Introduction

I am honored to be here today to speak and exchange views with business leaders from the Chubu region. I would like to take this opportunity to express my deep gratitude for your cooperation with the Bank of Japan’s Nagoya branch.

Today, I will start by touching upon economic developments at home and abroad, and then move on to explain the Bank’s conduct of monetary policy. I will then discuss the economy’s path toward overcoming deflation.

I. Developments in overseas economies and in exchange rates

Considering that I have paid this region a visit every year just around this time in November, let me begin my talk by reflecting on developments in the economic environment surrounding Japan’s economy over the past year, especially in overseas economies and exchange rates.

To start with, I will outline developments in overseas economies. Around this time last year, developments with respect to the European debt problem – the biggest risk factor for the global economy at that time – had been highly uncertain and nervousness in financial markets had been so strong that even a worst-case scenario – namely, the collapse of the euro zone – had been envisaged (Chart 1). In comparison with last year, the risk of the European debt problem triggering an extreme event such as a global financial crisis has subsided, thanks to progress with reinforcing the safety net including such moves as the European Central Bank (ECB)’s decision to launch a new government bond purchasing program and the inauguration of the European Stability Mechanism (ESM). Nevertheless, an adverse feedback loop among the fiscal balance, the financial system, and economic activity continues to operate in Europe, particularly peripheral countries, and the effects have recently started to spill over to core countries as well. Consequently, the European economy has entered a moderate recession phase, as evident in the fact that it has posted successive negative growth since the fourth quarter of 2011. Meanwhile, the U.S. economy – its household sector in particular – has been undergoing recovery at a moderate pace. In terms of changes over the past year, it is a positive indication that housing investment appears to be bottoming out despite its continued low level (Chart 2). However, the situation regarding the “fiscal cliff” – the same issue as was raised a year ago – has not changed. In fact, there is increasing concern about this issue as the economy moves closer to the cliff. Relative to the past year, the economy that has encountered the most significant change is China (Chart 3). Deceleration of the Chinese economy has been prolonged mainly due to a decline in exports bound for Europe and inventory adjustment in materials industries, as evident in the fact that its real GDP growth rate on a year-on-year basis has continued to decline for seven consecutive quarters since the first quarter of 2011, though it remains at a high level. Apart from these short-term developments, whether the Chinese economy can make a smooth transition from high growth to moderate and stable growth appears to be growing into a matter of great interest in terms of policy conduct.

I will now turn to developments in exchange rates (Chart 4). Focusing solely on this past year, the yen has depreciated against the U.S. dollar by 4 percent and the Korean won by 8 percent while appreciating against the euro by 2 percent. A weighted average of these developments based on the value of trade – in other words, the nominal effective exchange rate – results in a 4 percent depreciation of the yen. Of course, putting aside developments that have occurred in the past year, I am well aware that corporate managers here in
Nagoya, where export-driven manufacturing plays a significant role, have been feeling that they continue to face a severe situation as the value of the yen has remained at a high level following its rapid appreciation since the Lehman shock. On this point, the share of overseas business fixed investment has been rising further in recent years and Japanese firms have been increasingly expanding their overseas business activities (Charts 5 and 6). Fundamentally, this reflects firms’ efforts to capture demand in overseas economies with relatively high economic growth; however, it also appears to reflect that the persistent trend of the yen’s appreciation is accelerating such business activities. From an even longer perspective, developments in the yen’s exchange rate have shown large swings. Looking back, the yen depreciated considerably toward the mid-2000s, mainly against the euro, against the background of yen carry trades (Chart 4). Following the Lehman shock, however, it started to appreciate rapidly. Forces behind such appreciation include a reversal of yen carry trades as interest rate differentials between the United States and Japan and those between Europe and Japan narrowed, and the fact that the yen had come to be perceived as a safe currency as the European debt problem became aggravated. Such large swings in the exchange rate have significant effects on corporate performance, and I do acknowledge that achieving a stable exchange rate is highly desirable in authorities’ policy conduct.

