3. Chinese economy shifts emphasis to expansion of domestic demand

(1) Increasing presence of the Chinese economy

China has achieved remarkable economic development over the 30 years since it started the initiative of reform and opening-up⁴⁶ in 1978. China's annual real GDP growth averaged as high as 9.8% over the 30-year period between 1979 and 2008. This economic development not only outpaced China's own average growth of 6.1% from 1953 to 1978, before the initiative of reform and opening-up started, but also outperformed Japan's economic growth during its high growth period (between 1955 and 1973, when Japan posted an average annual growth of 9.2%) in both the duration and the rate of growth.

Behind this remarkable growth are domestic factors, such as that the domestic agricultural sector was expanded by about 1990 after the initiative of reform and opening-up started and that township and village enterprises⁴⁷ grew in non-agricultural sectors.⁴⁸ Later, an increase in trade due to the opening of the economy to the outside world realized further economic growth. Standing at \$20 billion, the total trade value was the 29th largest in the world in 1978, but it has expanded some 124-fold to \$2.6 trillion. In particular, the value of exports has grown remarkably since China joined the WTO in 2001, leading the country to replace Germany as the world's largest exporter in 2008. As for the trade balance, China posted a deficit in most of the years between 1978 and 1993. However, it has posted a surplus every year since 1994, with the surplus amount continuing to grow. As a result, China's foreign currency reserves exceeded Japan's in 2006. As of the end of 2008, China held the world's largest amount of foreign currency reserves: \$1,946 billion.

China's nominal GDP expanded some 82-fold over the 30 years between 1979 and 2008. China accounted for 6.2% of the global nominal GDP in 2007, becoming the world's third-largest economic power, after the United States and Japan. The global presence of the Chinese economy is expected to grow further, as the IMF forecasts that China's nominal GDP will exceed Japan's in 2010, making China the world's second-largest economic power (see Figure 1-2-3-2).

⁴⁶ Shenzhen, Zhuhai and Shantou in the Guangdong province and Xiamen in the Fujian province and the entire Hainan province were designated as special economic zones based on the initiative of reform and opening-up started after the third plenary session of the 11th Central Committee meeting of the Chinese Communist Party, held in December 1978.

⁴⁷ "Township and village enterprises" is the collective name for enterprises operated by towns and villages and companies managed by individuals or a group of individuals in rural areas and that have been established since the start of the initiative of reform and opening-up.

⁴⁸ Yasheng Huang (2008), "Capitalism with Chinese Characteristics"



Figure 1-2-3-1 Changes in China's real GDP growth by demand component

Source: China Statistical Abstract (National Bureau of Statistics of China).

Figure 1-2-3-2 Changes in major countries' nominal GDP



Notes: Figures for 2008 and thereafter are forecasts by IMF. The second to sixth countries when ranked by nominal GDP. Source: *World Economic Outlook* (IMF).

Ranks	Country	Nominal GDP (\$100 million)	Percentage (%)	
	Worldwide	548,409	100.0	
1	U.S.	138,076	25.2	
2	Japan	43,844	8.0	
3	China	33,824	6.2	
4	Germany	33,209	6.1	
5	UK	28,034	5.1	
6	France	25,938	4.7	
7	Italy	21,175	3.9	
8	Spain	14,400	2.6	
9	Canada	14,361	2.6	
10	Brazil	13,335	2.4	

Figure 1-2-3-3 World GDP rankings in 2007

Source: World Economic Outlook, April 2009 (IMF), Direction of Trade Statistics (IMF).

Ranks	Exporter	Value (\$100 million)	Percentage (%)
	Worldwide	160,242	100.0
1	China	14,853	9.3
2	Germany	14,652	9.1
3	U.S.	13,002	8.1
4	Japan	7,831	4.9
5	Netherlands	6,338	4.0
6	France	6,066	3.8
7	Italy	5,399	3.4
8	Belgium	4,776	3.0
9	UK	4,598	2.9
10	Canada	4,573	2.9

Figure 1-2-3-4 World export rankings in 2008

Source: World Economic Outlook, April 2009 (IMF), Direction of Trade Statistics (IMF).

Figure 1-2-3-5 World import rankings in 2008

Ranks	Importer	Value (\$100 million)	Percentage (%)	
	Worldwide	166,894	100.0	
1	U.S.	21,660	13.0	
2	Germany	12,048	7.2	
3	China	11,913	7.1	
4	Japan	7,618	4.6	
5	France	7,067	4.2	
6	UK	6,339	3.8	
7	Netherlands	5,738	3.4	
8	Italy	5,563	3.3	
9	Belgium	4,705	2.8	
10	Canada	4,489	2.7	

Source: World Economic Outlook, April 2009 (IMF), Direction of Trade Statistics (IMF).

(2) Impact of the global financial crisis on the Chinese economy

The impact of the sharp slowdown of the global economy caused by the financial crisis has spread to China, which until now has maintained high economic growth. Although the Chinese economy posted growth in excess of 10% for five consecutive years from 2003, China's real GDP growth rate in 2008 was 9.0%, falling below 10% for the first time in six years (see Figure 1-2-3-6).

On a quarterly basis, China's real GDP growth has slowed down since peaking at 14.0% in the second quarter of 2007, and it fell short of the Chinese government's target of 8% growth in the fourth quarter of 2008. In the first quarter of 2009, the most recent quarter for which data are available, real GDP grew 6.1%, with contributions of 4.3 percentage points from consumption, 2.0 percentage points from investment and minus 0.2 percentage points from net exports,⁴⁹ indicating that a decrease in the export value due to a decline in external demand especially affected the economic growth. The effects of the slowdown in exports have spread to production and employment, fueling concern that deterioration in the employment situation may drag down domestic consumption.

Although China started implementing credit-tightening measures in 2007, including interest rate hikes and restrictions on loans, in order to prevent an economic overheating, it had to change course because of the world economic crisis. It should be taken into consideration that the slowdown in the Chinese economy is attributable not only to external factors related to the world economic crisis but also to domestic factors, including the effects of the credit-tightening policy.

On a region-by-region basis, economic growth slowed down significantly in coastal areas that depend heavily on exports, including Shanghai and Guangdong Province (Tianjin is the exception because of the many investment projects that are ongoing in the Tianjin Binhai New Area). Despite Beijing's small dependence on exports compared with coastal areas, growth in the city also slowed down significantly because the head office functions of exporting companies are concentrated there. On the other hand, the slowdown in growth was limited in inland areas and the central region because of their small dependence on exports compared with coastal areas. However, economic growth in Shanxi province, China's biggest coal-producing region, was dragged down by a decline in demand for coal due to a decrease in the volume of electricity generation, while growth in the Sichuan province slowed down because of the lingering effects of earthquake damage (see Figure 1-2-3-7).

⁴⁹ A press conference given by the Chinese National Bureau of Statistics on April 16, 2009



Figure 1-2-3-6 Changes in China's real GDP growth

Figure 1-2-3-7 Relation between cities and provinces' dependence on exports and their growth rates



Notes: Changes in growth rate = 2008 real GDP growth minus 2007 real GDP growth. Coastal areas:

Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan. Central region: Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei and Hunan. Western region: Inner

Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang.

Source: CEIC Database.

(A) Slowdown in exports

(a) Chinese economy's dependence on exports

If we examine China's economic structure in light of the ratios of investment, consumption and exports to nominal GDP, we recognize that China has become increasingly dependent on exports in recent years compared with Japan and the United States. As processing trade accounts for about 50% of Chinese exports (see Figure 1-2-3-8), a slowdown in exports presumably produces a relatively large impact on the Chinese economy, although the unit export price and added value of Chinese products are lower than those of Japanese products.⁵⁰

Since the Chinese economy also depends heavily on investment, it was pointed out at the National People's Congress, where the policy for government activities is indicated, that in order to enable the Chinese economy to achieve sustainable growth, it is necessary to establish a demand structure with well-balanced dependence on investment, consumption and net exports and to strengthen domestic demand by expanding consumption demand in particular (see Figure 1-2-3-9).



Figure 1-2-3-8 Changes in the ratio of processing trade exports to total Chinese exports

Notes: Value of processing trade exports = the value of processed and assembled goods exports plus the value of assembled imported goods exports. Ratio of processing trade exports = the value of processing trade exports divided by the total exports.

Source: China Customs Statistics (General Administration of Customs of China).

⁵⁰ See Section 1.2, Chapter 2.



