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Bank of Japan

Outlook for Economic Activity and Prices

April 2015

(English translation prepared by the Bank's staff based on the Japanese original)

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The Bank's View¹

Summary

- Japan's economy is likely to continue growing at a pace above its potential from fiscal 2015 through fiscal 2016. Thereafter, through fiscal 2017, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate. The slowdown is due mainly to (1) the effects of a front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike planned in April 2017 and (2) cyclical deceleration.²
- The year-on-year rate of increase in the consumer price index (CPI, for all items less fresh food and excluding the direct effects of the consumption tax hikes) is likely to be about 0 percent for the time being and, as the underlying trend in inflation steadily rises and the effects of the decline in crude oil prices dissipate, accelerate toward 2 percent -- the price stability target.³ Although the timing of reaching around 2 percent depends on developments in crude oil prices, it is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level. Thereafter, Japan's economy is expected to gradually shift to a growth path that sustains such inflation in a stable manner.
- Comparing the current projections up through fiscal 2016 with the previous ones, the projected growth rate is more or less unchanged. The projected rate of increase in prices is somewhat lower.
- In the context of the price stability target, the Bank of Japan examined the aforementioned baseline scenario (the first perspective) and upside and downside risks to the baseline scenario (the second perspective).⁴ As for the conduct of monetary policy, quantitative and qualitative monetary easing (QQE) has been exerting its intended effects. The Bank will continue with QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

¹ The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on April 30, 2015.

² The April 2015 *Outlook for Economic Activity and Prices* (Outlook Report) assumes, as with the January 2015 interim assessment, that the consumption tax will rise to 10 percent in April 2017.

³ Individual Policy Board members make their forecasts based on the following assumption about crude oil prices. Dubai crude oil prices are expected to rise moderately from the recent 55 U.S. dollars per barrel to 70-75 dollars per barrel toward the end of the projection period. In such a case, the contribution of energy items to the year-on-year rate of change in the CPI (all items less fresh food) is estimated to be mostly in the range of minus 0.7 to minus 0.8 percentage point for fiscal 2015, and mostly in the range of plus 0.1 to plus 0.2 percentage point for fiscal 2016. More specifically, this contribution is expected to fall further into negative territory for the time being, followed by a narrowing in the negative contribution in the second half of fiscal 2015; in the first half of fiscal 2016, the contribution is estimated to be around 0 percentage point.

⁴ As for the examination from two perspectives in the context of the price stability target, see the Bank's statement released on January 22, 2013, entitled "The 'Price Stability Target' under the Framework for the Conduct of Monetary Policy."

I. Baseline Scenario of the Outlook for Economic Activity and Prices in Japan

A. Outlook for Economic Activity

Japan's economy has continued its moderate recovery trend. In the corporate sector, exports and production have picked up and profits have increased to their highest level historically. Firms have maintained their positive investment stance. In the household sector, private consumption as a whole has remained resilient amid continued steady improvement in the employment and income situation.

Looking ahead, as domestic demand is likely to be firm and exports are expected to increase moderately, a virtuous cycle from income to spending is likely to be maintained in both the household and corporate sectors. In these circumstances, Japan's economy is likely to continue growing at a pace above its potential from fiscal 2015 through fiscal 2016.⁵ Thereafter, through fiscal 2017, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate. The slowdown is due mainly to (1) the effects of a front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike planned in April 2017 and (2) cyclical deceleration.

The above projection assumes the following underlying developments.

First, as the Bank of Japan continues with QQE, aiming to achieve the price stability target of 2 percent as long as it is necessary for maintaining that target in a stable manner, financial conditions are likely to remain accommodative and continue stimulating the economy.⁶

⁵ Japan's potential growth rate is estimated to be "around 0.5 percent or lower" recently under a specific methodology, and is expected to rise gradually toward the end of the projection period. However, it should be noted that estimates of the potential growth rate are subject to a considerable margin of error as they rely on the methodology employed and could change as more data for the relevant period become available.

⁶ Individual Policy Board members make their forecasts assuming the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy. Specifically, markets have factored in that short-term interest rates will continue to be effectively 0 percent throughout the projection period. While markets have been forecasting that long-term interest rates will hover at low levels throughout the projection period, this reflects market participants' forecasts for prices, which are lower than those presented in the Outlook Report. Each Policy Board member assumes the future path of long-term interest rates based on such market views, taking into account the difference in the forecasts for prices.

Second, overseas economies are expected to moderately increase their growth rates as advanced economies continue to see firm recovery and its positive effects gradually spread to emerging economies. Among major countries and regions, the U.S. economy is expected to continue to see growth driven mainly by private demand. The European economy is projected to recover moderately, due to supportive forces including a recovery in private consumption and an increase in exports, although it remains under adjustment pressure associated with the debt problem and low inflation rates will likely continue for some time. The Chinese economy is likely to follow a generally stable growth path, albeit at a somewhat reduced pace, as authorities carry out policy measures to support economic activity while progressing with structural reforms.

Third, public investment is expected to follow a moderate downtrend from the current relatively high level, and thereafter level off toward the end of the projection period.

Fourth, firms' and households' medium- to long-term growth expectations are expected to rise moderately against the backdrop of progress in implementation of the government's growth strategy, including regulatory and institutional reforms, an increase in labor participation by women and the elderly under such strategy, firms' continued efforts toward improving productivity and discovering potential domestic and external demand, and steady progress in overcoming of deflation.

Given these assumptions, economic activity during the projection period can be elaborated on as follows. For fiscal 2015 through fiscal 2016, exports are expected to increase moderately owing to the recovery in overseas economies and support from past foreign exchange rate developments. With an improvement in corporate profits and monetary accommodation continuing to provide a boost, business fixed investment is projected to increase steadily, additionally supported by recently emerging developments toward the enhancement of domestic production capacity. Private consumption is projected to accelerate its pace of increase due to the effects of a steady improvement in the employment and income situation and a wage rise, combined with those of an increase in real income due to the decline in energy prices and of a recovery from the decline after the consumption

tax hike in April 2014, both of which are expected in fiscal 2015.⁷ Reflecting these developments in demand both at home and abroad, industrial production is expected to increase moderately.

Through fiscal 2017, the economy is likely to be affected by the front-loaded increase and subsequent decline in demand prior to and after the scheduled second round of consumption tax hikes, and the pace of increase in business fixed investment is likely to decline, reflecting a cycle in the accumulation of capital stock. However, exports are projected to continue increasing moderately owing to overseas economic growth, and domestic private demand is likely to be resilient supported by accommodative financial conditions and heightened growth expectations. Meanwhile, Japan's potential growth rate is expected to follow a moderate increasing trend through the projection period, pushing up the economy's growth in the medium to long term. Therefore, the economy is projected to maintain its positive growth, although with a slowing in its pace to around a level somewhat below the potential growth rate.

Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected growth rate is more or less unchanged.

B. Outlook for Prices

The year-on-year rate of increase in the CPI (for all items less fresh food, and the same hereafter) has been about 0 percent recently.

Major factors that determine inflation rates into the future are evaluated as follows. First, the aggregate supply and demand balance (the output gap), which shows the utilization of

⁷ The effects of the two rounds of consumption tax hikes on the economic growth rate for each fiscal year are quantitatively estimated as follows: an increase of around 0.5 percentage point for fiscal 2013, a decrease of around 1.2 percentage points for fiscal 2014, an increase of around 0.3 percentage point for fiscal 2015, an increase of around 0.3 percentage point for fiscal 2016, and a decrease of around 0.8 percentage point for fiscal 2017. However, it should be noted that these estimates are subject to considerable uncertainty given that they depend partly on income conditions and price developments at each point in time, and therefore are subject to a considerable margin of error.

labor and capital, has steadily followed an improving trend.⁸ Specifically, the tightening trend in labor market conditions has continued, with the unemployment rate declining moderately to around 3.5 percent.⁹ In this situation, wage improvements have continued, as seen in the fact that scheduled cash earnings (regular wages) have increased. Moreover, since the effects of the decline in demand following the consumption tax hike have been dissipating, capacity utilization rates have become higher. Therefore, the output gap is likely to turn positive (in excess demand) in the first half of fiscal 2015, and thereafter, through fiscal 2016, move further into excess demand territory; thus, upward pressure on wages and prices due to the tightening of supply and demand conditions is likely to steadily increase. Subsequently, in fiscal 2017, the output gap is projected to be more or less unchanged in positive territory.

Second, medium- to long-term inflation expectations appear to be rising on the whole from a somewhat longer-term perspective. Such developments in inflation expectations are likely to have been influencing actual wage and price settings. For example, in the annual labor-management wage negotiations, there has been a spread of movements toward reflecting price developments as well as corporate performance on wages, and the increase in wages including that in base pay this year will be larger than last year. Looking ahead, as the Bank pursues QQE and the observed inflation rate rises, medium- to long-term inflation expectations are also likely to follow an increasing trend and gradually converge to around 2 percent -- the price stability target.

⁸ There are two approaches to estimating the output gap: (1) estimate potential GDP and then measure its difference with actual GDP; and (2) directly measure the utilization of production factors (labor and capital). As the output gap in the Outlook Report has been estimated based on the latter approach, changes in the GDP growth rate do not have a one-to-one relationship with the expansion/narrowing of the output gap. It should be noted that estimates of the output gap could differ depending on the specific methodology employed and data used, and therefore they are subject to a considerable margin of error.

⁹ One measure used in determining the degree of tightness in labor market conditions is the *structural unemployment rate*. In the labor market, there is always a mismatch to some extent between job openings and job applicants, and thus there is a certain number of unemployed even when the economy is booming. Given that there is such unemployment due to the mismatch, the unemployment rate that corresponds to a state in which excess labor force has disappeared is called the structural unemployment rate. This rate is calculated to be around 3.5 percent or lower recently under a specific methodology. However, it should be noted that the estimated structural unemployment rate tends to change over time.

Third, through import prices, while past developments in foreign exchange rates will exert upward pressure on consumer prices, a decline in international commodity prices, including crude oil prices, will exert downward pressure on consumer prices for the time being.

Based on the above, the outlook for the year-on-year rate of increase in the CPI (excluding the direct effects of the consumption tax hikes) is as follows. It is likely to be about 0 percent for the time being and, as the underlying trend in inflation steadily rises and the effects of the decline in crude oil prices dissipate, accelerate toward 2 percent -- the price stability target. Although the timing of reaching around 2 percent depends on developments in crude oil prices, it is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level. Thereafter, the year-on-year rate of increase in the CPI is likely to be around 2 percent on average.¹⁰ Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected rate of increase in the CPI is somewhat lower.

II. Upside and Downside Risks

A. Risks to Economic Activity

The following are upside and downside risks to the Bank's aforementioned baseline scenario regarding the economy. First, there is uncertainty regarding developments in overseas economies. Risks to future developments in overseas economies include the pace of growth in the U.S. economy and its effects on the global financial markets, the prospects regarding the debt problem and the momentum of economic activity and prices in Europe, the progress in structural adjustments toward achieving sustainable growth in emerging economies, the effects of the decline in commodity prices, and geopolitical risks.

The second risk is the effects of the consumption tax hike scheduled to take place in April 2017. The effects on the economy of the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike, as well as of the decline in real income,

¹⁰ The effects of the scheduled consumption tax hike in April 2017 on prices can be mechanically estimated by assuming that the rise in the consumption tax will be fully passed on for all currently taxable items. On this basis, the year-on-year rate of increase in the CPI will be pushed up by 1.3 percentage points in fiscal 2017.

may differ depending on consumer sentiment, the employment and income situation, and developments in prices.

Third, firms' and households' medium- to long-term growth expectations may be either raised or lowered depending on future developments in regulatory and institutional reforms, innovation in the corporate sector, and the employment and income situation surrounding the household sector.

Fourth, in the event that confidence in fiscal sustainability in the medium to long term declines, the economy may deviate downward from the baseline scenario through increases in people's concerns regarding the future and rises in long-term interest rates that are unwarranted by economic fundamental conditions. On the other hand, there is also a possibility that the economy will deviate upward from the baseline scenario if confidence in the path toward fiscal consolidation strengthens and people's concerns regarding the future are alleviated.

B. Risks to Prices

In case the aforementioned upside and downside risks to the economy materialize, it is likely that prices will also be affected to a certain degree. Other factors that could exert upside and downside risks to prices are as follows. The first concerns developments in firms' and households' medium- to long-term inflation expectations. The baseline scenario assumes that, amid rises in observed inflation accompanied by wage increases, people's inflation expectations will rise further and gradually converge to around 2 percent -- the price stability target. However, the pace at which they will rise is subject to uncertainty over developments in observed prices and to the extent to which they will affect inflation expectations. On this point, there is a risk that the year-on-year rate of increase in the CPI being about 0 percent for the time being, which owes to the effects of the decline in energy prices, might affect the pace of increase in inflation expectations.

The second concerns developments in the output gap, particularly in labor market conditions. The baseline scenario assumes that, on the labor supply side, the recent increase in labor participation by the elderly and women and recent movements in firms to

convert part-time employees into regular ones will continue to some extent, but uncertainty is associated with this assumption.

The third regards the responsiveness of inflation to the output gap. Attention needs to be paid to what extent firms will raise sales prices and wages as supply and demand balances in goods and services as well as labor market conditions tighten. On this point, there is a possibility that the pace of improvement in wages could deviate upward on the back of the tightening in labor market conditions, which in turn could affect prices of goods and services. Meanwhile, there also is a possibility that a rise in prices and wages will not progress smoothly should consumers mount strong resistance to an increase in sales prices or should firms be cautious with regard to raising wages.

Fourth, developments in import prices, reflecting fluctuations in international commodity prices such as crude oil prices and foreign exchange rates, as well as the extent to which such developments will spread to domestic prices, may lead prices to deviate either upward or downward from the baseline scenario.

III. Conduct of Monetary Policy

In the context of the price stability target, the Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy.

The first perspective concerns an examination of the baseline scenario for the outlook. Japan's economy is judged as likely to achieve around 2 percent inflation around the first half of fiscal 2016 and thereafter gradually shift to a growth path that sustains such inflation in a stable manner.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy. With regard to the baseline scenario for economic activity, upside and downside risks can be assessed as being balanced, although uncertainty remains high, including that regarding developments in overseas economies. With regard to the baseline scenario for prices, there is considerable uncertainty, mainly in developments in medium- to long-term inflation expectations, and risks are skewed to the downside. Examining financial imbalances from a longer-term perspective, there is no sign at this

point of excessively bullish expectations in asset markets or in the activities of financial institutions.¹¹ Nevertheless, in a situation where the amount outstanding of government debt has shown a cumulative increase, due attention needs to be paid to the fact that financial institutions' holdings of government bonds have remained at an elevated level, although they have been on a gradual declining trend.

As for the conduct of monetary policy, QQE has been exerting its intended effects. The Bank will continue with QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

¹¹ For more details, see the April 2015 issue of the Bank's *Financial System Report*.

Forecasts of the Majority of Policy Board Members

		y/y % chg.	
	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2014	-1.0 to -0.8 [-0.9]	+2.8	+0.8
Forecasts made in January 2015	-0.6 to -0.4 [-0.5]	+2.9 to +3.2 [+2.9]	+0.9 to +1.2 [+0.9]
Fiscal 2015	+1.5 to +2.1 [+2.0]	+0.2 to +1.2 [+0.8]	
Forecasts made in January 2015	+1.8 to +2.3 [+2.1]	+0.4 to +1.3 [+1.0]	
Fiscal 2016	+1.4 to +1.8 [+1.5]	+1.2 to +2.2 [+2.0]	
Forecasts made in January 2015	+1.5 to +1.7 [+1.6]	+1.5 to +2.3 [+2.2]	
Fiscal 2017	+0.1 to +0.5 [+0.2]	+2.7 to +3.4 [+3.2]	+1.4 to +2.1 [+1.9]

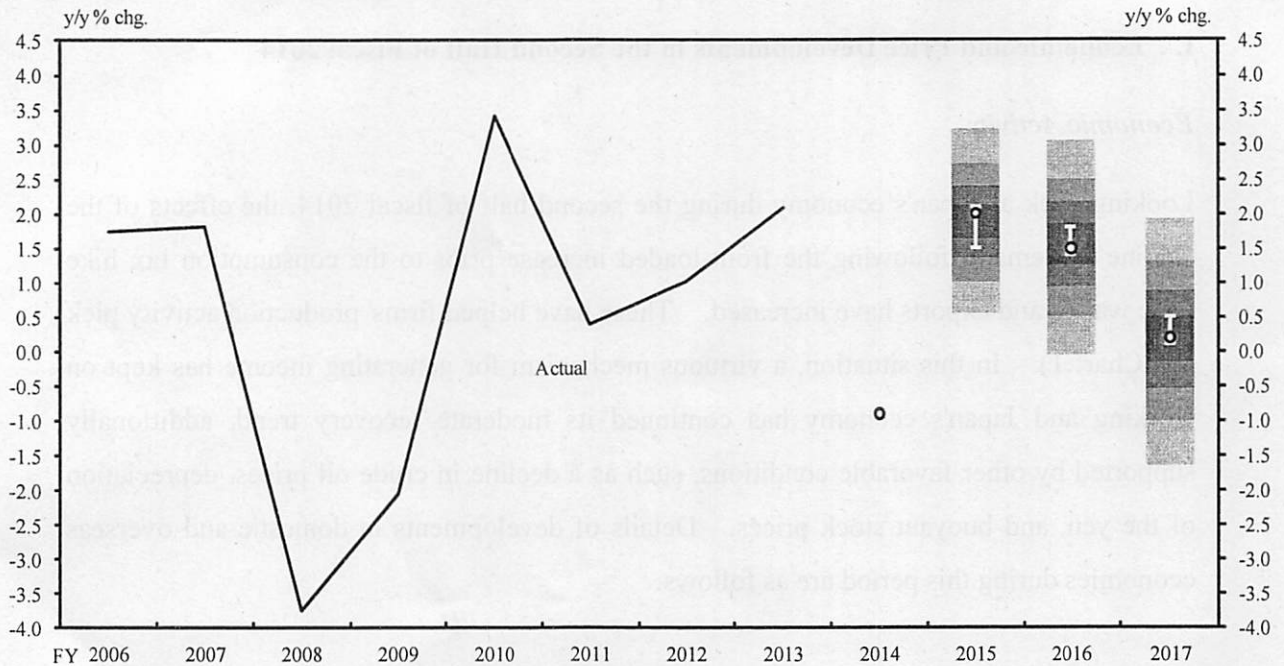
Notes: 1. Figures in brackets indicate the median of the Policy Board members' forecasts (point estimates).

- The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which he or she attaches the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
- Individual Policy Board members make their forecasts assuming the effects of past policy decisions and with reference to views incorporated in financial markets regarding future policy.
- Dubai crude oil prices are expected to rise moderately from the recent 55 U.S. dollars per barrel to 70-75 dollars per barrel toward the end of the projection period. In such a case, the contribution of energy items to the year-on-year rate of change in the CPI (all items less fresh food) is estimated to be mostly in the range of minus 0.7 to minus 0.8 percentage point for fiscal 2015, and mostly in the range of plus 0.1 to plus 0.2 percentage point for fiscal 2016. More specifically, this contribution is expected to fall further into negative territory for the time being, followed by a narrowing in the negative contribution in the second half of fiscal 2015; in the first half of fiscal 2016, the contribution is estimated to be around 0 percentage point.
- The consumption tax hike scheduled to take place in April 2017 -- to 10 percent -- is incorporated in the forecasts, but individual Policy Board members make their forecasts of the CPI based on figures excluding the direct effects of the consumption tax hike. The forecasts for the CPI for fiscal 2017 that incorporate the direct effects of the consumption tax hike are constructed as follows. First, the contribution to prices from each tax hike is mechanically computed on the assumption that the tax increase will be fully passed on for all taxable items. The CPI will be pushed up by 1.3 percentage points. Second, this figure is added to the forecasts made by the Policy Board members.
- The CPI (all items less fresh food) for fiscal 2014 is computed based on the assumption that the year-on-year rate of increase for March is the same as that for February, and the contribution of the tax hike to prices is mechanically computed in the same way as described in Note 5: the CPI for fiscal 2014 is pushed up by 2.0 percentage points.
- The ranges shown below include the forecasts of all Policy Board members.

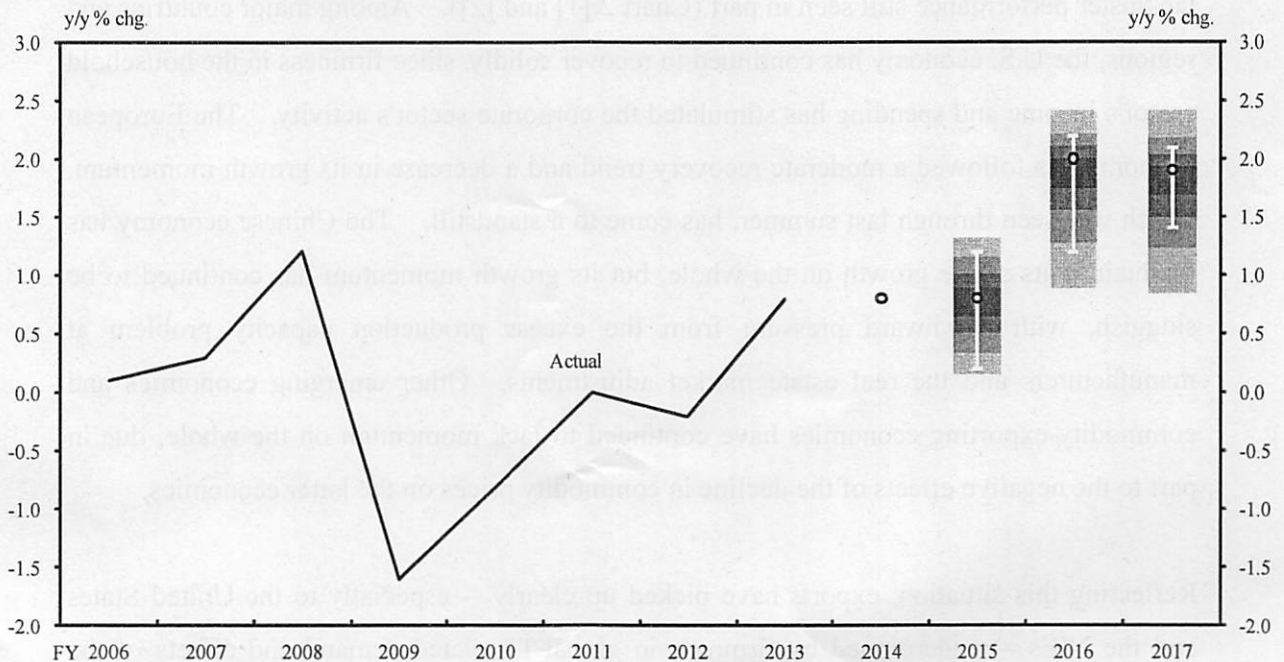
		y/y % chg.	
	Real GDP	CPI (all items less fresh food)	Excluding the effects of the consumption tax hikes
Fiscal 2014	-1.0 to -0.3	+2.8	+0.8
Forecasts made in January 2015	-0.7 to -0.3	+2.9 to +3.3	+0.9 to +1.3
Fiscal 2015	+0.8 to +2.2	+0.2 to +1.3	
Forecasts made in January 2015	+1.3 to +2.3	+0.3 to +1.4	
Fiscal 2016	+0.8 to +1.8	+0.8 to +2.3	
Forecasts made in January 2015	+0.7 to +2.0	+0.9 to +2.3	
Fiscal 2017	-0.1 to +0.6	+2.0 to +3.5	+0.7 to +2.2

Forecast Distribution Charts of Policy Board Members

(1) Real GDP



(2) CPI (All Items Less Fresh Food)



Notes: 1. The Forecast Distribution Charts are based on the aggregated probability distributions (i.e., the Risk Balance Charts) compiled from the distributions of individual policy board members, and constructed as follows. First, the upper and lower 10 percentiles of the aggregated distributions are trimmed. Second, the various percentiles of the aggregated distributions are color-coded as below.

Upper 40% to lower 40%	Upper 30% to 40% and lower 30% to 40%	Upper 20% to 30% and lower 20% to 30%	Upper 10% to 20% and lower 10% to 20%
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- For the process of compilation of the Risk Balance Charts, see the box on page 9 of the April 2008 *Outlook for Economic Activity and Prices*.
- The circles in the charts indicate the median of the Policy Board members' forecasts (point estimates). However, the CPI (all items less fresh food) for fiscal 2014 is computed based on the assumption that the year-on-year rate of increase for March is the same as that for February.
- The vertical lines in the bar charts indicate the range of the forecasts of the majority of Policy Board members.
- The forecast for the CPI excludes the direct effects of the scheduled consumption tax hikes.

The Background¹²

I. Economic and Price Developments in the Second Half of Fiscal 2014

Economic Activity

Looking back at Japan's economy during the second half of fiscal 2014, the effects of the decline in demand following the front-loaded increase prior to the consumption tax hike have waned and exports have increased. These have helped firms' production activity pick up (Chart 1). In this situation, a virtuous mechanism for generating income has kept on working and Japan's economy has continued its moderate recovery trend, additionally supported by other favorable conditions, such as a decline in crude oil prices, depreciation of the yen, and buoyant stock prices. Details of developments in domestic and overseas economies during this period are as follows.

Overseas economies -- mainly advanced economies -- have been recovering, albeit with a lackluster performance still seen in part (Chart 2 [1] and [2]). Among major countries and regions, the U.S. economy has continued to recover solidly, since firmness in the household sector's income and spending has stimulated the corporate sector's activity. The European economy has followed a moderate recovery trend and a decrease in its growth momentum, which was seen through last summer, has come to a standstill. The Chinese economy has maintained its stable growth on the whole, but its growth momentum has continued to be sluggish, with downward pressure from the excess production capacity problem at manufacturers and the real estate market adjustments. Other emerging economies and commodity-exporting economies have continued to lack momentum on the whole, due in part to the negative effects of the decline in commodity prices on the latter economies.

Reflecting this situation, exports have picked up clearly -- especially to the United States and the NIEs -- underpinned by firmness in global IT-related demand and effects of the depreciation of the yen, after having shown some weakness during the first half of fiscal 2014 (Charts 2 [3] and [4] and 3). Meanwhile, public investment has more or less leveled

¹² "The Background" provides explanations of "The Bank's View" decided by the Policy Board of the Bank of Japan at the Monetary Policy Meeting held on April 30, 2015.

off at a high level while positive effects of the supplementary budget for fiscal 2013 remain (Chart 4 [1]).

In the corporate sector, production activity, which had shown some weakness until last summer, has picked up (Chart 5). This pick-up is attributable to progress in inventory adjustments in durable consumer goods and construction goods triggered by the decline in demand following the front-loaded increase prior to the consumption tax hike, and also to the rise in exports. Corporate profits have continued their improving trend mainly in manufacturers, and business sentiment has generally stayed at a favorable level, picking up after having exhibited some cautiousness (Charts 6 and 7). In this situation, business fixed investment as a whole followed a moderate increasing trend, although it somewhat lacked momentum in construction (Chart 8).

The employment and income situation continued to see steady improvement. The improvement in labor market conditions has become evident again after having been somewhat slow, and winter bonuses have increased solidly (Charts 9 and 10). Meanwhile, the decline in private consumption following the front-loaded increase prior to the consumption tax hike, including the lingering decline in consumption of durable goods such as automobiles and household electrical appliances, has gradually subsided (Charts 11 [1] and [2] and 12). Against this backdrop, private consumption as a whole has remained resilient, although it had shown some sluggishness in its pace of improvement because of a decline in real income as well as of the effects of an increasing cautiousness in consumer sentiment. Even consumer sentiment has started to pick up in the January-March quarter of 2015, reflecting the positive effects of a decline in gasoline prices and anticipation of wage increases (Chart 11 [3] and [4]). Housing investment had continued to decline following the front-loaded increase but has started to bottom out since the turn of the year (Chart 4 [2]).

Reflecting these aforementioned developments in economic activity, the output gap, which captures the utilization of labor and capital, had fallen somewhat further into negative territory in the first half of fiscal 2014 due to the effects of the consumption tax hike, but it has improved to around 0 percent through the second half of the fiscal year (Chart 13).

Prices

On the price front, excluding the direct effects of the consumption tax hike, the year-on-year rate of change in the producer price index (PPI) had turned negative in November 2014, reflecting a substantial decline in international commodity prices, and thereafter generally continued to fall further into negative territory (Chart 14 [1] and [2]). The year-on-year rate of increase in the services producer price index (SPPI, excluding international transportation) has been in the range of 0.5-1.0 percent, on the back of continued improvement in corporate profits, although some components of SPPI were affected by the sluggishness in domestic demand (Chart 14 [2]). The year-on-year rate of increase in the CPI has decreased to about 0 percent through the fiscal year-end, as the contribution of energy items has turned negative because of the effects of the decline in crude oil prices, and the positive contribution of non-energy items has narrowed somewhat because of sluggishness in private consumption accompanied by a pause in passing on cost increases (Chart 15 [1] and [2]). The year-on-year rate of increase in the CPI (all items less food and energy) also has slowed since last spring, but the slowdown was marginal compared to that in the CPI (Chart 16 [1]). The rate of increase in the trimmed mean,¹³ which is one of the indicators for capturing the trend in the CPI, had tended to slow moderately, but has improved slightly toward the end of the fiscal year (Chart 16 [1]). The difference between the share of CPI items for which prices have risen from the previous year and that for which prices have declined had continued to be more or less unchanged since last spring, but has increased somewhat toward the fiscal year-end (Chart 16 [2]). Meanwhile, the year-on-year rate of change in the GDP deflator has been more or less unchanged at around 2 percent, since the domestic demand deflator has seen somewhat of a reduction in its positive contribution while the contribution of the external demand deflator has turned positive (Chart 14 [3]).¹⁴

¹³ In order to eliminate the effects of large relative price fluctuations, the trimmed mean is obtained by mechanically excluding a certain percentage of the upper and lower tails of the price fluctuation distribution by item.

¹⁴ Chart 14 (3) includes the effects of the consumption tax hike. In the economic outlook for fiscal 2015, the government estimated the direct effects of the consumption tax hike in April 2014 on the GDP deflator at about 1.4 percentage points. This means that, even excluding the effects, the year-on-year rate of change in the GDP deflator for fiscal 2014 would turn positive.

Land prices as a whole have been declining slightly, but the pace of decline has been slowing. Looking at the *Land Market Value Publication* for 2015 (as of January 1), commercial land prices have leveled off for the first time in seven years (Chart 17). In the three major metropolitan areas (Tokyo, Osaka, and Nagoya), both commercial and residential land prices have continued to increase slightly. In nonmetropolitan areas, those land prices have continued to decline, but the pace of decline has been slowing.

II. Financial Developments

Financial Conditions

Financial conditions are accommodative.

With the Bank pursuing QQE, the monetary base has been increasing at a high year-on-year growth rate of around 35–40 percent (Chart 18).

Firms' funding costs have been hovering at low levels. The issuance spreads for CP and corporate bonds have been low, as favorable issuing conditions have continued against the backdrop of firm demand from investors (Chart 19). The average interest rates on new loans and discounts for the short term have been at historical low levels, and those for the long term have continued to moderately decline, marking new record lows (Chart 20 [1]). In these circumstances, interest payments by firms have been at sufficiently low levels in relation to their profits (Chart 20 [2]).

With regard to the availability of funds for firms, financial institutions' lending attitudes -- as perceived by large as well as small firms -- have been on an improving trend (Chart 21 [1]). The diffusion indexes (DIs) in the Short-Term Economic Survey of Enterprises in Japan (*Tankan*) have improved to the levels generally in line with or above those of around 2006, which is the recent peak. Firms' financial positions have been favorable for both large and small firms (Chart 21 [2]). Various DIs have improved to the levels generally in line with or above the recent peak seen around 2006.

Domestic demand for working capital by firms has continued to rise. There has also been an increase in demand for funds in sectors where there are prospects for high growth, such as the medical and nursing business, and for funds related to mergers and acquisitions of firms. In these circumstances, bank lending has continued to increase and this rise has expanded to a wider range of businesses, regions, and firm sizes. The year-on-year rate of increase in its amount outstanding has been around 2.5-3.0 percent (Chart 22 [1]). By firm size, the year-on-year rates of change in bank lending both to large and small firms have continued to be positive (Chart 22 [2]). Meanwhile, the aggregate amount outstanding of CP and corporate bonds has generally been at about the previous year's level (Chart 22 [3]). Looking at CP and corporate bonds separately, the year-on-year rate of change in the amount outstanding of CP has been positive on the back of increased funding by leasing companies and consumer finance companies, but that of corporate bonds has been negative, partly reflecting a high level of corporate bond redemption in the first half of fiscal 2014.

The year-on-year rate of change in the money stock (M2) has been growing at around 3.0-3.5 percent, mainly reflecting the increase in bank lending (Chart 23 [1]). The ratio of M2 to nominal GDP has been on a moderate increasing trend (Chart 23 [2]).

Developments in Financial Markets

Global financial markets have been firm amid continued accommodative financial conditions, as evidenced by generally low long-term interest rates and a continued uptrend in stock prices.

Looking at respective financial markets, stock prices continued trending upward globally, with accommodative financial conditions underpinning the economy and business performance (Chart 24 [1]).

Yields on 10-year government bonds in the United States have fluctuated somewhat; they had declined rather considerably through the start of the year against the background of a decrease in inflation expectations caused by the substantial decline in crude oil prices, and then rose reflecting markets' attentiveness toward normalization of monetary policy.

However, they have generally been at a low level of around 2 percent (Chart 25 [1]). Long-term interest rates in Germany, in turn, have been declining, due mainly to the implementation of the public sector purchase program (PSPP) by the European Central Bank (ECB). Meanwhile, foreign currency funding conditions have remained stable. The LIBOR-OIS spreads in the U.S. dollar and euro have remained at historical low levels (Chart 26 [2]).

Looking at financial markets in Japan, short-term interest rates -- including those on term instruments with longer maturities -- have been kept low as the Bank continues to provide ample liquidity (Chart 26 [1]). Yields on treasury discount bills (T-Bills) have been about 0 percent or in negative territory. Credit spreads on interbank transactions have remained stable as the balance sheets of Japanese financial institutions have maintained their soundness (Chart 26 [2]).

Yields on 10-year Japanese government bonds (JGBs) had fluctuated somewhat; they had declined to a historical low of about 0.2 percent as U.S. and European long-term interest rates had declined, but thereafter rose somewhat, mainly reflecting the developments in U.S. long-term interest rates. However, they have generally been at low levels, and recently have been in the range of 0.30-0.35 percent (Chart 25).

Stock prices continued their rising trend, reflecting such factors as solid Japanese corporate earnings in a situation where buoyant stock prices continued to be seen globally, and have recently been at a level as high as that marked in 2000 (Chart 24 [1]). In the Japan real estate investment trust (J-REIT) market, prices have been firm against the backdrop of a continued improvement in fundamentals of the real estate market (Chart 24 [2]).

In foreign exchange markets, the yen depreciated against the U.S. dollar from last autumn through the end of that year in view of the difference in the direction of monetary policy between Japan and the United States, and thereafter, from this year, it has been staying at broadly around 120 yen against the dollar (Chart 27). The yen has been appreciating against the euro as the ECB introduced additional monetary easing measures.

III. The Outlook for Economic Activity and Prices from Fiscal 2015 to Fiscal 2017

The Outlook for Economic Activity and Prices

In assessing the outlook for Japan's economy, it is useful to review the economic and price developments during the two years after the introduction of QQE in April 2013 (Chart 28). QQE has lowered real interest rates by raising inflation expectations through a strong and clear commitment toward achieving the price stability target of 2 percent, and concurrently by putting downward pressure on nominal interest rates across the entire yield curve through massive purchases of long-term government bonds. At the same time, the correction of the excessive appreciation of the yen and the rise in stock prices have taken place, and economic activity has started to gain momentum, accompanied by an improvement in growth expectations. In this situation, the economy has continued its moderate recovery trend despite being affected by the consumption tax hike, and the utilization of production factors such as labor and capital has followed an improving trend. On the income side, corporate profits and employee income have continued to improve steadily, and this has underpinned households' and firms' proactive spending behavior. On the wage and price fronts, the trend has changed from a moderately downward one to a moderately upward one, partly on the back of an improvement in the supply-demand conditions, mainly in the labor market.

In terms of the outlook, from fiscal 2015 through fiscal 2016, the economy is projected to continue growing at a pace above its potential, as accommodative financial conditions are likely to be maintained, with additional impetus including the decline in crude oil prices¹⁵. In fiscal 2017, the economy is likely to maintain its underlying resilience, although growth is projected to clearly slow down compared to the previous fiscal year, as a result of cyclical deceleration and of negative effects of the second round of consumption tax hikes scheduled

¹⁵ The effects of the decline in crude oil prices on economic activity and prices are analyzed in Box 1.

to take place in April 2017¹⁶. Against this backdrop that implies improvements in the output gap, the underlying trend in inflation is projected to steadily rise, supported by a heightening in medium- to long-term inflation expectations, and the year-on-year rate of increase in the CPI (excluding the direct effects of the consumption tax hike) is likely to accelerate toward 2 percent -- the price stability target -- as the effects of the decline in crude oil prices dissipate. Although the timing of reaching around 2 percent depends on developments in crude oil prices, it is projected to be around the first half of fiscal 2016, assuming that crude oil prices will rise moderately from the recent level. Thereafter, the year-on-year rate of increase in the CPI is expected to be around 2 percent on average.

Looking at the outlook for economic activity in detail, in fiscal 2015, demand both at home and abroad is likely to increase in a well-balanced manner, and the economy is expected to grow at a pace clearly above its potential. Consequently, the output gap is likely to turn clearly positive and the economy is projected to follow a moderate expanding trend.

¹⁶ As in the January 2015 interim assessment, it is assumed in this report that the consumption tax will rise to 10 percent in April 2017. The front-loaded increase and subsequent decline in demand prior to and after the consumption tax hike is expected to occur mainly in household spending (private consumption and housing investment). In addition, a part of business fixed investment, particularly in businesses eligible for the simplified tax system or the tax exemption -- mainly corresponding to family-owned firms and small firms -- is also projected to be subject to such fluctuation.

The effects of the first round of consumption tax hikes on the economic growth rate are estimated to be as follows. After the front-loaded increase in demand pushed up the growth rate by about 0.5 percentage point in fiscal 2013, both the subsequent decline in demand and the decline in real income have pushed down the growth rate by about 1.2 percentage points in fiscal 2014. The growth rate is expected to be pushed up by about 0.3 percentage point in fiscal 2015 as the effects of the subsequent decline in demand will dissipate. It is worth noting that these estimated figures are subject to a considerable margin of error since quantitatively extracting the effects of the consumption tax hike is quite difficult, taking into account (1) that the hike took place in tandem with the expiration of some widely used computer operating systems and the strengthening of gas emission regulations, and (2) that the price rise including the consumption tax hike has made household sentiment cautious and exerted negative effects on consumption by more than explained by the decline in real income.

On this basis, the effects of the second round of consumption tax hikes are projected to be a boost of about 0.3 percentage point in fiscal 2016 and a hit of about minus 0.8 percentage point in fiscal 2017, both about two-thirds of the estimated effects of the first round of consumption tax hikes, given the difference in the increase in the tax rate.

Looking at respective demand components, public investment is projected to turn to a moderate downtrend. On the other hand, exports are expected to continue increasing moderately, underpinned by the recovery in overseas economies and by the effects of the past depreciation of the yen. Private consumption is likely to increase firmly, owing to an increase in real disposable income reflecting a rise in base pay and the decline in energy prices, as well as to a bounce back from the decline in demand last year. Business fixed investment is expected to increase at an accelerated pace, supported by a clear improvement in corporate profits -- attributable to the decline in crude oil prices -- and by accommodative financial conditions.

Regarding fiscal 2016, a boost to the economy brought about by the cycle of business fixed investment is likely to wane as capital stock accumulates. Nevertheless, exports are expected to continue increasing moderately, supported by the recovery in overseas economies and the effects of the past depreciation of the yen, and the effects of monetary easing and the rise in growth expectations, combined with those of the increase in exports, are expected to continue supporting domestic private demand. Moreover, in the second half of the fiscal year, a front-loaded increase in demand prior to the consumption tax hike is expected to be seen again. Therefore, the economy, despite a slowdown in its pace of growth compared to the previous fiscal year, is projected to continue growing at a pace clearly above its potential.

In fiscal 2017, business fixed investment is projected to be under stronger downward pressure from the cycle in the accumulation of capital stock, and the consumption tax hike will bring about a decline in demand following the front-loaded increase and a decline in real income, and thus economic growth is projected to substantially weaken compared to the previous fiscal year. However, on the back of the moderate acceleration in overseas economic growth, exports are likely to continue increasing, and domestic private demand is likely to maintain its underlying resilience with the effects of monetary easing and heightened growth expectations, additionally underpinned by investment related to hosting the Olympic Games. Thus, the economy is projected to maintain somewhat positive growth, though somewhat below the growth potential, and the output gap is expected to remain in positive territory.

Expressing the outlook in terms of the annual real GDP growth rate, it is projected to be around 2 percent for fiscal 2015, around 1.5 percent for fiscal 2016, and in the range of 0.0-0.5 percent for fiscal 2017. Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected growth rate is more or less unchanged.

The outlook for prices based on the assumption that crude oil prices will rise moderately from the recent level is as follows. The year-on-year rate of increase in the CPI is projected to be about 0 percent for the time being, with negative contributions of energy items offsetting positive contributions of other items. However, the effects of an improvement in the output gap and of a rise in medium- to long-term inflation expectations are projected to continue, and passing on cost increases resulting from the past depreciation of the yen is likely to proceed again. Hence, as the negative contribution of energy items wanes from the second half of fiscal 2015, the rate of increase in the CPI as a whole is projected to accelerate and reach around 2 percent around the first half of fiscal 2016. Thereafter, the rate of increase is likely to be around 2 percent on average. Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected rate of increase in the CPI is somewhat lower.

The following provides supplementary details on the assumptions and underlying mechanism of the outlook for economic activity and prices.

Government Spending

Public investment will be underpinned to some degree by the implementation of the supplementary budget for fiscal 2014, but, given that the level in fiscal 2014 was high, it is likely to follow a moderate downtrend (Charts 4 [1] and 29 [1]). Nevertheless, in light of increasing demand for maintenance and replacement of social infrastructure and of investment related to hosting the Olympic Games, public investment is expected to decline more moderately than in the mid-2000s and level off toward the end of the projection period (Chart 29 [2]).

Meanwhile, the level of the amount outstanding of government liabilities as a percentage of nominal GDP is likely to continue to be at a high level, even incorporating the consumption tax hikes and an increase in tax revenue resulting from the economic recovery, due to an increase in social security-related spending reflecting the aging population (Chart 29 [3] and [4]).

Overseas Economies

Overseas economies are expected to very moderately increase their growth rates toward about 4 percent, which is the past long-term average, as advanced economies continue to see firm recovery and its positive effects gradually spread to emerging economies (Chart 30).¹⁷

Among major countries and regions, the U.S. economy is expected to continue to see solid growth as the firmness in the household sector's income and spending stimulates the corporate sector's activity. The European economy is expected to continue to see moderate recovery, due to supportive forces including an increase in consumption and a pick-up in exports, although it remains under adjustment pressure associated with the debt problem and low inflation rates will likely continue for some time. The Chinese economy is likely to continue to generally see stable growth as authorities carry out policy measures to support economic activity while progressing with structural reforms, but the pace of growth is expected to be somewhat reduced. Other emerging economies and commodity-exporting economies are expected to gradually increase their growth rates, as the recovery in advanced economies spreads to them and as domestic demand is expected to pick up induced by such development, although differences across countries and regions are likely to remain for the time being.

¹⁷ Looking at the weighted averages of real GDP growth rates of respective economies and regions released by the International Monetary Fund (IMF) in April 2015, by value of exports from Japan, the growth rates of overseas economies are projected to register 3.7 percent in 2015, 3.9 percent in 2016, and 3.9 percent in 2017 (Chart 30). Although rising very moderately, even at the end of the projection period, the growth rate is projected to be below 4 percent, which is the long-term average for the past 35 years -- from 1980 through 2014.

However, the outlook for overseas economies entails the following upside and downside risks. First, there is a possibility that positive effects of the decline in crude oil prices will be larger than expected, and thus growth in overseas economies as a whole will deviate upward. There is also a possibility that spending in the U.S. corporate sector will be even more buoyant, partly on the back of a heightening in growth expectations. In contrast, with respect to the European economy, the consequences of the debt problem -- including developments in Greece -- and the momentum of economic activity and prices warrant attention. In addition, there is a risk in the Chinese economy that the slowdown in the pace of growth will accelerate against the background of the persistent problem of excess production capacity, and this acceleration will affect other Asian economies. Attention is also warranted on the risk that growth in commodity-exporting economies will deviate downward, affected by weak commodity prices and geopolitical factors.

Exports and Imports

The pick-up in exports has become evident recently. Exports to the United States, which had lacked momentum during the first half of 2014 due to the effects of the severe winter weather and of a series of start-ups of overseas production sites by the Japanese automobile industry, have recently been increasing. Exports to the NIEs have also been picking up noticeably on the back of firm IT-related demand, particularly for smartphones.

Looking at future developments in exports from two perspectives -- the volume of global trade (i.e. global exports) and Japan's share in that volume -- exports are expected to increase moderately on the whole, as Japan's share in global exports, which had declined after the global financial crisis, will pick up moderately, underpinned partly by the past depreciation of the yen, and the volume of global trade will continue to increase at about the same rate as the global economy (Chart 31).

The following factors are attributed to the expected pick-up in Japan's share in global exports. First, as pick-ups in investment activity gain momentum globally on the back of a moderate recovery of the overseas economies as a whole, it is likely that exports such as of capital goods, in which Japan has a comparative advantage, will increase. On this point, in

the United States, which is the driving force of the recent global economy, the firmness in the household sector's income and spending has been stimulating the corporate sector's activity, and business fixed investment, particularly in machinery, has been recovering. In this situation, exports of capital goods and parts, in which Japan has a comparative advantage, have recently been noticeably increasing, driven in particular by U.S. demand (Chart 32 [3]). They are likely to continue increasing moderately as investment activity recovers globally. Second, the current level of foreign exchange rates could lead to recovery in the price competitiveness of Japan's export goods. On this point, Japan's exports of IT-related goods continued to be sluggish until around end-2013 on the back of a decline in competitiveness in the global market, despite global semiconductor shipments having picked up after bottoming out around end-2011. However, its exports of IT-related goods have regained their growth since mid-2014, which is probably attributable to the underpinning of the depreciation of the yen since end-2012 (Chart 32 [1]). The recent depreciation of the yen has also brought about a substantial increase in the number of foreign visitors to Japan and substantially boosted the travel receipts that are categorized as exports of services in the balance of payments statistics, and this could be regarded as an increase in the competitiveness of Japan's tourism industry (Chart 32 [2]). Third, some manufacturers -- particularly processing industries -- are planning to somewhat slow the pace of expansion in their overseas production in view of the recent depreciation of the yen, and this can also underpin future developments in exports (Chart 32 [4]).

Imports are expected to continue a moderate increasing trend, partly reflecting developments in domestic demand, although developments in foreign exchange rates will be a restraining factor and fluctuations caused by the consumption tax hike are envisaged.

External and Saving-Investment Balances

The trade balance in nominal terms is expected to follow a moderate improving trend, albeit with fluctuations caused by the front-loaded increase and subsequent decline in demand prior to and after the consumption tax hikes, on the back of an increasing trend in real net exports and the improvement in the terms of trade due to the decline in commodity prices

including crude oil prices¹⁸ (Chart 33 [1] and [2]). Moreover, the income balance is likely to widen its surplus as overseas assets continue to accumulate, mainly through direct investment. Reflecting such developments, the current account surplus is likely to widen, albeit moderately (Chart 34 [1]).

Looking at the domestic saving-investment balance that conceptually corresponds to the current account balance, excess saving in the private sector during the projection period will likely narrow very moderately, albeit with fluctuations caused by the consumption tax hikes, while the deficit in the general government is expected to decrease markedly, partly due to an increase in tax revenue (Chart 34 [2]). Therefore, domestic excess saving as a whole is expected to follow a rising trend through the projection period.

The Environment surrounding Corporate Profits

Corporate profits are expected to continue their solid increasing trend, supported by (1) the substantial improvement in the terms of trade, partly due to the decline in crude oil prices, (2) the recovery in sales volume (i.e. shipments) due to the increase in demand at home and abroad, and (3) the increase in receipts of dividend income and interest income from firms' buoyant overseas business (Charts 5 [2], 6, and 33 [2]). However, toward the end of the projection period, the growth rate of corporate profits is expected to gradually decline since the distribution of profits to households will further progress through the increase in personnel expenses, the economy will head for a cyclical deceleration, and there will be a decline in demand in fiscal 2017 following the front-loaded increase prior to the consumption tax hike.

The decline in crude oil prices and the depreciation of the yen exert positive effects on economic activity through improvement in corporate profits and increases in firms'

¹⁸ The decline in crude oil prices leads to declines in other mineral fuel prices, including liquefied natural gas (LNG) prices. Calculating effects of the 50 percent decline in crude oil prices on nominal imports, based on the estimated long-run elasticity of major mineral fuel prices to crude oil prices and the assumption that import quantity is unchanged, there will be a decline of over 10 trillion yen in nominal imports (increase of over 10 trillion yen in trading gains) in the long run (Chart 33 [3]).

spending. However, while the decline in crude oil prices exerts positive effects on a wide range of sectors, the effects of the depreciation of the yen differ largely by sector, in that its positive effects tend to be enjoyed particularly by manufacturers, while nonmanufacturers -- especially small firms, which have a relatively weak ability to pass on costs to sales prices -- are prone to negative effects. On this point, the baseline scenario assumes that the increase in profits of large manufacturing firms will gradually have a positive impact on the economy as a whole through investment, including that for research and development sites in Japan, an increase in employee income, and changes in firms' purchasing behavior toward contractors. The following developments that have recently been observed among large manufacturing firms can be judged as those that underscore the Bank's aforementioned view; namely, (1) announcements on the rise in base pay that is larger than last year, (2) fewer requests to contractors to lower their product prices, (3) an increase in domestic business fixed investment, and (4) expansion of the return of profits to shareholders.

