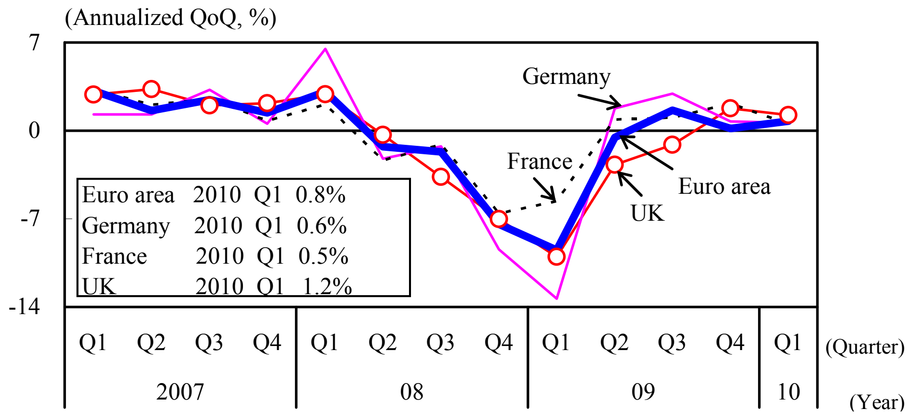
Section 4 European Economy

1. Economic Trends and Fiscal/Monetary Policies in Europe

(1) Economic trends in Europe

- Having emerged from the worst stage around the spring of 2009, the European economy has ceased to fall. It is basically expected to get on track towards a moderate recovery from this point onward. Nevertheless, there exist some downside risks for the future economy including credit crunch, disappearance of the positive effects of policy measures taken so far, and a worsening employment situation. In addition, it has to be borne in mind that the Greek fiscal crisis may heighten concerns over the fiscal positions of other European nations and the European financial system as a whole, which could make the volatile financial and capital market more unstable.

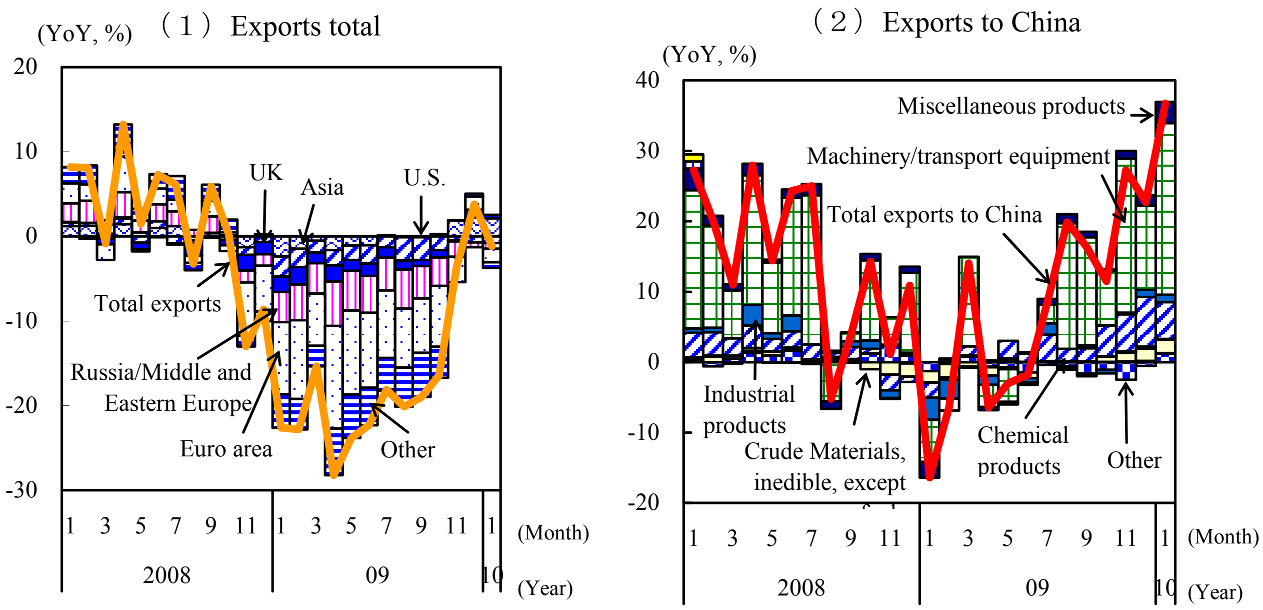
Figure 1-4-1 Real GDP Growth Rates of Major European Countries



(Notes) Source: Eurostat, Federal Statistical Office for Germany, INSEE (National Institute of Statistics and Economic Studies, France) and Office for National Statistics, UK.

- Exports have increased in Germany, France and the UK. German exports to Asia, particularly those to China, have been robust.

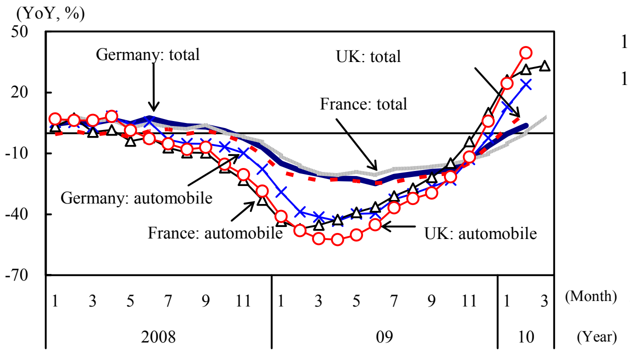
Figure 1-4-5 German Export Trends



(Notes) Source: Eurostat.

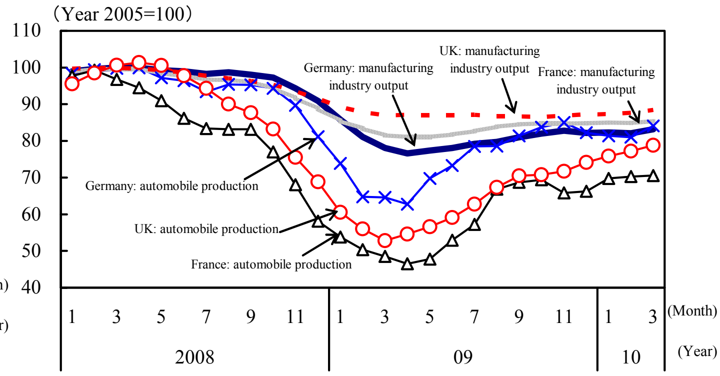
- The automobile scrapping scheme had supported the economy from around the spring of 2009 in Germany and the summer of that year in France and the UK. However, expected weak demand for automobiles in reaction to the brisk sales bolstered by the scheme is likely to cause automobile-related industries to slump for a while.

Figure 1-4-9 Exports



(Note) Source: Eurostat.

Figure 1-4-13 Manufacturing Industry Output and Automobile Production



(Note) Source: Eurostat.

- Unemployment rates in Europe have remained at high levels. In Spain, the proportion accounted for by the long-term unemployed of the total unemployed population has increased, with the unemployment rate among youth rising.
- Outstanding loans to corporations at financial institutions in the euro area have continued to decline. Meanwhile, those at UK financial institutions have leveled off.

(2) Fiscal/monetary policies in Europe

- Europe has begun to tackle fiscal consolidation due to deteriorating budget conditions resulting from the economic downturn.
- While the policy interest rates have remained unchanged, nontraditional monetary policies introduced to deal with the financial crisis have gradually been abandoned. However, some nontraditional monetary policies have been reintroduced, triggered by the Greek fiscal crisis.
- Amid some downside risks such as the further deterioration of the employment situation and a credit crunch, embarking on fiscal consolidation with more haste than caution may bring about prolonged economic stagnation.

2. The Greek Fiscal Crisis and Contagion

- Background to and development of the Greek fiscal crisis

October 2009	○ Change in administrations New Democratic Party (center-right) ⇒ Greek Panhellenic Socialist Movement Party (left) ○ Significant downward revision of fiscal statistics data Treasury budget as a percentage of the GDP 2008: -5.0% → -7.7%; 2009: -3.7% → -12.5% ⇒ Market distrust towards Greek fiscal positions increased
November 2009	○ Dubai debt crisis ⇒ Increased financial market's awareness of sovereign risks
December 2009	○ Greek government bonds downgraded ⇒ Market concerns over Greek fiscal positions further heightened
November 2009 – March 2010	○ Several fiscal reform programs announced by the Greek government ⇒ Markets unimpressed, as it appeared to be "bit-by-bit" measures. ○ Some statements were released by the EU at European Council and other occasions that "Euro area member states take determined and coordinated action, if needed, to safeguard financial stability in euro area as a whole" ⇒ Taken by markets as a sign that EU lacked concrete measures ⇒ Market concerns over Greece not alleviated (increase in long-term interest rates and CDS)
April 11, 2010 April 23, 2010	○ Rescue framework for Greece involving loans from the IMF and other euro area countries agreed to ○ Greek government officially requested the activation of the support mechanism
May 2, 2010 May 9, 2010 May 10, 2010 May 10, 2010	○ At the request of the Greek government, a bailout package worth 110 billion euros over the next 3 years was agreed to ○ Establishment of European Financial Stabilization mechanism (stabilization fund for the euro area) worth up to 750 billion euros was agreed to ○ Announcement by the ECB of its decision to intervene in dysfunctional public and private bond markets ○ Major central banks will re-establish a dollar swap facility with the FRB and introduce dollar fund supply operations

Table 1-4-25 Greek Economic Policy Program (Outlines)

