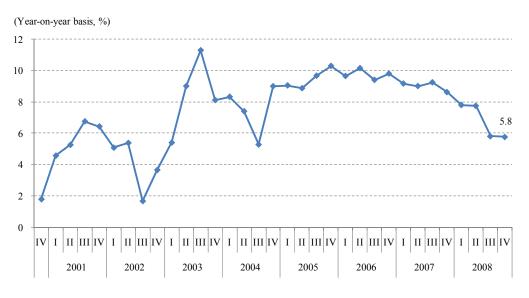
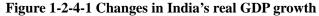
4. Indian economy remaining relatively firm despite the impact of the global economic downturn

For some 40 years after its independence, India maintained a socialist-oriented mixed economy system.⁸¹ The country's budget deficit expanded due to increases in various subsidies and public works expenditures and its current account balance deteriorated significantly as a result of a surge in crude oil prices triggered by the Gulf War of 1990 and a decline in remittances sent home by emigrant workers, causing the country to face a serious shortage of foreign currencies.

The crisis prompted India to implement economic reform measures in 1991, including (i) monetary and foreign exchange measures (currency devaluation, a shift to a floating rate system and the liberalization of banking activity, (ii) reduction of the budget deficit, (iii) industrial and trade deregulations (automatic approval of foreign capital participation in some areas, abolition of industrial licenses, etc.). Thereafter, India continued strong economic growth, with its nominal GDP reaching \$1.2 trillion in 2008. The Indian economy has thus become the third largest in Asia, after the Japanese and Chinese economies, and its size is coming close to the size of the GDP of the 10 ASEAN member countries combined (\$1.5 trillion).⁸² Particularly, over the five years since fiscal 2003,⁸³ the Indian economy posted a high average annual growth of 9% due to active household consumption and strong investment (see Figure 1-2-4-1).





The Indian economy, which started to slow down in the first half of 2008 as a result of a surge in prices of crude oil and other primary products, lost momentum further in the second half of the year

Source: CEIC Database.

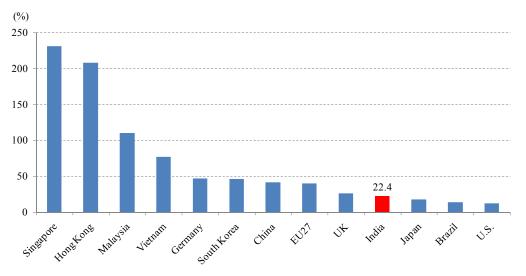
⁸¹ A mixed economy refers to a system which is based on a market economy but which also involves extensive and active government intervention in the economy.

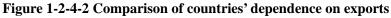
⁸² IMF, "World Economic Outlook Database, April 2009"

⁸³ The fiscal year in India starts in April and ends in March in the following year.

because of the impact of the global financial and economic crisis. Consequently, the Indian economy's growth rate fell to 6.7% in fiscal 2008.

However, there are high hopes that the Indian economy will maintain strong economic growth in the medium and long terms, because it does not depend heavily on exports (see Figure 1-2-4-2), has a huge consumer market comprised of a population of more than 1.1 billion people and is capable of ensuring a stable supply of labor due to its large population of young people (see Figure 1-2-4-3).





Notes: Export dependency = goods and services exports divided by nominal GDP in 2007. Source: *National Accounts Main Aggregates Database* (UN).

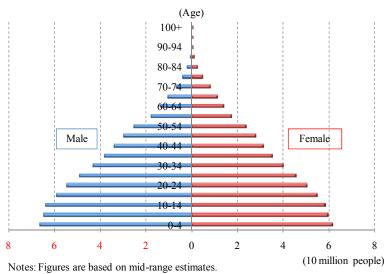


Figure 1-2-4-3 India's population by gender and age group in 2005

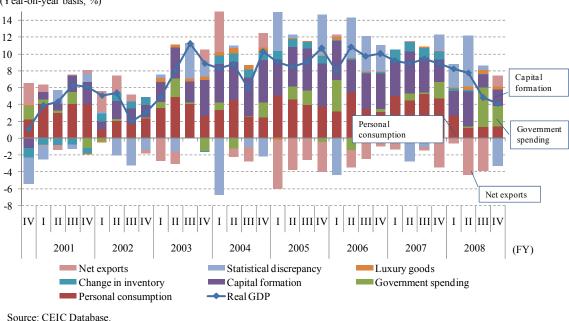
Source: World Population Prospects: The 2008 Revision (UN).

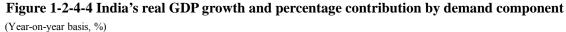
(1) Notable features of the Indian economy

(A) Economic growth led by domestic demand

Data on GDP growth by demand component shows that personal consumption and fixed capital formation are leading the growth of the Indian economy (see Figure 1-2-4-4). Personal consumption and investment accounted for 57.1% and 31.6%, respectively, of real GDP in fiscal 2007, meaning that domestic demand accounted for around 90% of real GDP. Therefore, we may say that India has a domestic demand-led economy.

However, capital expenditures fell sharply in the third quarter of fiscal 2008 due to the impact of the global financial and economic crisis, causing the growth rate to continue declining. This is presumably because of a shortage of funds for capital expenditures caused by reduced liquidity due to a global credit crunch.





(B) Economic growth led by services industries

In India, whose economy is led by domestic demand, the services industry has acted as the driving force behind economic growth since the economic reform was implemented in 1991. As for the industry-by-industry contribution to real GDP growth, the services industry, including commercial services, hotel, transportation and communications, financial services and real estate, makes the largest contributions, confirming that India's strong economic growth is led by the services industry (see Figure 1-2-4-5).⁸⁴

⁸⁴ In fiscal 2007, the services industry accounted for 57% of real GDP (the ratio is 26% for the manufacturing industry and 17% for the agriculture, forestry and fisheries industries), indicating that the Indian economy centers on the services industry.