Figure 1-2-3-9 Changes in Chinese, Japanese and U.S. fixed capital formation, household consumption, and ratio of exports to nominal GDP

(b) Decrease in exports due to a decline in demand from the United States and Europe

Net exports, which have until now led economic growth together with investment, made a contribution of minus 0.2 percentage points to GDP growth in the first quarter of 2009, thereby lowering the growth rate. Although the value of Chinese exports posted growth in excess of 20% every year between 2002 and 2007, after China joined the WTO, it fell as much as 25.7% in February 2009 on a year-on-year basis. The decline in exports was due in large part to a shrinkage of demand from developed countries caused by the world economic crisis and the ensuing decrease in the supply of parts to other Asian countries.

A breakdown of Chinese exports by destination country and region shows that demand from the United States and Europe has until recently acted as the driving force behind Chinese exports. However, since around 2007, when the U.S. subprime mortgage problem emerged, the contribution of exports to the United States and Europe to China's export growth has declined. In addition, the contribution of exports to Asia also declined in 2008, and it turned negative in November of the same year on a year-on-year basis (see Figure 1-2-3-10). This was presumably because exports of parts to Asia declined as a result of inventory adjustments there for products to be exported to the United States and Europe.

A look at the destinations of Chinese exports by type of goods shows that about 60% of exports of consumer goods are bound for the United States and Europe, indicating that exports of such goods are susceptible to changes in demand from those regions (see Figure 1-2-3-12). While about 50% of exports of parts are bound for Asia, including Japan, about 60% of exports of consumer goods from Asia are bound for the United States and Europe. This indicates that Chinese exports of parts depend significantly on final demand from the United States and Europe (see Figure 1-2-3-13).

As for Chinese imports, the value of processing trade imports came to \$378.4 billion in 2008, accounting for some 30% of overall imports. However, processing trade started to decline in November on a year-on-year basis due to a decline in imports of parts caused by a decrease in processing trade exports to the United States and Europe and a fall in raw materials prices that followed a price surge. Consequently, China posted a trade surplus of \$295.5 billion in 2008, its largest trade surplus ever. While

the amount of China's trade surplus has been growing year after year, the growth in the surplus in 2008, 12.5% compared with the previous year, was much lower than the previous year's growth of 48.0% because of a slowdown in exports.



Figure 1-2-3-10 Percentage contribution to Chinese exports by country and region

Notes: Other Asian countries: ASEAN+6 (excluding China and Japan). Source: *China Customs Statistics* (General Administration of Customs of China).



Figure 1-2-3-11 Percentage contribution to Chinese imports by country and region

Notes: Other Asian countries: ASEAN+6 (excluding China and Japan). Source: China Customs Statistics (General Administration of Customs of China).



Figure 1-2-3-12 Breakdown of destinations of Chinese parts/consumer goods exports

Notes: Asia: ASEAN+6 (excluding China and Japan). Source: *RIETI-TID* (Research Institute of Economy, Trade and Industry).





(c) Foreign-owned companies supporting Chinese trade

Although the value of Chinese trade has grown mainly because of foreign-owned companies engaging in processing trade, the ratio of the value of trade by foreign-owned companies to the overall value of trade, currently at some 60%, has been decreasing in recent years (see Figures 1-2-3-14 and 1-2-3-15). The ratio of trade by foreign-owned companies declined in 2008 particularly because their exports of products bound for their home countries and imports of parts for processing trade decreased due to the impact of the world economic crisis. Other factors behind the drop in the ratio of trade by foreign-owned companies include a shift in global demand, from products with high value added that are exported by them to low-priced products exported by Chinese companies, and the increasing competitiveness of Chinese companies.

Notes: Asia: ASEAN+6 (excluding Japan). Source: *RIETI-TID* (Research Institute of Economy, Trade and Industry).



Figure 1-2-3-14 Changes in the ratio of the value of exports by foreign-owned companies to the value of overall Chinese exports

Figure 1-2-3-15 Changes in the ratio of the value of imports by foreign-owned companies to the value of overall Chinese imports



(B) Production adjustments due to a slowdown in exports

A slowdown in exports has affected production activity in China. In particular, electrical products are very susceptible to a decline in exports as the export ratio is high for such products (see Figure 1-2-3-16).

Growth in industrial production in China started to slow down around July 2008 on a year-on-year basis. In line with the slowdown in industrial production, electricity consumption also started to drop in February 2009 on a year-on-year basis (see Figure 1-2-3-17).



Figure 1-2-3-16 China's export ratio by type of product

Notes: Figures for air conditioners, refrigerators and washing machines are based on 2005 data. Others are based on 2007 data. Export ratio = the volume of exports divided by the volume of production. Source: CEIC Database.

Figure 1-2-3-17 Changes in China's industrial production and electricity consumption



Data on production by product items show that although production started to decline in the second half of 2008 through January 2009 for all items due to production adjustments, it has rebounded for many items since February (see Figure 1-2-3-18). A rebound in production of home electronics appliances and automobiles is presumably attributable to consumption stimulus measures, including a subsidy scheme for home electronics appliances, which was introduced on February 1, and a tax cut for compact cars, which was introduced on January 20 (details of consumption stimulus measures taken by China are to be described later).



Figure 1-2-3-18 Changes in China's production by type of product

(C) Impact of production adjustments on employment and wages

Production adjustments for industrial products have aggravated the employment situation and curbed wages. The number of registered unemployed people in urban areas in the fourth quarter of 2008 rose to 8.86 million due to a decrease in job offers, mainly in the manufacturing industry (see Figure 1-2-3-19). Growth in wages, which until recently continued to increase, has slowed down since the beginning of 2008 (see Figure 1-2-3-20).

One notable feature of the Chinese labor market is the presence of "migrant workers." As the government has actively promoted migration of a labor force out of rural areas in order to secure an adequate labor force in urban areas, the number of migrant workers reached some 225 million as of the end of 2008, accounting for about 30% of all employees. Starting around 2004, coastal areas faced a shortage of migrant workers because of improvements in the living standards in rural areas thanks to governmental rural area support measures and a shrinkage of the population of young people due to the government's one-child policy.

However, the situation suddenly changed because of the impact of the world economic crisis.

According to an announcement made by the government,⁵¹ 20 million migrant workers lost jobs in urban areas during the period of the Chinese New Year, of which 11 million remained unemployed as of the end of March as they failed to find jobs despite returning to urban areas after spending the New Year period in rural areas. In response, the Chinese government announced and quickly implemented emergency employment-support measures, including restrictions on rationalization by state-owned corporations, the provision of employment subsidies, and temporary living expense subsidies for migrant workers. The implementation of employment-support measures was described as a priority matter in a report on government activities presented at the National People's Congress, and the government made clear its emphasis on this matter by increasing expenditures related to employment-support measures in 2009 by 67% from the previous year.

The Chinese government has estimated that economic growth of 8% is necessary in order to secure employment and ensure social stability.⁵² However, given that new jobs created based on an annual economic growth of about 10% from 2006 to 2008, it is unclear whether growth of 8% will create a sufficient number of new jobs to cover all job seekers, including 8.86 million unemployed people in urban areas and 6.1 million people graduating from universities in July 2009.



Figure 1-2-3-19 Changes in China's unemployment and job opening ratio

⁵¹ An analysis report entitled, "2008 Year End Nation Total of Migrant Workers is 225.42 million." issued by the Chinese National Bureau of Statistics on March 25, 2009

⁵² A 2009 report on government work presented at the National People's Congress in March 2009.



Figure 1-2-3-20 Changes in the growth of average wages per person in China

Source: China Monthly Economic Indicators (National Bureau of Statistics of China).

(D) Impact of the financial crisis on financial institutions

While the total amount of debts owed by Lehman Brothers to Chinese state-owned banks stood at around \$700 million,⁵³ the ratio of such debts to the overall assets was only 0.01% even at Bank of Communications, which had the largest exposure to Lehman Brothers among those banks. Indicating that the financial crisis did not have a significant impact on the Chinese state-owned banks, Industrial and Commercial Bank of China posted a year-on-year profit increase of 35% in 2008 and China Construction Bank registered a year-on-year profit increase of 34%, despite a slowdown in growth in interest income due to interest rate cuts by the People's Bank of China, the central bank.

The non-performing loan ratio for the four major Chinese state-owned banks declined from 33.4% at the end of 2000 to 2.8% at the end of 2008 due to the transfer of their bad loans to AMCs (asset management corporations).⁵⁴ However, potential bad loans may be increasing as new loans are growing in 2009.