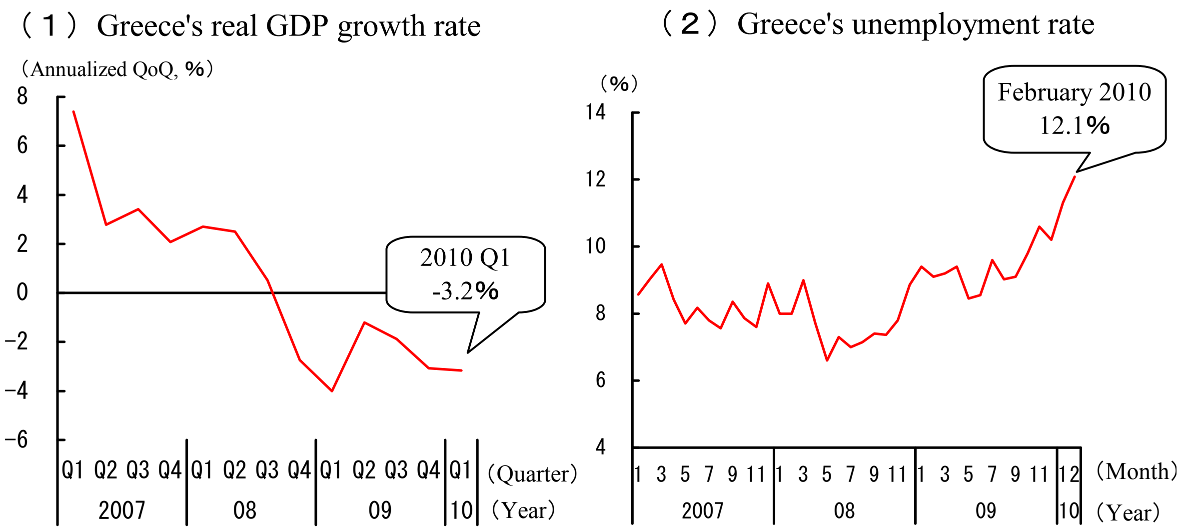
Target of Greek Fiscal Consolidation:
Fiscal deficit to be brought down 11% (of nominal GDP) by 2014

	2009	2010	2011	2012	2013	2014
Real GDP growth rate	-2.0	-4.0	-2.6	1.1	2.1	2.1
General government deficit as % of GDP	-13.6	-8.1	-7.6	-6.5	-4.8	-2.6
General government debt as % of GDP	115	133	145	149	149	146

● Future outlook

Concern 1 Greek economy is expected to suffer from negative growth up to 2011 and to remain at high level of unemployment. Under these circumstances and faced with strong opposition from the public, can the Greek government carry out the fiscal consolidation program?

Figure 1-4-27 Greek Real GDP Growth Rate and the Unemployment Rate



(Note) Source: Eurostat.

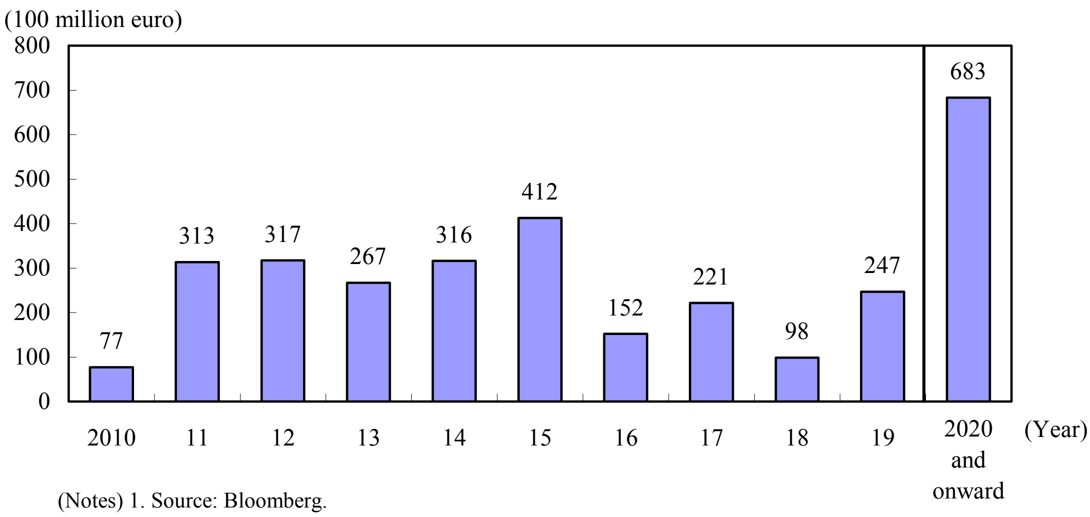
(Note) 1. Source: Hellenic Statistical Authority.
2. Figures are raw data (not seasonally adjusted).

Table 1-4-28 Results of Greek Opinion Polls (May 4)

(1) Are you for or against the new fiscal reform program?	For: 23%	Against: 66%
(2) Is the new fiscal reform program the only way to deal with the crisis?	Yes: 32%	No: 59%
(3) Do you support Prime Minister George Papandreou?	Yes: 36%	No: 62%
(4) Would you tolerate a strike or a demonstration?	Yes: 68%	No: 28%

Concern2 With redemption of a significant amount of government bonds scheduled, will the situation improve by then?

Figure 1-4-29 Redemption Schedule of Greek Government Bonds



(Notes) 1. Source: Bloomberg.
2. As of May 21, 2010.

Concern 3 Contagion

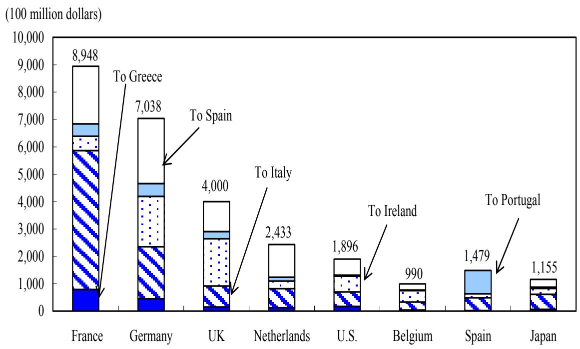
Risk of contagion through financial markets to (1) south European and other countries and (2) the European financial system.

Figure 1-4-32 Fiscal Conditions and Credit Ratings (As of May 21, 2010)

	Credit ratings by major rating agencies			General government fiscal balance as a percentage of the GDP	General government debt as a percentage of the GDP
	Moody's	S&P	Fitch	2009	2009
Portugal	Aa2	A-	AA-	-9.4	76.8
Italy	Aa2	A+	AA-	-5.3	115.8
Ireland	Aa1	AA	AA-	-14.3	64.0
Greece	A3	BB+	BBB-	-13.6	115.1
Spain	Aaa	AA	AAA	-11.2	53.2
Belgium	Aa1	AA+	AA+	-6.0	96.7
UK	Aaa	AAA	AAA	-11.5	68.1
Germany	Aaa	AAA	AAA	-3.3	73.2
Japan	Aa2	AA	AA-	-7.4	189.3
U.S.	Aaa	AAA	AAA	-11.2	83.9

(Note) Source: European Commission and OECD.

Figure 1-4-38 Consolidated Foreign Claims on South European and Other Countries by the Reporting Banks of Major Countries



(Notes) 1. Source: BIS.
2. As of the end of December 2009.

Column 1-8 Example of Argentina's debt default

January 2002 Default on the payment of government bond yields (Default on the payment of yen-denominated government bond yields in March)

January 2002 Shift from a fixed rate system (1 dollar = 1 Argentine peso) to a floating rate system
(The peso depreciated to as low as 3.86 to the dollar in June 2002.)
⇒ Foreign currency-denominated debt outstanding soared; nearly trebled in 2002

2002 and onward Negotiations with the IMF and private creditors to cut debts (Some still continuing even today)

Since then, the economy has been on a recovery and growth trend.
↑
(1) Increasing export competitiveness due to the exchange rate depreciation
(2) Surge in the prices of major export products, i.e. wheat and soybean.

★ Greece is unable to resort to the measure (1) above, as long as it continues to be a member of the euro currency area.

- In order to restore its export price competitiveness, a reduction in wage levels and prices is essential.
  (The major industries in Greece are shipping, tourism and agriculture; the export of goods and services as a percentage of the GDP stood at 17.8% in 2009).
- On the other hand, if Greece leaves the euro currency area and start reusing the drachma, a debt default could not be avoided since a drop in the exchange rate would cause drachma-based government debt outstanding to snowball.
  ⇒ Expected to cause a problem on financial institutions in Germany, France, etc.

3. Underlying Reasons behind and Lessons from the Greek Fiscal Crisis

(1) Fiscal management problems in Greece and EU fiscal discipline

The Greek government did not implement fiscal consolidation even while the economy was booming. Moreover, the Stability and Growth Pact in EU, together with the related punitive provisions against it, was not effective in preventing the crisis from occurring.