Business Fixed Investment

Business fixed investment is projected to follow a moderate uptrend, with corporate profits continuing their clear improving trend, supported in part by the past decline in crude oil prices and the depreciation of the yen. Although the economic growth rate for fiscal 2014 is expected to be negative, firms' medium-term growth expectations have maintained their improving trend (Chart 35 [1]). Favorable conditions in terms of capital costs -- such as the buoyant stock prices, low interest rates, and accommodative lending attitudes -- are also expected to continue to stimulate business fixed investment. During the latter half of the projection period, however, the pace of the cyclical increase in business fixed investment is projected to gradually slow down as capital stock accumulates.

It is possible to envisage growth rates of business fixed investment from the viewpoint of the capital stock cycle, based on the assumption that the investment will be undertaken in order to realize the level of capital stock necessary for production activity under the specific rate of expected growth (Chart 35 [2]). There appears to still be ample room for business fixed investment to increase for the time being even if firms' expected growth rates are

about the same level as the growth potential, which is estimated to be around 0.5 percent or lower. Thereafter, it is projected that business fixed investment will be supported by the continued extremely accommodative financial conditions under QQE, both in terms of interest rates and availability of funds, coupled with the moderate rise in growth expectations and the materialization of demand for investment related to hosting the Olympic Games.

The ratio of business fixed investment to cash flow of large firms on a domestic non-consolidated basis has clearly declined since the global financial crisis, and no noticeable change in its trend has been observed recently (Chart 36 [2]). On a consolidated basis, including overseas business activities, however, this ratio has clearly risen from the bottom seen after the global financial crisis. Firms' growth expectations have been recovering steadily with overseas demand taken into account, and they have been taking risks including investment related to business potential with a main focus on expanding their activities overseas. Nevertheless, while the underlying trend of expanding overseas investment will be maintained, firms are likely to start increasing their share of domestic investment to some extent, as domestic investment profitability recovers, due in part to the past depreciation of the yen. Though domestic investment had been mainly seen in the maintenance and replacement of the outdated capital stock, investment intended for domestic capacity expansion has recently started in some strategic areas such as development of new products, in view of the depreciation of the yen, which has taken root for over two years.¹⁹

The Employment and Income Situation

With regard to the labor market conditions, the improving trend had been somewhat slow, reflecting the sluggishness in economic activity in the first half of fiscal 2014, but has become evident again recently (Chart 9). The pool of labor necessary for economic activity has been supplied by a decline in the number of unemployed as well as an increase in labor participation by women and the elderly, and the amount of labor input (i.e.,

¹⁹ Controlling for the growth differential between Japan and overseas, it is estimated that foreign exchange rates have a considerable impact on the decision regarding the ratio of investment at home and abroad with a time lag of about two years (Chart 36 [3]).

[number of employees] times [number of hours worked]) has been rising moderately, due mainly to the increase in the number of employees (Charts 37 and 38 [1]). Looking at the unemployment rates across the duration of unemployment, the decline has recently been noticeable in the short-term unemployment rate (less than one year), which most recently has improved to the level seen in the period of the asset price bubble (Chart 37 [1]). The declining trend has also been noticeable in the long-term unemployment rate (one year and over), which has recently declined to around the lowest level marked before the global financial crisis, albeit with the pace of improvement having been more moderate than the short-term unemployment rate. Assessment on the degree of the tightness of labor market conditions does not change even when, in addition to the standard unemployment rate (U3), looking at the broadly-defined unemployment rate (U6) -- which counts as unemployed those who currently are not looking for work but are potentially willing to work and those who currently are employed part-time but want and are available to work longer than they do at present (Chart 37 [2]). Considering that firms have shown increasing willingness toward their hiring over the medium term in light of the prospect that Japan's economy is likely to continue growing at a pace above its potential through fiscal 2016, the number of employees is likely to continue increasing, and steady improvement in labor market conditions is expected to continue (Chart 38 [2]).

Looking at wages, as labor market conditions have tightened, hourly nominal wages of employees as a whole have improved moderately, albeit with some fluctuations (Chart 38 [3]). Going forward, it is likely that the annual increase in base pay will accelerate and that upward pressure on wages, particularly scheduled cash earnings, will increase clearly. Under this outlook for the employment and income situation, the increase in employee income is expected to accelerate moderately, and thereafter the rate of increase is likely to gradually stabilize in positive territory in the latter half of the projection period (Chart 10 [3]). The labor share is not assumed to show a clear downtrend -- as had been seen in past economic recovery phases -- and is likely to be more or less flat (Chart 38 [4]).

The rise in base pay is one of the important determinants of future developments in wages. Looking at wage negotiations this spring, the interim result recently reported by the Japanese Trade Union Confederation (*Rengo*) suggests that there has been about a 0.7

percent increase in base pay, which is a larger increase than the 0.4 percent of last spring, though uncertainty remains with regard to the final result (Chart 39 [1]). As for spring 2016 onward, if the stance of taking account of price increases in labor-management wage negotiations takes hold, the annual increase in base pay is likely to accelerate as improvement in the output gap in line with the economic recovery and a rise in medium- to long-term inflation expectations will gradually become evident.²⁰

Households' Spending Behavior

Private consumption has shown sluggishness in some areas even in the period after autumn 2014, where the sample bias of the demand-side statistics and the effects of irregular weather seemed to have dissipated and the decline following the front-loaded increase prior to the consumption tax hike has generally been waning. Such sluggishness could be attributable not only to the decline in real income, but also to the fact that consumer sentiment continued to be cautious until around the beginning of 2015 against the background of a concern about the negative growth rate for fiscal 2014 and of a slight stiffening in resistance to price increases partly owing to the depreciation of the yen since last autumn (Chart 40).

Nevertheless, consumer sentiment has started to pick up recently on the back of the decline in gasoline prices and expectations for wage increases. From this spring onward, improvement in such sentiment is likely to be evident because an increase in the amount of pensions and a decline in electricity prices are expected to occur. The increase in employee income reflecting the tightening of labor market conditions and the rise in base pay that is larger than last year, as well as wealth effects stemming from the rise in stock

²⁰ Looking at the relationship between increases in base pay demanded by labor unions and the CPI inflation, the demanded increases in base pay have a relatively higher correlation with the year-on-year rate of change in the CPI for all items less food and energy (excluding the direct effects of the consumption tax hikes) compared with other indicators (Chart 39 [2] and [3]). This suggests that, if the underlying trend in inflation is rising steadily, reflecting economic improvement, increases in base pay demanded by labor unions accordingly could become larger even if the CPI falls temporarily due in part to the decline in energy prices.

prices, are also expected to have positive effects on the household sector (Chart 41).²¹ Reflecting these favorable conditions, private consumption is likely to be resilient from fiscal 2015 through fiscal 2016. In addition, the front-loaded increase in consumption prior to the scheduled second round of consumption tax hikes is expected to occur in the second half of fiscal 2016. On the other hand, private consumption for fiscal 2017 is likely to turn to a decline, although this would be smaller than that in fiscal 2014, because of negative effects of the tax hike on real income and the decline in consumption following the front-loaded increase. However, there is high uncertainty regarding the degree of this decline in private consumption.

Housing investment is expected to gradually regain its resilience, underpinned in part by a decline in housing loan rates, with continued steady improvement in the employment and income situation (Charts 4 [2] and 12 [6]). As for the effects of the scheduled second round of consumption tax hikes, the degree of the front-loaded increase and subsequent decline in housing investment is likely to be somewhat smaller than that of the first round, given that (1) the front-loaded increase for the second round may in part have materialized to some extent already before the first round and (2) the gift tax exemption related to funds for housing acquisition has been extended and expanded. However, there is high uncertainty regarding the effects on housing investment, as with the case of private consumption.

The Environment surrounding Prices

In the outlook for prices, the main factors that determine inflation rates are assessed as follows. First, the output gap has continued its moderate improving trend, albeit with fluctuations. Although this is slightly negative at present, it is expected to improve notably, reflecting a rise in economic growth. Looking at the outlook in more detail, the output gap is expected to exceed 0 percent, which is the level of the past long-term average, and turn positive in the first half of fiscal 2015. Thereafter, reflecting higher utilization of production factors accompanied by faster economic growth, the output gap is projected to

²¹ Scheduled cash earnings, which are usually considered to constitute changes in permanent income, are likely to affect private consumption more clearly than non-scheduled cash earnings and special cash earnings, both of which are affected by temporary factors.

expand within positive territory. Through fiscal 2016, the pace of improvement is likely to gradually decelerate due to a slowdown in the growth rate and a rise in the potential growth rate. In fiscal 2017, it is likely to more or less level off, partly due to the effects of the scheduled second round of the consumption tax hikes. However, the level of the output gap is expected to remain in positive territory, and thus the output gap will continue to exert upward pressure on prices.

Second, judging from market-based indicators and various survey results, medium- to long-term inflation expectations appear to be rising on the whole from a somewhat longer-term perspective. Although crude oil prices have substantially declined, the results of surveys conducted of economists, bond market participants, households, and firms indicate that medium- to long-term inflation expectations have been maintained on the whole (Charts 42 and 43). Based on the break-even inflation rates, calculated as the yield spreads between the fixed-rate bonds and inflation-indexed bonds, market participants' inflation expectations had declined globally through the end of last year, but have started to rise again as crude oil prices have leveled off. Such increases in inflation expectations from a somewhat longer-term perspective seem to have brought behavioral changes such as in firms' price setting, wage negotiations between management and labor, and household consumption. Looking ahead, as the Bank pursues QQE and the observed inflation rate rises, medium- to long-term inflation expectations are likely to follow an increasing trend and gradually converge to around 2 percent -- the price stability target.

Third, with regard to import prices, the Bank assumes that Dubai crude oil prices will rise moderately from the recent 55 U.S. dollars per barrel to 70-75 dollars per barrel toward the end of the projection period. Under this assumption, since the effects of the decline in international commodity prices will more than offset those of the depreciation of the yen, import prices are expected to continue declining on a year-on-year basis for the time being, and then the pace of decline is projected to slow in the second half of fiscal 2015 (Chart 44 [1]). Given that energy items in the CPI are affected by changes in relevant import prices in a relatively short time, the contribution of those items to the CPI is expected to fall further into negative territory for the time being, followed by a narrowing in the negative contribution in the second half of fiscal 2015; in the first half of fiscal 2016, the

contribution is estimated to be around 0 percentage point. By contrast, the pass-through in other items in the CPI from relevant import prices is likely to continue having a positive effect on the CPI in fiscal 2015, since passing on changes in costs resulting from the past depreciation of the yen will proceed gradually against the backdrop of private consumption maintaining its underlying resilience (Chart 44 [2]).

Taking the above into account, the outlook for prices excluding the direct effects of the consumption tax hikes is assessed as follows. The PPI is expected to be more or less flat in fiscal 2015 due to the effects of the decline in crude oil prices, but from fiscal 2016 onward, it is projected to continue increasing moderately on the back of improvements in overseas economies and in the supply and demand conditions for products, and of a rise in international commodity prices. The year-on-year rate of increase in the CPI is projected to be about 0 percent for the time being, with negative contributions of energy items offsetting positive contributions of other items. However, the effects of an improvement in the output gap and of a rise in medium- to long-term inflation expectations are projected to continue, and passing on cost increases resulting from the past depreciation of the yen is likely to proceed again. Hence, as the negative contribution of energy items wanes from the second half of fiscal 2015, the rate of increase in the CPI as a whole is projected to accelerate and reach around 2 percent around the first half of fiscal 2016. Thereafter, the rate of increase is likely to be around 2 percent on average. Comparing the current projections up through fiscal 2016 with those in the January 2015 interim assessment, the projected rate of increase in the CPI is somewhat lower.

Considering the aforementioned outlook for prices in light of its relationship with the output gap -- depicted by the so-called Phillips curve -- the year-on-year rate of increase in the CPI for fiscal 2015 is likely to accelerate at a distinctly faster pace than suggested by that of improvement in the output gap, owing to rises in input costs being passed on to prices of final goods -- as seen in fiscal 2013 when the rapid depreciation of the yen occurred immediately before that year began -- and to a rise in medium- to long-term inflation expectations (Charts 15 [2] and 45). In fiscal 2016, although the effects of the depreciation of the yen will dissipate gradually, the rate of increase in the CPI is likely to expand at a moderate but slightly faster pace than suggested by the pace of improvement in

the output gap, since the medium- to long-term inflation expectations are likely to continue rising. In fiscal 2017, the year-on-year rate of increase in the CPI is likely to remain around 2 percent. As such, in the baseline scenario, the year-on-year rate of increase in the CPI is assumed to respond relatively clearly to the improvement in the output gap, and the Phillips curve is expected to gradually shift upward, reflecting a rise in medium- to long-term inflation expectations.

Behind such developments, in addition to the Bank's strong commitment to achieving the price stability target, the changes in households' consumption behavior and firms' price-setting behavior could operate interactively. First, looking at households, their protracted attitude toward searching for lower prices remains but has been less pronounced on the whole. The tendency to select geographical convenience and high value-added products seems to be more pronounced gradually among the elderly and female workers in particular, as evidenced by an increase in purchase-unit-base prices (Chart 46 [1]). Second, the power of controlling prices in the retail sector and various service sectors -- represented by a mark-up rate -- might be somewhat strengthened against the background of, for example, realignment in the consumption-related sector over the longer term.²² Third, against this background, firms' price-setting behavior in the retail and service sectors has been shifting from a low-price strategy utilizing inexpensive imported goods as seen in the past toward a strategy of raising sales prices while increasing value-added. In relation to these points, moves among firms to pass changes in input costs -- including developments in foreign exchange rates -- on to sales prices of final goods have become more pronounced compared with such moves in previous phases (Chart 44 [2]).

Looking at prices and nominal wages, there is a stable relationship between the CPI and hourly wages, in that they move almost in parallel in the long run (Chart 47). In the aforementioned outlook, it is assumed that a virtuous cycle between wage increases and price increases will gradually come to operate more steadily, partly because developments on the price front will be taken into account in wage negotiations. Specifically, the rate of

²² For example, developments in the DI in the *Tankan* for changes in output prices and input prices for the consumption-related sector indicate that, while the DI for changes in input prices has recently been at the level below the latest peak registered in around 2007-2008, that for changes in output prices has been close to or slightly above the latest peak level (Chart 46 [2]).

increase in the CPI is projected to accelerate gradually as hourly wages are expected to rise moderately, reflecting the tightening of labor market conditions and the rise in inflation expectations. The key to realizing this outlook is envisaged to be a movement toward an increase in wages driven by a rise in base pay in addition to the sustainability of economic recovery and higher economic growth potential. In other words, a virtuous cycle between wage increases and price increases will be likely in the following situation: a resistance to price increases among consumers will be less pronounced as they experience a sustained increase in wages, such as a higher rise in base pay, and firms' behavior will reflect the assumption that they can pass an increase in labor costs on to sales prices of their goods.

(Box 1) Effects of the Decline in Crude Oil Prices on Economic Activity and Prices

A decline in crude oil prices exerts downward pressure on prices -- mainly on prices of energy items in the CPI -- in the short term, but such direct effects of the decline will gradually dissipate. On the other hand, from a somewhat longer-term perspective, the decline in crude oil prices induces a positive effect of improving the terms of trade (an increase in real purchasing power) for Japan, which is an oil-importing country, and will push up prices of a wide range of goods and services.

In order to verify this point empirically, responses of economic activity and prices to a shock from the decline in crude oil prices were examined by using data for 1983 to 2014 and estimating a simple time-series model -- a structural vector autoregressive model (SVAR) -- which consists of (1) world industrial production, (2) real crude oil prices, (3) the nominal effective exchange rate of the yen, (4) the output gap, (5) the CPI, and (6) the CPI (all items less food and energy) (Chart 48).²³ The result of this empirical analysis suggests that a shock of a 50 percent decline in crude oil prices will yield a clear improvement in the output gap in about six months after the occurrence of this shock and thereafter the output gap will continue to be positive. On the other hand, immediately after the occurrence of this shock, the year-on-year rate of change in the CPI will temporarily drop significantly into negative territory due to the effects of the decline in energy prices but will gradually turn positive in response to an improvement in the output gap. Meanwhile, the year-on-year rate of increase in the CPI (all items less food and energy) will barely be affected by the direct impact of the decline in crude oil prices immediately after the shock, but thereafter it will gradually accelerate in reflection of the improvement in the output gap.²⁴

²³ In this analysis, a response to idiosyncratic shocks that may occur to crude oil prices was estimated. Such shocks reflect supply-side factors and geopolitical risk factors that cannot be explained by other explanatory variables such as world industrial production, which is closely related to global demand.

²⁴ Looking at the responses to the shock of the decline in world industrial production -- a shock that will lead to a decline in the global demand for crude oil -- in the same time-series model, crude oil will decline and the output gap will fall into negative territory, mainly reflecting a decrease in exports. Consequently, the year-on-year rate of change in the CPI would continue on a downtrend.

Next, past episodes associated with the decline in crude oil prices were examined. Reviewing the experience of "a reverse oil shock" in 1986 when the West Texas Intermediate (WTI) crude oil prices declined sharply from about 30 U.S. dollars per barrel to about 10 dollars per barrel, albeit with some differences in economic conditions between now and then -- for example, the appreciation of the yen at that time -- trading gains increased significantly by about 2.5 percent of real GDP due to effects of the falling crude oil prices (Chart 49). As a result, corporate profits improved clearly even for manufacturers that had been suffering from the recession caused by the appreciation of the yen, and the output gap expanded within positive territory, albeit with some time lag, against the background of the firm increase in domestic demand. In this situation, the year-on-year rate of change in the CPI (all items) temporarily registered a negative figure but turned positive in about a year after the decline in crude oil prices, supported by an improvement in the output gap. Thereafter, it rose further within positive territory. Meanwhile, the year-on-year rate of increase in the CPI (all items less food and energy) had remained in the range of around 1.5 to about 2 percent, underpinned by the improvement in the output gap, despite the downward pressure on prices from the appreciation of the yen. This episode seems to be consistent with the mechanism indicated by the results in the aforementioned time-series model.

(Box 2) Assessment of the Effects of QQE on Economic Activity and Prices (1)

Two years have passed since the introduction of QQE in April 2013. This section provides the Bank's estimate of the effects of QQE so far on economic activity and prices.²⁵

(Transmission Mechanism of QQE)

The start of the transmission mechanism of QQE that the Bank envisages is as follows: (1) inflation expectations will be raised through a strong and clear commitment to achieving the price stability target of 2 percent; and concurrently, (2) downward pressure will be put on nominal interest rates across the entire yield curve through massive purchases of JGBs; thereby (3) decreasing real interest rates. With this start of the mechanism, (4) the decline in real interest rates will stimulate private demand, which will lead to an improvement in the output gap. Then, (5) with the output gap improving -- together with a rise in inflation expectations as described in (1) -- actual inflation rates will rise, and (6) if people experience actual price increases, their inflation expectations will increase further, and this process from (1) to (6) will be reinforced further. Under this mechanism, a virtuous cycle in which the inflation rate rises toward the price stability target together with an improvement in the real economy will be created (Chart 50).

In the following, the downward effects of QQE on real interest rates, illustrated as (1) through (3) above, will be assessed.

(Quantitative Assessment of the Downward Effects on Real Interest Rates)

While various approaches are available to estimate the downward effects of QQE on real interest rates, the following three approaches are adopted: the first (observational approach) calculates the degree of decline in real interest rates by adding the degree of decline in nominal long-term interest rates and the degree of increase in inflation expectations (relying on multiple indicators); the second (regression approach) estimates downward effects of the Bank's JGB purchases on real interest rates by performing a regression analysis in which

²⁵ In principle, the effects are gauged in terms of changes in economic indicators by comparing the figures for the January-March quarter of 2013 with those for the October-December quarter of 2014. Regarding some indicators that are updated only semiannually, figures for December 2012 are used for those for the January-March quarter of 2013.

explanatory variables consist of the ratio of the Bank's holdings of JGBs to the total amount outstanding of JGBs, yields on government bonds in the United States, expected rates of inflation, and forecasts for real GDP growth; and the third (equilibrium interest rates approach) estimates real interest rate gaps -- the differences between the equilibrium interest rates computed by a term structure model of interest rates and actual real interest rates -- for each maturity and regards the changes after the introduction of QQE as the downward effects on real interest rates. Results obtained from these approaches suggest that the estimated downward effects of QQE on real interest rates in terms of 10-year yields are in the range of 0.7 to 0.8 percentage point²⁶ in the first approach, 0.8 percentage point in the second, and 0.9 percentage point in the third; roughly speaking, slightly less than 1 percentage point (Charts 51 and 52).

²⁶ The degree of change in inflation expectations differs largely within the range of 0.0 to 4.8 percentage points, depending on indicators. However, if figures obtained from surveys conducted of economists and market participants are used, the degree of change in medium- to long-term inflation expectations is in the range of 0.4 to 0.5 percentage point.

(Box 3) Assessment of the Effects of QQE on Economic Activity and Prices (2)

In Box 3, the effects of the decline in real interest rates brought by QQE, as estimated in Box 2 -- which stems from a rise in inflation expectations and a decline in nominal interest rates -- on economic activity and prices (through the transmission mechanism of [4] and [5] explained in Box 2) are quantitatively assessed (Chart 53).

(Estimation of the Effects on Economic Activity and Prices)

The Bank's macroeconomic model, the Quarterly Japanese Economic Model (Q-JEM), was used to run a simulation based on the assumption that real interest rates have declined by 0.8 percentage point accompanied by an increase in medium- to long-term inflation expectations of 0.5 percentage point, as suggested by the results in Box 2. The simulation results (hereafter simulation 1) indicated that the output gap has been pushed up by 1.1 percentage points and that the year-on-year rate of increase in the CPI has increased by 0.6 percentage point. Next, given the fact that the extent to which stock prices rose and the yen depreciated in reality was greater than what could be explained by the macroeconomic model, which takes into account the decline in real interest rates, a quantitative simulation was run by adopting Q-JEM based on another assumption -- that both stock prices and the yen's exchange rates moved in line with the actual developments on the whole -- in addition to the assumptions for simulation 1. The result of this simulation (hereafter simulation 2) indicated that the output gap has improved by about 3.0 percentage points and that the year-on-year rate of increase in the CPI has increased by 1.0 percentage point.

The factors behind the fact that the actual degree of the depreciation of the yen and of a rise in stock prices both exceeded the effects of the decline in real interest rates estimated using Q-JEM can be viewed as follows: (a) of the effects of QQE, there could be additional policy effects that cannot be gauged by changes in real interest rates²⁷; (b) the effects of the government's series of economic stimulus measures are applicable; and (c) developments in global financial markets are also applicable. Therefore, the result of simulation 1 could be

²⁷ A simulation using a macroeconomic model based on past data cannot fully replicate changes in expectations of economic entities accompanying a policy regime change as well as resultant developments in stock prices and foreign exchange rates.

somewhat underestimating the effects of QQE while that of simulation 2 could be somewhat overestimating those effects.

Meanwhile, the actual degree of improvement in the output gap was 2.0 percentage points, an increase from minus 2.1 percent to minus 0.1 percent, and the year-on-year rate of change in the CPI increased by 1.0 percentage point, from minus 0.3 percent to 0.7 percent. These figures sit within the ranges of the results obtained from the two simulations. These improvements in economic activity and prices could be judged as being mostly in line with the mechanism anticipated by QQE.²⁸

Nevertheless, in order to achieve the price stability target of 2 percent in a stable manner, a further rise in inflation expectations and a continuation of the upward shift in the Phillips curve are necessary (Chart 45). On this point, the fact that the actual CPI inflation rate has been declining since last summer due to the sharp fall in crude oil prices is an issue in relation to (6) in the transmission mechanism explained in Box 2. Various indicators relating to inflation expectations have not declined, due in part to the Bank's expansion of QQE in October 2014 (Charts 42 and 43). Taking into account other information, such as firms' wage- and price-setting behavior, inflation expectations appear to be rising on the whole from a somewhat longer-term perspective. Of course, it is necessary to continue examining whether this uptrend in inflation expectations will continue, even in a situation where the actual CPI inflation rate has been declining.

²⁸ On top of QQE, various factors have affected Japan's economy in reality. For example, it can be noted that (1) factors that have boosted the economy include high government spending -- such as public investment -- as well as developments in stock prices and foreign exchange rates (other than those brought about by QQE), while (2) factors that have exerted downward pressure on the economy include the effects of the consumption tax hike on private consumption. Moreover, in terms of factors that have affected prices, the effects of developments in foreign exchange rates and in crude oil prices can be pointed out. It cannot be stated for certain without quantitatively assessing these factors and other relating factors, but it can be considered that the economy and prices turned out to be mostly in line with the estimation as a result of these factors exerting upward and downward effects, broadly offsetting by each other.

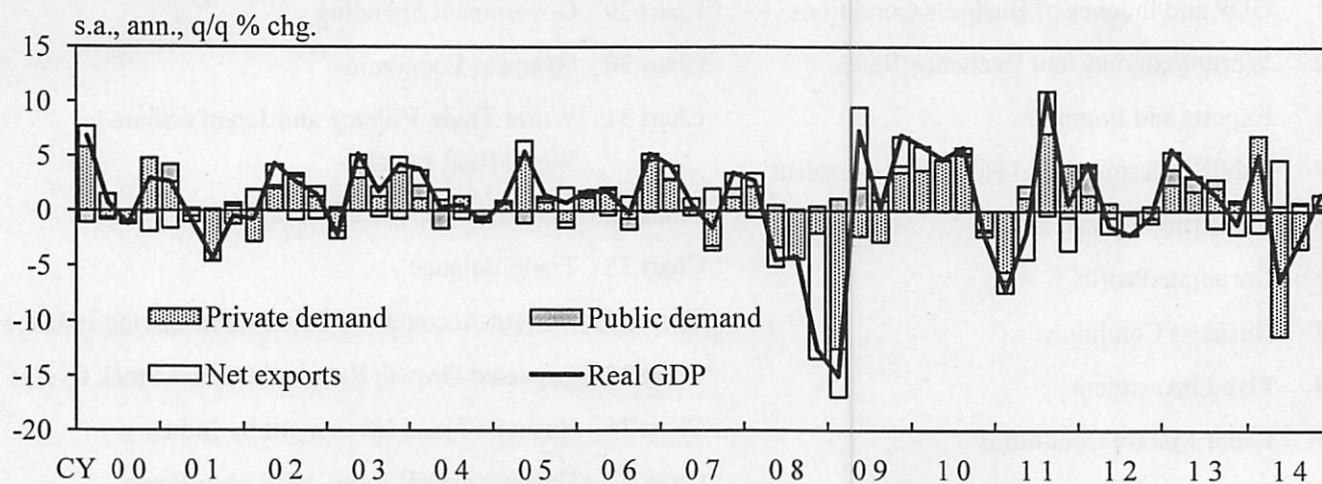
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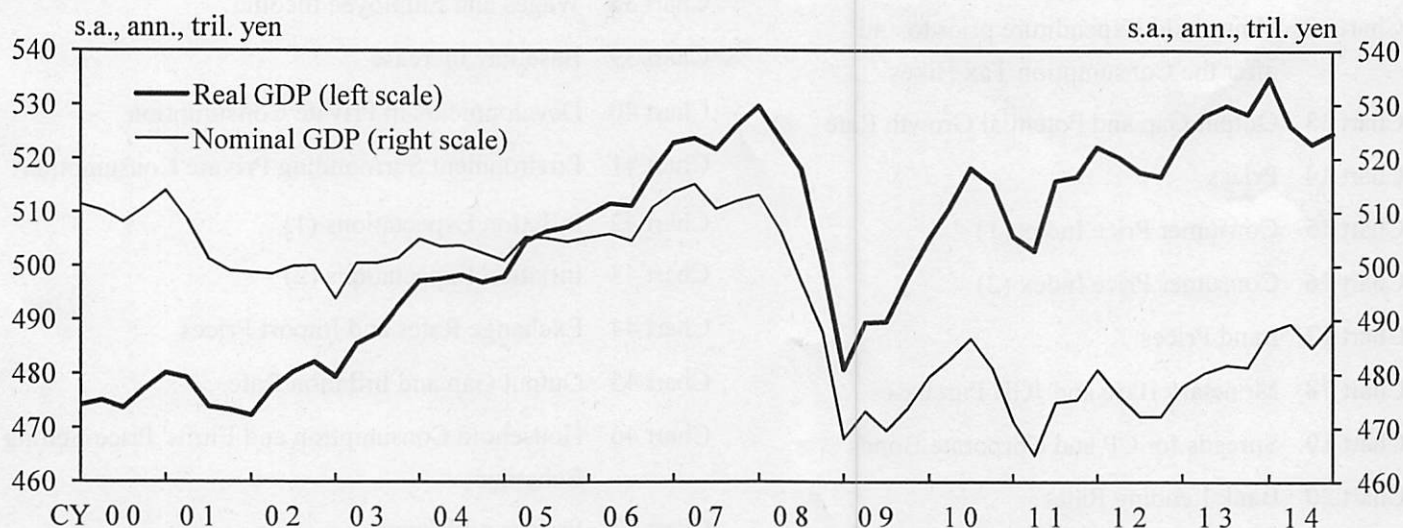
GDP and Indexes of Business Conditions

(1) GDP

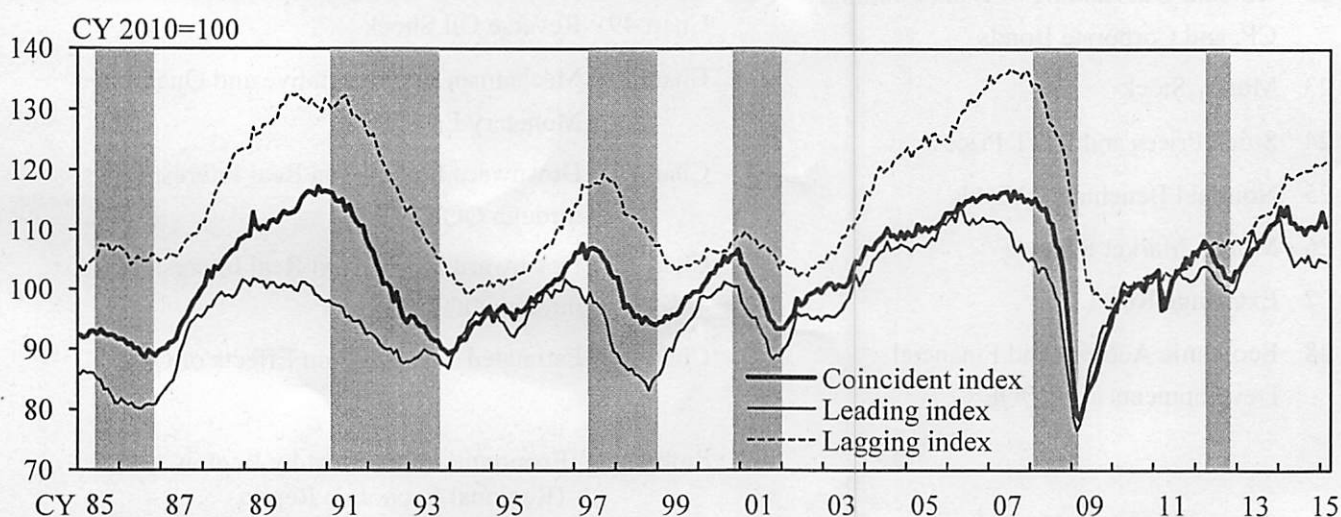
(a) Changes from the Previous Quarter



(b) Level



(2) Indexes of Business Conditions (Composite Indexes)

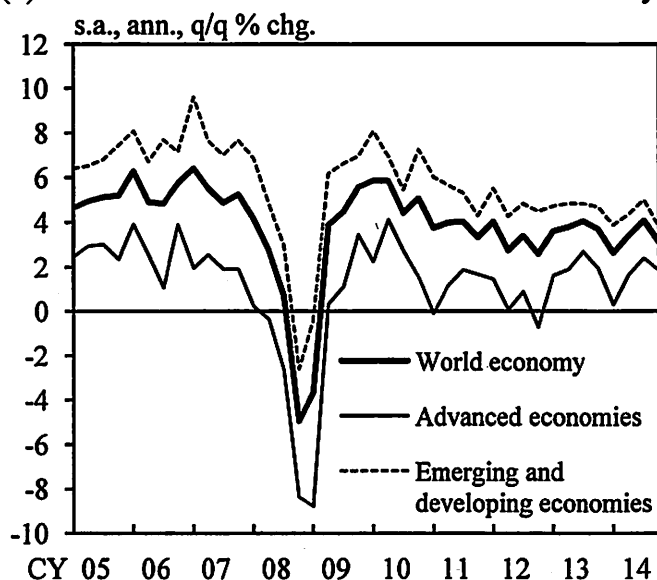


Note: Shaded areas indicate recession periods.

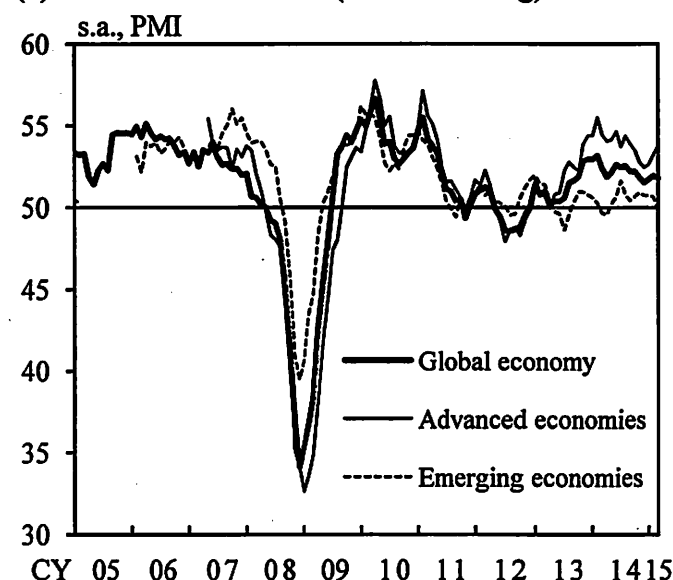
Source: Cabinet Office, "National Accounts," "Indexes of Business Conditions."

World Economy and Exchange Rates

(1) Real GDP Growth Rates of the World Economy¹

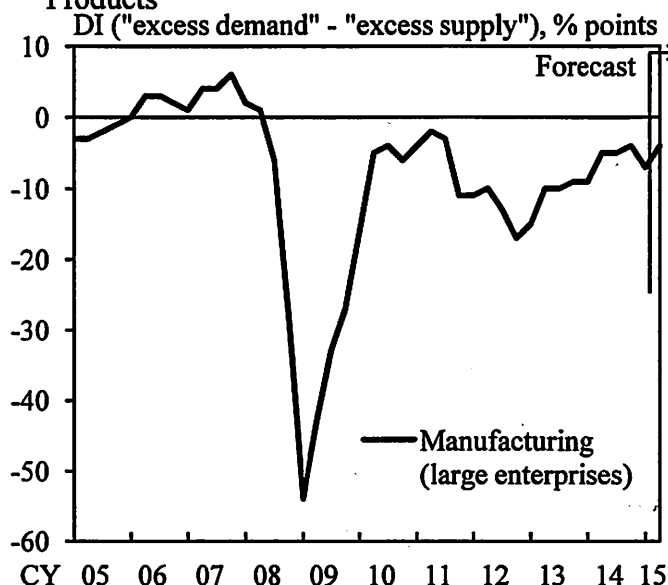


(2) Business Confidence (Manufacturing)²

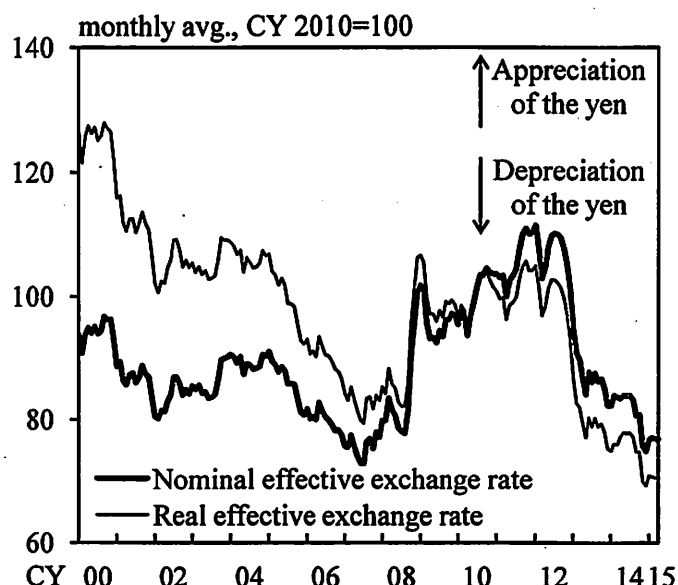


- Notes: 1. Figures are calculated using purchasing power parity (PPP)-adjusted GDP shares of world total GDP. Both PPP-adjusted GDP figures and world total GDP are from the IMF. World economy here includes 189 countries. Advanced economies are the euro area, Japan, the United Kingdom, and the United States. Emerging and developing economies consist of the rest of the world economy. Figures include estimated quarterly growth rates based on historical annual data on real GDP growth rates.
2. Figures for global economy show the Markit PMI. Figures for advanced economies and emerging economies are calculated using the Markit PMI and PPP-adjusted GDP shares of world total GDP. Both PPP-adjusted GDP figures and world total GDP are from the IMF. Advanced economies are the euro area, Japan, the United Kingdom, and the United States. Emerging economies are Australia, Brazil, China, the Czech Republic, Hungary, India, Indonesia, Mexico, Poland, Russia, Singapore, South Korea, Taiwan, Turkey, and Vietnam.
- A PMI reading of more than 50 indicates an expansion of the economy, while a reading below 50 indicates a contraction.

(3) Overseas Supply and Demand Conditions for Products¹



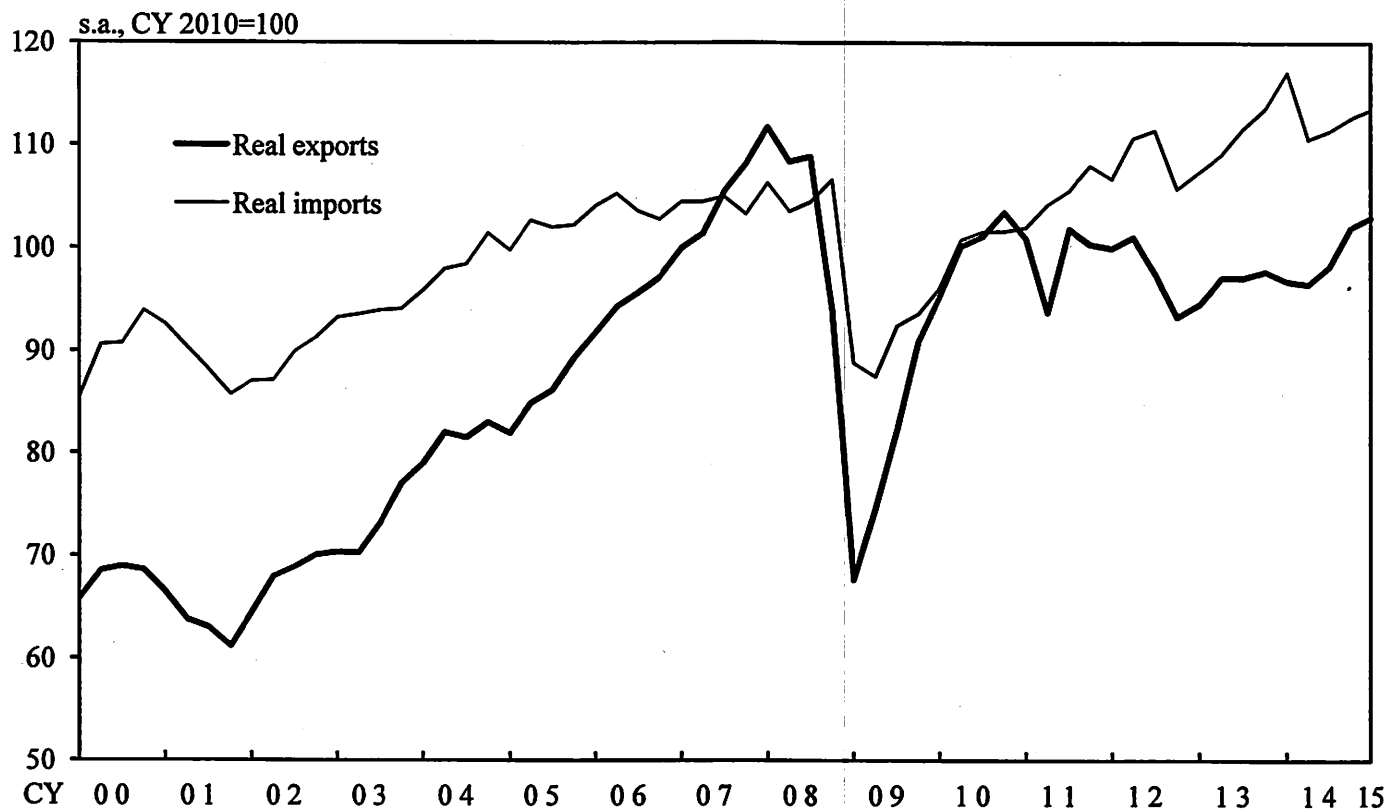
(4) Effective Exchange Rates of the Yen²



- Notes: 1. The figure for 2015/Q2 is the forecast in the March 2015 survey.
2. Figures are based on the broad indices of the BIS effective exchange rates. Figures for April 2015 are calculated using the Bank of Japan's nominal effective exchange rate of the yen.
- Sources: IMF, "World Economic Outlook"; Markit (© and database right Markit Economics Ltd 2015. All rights reserved.); Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan"; Bank for International Settlements (BIS), etc.

Exports and Imports

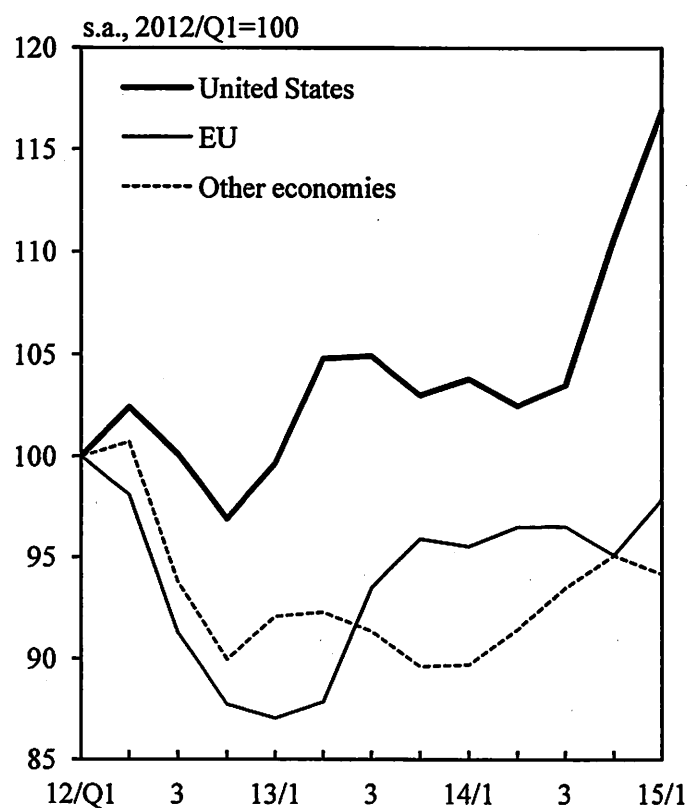
(1) Real Exports and Real Imports



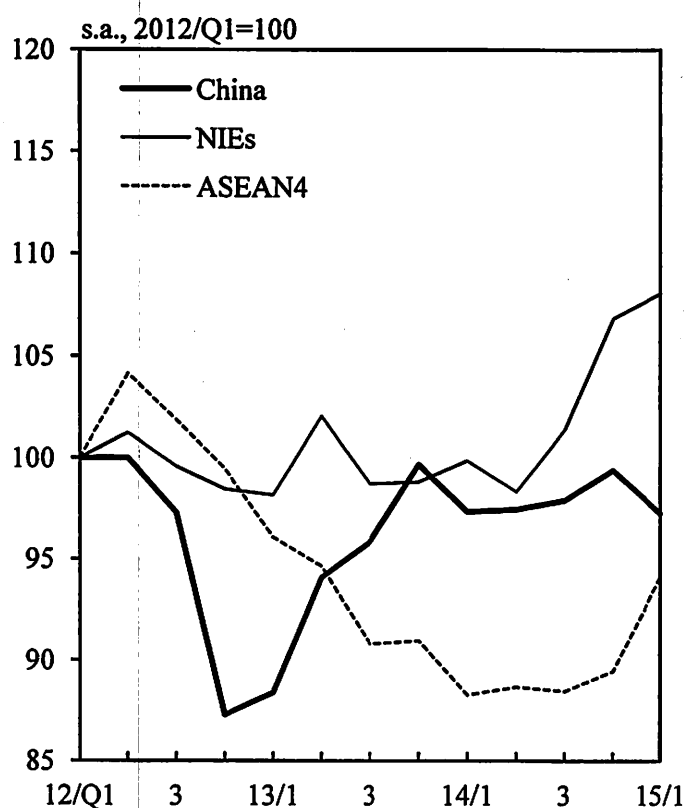
Note: Figures are seasonally adjusted by X-12-ARIMA. The same applies to the charts below.

(2) Real Exports by Major Country and Region

(a) United States, EU, and Other Economies



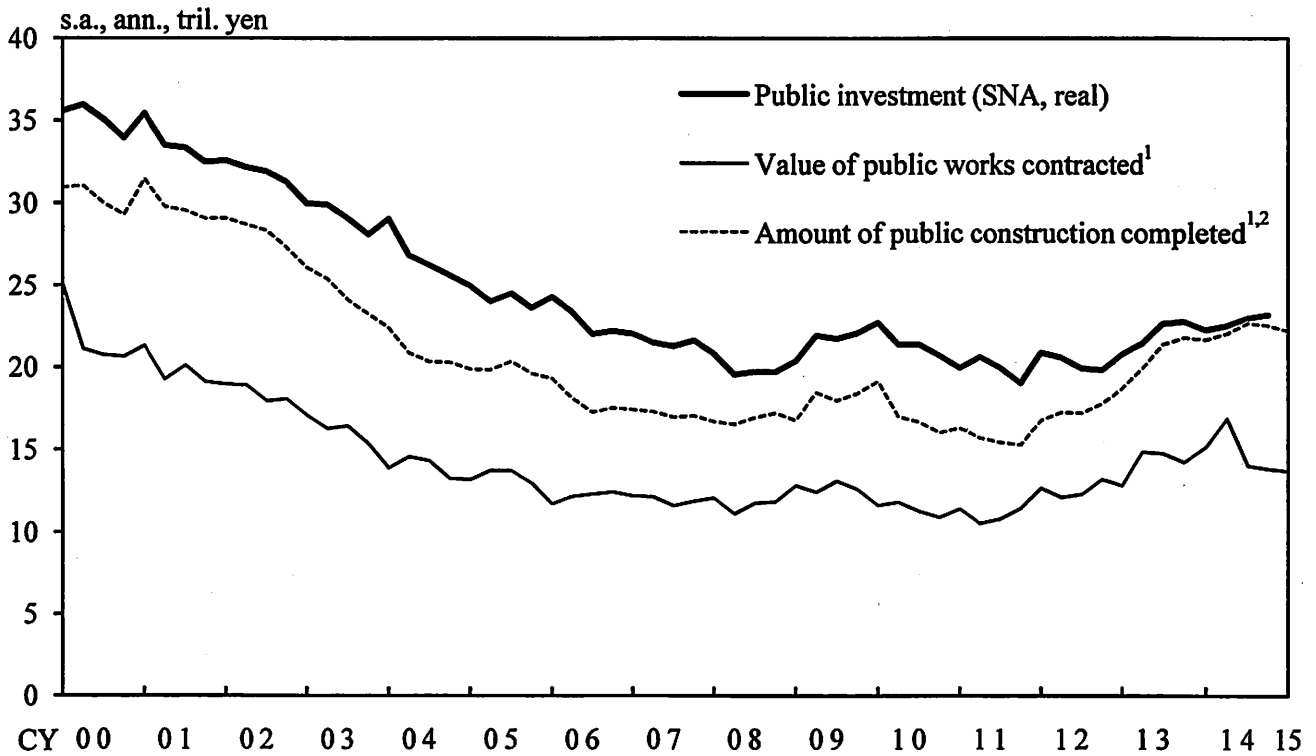
(b) China, NIEs, and ASEAN4



Sources: Ministry of Finance, "Trade Statistics"; Bank of Japan, "Corporate Goods Price Index."