Meanwhile, the amount of U.S. treasuries directly held by China came to \$585 billion as of the end of September 2008, exceeding the amount of U.S. treasuries held by Japan, \$573.2 billion, making China the world's largest holder of such bonds. This means that China's foreign currency reserves could be eroded by the U.S. dollar's depreciation against the yuan.

⁵³ Lehman Brothers-related debts totaled \$191.4 million for China Construction Bank, \$151.8 million for Industrial and Commercial Bank of China, \$76 million for China CITIC Bank, \$75.62 million for Bank of China, \$70.02 million for Bank of Communications, \$70 million for China Merchants Bank and \$33.6 million for Industrial Bank.

⁵⁴ In 1999, Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, and China Construction Bank were established as organizations mainly responsible for disposing of bad loans held by state-owned banks.

(3) Economic stimulus measures taken by China

The Chinese government quickly adopted measures to deal with the world economic crisis. On September 16, 2008, the day after Lehman Brothers failed, the People's Bank of China, the central bank, lowered the base lending rate for the first time in six years and seven months. Later, China implemented a series of fiscal, tax and monetary measures, including reduction of the reserves requirement ratio, an increase in the export tax refund rate, cuts or exemption of personal income taxes related to deposit interest, a cut in the securities stamp duty rate, reduction of the housing transaction tax and fees and the provision of support for loans to small and medium-size enterprises.

In addition, on November 9, 2008, the Standing Committee of the Chinese State Council adopted the "10 major measures for the promotion of domestic demand and economic growth," which featured the implementation of economic stimulus measures with total investments of 4 trillion yuan by the end of 2010. Furthermore, China adopted plans for adjustments and promotion of 10 major industries, including the auto and steel industries, and consumption stimulus measures, such as the provision of subsidies for the purchase of home electronics appliances and automobiles.

(A) Measures to expand domestic demand with 4-trillion-yuan investments

(a) Breakdown of the 4-trillion-yuan investments centering on infrastructure development

Regarding the economic stimulus package with total investments of 4 trillion yuan (around ¥58 trillion),⁵⁵ equivalent to around 15.5% of China's nominal GDP in 2007, the Chinese government plans to implement the 4-trillion-yuan investments by the end of 2010. The fields of projects covered by the package are (i) construction of houses for low- and middle-income people as a social security measure, (ii) development of rural infrastructure, (iii) development of key infrastructures including railways, roads, airports and power facilities, (iv) promotion of medical and sanitary projects and culture and education-related projects, (v) development of the ecological environment, (vi) voluntary innovation and structural adjustments and (vii) post-disaster reconstruction in earthquake-hit areas (see Table 1-2-3-21). These are seven of the fields of projects covered by the "10 major measures for the promotion of domestic demand and economic growth," adopted on November 9, 2008. When these measures were adopted, the budget allocations for infrastructure development projects such as the construction of railways, roads, airports and power facilities totaled 1.8 trillion yuan, nearly half of the total investments. However, the National People's Congress reduced the budget allocations for such key infrastructure development projects due to concerns that inefficient investments, including duplicate investments by the central and regional governments, could arise. In exchange, the budget allocations for the construction of houses for low- and middle-income people and fields related to the promotion of voluntary innovation were expanded so as to place increased emphasis on measures to expand domestic demand led mainly by consumption.

The central government will bear 1.18 trillion yuan of the 4-trillion-yuan investments under the economic stimulus package, with the rest to be born by regional governments, state-owned banks and private companies. In the fourth quarter of 2008, the central government alone already invested 300 billion

⁵⁵ Based on the exchange rate as of the end of April 2009.

yuan in the construction of low-priced houses and development of infrastructures, including waterworks in rural areas, and 120 billion yuan in post-disaster reconstruction in earthquake-hit areas.⁵⁶

The Chinese National Development and Reform Commission estimates that the 4-trillion-yuan economic stimulus package will boost China's GDP by around 1% annually.⁵⁷

Ten measures to expand domestic demand	(Nov.)	the NPC
(1) Accelerating construction of houses for low- and middle-income people as a social security measure	280 billion yuan	400 billion yuan
(2) Accelerating development of rural infrastructure	370 billion yuan	370 billion yuan
(3) Accelerating development of key infrastructures including railways, roads, airports and power facilities	1.8 trillion yuan	1.5 trillion yuan
(4) Accelerating promotion of medical and sanitary projects and culture and education-related projects	40 billion yuan	150 billion yuan
(5) Accelerating development of the ecological environment	350 billion yuan	210 billion yuan
(6) Accelerating voluntary innovation and structural adjustments	160 billion yuan	370 billion yuan
(7) Accelerating post-disaster reconstruction in earthquake-hit areas	1 trillion yuan	1 trillion yuan
(8) Improving the income of urban and rural residents	-	_
(9) Fully implementing value-added tax reform in all the regions and industries in China (reducing the burden of enterprises by 120 billion yuan)	-	-
(10) Enhancing financial support for economic growth (including the cancellation of the ceiling for loan dispersal of commercial banks)	-	-

Table 1-2-3-21 China's ten measures to expand domestic demand

Source: Decisions made by the Executive Meeting of State Council on November 5, 2008, press release from the National Development and Reform Commission.

(b) Measures taken by regional governments to expand domestic demand

Following the announcement of the 4-trillion-yuan economic stimulus package, regional governments adopted investment plans one after another. Investments proposed by regional governments total more than 20 trillion yuan, making it seem as if they are competing to see who can investment the most. It is notable that the governments in inland regions in the southwest, including the Sichuan province, the Yunnan province and Chongqing City, and coastal regions in the southeast, including the Jiangsu province, the Guangdong province, Shanghai City and the Shandong province, proposed a particularly large amount of investments (see Table 1-2-3-22). Inland regions, which were significantly affected by a slowdown in exports, presumably because they are the homes of migrant workers working in coastal regions, drew up active investment plans just like coastal regions.

However, as the total amount of the investment plans proposed by regional governments far exceeds the investment amount of 4 trillion for the central government's economic stimulus package, there are concerns that inefficient investments may be made and the fiscal position of regional government may

⁵⁶ A report entitled, "Analysis of the Effects of the Implementation of Investment Expansion and Economic Growth Measures by the National Development and Reform Commission," announced by the Chinese National Development and Reform Commission on May 6, 2009.

⁵⁷ A press conference given by the chairman of the Chinese National Development and Reform Commission on November 27, 2008.

deteriorate. Therefore, the central government is strengthening efforts to ensure appropriate implementation of public works projects by establishing a joint surveillance organization of the Communist Party and the State Council (which is equivalent to a cabinet).

Table 1-2-3-22 Measures taken by regional governments in China to expand domestic demand

	Proposed investments (yuan)	Project description
Sichuan province	3 trillion	Improvements in transportation infrastructure, including reconstruction of the earthquake-affected areas (including construction of an international airport)
Yunna n province	5 trillion (5 years)	Investment of 3 trillion yuan over five years to 2012 in construction of railways, ports and roads (including construction of an international airport). e.g. - Ongoing China-Myanmar oil and natural gas pipelines project and oil refinery project - Large-scale railway projects, such as Guangxi Nanning-Yunnan Kunming Railway Project.
Chongqing City	About 1.3 trillion	The third phase of construction of Chongqing Jiangbei Airport with investment of 36 billion yuan is now fully underway. (Airport construction project approved in 2008 with the aim of stimulating domestic demand and economic growth)
Guangdong province	About 1.3 trillion	Acceleration of construction of low-cost lease housing and economically-friendly housing. Investment in the transportation, energy and manufacturing industries. e.g. - Rail transit in the Zhujiang Delta area - Wuhan (Hubei province)-Guangzhou (Guangdong province) railway
Liaoning province	About 1.3 trillion	Investments made in 2009 in major infrastructure projects and development of the services industry.
Henan province	1.2 trillion	Investments in industrial structure adjustment projects, services industry, energy, and agricultural water supply infrastructure in order to stimulate domestic demand.
Jiangsu province	950 billion	Development of infrastructure in rural areas and railway, port and airport infrastructure, and housing construction as part of social security programs. (300 billion yuan in 2009 and 650 billion yuan in 2010, 3.7-trillion-yuan investment to be made by 2010 in cooperation with the private sector)
Shandong province	About 800 billion	Investments in eight major industries, including manufacturing, services, and infrastructure-related industries, that would help boost domestic demand.
Hebei province	About 600 billion	Investments mainly in implementation of energy-saving/pollutant reduction projects, construction of low-cost lease housing, and improvement of transportation infrastructure.
Shanghai City	500 billion	Investment in infrastructure, including housing, as part of social security programs, and in highways and railways, in accordance with Shanghai's 11th Five-Year Plan.
Fujian province	About 340 billion	Investment in infrastructure in rural areas, housing construction as part of social security programs, and infrastructure including railways and ports.