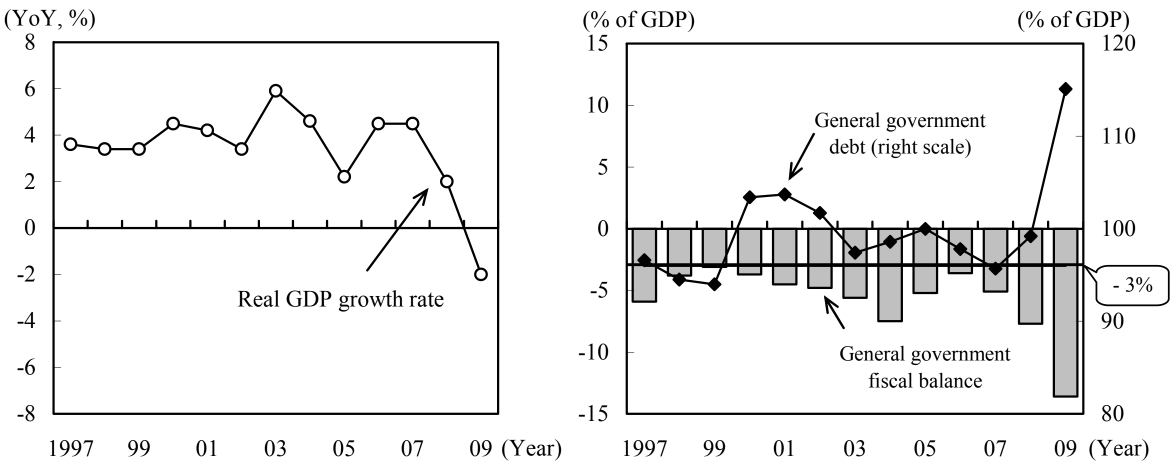
⇒ It is necessary to steadily implement fiscal consolidation during any economic recovery and expansion phase in preparation for an economic recession and crisis. Fiscal discipline under the Stability and Growth Pact and related punitive provisions must be strictly applied.

(2) Market discipline

Market discipline did not function effectively, either. The spread between the yield on Greek government bonds and that on German government bonds significantly narrowed after 2001 when Greece joined the euro area. From then on until 2008, the yield spread remained very narrow despite the worsening fiscal conditions in Greece. Furthermore, the high credit ratings given to Greek government bonds by major rating agencies were maintained.

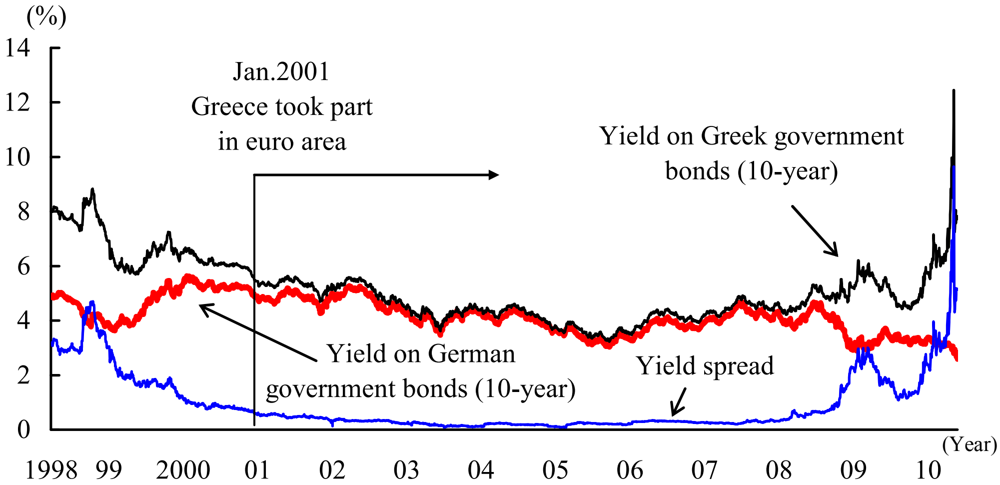
⇒ Market warnings could sometimes be too late, making the situation uncontrollable.

Figure 1-4-42 Economic and Fiscal Conditions in Greece



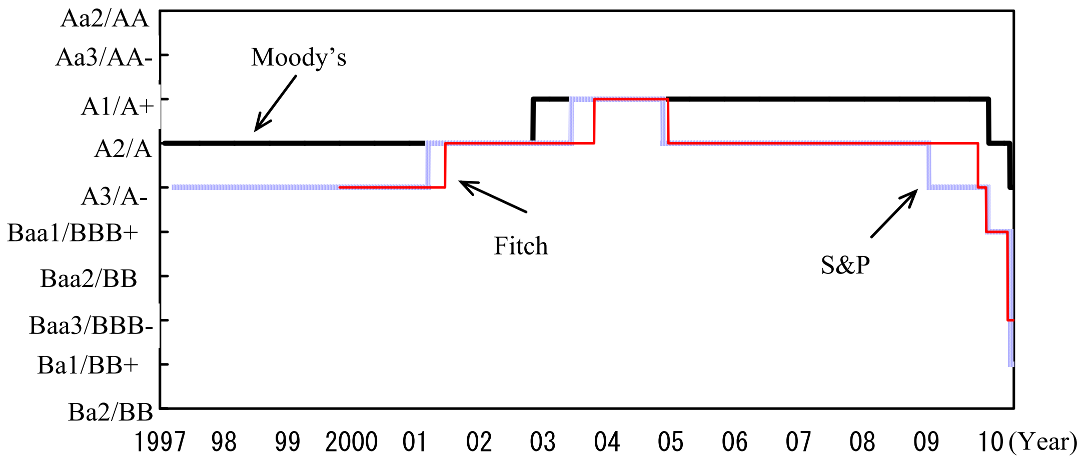
(Note) Source: Eurostat.

Figure 1-4-43 Trends in the Yield on Greek Government Bonds



(Note) Source: Bloomberg.

Figure 1-4-44 Trends in the Credit Rating of Greek Government Bonds



(Note) Source: Bloomberg.

(3) Credibility of statistics

- Statistics compiled by Greece became a subject of attention at the European Commission from 2004. They were particularly worried about: (1) the potential arbitrariness of and political intervention in statistics; and (2) the inadequate system of compiling statistics.
- Greece falsely claimed in 1998 as well to meet the euro-area entry criteria that its fiscal deficit was 2.5% of GDP (which was thereafter revised upward to 4.3%).

  ⇒ <u>Once the credibility of statistics is lost, it is difficult to recover it. Enhancing adequate resources for compiling statistics is essential</u>.

(4) Maintaining export competitiveness under a single currency area

- Whereas Germany and the Netherlands enjoy the current account surplus, Spain, Italy and Greece continue to be burdened with the current account deficit causing the current account imbalance, which has rapidly expanded since around 2004 in particular.
- Behind this are: (1) that by joining the euro area, south European countries have seen their long-term interest rates falling while demand has been surging; and (2) that without exchange rate adjustments, the real exchange rates have appreciated in these countries, reducing their export price competitiveness.
- Unless prices and wages in south European countries fall, the current account imbalance in the euro area will likely persist.

(5) Consideration of an optimum currency area

<Optimum currency area requirements>

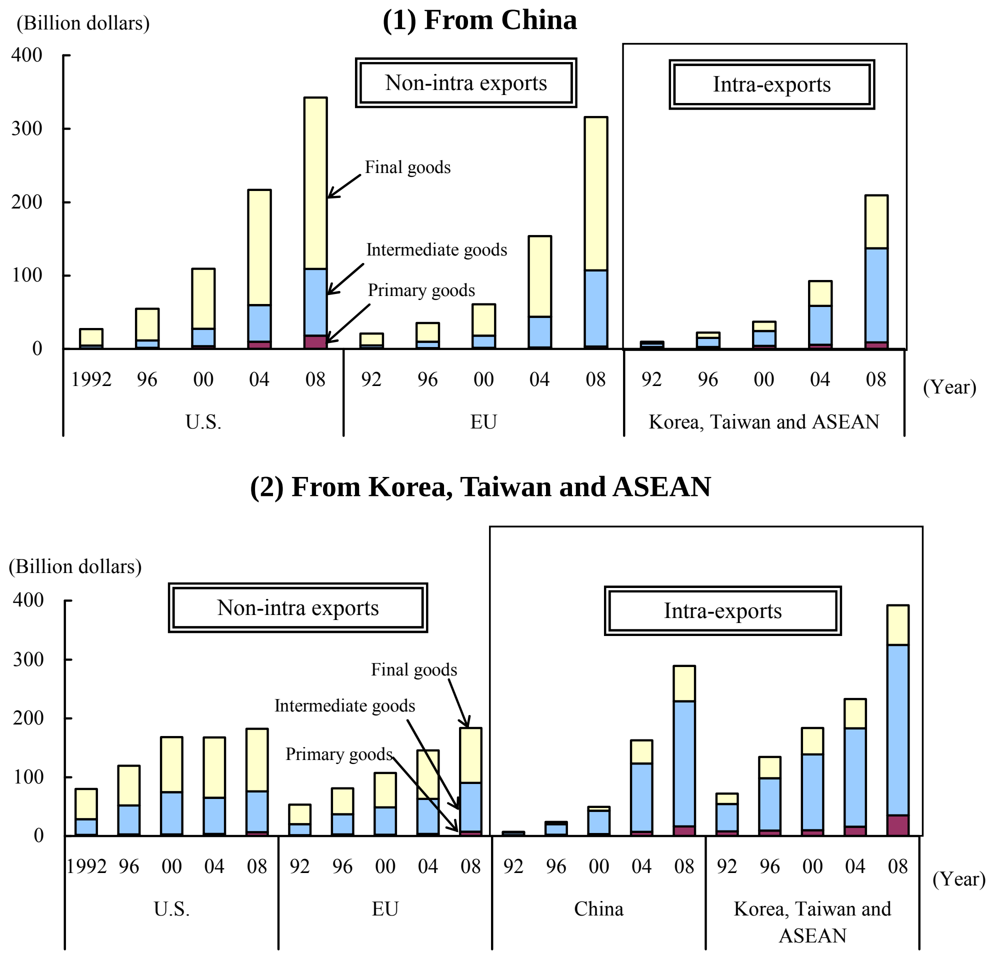
- There is high labor mobility among the countries in the area. In addition, there is high wage flexibility.
- There is openness in the trade, with active intra-regional transactions.
- Participant countries have similar business cycles, and economic shocks affect symmetrically across the countries.