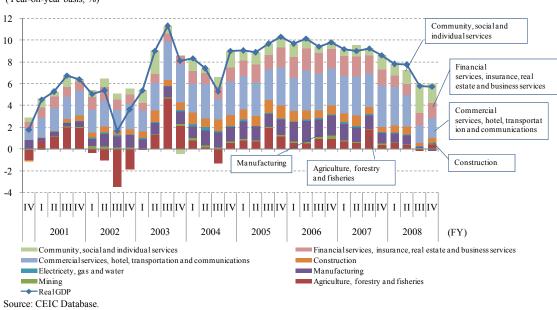
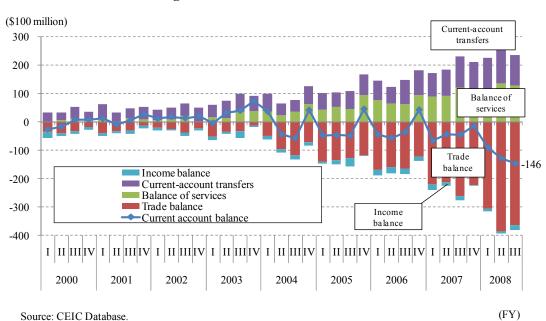
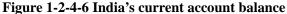


Figure 1-2-4-5 India's real GDP growth and percentage contribution by industry (Year-on-year basis, %)

India has chronically posted a trade deficit as its imports continuously exceed exports due to structural factors. In particular, the trade deficit expanded further in 2008. As for the current account balance, a surplus in the current transfer account, mainly due to remittances from emigrant workers, is working to limit the expansion of the current account deficit (see Figure 1-2-4-6).





(C) Trends in industries

(a) IT services industry

In the services industry, the IT services sector, including software development and business process outsourcing (BPO),⁸⁵ has especially increased sales, driven by exports to the U.S. and European markets.

In the global market for IT-related offshore outsourcing,⁸⁶ whose size is estimated to grow from \$249 billion in 2006 to \$450 billion in 2010, India has the largest market share (11.5%) as an outsourcing destination and is expected to hold the top position until 2010.⁸⁷

According to the NASSCOM (National Association of Software and Services Companies), the value of exports of IT services, including software development and BPO, in fiscal 2008 is estimated at \$47 billion (see Figure 1-2-4-7). However, compared with the previous year, growth in the export value slowed down. This was presumably because the IT services industry was affected by the global financial and economic crisis that started in the United States,⁸⁸ as 60% of exports of IT services from India are bound for the United States and 41% of foreign customers are banks, insurance companies and other financial institutions (see Figures 1-2-4-8 and 1-2-4-9).

While some people expect that expenditures on IT services will be curbed amid the global recession, others predict that the recession will provide the Indian IT service industry with a good business opportunity given the possibility that an increase in the number of companies seeking to reduce costs and improve business process efficiency⁸⁹ will expand demand for BPO.⁹⁰

⁸⁵ Business process outsourcing (BPO) refers to the consignment of back-office operations such as call center operations to an outside contractor, for example.

⁸⁶ Offshore outsourcing refers to the consignment of business operations to an overseas company.

⁸⁷ Ministry of Economy, Trade and Industry (2008), "BPO KENKYUUKAI HOUKOKUSHO"

⁸⁸ The financial and economic crisis has also affected Indian IT engineers working in the United States. Under the Economic Stimulus Act, which was enacted in February 2009, the United States prohibited companies receiving fiscal support from directly employing foreign people working with the H1-B visa (a visa for workers in specialty occupations). According to the NASSCOM, Indian IT engineers received 11% of the total H1-B visas issued in 2008 (a NASSCOM press release issued on March 12, 2009).

⁸⁹ For example, IBM of the United States was reportedly planning to eliminate some 5,000 jobs in its North American IT business and transfer the business operations made redundant by the job reduction to India (the online version of The Wall Street Journal, March 25, 2009)

⁹⁰ NASSCOM (2009), "Indian IT-BPO Industry Factsheet 2009"

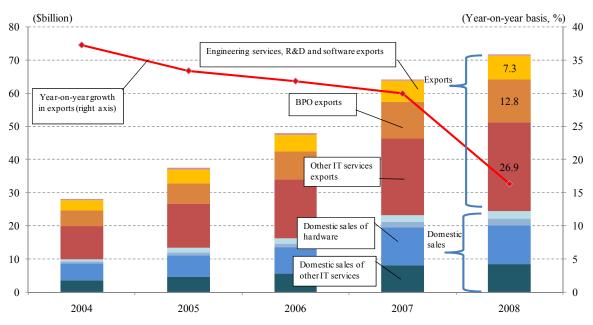
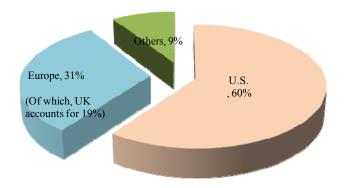


Figure 1-2-4-7 Indian IT services sales and year-on-year growth in IT exports

1. Figures for FY2008 are estimates published in February 2009.

2. Year-on-year growth in exports is based on the sum of other IT services exports, BPO exports, and engineering services, R&D and software exports. Source: *IT-BPO Industry Factsheet 2009* (NASSCOM).

Figure 1-2-4-8 Breakdown of Indian IT-BPO services exports by region of destination in FY2007



Source: Indian IT-BPO Industry Factsheet 2009 (NASSCOM).

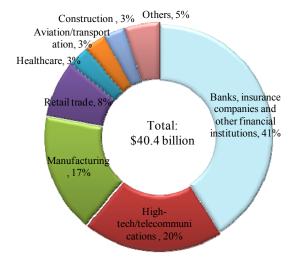


Figure 1-2-4-9 Breakdown of Indian IT-BPO services exports by industry

Notes: Total of IT services, BPO, engineering services, R&D, and software products exports. Source: *Indian IT-BPO Industry Factsheet 2009* (NASSCOM).

