such as crude oil in recent years. This growth has contributed to an increase in national incomes and consumption, resulting in a greater market potential. (see Figure1-3-119). Additionally, in resource rich countries, it has become popular to establish investment funds for investing the foreign currencies earned from resource exports, and foreign currencies are invested aggressively. Thus, the economies in resource rich countries are having a larger share in the world economy.

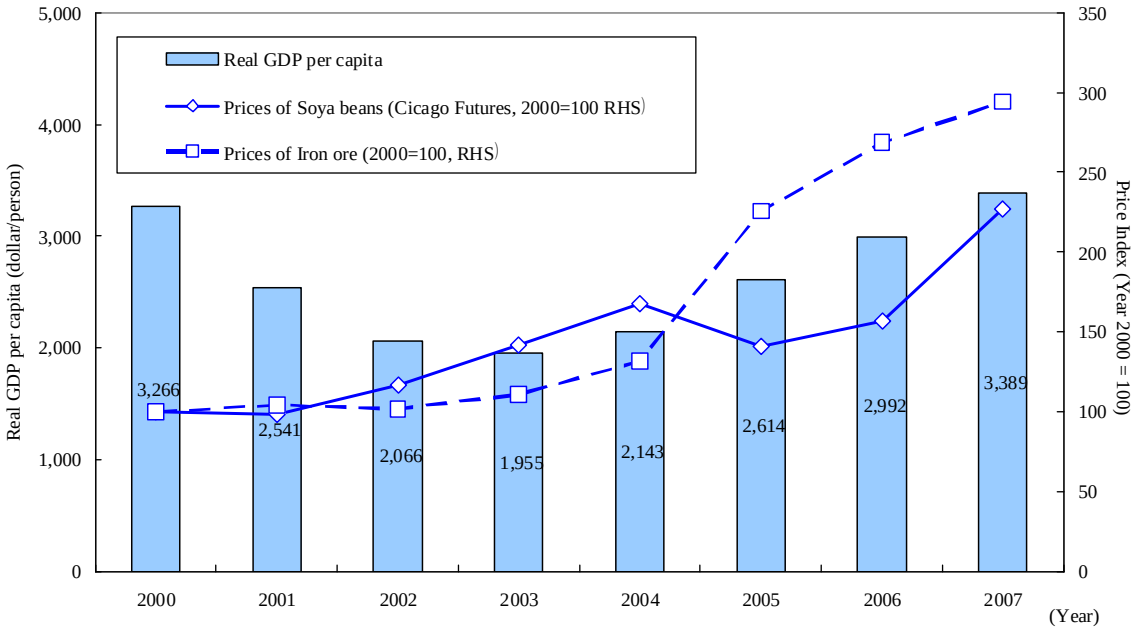
The resource rich countries of Russia, a producer of crude oil and natural gas; Brazil, a producer of iron ore, coal, and so forth; and of the GCC (Gulf Council Cooperation), crude oil producers, are used as examples in examining the current situation, problems, and their market potential in the discussion that follows.

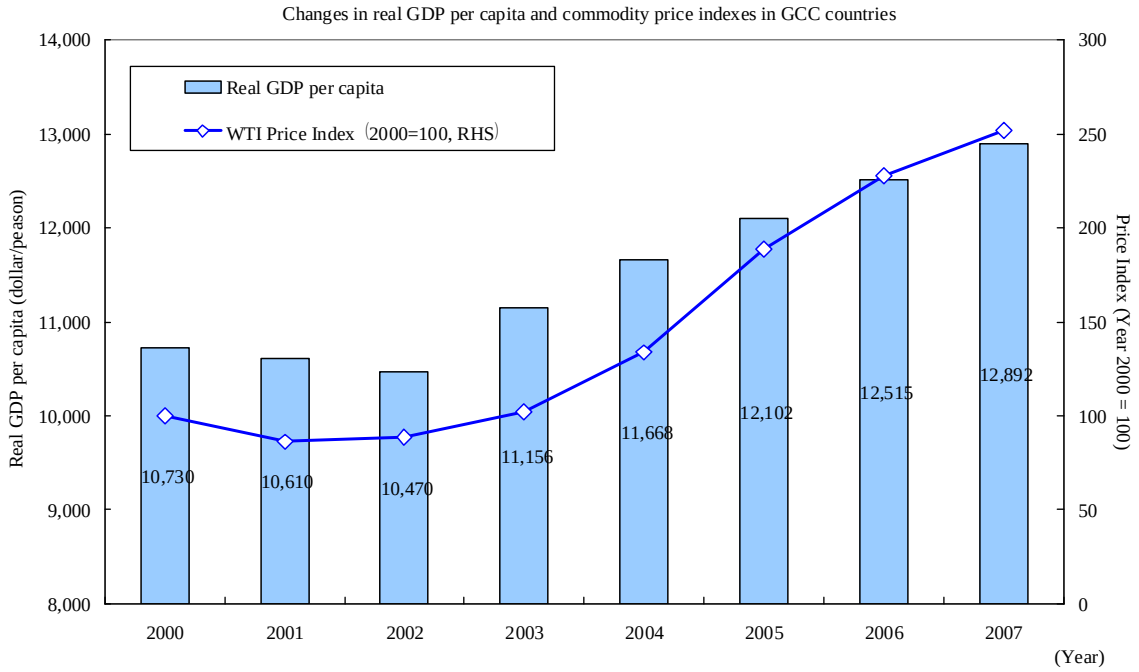
Figure 1-3-119 Changes in real GDP per capita and commodity price indexes in resource countries

Changes in real GDP per capita and commodity price indexes in Russia



Changes in real GDP per capita and commodity price indexes in Brazil



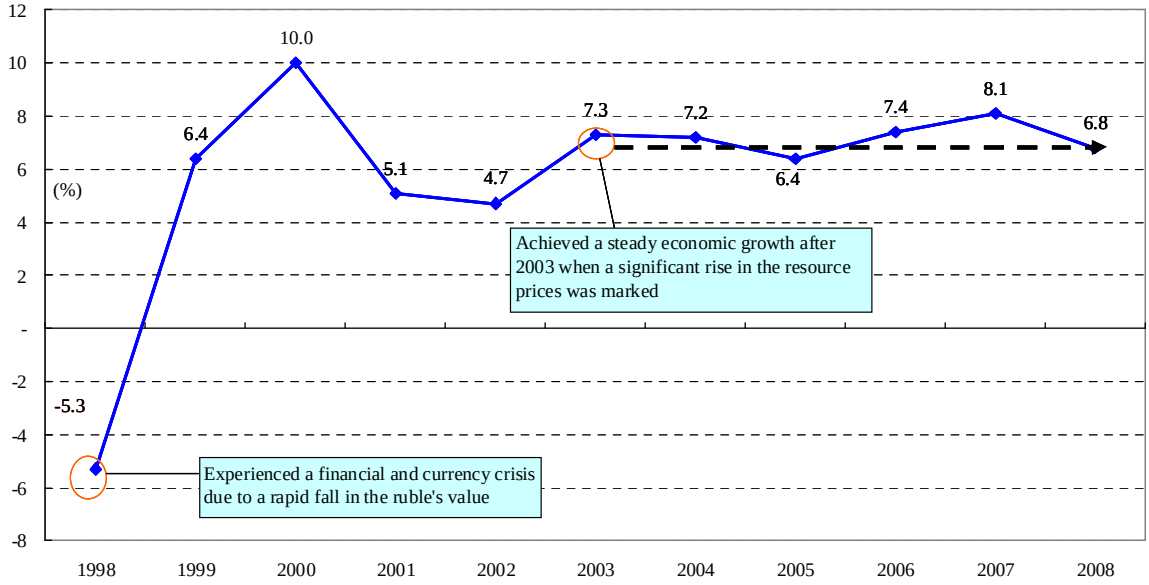


(1) Economy of Russia

(Russia continually achieves high economic growth after a financial and currency crisis)