Chapter 2 Toward Asian Century: Conditions for Long-Term Self-Sustaining Growth

Section 1 Asia's Growth Pattern and its Problems in the 2000s

- The international division of labor in Asia has developed through a regional production network. Export expansion in recent years is due largely to the expansion of intraregional trade, which is mainly of intermediate goods.
- China has rapidly become a center for processing and exporting final goods as indicated by the remarkable increase in intraregional exports of intermediate goods to China and China's export of final goods to the U.S. and Europe.

Figure 2-1-6 Exports from East Asia (by Destination and Category)

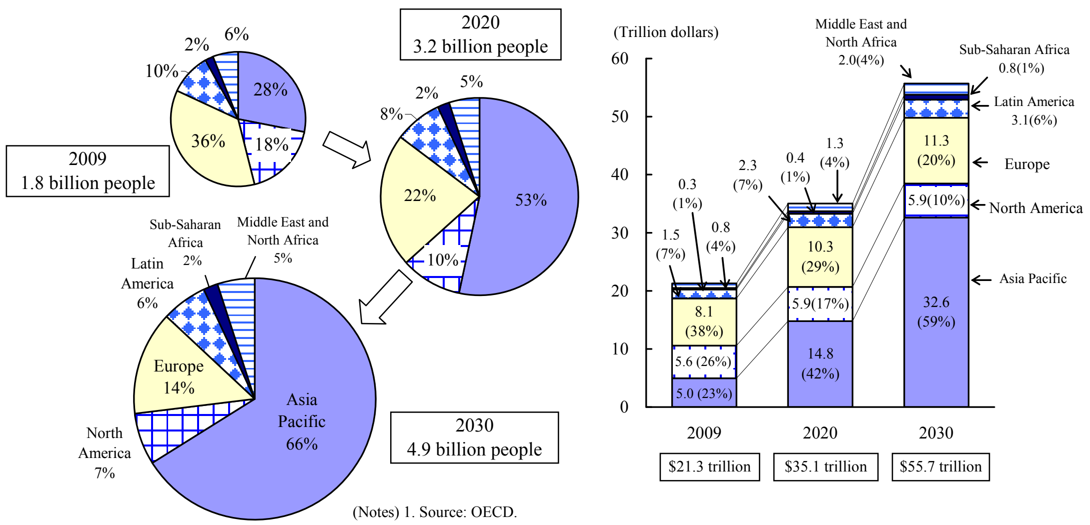


(Note) Source: Research Institute of Economy, Trade and Industry Database "RIETI-TID2009."

- As population increase and income level rise, a so-called middle class defined as those with certain level of spending has formed in Asia. Accordingly, there is a great potential demand of consumers in the future.
- It is necessary to solve structural problems that restrict consumption, such as income inequality and insufficient social security systems so that the expansion of individual consumption can lead to sustainable economic growth in Asia.

Figure 2-1-9 Projection of the Global Middle Class by Region

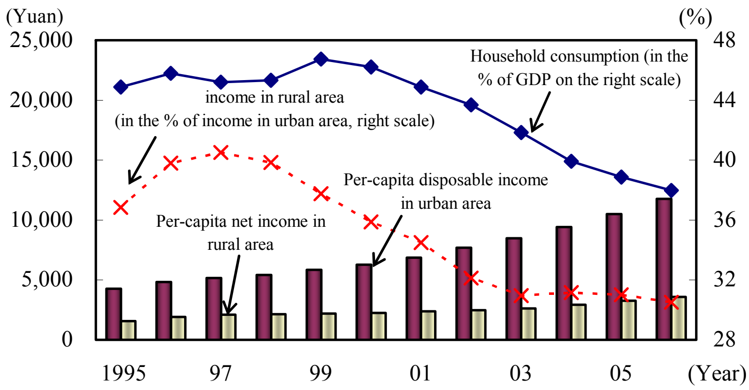
(1) Shares of middle class population **(2) Middle class consumption**



(Notes) 1. Source: OECD.
2. The sum may not match the total due to rounding off.

- In Asia, income inequality has tended to widen as the economy grows more rapidly. Purchasing power is restricted by the sluggish income growth of low and middle income class which account for the overwhelming majority of consumers. Appropriate redistribution of the income might stimulate potential demand and broaden the range of personal consumption.
- It is also important in terms of expanding consumption to improve the social security system and the financial system in order to dispel people's anxieties for the future and their precautionary savings to fall.

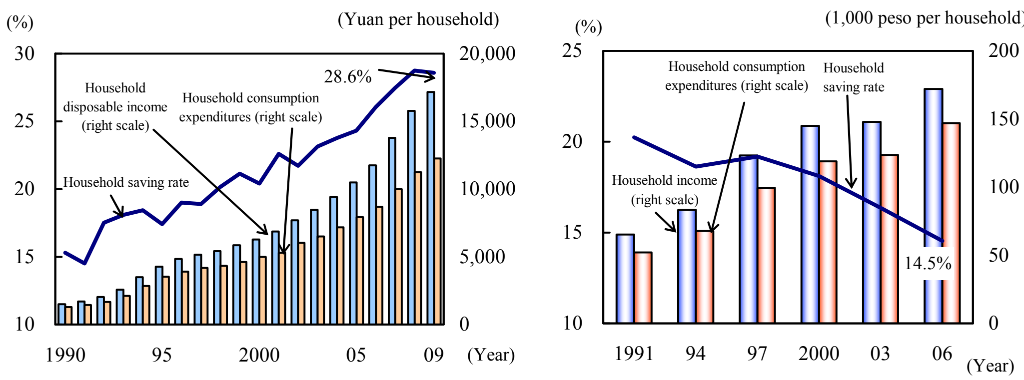
Figure 2-1-12 Income Levels of Urban and Rural Areas in China



(Note) Source: National Bureau of Statistics of China.

Figure 2-1-14 Household Saving Rate

(1) China (urban areas) (2) Philippines



(Notes) 1. Source: National Bureau of Statistics of China and National Statistics Office, Philippines.
2. Data for the Philippines is from the Family Income Expenditure Survey conducted every three years.

Section 2　Asia's Long-Term Economic Outlook

1. Population and Economic Growth

(1)　Present situation in Asia and the future outlook

- The birthrate is declining and the population is aging in Asian countries, where both the birthrate and infant mortality are becoming lower. The total fertility rates for China, Korea, Singapore, Thailand, etc., are below the replacement level of 2.08. On the other hand, those of the Philippines, India, etc., which are declining slowly, are now around 2.5.
- Along with the decline in the birthrate, the proportion of the population under 15 years old is shrinking. Partly because average life expectancy is becoming longer due to the development of medical technology, the population is aging in every Asian country. Since baby boomers who were born after World War II will be 65 years or older in the near future, the aging of the population is expected to continue.

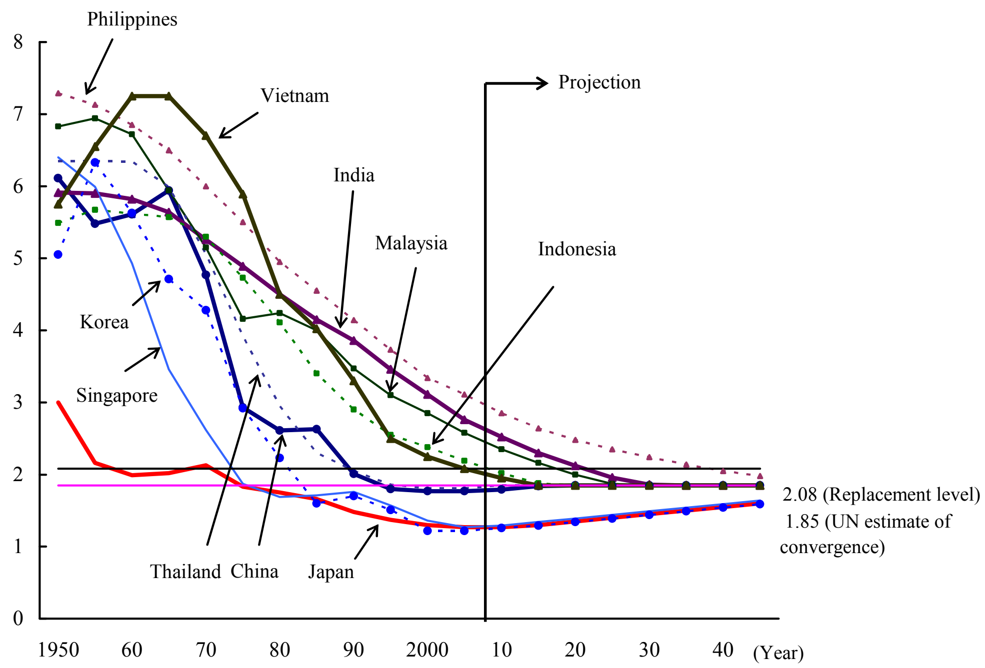
Table 2-2-3　Total Fertility Rate is on the Decline

(1) Present birthrate

China	India	Indonesia	Japan	Malaysia
1.72	2.68	2.18	1.37	2.19
Philippines	**Korea**	**Singapore**	**Thailand**	**Vietnam**
2.48	1.19	1.28	1.81	2.14