Public Investment and Housing Investment

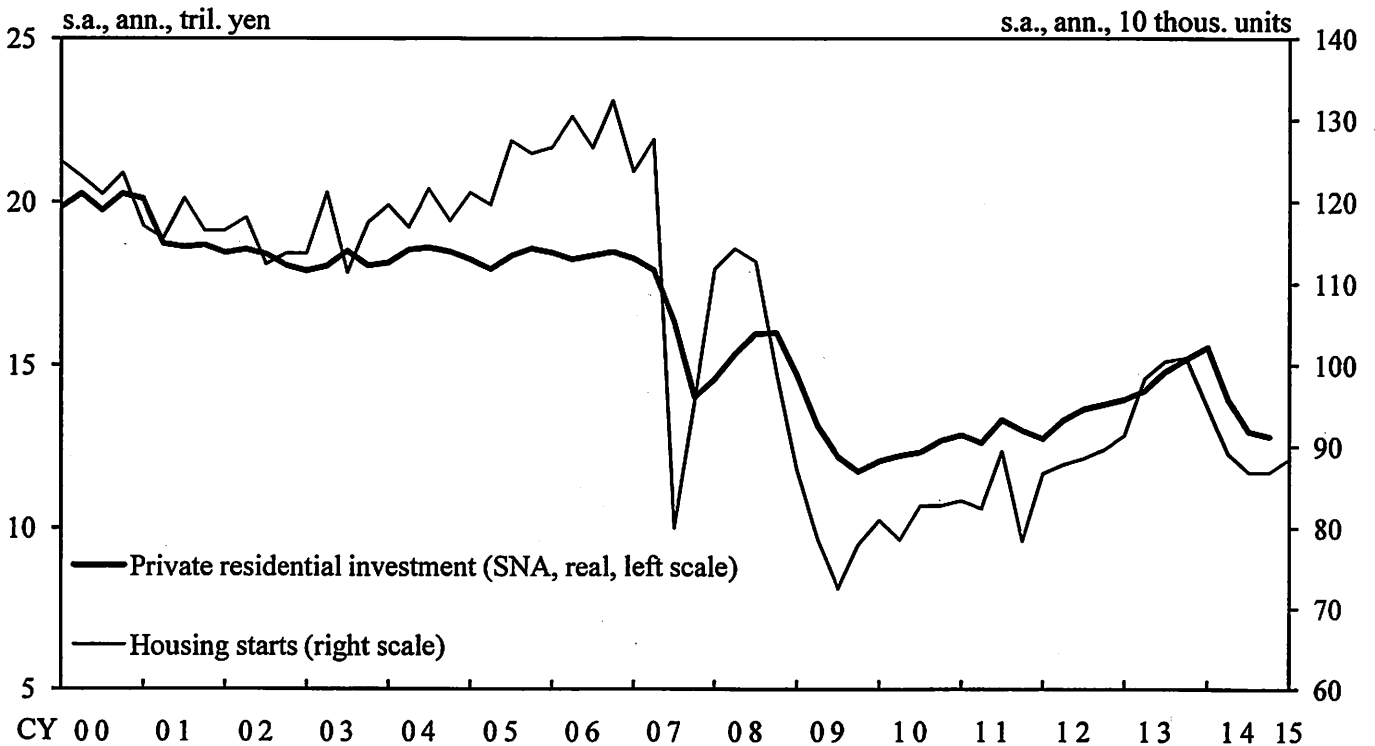
(1) Indicators of Public Investment



Notes: 1. Figures are seasonally adjusted by X-12-ARIMA.

2. The figure for 2015/Q1 is the January-February average.

(2) Housing Starts and Private Residential Investment

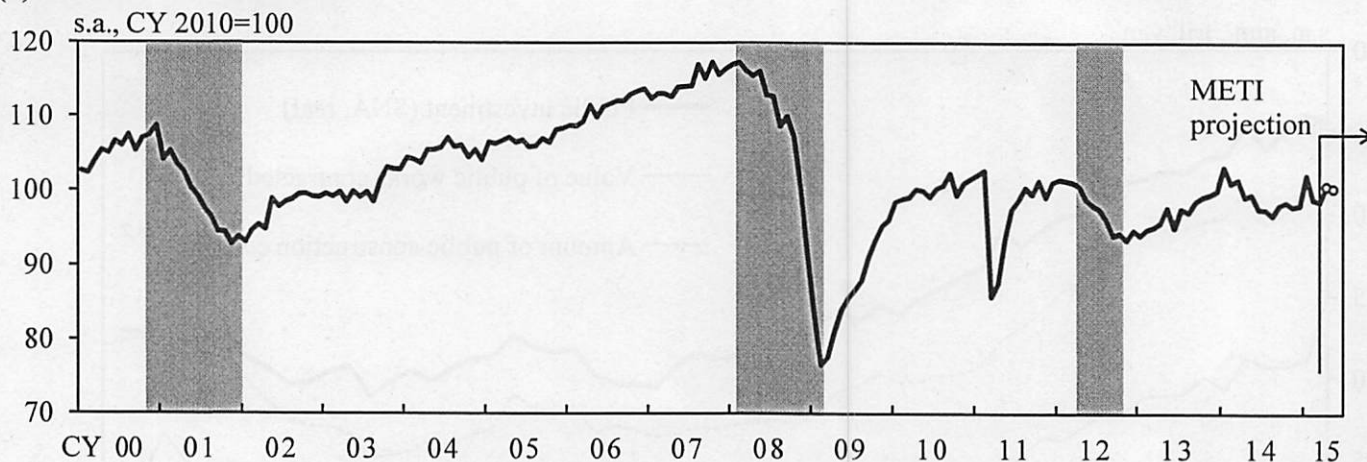


Note: The figure for housing starts for 2015/Q1 is the January-February average.

Sources: Cabinet Office, "National Accounts"; East Japan Construction Surety, etc., "Public Works Prepayment Surety Statistics"; Ministry of Land, Infrastructure, Transport and Tourism, "Integrated Statistics on Construction Works," "Statistics on Building Construction Starts."

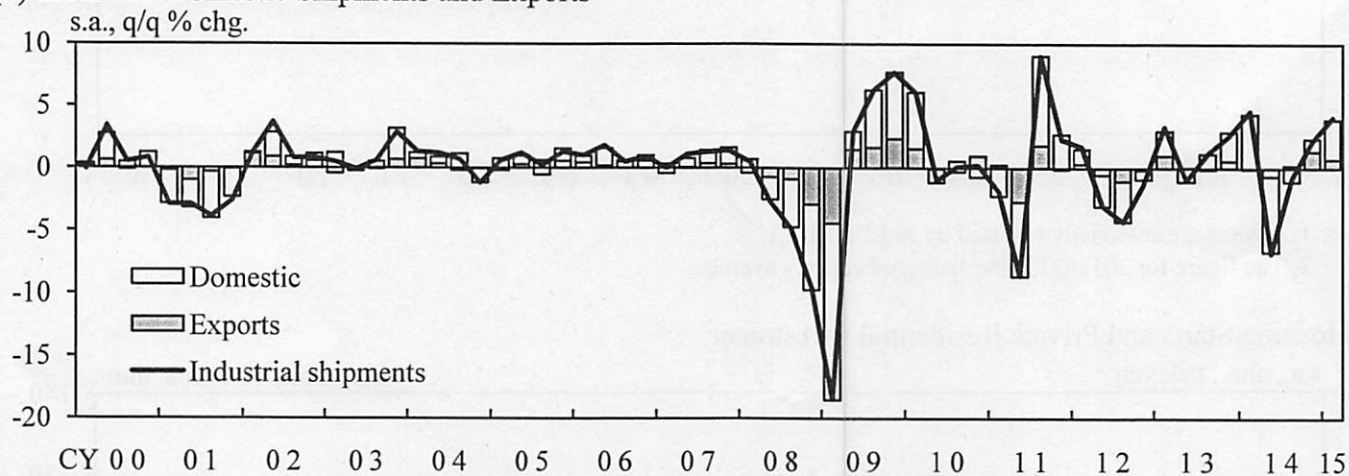
Industrial Production

(1) Industrial Production



Note: Shaded areas indicate recession periods.

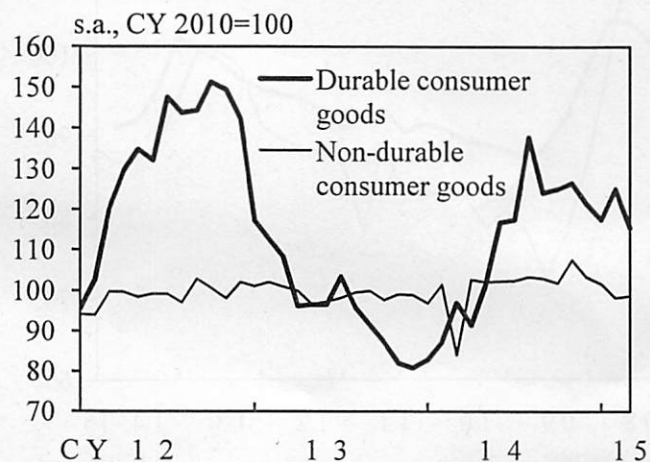
(2) Industrial Domestic Shipments and Exports



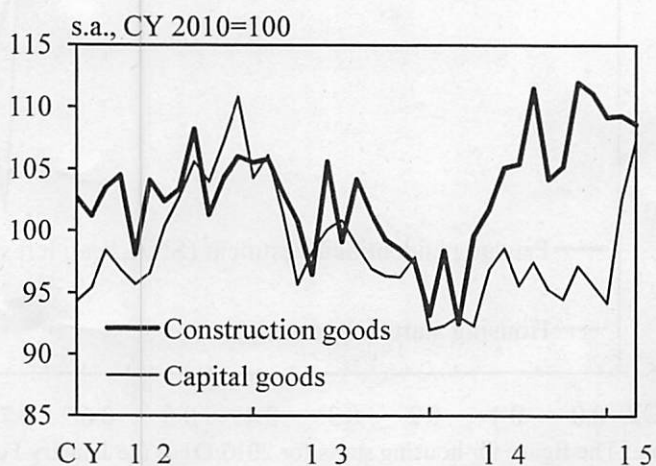
Note: Figures for 2015/Q1 are January-February averages.

(3) Inventory Ratio

(a) Consumer Goods

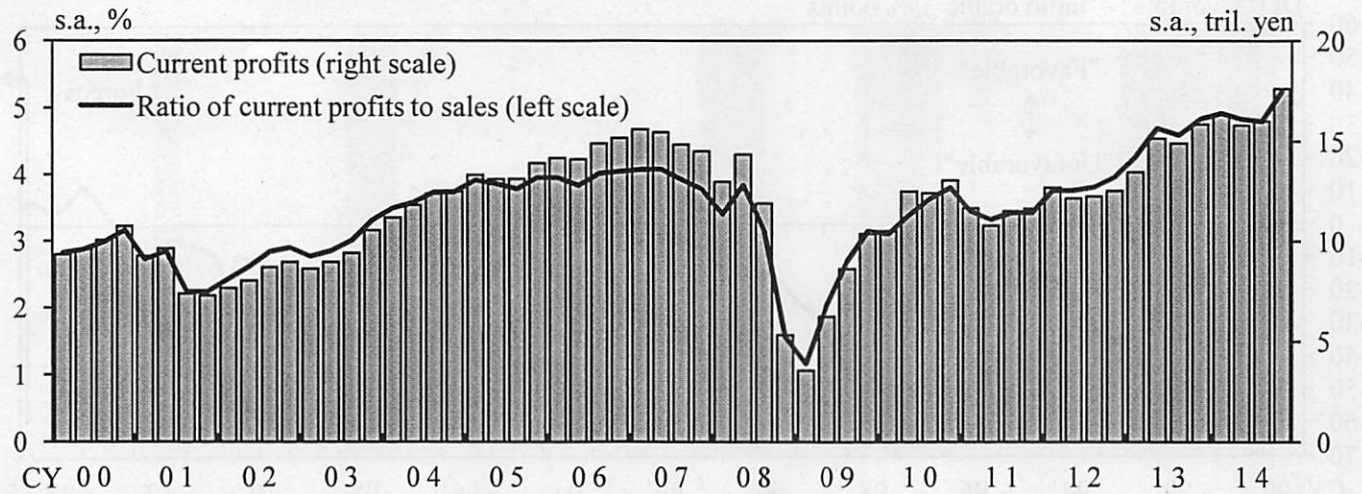
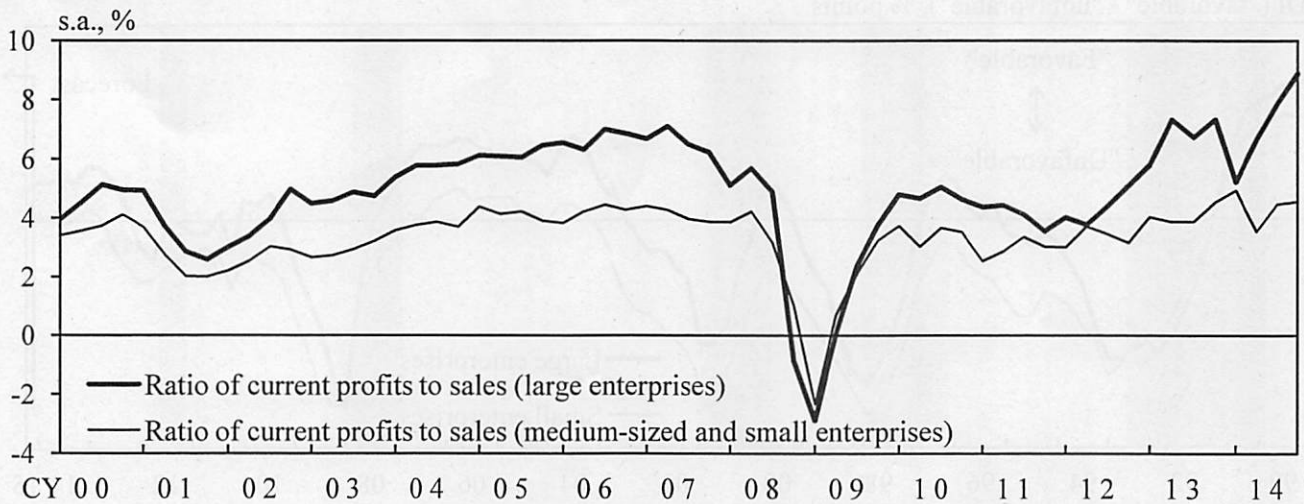
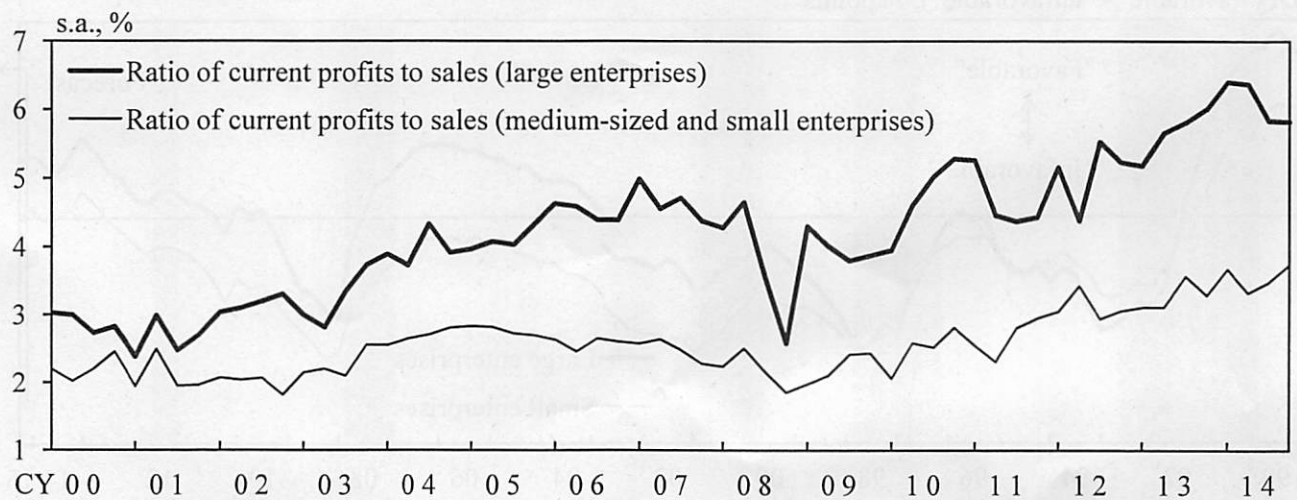


(b) Capital Goods and Construction Goods



Corporate Profits

(1) All Industries and Enterprises

(2) Manufacturing²(3) Nonmanufacturing²

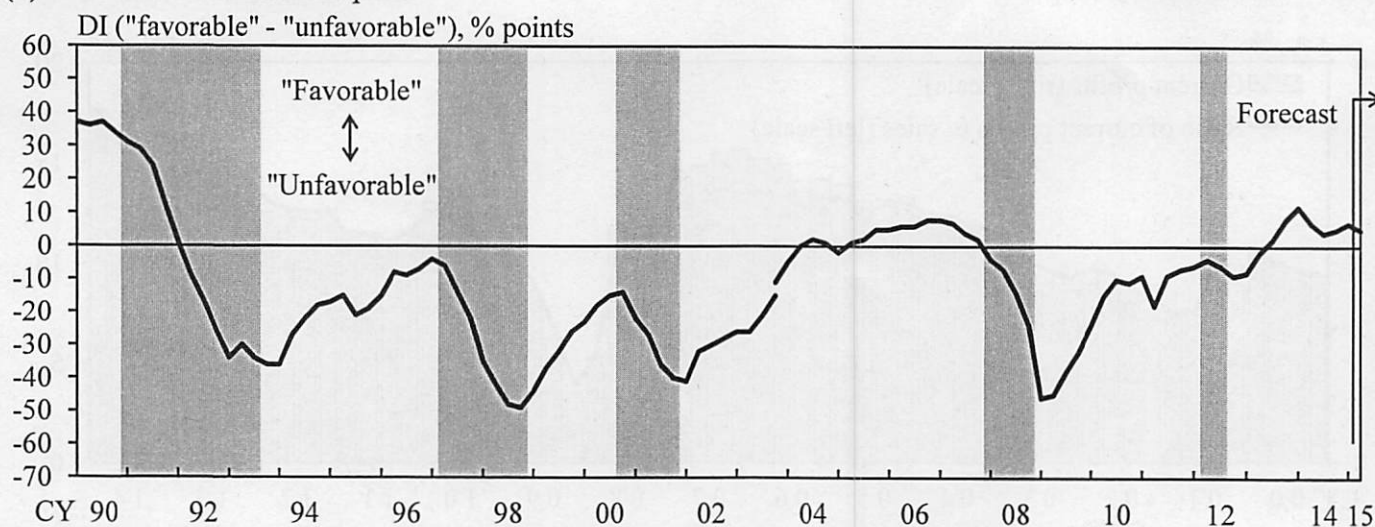
Notes: 1. Excluding "Finance and Insurance."

2. Figures are seasonally adjusted by X-12-ARIMA.

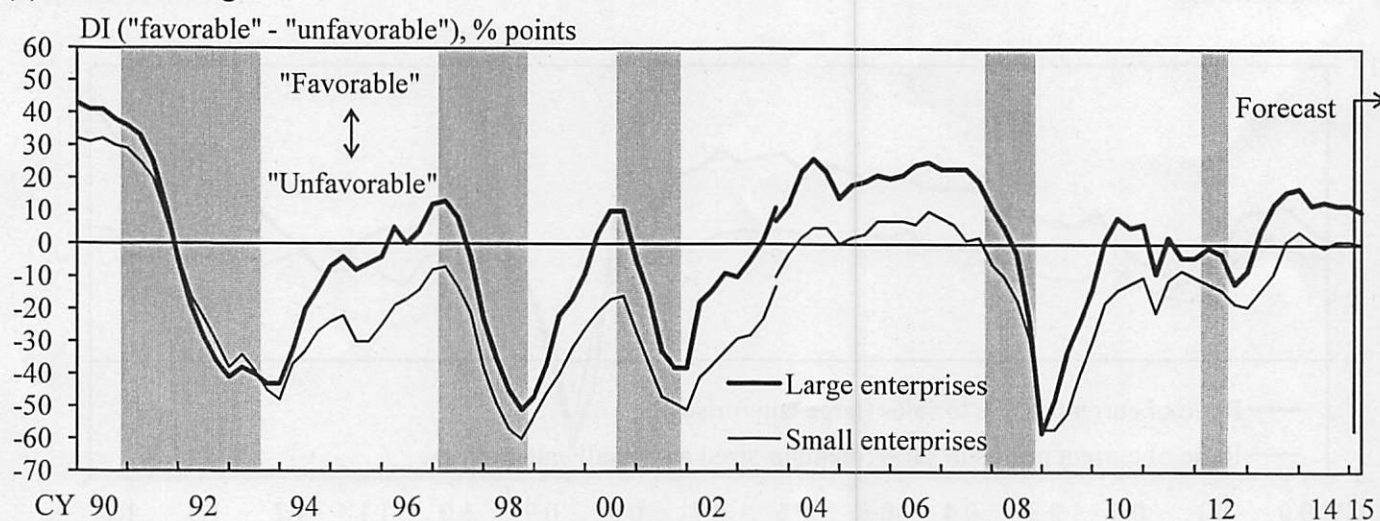
Source: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly."

Business Conditions

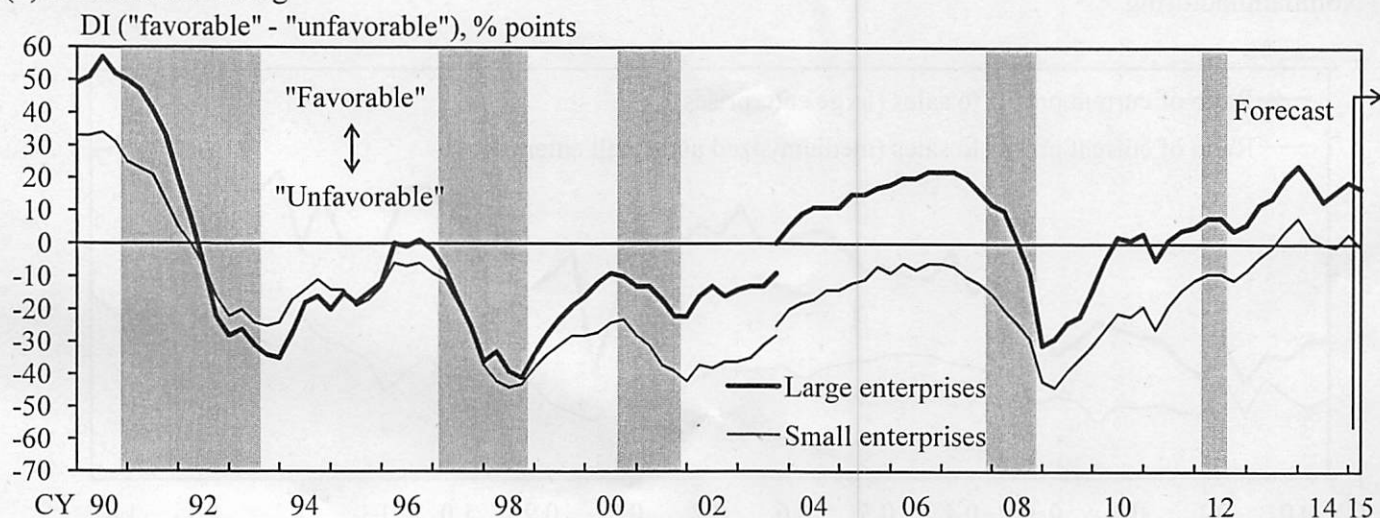
(1) All Industries and Enterprises



(2) Manufacturing



(3) Nonmanufacturing



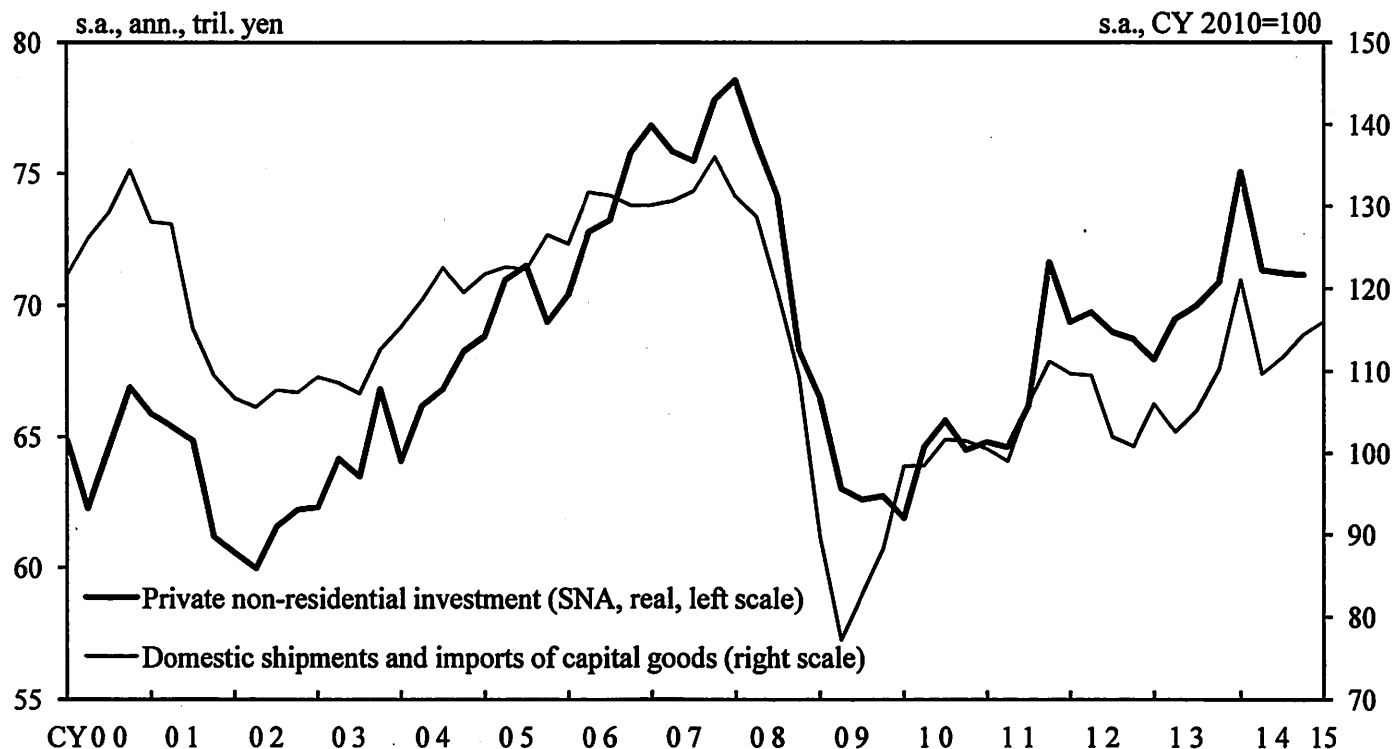
Notes: 1. The "Tankan" was revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis. Figures for 2015/Q2 are the forecasts in the March 2015 survey.

2. Shaded areas indicate recession periods.

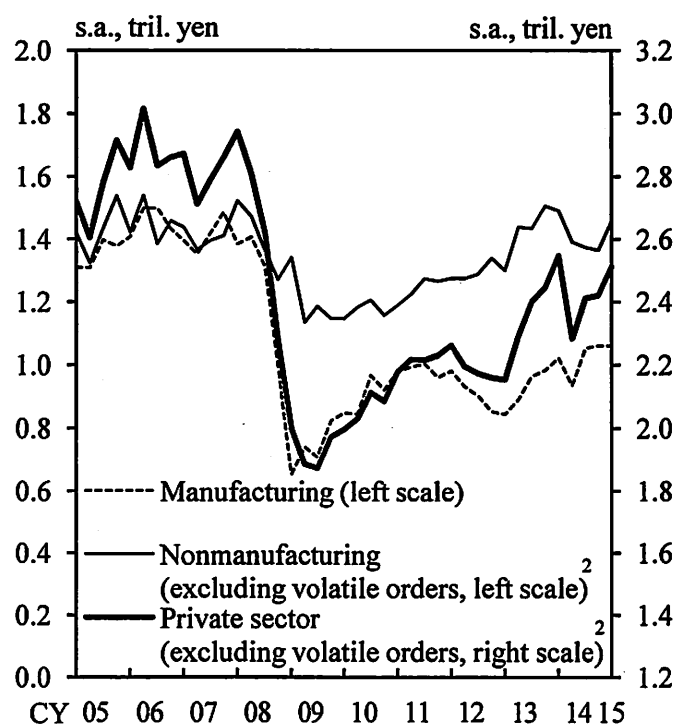
Source: Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan."

Fixed Investment

(1) Private Non-Residential Investment, and Domestic Shipments and Imports of Capital Goods

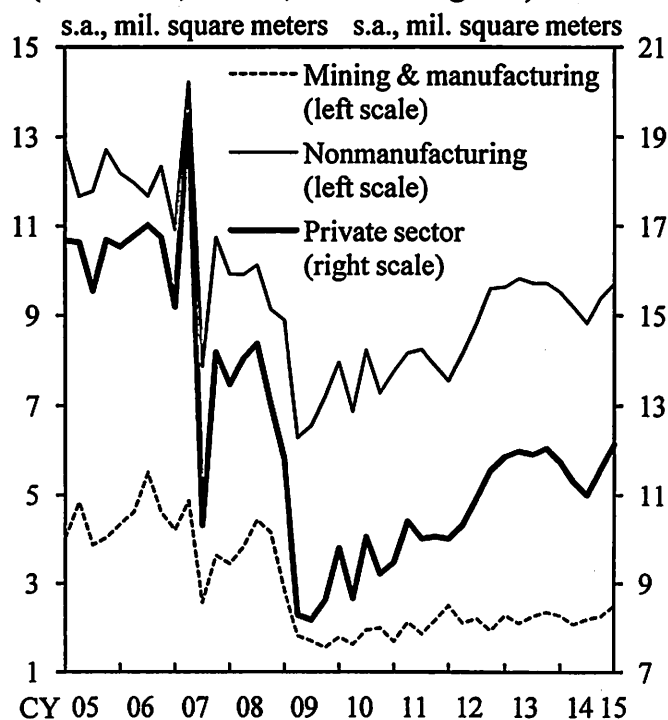


Note: The figure for 2015/Q1 is the January-February average.

(2) Machinery Orders¹

(3) Construction Starts

(Floor Area, Private, Nondwelling Use)^{1,3}



Notes: 1. Figures for 2015/Q1 are January-February averages in the quarterly amount.

2. Volatile orders: orders for ships and orders from electric power companies.

3. Figures are seasonally adjusted by X-12-ARIMA.

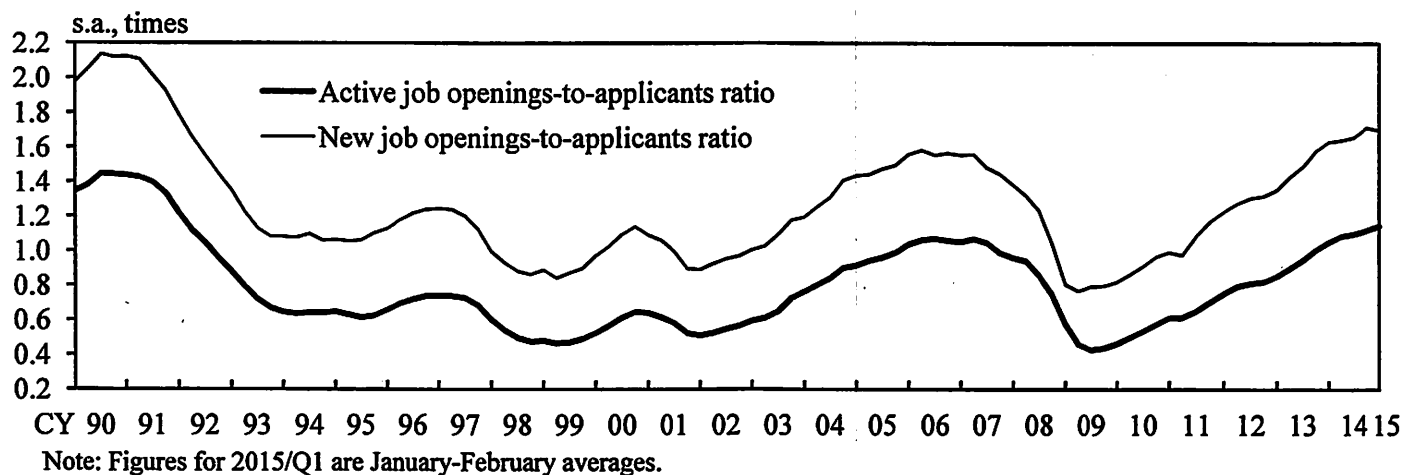
Sources: Cabinet Office, "National Accounts," "Orders Received for Machinery";

Ministry of Economy, Trade and Industry, "Indices of Industrial Domestic Shipments and Imports";

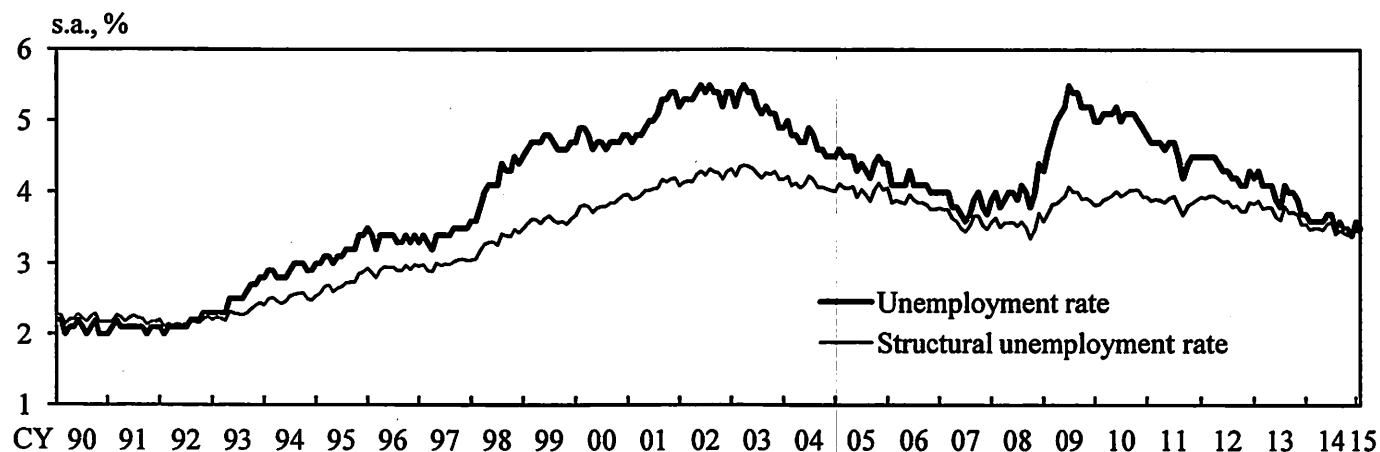
Ministry of Land, Infrastructure, Transport and Tourism, "Statistics on Building Construction Starts."

Labor Market Conditions

(1) Job Openings-to-Applicants Ratio

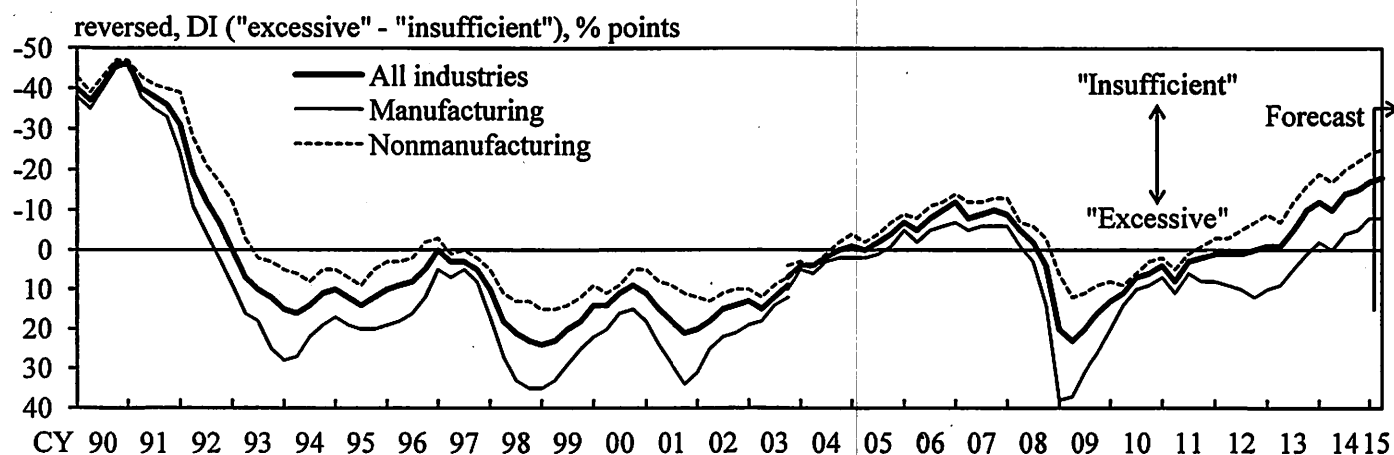


(2) Unemployment Rate



Note: The structural unemployment rate is defined as the level of the unemployment rate where the number of vacancies equals that of the unemployed, given the empirical relationship between job vacancies and unemployment (estimation by the Research and Statistics Department, Bank of Japan). It captures frictional unemployment and unemployment caused by the mismatch between supply and demand in the labor market.

(3) Employment Conditions DI

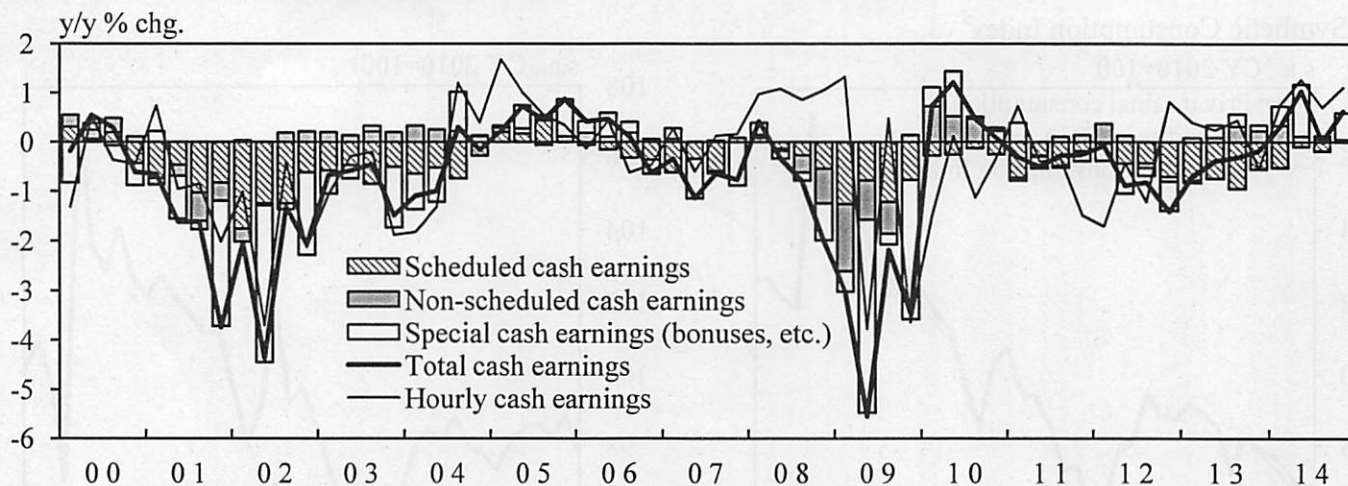


Note: Data from the "Tankan" are based on enterprises of all sizes. The "Tankan" was revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis. Figures for 2015/Q2 are the forecasts in the March 2015 survey.

Sources: Ministry of Health, Labour and Welfare, "Report on Employment Service"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan."

Employee Income

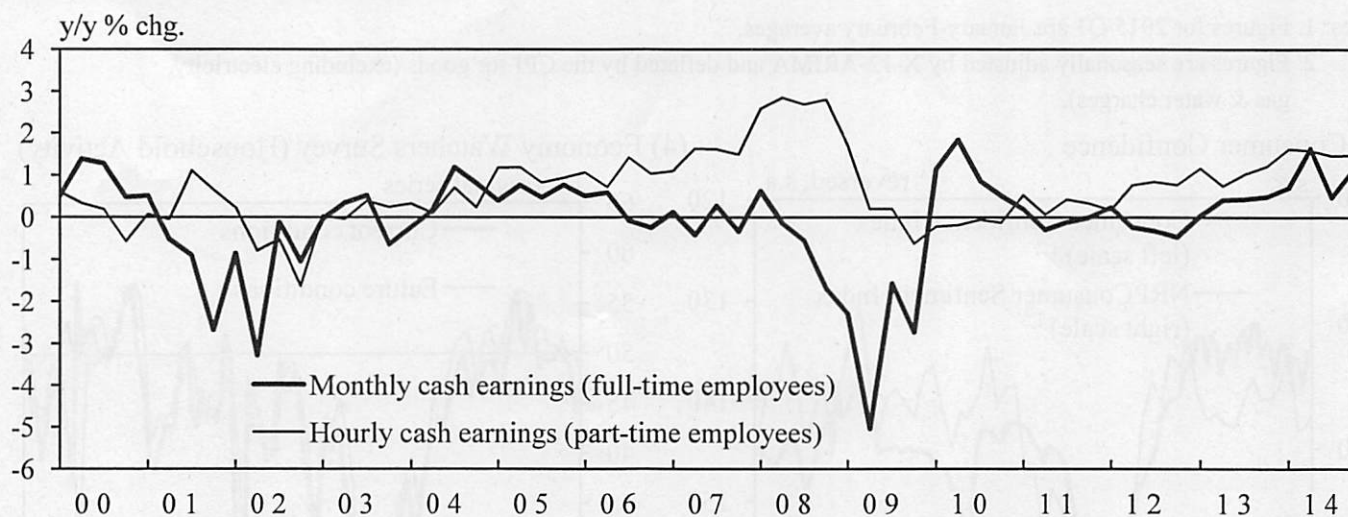
(1) Breakdown of Total Cash Earnings



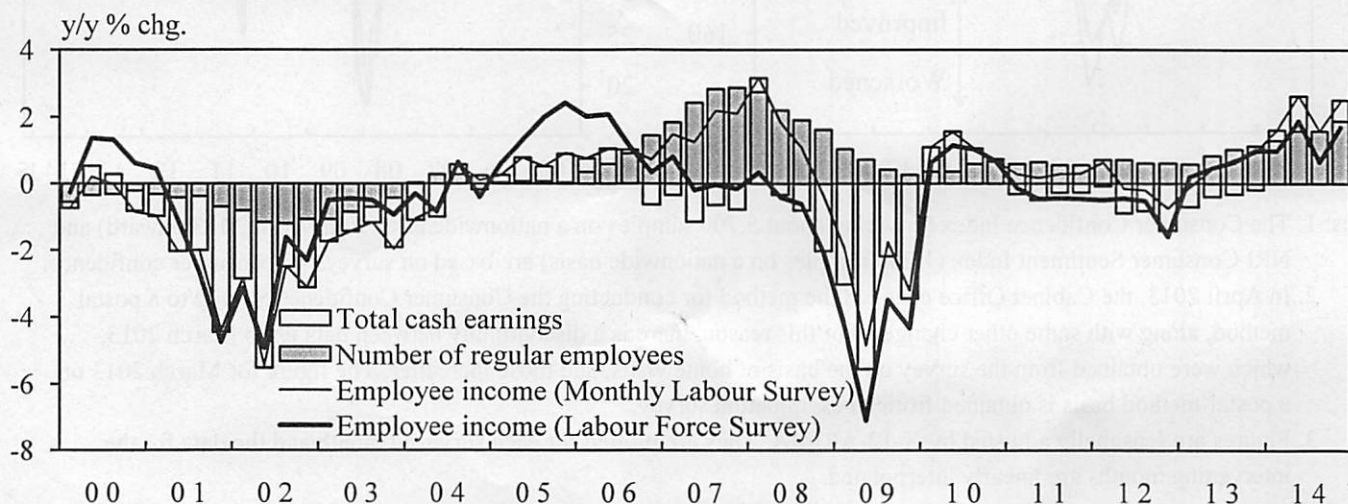
Note: Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

The same definition applies to the charts below.

(2) Cash Earnings by Type of Worker



(3) Breakdown of Employee Income



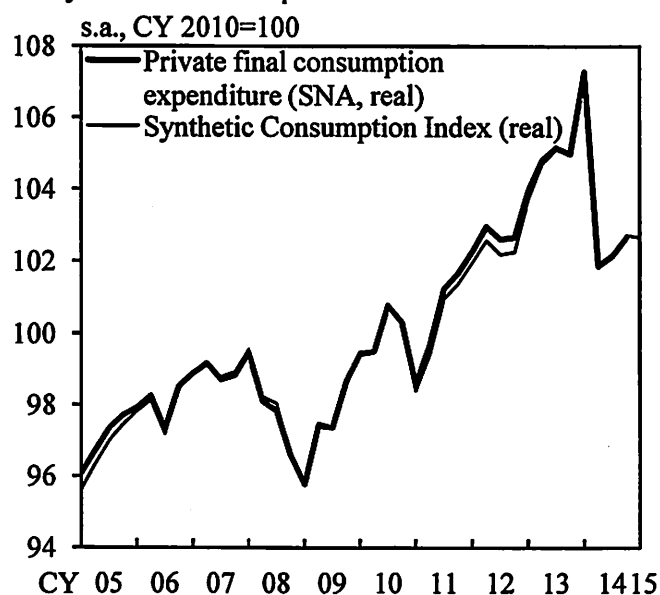
Note: Employee income (Monthly Labour Survey) = number of regular employees (Monthly Labour Survey) × total cash earnings

Employee income (Labour Force Survey) = number of employees (Labour Force Survey) × total cash earnings

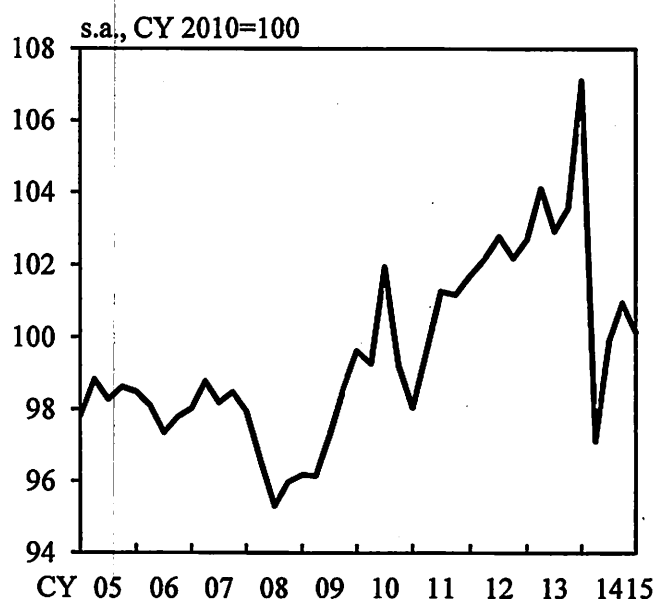
Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey."

Private Consumption

(1) Private Final Consumption Expenditure and Synthetic Consumption Index¹



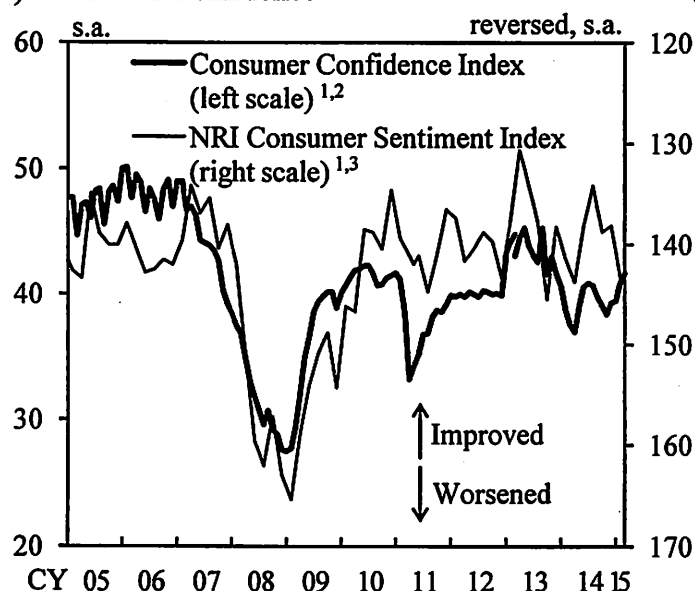
(2) Sales at Retail Stores (Real)^{1,2}



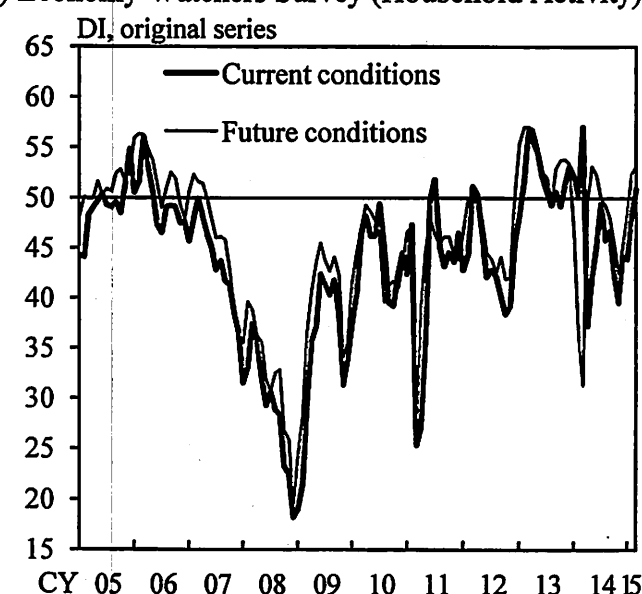
Notes: 1. Figures for 2015/Q1 are January-February averages.

2. Figures are seasonally adjusted by X-12-ARIMA and deflated by the CPI for goods (excluding electricity, gas & water charges).

(3) Consumer Confidence



(4) Economy Watchers Survey (Household Activity)



Notes: 1. The Consumer Confidence Index (covering about 5,700 samples on a nationwide basis from April 2013 onward) and NRI Consumer Sentiment Index (1,200 samples on a nationwide basis) are based on surveys on consumer confidence.

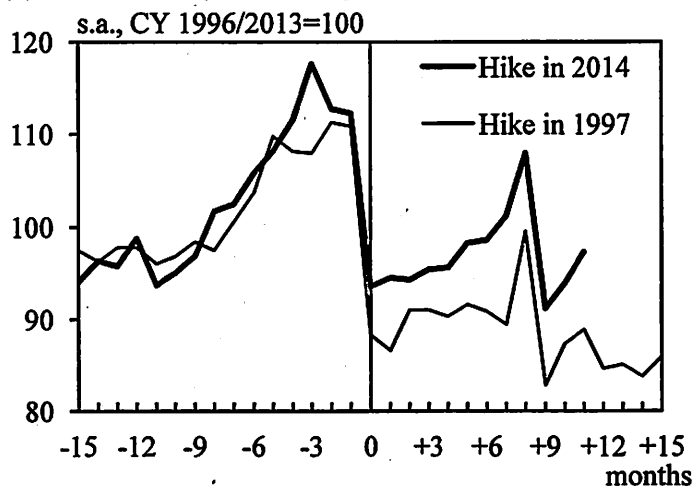
2. In April 2013, the Cabinet Office changed the method for conducting the Consumer Confidence Survey to a postal method, along with some other changes. For this reason, there is a discontinuity between data up to March 2013, which were obtained from the survey on the basis of home visits, and those thereafter. The figure for March 2013 on a postal-method basis is obtained from an examination survey.