Source: Various press information.

(c) Fiscal expenditures

As the implementation of the 4-trillion-yuan economic stimulus package entails a huge amount of fiscal expenditures, we will examine the soundness of the Chinese government's fiscal position in the medium and long terms. According to a draft budget compiled by the Chinese Ministry of Finance, China's budget deficit in 2009 is estimated at 950 billion yuan, including 750 billion for the central government and 200 billion yuan for regional governments (see Figure 1-2-3-23). The ratio of the budget deficit to nominal GDP is lower than 3%, a level which is generally regarded as a limit for fiscal soundness and which constitutes one of the criteria for participation in the EU (see Figure 1-2-3-23). In order to cover a budget deficit arising from the implementation of economic stimulus measures, China plans to issue a vast amount of government bonds. However, the ratio of outstanding Chinese government bonds to nominal GDP as of the end of 2008 stood at around 20%, lower than the 30% line that is a limit for fiscal soundness according to international standards.⁵⁸ Regional governments, whose real

⁵⁸ "Report on the Budget Implementation by the Central and Regional Governments in 2009 and Draft Budgets of the Central and Regional Governments for 2009," announced by the Chinese Ministry of Finance on March 16, 2009.

estate-related revenues have dropped sharply due to a decline in real estate prices, will issue regional government bonds for the first time ever in order to cover a budget deficit of 200 billion yuan. In order to control the issuance of regional government bonds, the budgetary authorities of the central government will issue such bonds on behalf of regional governments.





(B) Expansion of infrastructure-related investments under the economic stimulus package and a slowdown in real estate-related investments

(a) Infrastructure-related investments

The 4-trillion-yuan economic stimulus package centering on infrastructure investments has brought about benefits including an increase in the amount of investments made in infrastructure-related business sectors. Growth in fixed asset investments in urban areas, which account for more than 80% of the overall fixed-asset investments in China, has been accelerating since the end of 2008, when the implementation of the 4-trillion-yuan economic package started, despite a slowdown in real estate development investments since the second half of 2008. The growth rate rose to 30.3% in March 2009 (see Figure 1-2-3-24).



Figure 1-2-3-24 Changes in fixed-asset investments in China's urban areas

The growth in fixed asset investments is attributable in large part to an increase in infrastructure-related investments under the 4-trillion-yuan economic stimulus package. Data on fixed investments by business sector show that growth in investments made by the manufacturing industry and the real estate industry slowed down, while infrastructure-related investments have increased rapidly since the beginning of 2009, indicating that the 4-trillion-yuan economic stimulus package has promoted infrastructure-related investments (Figure 1-2-3-25). Infrastructure-related investments account for around 20% of the overall investments (see Figure 1-2-3-26).

Among infrastructure-related investments, investments in transport infrastructures, including railways, are attracting particularly strong expectations. As for railway construction, a plan to invest about 5 trillion yuan in railways, including high-speed lines, by 2020 has been proposed, with the goal of extending the total length of railways nationwide to 120,000 kilometers or longer.⁵⁹ Railway-related infrastructure investments of 600 billion yuan are expected to create demand for 20 million tons of steel, 120 million tons of cement and 6 million jobs. In addition, those investments are expected to bring about various other benefits, including cuts in transportation costs, shorter travel time for passengers, a decrease in traffic accidents and improvements in the regional investment environment. As for investments in road construction, a plan to invest about 1 trillion yuan nationwide in 2009 has been proposed.⁶⁰ In addition to investments in expressway construction, the plan includes investments of around 200 billion yuan in rural road improvements, including the construction of roads linking villages and the paving of existing roads.

⁵⁹ A press release issued by the director-general of the planning bureau of the Chinese Ministry of Railways on November 12, 2008.

⁶⁰ A press release issued by the director-general of the planning bureau of the Chinese Ministry of Communications on November 24, 2008.

Figure 1-2-3-25 Changes in fixed-asset investments in China's urban areas by business sector



Figure 1-2-3-26 Breakdown of the fixed-asset investments in China's urban areas in 2008

Source: National Bureau of Statistics of China.



services, electricity, gas and water supply, construction, and informatic communication. Source: CEIC Database.

(b) Real estate-related investments

While infrastructure-related investments continue to increase under the 4-trillion-yuan economic stimulus package, growth in real estate investments, which has until now led overall investments, has slowed down significantly since the second half of 2008. The rate of growth in real estate prices, which until recently continued to rise turned negative in December 2008 on a year-on-year basis because of the combined effects of the credit-tightening prompted by concerns about the possibility of a real estate bubble arising from a surge in real estate prices caused by active real estate investments made by the first

half of 2008 and the impact of the world economic crisis. On a city-by-city basis, housing prices in Shenzhen posted a particularly steep drop of 12.7% in reaction to a sharp rise recorded in 2007 (see Figure 1-2-3-27). While there are signs of an end to the fall in housing prices in some regions, how to curb the drop in real estate prices will be a critical challenge, since falling real estate prices could aggravate the fiscal position of regional governments by reducing tax revenues and create a mountain of bad loans.



Figure 1-2-3-27 Housing prices in China's major cities

Source: National Development and Reform Commission of China.

(B) Plans for adjustment and promotion of 10 major industries

Apart from the 4-trillion-yuan economic stimulus package, which focuses on demand-side stimulus centering on infrastructure development, the Chinese government adopted plans for adjustment and promotion of 10 major industries as a supply-side measure (see Table 1-2-3-28). These are three-year plans concerning the auto, steel, textile, equipment manufacturing, shipbuilding, electronics and information, light manufacturing, petrochemicals, non-ferrous metals and distribution industries. As a basic policy, the plans will provide relief to these industries, which face deterioration in corporate earnings, the employment situation and the inventory condition, in the first year and promote structural adjustments through corporate reorganization and technological innovation in the following two years.

	Descriptions
Auto industry	Promoting to develop own brands and electric cars.
Steel industry	Promoting to reorganize steel makers and abolish production facilities with low production efficiency. Promoting to stabilize the iron ore import market.
Shipbuilding industry	Promoting to repair and replace old ships.
Petrochemicals industry	Promoting to stabilize the prices of energy products and recycle waste.
Textile industry	Promoting to optimize regional allocation (transferring of processing companies to the east-central region)
Light manufacturing industry	Promoting environmental protection and improved quality and safety.
Non-ferrous metals industry	Promoting to reorganize non-ferrous metal producers and abolish production facilities with low production efficiency. Promoting to establish recycling systems.
Equipment manufacturing	Promoting automation in large-scale industries, such as steel and auto industries.
Electronics and information industry	Promoting digitalization in the audio and visual industry. Promoting R&D and outsourcing services.
Distribution industry	Enhancing cooperation between distribution companies and manufacturing/trading companies. Promoting to build distribution infrastructure.

Table 1-2-3-28 Outline of China's plans for adjustment and promotion of 10 major industries

Source: Chinese government's press releases, etc.

For example, an adjustment and promotion plan for the auto industry, determined on January 14, 2009, seeks to promote the consolidation and reorganization of automakers as well as technological innovation related to next-generation automobiles, including electric cars, with a view to stabilizing and expanding automobile demand. Specifically, the plan includes: (i) reducing the tax on the purchase of a compact car with an engine displacement of 1,600 c.c. or less from 10% to 5%; (ii) providing a subsidy to farmers who replace their three-wheeler or low-speed truck with a light truck or purchase a passenger car with an engine displacement of 1,300 c.c. or less between March 1 and December 31, 2009 (5 billion yuan was allocated for the subsidy scheme); (iii) supporting an expansion of the size of automakers and auto parts makers through mergers and reorganization of major automakers and mergers of parts makers; (iv) allocating 10 billion yuan in special funds for the support of voluntary innovation initiatives and technology development by companies; (v) promoting the use of next-generation automobiles in large and middle-size cities by providing subsidies for domestic production of electric cars and related parts; (vi) helping automakers develop their own brands, establishing bases for exports of automobiles and auto parts, developing auto-related services and establishing the mechanism of auto loans.