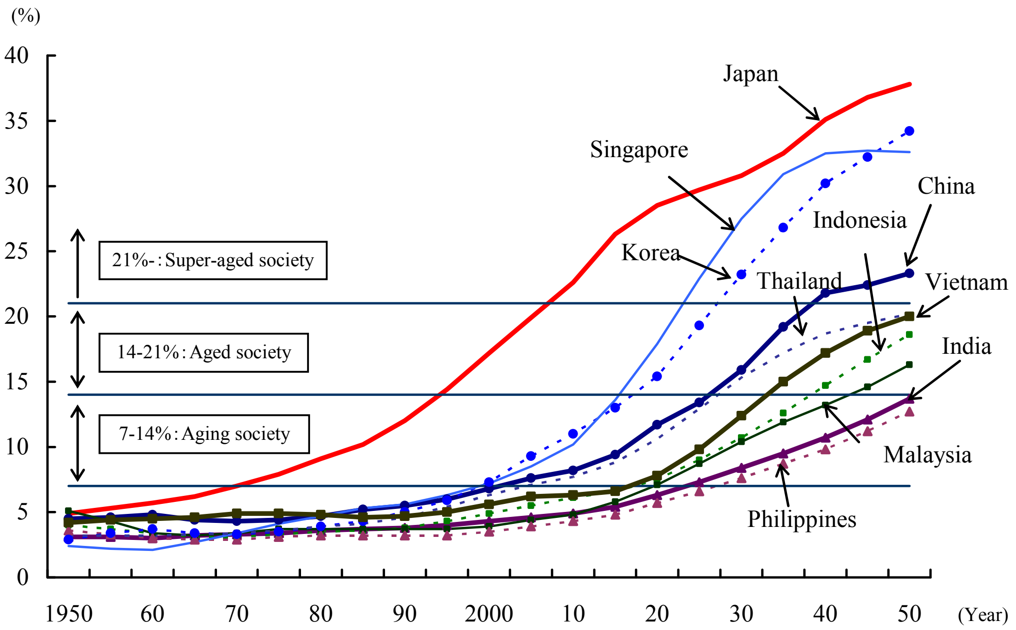
(Notes) 1. Source: UN "Demographic Yearbook 2007" (Malaysia and Philippines), World Bank "World Development Indicators 2009" (China, India, Indonesia, Thailand and Vietnam), MHLW "Annual Estimates of Vital Statistics of Japan 2009" (Japan), materials of the National Statistical Office of Korea (Korea), Statistics Singapore (Singapore).
2. Data for Japan, Korea and Singapore are those of 2008, data for the Philippines, of 2005, and other data, of 2007.

(2) Medium-variant assumption



(Notes) 1. Source: "UN World Population Prospects."
2. The medium variant case is based on the assumption that the birthrate will converge on 1.85 in the long term. The low variant case is based on the assumption that the birthrate will converge on 1.35 in the long term.
3. The National Institute of Population and Social Security Research states that the actual fertility rate for Japan was 1.37 in 2008.

Figure 2-2-5 Proportion of People Aged 65 or Over: Population of Almost All Countries will be Aging by 2030



<Proportion of the Population Aged 65 or Over in 2005>

(%)

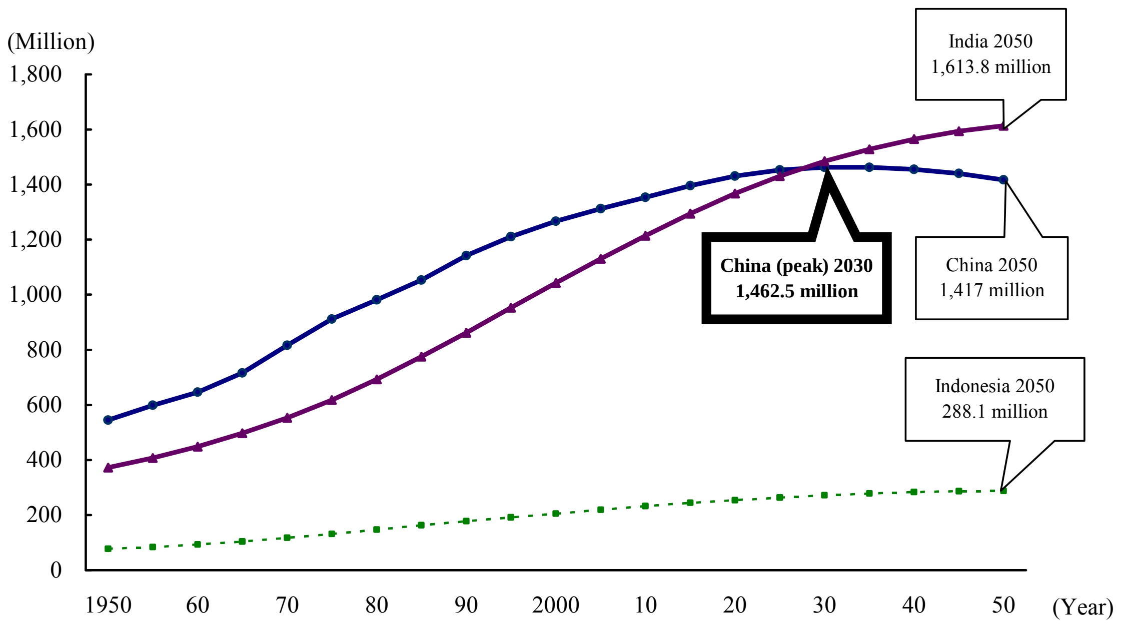
China	India	Indonesia	Japan	Malaysia
7.6	4.6	5.5	19.9	4.4
Philippines	Korea	Singapore	Thailand	Vietnam
3.9	9.3	8.5	7.1	6.2

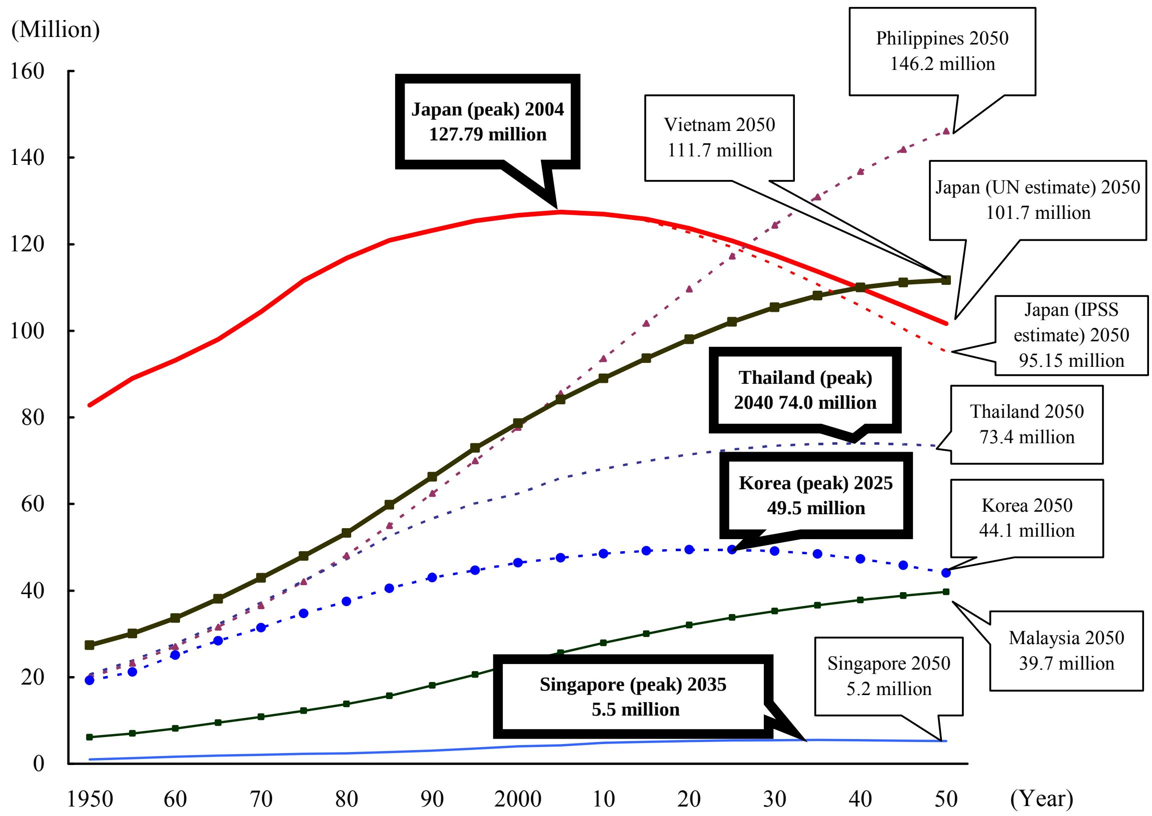
(Notes) 1. Source: "UN World Population Prospects."
2. The figure above is based on the assumption that the birthrate will converge on 1.85 in the long term.
3. The National Institute of Population and Social Security Research states that the actual proportion of the elderly population in Japan was 22.1% in 2008.

- In Asia, the total population of many countries including Japan, China, Korea, Singapore and Thailand (except India and the Philippines) will have started decreasing by 2050 due to their declining birthrate and aging population. In particular, Japan and Korea will face a considerable decline in their population.