3. Figures are seasonally adjusted by X-12-ARIMA. They are plotted for each surveyed month and the data for the intervening months are linearly interpolated.

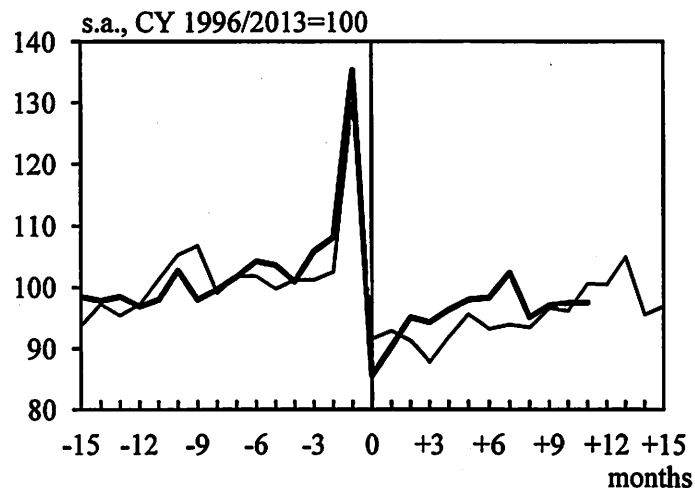
Sources: Cabinet Office, "National Accounts," "Synthetic Consumption Index," "Consumer Confidence Survey," "Economy Watchers Survey"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Ministry of Economy, Trade and Industry, "Current Survey of Commerce"; Nippon Research Institute (NRI), "Consumer Sentiment Survey."

Household Expenditure prior to and after the Consumption Tax Hikes

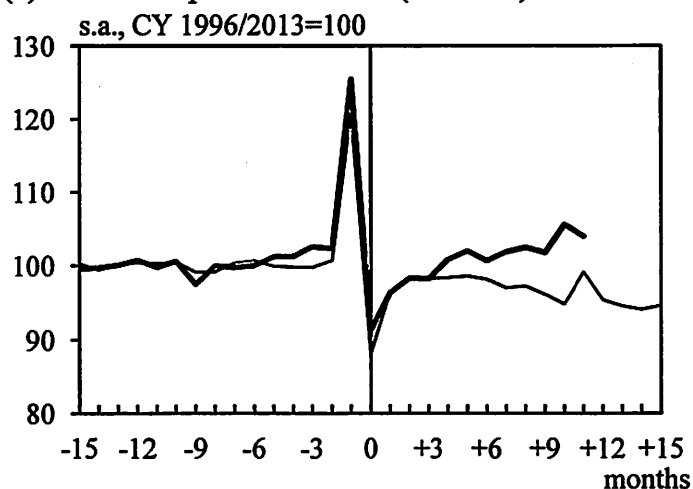
(1) New Passenger-Car Registrations



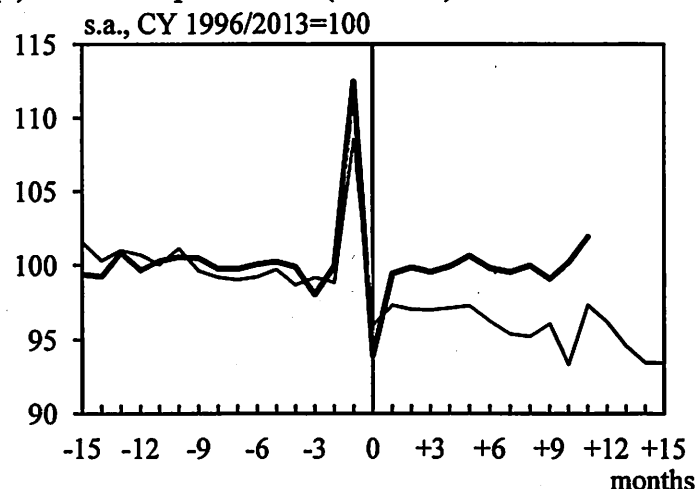
(2) Sales of Household Electrical Appliances (Nominal)



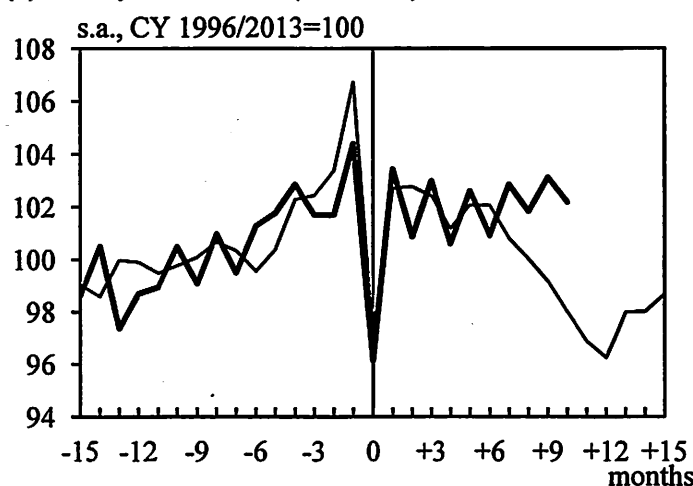
(3) Sales at Department Stores (Nominal)



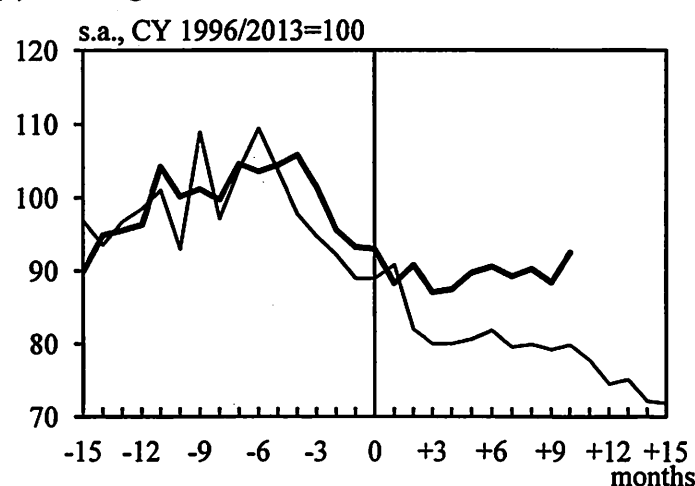
(4) Sales at Supermarkets (Nominal)



(5) Outlays for Travel (Nominal)



(6) Housing Starts



Notes: 1. Month 0 represents April 1997/2014, the month in which the consumption tax rate was raised.

2. Figures for Charts (1) through (5) are seasonally adjusted by X-12-ARIMA.

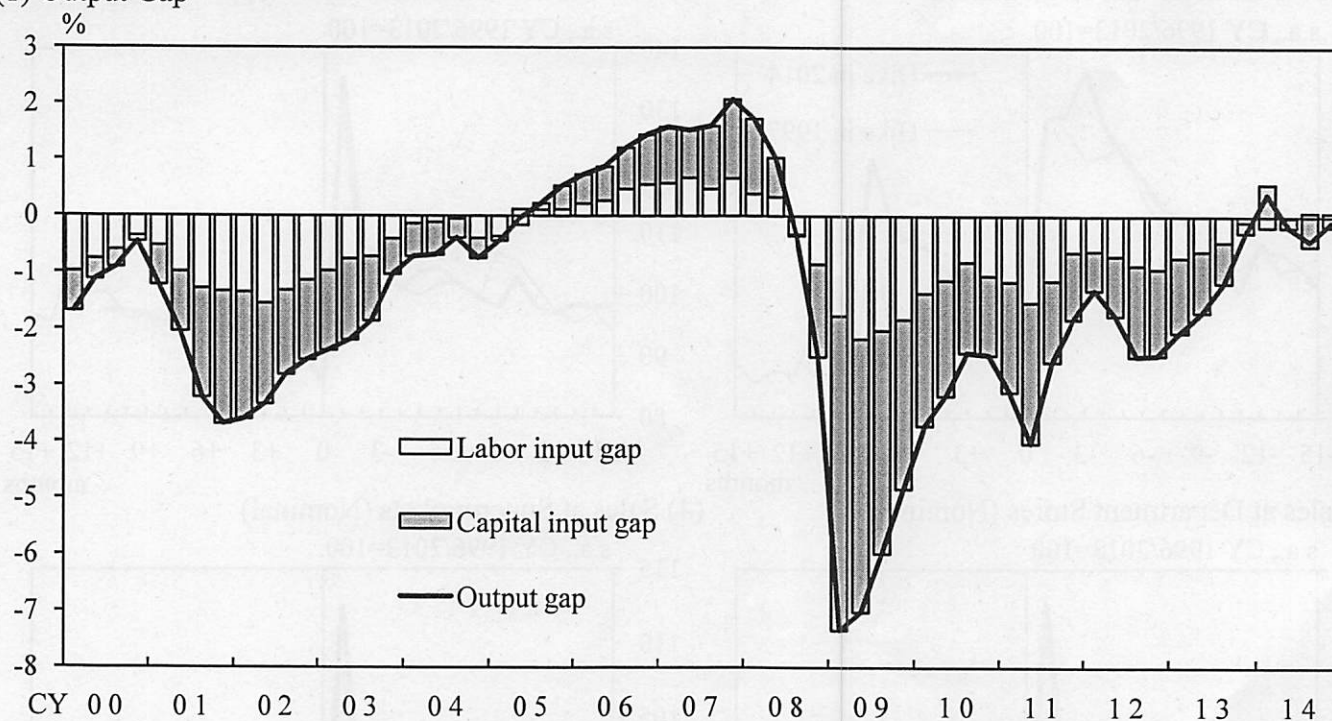
3. Figures for Chart (1) include small cars with engine sizes of 660 cc or less.

4. Figures for Charts (3) and (4) are adjusted to exclude the effects of the increase in the number of stores.

Sources: Japan Automobile Dealers Association, "Domestic Sales of Automobiles"; Ministry of Economy, Trade and Industry, "Current Survey of Commerce"; Japan Tourism Agency, "Major Travel Agents' Revenue"; Ministry of Land, Infrastructure, Transport and Tourism, "Statistics on Building Construction Starts," etc.

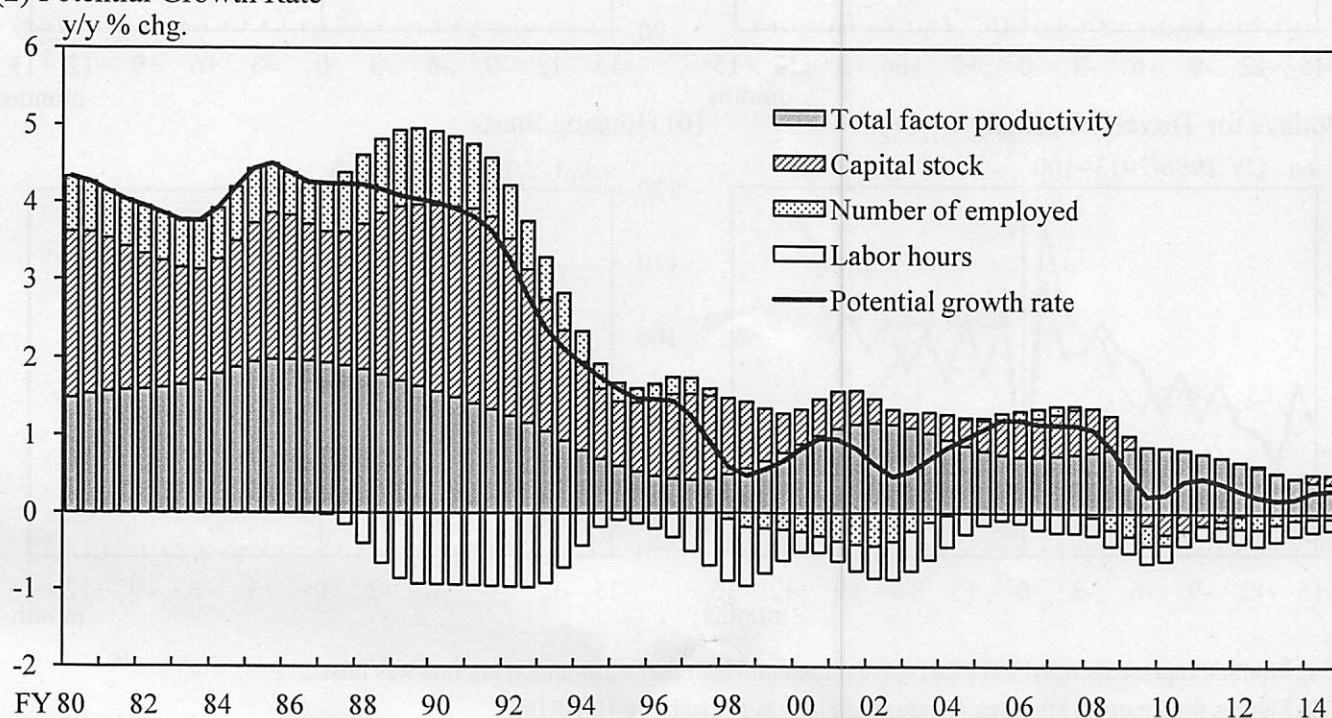
Output Gap and Potential Growth Rate

(1) Output Gap



Note: The output gap and the potential growth rate are estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3. The same applies to the chart below.

(2) Potential Growth Rate

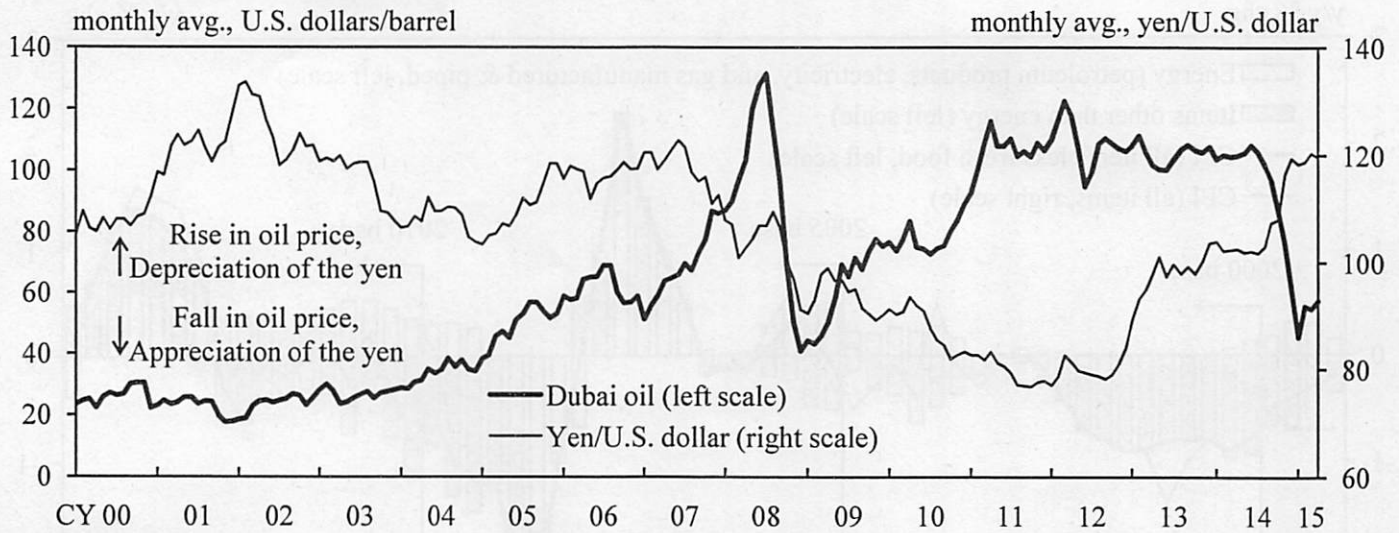


Note: Figures for the second half of fiscal 2014 are those of 2014/Q4.

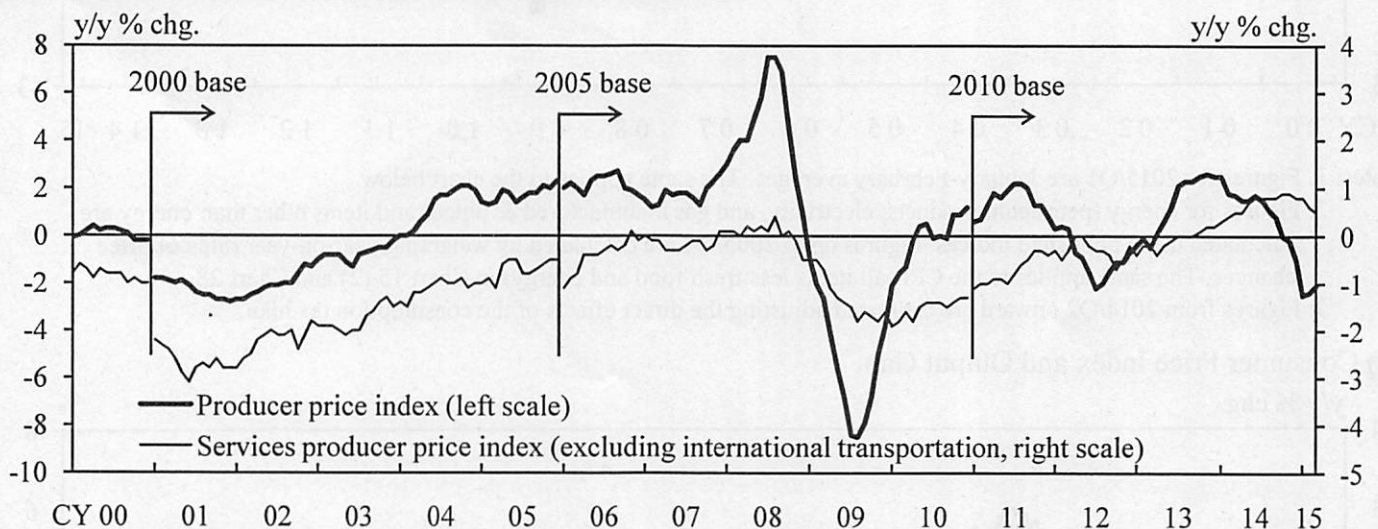
Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service"; Ministry of Economy, Trade and Industry, "Indices of Industrial Production"; Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan," etc.

Prices

(1) Oil Price and Exchange Rate

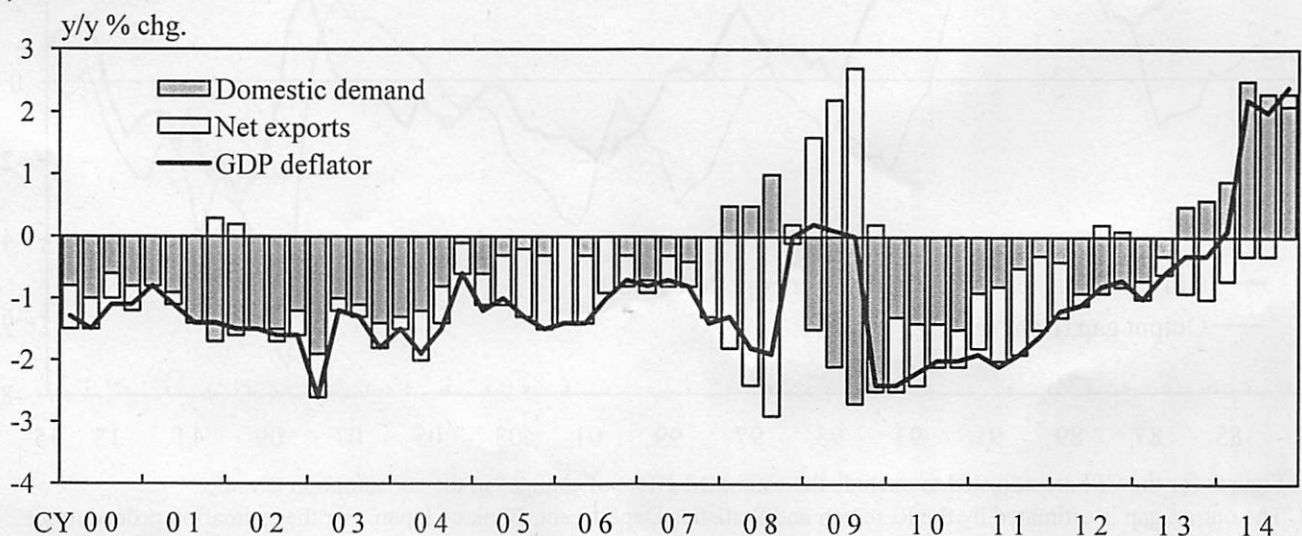


(2) Producer Price Index and Services Producer Price Index



Note: Figures from April 2014 onward are adjusted to exclude the direct effects of the consumption tax hike, using indices excluding the consumption tax.

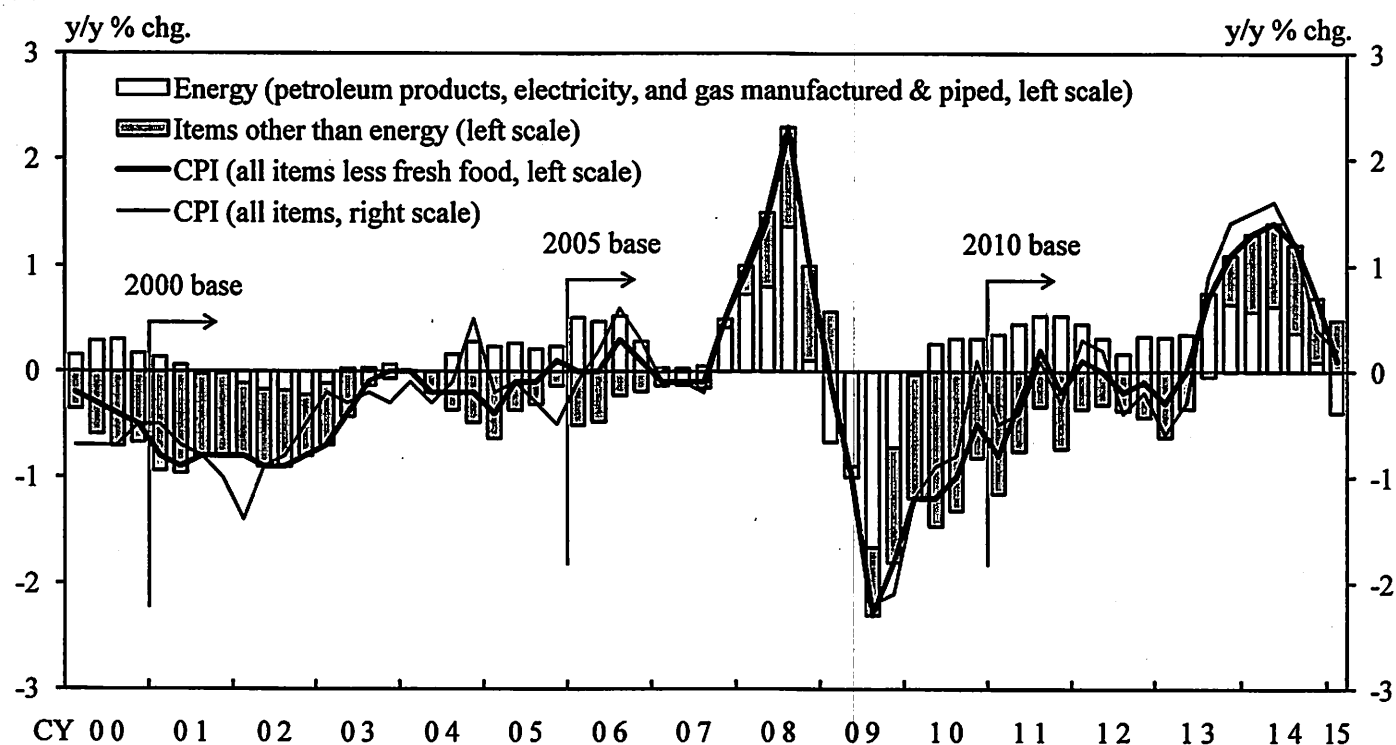
(3) GDP Deflator



Sources: Bank of Japan, "Corporate Goods Price Index," "Services Producer Price Index"; Cabinet Office, "National Accounts," etc.

Consumer Price Index (1)

(1) Consumer Price Index

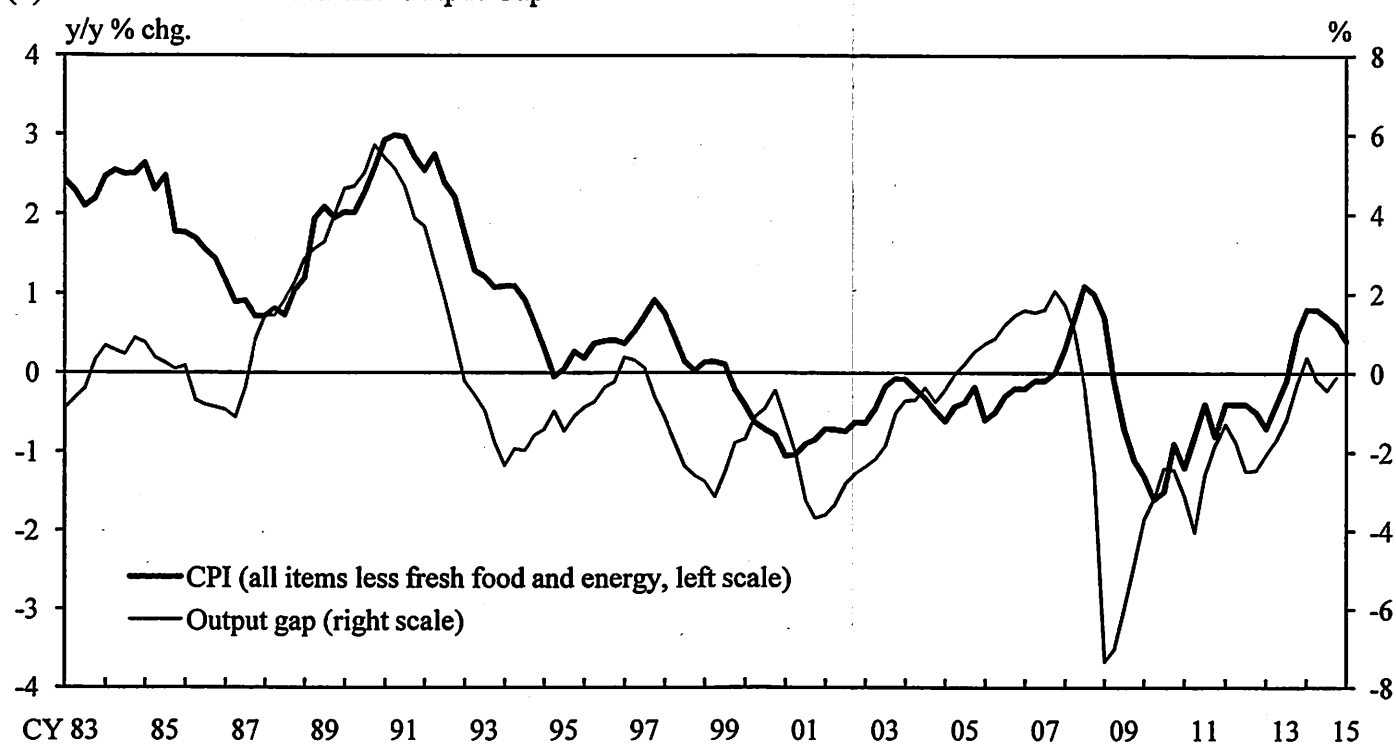


Notes: 1. Figures for 2015/Q1 are January-February averages. The same applies to the chart below.

2. Figures for energy (petroleum products, electricity, and gas manufactured & piped) and items other than energy are calculated using published indices. Figures up to 2005/Q4 are calculated by weighting year-on-year rates of price changes. The same applies to the CPI (all items less fresh food and energy) in Chart 15 (2) and Chart 28.

3. Figures from 2014/Q2 onward are estimated adjusting the direct effects of the consumption tax hike.

(2) Consumer Price Index and Output Gap



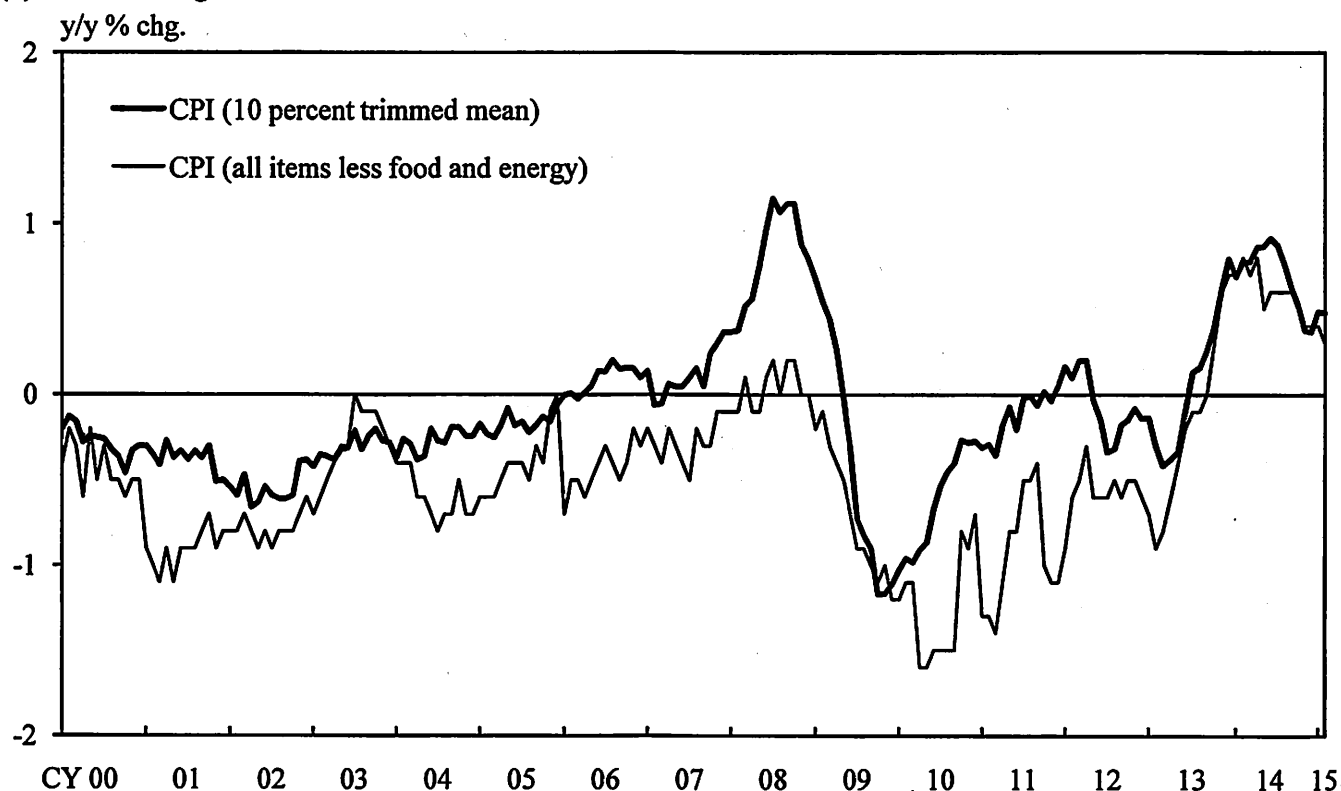
Notes: 1. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate.

2. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Cabinet Office, "National Accounts," etc.

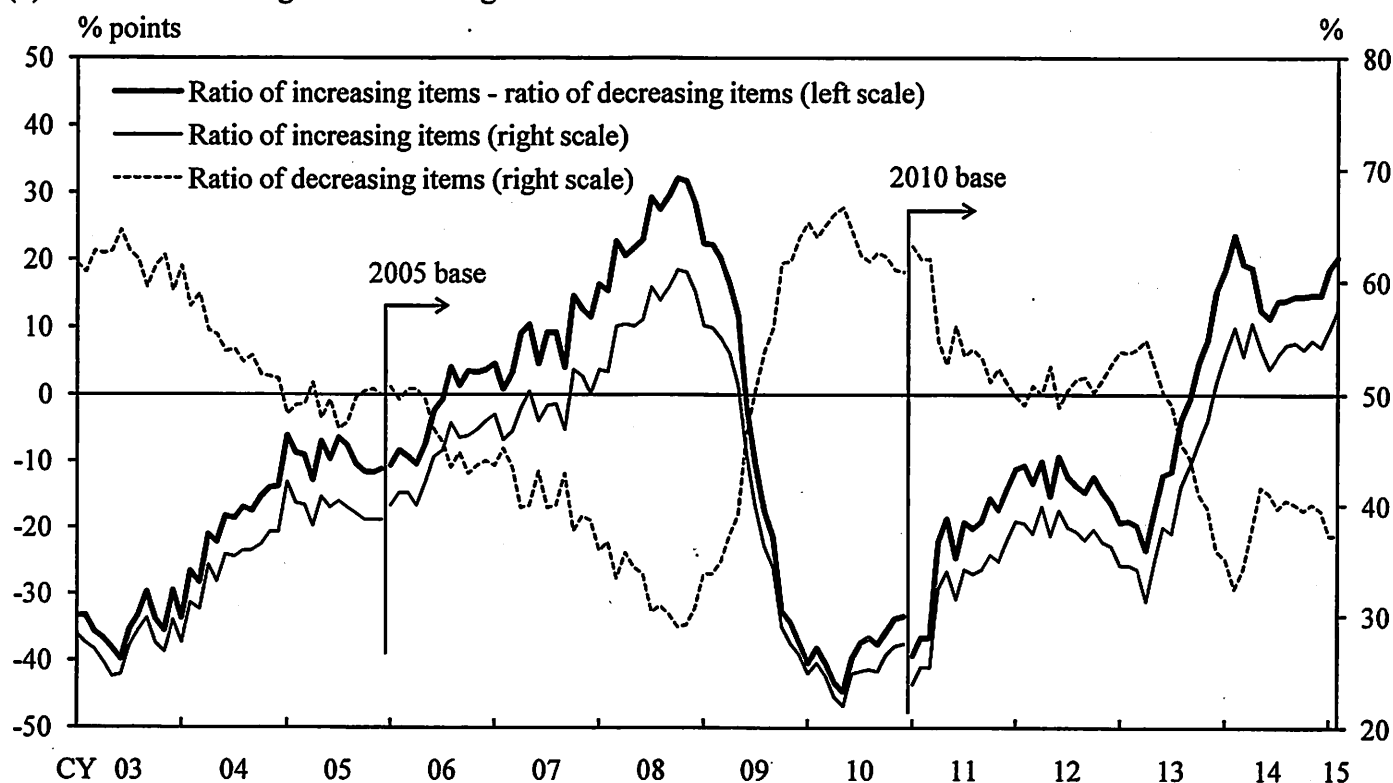
Consumer Price Index (2)

(1) Trend Changes in Consumer Prices



- Notes: 1. Figures for the 10 percent trimmed mean are the weighted averages of the year-on-year price changes in individual items making up the CPI. Items are arranged in ascending order of their year-on-year rate of price change and those falling into the upper and lower 10 percent tails by weight are trimmed.
2. Figures from April 2014 onward are estimated adjusting the direct effects of the consumption tax hike. The same applies to the chart below.

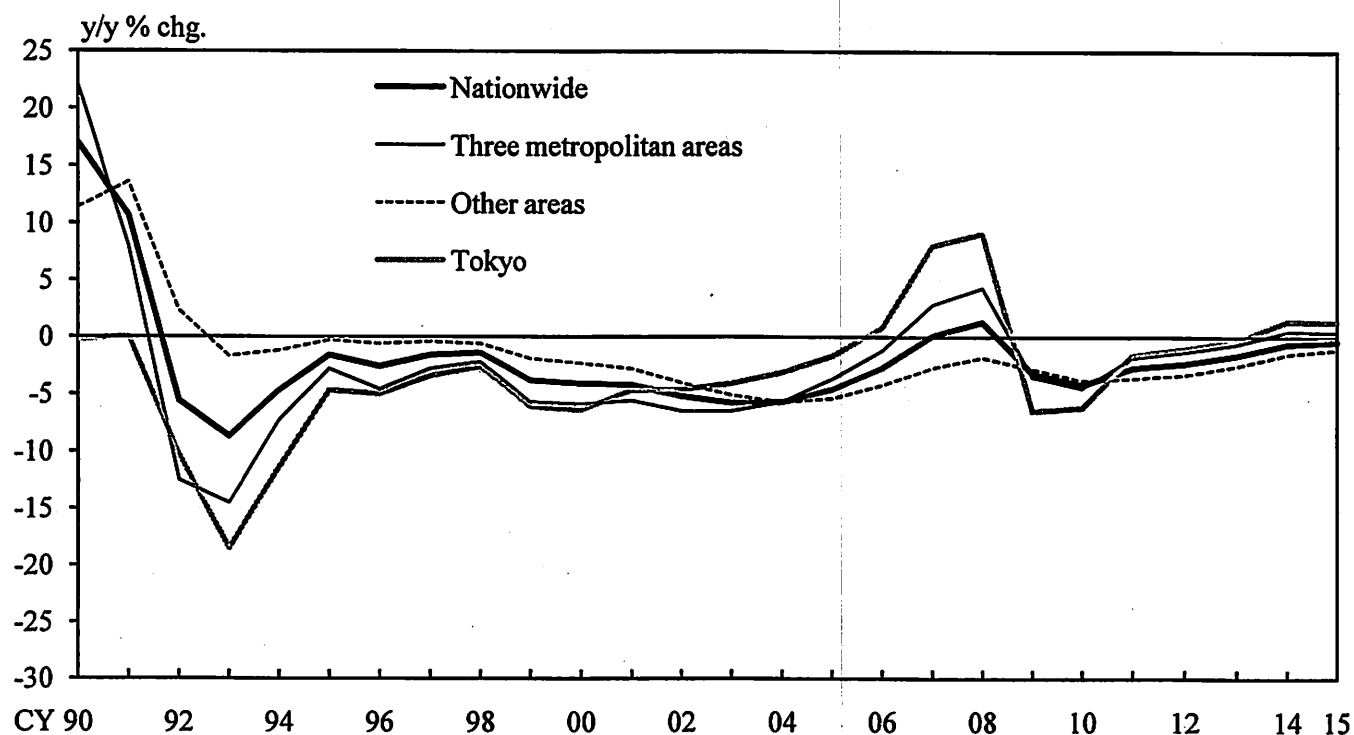
(2) Ratio of Increasing and Decreasing Items



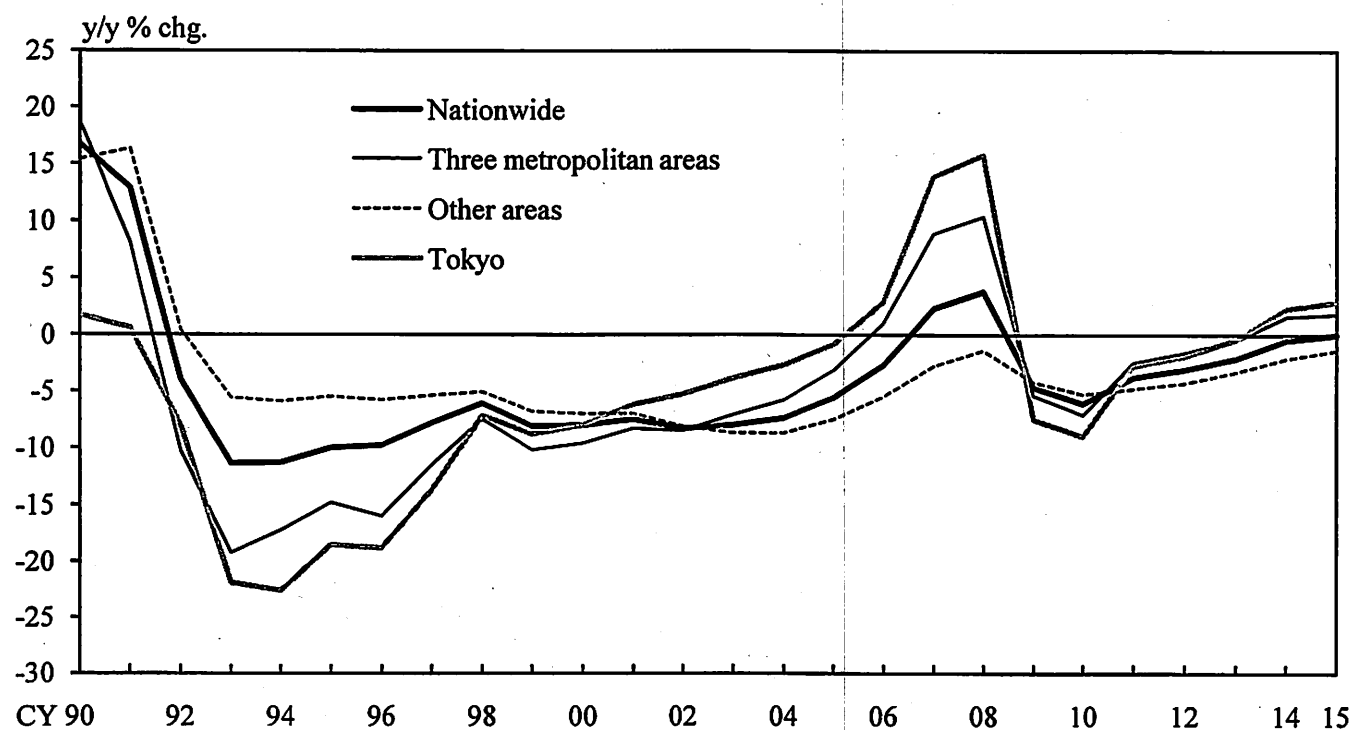
Note: Proportion of items whose indices increased/decreased from a year earlier. All items less fresh food.
Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

Land Prices

(1) Residential Land



(2) Commercial Land



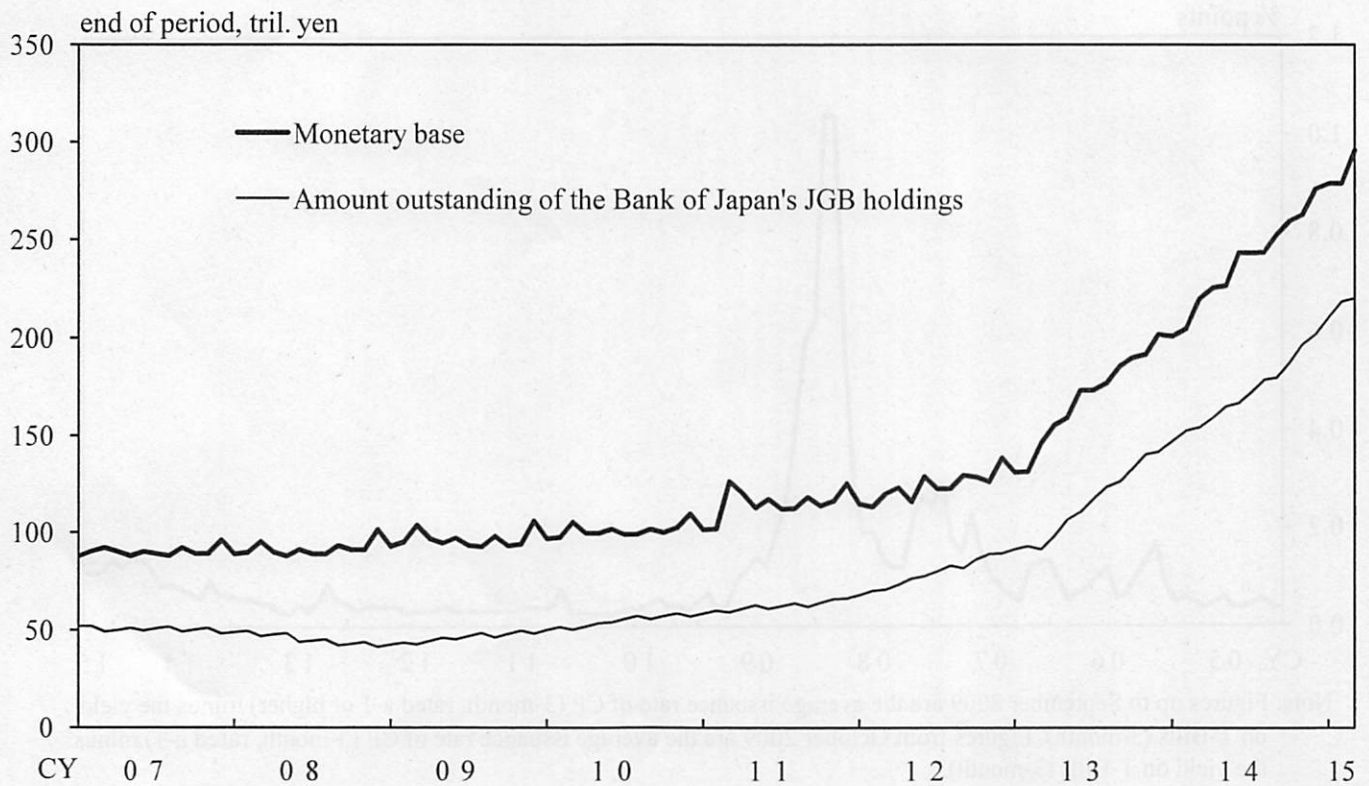
Notes: 1. Figures are as of January 1.

2. Three metropolitan areas: the Tokyo area (Tokyo, Kanagawa, Saitama, Chiba, and Ibaraki prefectures), the Osaka area (Osaka, Hyogo, Kyoto, and Nara prefectures), and the Nagoya area (Aichi and Mie prefectures). Other areas: other than the three metropolitan areas.

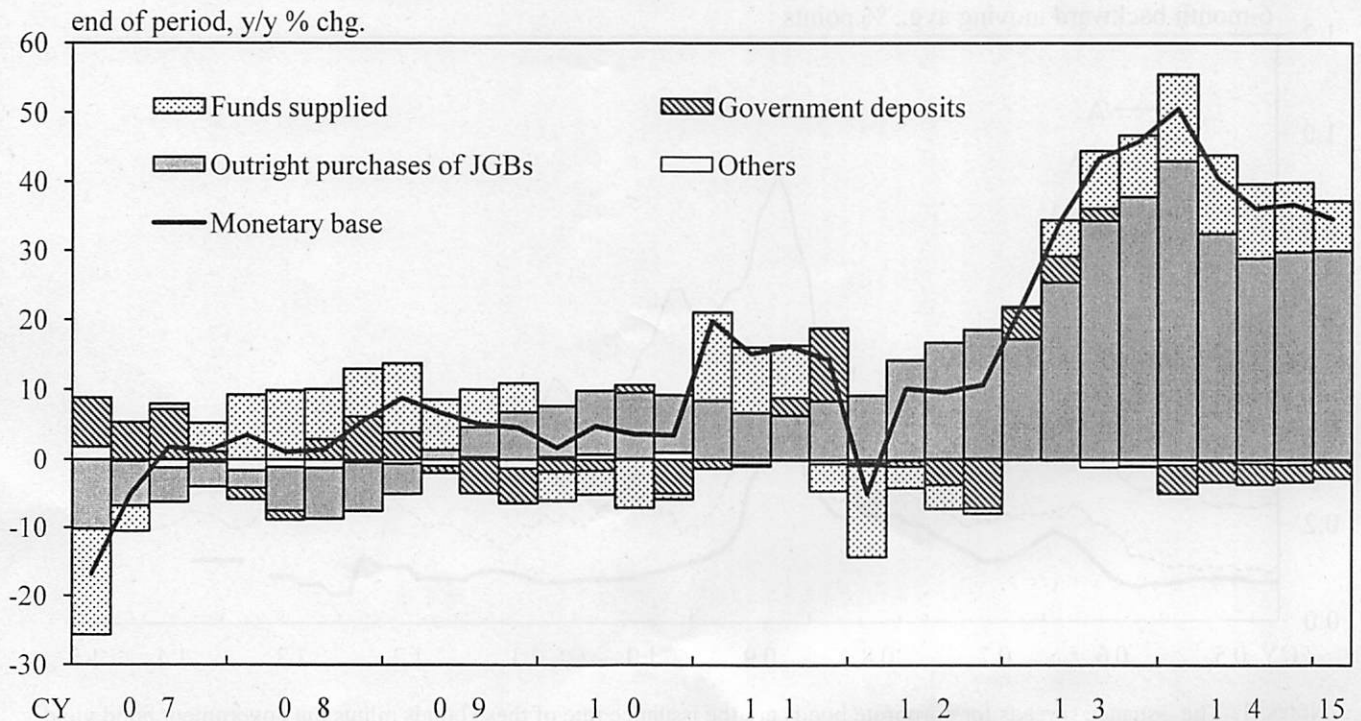
Source: Ministry of Land, Infrastructure, Transport and Tourism, "Land Market Value Publication."