(b) Manufacturing industry

The manufacturing industry accounted for 26% of real GDP in fiscal 2007, about half the ratio for the services industry (56%). However, the IT services sector, which leads the economy, does not have a wide range of supporting industries such as small and medium-size enterprises engaging in parts manufacturing and materials processing and distributors. According to the NASSCOM, the number of people directly employed by the IT industry stood at only about 2.2 million in fiscal 2007. Even if those indirectly employed are included, the number of people employed by the IT industry came to only around 10 million.⁹¹ As the number of young people entering the labor market is expected to grow with an increase in the population, the existing industrial structure could fail to absorb excess labor and a rise in the number of unemployed people could fuel social concerns.⁹² For India to maintain stable growth, the country needs to create jobs by fostering the manufacturing industry.⁹³

⁹¹ NASSCOM (2009), "Indian IT-BPO Industry Factsheet 2009"

⁹² The web site of the Organization for Small & Medium Enterprises and Regional Innovation

⁹³ One factor that may have hampered the development of the manufacturing industry is the fact that there was not sufficient incentive for expanding production and improving productivity because the government granted excessive preferential treatment to small manufacturers while expanding the public sector under a mixed economy system that continued until 1991. In recent years, internationally competitive companies have emerged in the pharmaceutical and steel industries.

Column 5 Will India inherit the Japanese model of manufacturing?

Since Suzuki Motor Corp advanced into India in 1982, India has been developing a foundation for "coordination-based manufacturing" with the support of the Association for Overseas Technical Scholarship (AOTS). Under the Automobile Mission Plan, announced by the Indian government in January 2007, India positions itself as a production hub of small cars that takes advantage of its expertise in coordination-based manufacturing. In August 2007, Toyota Motor Corp opened the Toyota Technical Training Institute in India, its first such institute outside Japan. India has strong familiarity with the Japanese model of coordination-based manufacturing, as exemplified by the presence of Rane Group, a major auto parts maker based in Chennai that has received a Deming Prize in the past. An Indian company based in a very remote corner of the country advocates the "Kaizen" initiative and the "5S" initiative, taking a leaf out of the Japanese style production management system.

In addition, the Indian market is similar to the Japanese market in that consumers there are very choosy about their needs. Indian consumers' tendency to have faith in highly durable Japanese products despite their high prices and confidence in Japanese brands, rather than favor low cost over high quality, is very encouraging for Japanese-owned companies in India, where the middle-income class is expected to grow significantly. Moreover, the protection of intellectual property rights is seen to be stronger in India than in China and Southeast Asian countries, although the degree of protection may vary depending on how much protection effort individual companies make.

In India, dedication to duties is admired as a virtue, and a work ethic that places more emphasis on performing a job than on earning money⁹⁴ is widespread. These factors are expected to make great contributions to the growth of the manufacturing industry. While India needs to overcome such challenges as training workers to acquire skills in multiple processes, it has the potential to achieve innovation in manufacturing processes while inheriting the Japanese model of coordination-based manufacturing. India could be a dark horse candidate for the successor of Japan as the practitioner of coordination-based manufacturing.

(2) Impact of the global financial and economic crisis on the Indian economy

Immediately after the failure of Lehman Brothers in September 2008, there were widespread expectations that the Indian economy would not be significantly affected by it. Among the reasons cited for the optimism were (i) that the balance sheets of Indian financial institutions were relatively sound (the amount of bad loans was small)⁹⁵ and (ii) that the Indian economy was led by domestic demand and its dependence on exports was relatively small. However, the Indian economy was unable to avert the impact of the global recession, as it was closely linked to the global economy through the financial channel due to its heavy dependence on overseas funds for meeting the needs for active capital expenditures.

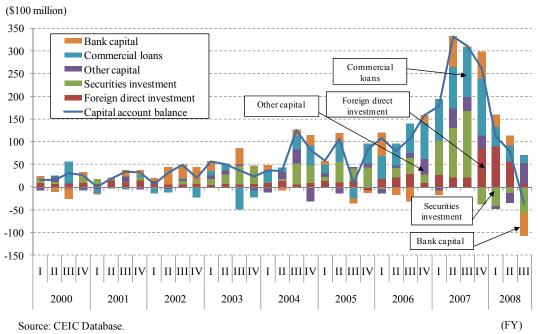
⁹⁴ The Bhagavad Gita, which is treasured by the Indian people as a sacred scripture, preaches, "The significance of performing your duties resides in the action, not in the results thereof. You should not let the results of your action be the motivation for the action. Neither should you be attached to inaction."

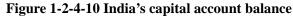
⁹⁵ Indian financial institutions are deemed to have been hardly affected by the subprime mortgage problem as they were under the strong administrative regulation and supervision (by the Ministry of Finance and the Reserve Bank of India (hearings with local banks)

(A) Impact on the financial sector and the real economy

(a) Impact on the financial sector

It was the financial sector that was first affected by the financial crisis. As capital funds, mainly those invested by foreign institutional investors, were withdrawn⁹⁶ in response to a global credit crunch that occurred after the Lehman shock, liquidity in India declined, squeezing corporate fund-raising. It became difficult to raise funds from abroad through the issuance of securities and borrowings, and Indian banks, too, tightened their stance on lending. In the October–December quarter of 2008, India posted a capital account deficit for the first time since the July–September quarter of 1998 as a result of a net outflow of portfolio investments and a decline in external borrowings (see Figure 1-2-4-10).





In addition, India's currency, the rupee, depreciated sharply and Indian stock prices⁹⁷ plunged as a result of an outflow of foreign capital (see Figure 1-2-4-11).

 ⁹⁶ As the Reserve Bank of India strengthened its stance of credit tightening (raised interest rates) in fiscal 2008 and thereafter, an outflow of funds, especially portfolio investments, started to grow around that time.
⁹⁷ The SENSEX index, which peaked above 20,000 in 2007, was down to less than half the peak level in early 2009.