  - Japan: 127.51 million (2009) → 101.7 million (2050) (-20.3%)
    (The National Institute of Population and Social Security Research estimates as follows.
    → 95.15 million in 2050 (-25.4%) → 89.93 million in 2055 (-29.5%))
  - Korea: 49.5 million (2025)
    →Population starts decreasing in 2030. → 44.1 million (2050) (-10.9%)
  - China: 1.4625 billion (2030)
    →Population starts decreasing in 2035. → 1.417 billion (2050) (-3.1%)

Figure 2-2-7 Total Population of Asia: toward Decline in Many Countries



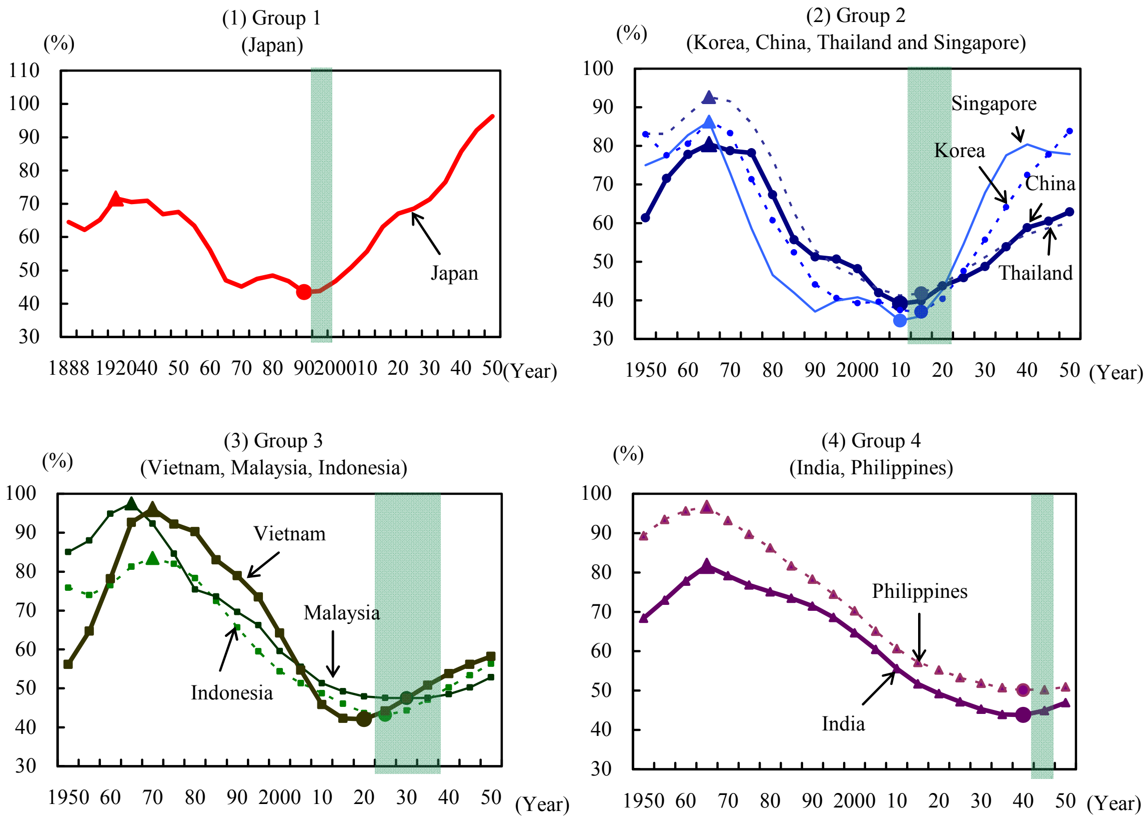


(Notes) 1. Source: "UN World Population Prospects," and the National Institute of Population and Social Security Research (IPSS).
2. The figure above is based on the assumption that the birthrate will converge on 1.85 in the long term.

(2) Demographic bonus period and onus period

- The demographic bonus period means when the total dependency ratio (the sum of the elderly (65 years old or over) and child population (0 to under 15 years old) divided by the number of people of working age) is declining while the demographic onus period means when the total dependency ratio is increasing. In the bonus period, the population structure has the effect of increasing per-capita economic growth owing to the substantial labor force and the relatively lower burden of supporting the dependent population. In contrast, in the onus period, the population structure has the effect of decreasing per-capita economic growth.
- The relationship between changes in the population pyramid and the advent of the demographic bonus and onus periods is explained in the following way. In the process whereby the shape of the population pyramid changes from a pyramid to a cylindrical bell or barrel-shaped curve, the bonus period begins since the child population decreases compared with the working-age population. Later, while the shape of the population pyramid changes from a cylindrical bell or barrel shape to an inverted pyramid, the onus period comes due to the increase in the elderly population and the decrease in the working-age population.
- It is expected that Asian countries will shift from the bonus period to the onus period in the order of Japan first, then China, the NIEs and the ASEAN countries since the total dependency ratio starts to increase along with a declining birthrate and an aging population.

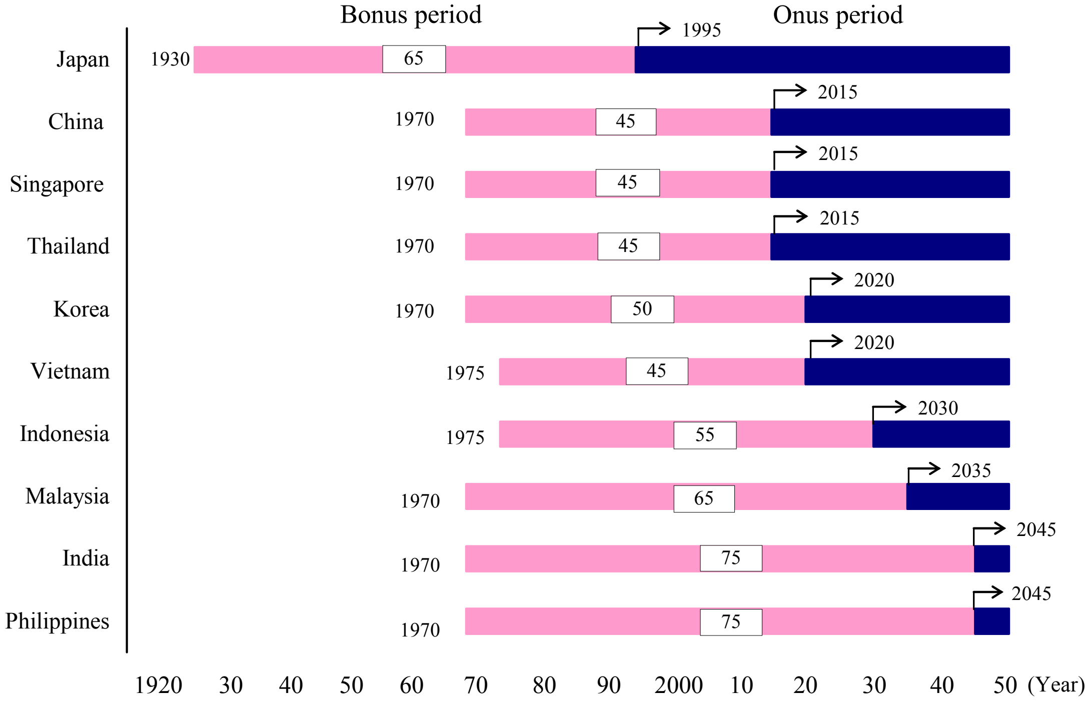
Figure 2-2-12 Trends in the Total Dependency Ratio in Asian Countries: The Proportion Starts to Rise in One Group after Another along with a Declining Birthrate and an Aging Population and Asian Countries Enter the Onus Period



(Notes) 1. Source: "UN World Population Prospects" except for the data for Japan in and before 1950, which is based on materials of the National Institute of Population and Social Security Research.
2. The figure above is based on the assumption that the birthrate will converge on 1.85 in the long term.
3. The shaded areas indicate the transition stage from a bonus period to an onus period.
4. Total dependency ratio = (child population + elderly population) / working-age population

- In developed European countries, the birthrate kept declining over such a long period from the first half of the 19th century that the rate of change in the population structure was moderate and the demographic bonus period lasted for a long time. In contrast, the birthrate has declined so sharply in Asia that the bonus period is expected to end in a much shorter time. The bonus period is expected to last for 45 years in China, Singapore and Thailand, which represents the shortest period, and for 75 years in the Philippines and India, which represents the longest period.
- Asian countries will move from the bonus period to the onus period one after another in 2015 and subsequent years. It is imperative for Asian countries to prepare for the onus period since many of them have not fully established social security systems and some other reasons.

Figure 2-2-13 Length of the Demographic Bonus Period: It Is Short in Asian Countries



(Notes) 1. Source: "UN World Population Prospects" (data in 1950 and after), and the National Institute of Population and Social Security Research (data for Japan in 1950 and before).
2. The figure above is based on the assumption that the birthrate will converge on 1.85 in the long term.
3. In Japan, the bonus period started around 1930 and lasted for about 65 years. However, the substantial start was 1950 since Japan experienced World War II after entering the bonus period.

2. Asia's Long-Term Economic Outlook

In Asia, problems caused by the shrinking and aging of the population will become more serious and economic growth in almost all Asian countries is expected to slow down. Accordingly, it is extremely important to analyze how much impact the shrinking population will have on the economic growth of each country when forecasting Asia's economies in the long-term.

Though it has certain limitations that it is based on the assumptions that the growth rate of total factor productivity and the ratio of investment to GDP will remain at the same trends as in the past, the following analysis presents quantitatively the impact of a shrinking and aging population and a declining birthrate on each country's GDP as much as possible and the prospect of the position that Asian economies will occupy in the world in the future.