Meanwhile, an adjustment and promotion plan for the steel industry, which was determined on January 14, 2009, seeks to promote the consolidation and reorganization of steel makers, stabilize prices of steel products and international iron ore prices, with a view to fostering internationally competitive steel makers. Specifically, the plan includes: (i) stabilizing the shares of Chinese steel makers in the international market by adjusting export duty rates while expanding domestic consumption of steel products; (ii) abolishing production facilities with low production efficiency by controlling the total amount of steel production; (iii) fostering large steel-making groups by promoting mergers and reorganization of steel makers; (iv) improving the quality of steel products by using government budget funds to enhance technologies and research and development capability; and (v) establishing a mechanism for sharing risks involved in production and sales by bringing order to the iron ore import market and standardizing the steel product sales system.

(C) Consumption stimulus measures taken by the Chinese Government

In order to increase consumption, the Chinese government is implementing subsidy schemes for rural areas where the income level, which was previously low, is rising as fast as in urban areas (see Figure 1-2-3-29). Such schemes include the "Home Electronics Appliances Subsidy Program in Rural Areas" scheme and the "Rural Auto Subsidy" scheme, which provide subsidies to buyers of home electronics appliances and cars, respectively. These schemes are intended not only to stimulate demand for home electronics appliances and cars in rural areas where the diffusion rate for such products are low and enhance the purchasing power there (see Figure 1-2-3-30) but also increase sales of such products at a time when exports of such products are slowing down.





Figure 1-2-3-30 Durable consumer goods ownership in China's urban and rural areas



Source: China Statistical Yearbook (National Bureau of Statistics of China).

(a) "Home Electronics Appliances Subsidy Program in Rural Areas" scheme

The "Spread Home Appliance to Villages" scheme started in Shandong, Henan and Sichuan Provinces in December 2007 in order to increase consumption in rural areas. On February 1, 2009, the scheme was extended nationwide for a period of four years. The list of eligible product items initially included color TVs, washing machines, refrigerators and mobile phones, while motorbikes, personal computers, water heaters and air conditioners were added later. When people in rural areas buy these products, they receive a subsidy of 13%, with 80% of the subsidy provided by the central government and the remaining 20% by the regional government concerned. All households initially received one subsidy payment for each product item but they now receive two subsidy payments for each product item.

The Chinese Ministry of Commerce predicts that this scheme will create consumption demand worth 1.6 trillion yuan over four years.⁶¹ The sales volume of eligible products in January to March 2009 came to 2,700,000 units, generating sales of 4 billion yuan. In March alone, the sales volume came to 1,485,000 units, generating sales of 2.24 billion yuan, up some 70% from the previous month.

The limits on the unit prices of eligible product items were set at 2,000 yuan (around $\pm 29,000$)⁶² for color TVs and washing machines and 2,500 yuan (around $\pm 36,000$) for refrigerators and air conditioners. Eligible manufacturers and models are selected through bids. As the price limits are set at low levels, most eligible models are those made by Chinese manufacturers, with few foreign manufacturers selected as eligible ones. Among the selected foreign manufacturers are Panasonic and Sanyo Electric, both of Japan, regarding washing machines; Nokia of Finland and Samsung of South Korea regarding mobile phones; and Dell of the United States, Philips of the Netherlands and Acer of Taiwan regarding personal computers. Starting in April, the price limits were raised to 3,500 yuan (around $\pm 51,000$) for color TVs and to 400 yuan (around $\pm 58,000$) for air conditioners.

(b) "Rural Auto Subsidy" scheme

The "Spread Cars to Villages" scheme, which provides subsidies for the purchase of automobiles in rural areas, was announced on March 14 by the Chinese National Development and Reform Commission. A subsidy equivalent to 10% of the purchase value but no more than 5,000 yuan is provided to people who replace their three-wheeler with a light truck or a mini-car worth 50,000 yuan or more. The government has allocated 5 billion yuan for the subsidy payments, expecting that new demand for around 1 million units will be created.

(E) Trends in China's consumption market

Total retail sales of social consumer $goods^{63}$ in 2008 amounted to 10.8 trillion yuan, which represented a year-on-year growth of 21.6%, higher than the previous year's rise of 16.8%. However, on a

⁶¹ A guidance on investment in China entitled, "Chinese consumer market makes spring recovery," issued by the Chinese Ministry of Commerce on April 13, 2009.

⁶² Based on the exchange rate as of the end of 2009.

⁶³ "Total retail sales of social consumer goods" refers to total sales of products consumed by people in their everyday life, including those provided by the restaurant, newspaper publishing, postal services, wholesale and retail and other services industries.

monthly basis, after peaking in August and September, growth in total retail sales of social consumer goods slowed down due to the impact of the world economic crisis. Consumption fell more steeply in coastal areas than in the western and central regions (see Figure 1-2-3-31).

A comparison of the trends in consumption in urban areas and rural areas shows that although growth in the former previously exceeded growth in the latter, this pattern has been reversed since November 2008. In March 2009, consumption in urban areas posted a year-on-year growth of 13.7%, a higher growth than in February and the highest growth since that of 10.9% recorded in December 2005.⁶⁴ Meanwhile, consumption in rural areas posted a year-on-year growth of 16.9%, the highest growth since that of 16.1% recorded in September 2007, confirming that consumption is growing more strongly in rural areas than in urban areas (see Figure 1-2-3-32).



Figure 1-2-3-31 Changes in China's retail sales of social consumer goods by region

Source: Statistics from the Ministry of Commerce of China.

⁶⁴ Excluding data for January and February, which are affected by the Chinese New Year.



Figure 1-2-3-32 Changes in the retail sales of social consumer goods in China's urban and rural

(a) Increases in sales of home electronics appliances and automobiles

As for the trend in retail sales of social consumer goods by product item, sales of home electric appliances fell 8.6% in December on a year-on-year basis but have rebounded since January, growing 26.9% in March. Sales of automobiles have also recovered, growing 27.0% in March on a year-on-year basis. Meanwhile, although sales of foodstuffs and clothes grew 11.9% and 13.3%, respectively, in March, posting higher sales growth than in February, their growth rates were lower than the growth rates for sales of appliances and automobiles (see Figure 1-2-3-33).

A comparison of sales of automobiles in China, Japan and the United States show that sales in China continued to decline on a year-on-year basis after turning down in August 2008 but have rebounded since February. On the other hand, sales in Japan and the United States are continuing to decline on a year-on-year basis, making China stand out for its increase in sales of automobiles compared with other markets (see Figure 1-2-3-34). Moreover, sales of automobiles in China in January 2009 came to 740,000 units, exceeding for the first time ever sales in the United States, which totaled 660,000 units, and have remained the highest in the world since then.⁶⁵ As the automobile ownership ratio in China's urban areas is still low, at some 6 units per 100 households, there are hopes that future diffusion of automobiles will further expand consumption. As shown above, consumption of some products is starting to recover as a result of consumption stimulus measures taken by the government.

⁶⁵ Sales in April totaled 1.15 million units in China, 820,000 units in the United States and 280,000 units in Japan (the China Association of Automobile Manufacturers, Autodata of the United States and the Japan Automobile Dealers Association).



Figure 1-2-3-33 Changes in China's retail sales of social consumer goods by type of product

Figure 1-2-3-34 Changes in auto sales in China, Japan and the U.S.



Source: China Automotive Industry Association, Japan Automobile Dealers Association, U.S. Auto data.

(b) Toward growth based on expanded consumption

Although consumption of some products is growing, there are concerns over how an increase in the number of unemployed people and a slowdown in growth in wages will affect future consumption. In order to enable the Chinese economy to recover in earnest, it is necessary not only to generate temporary effects through individual policy measures but also to achieve growth based on sustainable expansion of consumption. In addition, while consumption in China is expanding, it still accounts for only a small portion of GDP compared with investment and exports, as shown in Figure 1-2-3-9. Therefore, in order to

ensure that the Chinese economy continues sustainable growth, it is also necessary to change the country's economic structure by expanding consumption.

China's per-capita GDP stood at \$3,000 in 2008, indicating that consumption of durable consumer goods, such as automobiles and home electronics appliances, are likely to become active. In Japan, per-capita GDP exceeded \$3,000 in the 1970s, when the country was recording high growth, leading to active consumption of automobiles and home electronics appliances. There is an argument that when a country's per-capita GDP exceeds \$3,000, urbanization and industrialization accelerate, leading to a significant change in the people's consumption behavior patterns, a matter that, if true, will help China maintain growth, expand demand and carry out structural adjustments (see Figure 1-2-3-35).⁶⁶





However, in order to further expand consumption in China, it is important to raise the income of the 720 million people who live in rural areas. The income level in urban areas was 2.4 times as high as that in rural areas in 1991, and the difference has been increasing since then, expanding to 3.3 times in 2008 (see Figure 1-2-3-36).