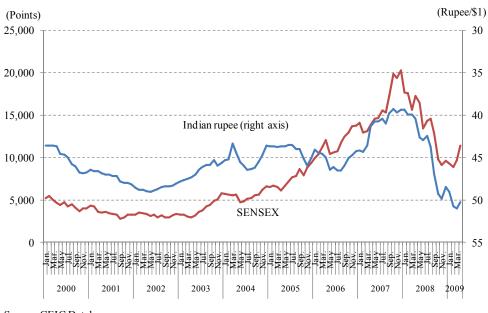


Figure 1-2-4-11 Changes in Indian rupee exchange rate and stock prices

Source: CEIC Database.

(b) Impact on the real economy

Next, the real economy was affected by the global financial crisis. Exports of jewelry and textile products, India's major export items, dropped steeply because of a decline in demand from the United States and Europe, which are major exports markets. The value of commodity exports has been declining since October 2008 (see Figure 1-2-4-12). In addition, India's current account deficit expanded to \$14,644 million in the October–December quarter of 2008 as a result of decreases in exports of services, including IT services, and remittances sent home by emigrant workers.⁹⁸ Industrial production has also been declining, providing clear evidence of a slump in corporate activity (see Figure 1-2-4-13).

⁹⁸ The decline in the amount of remittances sent home by emigrant workers in the Middle East was attributable in part to a drop in crude oil prices (the web site of the Reserve Bank of India).

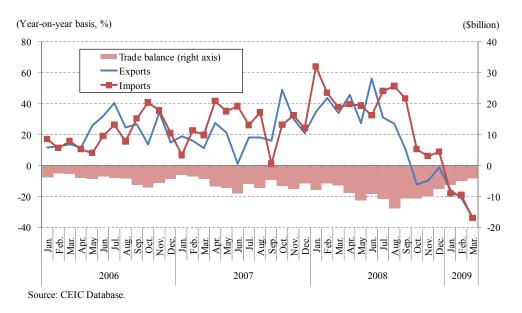
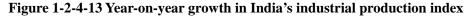
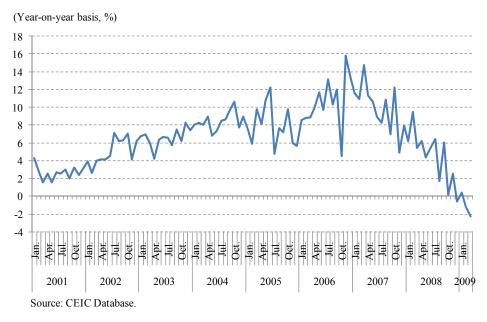


Figure 1-2-4-12 Year-on-year growth in Indian imports and exports





Sales of consumer durable goods, including automobiles and houses, weakened due to a decrease in loans to consumers, and unit sales of automobiles posted a year-on-year drop for four consecutive months, indicating a slowdown in personal consumption. However, domestic automobile sales have rebounded since February 2009, suggesting that the government's economic stimulus measures, such as tax reduction, which will be described later, have brought about some benefits (see Figure 1-2-4-14).

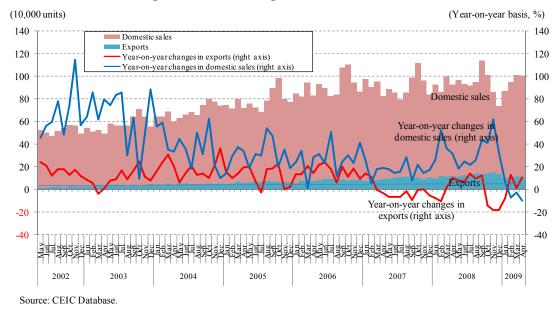


Figure 1-2-4-14 Changes in India's auto sales

(B) Economic stimulus measures taken by India

In order to limit the impact of the global credit crunch on the Indian economy, the Reserve Bank of India, the central bank, gradually reduced policy interest rates since October 2008, while the Indian government announced three sets of economic stimulus measures by March 2009.⁹⁹

(a) Shift from credit tightening to credit easing

The Reserve Bank of India was tightening credit in the first half of 2008 to contain inflation. However, after the Lehman shock of September 2008, it shifted to credit easing in order to deal with a shortage of liquidity due to an outflow of foreign capital, implementing a series of cuts in policy interest rates,¹⁰⁰ and relaxed restrictions on borrowings from foreign financial institutions. However, banks' lending rates declined only slowly, indicating that they remained cautious about providing loans (see Figure 1-2-4-15). Despite implementing the series of interest rate cuts after an easing of inflation, which was the greatest cause for concern in the first half of 2008, the Reserve Bank of India is facing calls from the industry for additional interest rate cuts.

⁹⁹ The three sets of measures were announced on December 7, 2008, and on January 2 and February 24, 2009, respectively.

¹⁰⁰ The repo rate, which stood at 9.0% in September 2008, was lowered to 4.75% in April 2009.

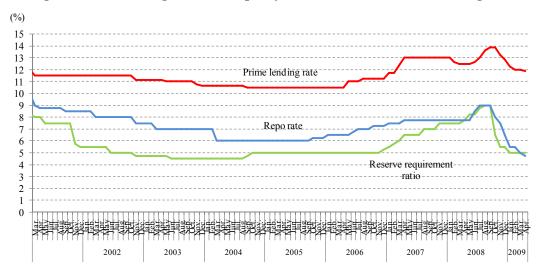


Figure 1-2-4-15 Changes in India's policy interest rates and banks' lending rates

Notes: The reportate is the short-term lending rate at which banks borrow rupees from the central bank. Source: CEIC Database.

(b) Tax reduction

The Indian government reduced the commodity tax rate from 14% to 8% and the services tax rate from 12% to 10% as a provisional measure.

(c) Financial support for infrastructure development

The Indian government authorized the issuance of tax-exempt bonds totaling 400 billion rupees (around ¥800 billion) by India Infrastructure Finance Company Ltd. (IIFCL). The funds raised from the market through the issuance of those bonds will be provided in loans for infrastructure development projects via banks.