- The estimation of the potential growth rate up to 2030 under the above assumption shows that the GDP growth rate for each country will generally slow down compared to the previous one, partly because the contribution of labor input to growth declines due to the decline in the labor force. However, the estimate above should be evaluated as a kind of baseline allowing some latitude since factors of production other than labor input are calculated on the assumption that the past trends will continue for the future.

- It is estimated that major Asian countries and regions will enjoy higher growth than that of other major countries although the pace of growth will slow down. However, the growth rates of Korea, Taiwan, Singapore and Hong Kong will drop significantly. In Japan, the contribution of labor input was already negative in the 2000s and it is also expected to become negative in the NIEs and Thailand in the 2020s. China will see a significant decline in growth, where the contribution of labor input will become negative in the 2020s as well.

- In contrast, the decline in growth rates is expected to be relatively small in Indonesia, Malaysia and the Philippines where the estimated labor force keeps increasing and the contribution of labor input remains positive even in the 2020s. In India, the labor force keeps increasing but the rate of increase will decline, and the contribution of labor input will diminish, so that the decline in the growth rate will be greater from the 2010s to the 2020s.

Table 2-2-15 Potential Growth Rate in Major Countries and Regions: High Growth Rate in Asia

<On the Assumption that Past Trends Continue>

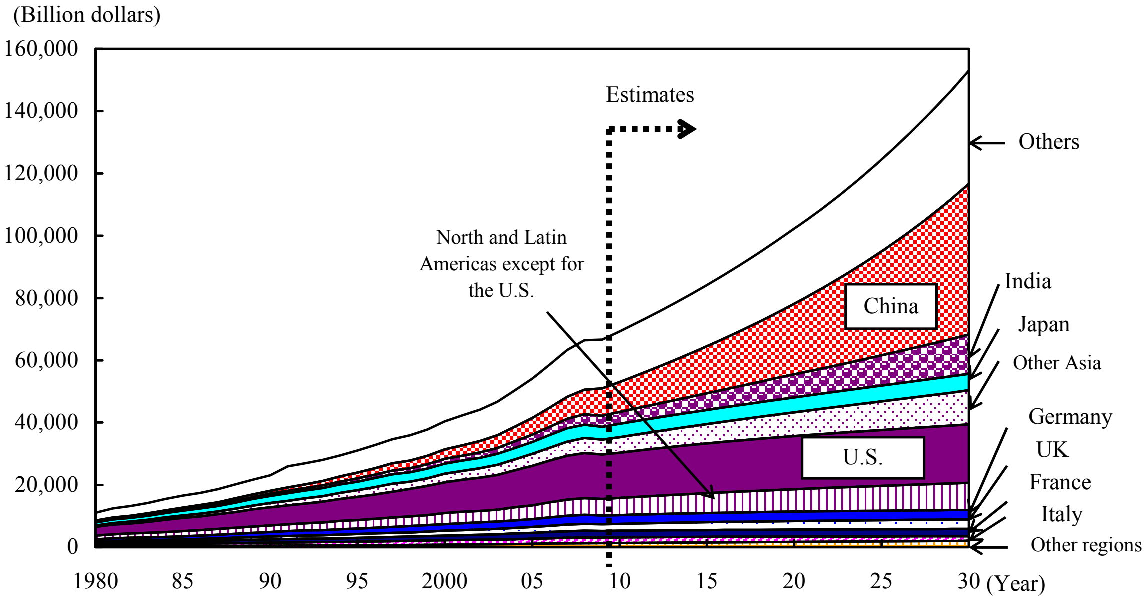
(%)

	Real GDP growth rate in the 2000s (a)	Potential growth rate in the 2010s (b)	Potential growth rate in the 2020s (c)	Change (2000s-2010s) (%) (b-a)	Change (2010s-2020s) (%) (c-b)
Asia					
China	10.0	9.1	7.9	(-0.8)	(-1.2)
India	7.2	6.9	5.7	(-0.3)	(-1.3)
Indonesia	5.2	5.7	5.0	(0.5)	(-0.7)
Malaysia	5.5	5.2	4.8	(-0.2)	(-0.4)
Philippines	5.0	5.0	5.0	(-0.0)	(0.0)
Thailand	4.8	4.9	4.6	(0.1)	(-0.3)
Singapore	5.5	4.6	2.7	(-0.9)	(-1.9)
Hong Kong	5.0	3.9	3.0	(-1.1)	(-0.9)
Korea	4.4	3.9	2.8	(-0.5)	(-1.1)
Taiwan	4.0	2.2	1.7	(-1.8)	(-0.5)
Japan	1.4	0.7	0.4	(-0.7)	(-0.3)
North and Latin Americas					
Argentina	3.9	4.3	3.4	(0.4)	(-0.9)
Brazil	3.7	3.4	2.5	(-0.3)	(-0.8)
Mexico	2.8	2.2	1.2	(-0.6)	(-1.1)
Canada	2.7	2.1	1.2	(-0.5)	(-0.9)
U.S.	2.4	2.2	1.6	(-0.2)	(-0.6)
Europe					
UK	2.5	1.9	1.3	(-0.6)	(-0.6)
Germany	1.4	0.9	0.1	(-0.5)	(-0.9)
France	1.9	1.1	0.7	(-0.8)	(-0.4)
Italy	1.2	0.5	0.0	(-0.7)	(-0.4)
Others					
South African Republic	4.1	3.0	3.1	(-1.1)	(0.1)
Australia	3.3	2.0	0.9	(-1.3)	(-1.1)

(Note) Figures shown for the 2000s are annual averages of the real GDP growth rate between 2000 and 2008.

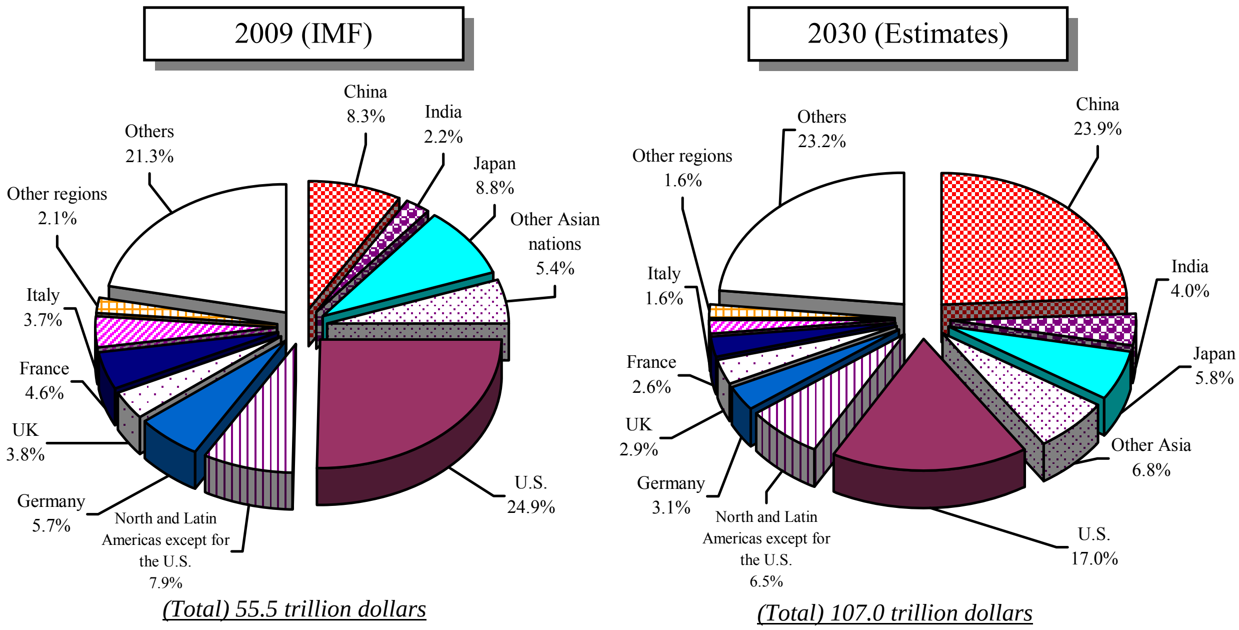
- When viewing changes of the sizes of the GDP, which are obtained from the trial calculation in dollar terms on a market rate basis based on the estimated result, the increase in the share held by Asian countries is outstanding, backed up by their high growth. On the other hand, the GDP of Japan and other developed countries will expand moderately, but their shares will decline. As for the share of each country in the world, the top four countries were the U.S., Japan, China and Germany in 2009, while the top four countries in 2030 are expected to be China, the U.S., Japan and India in descending order.

Figure 2-2-17 Long-Term Outlook for the GDP (on a Market Rate Basis)



(Notes) 1. Source: IMF "World Economic Outlook (Oct. 1, 2009)," Table 2-2-15 (potential growth rates).
2. The countries and regions shown in the figure above accounted for 97.0% of the world GDP in 2009.
3. "Other Asia" refers to Indonesia, Malaysia, the Philippines, Thailand, Singapore, Hong Kong, Korea and Taiwan. "North and Latin Americas except for the U.S." refers to Argentina, Brazil, Mexico and Canada. "Other regions" refers to the South African Republic and Australia.