Monetary Base and JGB Purchases

(1) Expansion in the Monetary Base and JGB Holdings



(2) Year-on-Year Percentage Change in the Monetary Base



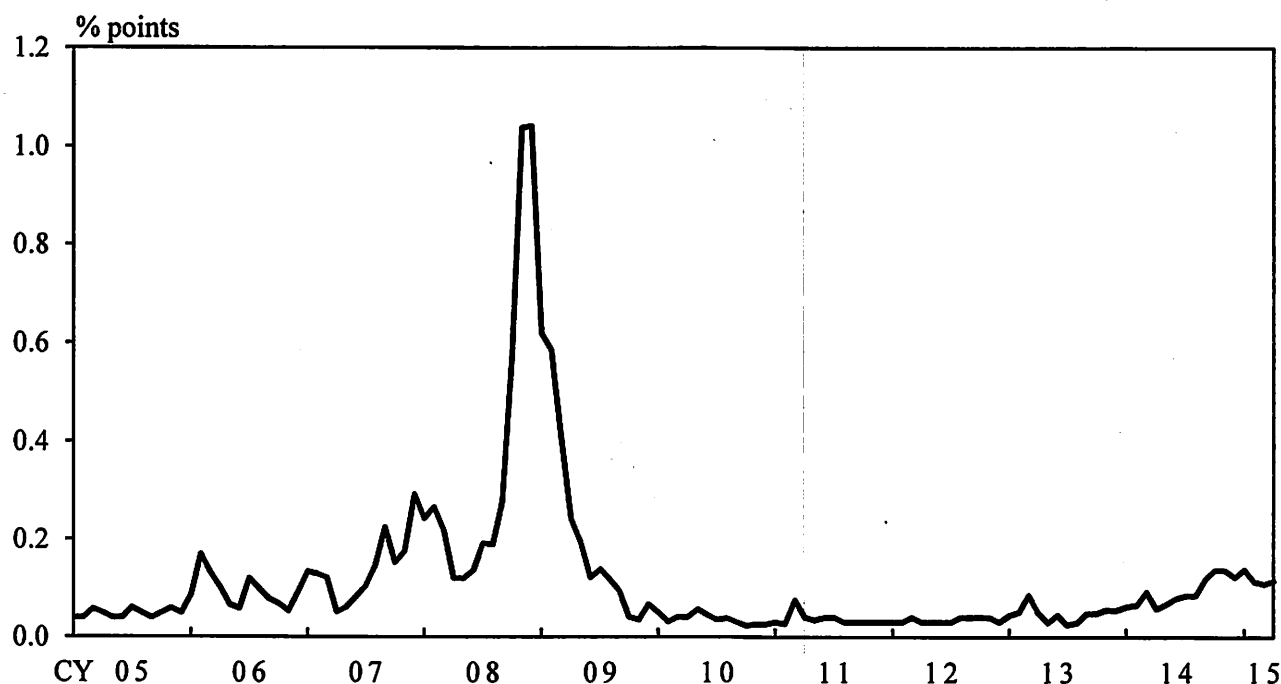
Notes: 1. Funds supplied are calculated by adding the amounts outstanding of (1) assets purchased through market operations (excluding outright purchases of JGBs), (2) funds-supplying operations against pooled collateral, and (3) the Loan Support Program, etc.

2. Government deposits mainly include sales of JGBs to the government under repurchase agreements and T-Bills underwritten by the Bank of Japan.

Source: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions," "Bank of Japan Accounts."

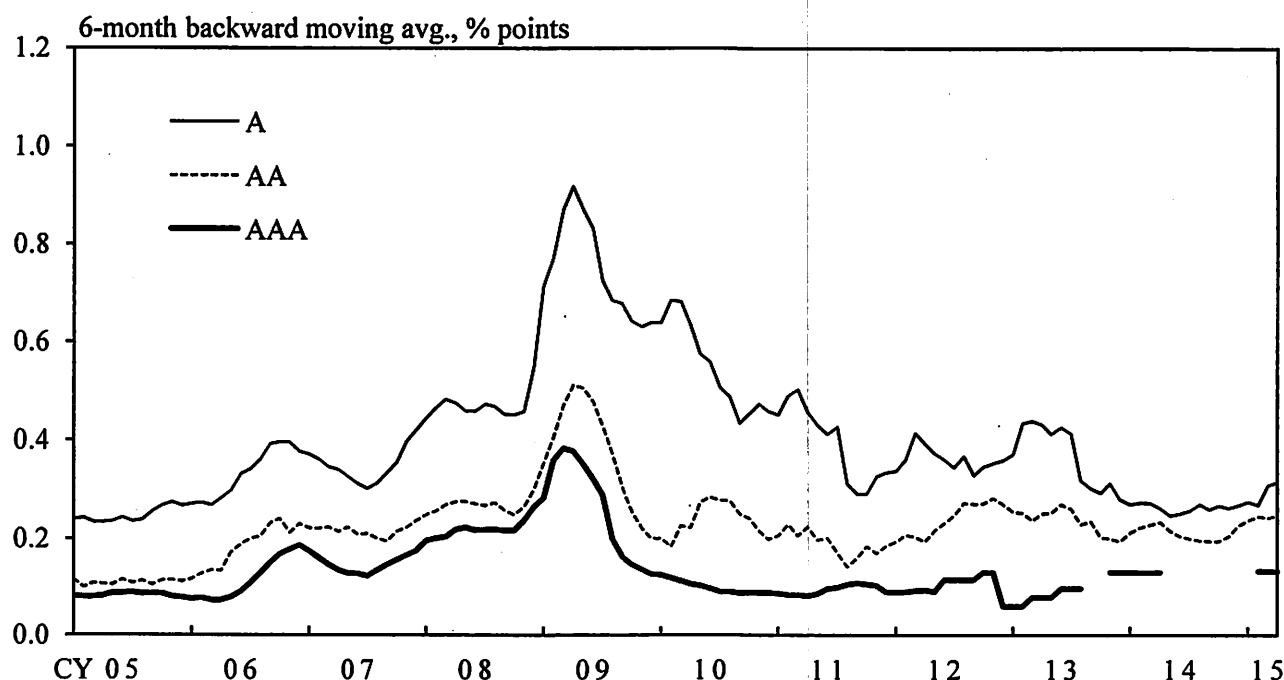
Spreads for CP and Corporate Bonds

(1) Issuance Spreads for CP



Note: Figures up to September 2009 are the average issuance rate of CP (3-month, rated a-1 or higher) minus the yield on T-Bills (3-month). Figures from October 2009 are the average issuance rate of CP (3-month, rated a-1) minus the yield on T-Bills (3-month).

(2) Issuance Spreads for Corporate Bonds by Securities Rating

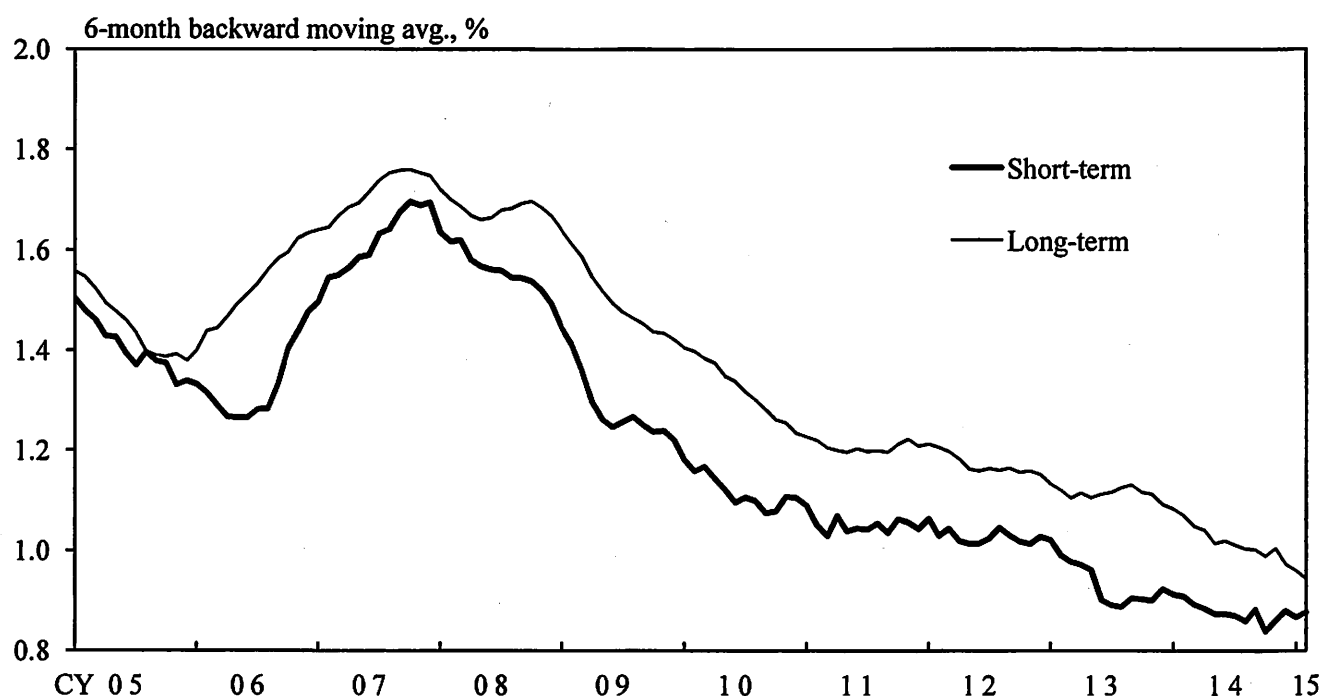


- Notes: 1. The issuance spreads for corporate bonds are the issuance rate of these bonds minus the government bond yield.
 2. Figures are the average of all maturities issued in domestic markets, based on the launch date.
 3. Bonds issued by banks and securities companies, etc., are excluded.
 4. Bonds are classified based on the highest rating among the ratings from Moody's, S&P, R&I, and JCR.
 5. Breaks in a line indicate periods when bonds were not issued for six or more months.

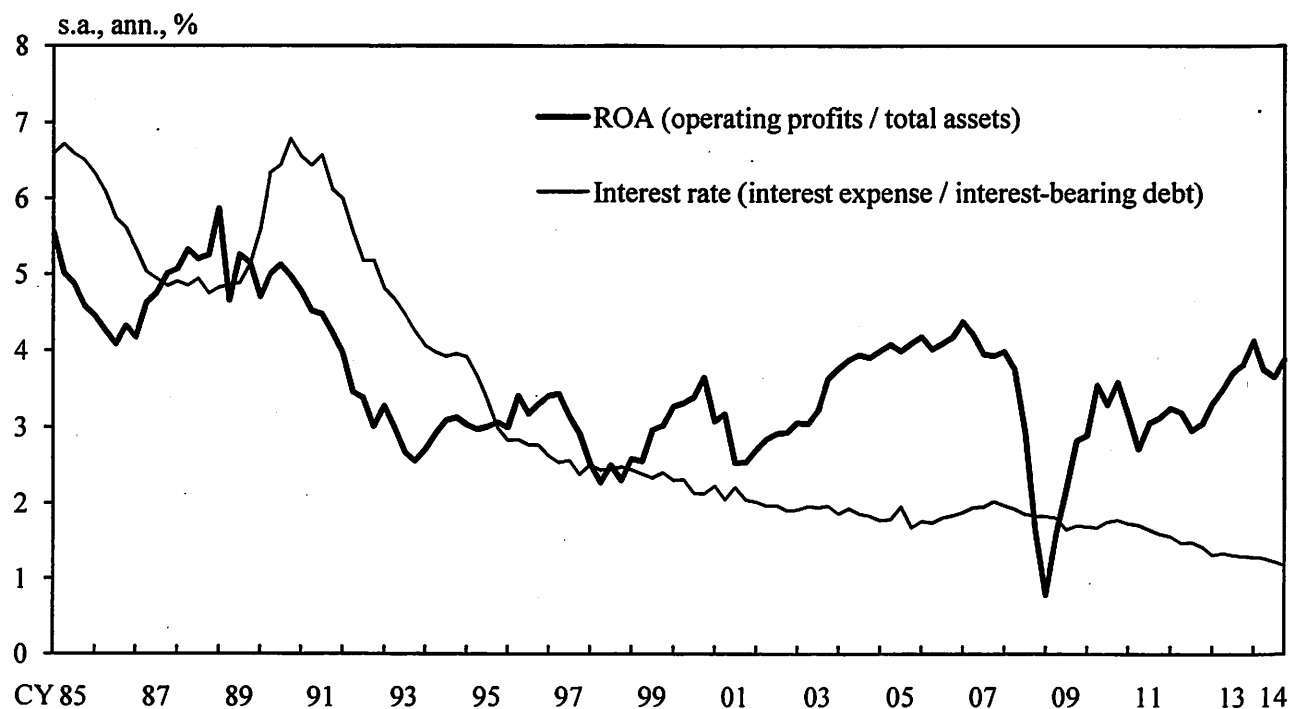
Sources: Bank of Japan, "Average Yields on Newly Issued Domestic Commercial Paper";
 Japan Securities Depository Center; Capital Eye, Ltd.; I-N Information Systems; Bloomberg.

Bank Lending Rates

(1) Average Contract Interest Rates on New Loans and Discounts



(2) ROA and Interest Rate



Notes: 1. Figures are taken from the "Financial Statements Statistics of Corporations by Industry, Quarterly," and are the total for enterprises of all sizes and in all industries. The finance and insurance industry is excluded.

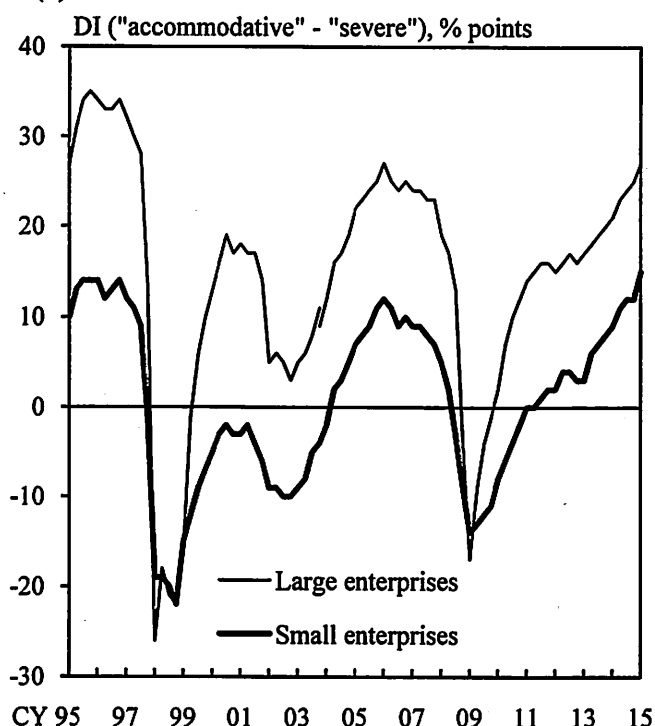
2. Interest-bearing debt is the sum of long- and short-term borrowings, corporate bonds, and bills receivable discounted outstanding.

Sources: Bank of Japan, "Average Contract Interest Rates on Loans and Discounts";

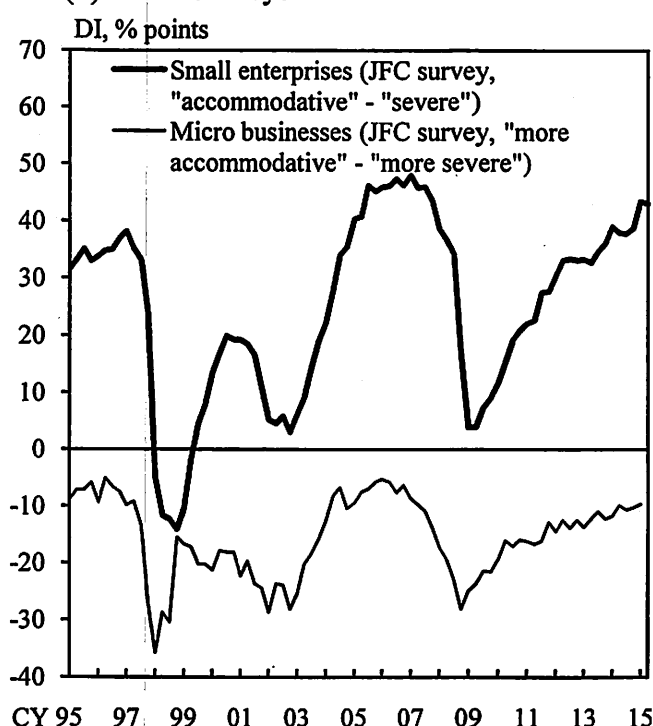
Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly."

Corporate Finance-Related Indicators

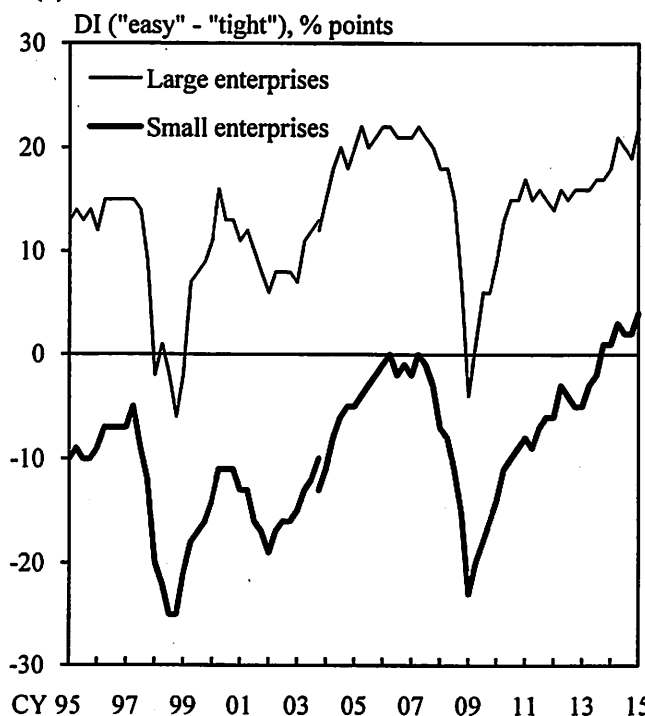
(1) Lending Attitude of Financial Institutions as Perceived by Firms

(a) *Tankan*

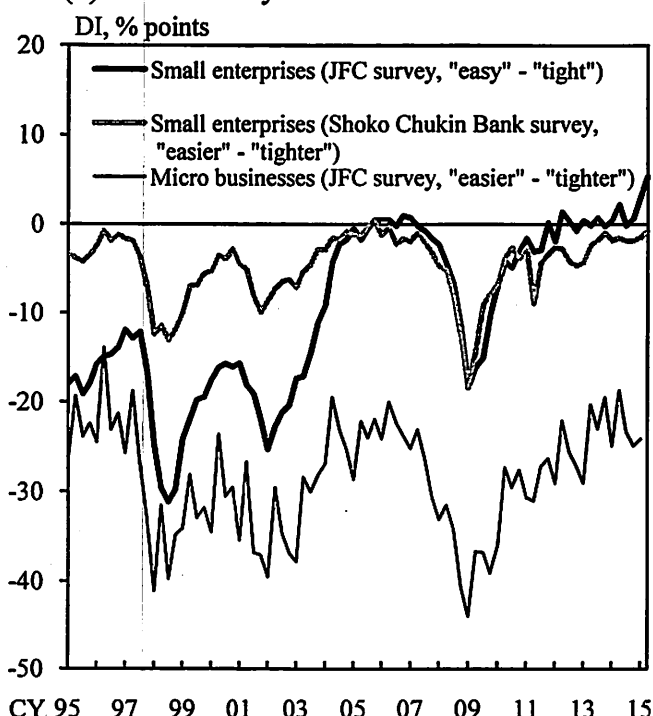
(b) Other Surveys



(2) Financial Position

(a) *Tankan*

(b) Other Surveys



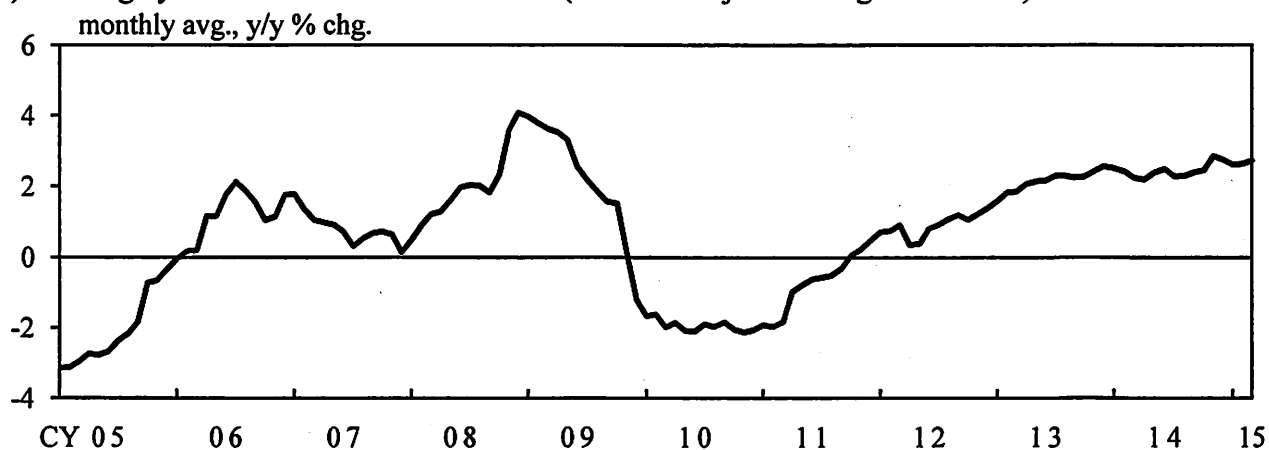
Notes: 1. Data from the "Tankan" are based on all industries. The "Tankan" was revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis.

2. Figures for 2015/Q2 are those of April.

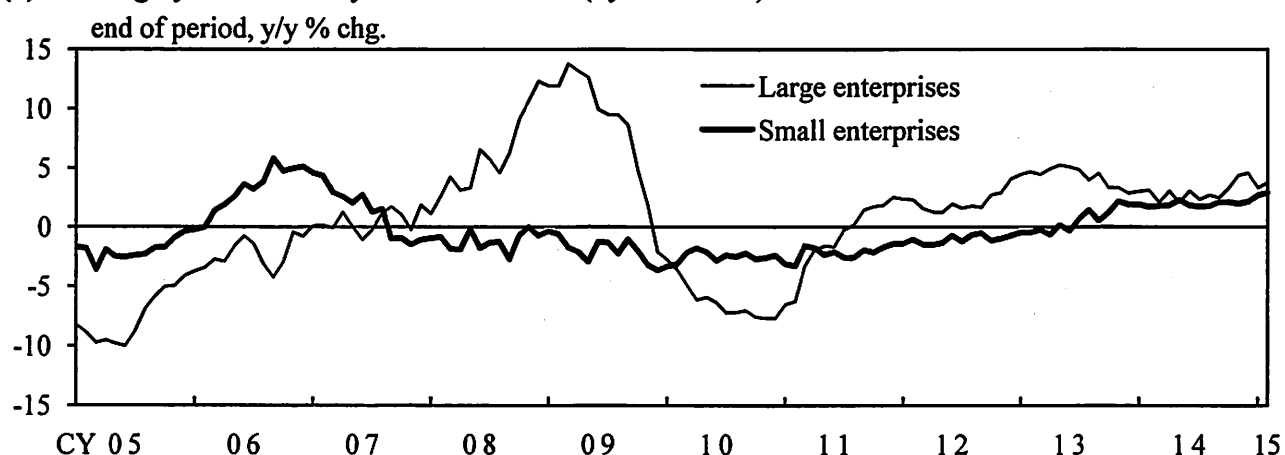
Sources: Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan"; Shoko Chukin Bank, Ltd., "Business Survey Index for Small and Medium-Sized Businesses"; Japan Finance Corporation (JFC), "Monthly Survey of Small Businesses in Japan," "Quarterly Survey of Small Businesses in Japan (For Micro Businesses)."

Amount Outstanding of Bank Lending, CP, and Corporate Bonds

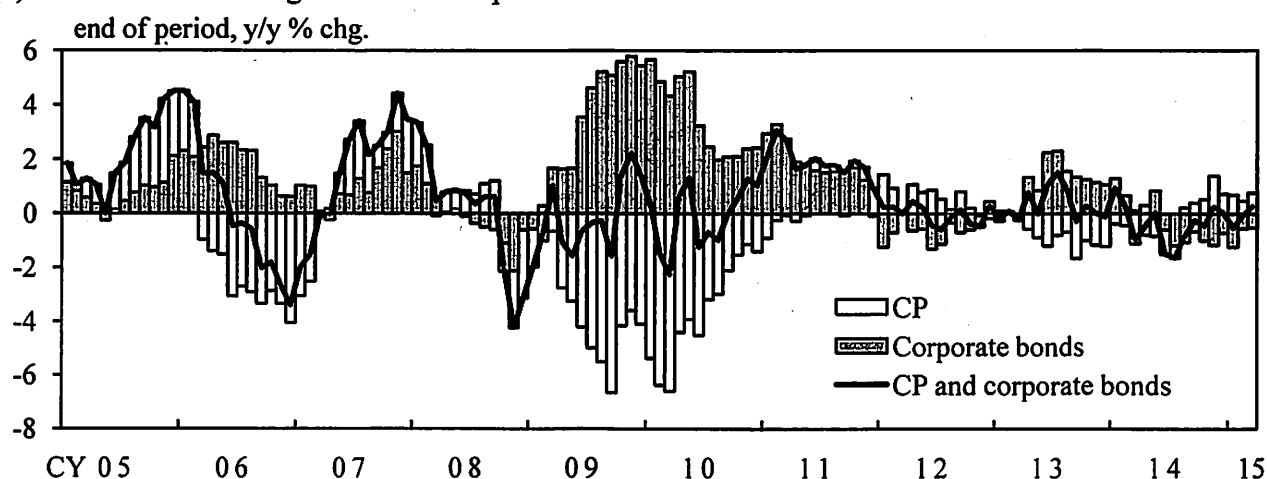
(1) Lending by Domestic Commercial Banks (Total of Major and Regional Banks)



(2) Lending by Domestically Licensed Banks (by Firm Size)



(3) Amount Outstanding of CP and Corporate Bonds



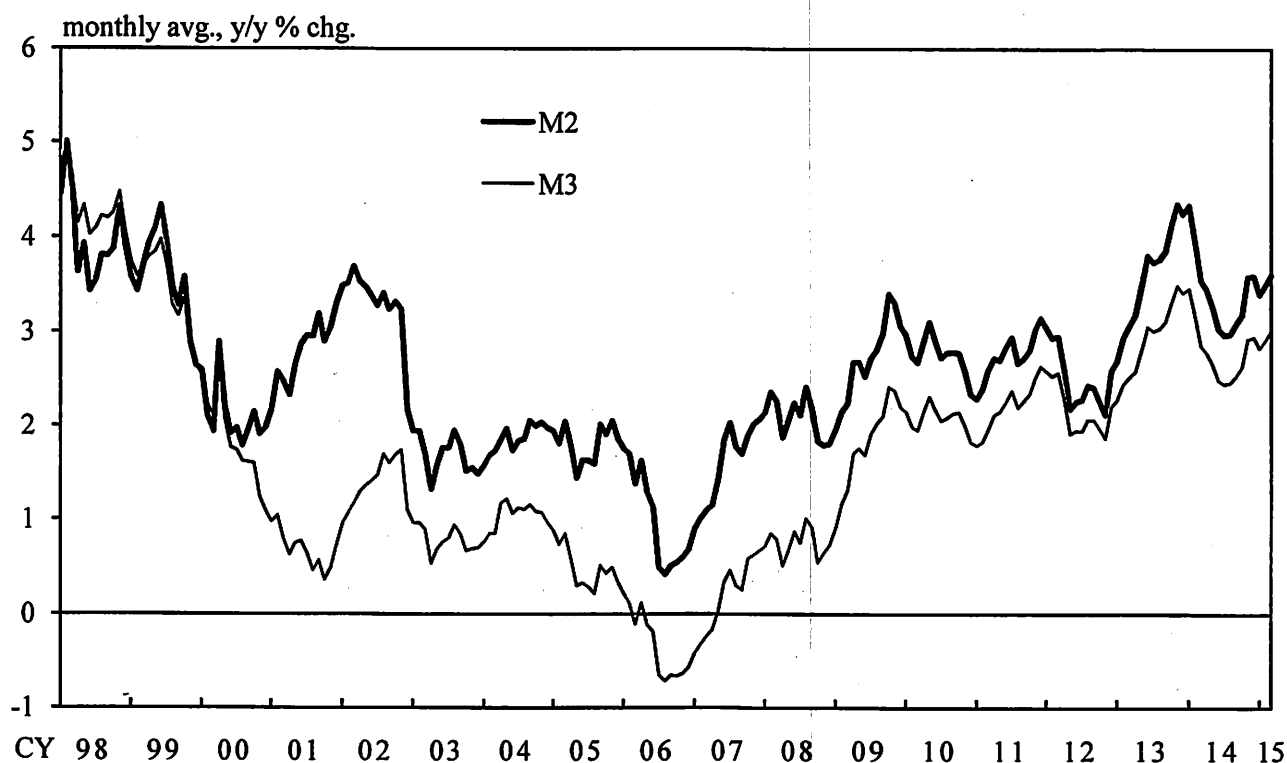
Notes: 1. Figures for CP are those of short-term corporate bonds registered under the book-entry transfer system. Those issued by banks, securities companies, and others such as foreign corporations are excluded; ABCP is included. Figures up to March 2008 are those compiled by the Bank of Japan.

2. Figures for corporate bonds are calculated based on the sum of straight bonds issued in both domestic and overseas markets. Bonds issued by banks are included. Domestic bonds are those registered by the book-entry transfer system. The series is spliced at April 2008 with the one published by the Japan Securities Dealers Association.

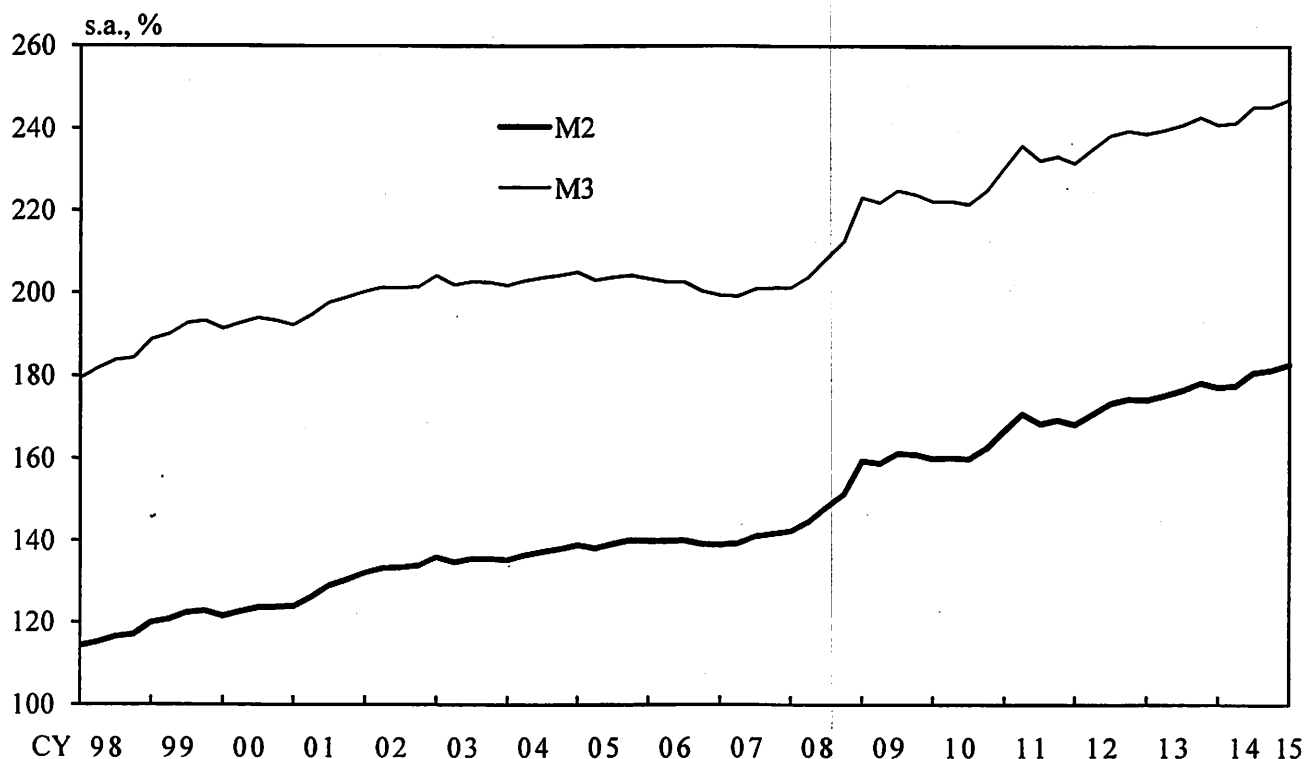
Sources: Bank of Japan, "Principal Figures of Financial Institutions," "Deposits, Vault Cash, and Loans and Bills Discounted"; Japan Securities Depository Center; Japan Securities Dealers Association; I-N Information Systems.

Money Stock

(1) Changes from a Year Earlier



(2) Ratio of Money Stock to Nominal GDP



Notes: 1. Figures for M2 up to March 2003 are the former series of the figures for M2+CDs.

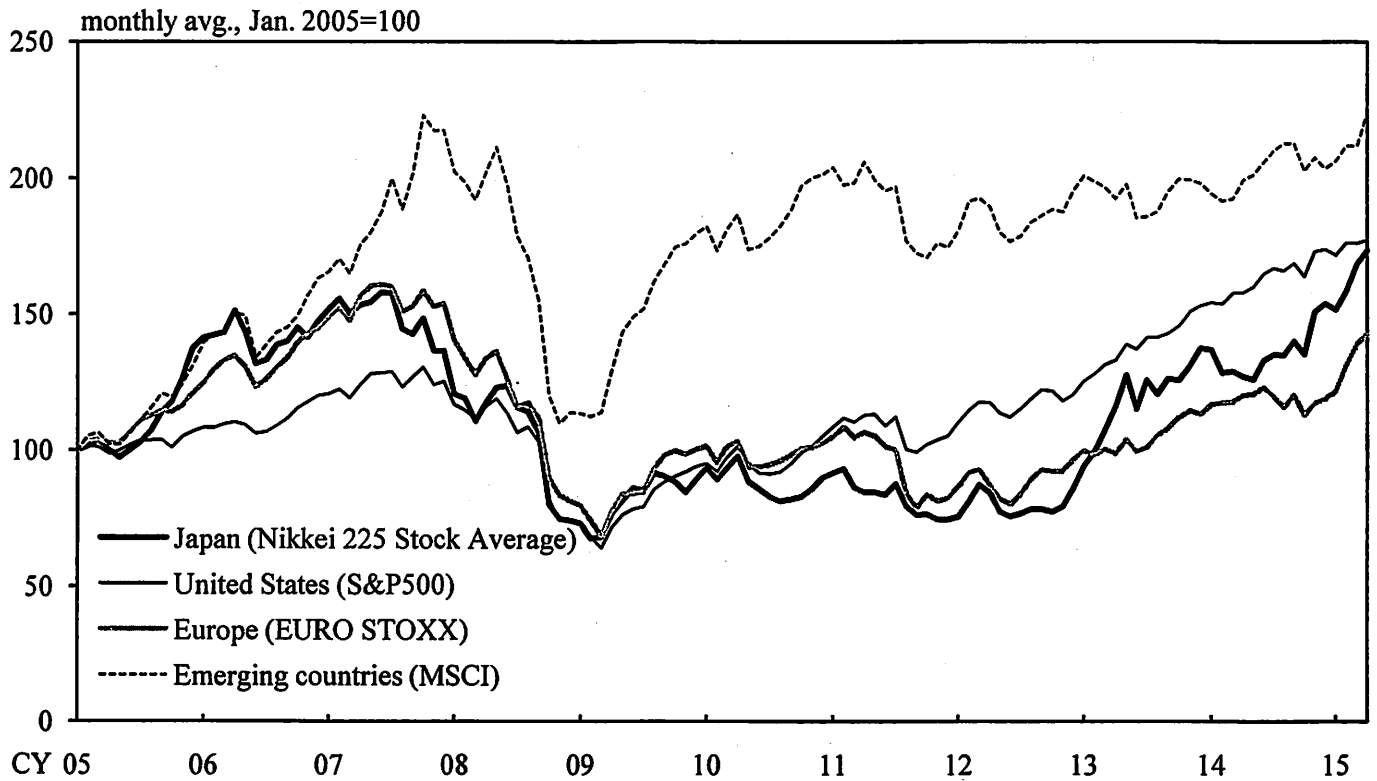
2. Figures for M3 up to March 2003 are the former series of the figures for M3+CDs minus the figures for pecuniary trusts.

3. The figure for nominal GDP in 2015/Q1 is assumed to be unchanged from the previous quarter.

Sources: Bank of Japan, "Money Stock"; Cabinet Office, "National Accounts."

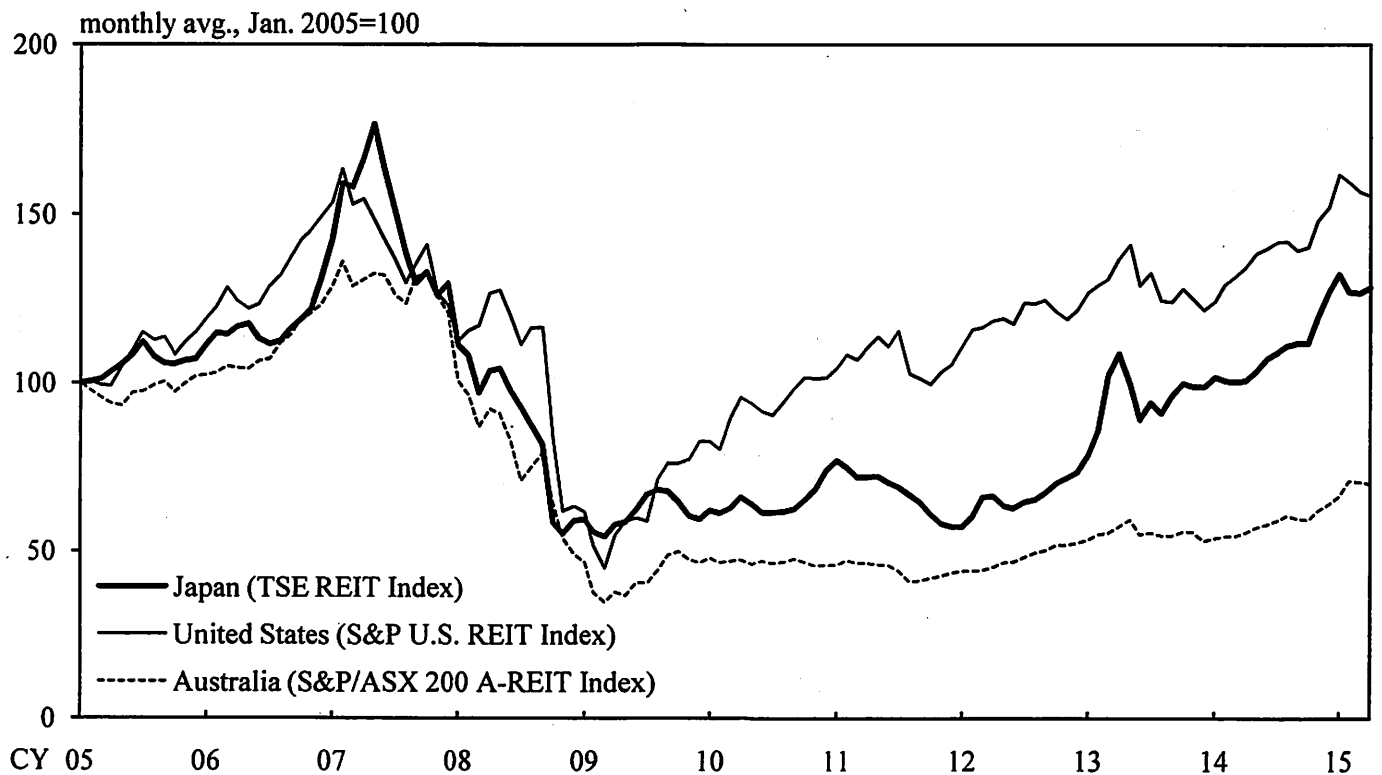
Stock Prices and REIT Prices

(1) Selected Stock Prices



Note: Figures for emerging countries are from the MSCI Emerging Markets Index denominated in the local currencies.

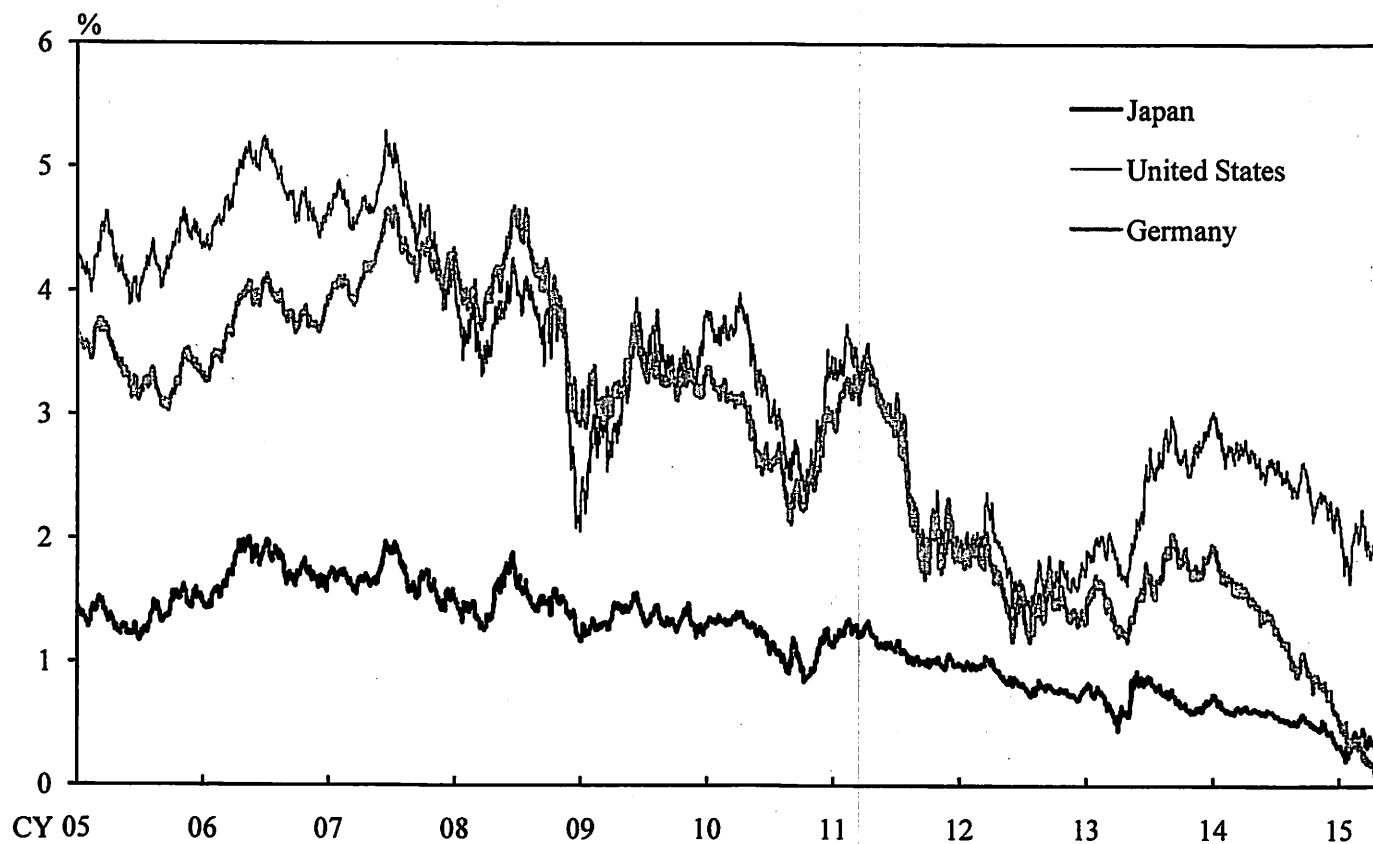
(2) Selected REIT Indexes



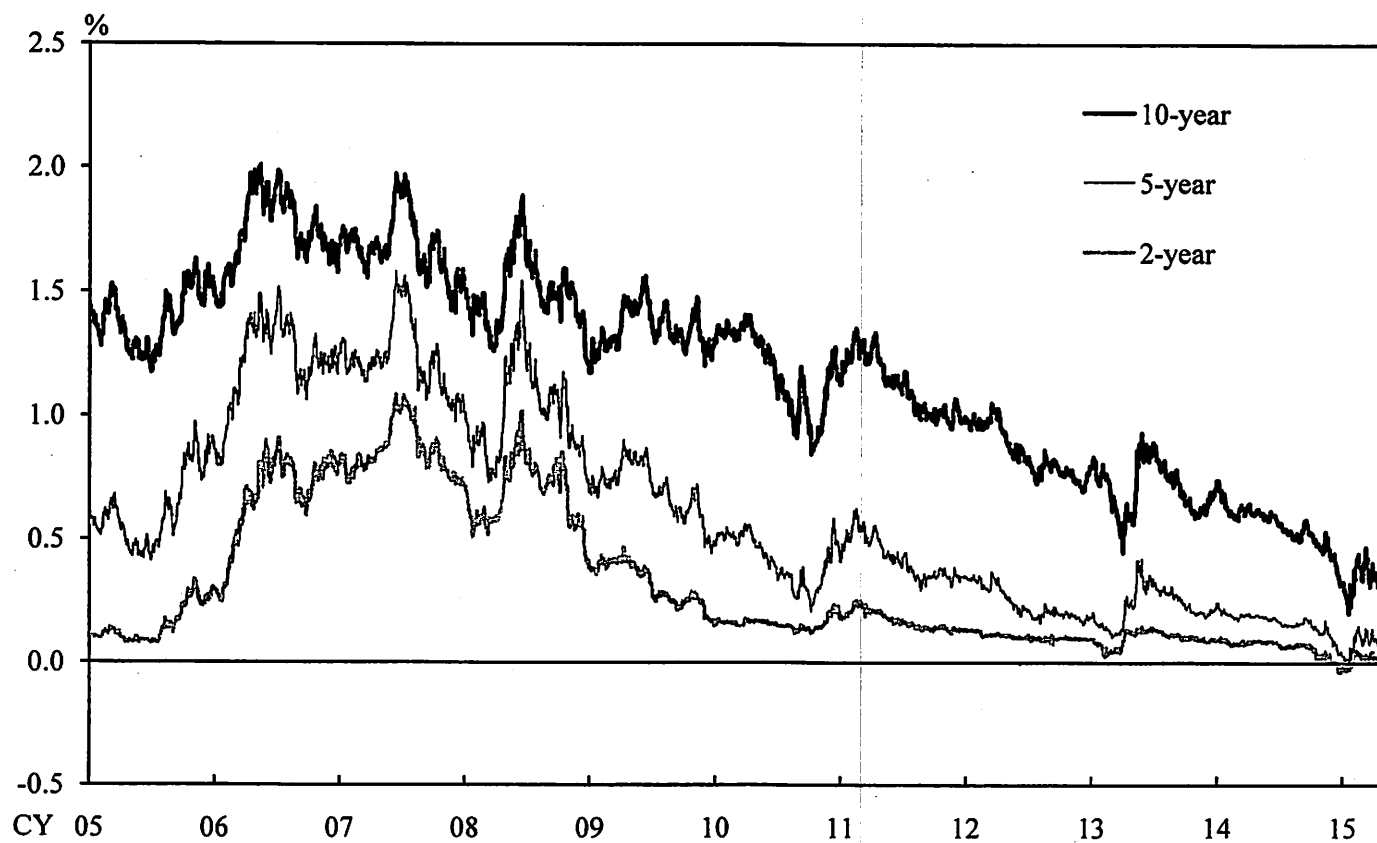
Source: Bloomberg.