(C) Expansion of the budget deficit

As a result of a series of increases in fiscal expenditures, the budget deficit is growing. According to an estimate by the Indian Ministry of Finance, the budget deficit in fiscal 2008 will reach 6% of GDP,¹⁰¹ far above the government's target of 2.5%, even though the Indian government is trying to curb the budget deficit based on the Fiscal Responsibility and Budget Management Act (FRBMA). Caution is required as the budget deficit could raise concern about India's ability to maintain sustainable growth if it continues to expand.

(3) India attracting hope as a huge consumer market

The Indian economy is expected to continue steady growth in the long term, as its dependence on external demand is small and consumption is likely to expand further in line with an increase in the

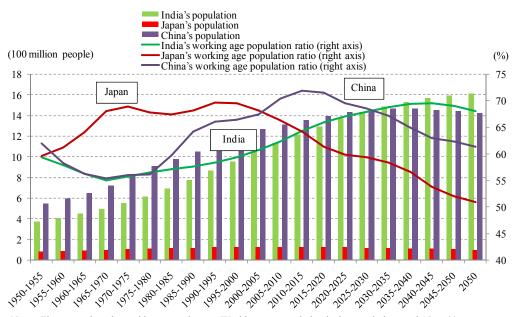
¹⁰¹ The Indian Ministry of Finance website (the announcement of a provisional budget on February 16, 2009). According to "Economic Outlook 2009" by the OECD, India's public-sector deficits, including the deficits of states, are estimated to have exceeded 10% of GDP in fiscal 2008.

population.

(A) The world's second biggest population and a large pool of young people

The Indian economy, led by domestic demand — mainly consumption — is supported by India's huge population, which is growing by 16 million people annually.¹⁰² According to the Central Statistical Organization of India, India's population in 2008 totaled around 1.148 billion people,¹⁰³ the second largest population in the world, after China's. The United Nations predicts that India will replace China as the world's most populous country around 2030 (see Figure 1-2-4-16). Moreover, as people aged 30 or less account for 60% of India's total population, the aging of society will advance moderately compared with other countries and the expected stable supply of labor and expansion of consumption will presumably contribute to future economic growth. On the other hand, in order to use the rapid growth of the population of working-age people as the driving force for consumption, India needs to create a vast amount of jobs so as to absorb the increasing labor force.





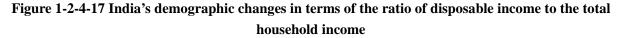
Notes: Figures are based on mid-range estimates. Working age population is the population aged 15 to 64. Source: World Population Prospects: The 2008 Revision (UN).

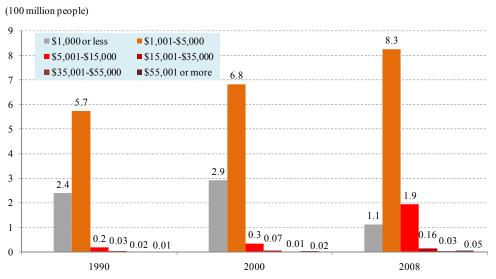
¹⁰² This is an annual population increase from 2005 to 2010, as estimated in "World Population Prospects: The 2008 Revision Population Database" by the United Nations.

¹⁰³ This is a median figure estimated by the Central Statistical Organization of India

(B) Expansion of the consumer market

According to a forecast by a private research organization,¹⁰⁴ India's middle-income class (with annual income of 0.2 to 1 million rupees, equivalent to around ± 0.4 million to ± 2 million), which numbered 13 million households, or 50 million people, in 2005, will grow to 583 million people in 2025, accounting for 41% of the total population. According to one estimate, the number of people with a household disposable income of \$5,001 or more exceeded 200 million in 2008 (see Figure 1-2-4-17).





Notes: Figures are the ratio of disposable income to the total household income multiplied by population. Source: Created by Nomura Research Institute using data from *World Consumer Lifestyle Databook 2009*, issued by Euromonitor International in 2008.

(a) Vibrant market for automobiles and mobile phones

The expansion of India's consumer market is reflected in increases in unit sales of automobiles and motorbikes, and the number of mobile phone subscribers (see Figures 1-2-4-18 and 1-2-4-19).

¹⁰⁴ Mckinsey Global Institute (2007), "The 'Bird of Gold': The Rise of India's Consumer Market"

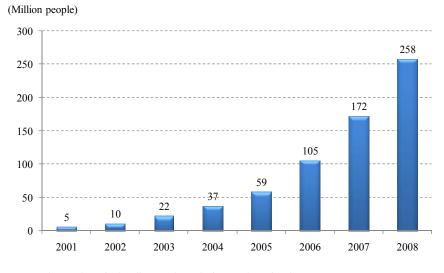


Figure 1-2-4-18 Changes in the number of mobile phone subscribers

Notes: The number of subscribers at the end of December of each year. Source: CEIC Database.

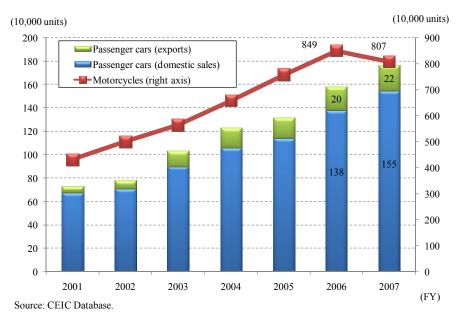


Figure 1-2-4-19 Changes in Indian sales of passenger cars and motorcycles

The number of mobile phone subscribers at the end of 2008 exceeded 250 million people, increasing by around 80 million people from a year before.

As for the passenger car market, Japanese automakers have large market shares (see Figure 1-2-4-20). Competition in the auto industry is expected to intensify,¹⁰⁵ as foreign automakers have advanced into

¹⁰⁵ A customer base may be expanded by the launch of Nano, an ultra-low-priced small car intended as a

India one after another, attracted by the growth potential of the country as a market, mainly for low-priced, small cars.