Although there is much room for a future expansion of consumption, including an increase in the diffusion of durable consumer goods in rural areas, the consumption propensity, which represents the ratio of income used for consumption to the disposable income has been declining, indicating that more of income

⁶⁶ A press conference given by a former Commissioner of the Chinese National Bureau of Statistics at the Chinese People's Political Consultative Conference on March 6.

is set aside for savings than for consumption (see Figure 1-2-3-37).



Figure 1-2-3-36 Changes in disposable income in China's urban and rural areas

Figure 1-2-3-37 Changes in China's consumption propensity



The increase in savings is attributable to delays in the development of social security services, including social insurance. In China, there are different sets of social securities services available for

people whose family is registered in urban areas and those whose family is registered in rural areas. Social security services available in urban areas include assurance of minimum living standards, endowment insurance, unemployment insurance and medical insurance, while in rural areas, endowment insurance and unemployment insurance are not available and medical insurance is only partially available. Of the 225.42 million people who have migrated out of rural areas to work in urban areas, only 18.46 million people participate in the endowment insurance system, 31.31 million people in the medical insurance system and 11.50 million people in the unemployment insurance system. In the meantime, the number of migrant workers who lost jobs around the period of the Chinese New Year in urban areas reached as high as 20 million, exceeding the number of workers participating in the unemployment insurance system. Therefore, the development of social safety net systems is a critical challenge. In addition, medical fees are very high. According to a report on social issues compiled by the Chinese Academy of Social Sciences, one of the most serious social problems for China is that medical fees are too high for farmers and ordinary citizens. The government, which is working on the reform of medical care as a top priority issue, published "Opinions on the Reform of Medical and Sanitary Systems" and "Proposals for Priority Measures for the Reform of the Medical and Sanitary Systems" (from 2009 to 2011) on April 6, 2009, thereby launching a new medical care system reform. The new medical care system reform aims to establish a basic framework of a medical care insurance system that covers 90% of all Chinese people in 2009-2010 as a medium-term goal and to establish a full medical insurance system that covers all Chinese people by 2020 as a long-term goal.

In addition, the government has eliminated tuition fees for compulsory education in both urban and rural areas and is distributing free textbooks to all school children receiving compulsory education in rural areas. The government allocated 595.5 billion yuan for investments to resolve "the three agricultural problems"⁶⁷ in 2008, up 37.9% from the previous year, in order to provide subsidies for food production and raise the living standards in rural areas.

(G) Credit easing

Before the financial crisis, China took credit-tightening measures, including raising the base interest rate and the reserve requirement ratio and introducing a limit on the total loan amount. This was in line with the credit tightening stance indicated at the Central Economic Work Conference that was held in December 2007. However, on September 16, 2008, the day after the failure of Lehman Brothers, the People's Bank of China, the central bank, quickly shifted to credit easing by cutting the base lending rate for the first time in six years and seven months.

(a) Interest rate cuts

Since cutting the base interest rate on September 16, 2008, the day after the failure of Lehman Brothers, the People's Bank of China reduced the rate five times, including when it did so in coordination with interest rate cuts by the central banks in the United States, the euro area, the United Kingdom,

⁶⁷ "The three agricultural problems" refers to the low productivity of the agricultural industry, the decay of villages and the poverty of farmers. The Chinese government places priority on tackling these problems.

Canada, Sweden and Switzerland. As a result, the base lending rate was gradually reduced from 7.47% to 5.31%. However, real interest rates, which take into consideration consumer price changes, rose due to a slowdown in growth in consumer prices that occurred in reaction to upsurges in food and natural resource prices (see Figure 1-2-3-38).



Figure 1-2-3-38 Changes in China's lending rate, real interest rate, and reserve requirement ratio

(b) Increased loans

The People's Bank of China abolished the limit on the total loan amount in October 2008 and shifted to credit easing in November. The government raised the money supply (M2) growth target from 16% in 2008 to 17% in 2009 and aims to increase the amount of new loans to 5 trillion yuan or more in 2009. Actual data show that M2 grew 25.5% in March and the amount of new loans has increased sharply since the end of 2008. With new loans provided between January and March totaling 4.58 trillion yuan, the annual amount is on course to far exceed the government's target (see Figure 1-2-3-39). While corporate profits are declining, the amount of outstanding debts is growing significantly (see Figure 1-2-3-40). In order to optimize the lending structure, the government aims to strictly curb loans to energy-intensive and high-pollution industries and industries with excess production capacities while strengthening financial support for farmers, rural areas and the agricultural industry as well as small and medium-size enterprises.

Figure 1-2-3-39 Changes in lending from financial institutions and money supply in China



Figure 1-2-3-40 Changes in Chinese industrial companies' outstanding debts and corporate profits



Notes: The statistics cover state-owned enterprises, and non-state-owned enterprises with operating profits of 5 million yuan or more. Source: CEIC Database.

(c) Shrinking excess liquidity and receding inflation risk

Although the Chinese government has recently increased the money supply through credit easing, an increase in the money supply was until the first half of 2008 a cause for concern that a vast amount of liquidity accumulated at private-sector financial institutions could be released in the form of loans, thereby

increasing inflationary pressures through upsurges of real estate asset prices and an overheating of the stock market. The government and the People's Bank of China previously made efforts to restrain inflationary pressures through credit tightening and other measures. In 2008, inflationary pressures due to excess liquidity eased as growth in food and natural resource prices slowed down and funds flowed out of China. The amount of foreign currency reserves minus the increases in the trade surplus amount and the amount of inward direct investment made in China (Figure 1-2-3-41, etc.) has remained negative since the second half of 2008, and this negative gap presumably represents the amount of funds that flowed out of China.

Although inflationary pressures have eased recently (see Figure 1-2-3-42), excessive loans could not only increase inflationary pressures in the long term but also lead to investments with low production efficiency, thereby impeding the development of the Chinese economy.



Figure 1-2-3-41 Changes in China's foreign currency reserves and major factors



Figure 1-2-3-42 Price changes in China

(H) Increase in trade payment settlements in the yuan

As a measure to stabilize external trade amid a slowdown in trade with the United States and Europe due to the impact of the world economic crisis, the Standing Committee of the Chinese State Council decided on April 8, 2009, to introduce a system that allows settlements of trade payments in the yuan on a trial basis. The system is applicable to trade between Hong Kong and five Chinese cities, namely Shanghai, in the Yangtze River Delta, and Guangzhou, Shenzhen, Zhuhai, Dongguan in the Pearl River Delta.

In addition, since last year, China has signed bilateral currency swap agreements worth a total of \$650 billion with South Korea, Indonesia, Belarus, Argentine, Hong Kong and Malaysia in order to facilitate bilateral trade payment settlements with these countries. Although trade payment settlements have until now been conducted only in the key international currencies like the U.S. dollar, the currency swap agreements are expected to enable China to avoid exchange risk and reduce foreign exchange costs by using yuan for such settlements. As the Chinese State Council has announced a plan to turn Shanghai into a global financial center by 2020, Shanghai is expected to become the Asian center of the circulation of yuan, and this is expected to increase the city's position as an international financial center.

Furthermore, Zhou Xiaochuan, the governor of the People's Bank of China, published a paper that pointed out the limits of the U.S. dollar-centric currency regime. In the paper, he argued that it is impossible for the countries that are the issuers of the key currencies alone to provide the world with sufficient liquidity and called for an expansion of the International Monetary Fund's SDR (Special Drawing Rights) system, casting doubt on the U.S. dollar-centric currency regime. While the introduction of yuan-denominated trade payment settlements is a step toward the internationalization of the yuan and increases the Chinese currency's international position, it also increases the possibility that China's economic and monetary policies will be affected by external factors.