The Russian economy experienced a financial and currency crisis due to the ruble crisis in 1998, which led to a drastic economic slowdown that resulted in a 5.3% decline of the real GDP growth rate (see Figure1-3-120). Subsequently, the Russian economy made a recovery as a result of price competitiveness gains due to the stabilized value of the ruble and the increase in the international price of primary minerals such as crude oil; it achieved a high growth rate of 10.0% in 2000. This was followed by a significant rise in imports as a result of ruble sales, which temporarily slowed down the economy. However, since 2003 when there was a significant rise in resource prices, the economy has continued to grow steadily at a high rate of around 7%.

Figure1-3-120 Changes in Russia's real GDP growth rate



Note: Including IMF predicted values
Source: IMF(2008), "World Economic Database (April 2008)"

(The Russian economy as a market)

Having achieved rapid economic growth, Russia is attracting attention as a consumer market because of the following reasons.

(a) Russia has a total population of 142.37 million (2005), which is more than that of Japan's 127.76 million (2005). The families with annual income exceeding 5,001 US dollars account for 46.1% of the total population, which means the country has a large population that is considered to comprise buyers[183].

(b) The income level has increased substantially in recent years, thus, the nominal GDP per capita is expected to exceed 10,000 US dollars in 2008[184] (see Figure1-3-121).

(c) The actual increase in consumption and investments is evident from the fact that Russia's import values increased by 2.4 times from 57.4 billion in 2003 to 137.7 billion in 2006[185].

The increases in the itemized import values in 2003 and 2006 were analyzed to track the consumer trend in the Russian market. This analysis revealed that import values rose significantly for most items, including general transport machineries such as cars (14.66 billion US dollars), nuclear reactors and boilers, machines (13.43 billion US dollars), and electrical machines (10.47 billion US dollars) (see Figure 1-3-122).

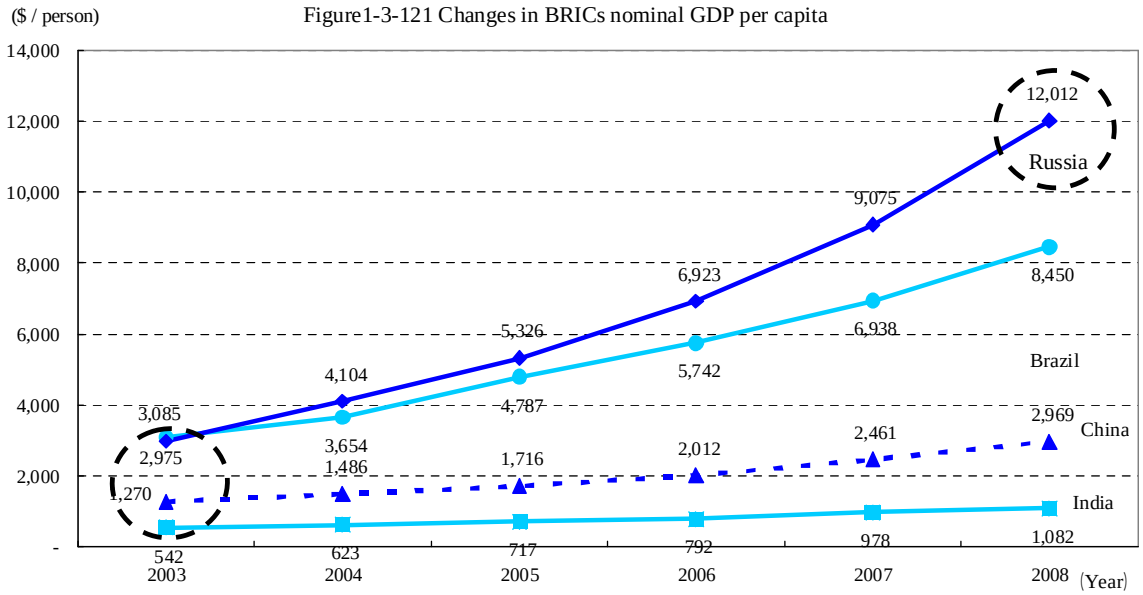
183 Euromonitor International (2007) "World Consumer Lifestyles Databook 2007"

184 Russia's nominal GDP per capita was a relatively low 2.975 thousand dollars in 2003 when resource prices rose significantly. However, since it exceeded Brazil's nominal GDP per capita in 2004, Russia has continued to mark the highest nominal GDP per capita among BRICs.(IMF's World Economic Outlook Database [April 2008])

185 UN "Comtrade"

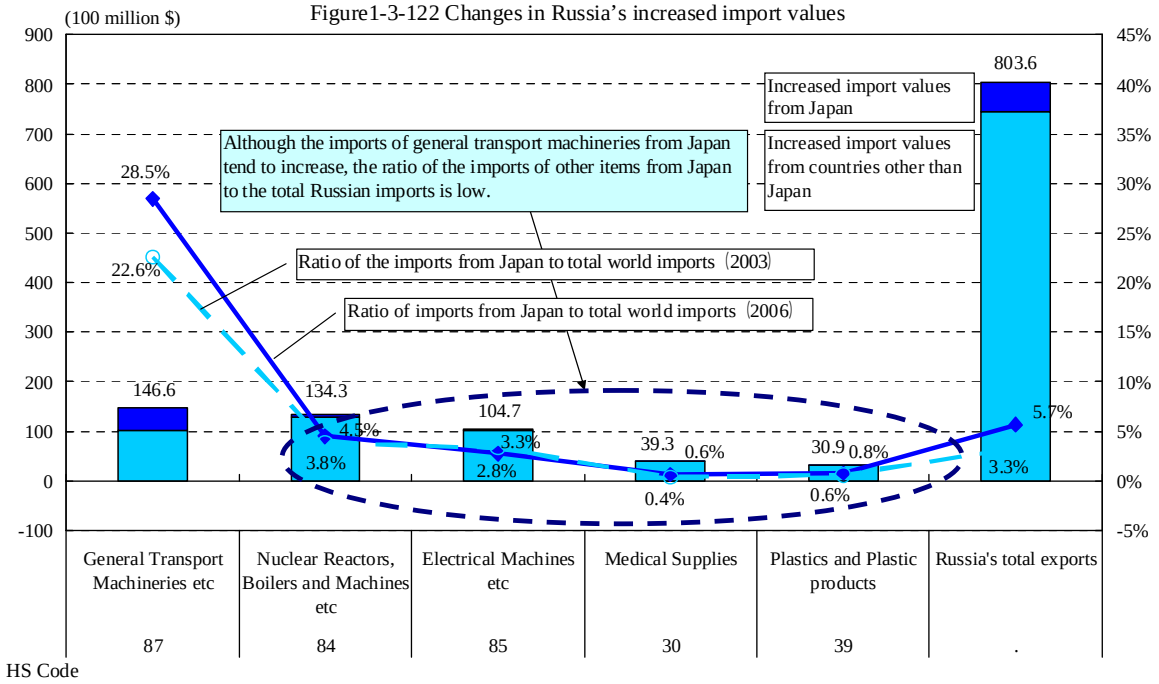
Meanwhile, an analysis of the itemized import values from Japan reveals that the import values of general transport machineries, and so forth, increased to 4.41 billion, and its ratio to Russia's import values also increased. However, as the import values of the other items were not significant[186], Japan has not yet received the full benefit of Russia's expanded consumer market.