The Bank is concerned that the appreciation of the yen could have adverse effects on Japan’s economy – mainly through a decrease in exports and corporate profits as well as deterioration in business sentiment – in the current phase, in which there is high uncertainty regarding the outlook for overseas economies. The yen’s appreciation should also be viewed as a risk in terms of whether it would accelerate firms’ shift of production overseas or whether it would lead to a decline in medium- to long-term growth expectations. As I will explain shortly, the Bank has been pursuing aggressive monetary easing while assessing developments in economic activity and prices, while also keeping in mind the risks I have just mentioned. Meanwhile, the government has carried out foreign exchange intervention as necessary in line with the understanding – shared again at the last G-20 meeting – that reads “disorderly movements in exchange rates have adverse implications for economic and financial stability.”

II. Recent developments in and the outlook for Japan’s economy

I will now explain recent developments in and the outlook for Japan’s economy, taking into account the developments in overseas economies and exchange rates that I have just explained.

In the first half of 2012, Japan’s economy registered the highest growth rate among the advanced economies. The situation changed rapidly since the summer, however, and the economy is currently weakening somewhat. Its transition to this somewhat weakening phase is mostly attributable to the prolonged deceleration in overseas economies. Exports decreased in July–September and then in October, and industrial production has fallen for two consecutive quarters (Chart 7). Developments in October–December warrant vigilance, as effects of the Japan-China relations are projected to be reflected in exports as well. While domestic demand has been relatively firm until recently, mainly against the background of an increase in reconstruction-related demand, the effects of the prolonged deceleration in overseas economies have gradually begun to spill over to domestic demand too. Private consumption has lost some momentum, partly due to the decline following the ending of subsidies for the purchase of environmentally friendly cars. While business fixed investment has been on a moderate increasing trend, it has shown some weakness in manufacturing mainly due to the deceleration in overseas economies.

Based on these developments in overseas demand, the economy is expected to remain relatively weak for the time being. Thereafter, however, it will return to a moderate recovery path as overseas economies gradually emerge from the deceleration phase. Meanwhile, the year-on-year rate of change in the consumer price index (CPI, all items less fresh food) is expected to remain at around 0 percent for the time being and start rising gradually thereafter.
as the supply and demand balance improves in accordance with a pick-up in economic activity. In fiscal 2014, it appears likely that the CPI will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being.

Whether developments in Japan's economy will follow the projected path, however, hinges on those developments in overseas economies. At international conferences that I have attended recently, the delegates from the United States, Europe, and China have similarly pointed to developments in overseas economies as a factor exerting a considerable impact on their own economies. If these economies are considered in terms of the global economy as a whole, however, this overseas factor does not exist. Put differently, it is important to grasp the global economy as a whole in an era that is witnessing significant progress in economic globalization. In this regard, we surely cannot forget that global economic expansion in the mid-2000s – particularly from 2004 toward 2007 – was characterized by extraordinarily favorable economic conditions supported by an unprecedented credit bubble (Chart 8). As a consequence of the bursting of this bubble, even six years since the bursting of the U.S. housing bubble and four years since the Lehman shock, and despite aggressive monetary easing in advanced economies, the pace of global economic recovery is extremely moderate (Chart 9). This suggests that it will be difficult for the global economy to return to a high growth path until adjustments of excess debt after the bursting of the bubble are completed.

III. Recent conduct of monetary policy

Let me now move on to the conduct of monetary policy. Based on the aforementioned assessment of economic activity and prices, the Bank of Japan undertook further aggressive monetary easing for two months in a row, in September and October 2012.

The Bank's decision can be summarized within the following two components. First, it decided to increase the size of the Asset Purchase Program (hereafter, the Program; Chart 10). The Program's size was increased by about 21 trillion yen when adding together the decisions made in September and October. Looking back to autumn 2010, when the Program was introduced, it started off at a size of about 35 trillion yen; within two years, its size increased by about 56 trillion yen to about 91 trillion yen and its timing of completion was also extended from end-2011 to end-2013. The Bank has clearly stated that it aims to achieve the goal of 1 percent for the time being in terms of the year-on-year rate of increase in the CPI through the pursuit of powerful monetary easing, conducting its virtually zero interest rate policy and implementing the Program mainly through the purchase of financial assets, as was announced back in February 2012. The Bank is determined to continue with this powerful easing until it judges the 1 percent goal to be in sight, while it will ascertain whether there is any significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.