(4) Toward the establishment of strategic and mutually beneficial relations between China and Japan

(A) Japanese-owned companies expected to make contributions in the environment- and energy-related fields

(a)Toward implementation of scientific concepts regarding development

Japanese-owned companies are expected to make contributions to the growth of the Chinese economy in the environment- and energy-related fields.⁶⁸ China's energy consumption and environmental impact have been increasing in line with the country's economic growth. The amount of energy consumption in China stood at 2.85 billion metric tons SCE⁶⁹ in 2008, making the country the world's second-largest energy consumer. As for imports of natural resources, in 2007, China was the world's third-largest importer of coal and oil (see Figure 1-2-3-43), with imports of 51.02 million metric tons of coal and

⁶⁸ According to a questionnaire survey concerning promising sectors as recognized by Japanese-owned companies operating in China, technology related to the environment and energy conservation was recognized as the most promising sector (a questionnaire survey on Japanese-owned companies operating in China by the Nihon Keizai Shimbun (April 14, 2009))

⁶⁹ SCE stands for Standard Coal Equivalent.

163.16 million metric tons of oil, and it was the 14th-largest importer of natural gas, with imports of 6.98 million tons.⁷⁰ Regarding coal, which is the main source of energy consumed by China (see Figure 1-2-3-44), the country satisfies its own needs mainly with domestic production, and the amount of domestically produced coal totaled 2.793 billion tons in 2008.⁷¹ However, as coal-fired thermal power generation emits a large amount of CO2, a cause of climate change, active efforts toward emission reduction are required.

Rank	Country	Volume of imports (10,000 tons)
1	U.S.	52,139
2	Japan	20,169
3	China	16,316
4	Korea	11,788
5	Germany	10,516
6	Italy	8,886
7	France	8,101
8	Spain	5,799
9	Netherlands	5,703
10	Singapore	5,129

Figure 1-2-3-43 Top oil importers in 2007

Notes: Figures classified under HS Code 2709 were counted. Source: Comtrade Database (UN).

Figure 1-2-3-44 Ratio of each source of energy relative to China's energy consumption in 2007



Source: CEIC Database.

Therefore, the Chinese government has set a goal of reducing the amount of energy consumption per GDP by 20% by 2010 compared with 2005 under the 11th five-year plan, aiming to achieve environment-friendly economic growth (see Figure 1-2-3-45), and has taken various measures to cut CO2 emissions. For example, in order to promote the use of next-generation automobiles, gasoline-electric hybrid buses and taxies have been introduced in Beijing and Shanghai. In addition, the development of energy conservation technology related to home electronics appliances, such as refrigerators and washing

⁷⁰ United Nations Statistics Division, Commodity Trade Statistics Database.

 $^{^{71}}$ CEIC Database_o

machines, and the use of labels indicating energy efficiency are also being promoted. Since 2006, about 300 Chinese trainees have been dispatched to Japan for training related to energy conservation, and they contributed to the revision of China's energy conservation act in 2007. Moreover, China plans to train energy managers.

China is also encouraging foreign investment in fields related to new energy and environment protection by applying preferential tax treatment to companies related to the high-tech industry and environment protection,⁷² among other measures. As it is possible to improve the energy consumption efficiency by spreading Japanese energy conservation and environmental technologies in China, Japan should make active efforts in this respect.

Under the 11th five-year plan, the Chinese government also set the goal of reducing the amount of chemical oxygen demand (COD), an indicator of the water pollution level, and the amount of sulfur dioxide emissions, a cause of acid rain, by 10% by 2010 compared with 2005 (see Figure 1-2-3-46). It is possible to enhance the effects of China's environment protection efforts by spreading Japanese environmental technologies that have advanced with Japan's industrial development.



Figure 1-2-3-45 China's energy consumption and energy consumption per GDP

Notes: SCE stands for Standard Coal Equivalent. Source: National Bureau of Statistics of China.

 $^{^{72}}$ As a preferential tax treatment, the corporate tax rate of 25% is reduced to 15% for companies engaging in business related to energy conservation and environment protection.



Figure 1-2-3-46 Changes in China's chemical oxygen demand (COD)

decomposition of pollutants. Source: *China Statistical Yearbook* of each year (National Bureau of Statistics of China), Ministry of Environment Protection of China

(b) China-Japan Comprehensive Energy Conservation and Environment Forum

As part of Japanese-Chinese cooperation in the environment- and energy-related fields, the Japan-China Energy Conservation Forum has been held annually since 2006. At this forum, leaders of the public and private sectors of Japan and China exchange opinions about policies, experiences and technologies in fields related to energy conservation and environment protection. At the third round of this forum, which was held in Tokyo in November 2008, Japan and China reached agreements on 19 cooperative projects, including a model project for commercial building energy conservation and a project to improve the water quality of Chinese lakes and marshes by using Japan's cutting-edge ozone-related technology. The agenda at the forum included energy conservation in the commercial sector, and water treatment and cooperation related to regional projects in addition to energy conservation in the industrial sector. Thus, the range of sectors and themes selected for cooperation and players involved in cooperation is expanding.

(B) China as a market

While Japanese-owned companies are expected to make contributions to the Chinese economy in the environment- and energy related fields, China is attracting growing expectation from Japan not only as a manufacturing base but also as a market.⁷³

Until 2006, the number of contracts for inward direct investment in China was higher for the

⁷³ In response to a question as to the role of Chinese operations in a questionnaire survey conducted on Japanese-owned companies operating in China by Nihon Keizai Shimbun (April 14, 2009), 79.6%, the highest ratio, replied that they regarded Chinese operations as a base for marketing and sales activities for the Chinese market, 67.3% regarded them as a base for production of products for the Chinese market and 51.0% regarded them as a base for exports (multiple replies allowed).

manufacturing industry than for the tertiary industry, including retail and wholesale sectors. However, since 2007, the number for the tertiary industry has been higher than the number for the manufacturing industry (see Figure 1-2-3-47). Since 2008, Japanese retailers such as Ryohin Keikaku, Fast Retailing and Aeon have announced plans to accelerate store openings in China, while Seven-Eleven Japan, which until recently concentrated on directly-operated stores in the country, started to open franchise stores, indicating increasing interest in China's growth potential as a market. As for the destinations of sales by Japanese-owned companies' subsidiaries in China, the ratio of sales to local customers has been increasing year after year, reaching about 60% in fiscal 2007 (see Figure 1-2-3-48).



Figure 1-2-3-47 Changes in the number of contracts for inward direct investment in China

Source: Ministry of Commerce of China.

Figure 1-2-3-48 Destinations of sales by Japanese manufacturers' subsidiaries in China



Notes: Ratio of sales to local customers = sales to local customers divided by total sales. Source: *Basic Survey of Overseas Business Activities* (Ministry of Economy, Trade and Industry).

(C) Utilization of local human resources

Amid China's increasing attraction as a market, some Japanese-owned companies regard the country as a base for research and development (R&D) of products for the Chinese market. According to a survey conducted by Nihon Keizai Shimbun, a Japanese business newspaper, on Japanese-owned companies operating in China, 14 of the 54 companies surveyed cited research and development of products for the Chinese market as a role of their Chinese operations. There are growing moves to use excellent Chinese human resources for product development and design and basic research for the Chinese market, thereby enhancing international competitiveness. The United States and European countries are already strengthening cooperation with China in joint R&D projects and in training of Chinese personnel to utilize an abundant supply of human resources in China at their R&D facilities in the country. Japan, too, should actively utilize Chinese human resources.

Based on its education development plan, China is trying to raise the standard of its universities. The number of university graduates in China reached 5.12 million in 2008, which is more than five times the 950,000 graduates in 2000.

For Japanese-owned companies operating in China, the management of labor affairs is a major challenge. According to a survey conducted by Nihon Keizai Shimbun on Japanese-owned companies operating in China,⁷⁴ more than 50% of the companies surveyed cited training of senior personnel as the matter that poses the greatest challenge for an expansion of business operations in China. Other challenges cited by many companies included the securing of excellent personnel and employment of personnel. Human resource-related challenges like these are indicated by the results of a questionnaire survey concerning employer popularity conducted on Chinese university students.⁷⁵ Not a single Japanese-owned company was included among the 50 most-popular employers, while 27 (non-Japanese) foreign-owned companies were included among them. The fact that 23 Chinese companies were included among the 50 most popular employers may indicate that Chinese companies have become as attractive as foreign-owned companies as employers. One factor behind the low popularity of Japanese-owned companies is the large difference between the Japanese employment system that favors seniority and features lifetime employment and the Chinese employment system. According to a questionnaire survey conducted by the Works Institute of Recruit Co.,⁷⁶ Chinese people place more priority on wages and fringe benefits than Japanese people when choosing an employer (see Figure 1-2-3-49). As for reasons for leaving a company, many Chinese people cited dissatisfaction with wages and a lack of room for promotion to higher positions (see Table 1-2-3-50). While the ratio of Chinese managers exceeded 70% at 16.7% of the companies surveyed, the ratio was lower than 10% at 35.2% of the companies, indicating that Japanese-owned companies in general still do not actively appoint Chinese people for management positions (see Figure 1-2-3-51). To resolve the scarcity of Chinese managers at Japanese-owned

⁷⁴ A questionnaire survey conducted on Japanese-owned companies operating in China by Nihon Keizai Shimbun (April 14, 2009)

⁷⁵ This survey, conducted by a Swedish consulting firm, covered 70 universities designated by China as national priority universities. Based on the replies from 16,815 students, the survey report listed the 100 most popular employers (the survey was conducted between January and April 2008).