Figure1-3-121 Changes in BRICs nominal GDP per capita



Note: IMF predicted values are included and estimated values are used for India after 2003, Brazil after 2005, Russia and China after 2006.
Source: IMF(2008), "World Economic Outlook Database (April 2008)"

Figure1-3-122 Changes in Russia's increased import values



186 In terms of electrical machines, and so forth, the increased import values for Russia are 10.47 billion dollars while the increase of import values from Japan was only 260 million dollars.

Russia's increased import values

HS Code	Import Items	Total import values (100 million $)			Import values from Japan (100 million $)			Ratio of Japan	
		2003	2006	Increased values	2003	2006	Increase values	2003	2006
87	General Transport Machineries etc	40.1	186.7	146.6	9.1	53.2	44.1	22.6%	28.5%
84	Nuclear Reactors, Boilers and Machines	84.4	218.6	134.3	3.2	9.8	6.6	3.8%	4.5%
85	Electrical Machines etc	43.9	148.6	104.7	1.5	4.1	2.6	3.3%	2.8%
30	Medical Supplies	22.9	62.2	39.3	0.1	0.4	0.3	0.4%	0.6%
39	Plastics and Plastic products	18.6	49.5	30.9	0.1	0.4	0.3	0.6%	0.8%
72	Iron and Steel	11.7	35.8	24.1	0.0	0.3	0.3	0.2%	0.9%
73	Iron and Steel products	14.3	37.5	23.2	1.3	1.7	0.4	9.2%	4.6%
02	Meat and Scrap Meat for as food	22.1	45.0	22.9	0.0	0.0	0.0	0.0%	0.0%
90	Optical, Photographic, Precision and Medical equipments etc	18.2	39.1	21.0	1.9	4.0	2.1	10.5%	10.3%
08	Edible Fruits	11.3	29.7	18.3	0.0	0.0	0.0	0.0%	0.0%
	Others	285.9	524.2	238.3	1.6	3.9	2.3	0.6%	0.8%
Total		573.5	1,377.0	803.6	18.8	77.9	59.1	3.3%	5.7%

Source: UN "COMTRADE"

(Japanese products penetrating the market)

Owning a car has become popular in Russia as a result of its citizens' increased income. Car sales have been growing rapidly and Japanese used cars are very popular as they are technically sophisticated and infrequently fail. In terms of agricultural products, there are some Japanese trading companies expanding the exports of apples and watermelons from Japan to Russia in cooperation with local fruit and vegetable traders[187].

Moreover, there are some commercial growers, which have started exporting flowers from Japan[188].

Flowers from Europe have been distributed mainly in the Far East thus far. However, these goods from Europe lose their freshness en route to their destination. Flowers exported from Japan, on the other hand, have a competitive edge when it comes to preserving freshness[189]. From now on, attention will be focused on whether Japan can expand its market share as an alternative provider of flowers. In addition, fruits such as persimmon are also exported using such distribution routes, and other fruits such as melons are expected to be exported in the future.

Furthermore, there have been attempts to export Japanese rice on a large scale in recent years[190]. At present, Japanese rice has become more popular in Russia and the number of Japanese restaurants

187 The chairman of the local society of commerce and industry says that he is considering opening satellite shops to sell vegetables and fruits from Japan in supermarkets in Vladivostok, Russia, which has an increasing number of wealthy people.

188 In Russia, it is the custom for men to send flowers to women on International Women's Day in March. Taking advantage of this custom, tulip growers from Niigata prefecture have been increasing their exports. The exports to Khabarovsk began on a trial basis in 2004 and the commercial export quotas of 100 thousand tulips began in 2006.

189 The distance between Niigata and Khabarovsk is about two hours by airplane, an important advantage for tulips since preserving their freshness is very important. In addition, while tulips from Holland last only a few days, tulips from Niigata are long-lasting (9 days to 15 days) and are of much better quality.

190 The federal inspection service in Russia completely suspended the issuance of quarantine certificates for imported rice because of safety and quality problems that occurred with 2,000 tons of imported rice; it also issued a notice that previously issued quarantine certificates were invalid. Although this complete suspension was revoked on December 12th, the importation of rice was limited to three authorized customs depots in St. Petersburg, Novorossiysk and Kaliningrad, located in the west of Russia. This is because quality inspection equipment is installed at these three customs depots. However, as none of the

has increased to around 500. As this trend continues, there will be a rise in demand for Japanese rice. Therefore, it is necessary to pay attention to Russia as a potential export market for agricultural products.

(Challenges to the potential of the Russian market)

Although the Russian market has achieved high economic growth rates, there are some challenges that need to be addressed.

○ **Rapid Population Decline**

First of all, one of the challenges faced by the Russian market is rapid population decline. The population in Russia has been decreasing since the mid-1990s. The average population growth rate from 2005 to 2015 is expected to be -0.2% for Japan and -5.3% for Russia[191], which indicates that the population of Russia is estimated to decrease more rapidly than that of Japan (see Figure 1-3-123).

In its state of the nation address (May 2006), the Russian government emphasized the need to address the population movement issue in relation to the population decline and has taken various measures such as an increase in subsidies to couples who have children in an effort to increase the birthrate as well as incentives to promote voluntary emigration of Russian people who reside in the CIS

(Commonwealth of Independent States).

At the Japan-Russia summit meeting held in June 2006, Japan made a proposal entitled “An initiative regarding the strengthening of cooperation between Japan and Russia in Far East Russia and East Siberia” in relation to Far East Russia and East Siberia where the populations have declined significantly and consideration has been given to strengthening cooperation between Japan and Russia in eight areas including transport, energy, and information and telecommunications[192].