Figure 2-2-18 Changes in the Shares in the world GDP (on a Market Rate Basis)

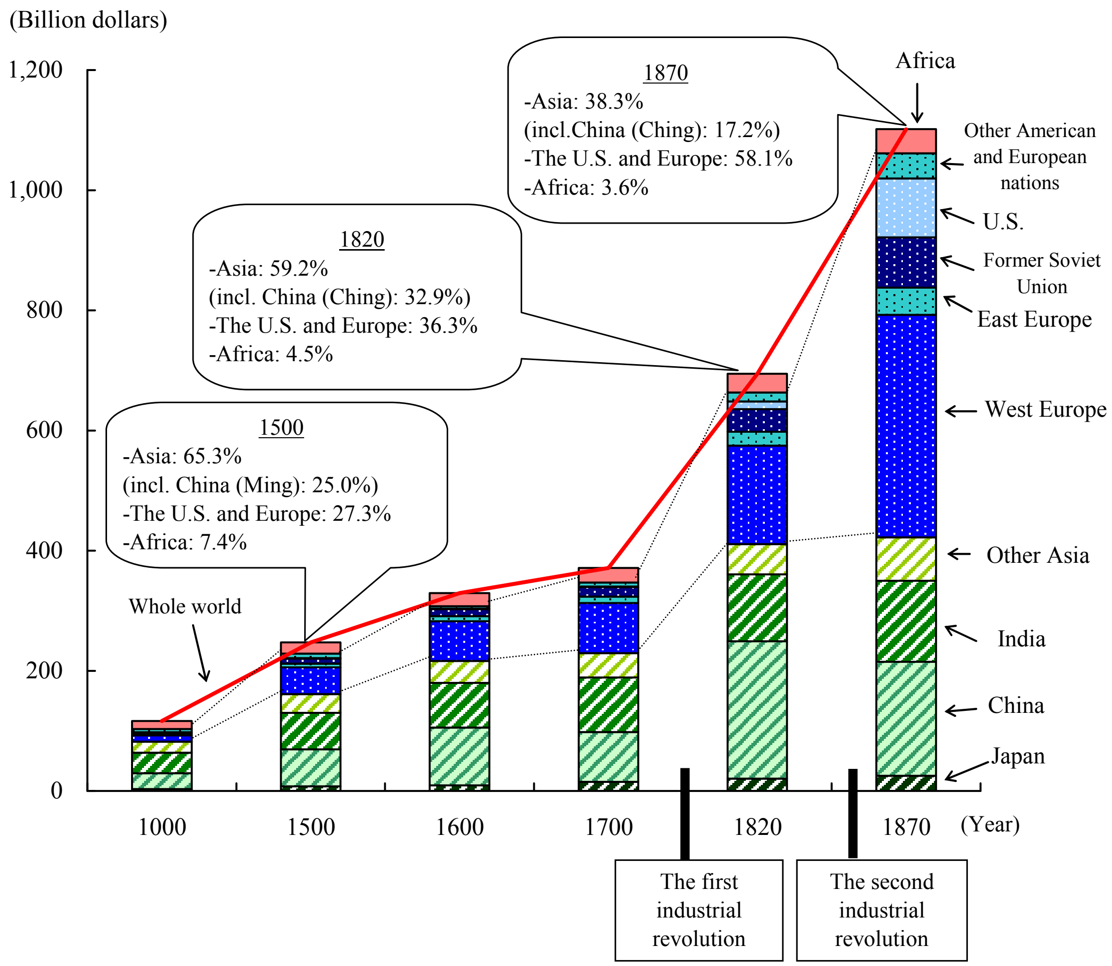


(Notes) 1. Source: IMF "World Economic Outlook (Oct. 1, 2009)," Table 2-2-15 (potential growth rates).
2. The countries and regions shown in the figure above accounted for 97.0% of the world GDP in 2009.
3. "Other Asia," "North and Latin Americas," "Other regions" include the same countries and regions as shown in Figure 2-2-19.

- When there is a downturn or decline in the growth of the labor force, the economic growth rate inevitably slows down if other conditions are unchanged. However, the expectation of economic growth depends on many factors, such as changes in the labor participation ratio, the domestic saving rate and the availability of foreign savings, and changes in total factor productivity. The effects of aging and the shrinking population on economic growth cannot be regarded as definite and determined. The strategies to prevent economic growth from declining will vary from country to country. Such strategies include, for example, improvements in human capital through investment in education, the steady accumulation of good quality capital stock, the promotion of technological innovation through the activation of R&D investment, and technology transfers from multinational companies through direct investment. It is important to take a policy approach as stated above for the improvement of labor productivity.

«Reference»

Column 1-2 Changes in Asia's GDP Compared with the World Economy in the Past 1,000 Years (Value, Year 1000-1870)



(Notes) Source: OECD "The World Economy: A Millennial Perspective (2001)"

Section 3　Asia's Growth Strategy: Need to Change the Growth Model

1. Asia's Growth Strategy in the Future

- Points to remember in forecasting the Asian economy in the future

  After the global financial crisis occurred, the Asian economy plays the role of the engine of global economic growth by recovering ahead of other regions. The following issues are regarded as having a significant effect on stable and sustainable economic growth in the future in the short, medium and long-term.

  - A risk of sluggish markets in the U.S. and Europe in the short-term
  - Global rebalancing in the medium-term
  - Aging and shrinking populations in the medium and long-term

- Quest for a new growth strategy

  For the further development of the Asian region, it is absolutely necessary to change the growth model that depends on the U.S. and Europe markets, as well as the structures that widen current account imbalances, which have formed after the Asian currency crisis. Specifically, the actions stated below are important.

(i) A new direction should be given to the current export-led growth model

- The latest crisis exerted its effect on Asia mainly through the channel of international trade. The multilayered production networks established throughout the Asian region are a source of Asia's competitiveness.
- It is important to lower dependence on the U.S. and European markets, and convert to a structure that is resilient to external shocks for Asia's stable and sustainable economic growth.
- In particular, the Asian market, which is now on a major scale, is expected to further expand when income levels rise. When Asia develops not only as a "World Factory" but also as a "World Market", and trade structures are adjusted from ones centered on intermediate goods to ones centered on final goods, Asia is expected to grow further.
- The expansion of Asia's domestic demand will bring about more stable, self-sustaining and sustainable growth without depending only on the U.S. and European markets (Balanced Growth).

(ii) Reduction of risks associated with current account imbalances

- The current account imbalance itself is not always a negative factor, and it will possibly diminish due to changes in the demographic structure in the long run. However, it is necessary to watch if the imbalance reflects some market distortions or will cause some risks in the future.
- In order to prevent a current account imbalance, which may cause a risk in the future, from becoming a factor for instability in the world economy, it is important to aim to reverse the underlying causes of imbalance and reduce the potential risk.
- Asia is also required to correct the imbalance by itself since Asia eventually helped to support the imbalance. It is important to improve social security systems and promote intraregional demand.

(iii) Response to drastic changes in the demographic structure

- Economic growth is going to be substantially restricted by the declining working age population, the decline in saving rates and for other reasons due to the contraction and aging of the population.
- Improvements in labor productivity have become a fundamental strategy. Policy approaches are also important, such as improvements in human capital through investment in education, the

steady accumulation of good-quality capital stock, the promotion of technological innovation through the activation of R&D investments, and technology transfers from multinational companies through foreign direct investment.

A stable macroeconomic environment, the accumulation of good quality human capital, the development of an environment suitable for business, proper redistribution, etc., are still important aspects that have to be maintained and strengthened for future growth. These factors have been evaluated as providing the impetus for rapid economic growth in East Asia.

2. Challenges in Realizing a Growth Strategy

In order to realize a growth strategy, it is necessary to tackle the structural problems of each Asian country. The basic policies for tackling problems are described below.

- Challenges regarding domestic demand stimulation (formation of middle-income class and the lessening of income inequality)

  - Distortions have been caused by development that puts priority on growth. Some distortions are made apparent in the form of a widening income inequality.
  - In order to stimulate Asia's intraregional demand and to make it a new growth axis, it is important to lessen income inequality and especially to encourage consumption by the middle-income class. To this end, income redistribution through social security benefits and the lessening of regional inequality through regional development are necessary (Inclusive Growth).

- Challenges as to the improvement of productivity

  - Foreign direct investment will continue to be regarded as having an important role now and in the future as an engine of Asia's economic growth. In order to maintain and develop growth based on foreign direct investment, it is necessary to further improve the environment for business.
  - Accordingly, development of human resources with special skills, which especially lags behind other regions ("Innovative Growth") and the rapid development of the institutional infrastructure are indispensable for Asia's sustainable growth, in addition to improvements in the quality and quantity of the hard infrastructure.
  - Interregional cooperation for strengthening Asia's competitiveness is also important, which includes the liberalization of trade and investment and Asia's institutional integration (Deepening Intraregional Cooperation).

- Maintenance of a stable macroeconomic and financial environment

  - Although there is excessive savings in Asia, the money is invested, instead of being circulated in Asia, into the developed countries. This situation is due to the deficient financial system in Asian countries and could be the result of market distortions based on the asymmetry of information that may exist.
  - Since there is much need for development in Asia, it is necessary to consider how to arrange risk transfers as to the money accumulated within Asia, and how to circulate the money and use it for mutual development. Long-term self-sustaining growth requires the development of a foundation in domestic financial markets.

Based on a recognition above, a detailed analysis is given below as to (i) the improvement of social security systems, (ii) the lessening of income inequalities, (iii) improvements in the quality of the labor force, (iv) development of the infrastructure, (v) improvements in total factor productivity and (vi) the maintenance of a stable macroeconomic and financial environment, which are all indispensable to a growth strategy for Asia's long-term self-sustaining growth.