Nominal Benchmark Yields

(1) 10-Year Government Bond Yields in Selected Advanced Economies

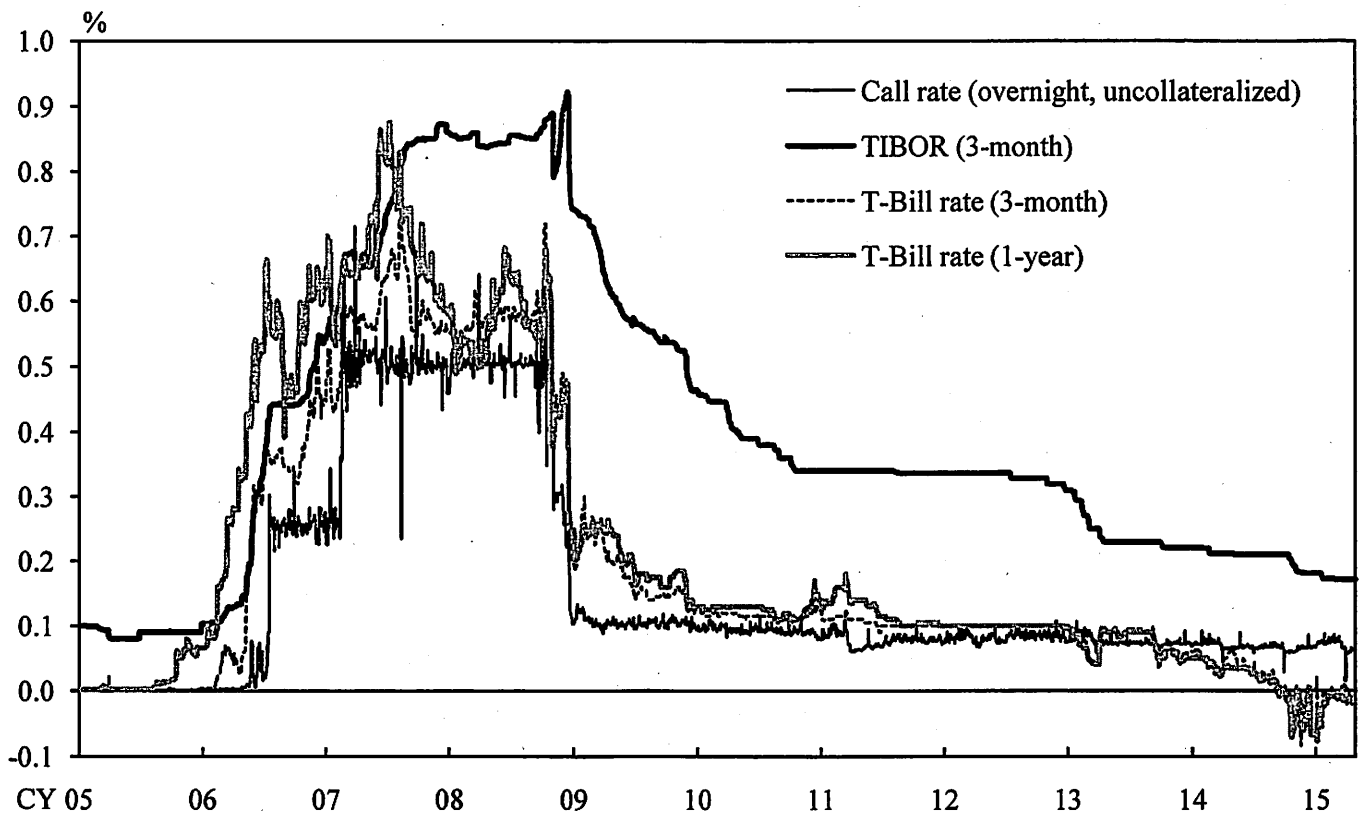


(2) JGB Yields

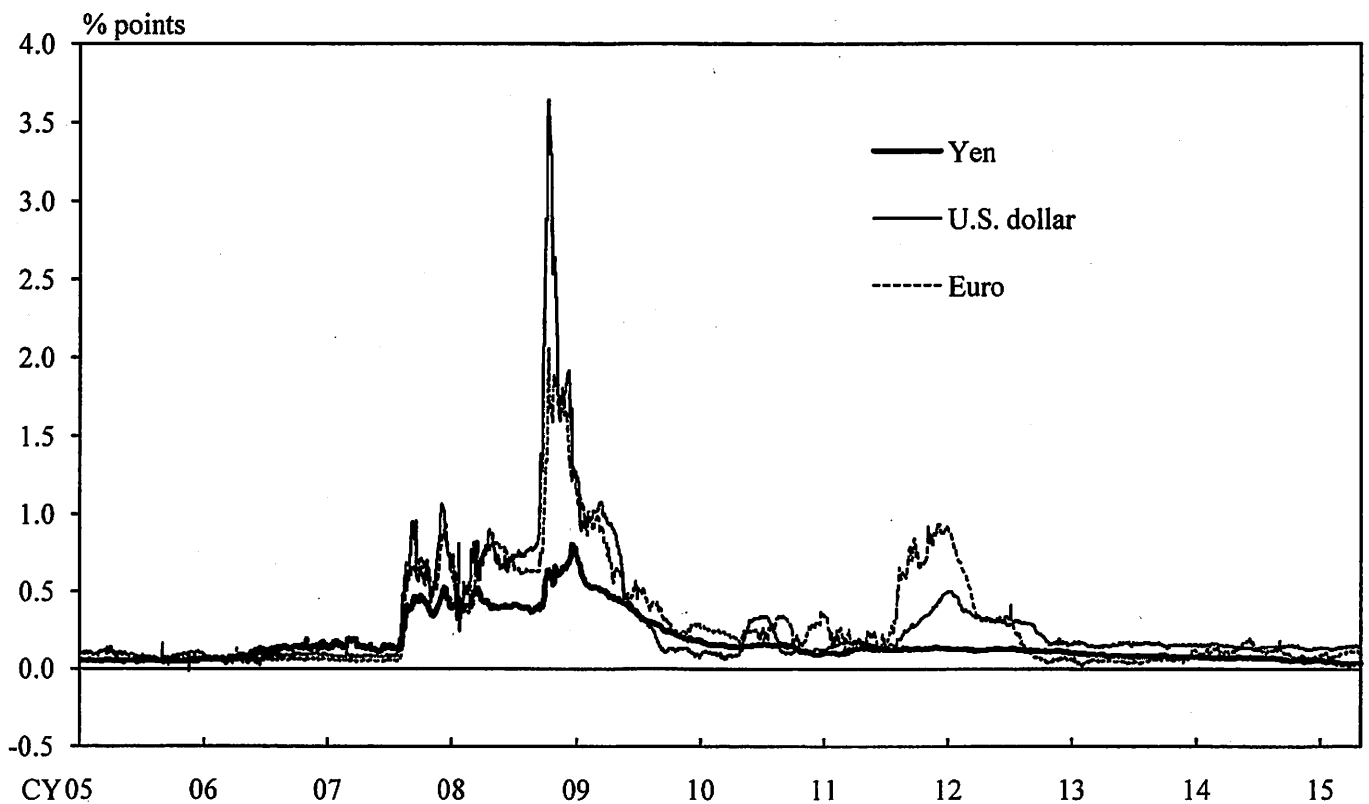


Money Market Rates

(1) Short-Term Interest Rates



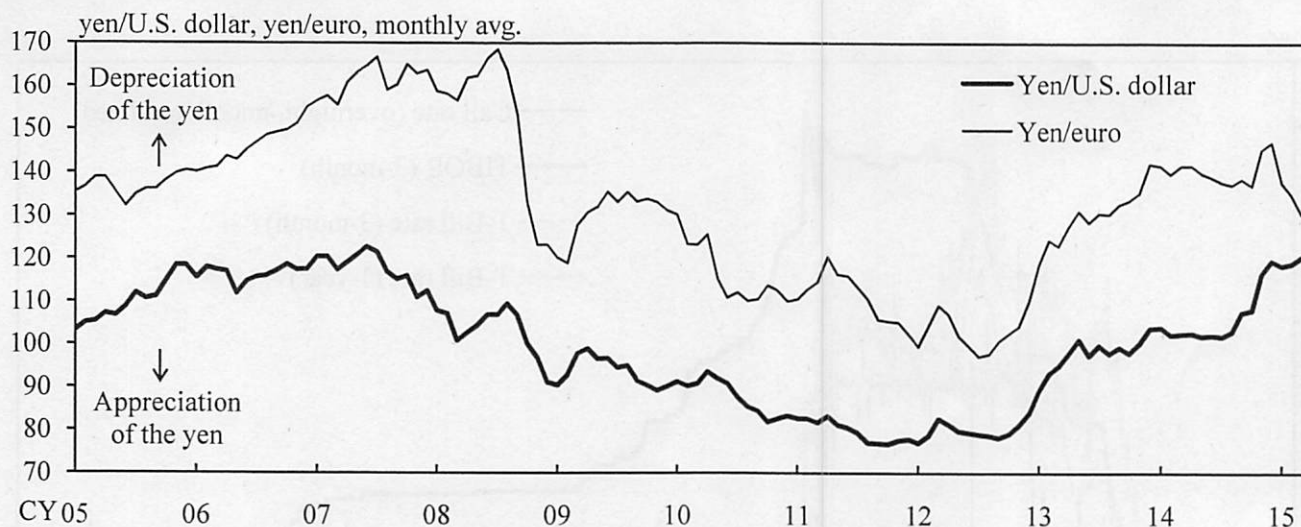
(2) Credit Spreads for Yen-, Dollar-, and Euro-Denominated Term Instruments



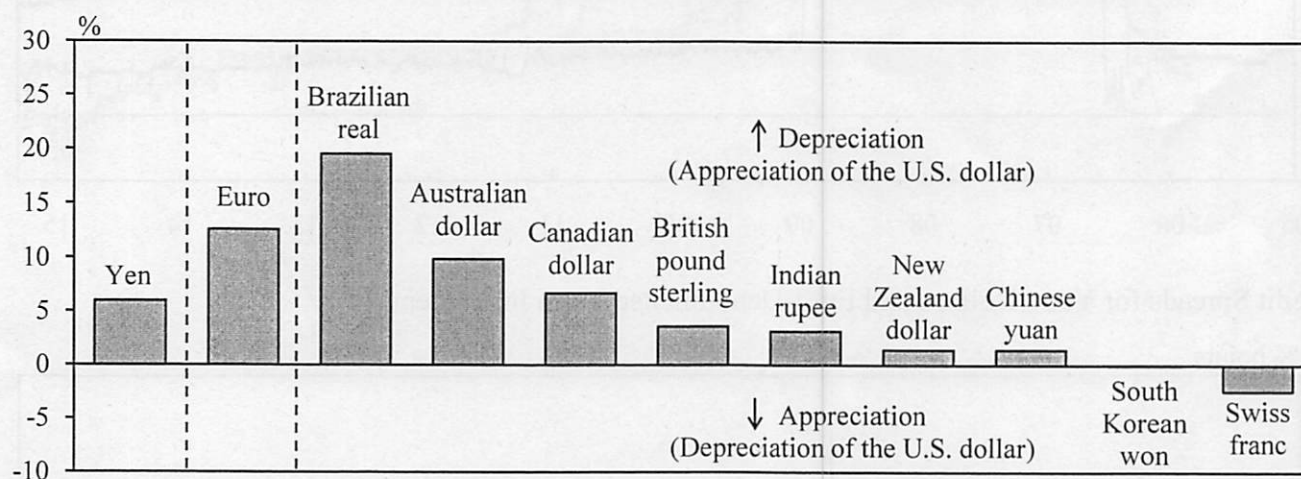
Note: The credit spreads for term instruments are LIBOR (3-month) minus yields on overnight index swaps (3-month).
Sources: Bank of Japan; Bloomberg.

Exchange Rates

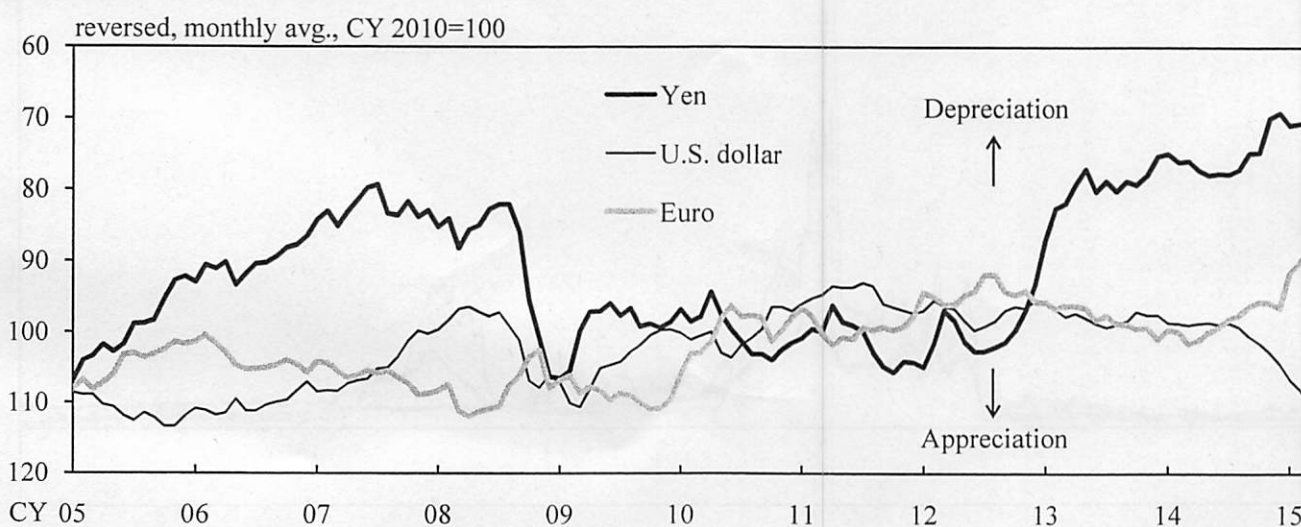
(1) Yen/U.S. Dollar and Yen/Euro



(2) Rates of Change in Selected Currencies against the U.S. Dollar (Since the End of October 2014)



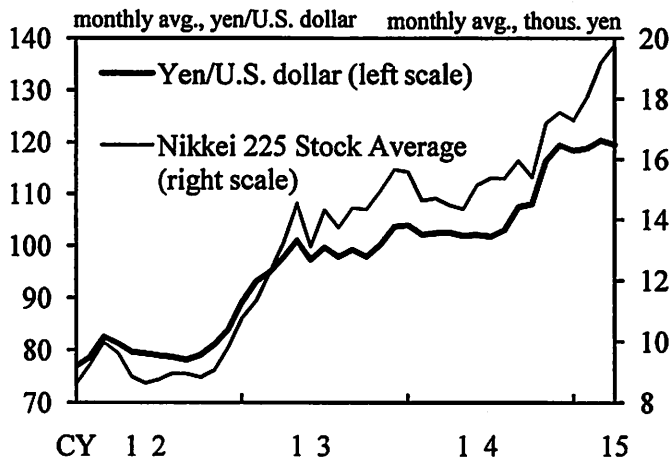
(3) Real Effective Exchange Rates



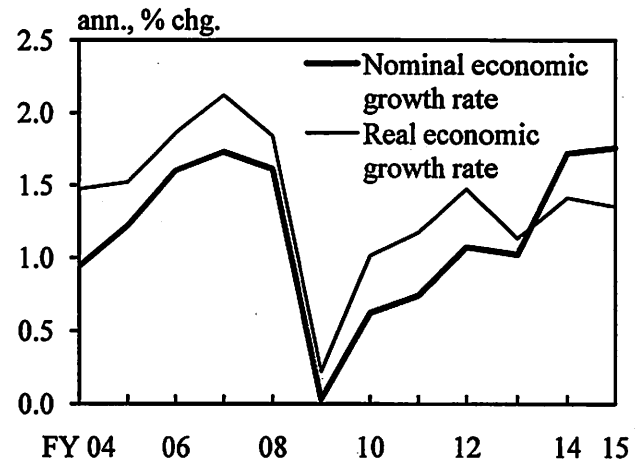
Note: The real effective exchange rates are based on the broad indices of the BIS effective exchange rate.
Sources: Bank for International Settlements (BIS); Bloomberg.

Economic Activity and Financial Developments after QQE

(1) Stock Price and Exchange Rate

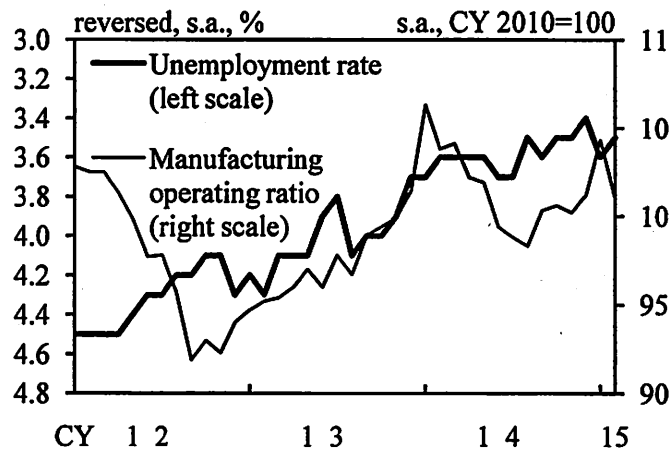


(2) Expected Growth Rate

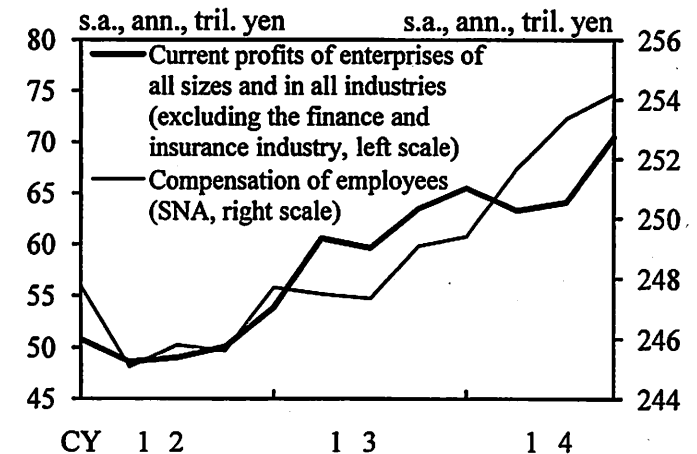
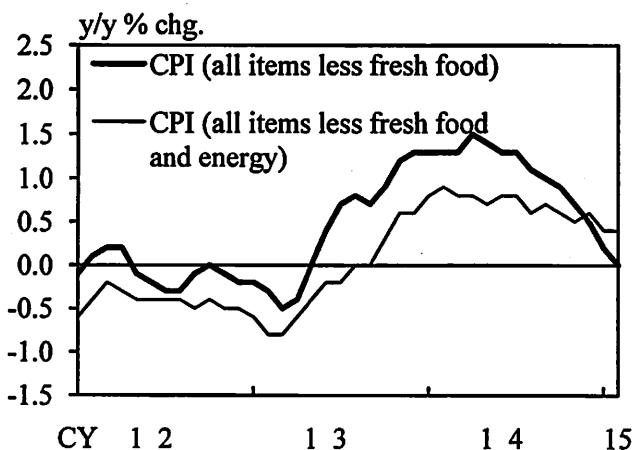
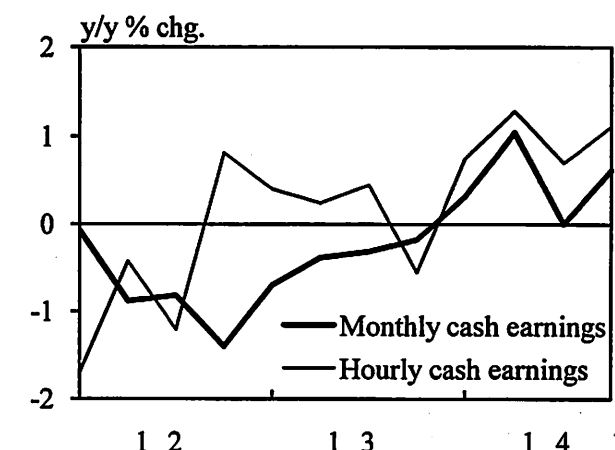


Note: Figures for the expected growth rates are the forecasts for the next 3 years, surveyed in January or February in the previous fiscal year.

(3) Unemployment Rate and Manufacturing Operating Ratio



(4) Corporate Profits and Compensation of Employees

(5) Consumer Price Index¹(6) Wages²

Notes: 1. Figures from April 2014 onward are estimated adjusting the direct effects of the consumption tax hike.

2. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

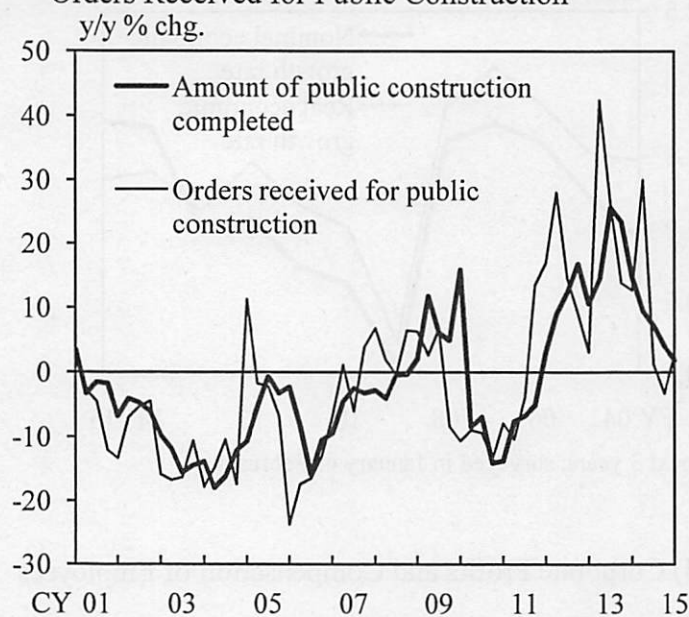
Sources: Cabinet Office, "National Accounts," "Annual Survey of Corporate Behavior";

Ministry of Economy, Trade and Industry, "Indices of Industrial Production";

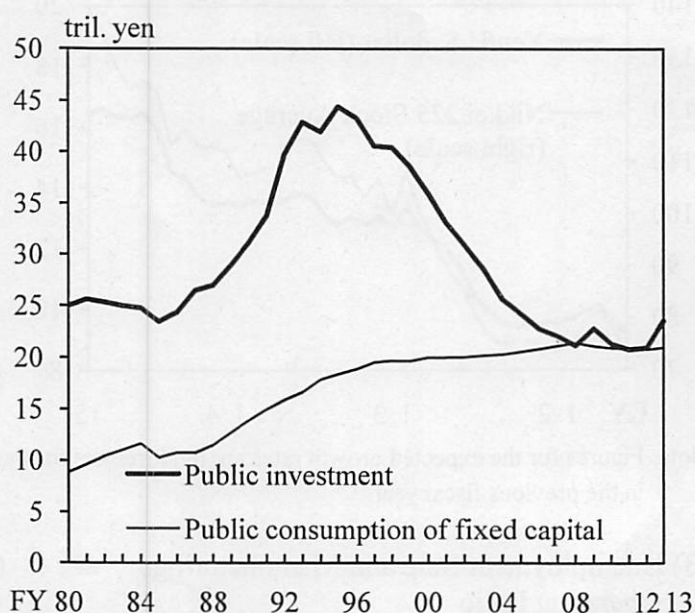
Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bloomberg, etc.

Government Spending

(1) Amount of Public Construction Completed and Orders Received for Public Construction¹



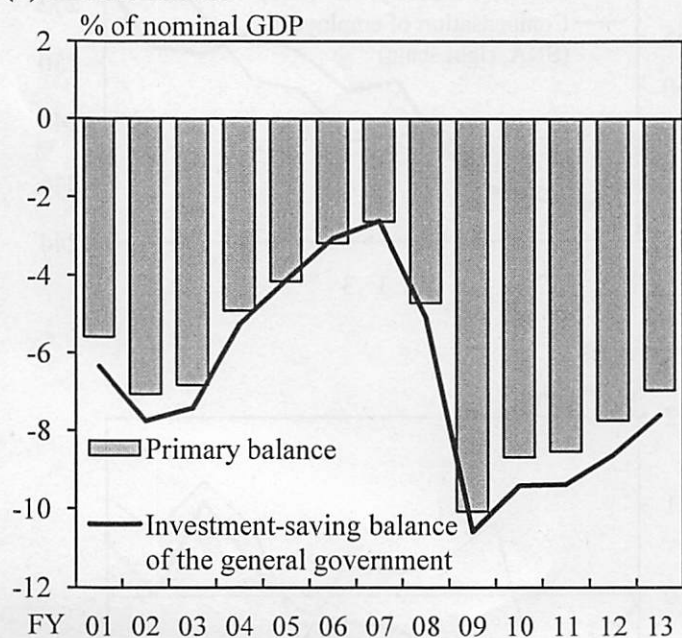
(2) Maintenance and Replacement of Social Capital²



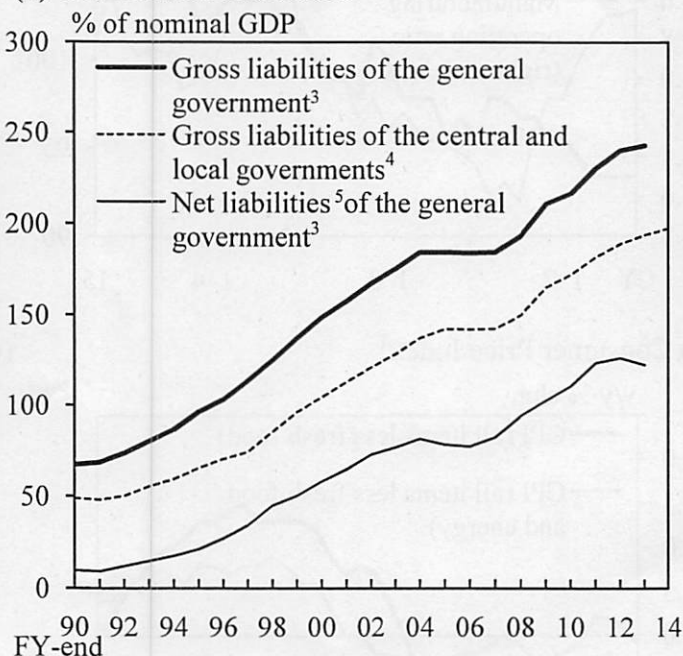
Notes: 1. Figures for 2015/Q1 are January-February averages.

2. Figures up through fiscal 1993 are calculated using the year-on-year rate of change in the figures on the 2000 base.

(3) Fiscal Balance¹



(4) Government Liabilities²



Notes: 1. Factors such as transfer of reserves in a special account to the general account are excluded from the investment-saving balance of the general government.

2. Figures up through fiscal 1993 are on the 2000 base. From fiscal 1994, they are on the 2005 base.

3. The general government consists of the central government, local governments, and social security funds.

4. Outstanding debt reported in "Economic and Fiscal Projections for Medium to Long Term Analysis (February 2015)."

The figure for fiscal 2014 is a projection.

5. Gross liabilities minus financial assets.

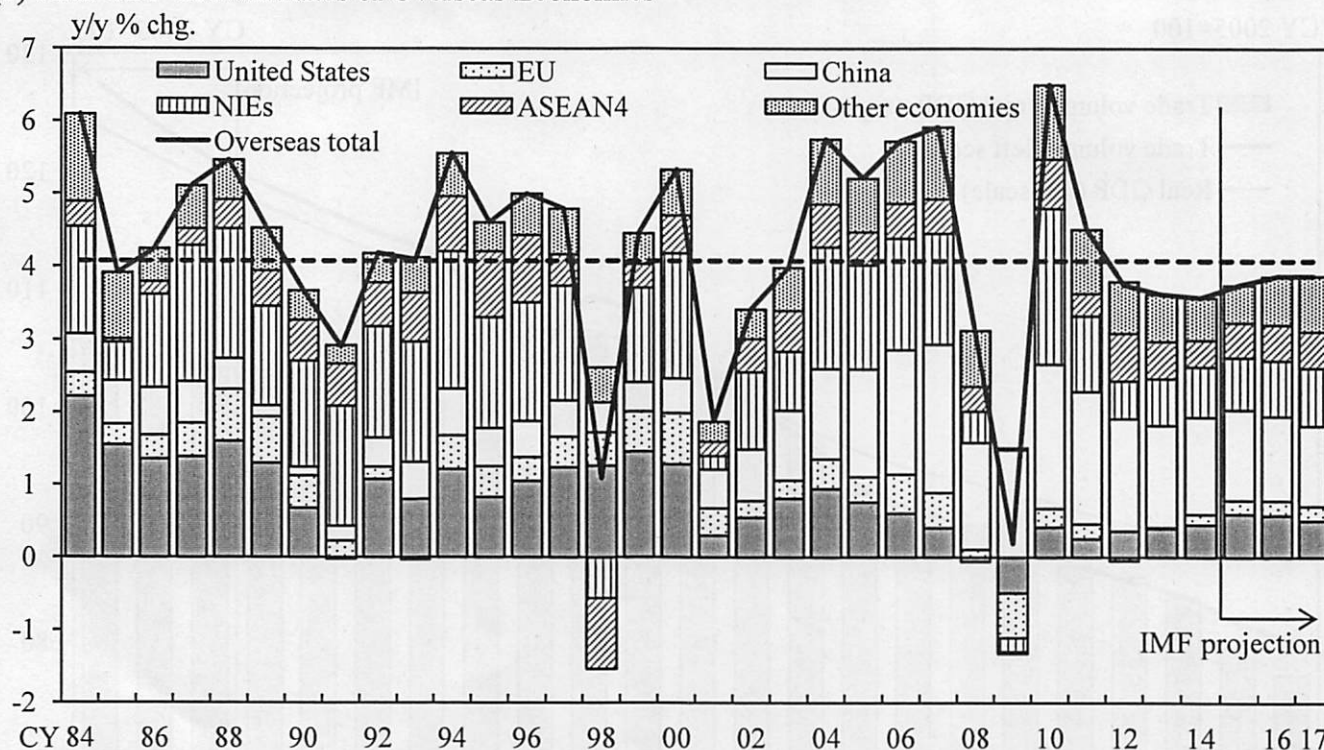
Sources: Ministry of Land, Infrastructure, Transport and Tourism, "Integrated Statistics on Construction Works,"

"Current Survey of Orders Received for Construction";

Cabinet Office, "National Accounts," "Economic and Fiscal Projections for Medium to Long Term Analysis," etc.

Overseas Economies

(1) Real GDP Growth Rates of Overseas Economies



Notes: 1. Figures for the overseas total are the weighted averages of real GDP growth rates using countries' share in Japan's exports as weights. GDP growth rates are from the "World Economic Outlook." The same applies to the chart below.
2. The broken line indicates the average of 1980-2014 (4.1 percent).

(2) Forecast of Real GDP Growth Rates by Major Country and Region

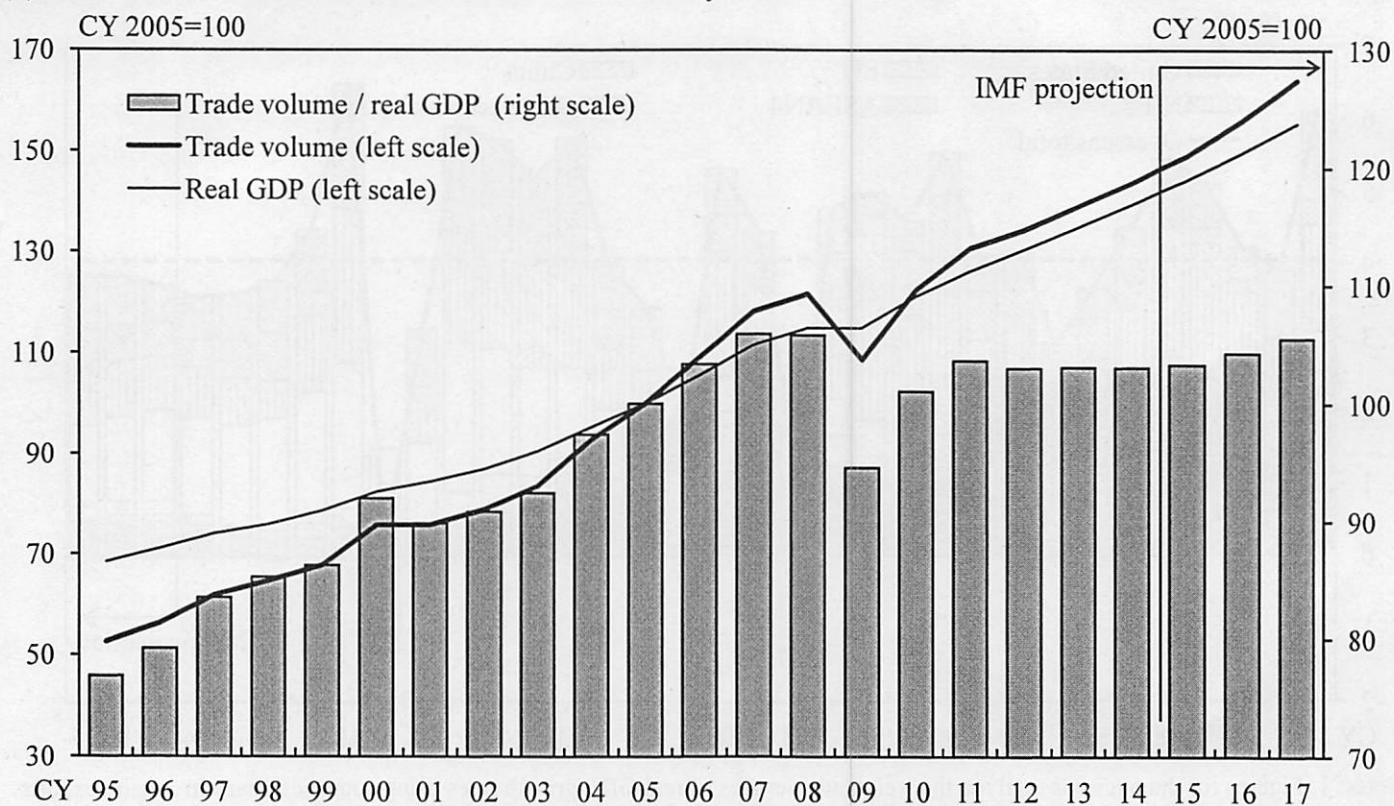
	Actual			IMF projection		
	CY 2012	2013	2014	2015	2016	2017
Overseas total	3.7	3.6	3.6	3.7 (4.0)	3.9 (4.0)	3.9
United States <18.7>	2.3	2.2	2.4	3.1 (3.6)	3.1 (3.3)	2.7
EU <10.4>	-0.5	0.0	1.3	1.8 (1.6)	1.9 (1.8)	1.9
East Asia <50.3>	5.1	4.9	4.7	4.8 (5.1)	4.8 (4.9)	4.8
China <18.3>	7.7	7.7	7.4	6.8 (6.8)	6.3 (6.3)	6.0
NIEs <21.8>	2.3	2.9	3.1	3.3 (3.6)	3.5 (3.8)	3.6
ASEAN4 <10.2>	6.2	4.4	3.3	4.7 (5.2)	4.8 (5.0)	4.9
Other economies <20.7>	3.7	3.1	2.9	2.6 (2.8)	3.3 (3.3)	3.8

Notes: 1. Shares of each country and region in the total amount of Japan's exports in 2014 are shown in angular brackets.
2. Figures in parentheses are projections as of January 2015. For some countries and regions, some figures were not available in January 2015 and figures as of October 2014 were used. Figures for the EU are calculated using April projections and the differences of these projections from January.

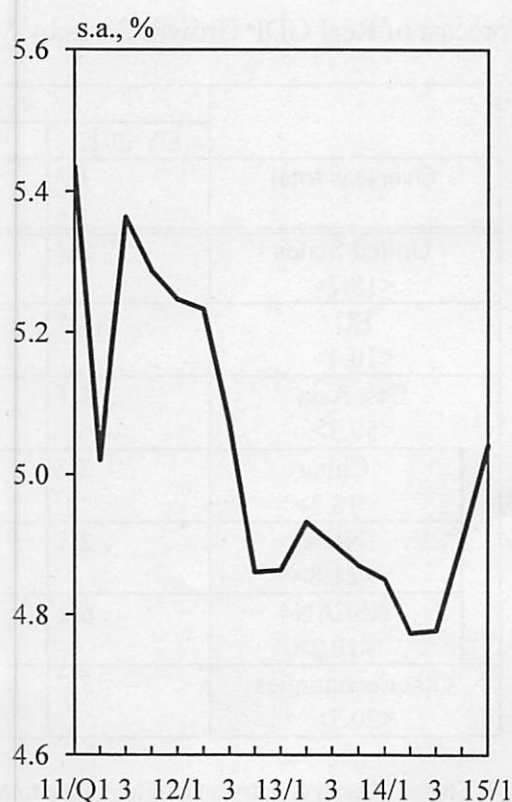
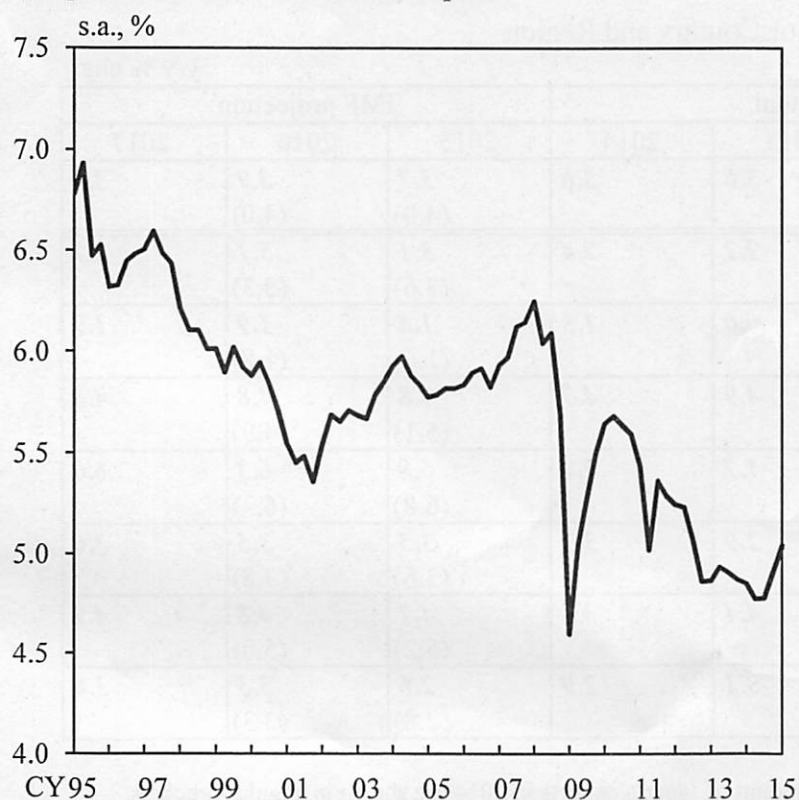
Sources: IMF, "World Economic Outlook"; Ministry of Finance, "Trade Statistics," etc.

World Trade Volume and Japan's Share in World Real Exports

(1) Real GDP and Trade Volume of the World Economy



(2) Japan's Share in World Real Exports

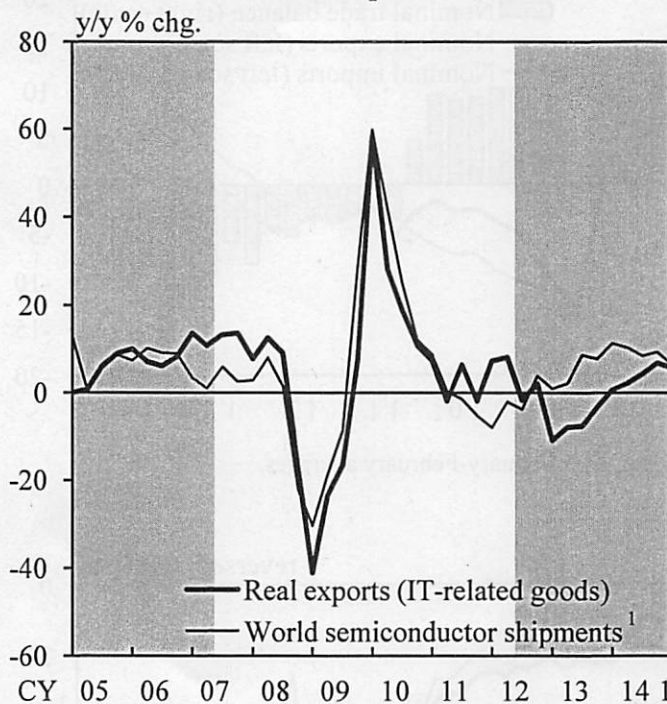


Note: The figure for 2015/Q1 is the January-February average.

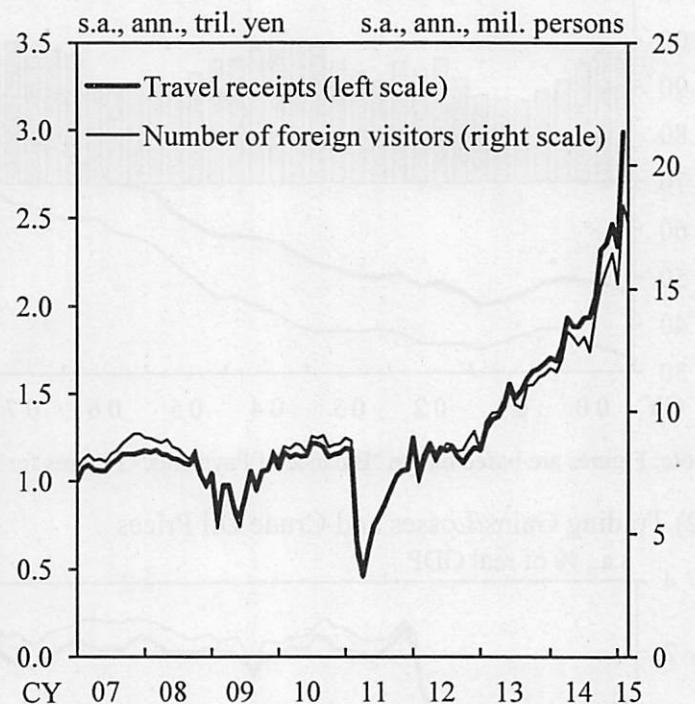
Sources: IMF, "World Economic Outlook"; CPB Netherlands Bureau for Economic Policy Analysis.

Effects of the Yen's Depreciation

(1) World Semiconductor Shipments and IT-Related Goods Exports



(2) Travel Receipts and Number of Foreign Visitors³

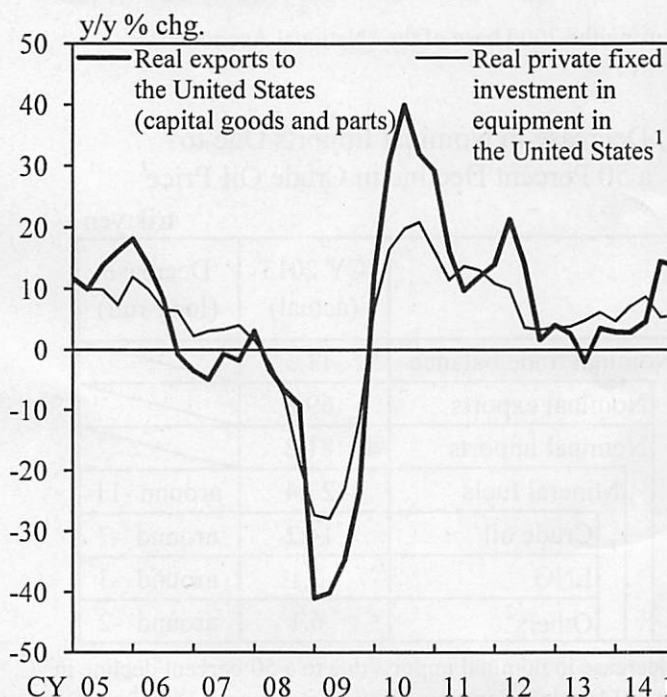


Notes: 1. The figure for 2015/Q1 is the January-February average.

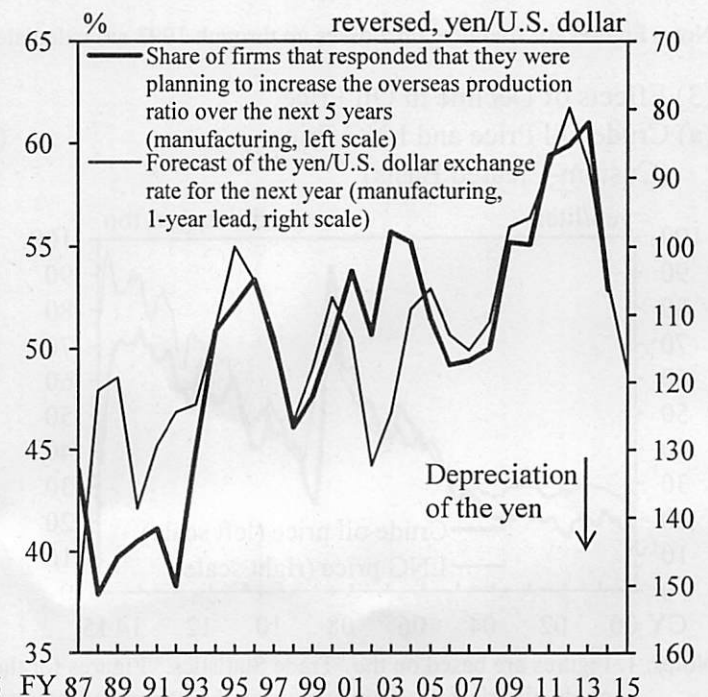
2. Shaded areas indicate periods where the yen is on a depreciating trend. Duration of each period is chosen based on the nominal effective exchange rate and the yen/U.S. dollar rate.

3. Figures are seasonally adjusted by X-12-ARIMA.

(3) Exports of Capital Goods and Parts to the United States, and Fixed Business Investment in the United States



(4) Firms' Forecast of the Overseas Production Ratio

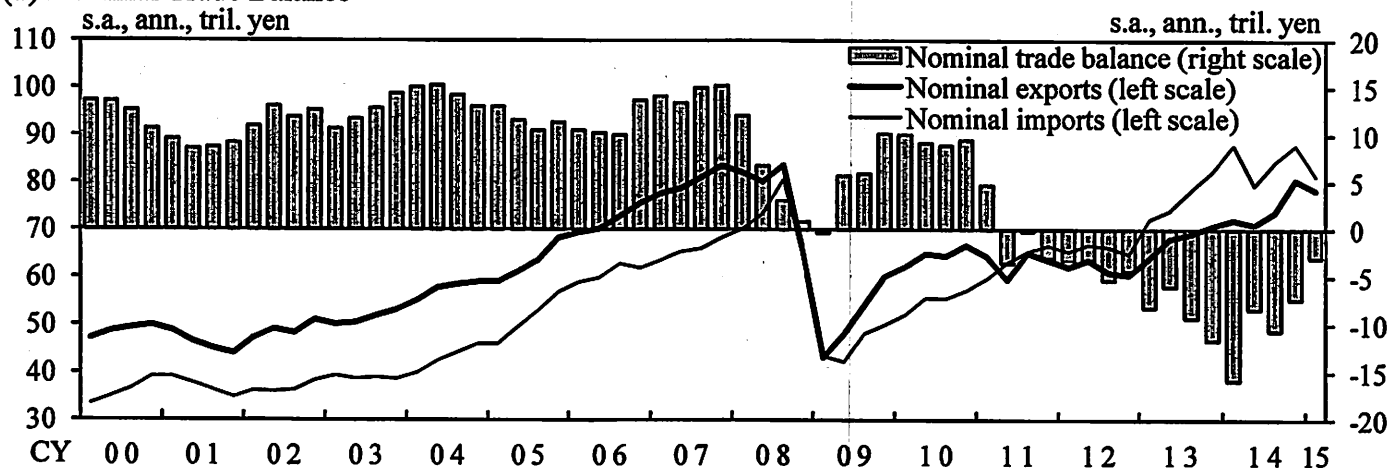


Note: 1. Figures are year-on-year rates of change in the seasonally adjusted series.

Sources: BEA; WSTS; Ministry of Finance, "Trade Statistics"; Ministry of Finance and Bank of Japan, "Balance of Payments"; Bank of Japan, "Corporate Goods Price Index"; Japan National Tourism Organization (JNTO); Cabinet Office, "Annual Survey of Corporate Behavior."

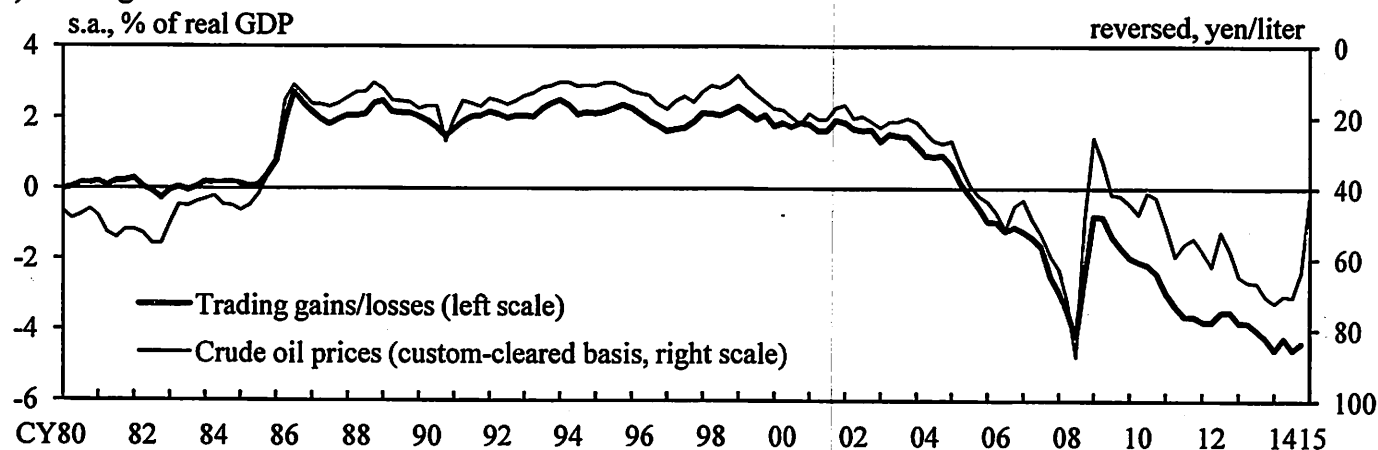
Trade Balance

(1) Nominal Trade Balance



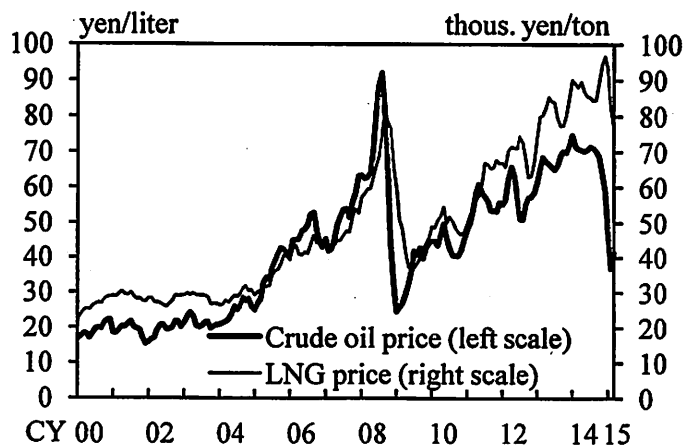
Note: Figures are based on the "Balance of Payments." Figures for 2015/Q1 are January-February averages.

(2) Trading Gains/Losses and Crude Oil Prices



Note: Figures for trading gains/losses up through 1993 are calculated using the 2000 base of the "National Accounts."