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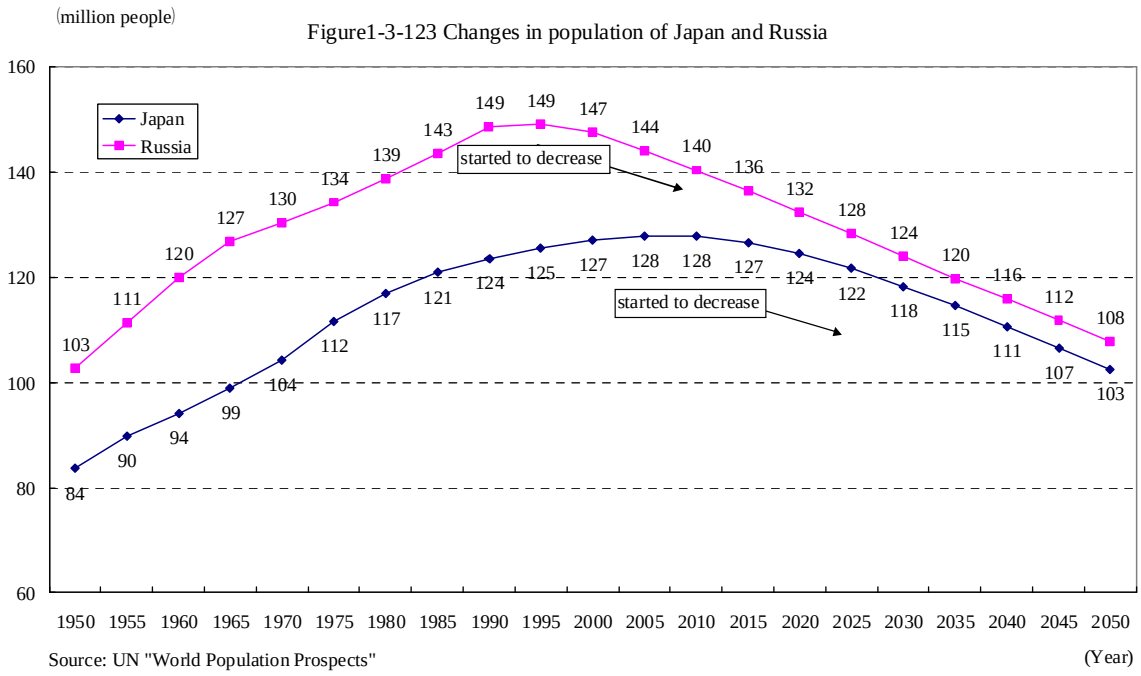
customs depots in Far East Russia was designated as an authorized depot, some consider that Russia may intend to restrict imports from Asia. Further, since there is a move to prevent the importation of agricultural, forestry and fishery products, close attention should be paid to where it goes from here.

191 UN “World Population Prospects”

192 The development, through these efforts, of East Siberia and Far East Russia which are geographically close to Japan provide Japanese companies with an advantage when they expand their business into Russia. In addition, in cooperation with Japan, Russia has started exploring oilfields in East Siberia; as a result, Russia’s crude oil exports to Japan have increased. Consequently, the relationship between Russia and Japan is expected to become even closer.

Figure1-3-123 Changes in population of Japan and Russia



Source: UN "World Population Prospects"

○ **Resources dependent exports**

Moreover, the other challenge that needs to be addressed is Russia's overdependence on its natural resources as a means of obtaining foreign currency. Russia is the one of the world's largest resource rich countries and, apart from the Middle East, in 2006, held the largest crude oil reserves, 6.6%, the world's largest natural gas reserves of 26.3%, and the world's second largest coal reserves of 17.3%. As a result of the rise in resource prices, fuel and energy products (crude oil, crude oil products and natural gas) accounted for 50.3% of total exports in 2000, compared with 43.3% in 1999, directly after the financial and currency crisis; their share of total exports further increased to 65.6% in 2006. In 2006, the exports of crude oil alone accounted for 32% of total exports. This indicates how much the high growth rate of the Russian economy relies on resources. The Russian government is conducting a review of the existing resource dependent industrial structures.

For instance, in industries other than resource related industries such as the automobile and high technology industries, Russia takes a progressive approach by inviting foreign capitals in order to promote industrial recovery. In recent years, special economic zones including the technology introduction zone, the industrial manufacturing zone, the tourism zone, and ports and harbors zone have been created to provide tax breaks, such as a reduction in customs duties and corporate taxes, and to promote industrial development.

Further, the newly elected Russian president Medvedev proclaimed that he would give priority to small and medium enterprises including manufacturing industries.

There is an increase in investment from abroad into industries other than the resource related industries, such as the process and manufacturing industries[193]. Thus, the Russian economy shows

193 Moreover, there was an increase in the import values for such equipment as nuclear reactors and boilers, and electrical machines, which were to be used for industrial purposes.

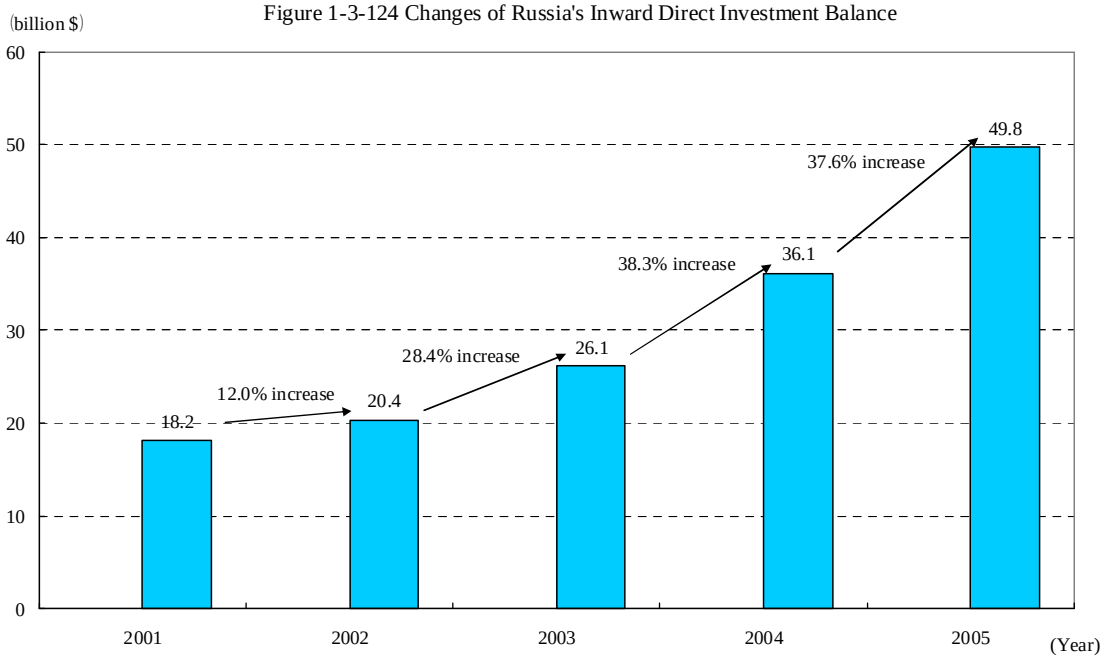
signs of increasing industrial diversification, and the adaptation of the Russian industrial structure is expected to proceed smoothly (see Figure 1-3-124).

In 1998, Russia plunged into a financial and currency crisis due to budget deficits and a decline in resource prices, which led to defaults and capital flights. Ten years have since passed, and Russia has achieved an economic turnaround; in 2000 it recovered from the 1998 budget deficit of 86.5 billion rubles, and in 2007 it recorded a budget surplus of 1501.8 billion rubles. At present, Russia is promoting economic policies that will stabilize its finances so that it can maintain the stability of the State and support the adaptation of its industrial structure through foreign capitals, while at the same time preventing capital flights similar to the one that occurred at the time of the crisis.

Taking advantage of a budget surplus, Russia established the oil stabilization fund in 2004, in preparation for a decline in resource prices; by the end of January 2008, the fund had grown to 157.3 billion dollars[194].

Meanwhile, the Russian government is working on exerting greater influence over resource prices by implementing a strategy of resource nationalization in relation to the resource related industries. Henceforth, there will be a greater focus on strengthening the nation's involvement in its resources.