The Indian government set goals for the promotion of production and exports of small cars.¹⁰⁶ In fiscal 2007, sales of passenger cars in India totaled around 1.5 million units, while exports totaled only around 200,000 units. However, exports to Europe, the Middle East and Africa, mainly by Hyundai and Maruti Udyog (Suzuki), have been gradually increasing (see Figure 1-2-4-21). As Japanese-owned companies' manufacturing facilities are concentrated around Delhi, which is located in an inland area, underdeveloped infrastructure has become a bottleneck for exports. However, access to ports is expected to be improved by future infrastructure development projects, including a plan for the Delhi-Mumbai Industrial Corridor Project, which will be described later.

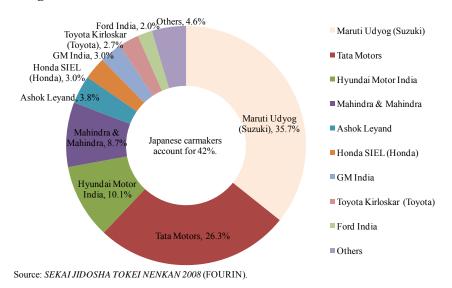


Figure 1-2-4-20 Carmakers' market share in the Indian auto market

replacement for a motorcycle, by Tata Motors, the largest automaker in India.

¹⁰⁶ The "Automotive Mission Plan 2006–2016, " compiled by the Indian Ministry of Heavy Industries and Public Enterprises as an auto industry strategy, calls for the implementation of measures to promote production and exports of small cars, MUVs, motorcycles, three-wheelers, tractors and related parts.

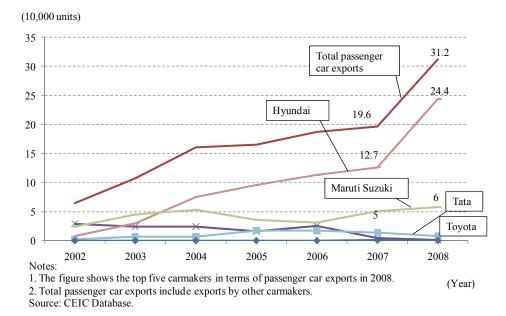


Figure 1-2-4-21 Changes in Indian passenger car exports by carmaker

(b) Eradication of poverty

In India, there is still a vast class of people under the poverty line, with 80% of the country's population living with an income of \$2 or less per day.¹⁰⁷ In order to continue to expand domestic demand steadily, it is important for India to eradicate poverty.

(4) Relations with Japan

(A) Hope for India as a huge market and concerns over infrastructures

The amounts of Japanese direct investment in India and Japanese trade with India are rapidly growing (see Figures 1-2-4-22 and 1-2-4-23). In particular, the amount of Japanese direct investment in India is expanding rapidly and approaching the amount of Japanese direct investment in China or in ASEAN. Investment in the production of transportation equipment, such as automobiles and electric machinery, accounts for a large portion of the overall outstanding Japanese direct investment in India (see Figure 1-2-4-24). However, investment targets have been diversifying in recent years, with direct investment in the financial/insurance sector and the chemical/pharmaceutical sector growing. Japan and India, which have close economic relations with each other as described above, are conducting negotiations about an economic partnership agreement (EPA). In December 2008, the 11th round of negotiations was held.

¹⁰⁷ Masanori Kondo (2008), "INDO NO YAKUSHIN TO NIHON HENO EIKYOU"

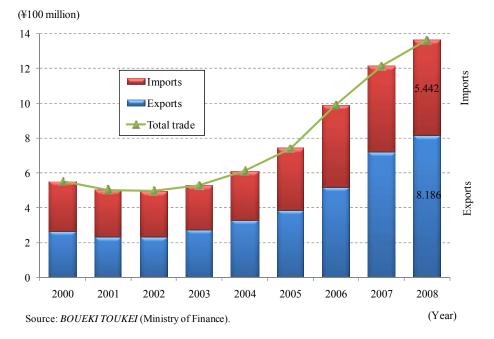
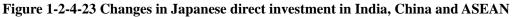
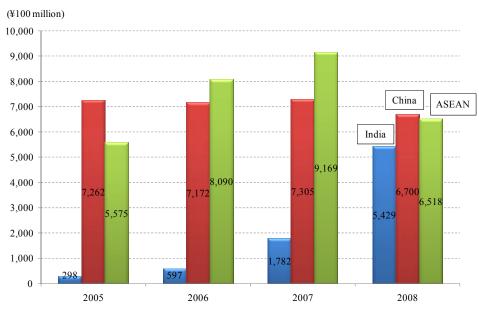


Figure 1-2-4-22 Changes in Japanese trade with India





Source: KOKUSAI SHUUSHITOUKEI (Ministry of Finance, Japan; Bank of Japan)

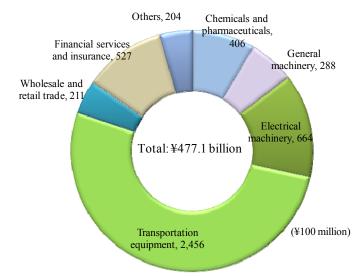


Figure 1-2-4-24 Outstanding Japanese direct investment in India in 2007

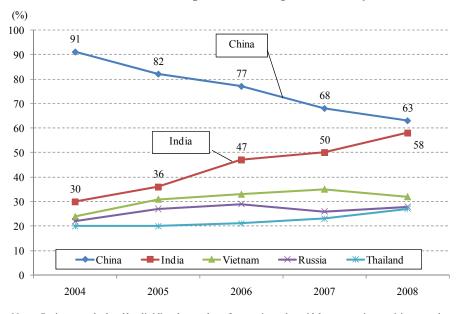
Source: KOKUSAI SHUUSHI TOUKEI (Bank of Japan).

According to a questionnaire survey conducted on Japanese-owned companies by the Japan Bank for International Cooperation with regard to direct investment abroad,¹⁰⁸ India is regarded as the second most promising investment target country, after China. While the ratio of companies preferring China declined, the ratio of those preferring India rose and came close to the ratio for China (see Figure 1-2-4-25). The most frequently cited reason for favoring India as a promising investment target was the growth potential of the Indian market (see Figure 1-2-4-26).