(3) Effects of Decline in Oil Price

(a) Crude Oil Price and LNG Price
(Custom-Cleared Basis)(b) Decrease in Nominal Imports Due to
a 50 Percent Decline in Crude Oil Price¹

	CY 2013 (actual)	Decrease (long-run)
Nominal trade balance	-11.5	
Nominal exports	69.8	
Nominal imports	81.2	
Mineral fuels	27.4	around -11
Crude oil	14.2	around -7
LNG	7.1	around -3
Others ²	6.1	around -2

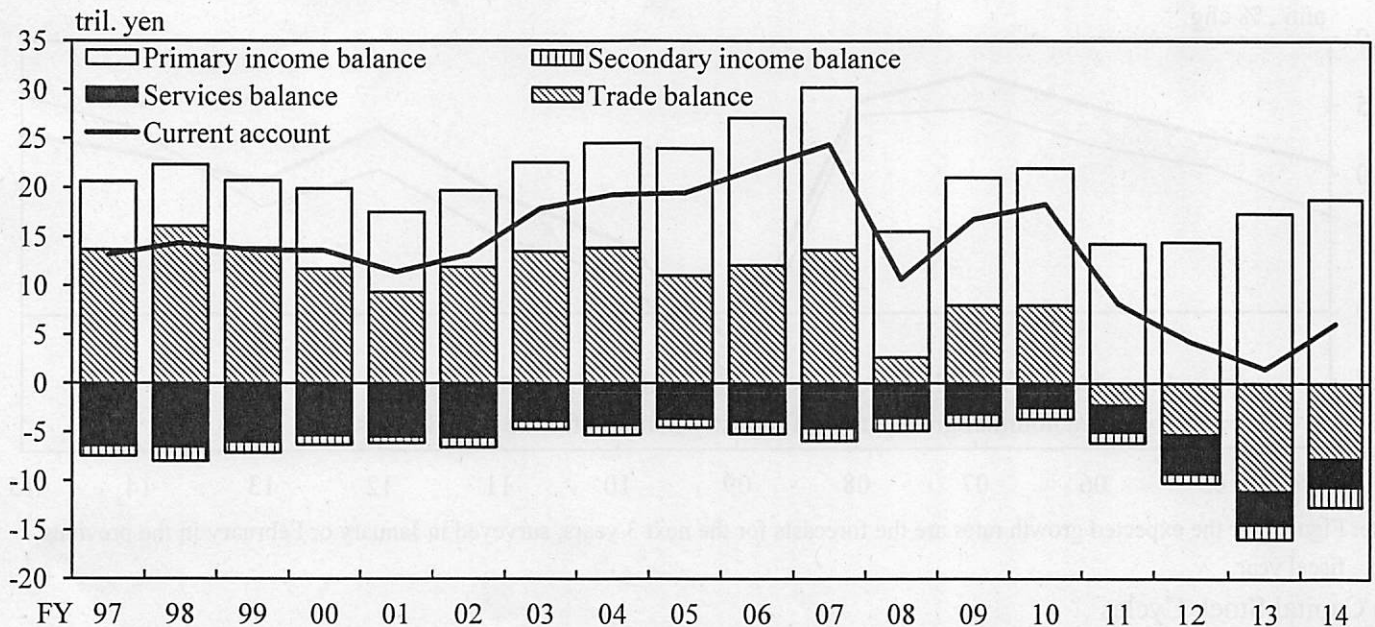
Notes: 1. Figures are based on the "Trade Statistics." Figures for the decrease in nominal imports due to a 50 percent decline in crude oil prices are estimated using the volume of imports in 2014 and the long-run elasticities between Dubai oil and the import prices of crude oil and LNG. Exchange rate is assumed as constant.

2. The decrease in "others" is calculated using the rate of decline in the LNG price.

Sources: Bloomberg; Ministry of Finance, "Trade Statistics"; Ministry of Finance and Bank of Japan, "Balance of Payments"; Cabinet Office, "National Accounts."

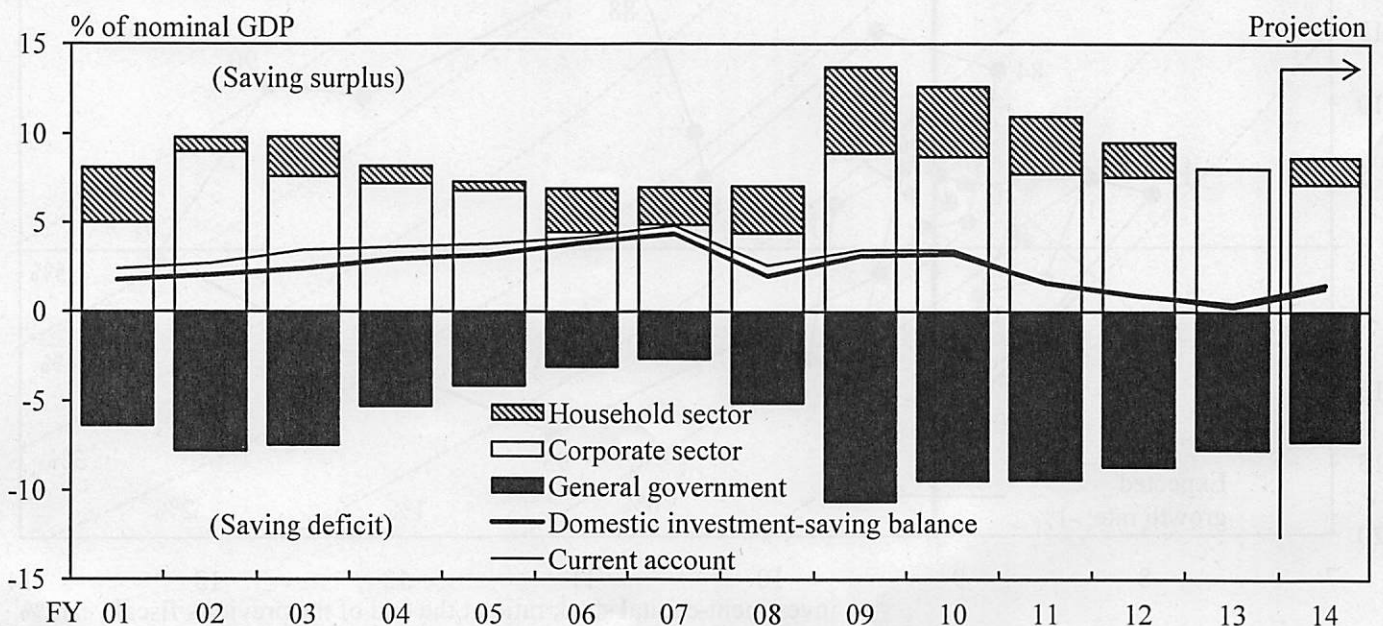
Current Account and Investment-Saving Balance

(1) Current Account



Note: Figures for fiscal 2014 are annualized amounts based on figures for April 2014-February 2015 averages.

(2) Investment-Saving Balance



Notes: 1. The factors described in the note to Chart 29 (3) are excluded.

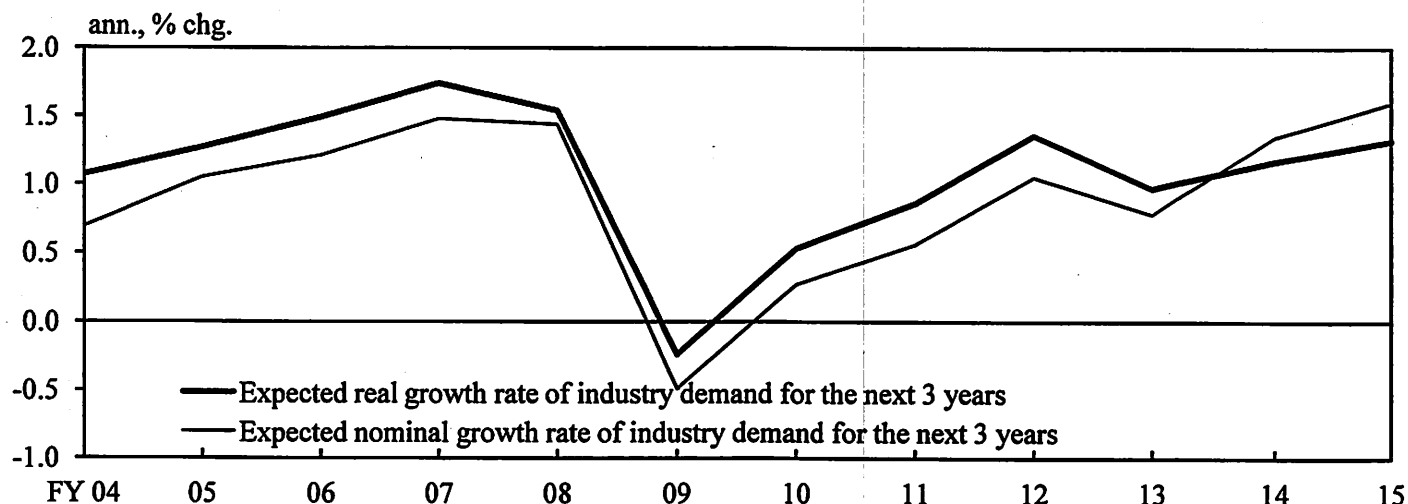
2. The figure for the investment-saving balance of the general government for fiscal 2014 is based on the "Economic and Fiscal Projections for Medium to Long Term Analysis (February 2015)." The figure for the balance of the household sector is estimated by subtracting private consumption expenditure and private residential investment from personal disposable income, which is estimated by the Research and Statistics Department, Bank of Japan. It includes estimated transfers of income from the government to households through economic policy packages. The figure for the balance of the corporate sector is the residual.

3. The domestic investment-saving balance for fiscal 2014 is estimated by adding the difference between the domestic investment-saving balance and the current account in fiscal 2013 (which was 0.2 percent of GDP) to the current account.

Sources: Cabinet Office, "National Accounts," "Economic and Fiscal Projections for Medium to Long Term Analysis"; Ministry of Finance and Bank of Japan, "Balance of Payments."

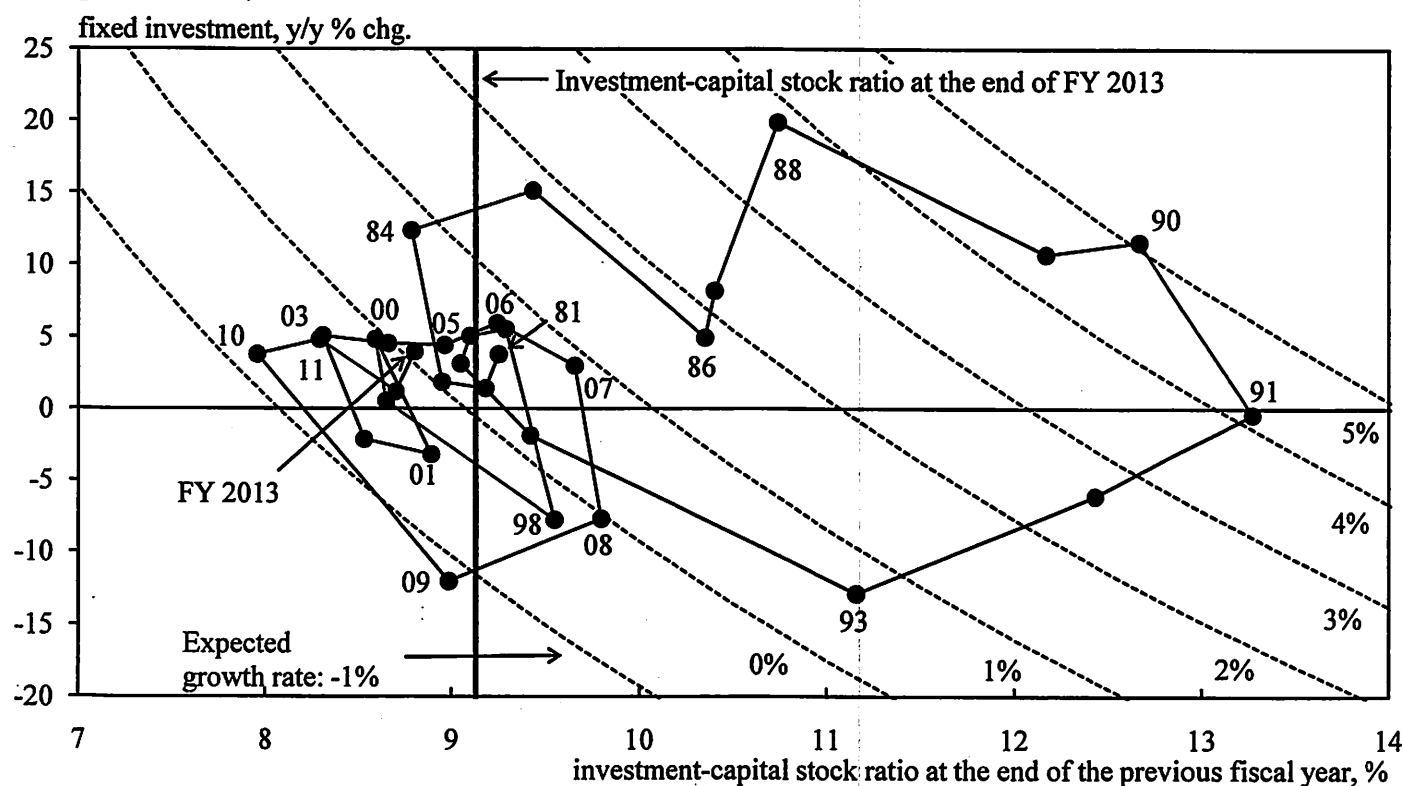
Expected Growth Rate and Capital Stock Cycles

(1) Expected Growth Rate of Industry Demand



Note: Figures for the expected growth rates are the forecasts for the next 3 years, surveyed in January or February in the previous fiscal year.

(2) Capital Stock Cycles

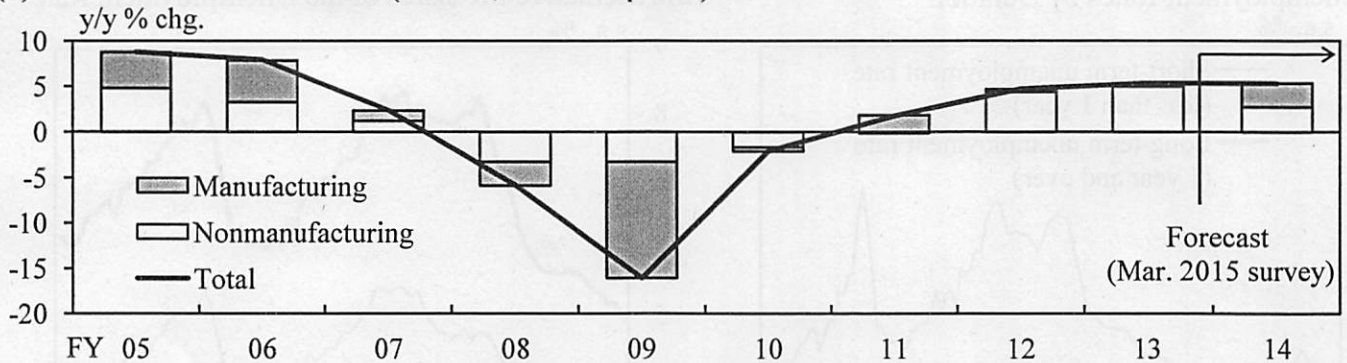


1. The capital stock cycles in the chart show the relationship between the investment-capital stock ratio and the year-on-year rate of change in fixed investment.
2. For a given expected growth rate, the relationship between the two variables follows a hyperbolic curve given by the following equation:

$$\text{Year-on-year rate of change in fixed investment (y-axis)} \times \text{investment-capital stock ratio at the end of the previous fiscal year (x-axis)} = \text{expected growth rate} + \text{trend growth rate of capital coefficient} + \text{depreciation rate}$$
3. What phase of the capital stock cycle fixed investment is in at a particular point in time can be determined by referring to the hyperbolic curve for the expected growth rate at that time.

Business Fixed Investment by Industry

(1) Business Fixed Investment (*Tankan*, All Enterprises)

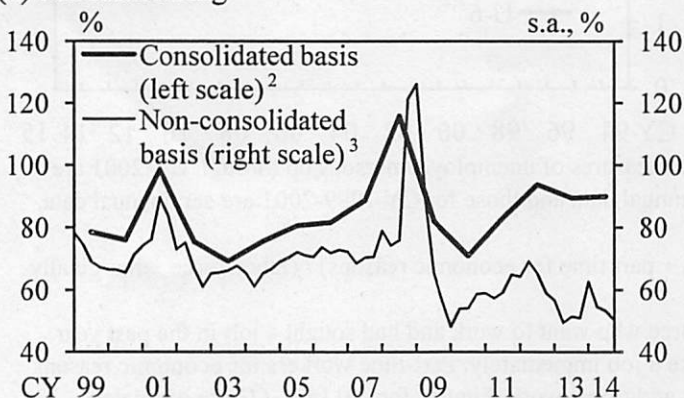


Notes: 1. Figures include software investment and exclude land purchasing expenses.

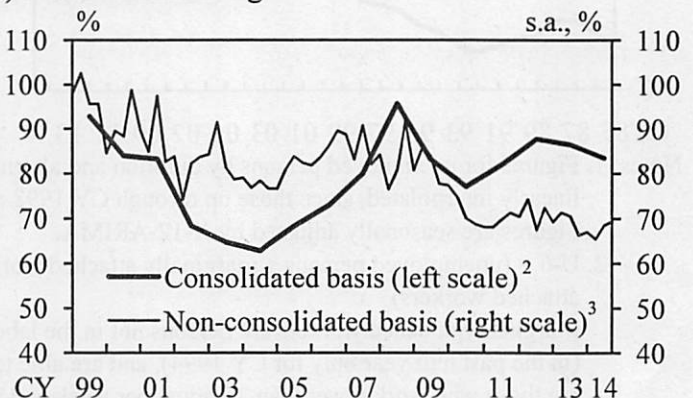
2. Figures up to fiscal 2008 are based on the previous accounting standard for lease transactions, while figures from fiscal 2009 onward are based on the new standard.

(2) Investment-Cash Flow Ratio (Large Enterprises)

(a) Manufacturing



(b) Nonmanufacturing



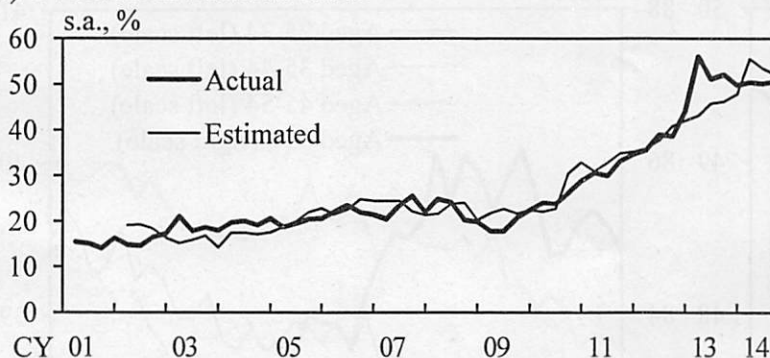
Notes: 1. Cash flow = depreciation expenses + current profits/2.

2. Figures are on a fiscal-year basis, except for those of 2014 which are based on the first half of the fiscal year.

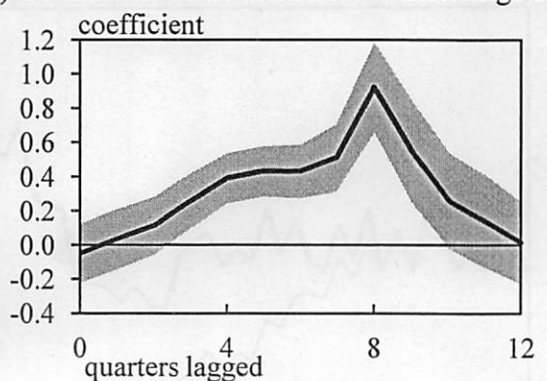
3. Figures are seasonally adjusted by X-12-ARIMA.

(3) Overseas Investment Ratio and Exchange Rate (Large Manufacturing Enterprises)

(a) Overseas Investment Ratio



(b) Coefficient on Real Effective Exchange Rate



Notes: 1. Overseas investment ratio = overseas investment / domestic investment

2. Figures for overseas investment ratio are seasonally adjusted by X-12-ARIMA.

3. The estimated value of the overseas investment ratio is obtained as follows:

Estimated value = $-5.3 + 0.9 \times \log \text{ of real effective exchange rate (eight-quarter lag) } - 0.5 \times \log \text{ of Japan's GDP / overseas GDP (eight-quarter lag) } + 0.6 \times \text{overseas investment ratio (four-quarter lag)}$

4. The shaded area shows the two standard error band.

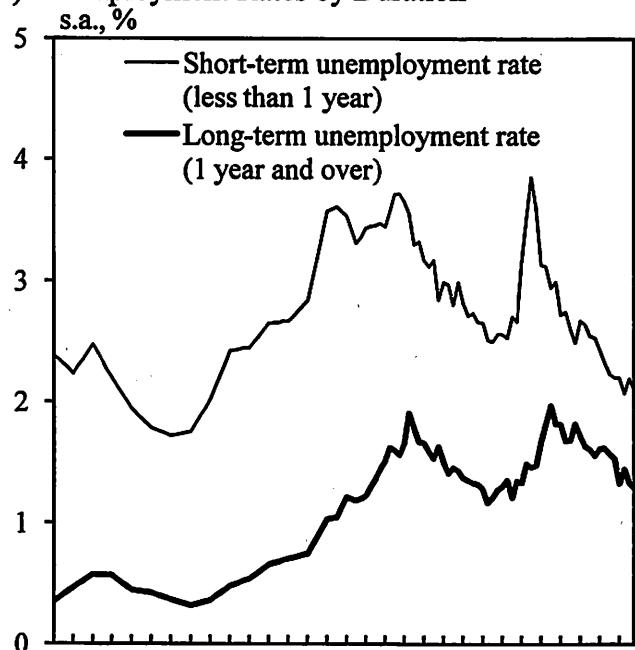
Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly";

Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan";

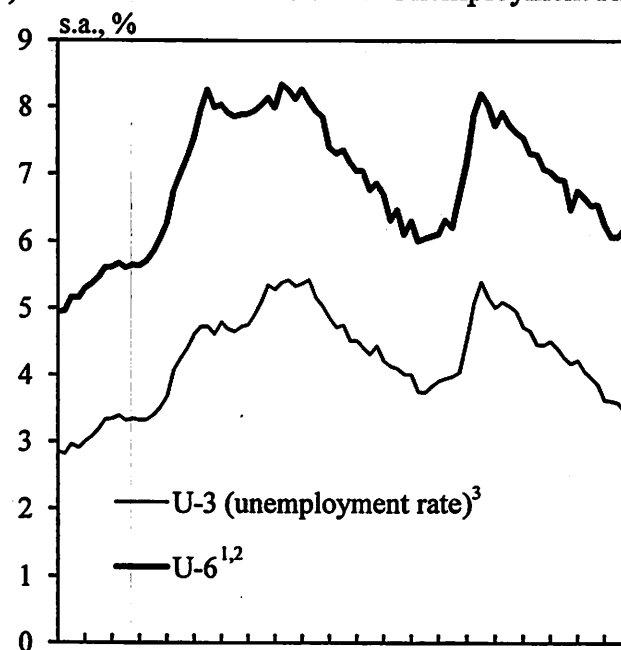
Ministry of Economy, Trade and Industry, "Quarterly Survey of Overseas Subsidiaries," etc.

Unemployment Rates and Labor Force Participation Rates

(1) Unemployment Rates by Duration¹



(2) Alternative Measures of the Unemployment Rate



CY85 87 89 91 93 95 97 99 01 03 05 07 09 11 13 14

CY94 96 98 00 02 04 06 08 10 12 14 15

Notes: 1. Figures for unemployed persons by duration and alternative measures of unemployed persons up through CY 2001 are linearly interpolated, since those up through CY 1998 are annual data and those for CY 1999-2001 are semiannual data. Figures are seasonally adjusted by X-12-ARIMA.

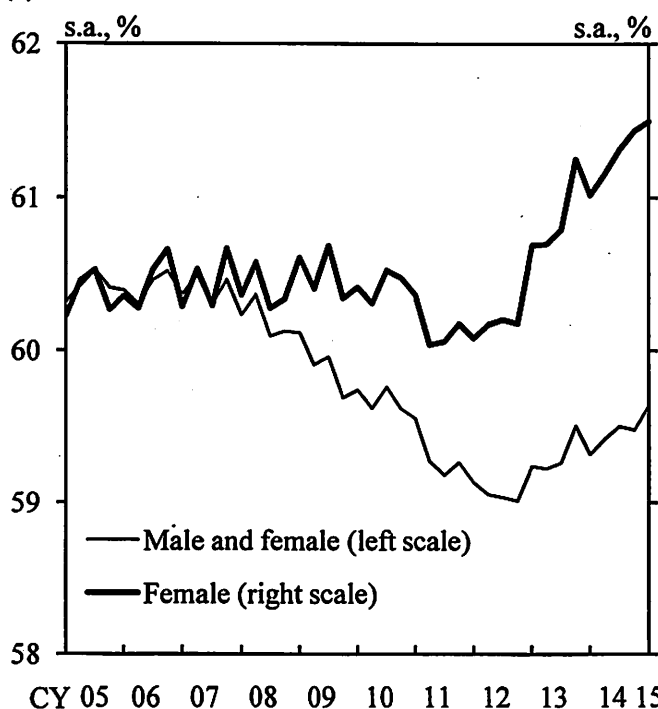
2. U-6 = (unemployed persons + marginally attached workers + part time for economic reasons) / (labor force + marginally attached workers)

Marginally attached workers are persons not in the labor force who want to work and had sought a job in the past year (in the past half year only for CY 1994), and are able to take a job immediately. Part-time workers for economic reasons are those who work fewer than 35 hours per week and seek additional work. Figures for 2011/Q1-Q3 are estimated values. Figures for workers employed part-time for economic reasons for 2013/Q1-2014/Q4 are estimated values.

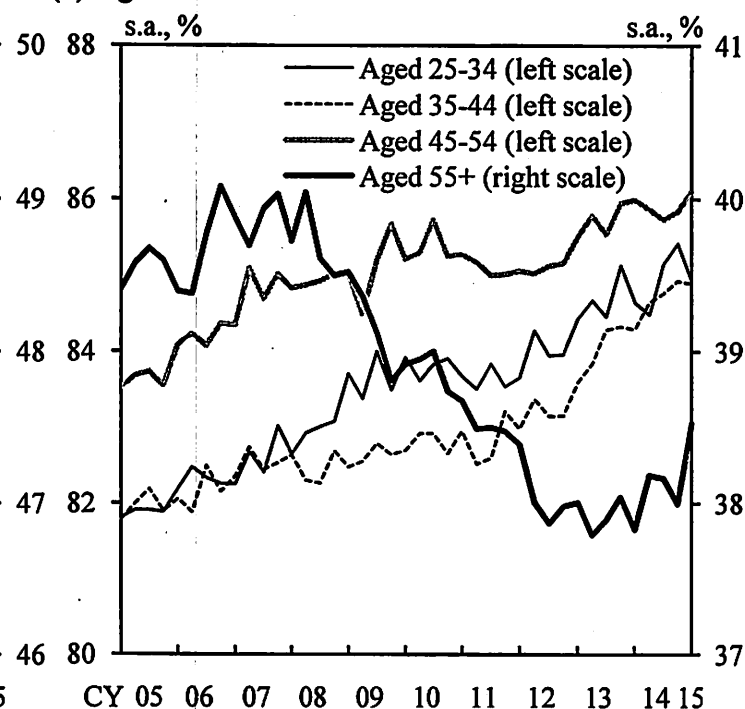
3. Figures for 2015/Q1 are January-February averages. The same rule applies to the charts below.

(3) Labor Force Participation Rates

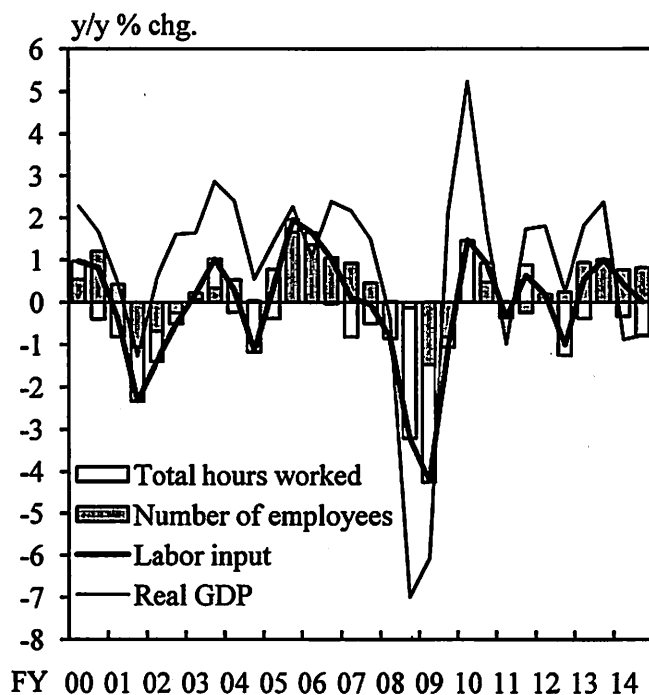
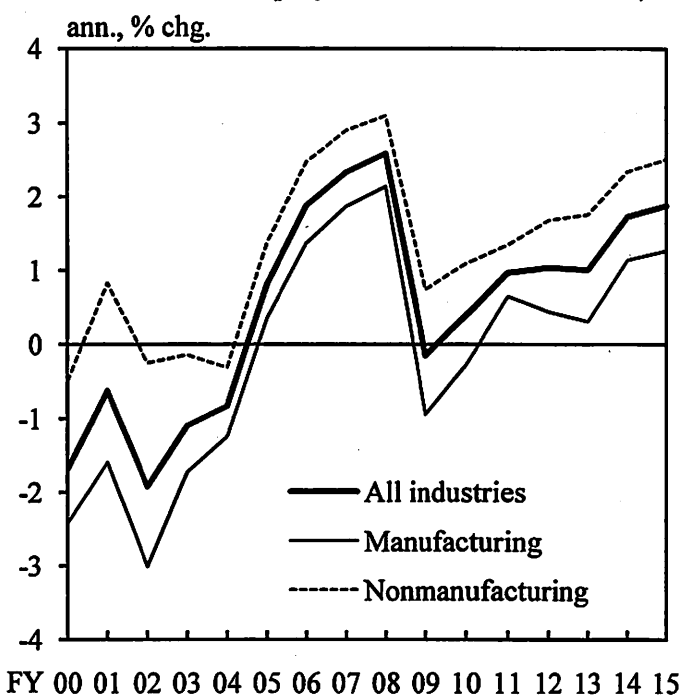
(a) Male and Female



(b) Age



Wages and Employee Income

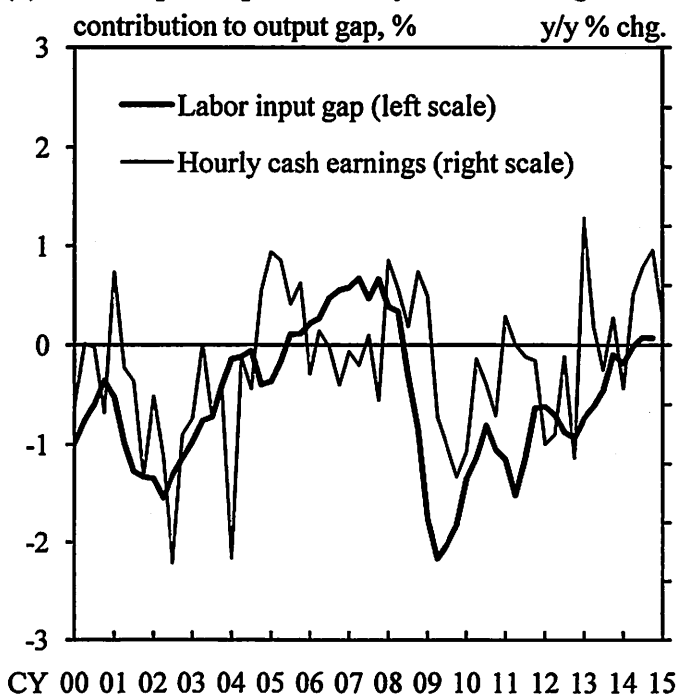
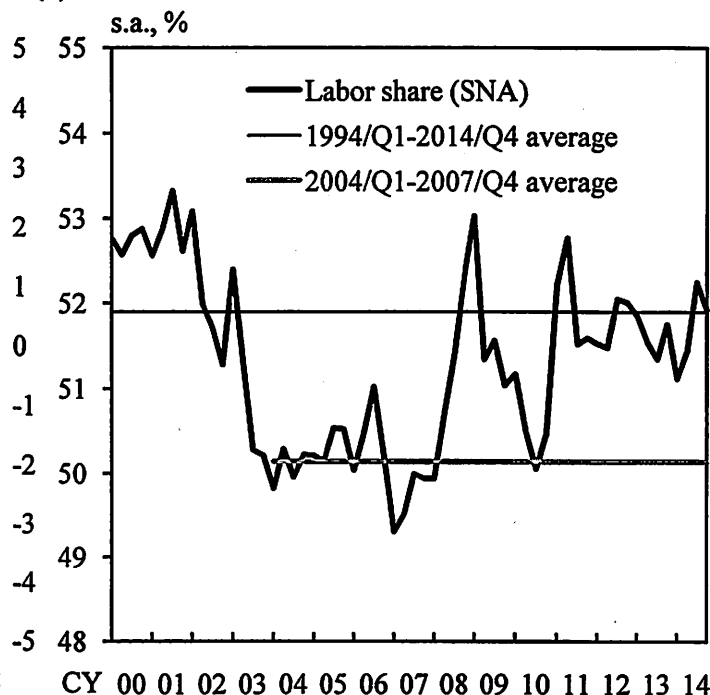
(1) Labor Input¹(2) Firms' Hiring Stance (Expected Changes in the Number of Employees for the Next 3 Years)²

Notes: 1. Figures for the second half of fiscal 2014 are October 2014-February 2015 averages (except real GDP).

The figure for real GDP for the second half of 2014 is the year-on-year rate of change in 2014/Q4.

Labor input = number of employees (Labour Force Survey) × total hours worked

2. Figures for the expected changes in the number of employees are the forecasts for the next 3 years, surveyed in January or February in the previous fiscal year.

(3) Labor Input Gap and Hourly Cash Earnings¹(4) Labor Share²

Notes: 1. The figure for 2015/Q1 is the January-February average.

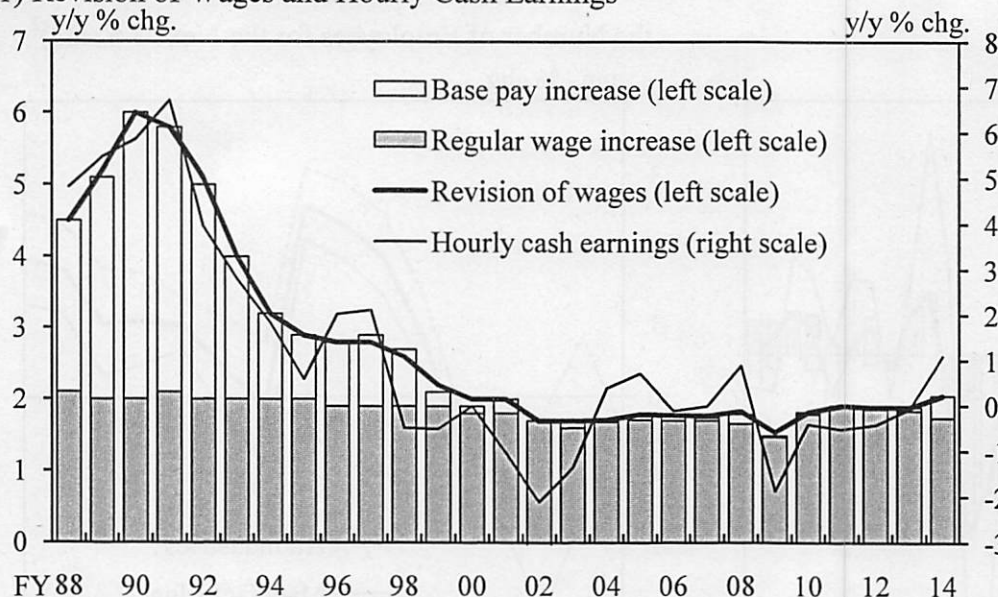
2. Labor share = compensation of employees / nominal GDP × 100

Sources: Cabinet Office, "National Accounts," "Annual Survey of Corporate Behavior";

Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service";

Ministry of Internal Affairs and Communications, "Labour Force Survey."

Base Pay Increase

(1) Revision of Wages and Hourly Cash Earnings¹

Notes: 1. Figures for hourly cash earnings up through fiscal 1990 are for establishments with 30 or more employees.

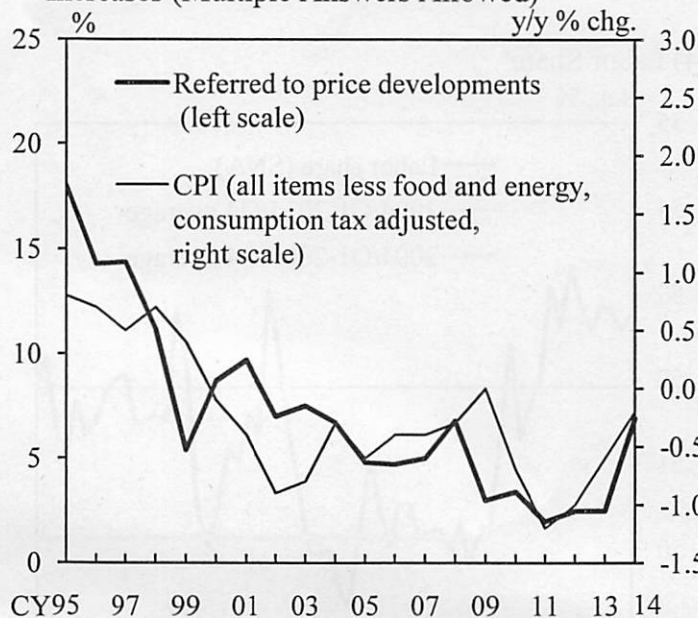
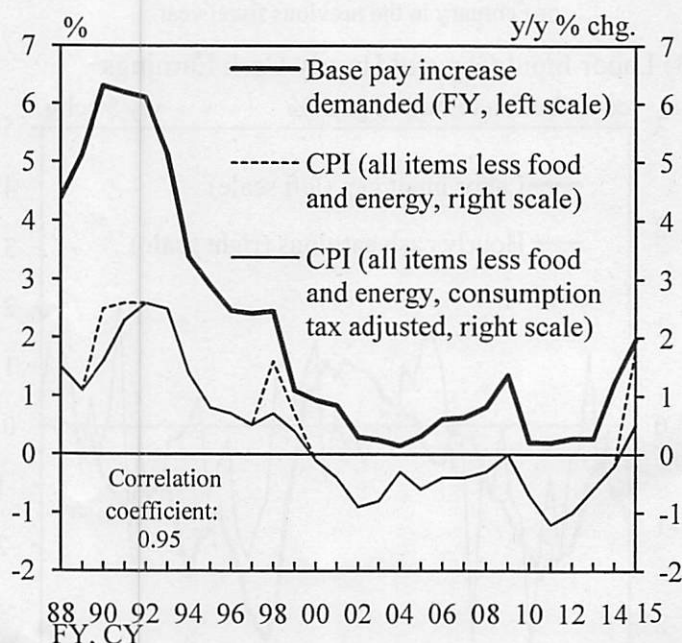
The figure for fiscal 2014 is the April 2014-February 2015 average.

2. The figure for the base pay increase demanded for fiscal 2015 is calculated based on the assumption that the regular wage increase demanded for fiscal 2015 is equivalent to that demanded for fiscal 2014.

The same rule applies to the chart below.

Base Pay Increase
Demanded and Granted²
(RENGO)

	Demanded	Granted
FY 2014	Eighth summary, final (as of July 1)	
	1.23%	0.38%
FY 2015	Fourth summary (as of April 14)	
	1.96%	0.67%

(2) Share of Respondents Referring to Price
Developments When Determining Wage
Increases (Multiple Answers Allowed)¹(3) Base Pay Increase Demanded and Developments
in the CPI^{1,2}

Notes: 1. Consumption tax adjusted CPI figures exclude the estimated effect of changes in the consumption tax rate.

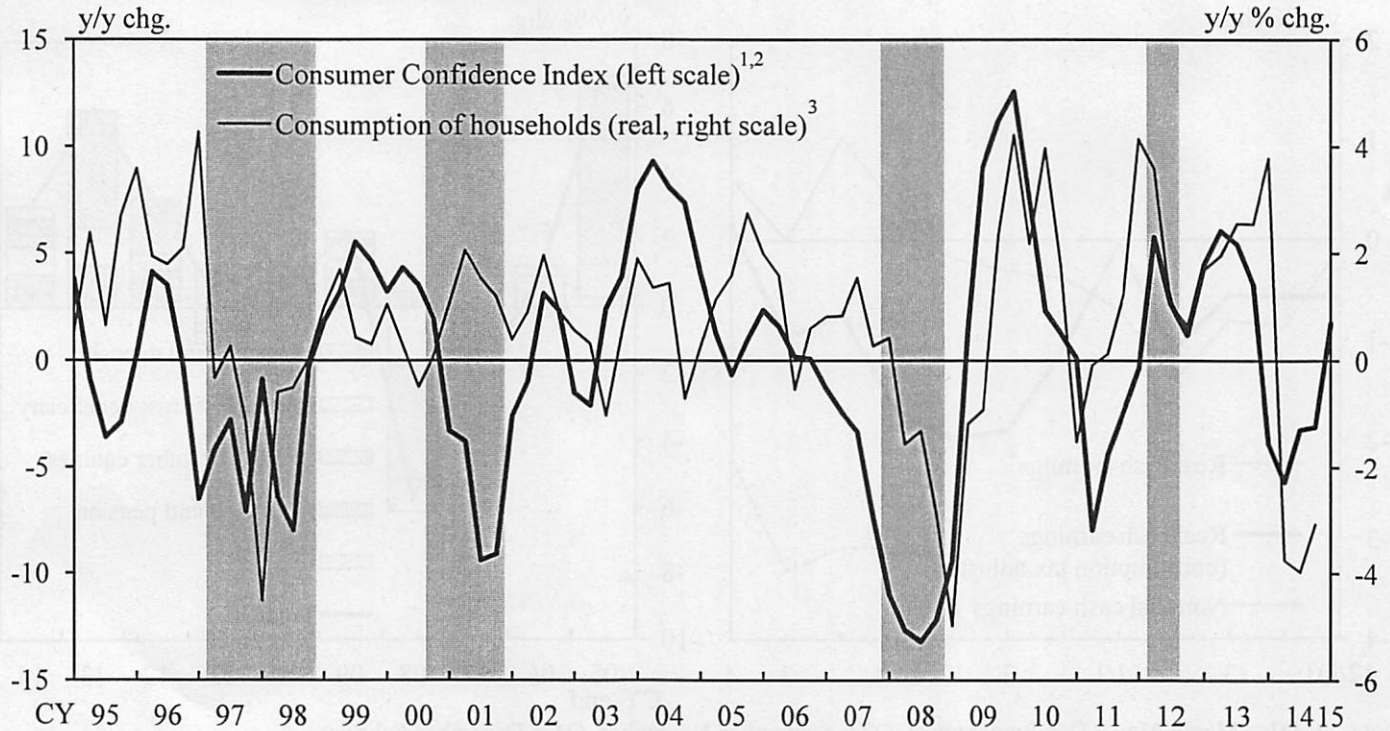
Figures for the CPI are plotted with a one-year lead.

2. Up through fiscal 2013 figures for the base pay increase demanded are calculated based on the assumption that the regular wage increase demanded was equivalent to that granted. The correlation coefficient is for the correlation between the base pay increase demanded and the rate of change in the CPI (all items less food and energy, consumption tax adjusted) from fiscal 1988 to fiscal 2015.

Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Survey on Wage Increase"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Japanese Trade Union Confederation (RENGO); Central Labour Relations Commission, "Comprehensive Survey on Wage Conditions"; The Institute of Labour Administration.

Developments in Private Consumption

(1) Consumer Confidence and Private Consumption



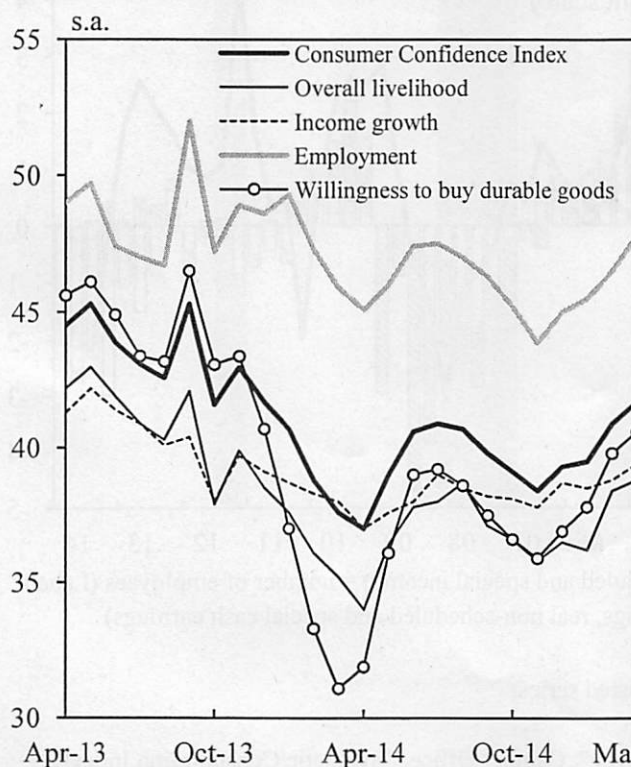
Notes: 1. The year-on-year changes are computed using figures in the last month of each quarter up to 2004/Q1 and quarterly averages from 2004/Q2 onward.

2. Figures up to 2013/Q1 are based on survey data collected on the basis of home visits. The same applies to Chart 40 (3).

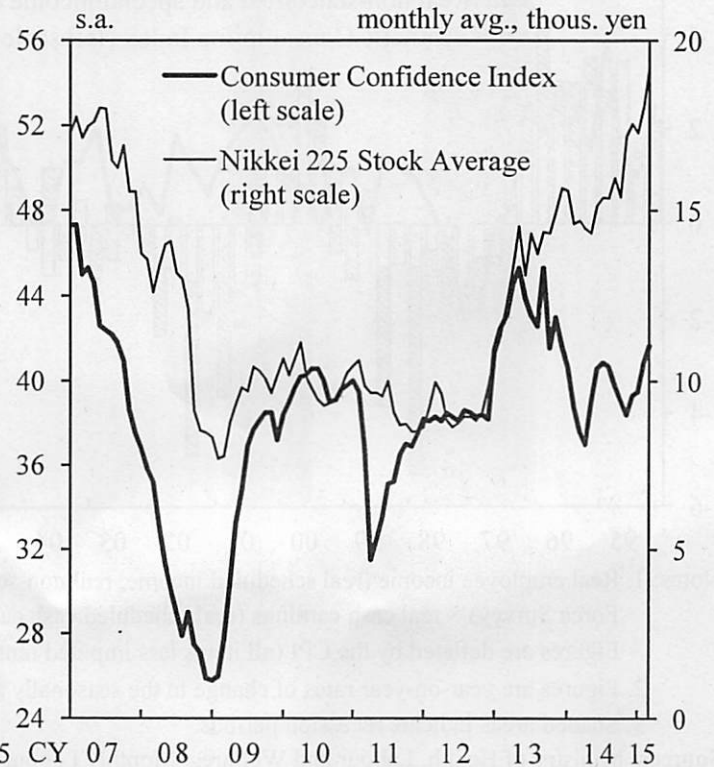
3. Imputed rent is excluded.