Figure 1-3-124 Changes of Russia's Inward Direct Investment Balance



Source: Institute for International Trade and Investment "SEKAI SYUYOUKOKU NO TYOKUSETU TOUSHI SYUUKEIHYOU"

○ High rate of inflation

The inflation rate in Russia reached a high of 9.7% in 2006 because of the increased exports resulting from a rise in the resource prices etc. Since 2000 and 2001 when the inflation rate exceeded 20%, it has been on a declining trend. However, it should be more closely monitored.

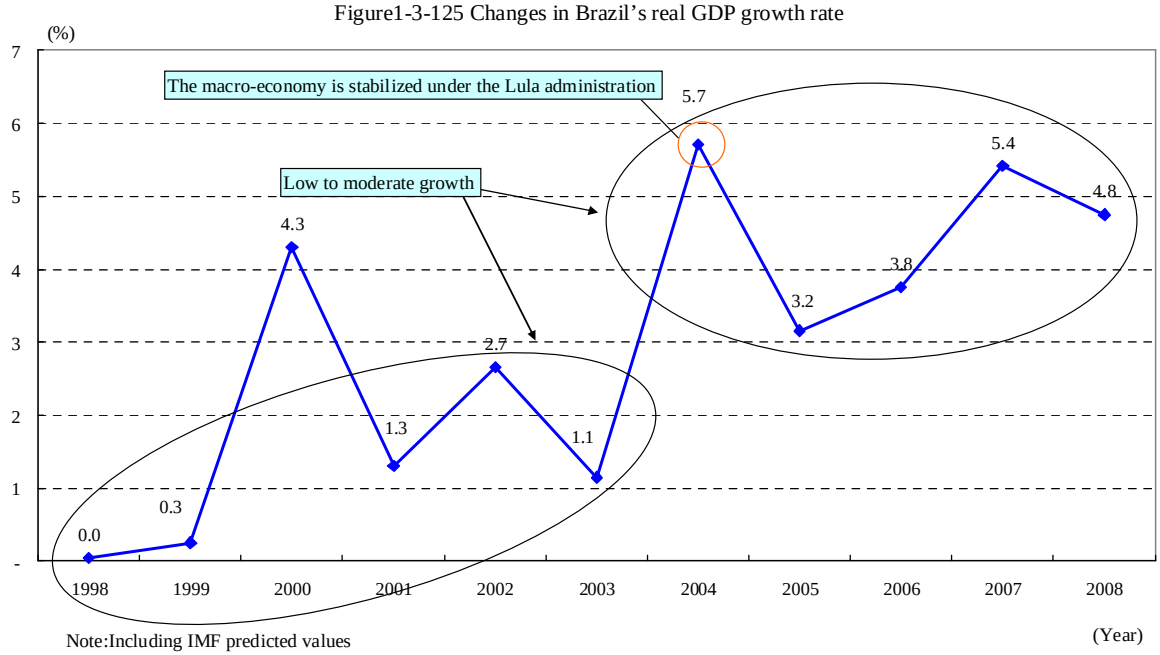
○ Economy of Brazil

194 The fund was divided into the provident fund and the national welfare fund in February 2008.

(Brazilian economy developed in the macro-economy)

Brazil experienced relatively low economic growth from 2001 to 2003. However, after it implemented new economic austerity measures in 2003, it was able to achieve balanced budgets and a stabilized macro-economy under the Lula administration. The economy has successfully grown since 2004 (see Figure 1-3-125).

Figure1-3-125 Changes in Brazil's real GDP growth rate



Note:Including IMF predicted values
Source: IMF "World Economic Outlook Database (April 2008)"

(Brazilian economy as a market)

The Brazilian economy is also attracting attention as a consumer market for the following reasons.

(a) Brazil has a total population of 186.83 million people (2005), which is more than that of Japan and Russia. The families with annual income exceeding 5,001 dollars account for 33.5% of the total population, which means the country has a large population considered to be buyers.

(b) The nominal GDP per capita was 3,085 dollars in 2003. However, it drastically increased to 5,715 dollars in 2006.

(c) Brazil's import values nearly doubled from 48.3 billion in 2003 to 91.3 billion in 2006.

This import surge seems to be attributable to an increase in exports due to a rise in prices for mineral resources such as iron ore, and food resources such as sugarcane[195, 196].

195 In recent years, the demand for sugarcane has been increasing as it can be used as an ingredient in ethanol.

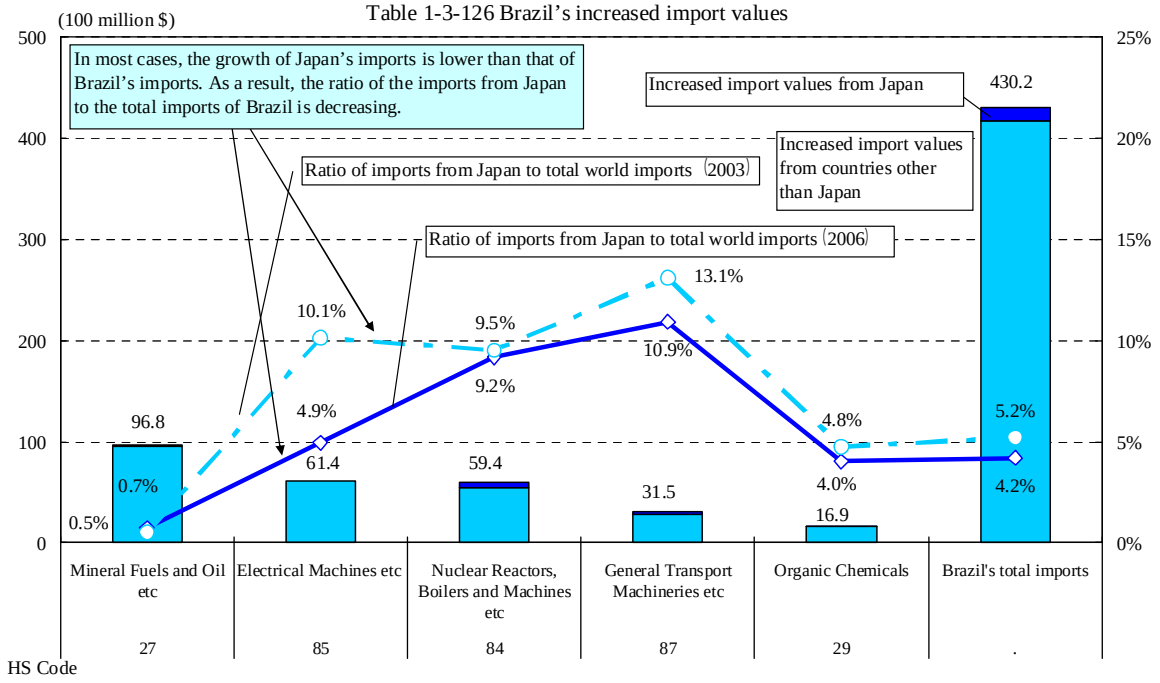
196 The export values of iron ore increased from 3.456 billion in 2003 to 8.949 billion in 2006. In addition, in terms of ethanol which is attracting attention as an alternative to fossil fuels, Brazil accounts for 32.3% of the world total output, which is second only to that of the United States. (Kato, N. (2008), "BRAZIL SEKAI NO BIONENRYOU SEISAN KITIKA NO HAIKEI TO KOUKYOU KAKUDAI NO HEIGAI") In response to the climate change issues, the demand for ethanol is expected to increase. When President Lula da Silva visited Sweden in September 2007, the EU affirmed that it would take the necessary steps to cut customs duties on ethanol.