The second aspect of the Bank's decision is the establishment of a new lending facility called the "Stimulating Bank Lending Facility" (Chart 11). Under this facility, the Bank will provide funds to financial institutions, at their request, up to an amount equivalent to the net increase in their lending. The total amount of funds provided by the Bank will be "unlimited" – that is, there shall be no upper limit. If we take account of the fact that firms' overseas activities and financial institutions' support of such activities through lending have important implications for the development of Japan's economy in the midst of economic globalization, then financial institutions' lending can be the form of either yen-denominated or foreign currency-denominated. The interest rate charged by the Bank will be equivalent to its target for the uncollateralized overnight call rate at the time of loan disbursement, and is currently

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0.1 percent per annum. Furthermore, loans can be rolled over up to four years at the request of financial institutions. In sum, these institutions can have access to long-term stable funding at a low cost through the Bank. According to data for the 12 months up through August 2012, the amount of lending increased by a total of approximately 15 trillion yen for financial institutions that saw a rise in their lending. Going forward, if financial institutions manage to increase their lending more aggressively, the amount of funds that the Bank can provide will rise accordingly. At present, the Bank is in the process of making the necessary arrangements, and we plan to release the details of this facility before the end of the year and start its operation as soon as possible.

The Bank’s aggressive monetary easing, which consists of its virtually zero interest rate policy and its purchases of financial assets through the Program, coupled with measures including the government’s intervention in the foreign exchange market, has fended off the yen’s appreciation to some extent. Nonetheless, we have heard the opinion that the Bank’s monetary easing is not enough because Japan’s economy has yet to overcome deflation. This opinion often refers to the amount of “money” supplied by a central bank. Looking at the monetary base — which is the amount of “money” supplied by a central bank, percentage point changes in its ratio relative to GDP since the Lehman shock have been more or less the same as in Europe and the United States, where the monetary base is thought to have been increased aggressively during this period (Chart 12). Furthermore, as Japan experienced its financial crisis much earlier than other economies, the ratio of the monetary base relative to GDP also started rising in earlier years and has now reached the highest level among the advanced economies.²

Now the question is, how can we further strengthen the effect of monetary easing? In order to answer this question, I would like to discuss the monetary transmission mechanism. This can be divided into two stages. The first stage is the transmission of monetary easing effects from the realm of monetary policy to the financial environment, where firms can raise sufficient funds at low costs on the back of monetary easing. The second stage is the transmission of effects from the financial conditions to economic activity and prices; in other words, the extent to which firms and households actually take advantage of the accommodative financial conditions to increase their investment and spending (Chart 13).

As for the first stage of the transmission, the effect of aggressive monetary easing has thoroughly permeated the financial environment, and extremely accommodative financial conditions have been achieved both in terms of interest rates and access to financing. If the effect of aggressive easing permeates the second stage of the transmission, it surely can be seen in economic activity and prices.

The Bank considers that the key to the overcoming of deflation lies in the extent to which a wide range of economic entities — such as firms and households — actually make full use of current accommodative financial conditions. With this in mind, I would next like to discuss the necessity to invigorate growth potential, or to raise the potential growth rate of the economy.

IV. Path toward overcoming deflation

Fluctuations in economic activity can be broken down into two components: one is the trend growth and the other is cyclical growth — that is, the fluctuation of economic activity around the trend growth path. The first half of my talk today mainly dealt with the issue of economic cycles, and monetary policy is aimed at ensuring price stability while leveling out such fluctuations.

² Under the current zero interest rate environment, the cost of holding money is zero, so money is unlikely to circulate in the economy no matter how much a central bank injects. What is important at this juncture is to raise the velocity of money through the strengthening of growth potential.
From this viewpoint, the output gap – which became as large as –8 percent after the Lehman shock – has shrunk to around –2 percent recently (Chart 14). Reflecting such developments in the economy, the year-on-year rate of change in the CPI (all items less fresh food) became as low as –2.4 percent in summer 2009, but overall it has been on an improving trend since then, as exemplified by the recent figure of around 0 percent. In contrast, the trend growth rate has been declining gradually.