However, while companies that have a specific plan for doing business in India are increasing steadily, less than half of the companies that regarded the country as a promising investment target had such a plan. The most frequently cited problem with India was underdeveloped infrastructure. Types of infrastructure for which development is seen as especially necessary were roads (cited by 84%), power facilities (74%) and water facilities (47%). Therefore, Japan aims to improve the investment environment by actively supporting infrastructure development in India through ODA.

¹⁰⁸ According to the Japan Bank for International Cooperation, the replies to the questionnaire survey were collected in July and August 2008.

Figure 1-2-4-25 Trends in Japanese-owned companies' promising investment target countries and the ratio of companies favoring each country



Notes: Ratios are calculated by dividing the number of enterprises who said the country is promising over the medium term (next three years or so) by the number of respondents who answered the question. Source: *JBIC FY2008 Survey: The Outlook for Japanese Foreign Direct Investment (20th Annual Survey)* (JBIC).

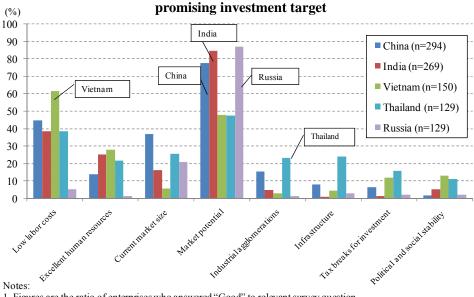


Figure 1-2-4-26 Reasons cited by Japanese-owned companies for favoring each country as a

1. Figures are the ratio of enterprises who answered "Good" to relevant survey question.

2. "n" = number of respondents.

Source: JBIC FY2008 Survey: The Outlook for Japanese Foreign Direct Investment (20th Annual Survey) (JBIC).

(B) Status of infrastructure development

India has an area of 32.87 million square kilometers, almost equal to the area of Europe excluding Russia. As metropolitan regions are scattered across the vast area, it is important to improve infrastructures, including road and railway networks that link those regions.

As indicated in the results of the above-mentioned questionnaire survey, underdeveloped infrastructures pose problems. To achieve sustainable economic growth, the Indian government aims to expand investment in infrastructure development. Under the 11th five-year plan (from 2007 to 2012), the government estimates necessary infrastructure investments during the period of the plan at around \$500 billion and aims to increase the ratio of infrastructure investment to GDP from 6% in fiscal 2005 to 9% by fiscal 2011. The plan allocates 33% of the investment to power facilities, 15% to roads and bridges and 13% to each of telecommunications and railways.

Because of its budgetary constraints, the government wants to make the most of the public-private partnership (PPP) scheme to meet the huge fund needs for the infrastructure investment. Under the 11th five-year plan, 37% of the funds will be provided by the central government, 32% by state governments and 30% by the private sector.

Below, we will provide an overview of the status of infrastructure development India.¹⁰⁹

(a) Roads

As of fiscal 2007, India had a nationwide network of 3.34 million kilometers of roads, including national roads, state roads and intra-city roads. Although national roads accounted for only 2% of the total, around 40% of all traffic passes through them. Of the national roads, 32% were one-lane roads. Despite the government's efforts to turn national roads linking major cities into multi-lane ones, traffic congestion is becoming increasingly serious due to an increase in traffic volume.

(b) Power facilities

India faces a chronic power shortage. It is said that problems afflicting the power sector are attributable to the electricity rates that are set low for farmers for political reasons and a scarcity of capital investment in construction of power plants due to the fiscal squeeze on state electricity boards (SEBs).¹¹⁰

(c) Railways

The railways business in India is monopolized by Indian Railways, a government-run railways company. The Indian government is planning to build dedicated freight corridors (DFC) between Mumbai and Delhi and between Delhi and Kolkata. Japan has expressed its intention to provide yen loans to support the construction of the priority development section of the Delhi–Mumbai corridor, planned as part of the Delhi–Mumbai Industrial Corridor Project, which is described below.

¹⁰⁹ Indian Ministry of Finance, "Economic Survey 2007–2008"

¹¹⁰ The above-cited paper by Masanori Kondo (2008)

(d) Ports

Mumbai is effectively the closest port to Delhi, which is located in an inland area. However, due to underdeveloped infrastructures, transport to Mumbai takes much time. Meanwhile, Chennai is attracting attention as a future export base for manufacturers because of its large-scale port facilities and proximity to Thailand and other ASEAN countries, where Japanese-owned companies' operations are heavily concentrated.¹¹¹

(C) Japanese support

(a) Delhi-Mumbai Industrial Corridor Project

Japan is providing support for the improvement of the investment environment in India through ODA and other means. In order to promote direct investment in India by Japanese-owned companies, it is especially important to resolve the problem of underdeveloped infrastructures. For the development of infrastructures in India, the Japanese and Indian governments are implementing the Delhi–Mumbai Industrial Corridor (DMIC) Project (see Figure 1-2-4-27). This project focuses on developing infrastructures by using private capital and the PPP scheme in order to develop six states located between Delhi and Mumbai¹¹² into a major industrial region by linking industrial zones and ports in them through dedicated freight corridor railways and roads. The project, when realized, is expected to improve the investment environment for foreign-owned companies, including Japanese ones, by resolving such problems as a scarcity of land for industrial use and underdeveloped infrastructures for the supply of power and water. For India, the project is expected to bring such benefits as increases in jobs and exports¹¹³ as improvements in infrastructures promote the development of an internationally competitive manufacturing industry.

In October 2008, the Japanese and Indian governments decided to support "early bird projects" (pilot projects) following the signing of a memorandum of understanding on the joint establishment of a Project Development Fund (PDF). A total of 17 early bird projects were adopted, with Japanese-owned companies expected to be involved in five of them. As the early bird projects are implemented with the support of the Indian side, including state governments, it is desirable that Japanese-owned companies actively participate in them. Starting in 2009, master plans and specific projects will be drawn up.