(Trends in the Brazilian Market)

In order to analyze the trends in the Brazilian market, itemized increased import values in 2003 and 2006 were compared and this revealed that imports, including mineral fuels and oils, and electric machineries had increased (see Figure 1-3-126). However, in terms of the imports from Japan, the imports of most major items have not increased. As a result, the ratio of the imports from Japan to Brazil's total imports has been decreasing.

The exports from Japan to Brazil were only 1.32 billion, whereas Brazil's total imports increased to 4.302 billion over the period 2003–2006 as a result of high economic growth. Therefore, as in the case of Russia, Japan has not yet benefited fully from Brazil's expanded market.

Table 1-3-126 Brazil's increased import values



Brazil's increased import values

HS Code	Import Items	Total Inport Values (100 million dollars)			Inport values from Japan (100 million dollars)			Ratio of Japan	
		2003	2006	Increased values	2003	2006	Increased values	2003	2006
27	Mineral Fuels and Oil etc	74.6	171.4	96.8	0.4	1.3	0.9	0.5%	0.7%
85	Electrical Machines etc	67.7	129.1	61.4	6.9	6.4	-0.5	10.1%	4.9%
84	Nuclear Reactors, Boilers and Machines	77.9	137.3	59.4	7.4	12.6	5.2	9.5%	9.2%
87	General Transport Machineries etc	25.2	56.7	31.5	3.3	6.2	2.9	13.1%	10.9%
29	Organic Chemicals	31.1	48.0	16.9	1.5	1.9	0.5	4.8%	4.0%
90	Optical, Photographic, Precision and Medical equipments etc	18.2	35.0	16.9	1.6	2.6	1.0	8.6%	7.4%
39	Plastics and Plastic products	18.5	34.1	15.6	0.6	0.9	0.3	3.2%	2.7%
74	Copper and Copper products	3.8	16.2	12.5	0.1	0.0	-0.0	1.6%	0.3%
26	Lime, Slag and Ash	3.3	14.8	11.5	0.0	0.0	-0.0	0.6%	0.0%
30	Medical Supplies	15.1	26.1	11.0	0.2	0.2	-0.0	1.5%	0.8%
	Ohters	147.9	244.5	96.6	3.3	6.2	3.0	2.2%	2.5%
Total		483.3	913.4	430.2	25.2	38.4	13.2	5.2%	4.2%

Source：UN COMTRADE

(Potential of the relationship with Japan)

The fact that Brazil has a large Japanese population should make it easier for Japanese companies to set up business in Brazil. Japanese Brazilians can act as a bridge between the two countries that will compensate for cultural and language differences. Companies that expand their businesses in Brazil often employ those with Japanese ancestry, and no significant problems have been reported. Trust, which those with Japanese ancestry established over a long period, is considered to have a favorable effect on the business activities of Japanese companies in Brazil.

In addition, Brazil and Japan is geographically located on the opposite side of the earth, and there is a 12-hour time difference between the two countries. Taking advantage of this time difference, some Japanese companies located in Japan outsource part of their systems administration to Brazil in order to conduct 24-hour remote monitoring services.

(Future potential of Brazilian market)

Brazil has a high ratio of industrial product exports[197], and in terms of industrial structures, the service industry accounts for 55% of the country's nominal GDP (2006). Thus, the Brazilian economy is less dependent on resources than the economies of Russia and the GCC countries are.[198] The Brazilian market is expected to show relatively steady growth.

However, there are some significant challenges that need to be addressed with regard to the future potential of the Brazilian market. One of the challenges is the issue of poverty. The Gini coefficient, which is a measure of the poverty disparity gap, for Brazil was 0.566[199] in 2005, and the population ratio of people living on a dollar or less a day in 2003 was 8% in Brazil compared to 3% in Argentina; this indicated that the percentage of people living in poverty in Brazil was higher than in Argentina.

Moreover, with regard to inflation, Brazil had experienced a significant commodity price boost of 14.8% by 2003, followed by a relatively steady change, of 6.6% in 2004, and 4.2% in 2006. In the future, Brazil's exports may expand due to a significant rise in resource prices, and its commodity prices may soar as a result of rapidly increasing foreign currency inflows due to export expansion. Therefore, it should be given closer attention.

○ **Economies of GCC countries**

(GCC countries continually achieve high economic growth rates because of a significant increase in the price of crude oil)

The GCC (Gulf Cooperation Council) countries have achieved a high economic growth rate in recent years (see Figure 1-3-127). Crude oil production of the GCC countries accounted for 22.3% of

197 With regard to the exports of Brazil in 2006, completed products such as cars and airplanes (industrial products) accounted for 54.3% of total exports, while primary products such as iron ore, crude oil and soy beans accounted for 29.3%.

198 According to Funaki, M.(2007) "BRAZIL: KYODAI YUDEN HAKKEN DE SEKIYU SEISAKU NI EIKYOU?", the Brazilian state-owned oil company, Petrobras, announced that the recoverable reserves of crude oil and natural gas in the Tupi oil and gas field off the coast of Rio de Janeiro are 50 to 80 billion barrels of oil equivalent. It seems that the discovery of this field will transform Brazil from being an oil producing country achieving self-sufficiency in oil into an oil producer capable of providing oil to the world market.

199 Even China whose poverty gaps have become the most significant problem in Asia marked only 0.469. It indicates how serious the problem is in Brazil.

the world total (excluding Bahrain) in 2006 and the export value rose sharply and nearly tripled from 164.3 billion dollars (2000) to 421.2 billion dollars (2006). Particularly, the export values from 2003 to 2006 when the price of crude oil rose significantly showed a very high increase, an average annual increase of 30.6% (see Figure 1-3-128).

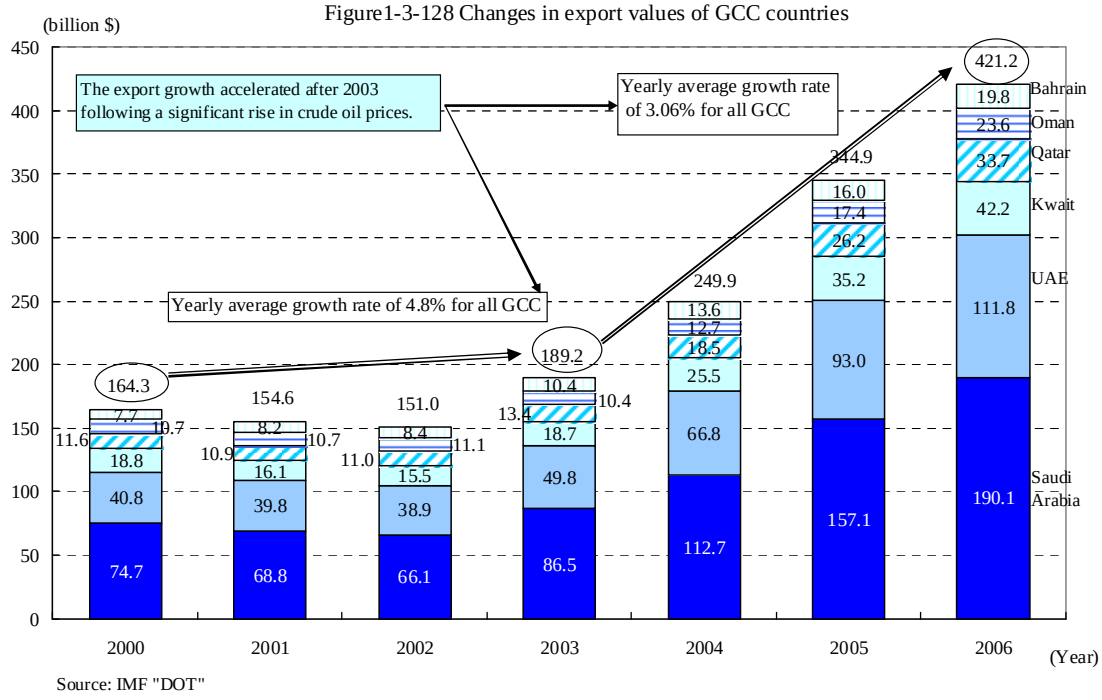
Table1-3-127 Changes in real GDP growth rates of GCC countries