When corporate managers – those of SMEs in particular – say that they cannot feel there has been any economic recovery, what they are expressing is exactly in line with the situation that I just described; namely, that the trend growth rate has been declining gradually. The average growth rate for the next decade or two is defined by the potential growth rate, which can be broken down into the rate of growth in the number of workers and that in the real GDP per worker – in other words, the labor productivity growth rate. The number of workers declined at a rate of –0.2 percent in the 2000s, and it is estimated that there will be an acceleration in the pace of decline to –0.6 percent in the 2010s and –0.8 percent in the 2020s, given the present labor participation rates by gender and generation (Chart 15). The labor productivity growth rate for the years 2000 through 2008 – a period characterized by relatively favorable economic conditions – was 1.5 percent. Taking these numbers together, the potential growth rate for the next two decades will be less than 1 percent.

This leads us to conclude that, in order to lift the potential growth rate to 2 percent, for example, it is imperative to make serious efforts both to increase the number of workers and to raise the labor productivity growth rate. As for the number of workers, increasing the labor participation rates of the elderly and women is a key factor. In terms of labor productivity, the average labor productivity growth rate in G-7 countries over the last 20 years is 1.3 percent (Chart 16). Admittedly, it is difficult to expect that advanced economies including Japan – having already completed their “catching up” process – will maintain high labor productivity growth rates, but one has to make tenacious efforts to raise the growth rate. We need to acknowledge the need to make efforts on these two fronts; that is, efforts to strengthen the growth potential. In an economy where a rise in income is hardly expected to occur in the near future, expenditure keeps declining and thus prices are unlikely to rise. It is in this context that the Bank notes the importance of efforts to strengthen the economy’s growth potential and support from the financial side in order for Japan’s economy to overcome deflation as early as possible and return to the sustainable growth path with price stability.

I have already explained the Bank’s own efforts to overcome deflation. For the last part of my remarks, I would like to discuss the respective roles of business firms, private financial institutions, and the government with regard to achieving the same goal of overcoming deflation.

First, business firms obviously are the main actors in the strengthening of growth potential. Among others, firms here in Nagoya have overcome a number of difficulties in the past and have actually cultivated the frontier for growth. I am fully confident that you have the strength to generate highly value-added goods and services in spite of severe circumstances.

Second, as for private financial institutions, their major lasting role is to support firms’ efforts toward strengthening growth potential from the financial side. On this point, it is important that financial institutions, while assessing the growth potential of businesses and cultivating credit demand for promising projects, provide funds smoothly to firms and projects with high growth potential, despite the high risks, through devising lending measures. In addition, financial institutions have the advantage, compared with other sectors, of maintaining corporate information and the customer network. Making use of such an advantage, they are expected to help customers solve challenges by providing services that meet the needs of those customers, such as developing a sales network at home and abroad, helping those customers start overseas businesses, and supporting M&A and business succession.
Last, but not least, it is really important for the government – through measures including decisive deregulation – to raise the attractiveness of domestic investment and lay the foundations that encourage firms to embark on challenges. It is also important for the government to continue making efforts to ensure fiscal consolidation. In order to aggressively cultivate new potential demand at home, firms have to produce new goods and services that meet highly diversified customers’ needs, partly due to the aging society; at the same time, the government must lay the foundations that allow households to use money without feeling unease about the future. In order to do so, the social security system and pension system need to be sustained. In recent years, Japanese financial institutions have been aggressively increasing the amount of Japanese government bond (JGB) holdings in light of declining credit demand in the private sector (Chart 17). Accordingly, interest rate risk stemming from fluctuations in market rates is heightening (Chart 18). Therefore, it is also extremely important from the viewpoint of financial institutions – which support the growth of business firms through lending activities – that the government makes every effort to ensure fiscal consolidation.

Concluding remarks
Japan’s economy now faces a big challenge, but we should not be trapped by pessimism. Unlike Europe and the United States, Japan is one of a handful of countries for which real consumption per capita has exceeded the levels prior to the Lehman shock (Chart 19). As I have noted today, in order to overcome deflation, firms, financial institutions, the government, and the central bank must play their respective roles, through which this challenge can surely be met.

Let me close by saying that the Bank is determined to continue making its utmost efforts toward overcoming deflation as early as possible and returning Japan’s economy to the sustainable growth path with price stability.

Thank you.
Chart 2

U.S. housing investment appears to be bottoming out despite its continued low level.