¹¹¹ Mizuho Research Institute (2008), "INDO SIJOU NI IDOMU NIKKEIKIGYOU Part II"

¹¹² The six states are Uttar Pradesh, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Maharashtra.

¹¹³ This project aims at doubling the potential employment capacity, tripling industrial production and quadrupling exports.

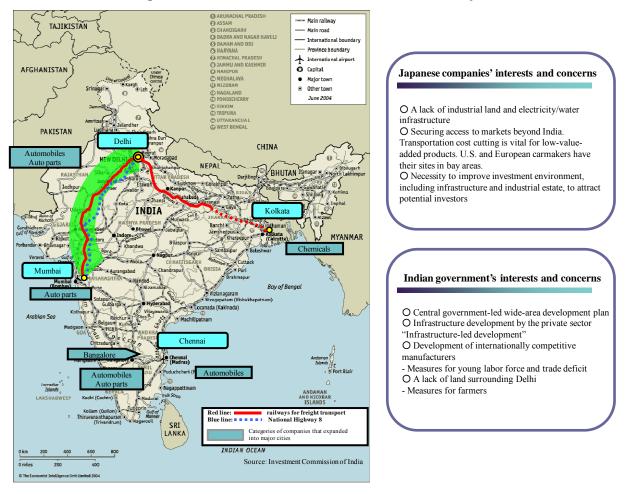


Figure 1-2-4-27 Delhi-Mumbai Industrial Corridor Project

(b) Provision of yen loans

India has been the recipient of the largest yen loans for six consecutive years from fiscal 2003. In fiscal 2008, Japan provided yen loans totaling around ¥236 billion to India.¹¹⁴ In addition to efforts to eradicate poverty and deal with environmental problems, yen loans are used for the development of infrastructures, including the "Delhi Mass Rapid Transit System" plan for the construction of what is known as the Delhi Metro and the construction of a priority development section of the planned dedicated freight corridor between Delhi and Mumbai.¹¹⁵

(D) Indian laws and regulations impeding Japanese companies' advance into India

It should be kept in mind that in addition to underdeveloped infrastructures, there are many

¹¹⁴ The Japanese Ministry of Foreign Affairs (2008), "ODA Country Data Book 2008"

¹¹⁵ As the backbone of industrial distribution under the DMIC project, the construction of a 1,468-kilometer DFC between Delhi and Mumbai is planned. Japan expressed its intention to provide support for the construction of the priority development section of this corridor through a tied yen loan involving the use of Japanese technology (October 2008).

institutional problems for companies advancing into India. Problems often cited include: that there is a complex web of authorities divided between the central and state governments; that regulations and tax systems differ from state to state; that negotiations and procedures concerning land acquisitions take a long time and cost much; and that it is difficult to dismiss employees because of generous employment protection.¹¹⁶

As a result of the relaxation of the restriction on the entry of foreign capital implemented since the economic reform initiative started in 1991, the entry of foreign-owned companies into the Indian market is automatically approved and 100% foreign ownership is allowed in principle. However, regarding some business sectors, there are still restrictions, such as limits on foreign ownership and a requirement for obtaining prior approval. For example, while India's retail market is attracting attention for its expected rapid growth,¹¹⁷ the entry of foreign retailers is approved only with some conditions attached.¹¹⁸ It is desirable that deregulation will be implemented in this respect in the future.

Column 6 Pakistan in the frontline of the fight against terrorism

For Japanese people, Pakistan may evoke negative images, such as political instability, suicide bombings and poverty.

Pakistan is attracting international attention for its geopolitical importance as a country in the frontline of the fight against terrorism. In April 2009, the Pakistan Donors Conference co-hosted by Japan and the World Bank was held in Tokyo with the participation of representatives from 31 countries and 18 international organizations, including the International Monetary Fund, and aid totaling more than \$5 billion over 2 years was pledged. Japan also pledged up to \$1 billion in aid to Pakistan on the condition that an IMF program adopted in November be steadily implemented. Certainly, Pakistan faces a difficult economic condition. The country plunged into a serious situation as a result of the world economic crisis that added to problems including a decline in foreign currency reserves due to upsurges in international crude oil and food prices, increases in its budget and current account deficits and a decrease in foreign investment following the deterioration of the security condition. Although the IMF decided on \$600 million in emergency loan to Pakistan in November 2008, the country's economic management continues to be precarious.

Despite the difficult situation, Pakistan, which posted economic growth of 6 to 8% in recent years, is a country with a large population of more than 180 million people (the sixth largest in the world as of 2009)

¹¹⁶ Hearings with Japanese-owned companies operating in India (2008), "Investment Environment in India," by the Japan Bank for International Cooperation and the World Business News by JETRO (March 19, 2009)

¹¹⁷ Rapid growth is expected because the high ratio of small retailers, including stores operated by individuals, means there is significant room for the growth of modern systematic retailing as well as because consumption is expected to expand (Ministry of Economy, Trade and Industry (2007), "KOURIGYOU NO KOKUSAITENKAI NI KANSURU KENKYUUKAI")

¹¹⁸ According to a directive issued in 2006 by the Indian Ministry of Commerce and Industry's Department of Industrial Policy and Promotion, those conditions are (i) that products are sold under a single brand, (ii) that products are sold under the same brand internationally and (iii) that a single-brand retailer handles only products on which the brand is indicated at the time of manufacturing. The limit on the foreign ownership ratio is set at 51%.

and is one of the "Next 11" countries, which are expected to follow the footsteps of BRICs as emerging economies with high growth potential. As Pakistan's population is expected to exceed 300 million people by 2050, making it the world's fourth populous country, after India, China and the United States (an estimate by United Nations), Pakistan is a promising market with an abundant supply of young labor.

Although it faces many structural problems, including underdeveloped infrastructures and the absence of major export industries, in addition to its recent difficult political and security conditions and the economic crisis, Pakistan has not lost its potential power.