⁷⁶ This survey was conducted online on working people in Shanghai in their 20s and 30s and regular workers in the Tokyo metropolitan area in the same age group between August and October 2008.

companies, it is necessary to foster mutual understanding between the Chinese and Japanese sides about employment practices. In this respect, it is presumably important to actively employ Chinese people with the experience of studying in Japan or living in Japan and appoint such people to management posts.



Figure 1-2-3-49 Japanese and Chinese people's criteria when choosing an employer

Source: CHUGOKU HITO TO SOSHIKI NO JITTAI CHOSA (Works Institute)

Table 1-2-3-50 Japanese and Chinese people's top five reasons for leaving a company (Multiple answers allowed: %)

China (n = 1000)		Japan (n = 1647)	
Dissatisfaction with wages	46.3	Concern over company's possibilities and future direction	30.9
A lack of room for promotion to higher positions	39.1	Dissatisfaction with work conditions (working hours, holidays, work location,	25.0
Having found a better place to work	33.2	Having found a better place to work	25.0
No chance to utilize one's skills and expertise	26.4	No sense of forward progress resulting from work	24.8
Concern over company's possibilities and future direction	25.0	Mentally stressful	23.7

Source: CHUGOKU HITO TO SOSHIKI NO JITTAI CHOSA (Works Institute)



Figure 1-2-3-51 Ratio of Chinese workers holding a position of manager or higher in Japanese-owned companies' subsidiaries in China

Source: CHUGOKU HITO TO SOSHIKI NO JITTAI CHOSA (Works Institute)

(D) Increasing technological competitiveness of Chinese companies

As technology transfers to China have proceeded as a result of the establishment of R&D facilities there by Japanese, U.S. and European companies, the technological competitiveness of Chinese companies in general has increased. The total corporate R&D expenditures made in China have been growing by around 30% annually since 2000. In 2007, such expenditures totaled 211.2 billion yuan (around 3 trillion yen), of which some 30% were expenditures by foreign-owned companies (see Figure 1-2-3-52).

In addition, the ratio of the value of exports of products to the value of imports of parts has been rising year after year (see Figure 1-2-3-53), indicating that value added to products exported from China has been increasing. For example, the difference between the prices of color TVs exported from Japan and those exported from China to the United States has been narrowing (see Figure 1-2-3-54), suggesting that the competitiveness of China's labor- and capital-intensive industries in particular is increasing.



Figure 1-2-3-52 Breakdown of corporate R&D expenditures made in China in 2007

Source: *China Statistical Yearbook* (National Bureau of Statistics of China).



Figure 1-2-3-53 Changes in China's processing trade

Figure 1-2-3-54 Comparison of unit prices in Japanese and Chinese exports to the U.S.



Moreover, an increasing number of Chinese companies with enhanced competitiveness are advancing into foreign markets. The Chinese government is actively promoting the advance of Chinese companies into foreign markets through its "going out" strategy,⁷⁷ which aims to expand Chinese direct investment

value of assembled imported goods. Rate of value addition = the value of processing trade exports divided by the value of processing trade imports.

Source: China Customs Statistics (General Administration of Customs of China).

⁷⁷ The "go out" strategy was formally proposed at the National People's Congress in 2000 in order to improve

abroad. Over the five years between 2003 and 2008, the amount of Chinese direct investment abroad increased 14-fold (see Figure 1-2-3-55) (an increase in Chinese direct investment in Africa is described in Column 11 of Section 2.6). Sales generated by Chinese companies from foreign projects in 2008 grew 39.4% on a year-on-year basis to \$56.6 billion and new foreign orders received by them increased 34.8% to \$104.6 billion.⁷⁸



Figure 1-2-3-55 Changes in the flow of Chinese direct investment abroad (excluding financial sector)

Source: China's Foreign Direct Investment Statistics (Ministry of Commerce of China).

(E) Need for the development of the investment environment

(\$100 million)

While China's competitiveness is increasing because of improvement in its technological capability, its advantage in labor costs, which has until now been regarded as a major factor behind its growing competitiveness, is expected to decline,⁷⁹ given the sharply rising minimum wages in various regions (see Figure 1-2-3-56) and a decrease in the Chinese labor population, which is expected to start around 2015 (see Figure 1-2-3-57), thereby gradually weakening China's international competitiveness in labor-intensive industries.

In addition to the rising labor costs, a lack of transparency over the enforcement of laws is cited as a problem with the investment environment in China (see Figure 1-2-3-58), and the number of labor disputes in China is also increasing (see Figure 1-2-3-59). Moreover, several foreign-owned companies

and resolve such problems as trade disputes with other countries arising from China's increasing exports, excess production capacities in some industries and a growing shortage of natural resources by promoting the advancement of Chinese companies into foreign markets. It aims to increase Chinese direct investment abroad, the amount of which is small compared with the amount of inward direct investment in China.

⁷⁸ "Statistics on foreign projects undertaken by China, business partnerships and design consulting services in 2008," Chinese Ministry of Commerce

⁷⁹ "International Competitiveness of China's Manufacturing Industry: Changes and Trends," the Institute of Industrial Economics, the Chinese Academy of Social Sciences (2009)

operating in China are reporting losses. The ratio of foreign-owned companies reporting losses to the overall loss-reporting companies has been increasing year after year, with foreign-owned companies accounting for a fourth of all loss-reporting companies in 2008 (see Figure 1-2-3-60). A preferential corporate tax rate applicable to foreign-owned companies will be raised from 15% to 25%⁸⁰ within five years from January 2008, making the investment environment in China increasingly difficult for foreign-owned companies.





Source: CEIC Database.



Quarter-on-quarter basis (%)



Source: World Population Prospects (UN).

⁸⁰ A corporate tax rate of 24% will be applied in some regions.



Figure 1-2-3-58 Changes in major issues raised by Japanese-owned companies expanding into China

Source: Survey report on overseas business operations by Japanese manufacturing companies (JBIC).



Figure 1-2-3-59 Number of labor disputes accepted in China

Notes: The 2008 figure includes unsettled cases from the previous year. Source: *Statistical publication on progress in the development of human resources and social security projects* (Ministry of Human Resources and Social Security of China)





Although overall inward direct investment in China is increasing, investment by such developed countries as Japan, the United States and Germany has been decreasing (Figure 1-2-3-61). For China, which needs to make its industrial structure more advanced, foreign capital will continue to be important. To continue to attract foreign investment, China needs to make further improvements in its business environment, including an improvement in its enforcement of laws and the implementation of countermeasures against counterfeit products.

Therefore, Japan is negotiating an investment treaty among Japan, China and South Korea and conducting a follow-up review of the Action Agenda for Improvement of The Business Environment among Japan, the People's Republic of China and South Korea. It is also encouraging China to improve the investment environment through the Japan-China High Level Economic Dialogue and various regular meetings.



Figure 1-2-3-61 Trends in inward direct investment in China

Column 4 China Compulsory Certification (CCC) concerning IT security products

In January 2008, the Chinese government announced that it would put into force the China Compulsory Certification (CCC) concerning IT security products on May 1, 2009. Following the expression of concerns by Japan, the United States and Europe about the CCC, China announced in April 2009 that the CCC would be applied only to products procured by the government, effective in May 2010. Despite the limited application, the CCC may pose various problems, including a possible impact on trade with China and high-tech business and problems related to the protection of intellectual property rights, as it requires compliance with China's own standards, the submission of technical information, including software designs, to Chinese screening organizations and onsite inspections of factories. Therefore, Japan, in cooperation with the United States and Europe, is strongly urging China to revoke the decision to introduce the CCC at the Japan-China summit meeting and the Japan-China High Level Economic Dialogue and on other occasions.