Housing Starts

Housing Prices

Note: The NAHB housing market index is created by the NAHB using data derived from the results of surveys conducted on construction enterprises.
Sources: Census Bureau, NAHB, S&P.

Chart 3

Deceleration of the Chinese economy has been prolonged, although the growth rate remains at a high level.

Real GDP

Manufacturing PMI

Note: A reading of 50 percent on manufacturing PMI generally indicates a turning point between economic expansion and contraction in the manufacturing sector.
Chart 4

Swings in the Yen's Exchange Rates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. dollar</td>
<td>-8.6</td>
<td>-27.6</td>
<td>-30.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Euro</td>
<td>33.7</td>
<td>-26.9</td>
<td>-35.4</td>
<td>-2.2</td>
</tr>
<tr>
<td>Korean won</td>
<td>20.4</td>
<td>-38.9</td>
<td>-45.3</td>
<td>8.1</td>
</tr>
<tr>
<td>Chinese yuan</td>
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<td>-11.8</td>
<td>-13.5</td>
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<tr>
<td>Swiss franc</td>
<td>19.0</td>
<td>-13.7</td>
<td>-13.5</td>
<td>-0.2</td>
</tr>
<tr>
<td>Australian dollar</td>
<td>45.9</td>
<td>-16.2</td>
<td>-21.4</td>
<td>6.8</td>
</tr>
<tr>
<td>Nominal effective exchange rate of the yen</td>
<td>9.0</td>
<td>-26.5</td>
<td>-29.3</td>
<td>3.9</td>
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</tbody>
</table>

Notes: 1. The nominal effective exchange rate is an indicator that measures the overall value of individual currencies. It is derived by calculating the weighted average of each currency's exchange rate against other currencies using the annual value of each country's trade with its counterparties as its weights.
2. The effective exchange rates are based on the broad indices of the BIS effective exchange rate. Figures for November 2012 have been calculated using the Bank of Japan's nominal effective exchange rate of the yen.
3. The nominal effective exchange rate in this chart is calculated by using the inverse of the indices released by the BIS such that a rise in the figure indicates a depreciation of the yen, and vice versa.

Sources: BIS, Bloomberg, Bank of Japan.

Chart 5

The share of overseas business fixed investment has been rising further in recent years against the background of expansion of the overseas market.

Domestic and Overseas Business Fixed Investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic business fixed investment</th>
<th>Overseas business fixed investment</th>
</tr>
</thead>
<tbody>
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<td>50</td>
<td>0</td>
</tr>
<tr>
<td>03</td>
<td>45</td>
<td>10</td>
</tr>
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<td>04</td>
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</tr>
<tr>
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<td>09</td>
<td>-30</td>
<td>70</td>
</tr>
<tr>
<td>10</td>
<td>-40</td>
<td>80</td>
</tr>
<tr>
<td>11</td>
<td>-50</td>
<td>90</td>
</tr>
<tr>
<td>12</td>
<td>-60</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Development Bank of Japan

Ratio of Overseas Business Fixed Investment to Domestic Business Fixed Investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Nonmanufacturing</th>
<th>Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
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<td>10</td>
</tr>
<tr>
<td>03</td>
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<td>-50</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>-60</td>
<td>90</td>
</tr>
</tbody>
</table>

Consolidated, overseas / non-consolidated, domestic

Planned
Chart 6

Rates of return on investment overseas are relatively high.

Chart 7

Exports and production are decreasing, mainly due to the prolonged deceleration in overseas economies.
Chart 8
The global economy registered high growth at an average of 5 percent from 2004 toward 2007.

Average for CY 2004-2007: +5.0%
Average for CY 2000-2007: +4.2%
Average for CY 1990-1999: +3.1%
Forecast by IMF (as of Oct. 2012)

Note: Figures are calculated using GDP based on purchasing power parity (PPP) shares of the world total from the IMF.
Source: IMF.

Chart 9
The pace of economic recovery in the United States and Europe after the bursting of the bubble has been moderate compared with that in the case of Japan.
The Bank increased the size of the Asset Purchase Program by a total of about 21 trillion yen in September and October 2012.

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Chart 11

Establishment of "Stimulating Bank Lending Facility."