(year-to-year basis)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bahrain	4.8%	4.3%	**5.2%**	**15.1%**	**5.2%**	**7.2%**	**5.6%**	**7.9%**	**6.5%**	**6.6%**	**6.2%**
Kuwait	3.7%	-1.8%	4.7%	0.2%	3.0%	**17.3%**	**10.7%**	**11.4%**	**6.3%**	4.6%	**6.0%**
Oman	2.7%	-0.2%	**5.5%**	**7.5%**	2.6%	2.0%	**5.3%**	**6.0%**	**6.8%**	**6.4%**	**7.4%**
Qatar	**9.0%**	**5.5%**	**10.9%**	**6.3%**	3.2%	**6.3%**	**17.7%**	**9.2%**	**10.3%**	**14.2%**	**14.1%**
Saudi Arabia	2.8%	-0.7%	4.9%	0.5%	0.1%	**7.7%**	**5.3%**	**6.1%**	4.3%	4.1%	4.8%
UAE	0.1%	3.1%	**12.4%**	1.7%	2.6%	**11.9%**	**9.7%**	**8.2%**	**9.4%**	**7.4%**	**6.3%**

Source: IMF "World Economic Outlook Database (April 2008)"

Figure1-3-128 Changes in export values of GCC countries



Source: IMF "DOT"

(GCC countries maintaining higher income level than Asian countries)

The real GDP per capita growth rates of the GCC countries have significantly increased in recent years (see Figure 1-3-129). For example, Saudi Arabia, a country with the largest population in the GCC countries, of 23.61 million, had stable and high real GDP per capita growth rates from 2003 to 2006. In addition, in view of the nominal GDP per capita of the GCC countries, these are the markets capable of buying high-value added products when compared to Asian countries (see Figure 1-3-130). Therefore, the GCC countries are considered to be promising markets for Japanese companies.

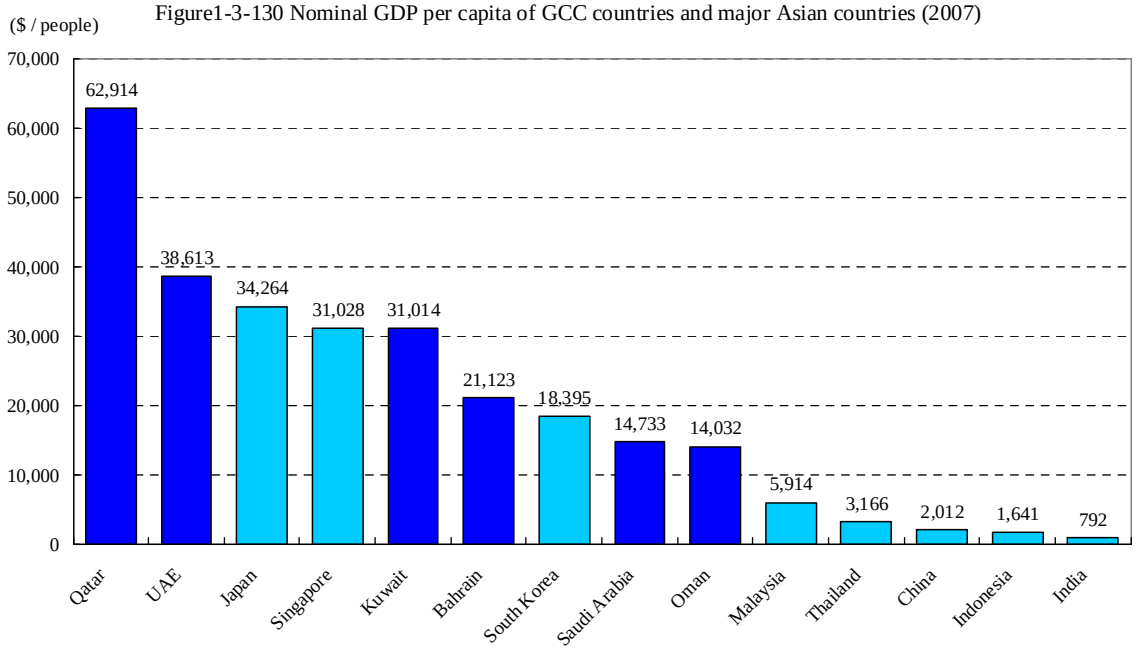
Table1-3-129 Changes in real GDP per capita growth rates of GCC countries

(year-to-year basis, %)

	2003	2004	2005	2006	2007
Bahrain	5.7	4.2	5.7	4.5	4.5
Kuwait	11.5	2.4	2.6	-0.1	0.6
Oman	1.4	4.5	4.8	5.1	5.4
Qatar	1.2	11.7	3.8	4.8	2.9
Saudi Arabia	5.1	2.9	3.4	1.8	1.6
UAE	5.5	3.6	-0.9	6.2	1.2

Source:IMF(2008) "World Economic Outlook Database April 2008"

Figure1-3-130 Nominal GDP per capita of GCC countries and major Asian countries (2007)



Source: IMF "World Economic Outlook Database (April 2008)"

(Current import situation of major GCC countries)

The import values of the GCC countries have been increasing because of increased income resulting from a significant rise in crude oil prices. The total import value more than tripled from 75 billion dollars (2000) to 236.7 billion dollars (2006), which exceeded the growth of exports (see Figure 1-3-131). On the other hand, the growth of the imports from Japan is lower than that of each GCC countries' growth in imports. As a result, the ratio of the imports from Japan to the total imports of each GCC country has been dropping.