- **Loan Support Program**
  - **Growth-Supporting Funding Facility**
    - Total Amount: 5.5 million yen
    - Main Rules: 3.5 million yen
    - Equity investments and ABL: 0.5 million yen
    - Small-Lot investments and loans: 0.5 million yen
    - Loans in the U.S. dollar: U.S. dollar funds equivalent to 1 million yen
    - Amount Outstanding: 3.4 trillion yen
  - **Stimulating Bank Lending Facility (New)**
    - Total Amount: "unlimited"
    - Simply Calculated Amount from the Recent Data: 15 trillion yen
    - Note: According to the August data, the amount of loans increased by approximately 15 trillion yen in a year for financial institutions whose lending increased.
Chart 12
Looking at the monetary base, percentage point changes in its ratio relative to GDP since the Lehman shock have been more or less the same as in Europe and the United States, where the monetary base is thought to have been increased aggressively during this period.

Recent Level
Change after the Lehman Shock (since end-Jun. 2008)
Change after CY2000 (since end-Dec. 1999)

Sources: Bank of Japan; Cabinet Office, FRB, BESA, ECB, Eurostat.

Chart 13
If firms and households actually take advantage of accommodative financial conditions, this would improve economic activity and lead to favorable price developments.

First Stage
Aggressive Monetary Easing
Encouraging a decline in longer-term market interest rates and a reduction in risk premiums

Second Stage
Accommodative Financial Conditions
Efforts to strengthen the foundations for economic growth
Encouraging economic entities to take advantage of accommodative financial conditions

Revitalizing Investment and Consumption
Improving Economic Activity and Prices

Bank of Japan
Asset Purchase Program
91 trillion yen
JGBs, T-Bills, CP, corporate bonds, ETFs, J-REITs
Intended timescale for completion: end-Dec. 2013

Loan Support Program
"Unlimited"
(20 trillion yen + alpha)
Growth-Supporting Funding Facility
Total amount: 5.5 trillion yen
Stimulating Bank Lending Facility
Total amount: Unlimited

Total amount: "Unlimited"
(110 trillion yen + alpha)
Chart 14

The rate of decline in the CPI has been slowing in reflection of the gradual shrinking of the output gap following its expansion after the Lehman shock.

A decline in the number of workers causes Japan's trend growth rate to decline.
The average labor productivity growth rate in G-7 countries since the 1990s is 1.3 percent.

Developments in Labor Productivity Growth Rate

- Japan
- United States
- United Kingdom
- Germany
- France
- Italy
- Canada
- G7 average

Notes:
1. Labor productivity = real GDP / number of workers.
2. To eliminate the effects of the financial crisis after the Lehman shock, figures for the 2000s are the averages for 2000 through 2008. Figures for the 1970s are the averages for 1970 through 1979.

Sources: OECD, Cabinet Office, Ministry of Internal Affairs and Communications.

Japanese financial institutions have been increasing their amount of JGB holdings to around 20 percent as a share of total assets.

Bar chart showing the amount of JGBs as a percentage of total assets for financial institutions, depository institutions, and major banks.

Note:
1. Financial institutions include depository institutions, insurance and pension funds, asset banks, and public financial institutions.

Source: Bank of Japan.
Chart 18

Financial institutions' interest rate risk stemming from an increase in JGB holdings is heightening.

![Amount of Domestic Bond Holdings](chart18a)

![Amount of Interest Rate Risk of Domestic Bonds (100bpv)](chart18b)

Note: 100bpv refers to the amount of interest rate risk calculated under the assumption that interest rates of all maturities would rise simultaneously by 1 percentage point.

Source: Bank of Japan

Chart 19

Japan's real GDP per working-age person and real consumption per capita have exceeded the levels for 2007.

![Real GDP](chart19a)

![Real GDP per Capita](chart19b)

![Real GDP per Working-Age Person](chart19c)

![Real Consumption per Capita](chart19d)

Notes:
1. A working-age person refers to those between 15 and 64 years old.
2. Figures for real GDP, real GDP per capita, and real GDP per working-age person for 2012 are January-September averages. Figures for real consumption per capita for 2012 are January-June averages. Figures for the population and the working-age population for 2012 are calculated using the growth rate for 2011.

Sources: Cabinet Office, World Bank; BEA, Eurostat, ONS.