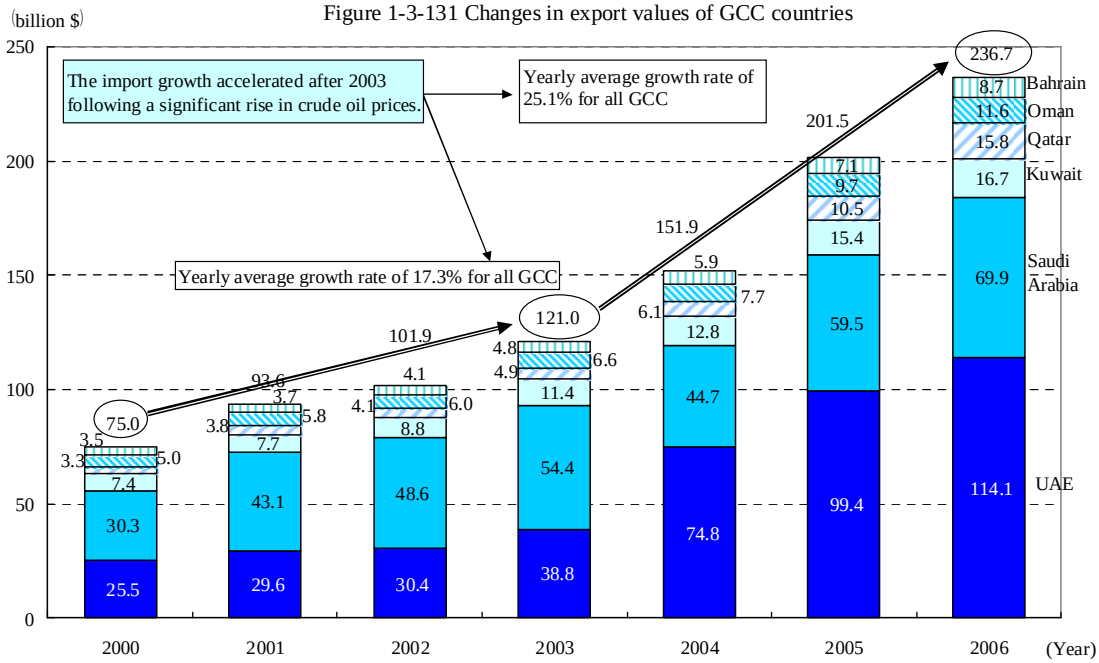
In terms of the import values of the most populous state in the GCC countries, Saudi Arabia, in 2006, the top three import partners for Saudi Arabia were the United States (14.7%), China (8.7%) and Germany (8.2%), and in 2006 the countries showed a year on year increase of 11.2%, 31.4% and 12%, respectively. Thus, as the total imports of Saudi Arabia increased, the imports from those countries also steadily increased. However, the growth rate of the exports from Japan (8%) was -0.7% and its export values decreased[200].

In terms of the imports of the United Arab Emirates as the second most populous country after Saudi Arabia, the top import partners (2005) were U.K. (115%), China (29.9%), U.S. (108.6%), India

200 Zaidanhoujin Sekaikeizaijyouhou Service (2008a) "ARC REPORT 2007 SAUDI ARABIA"

(25.4%), and Germany (21.1%), and the year on year growth rates of imports among those countries has increased drastically. However, the growth rates of the exports from Japan stayed at 5%[201].

Figure 1-3-131 Changes in export values of GCC countries



Source: IMF "DOT"

(Economic developments of GCC countries)

The crude oil export values of the GCC countries including Saudi Arabia, which are some of the world's largest crude oil producers, accounted for 90.1% (2006) of total export values. Their economies, which are overly dependent on resources for acquiring foreign currency, continue to boom while the resource prices keep rising. However, when the resource prices decline drastically it reduces their purchasing power and as a result economic growth may be sluggish.

Therefore, while the prices keep rising, most of the resource dependent countries need to take certain measures, including making high value-added investments, such as the construction of petroleum refining facilities using accumulated foreign currency reserves, and the creation of new industries in fields other than those related to the resources, as well as making investments in infrastructure for that purpose. In fact, various projects including the construction of petrochemical plants, the development of resort complex facilities, and the construction of the sea bridge linking Bahrain and Qatar are underway in the GCC countries.

Moreover, the so-called oil money investments of the Sovereign Wealth Funds, such as the Abu Dhabi Investment Authority in United Arab Emirates, which invest vast amounts of foreign currency gained from crude oil exports, will be put to good use.[202] In recent years, investors in the Middle East have kept an eye on countries such as China, India, Indonesia, and Malaysia,[203] and the connection

201 Zaidanhoujin Sekaikeizaijyouhou Service (2007a), "ARC REPORT 2007 UNITED ARAB EMIRATES"

202 For Sovereign Wealth Fund, refer to Section 2-1

203 Hatano, M. "TAKAKUKA ASIA SEKKIN DORU BANARE NO YOSOU SARERU 2007NEN NO GCC KEIZAI"

between the GCC countries and Asia may be further strengthened in the future, including an expansion of the Islamic financial system.

Meanwhile, growth rates of commodity prices were quite high, reaching 11.8% in Qatar and 9.7% in the United Arab Emirates in 2006. In terms of Saudi Arabia, whose commodity price growth rate was 2.3% in 2006,[204] the growth rate has accelerated compared to 0.6% in 2005. Therefore, the GCC countries should take appropriate action in response to inflation.

(Future of GCC countries)

The total population of 6 countries which belong to the GCC countries is approximately 34 million, which is equal to one-quarter of the Japanese population. Compared to China with a population of 1.3 billion, India with 1.1 billion and ASEAN with 560 million, the GCC countries have a small population.

Meanwhile, a characteristic of the GCC countries is their large population of the young. In Saudi Arabia, the youth population under 24 years old whose consumption propensity is thought to be relatively high accounts for 53% of the total population of the country. In addition, in terms of all the GCC countries, the population under 24 years old accounts for 49.5% of the total population, which is equivalent to 17 million. For instance, considering that young under 24 years old in Japan account for 24.4% of the total population of the country, it seems that the GCC countries have a market potential as young markets.

Further, the GCC countries are surrounded by countries with large populations, such as Egypt (80.4 million), and Iran (65.4 million). For instance, if one considers the 20 countries in the Middle East and North Africa (MENA) as one market, the total population reaches 300 million and the nominal GDP and its growth rate for this massive market are 1190 billion dollars and 8.9%, respectively, (average from 2000 to 2005) which exceeds that of ASEAN.

In the future, Japanese companies are expected to enter the GCC countries and conduct business from offices within those countries in order to develop the market in MENA.

For instance, UniCharm Corporation, a company which deals in commodity products, is one of the Japanese companies which is proactively engaging in business activity there. The company has focused on the economic growth and the population growth in Saudi Arabia and the potential for market growth in surrounding GCC countries. It has linked up with a Saudi Arabian company to undertake licensed production of commodity products since 1993.The local company needed to gain the product development capability and manufacturing technologies necessary to achieve expanded sales and its intention matched UniCharm's strategy of expanding its overseas business; thus UniCharm made the local company its subsidiary in 2005. As a result, the company succeeded in expanding its sales network and increasing its sales figures. Integrating the strength of the local subsidiary in sales and marketing into the existing manufacturing technologies of the company has contributed to the growth of sales which exceeds the market growth. While the local subsidiary considers the GCC countries including Saudi Arabia as its consumer markets, it engages in activities

204 The commodity price growth rate in Saudi Arabia is relatively steady. One of the reasons is that petroleum product prices can be set low by using subsidies.

to capture the massive MENA market by exploring new sales channels in MENA, at the same time making Saudi Arabia the base of operations for its exporting activities. In addition, it focuses on the fact that there is a common language, Arabic, in MENA. As a method of communication, including in packaging and advertisements, the standardized language contributes to creating a unity of market and can be convenient for conducting business operations.