4. Shaded areas indicate recession periods.

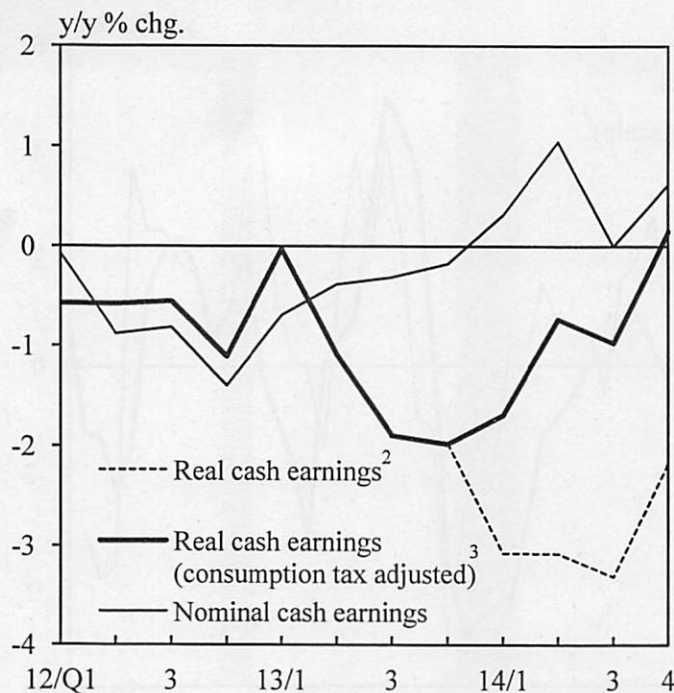
(2) Components of Consumer Confidence



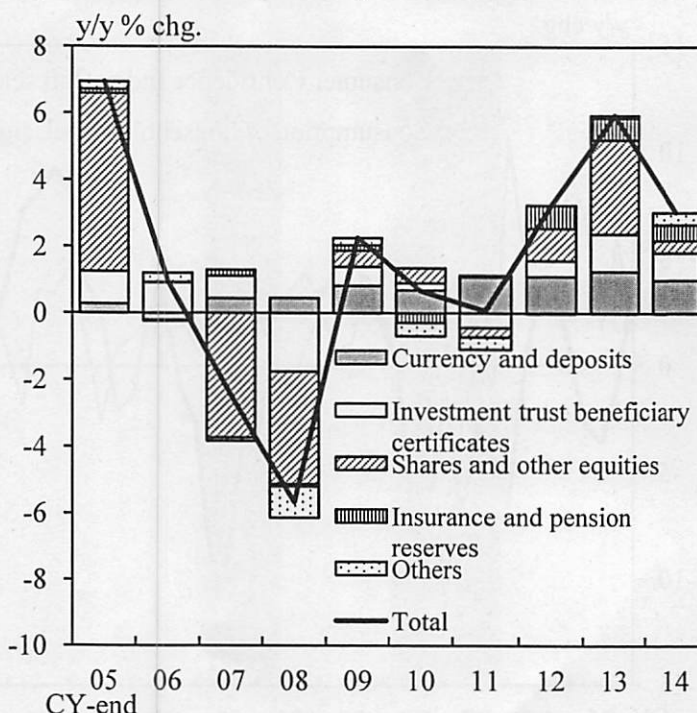
(3) Stock Price and Consumer Confidence



Environment Surrounding Private Consumption

(1) Real Cash Earnings¹

(2) Financial Assets Held by Households



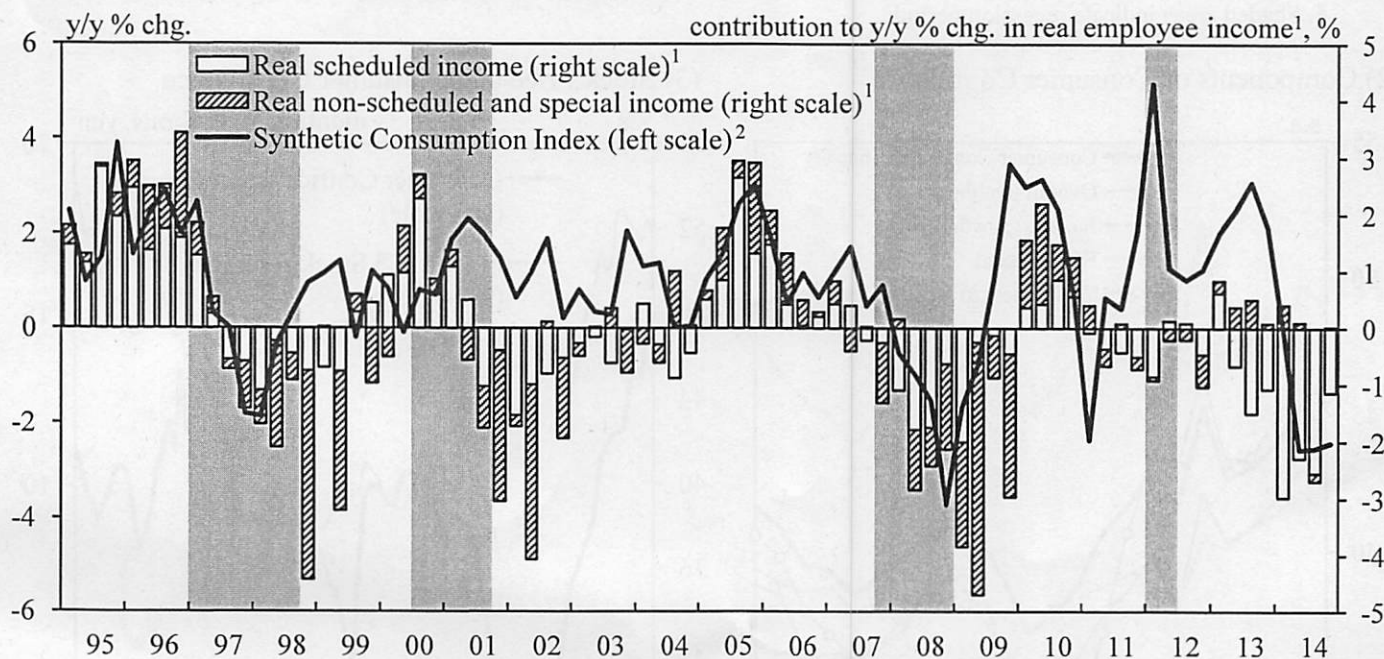
Notes: 1. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.

The same definition applies to the chart below.

2. Deflated by the CPI (all items less imputed rent).

3. Deflated by the CPI (all items less imputed rent) that is estimated adjusting the direct effects of the consumption tax hike.

(3) Real Employee Income and Private Consumption



Notes: 1. Real employee income (real scheduled income, real non-scheduled and special income) = number of employees (Labour Force Survey) × real cash earnings (real scheduled cash earnings, real non-scheduled and special cash earnings). Figures are deflated by the CPI (all items less imputed rent).

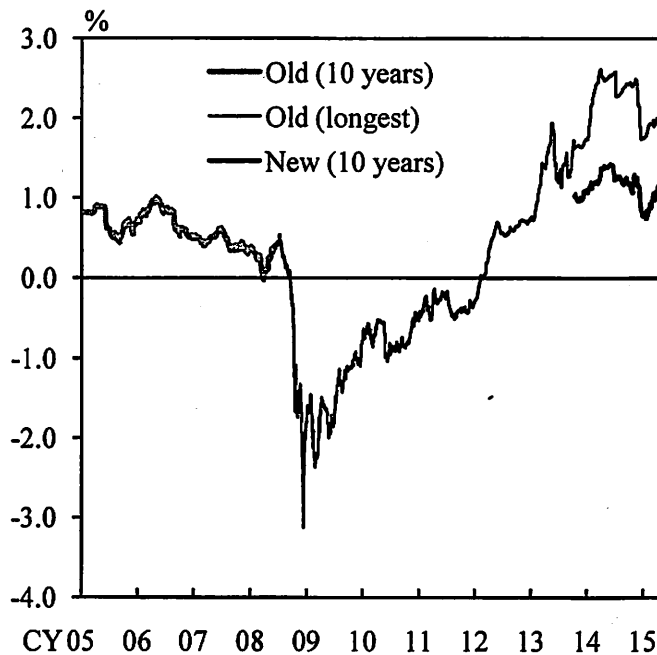
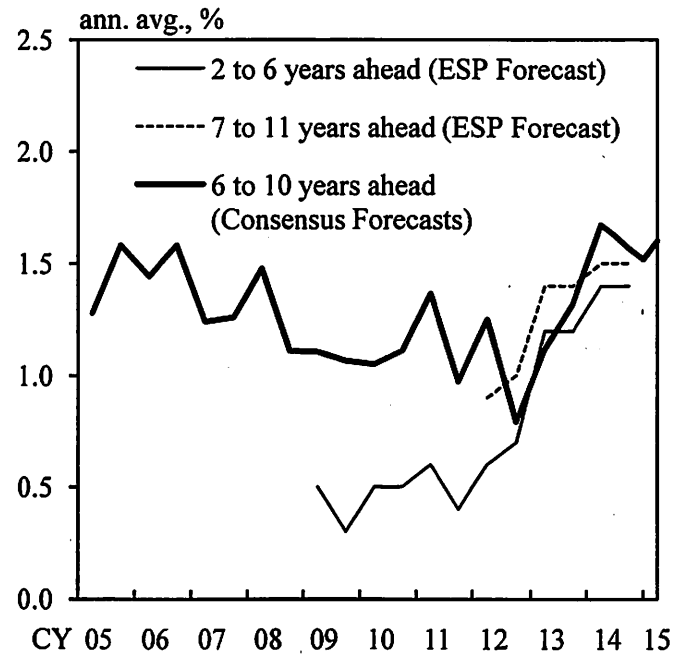
2. Figures are year-on-year rates of change in the seasonally adjusted series.

3. Shaded areas indicate recession periods.

Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Cabinet Office, "Synthetic Consumption Index"; Ministry of Internal Affairs and Communications, "Consumer Price Index," "Labour Force Survey"; Bank of Japan, "Flow of Funds Accounts."

Inflation Expectations (1)

(1) Market Participants

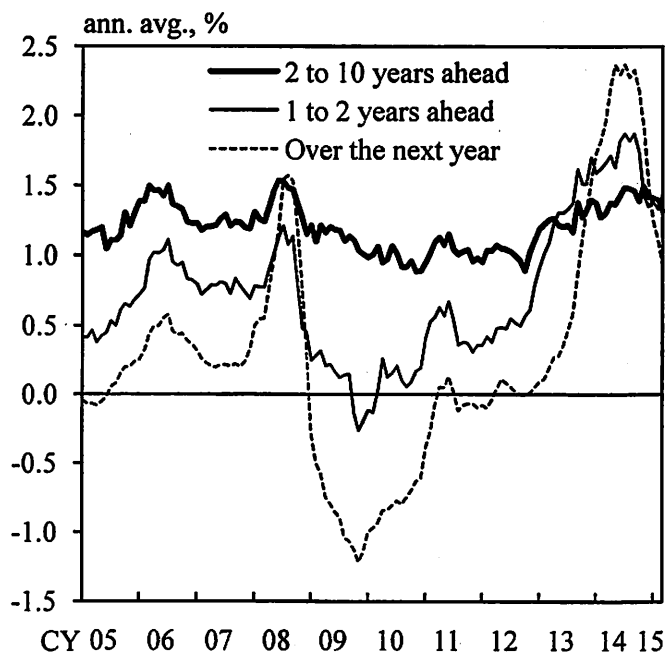
(BEI for Inflation-Indexed JGBs)¹(2) Economists²

Notes: 1. BEI (break-even inflation) rates are yield spreads between fixed-rate coupon-bearing JGBs and inflation-indexed JGBs. Inflation-indexed JGBs issued since October 2013 are designated as "new," while the rest are designated as "old." Figures for "old (longest)" are calculated using yield data for issue No. 16 of inflation-indexed JGBs, which matures in June 2018.

2. Figures for the Consensus Forecasts are compiled every January, April, July, and October. Those up through April 2014 were compiled every April and October. Figures for the ESP Forecast are compiled every June and December, and exclude the effects of the consumption tax hikes.

(3) Market Participants

(a) QUICK Survey



(b) Survey by Mizuho Securities

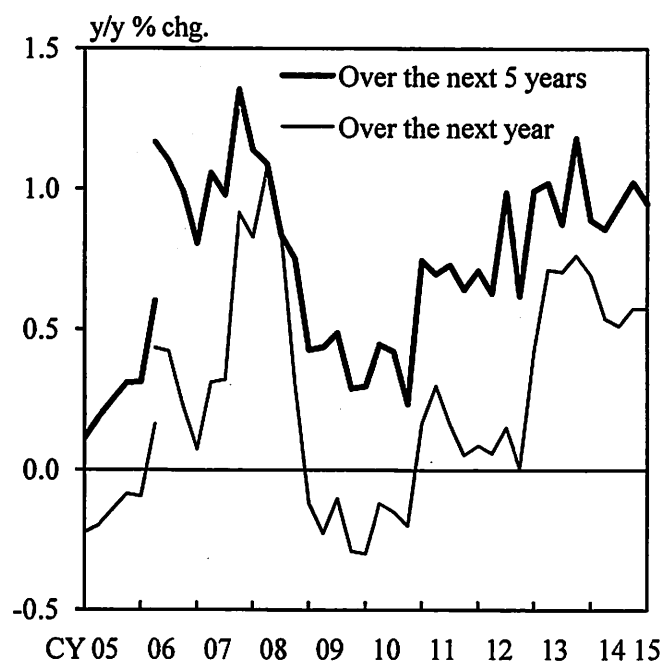
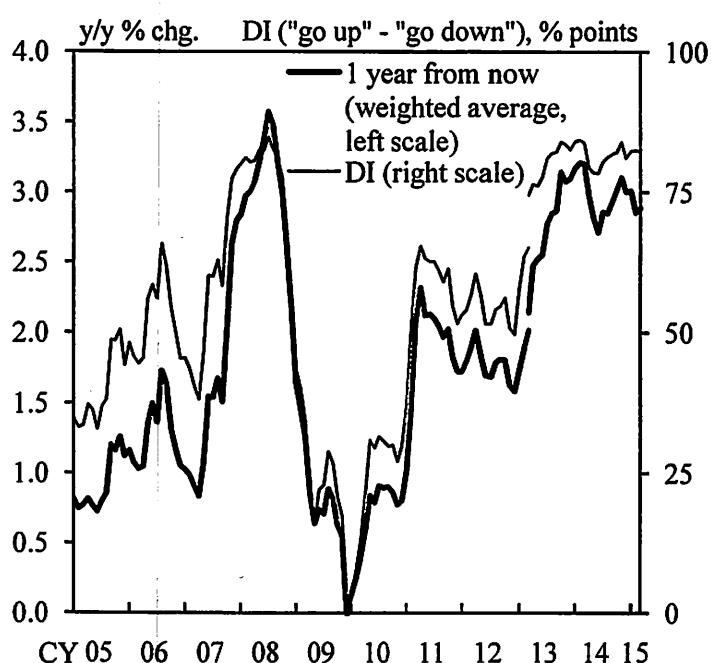


Note: From the September 2013 survey, the QUICK Monthly Market Survey (Bonds) has asked respondents to include the effects of the consumption tax hikes. Figures for the survey by Mizuho Securities exclude the effects of the consumption tax hikes.

Sources: Consensus Economics Inc., "Consensus Forecasts"; JCER, "ESP Forecast"; QUICK, "QUICK Monthly Market Survey (Bonds)"; Mizuho Securities, "Investor Survey"; Bloomberg.

Inflation Expectations (2)

(1) Households

(a) Opinion Survey on the General Public's Views and Behavior^{1,2}(b) Consumer Confidence Survey^{3,4}

Notes: 1. Figures are estimated using the modified Carlson-Parkin method. For details, see "On Inflation Expectations," Bank of Japan Review Series, 2008-J-15 (available in Japanese only).

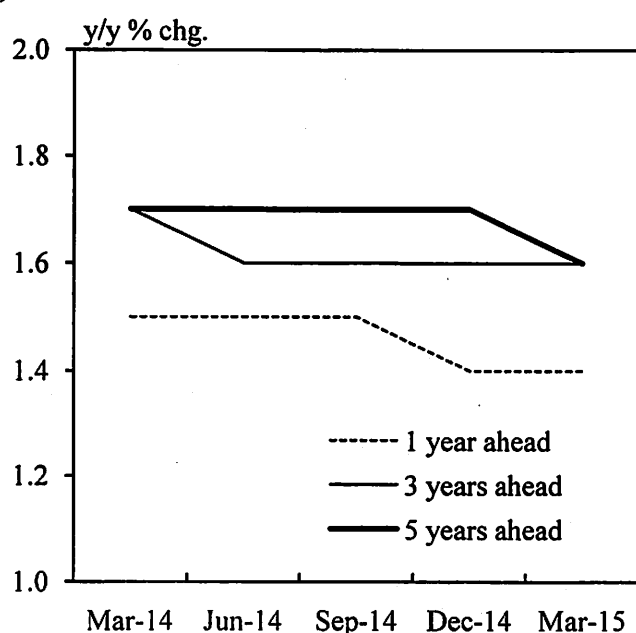
2. From the June 2013 survey, the Opinion Survey has asked respondents to exclude the effects of the consumption tax hikes.

3. Figures are for all households.

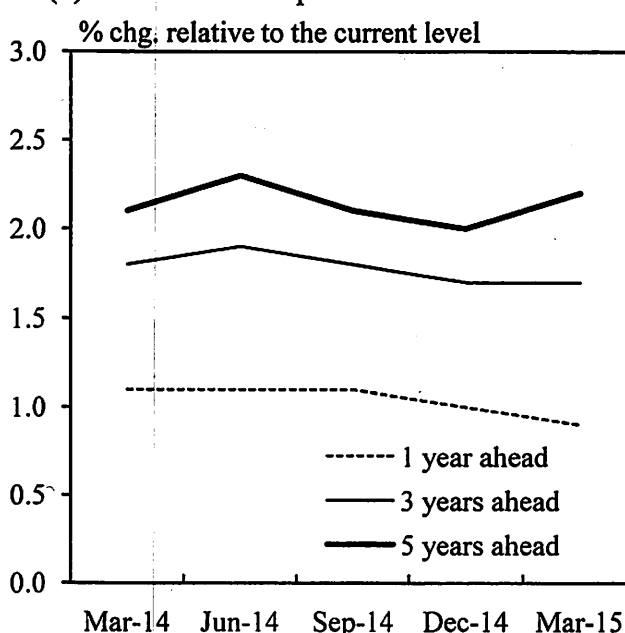
4. The weighted average is calculated based on the following assumption: survey responses chosen by households as their expected inflation rates -- "-5% or below," "from -5% to -2%," "from -2% to 0%," "from 0% to +2%," "from +2% to +5%," and "+5% or above" -- indicate inflation rates of -5%, -3.5%, -1%, +1%, +3.5%, and +5%, respectively.

(2) Enterprises (*Tankan*, All Industries and Enterprises, Average)

(a) Outlook for General Prices



(b) Outlook for Output Prices



Note: Figures exclude the effects of the consumption tax hikes.

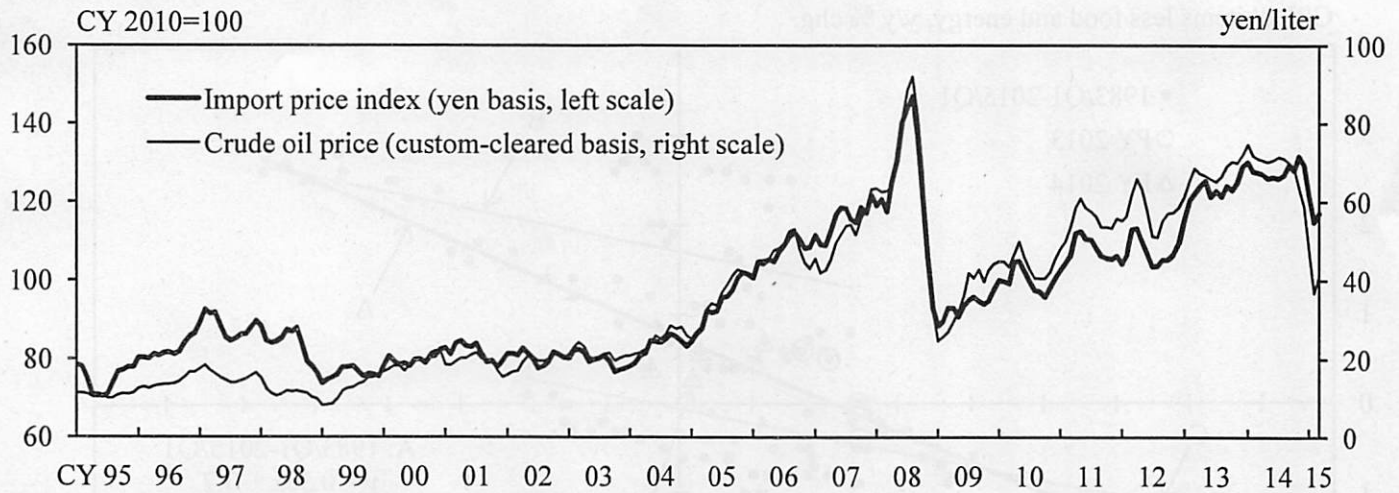
Sources: Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan,"

"Opinion Survey on the General Public's Views and Behavior"; Cabinet Office, "Consumer Confidence Survey";

Ministry of Internal Affairs and Communications, "Consumer Price Index."

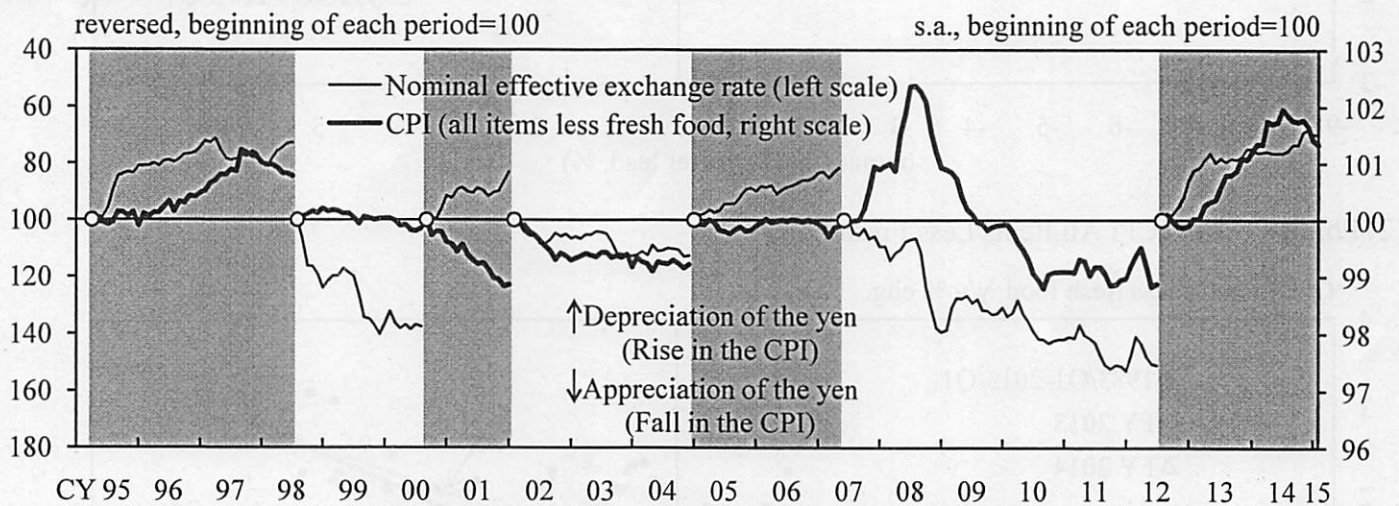
Exchange Rates and Import Prices

(1) Import Price Index

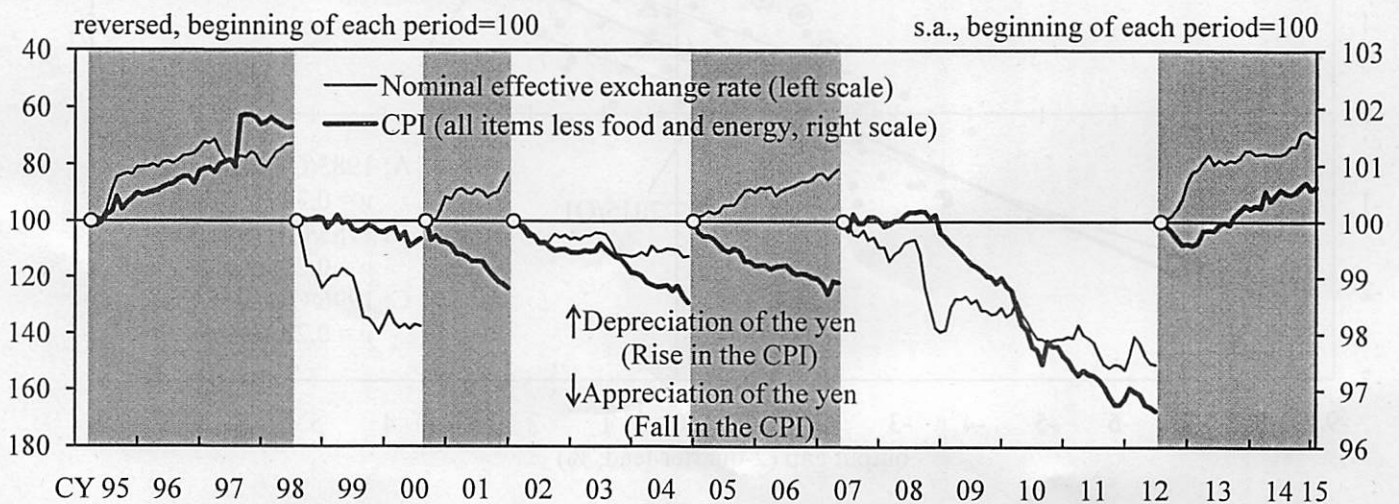


(2) Exchange Rate and Consumer Price Index

(a) CPI (All Items Less Fresh Food)



(b) CPI (All Items Less Food and Energy)

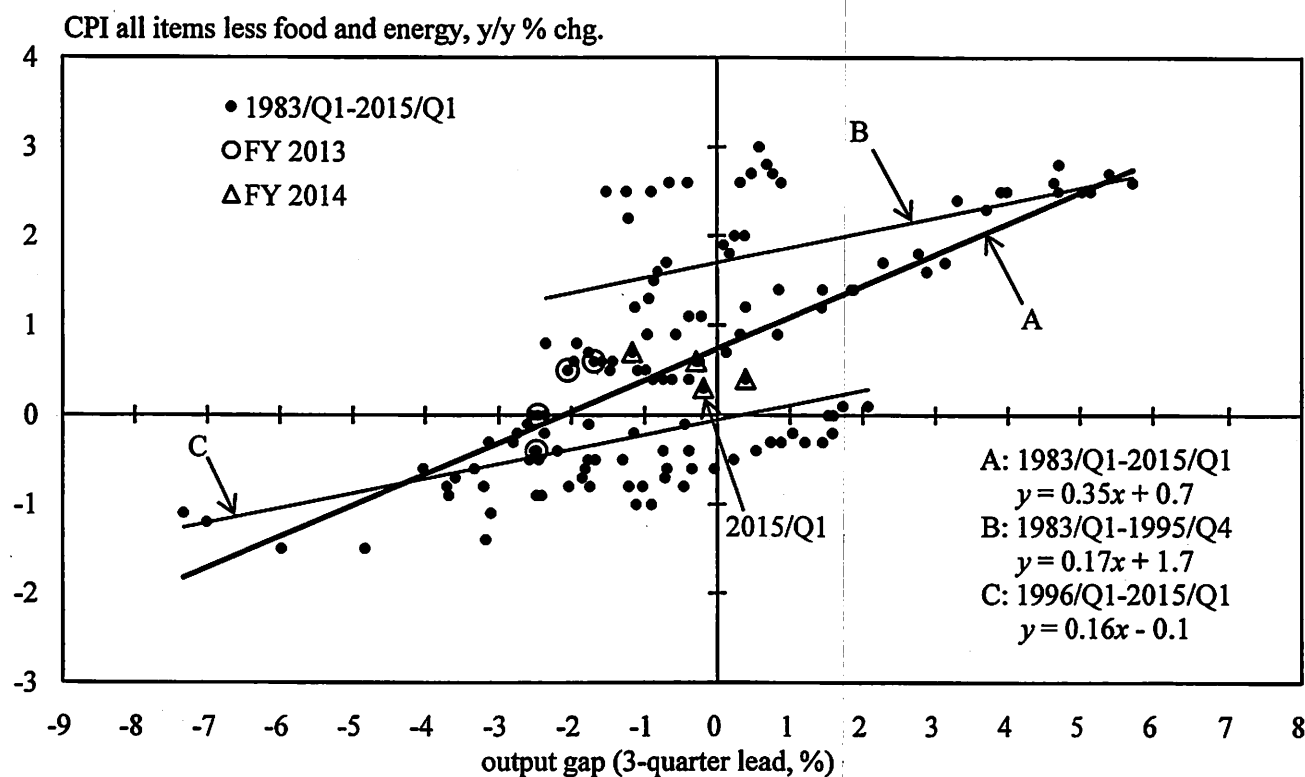


Notes: 1. Figures for the nominal effective exchange rate are based on the broad index of the BIS effective exchange rate.
2. Shaded areas indicate periods where the yen is on a depreciating trend. Duration of each period is chosen based on the nominal effective exchange rate and the yen/U.S. dollar rate.
3. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate.

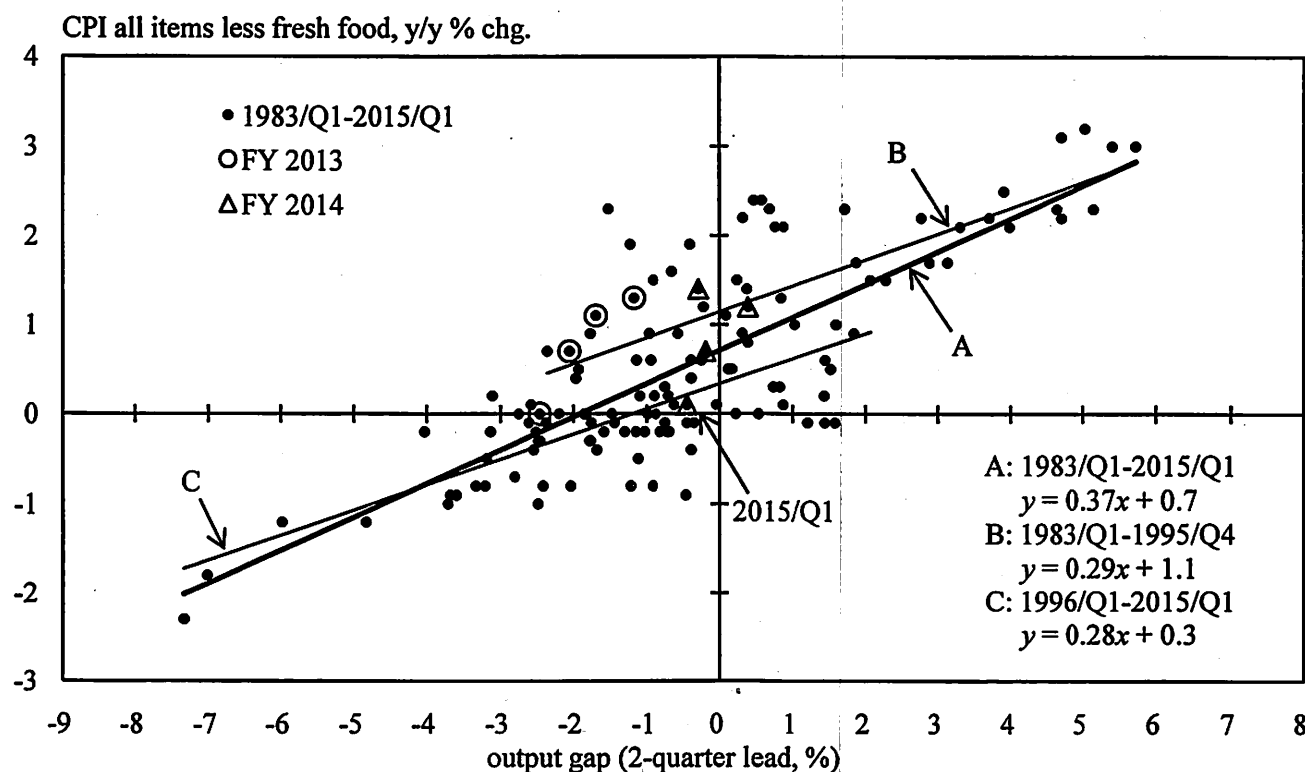
Sources: Bank of Japan, "Corporate Goods Price Index"; Ministry of Finance, "Trade Statistics"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bank for International Settlements (BIS), etc.

Output Gap and Inflation Rate

(1) Phillips Curve (CPI All Items Less Food and Energy)



(2) Phillips Curve (CPI All Items Less Fresh Food)



Notes: 1. Figures for the CPI for 2015/Q1 are January-February averages.

2. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate.

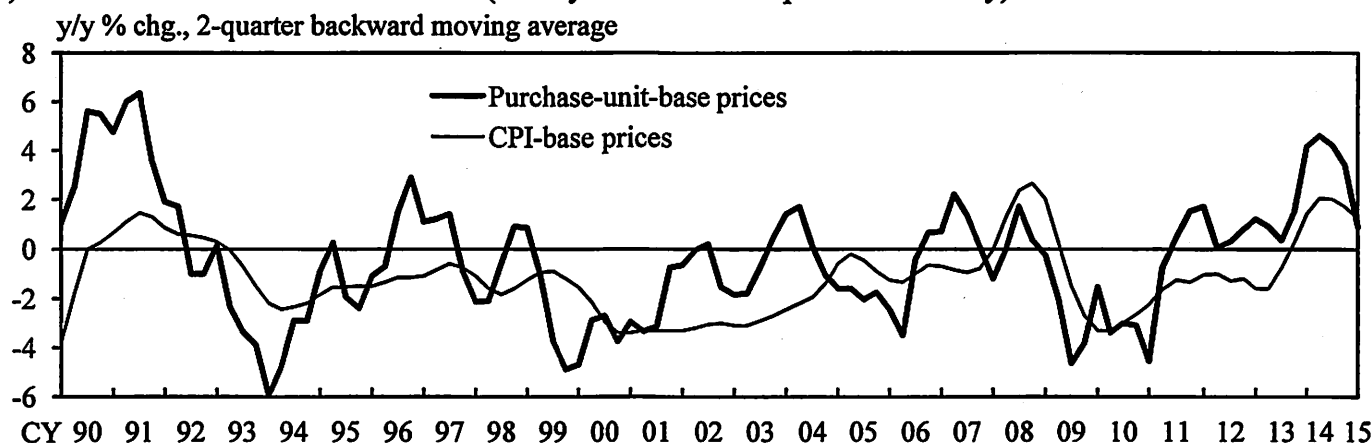
3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.

4. The number of lags is chosen so that the cross-correlation between the output gap and the CPI is maximized.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Cabinet Office, "National Accounts," etc.

Household Consumption and Firms' Price-Setting Behavior

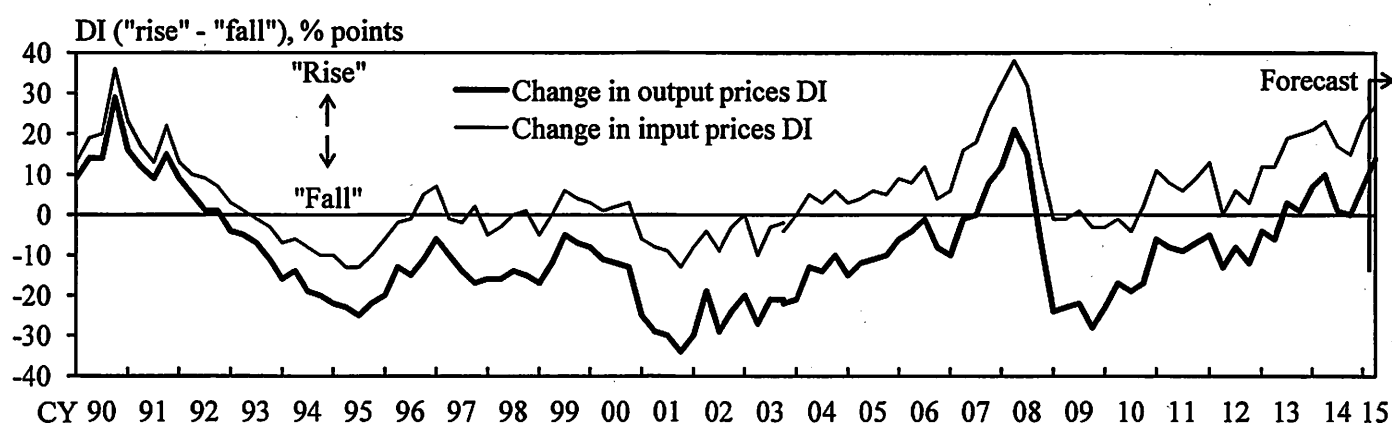
(1) CPI and Purchase-Unit-Base Prices (Family Income and Expenditure Survey)



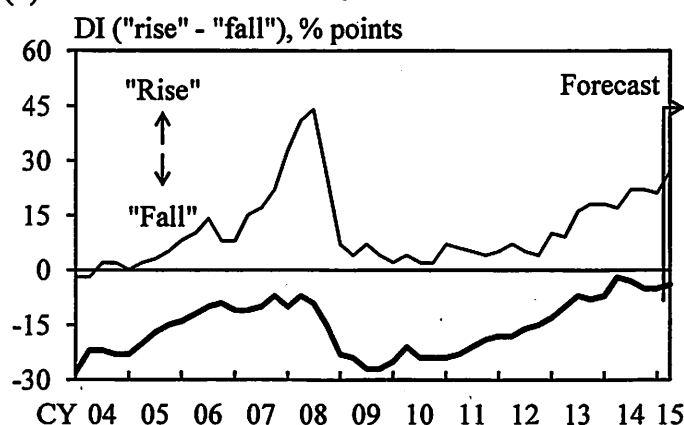
- Notes: 1. Items continuously available in both the CPI and the "Family Income and Expenditure Survey" are selected. The selected items are goods excluding fresh food, petroleum products, and electricity, manufactured & piped gas & water charges. Hence they mainly consist of food products, agricultural, aquatic & livestock products (less fresh food), clothes, and durable goods.
2. Figures for the purchase-unit-base prices and CPI-base prices are adjusted to exclude the estimated effect of changes in the consumption tax rate.
3. Figures for 2015/Q1 are January-February averages.

(2) Change in Output and Input Prices DI (*Tankan*, Enterprises of All Sizes)

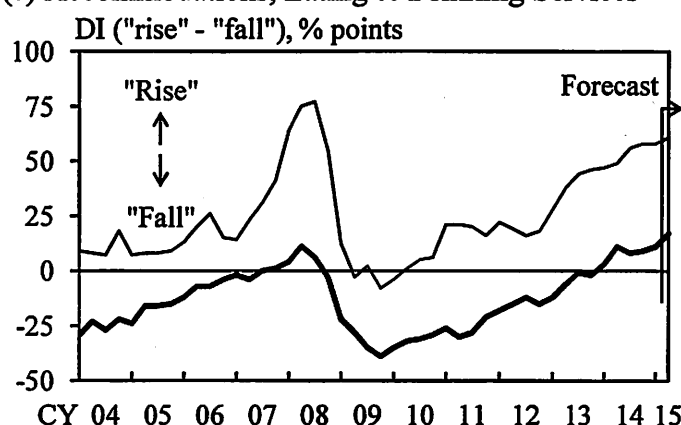
(a) Retail Sector



(b) Services for Individuals



(c) Accommodations, Eating & Drinking Services

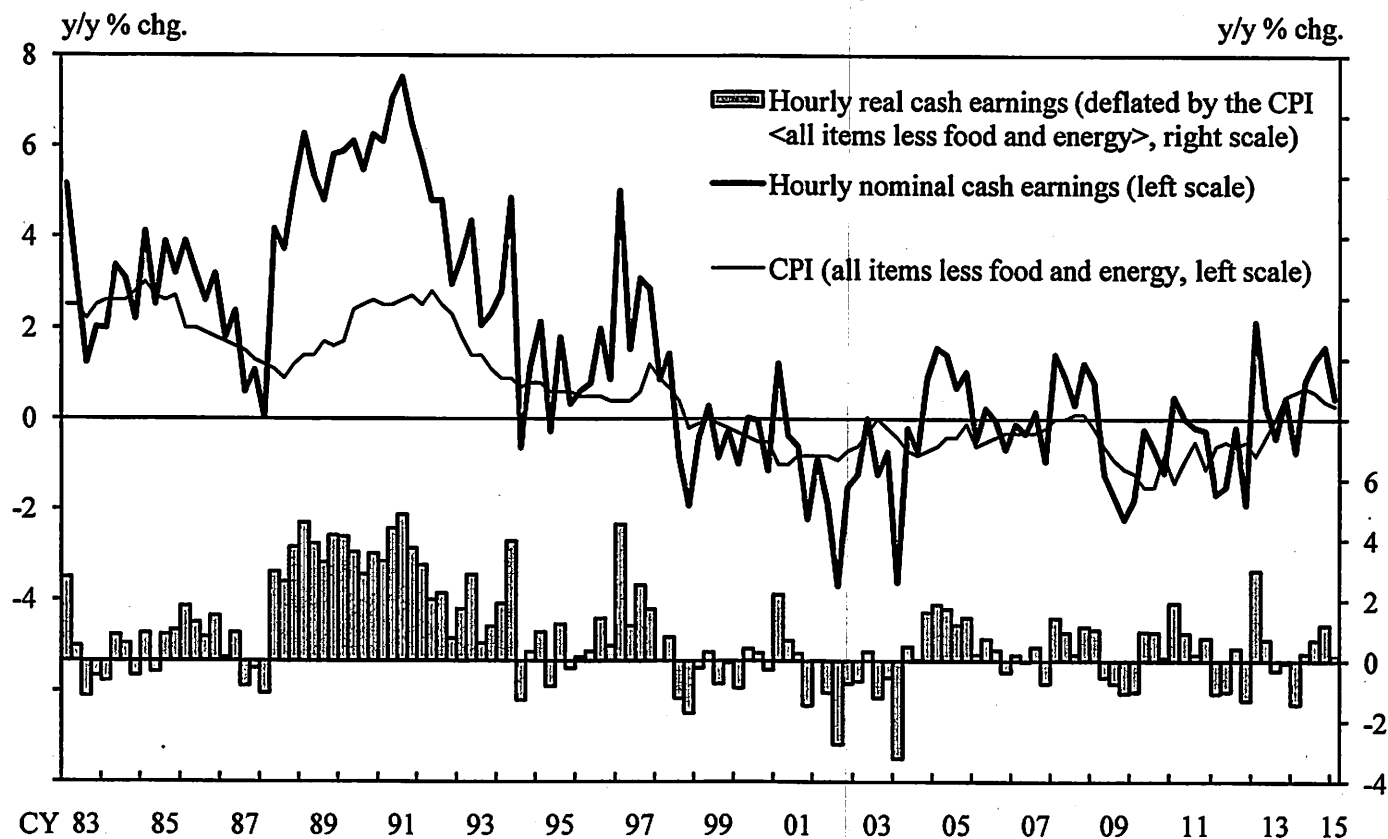


Note: The "Tankan" was revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis. Figures for 2015/Q2 are the forecasts in the March 2015 survey.

Sources: Ministry of Internal Affairs and Communications, "Family Income and Expenditure Survey," "Consumer Price Index"; Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

Prices and Wages

(1) CPI (All Items Less Food and Energy) and Hourly Cash Earnings

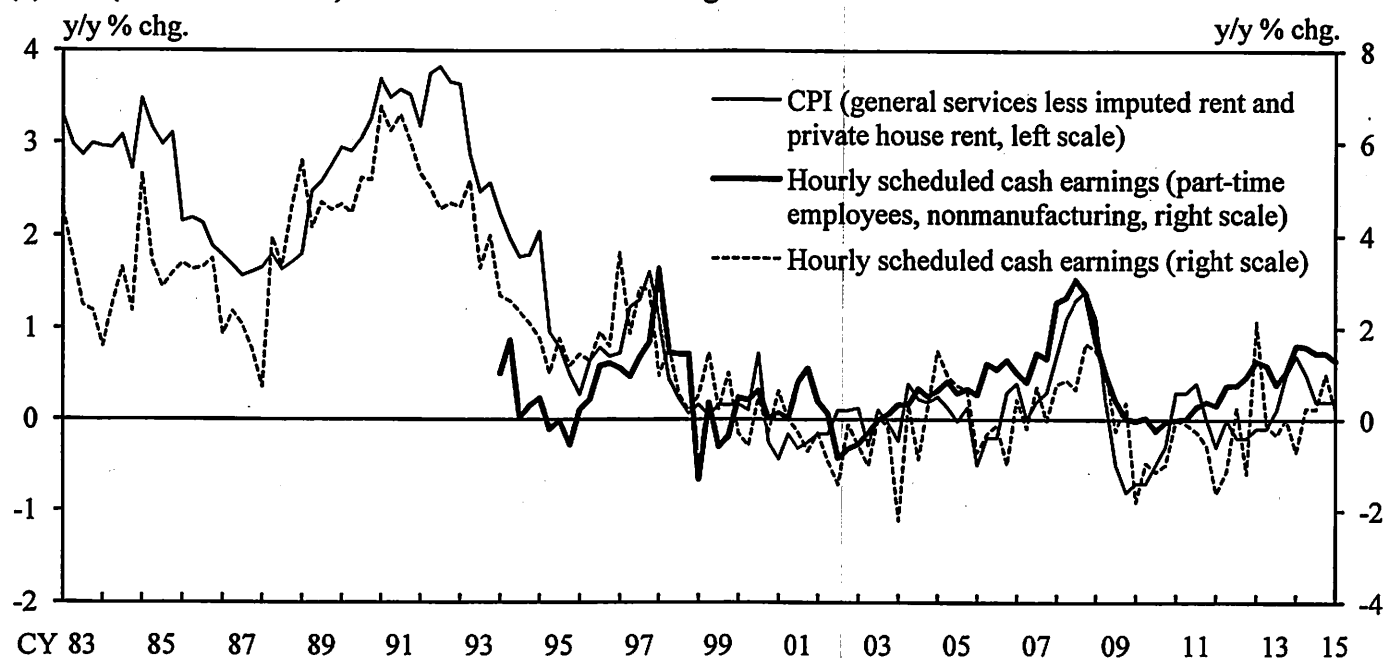


Notes: 1. Figures for 2015/Q1 are January-February averages. The same applies to the chart below.

2. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate. The same applies to the chart below.

3. Figures for hourly cash earnings up through 1990/Q4 are those for establishments with 30 or more employees. The same applies to the chart below.

(2) CPI (General Services) and Scheduled Cash Earnings



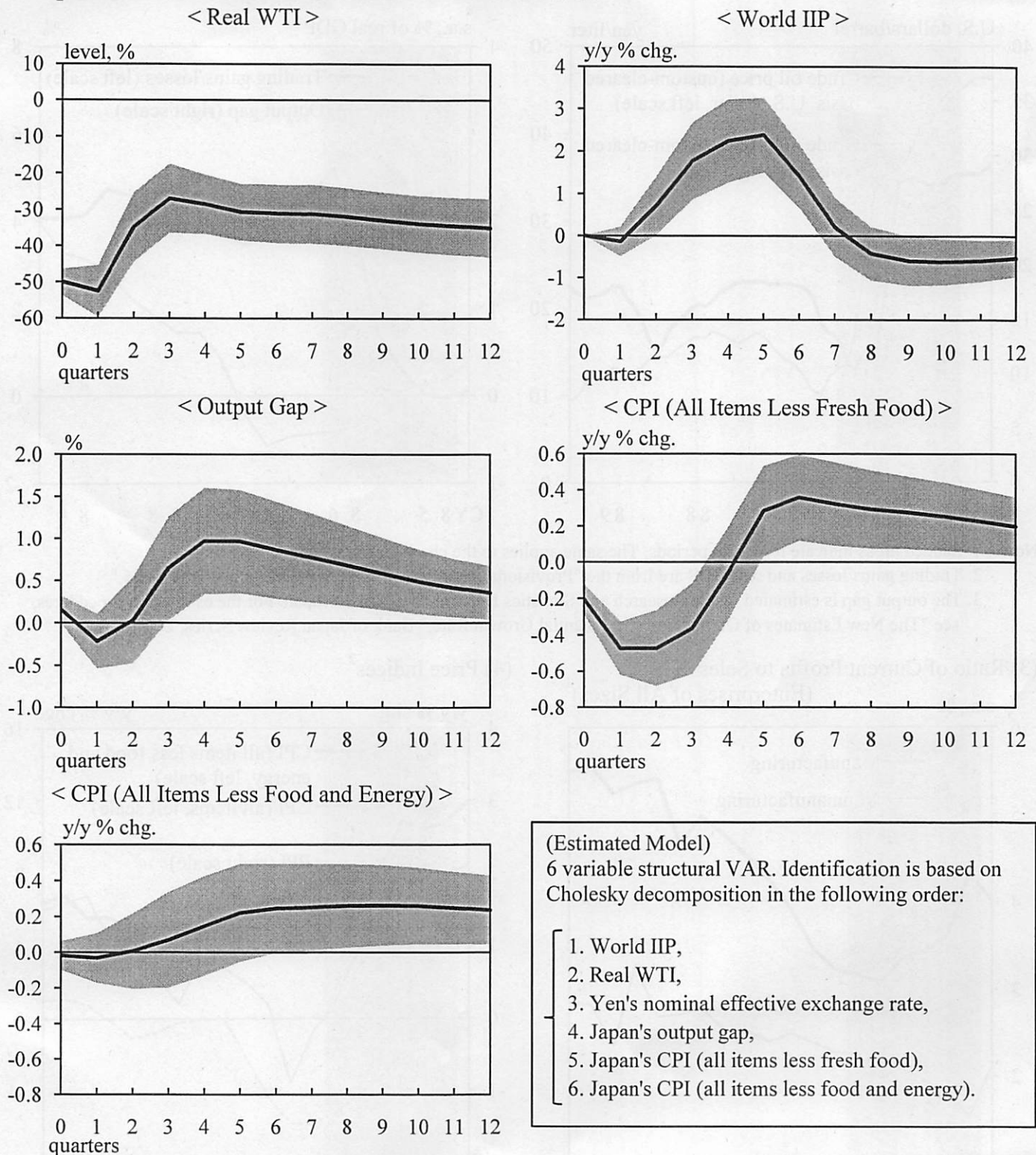
Note: Figures for the CPI (general services less imputed rent and private house rent) are calculated using published indices.

Figures up to 2005/Q4 are calculated by weighting year-on-year rates of price change.

Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey."

Effects of Falling Oil Prices

• Responses to a 50 Percent Decrease in the Real WTI



Notes: 1. The sample period is 1983/Q1-2014/Q4. Variables other than the output gap (%) are used in the form of quarter-on-quarter changes in the estimation. Year-on-year responses are calculated using quarter-on-quarter responses. Shaded areas indicate 75% percentile bands.

2. For computing the real WTI, the WTI is deflated by the U.S. CPI (all items).

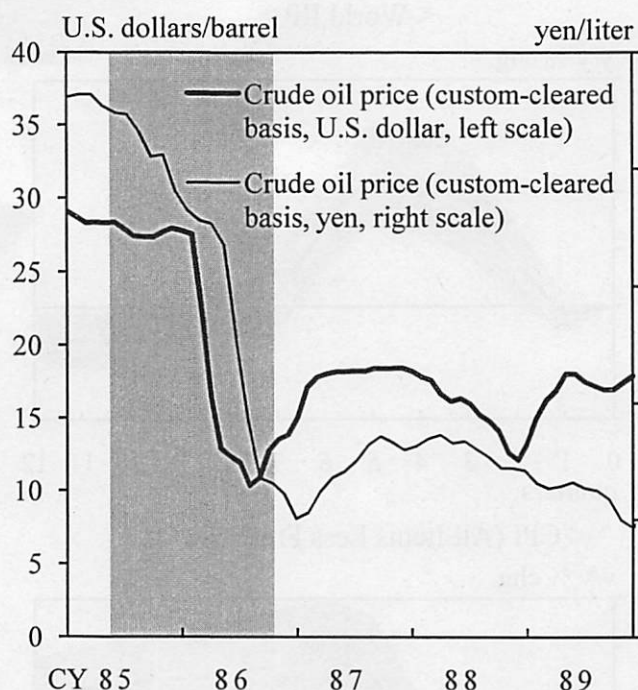
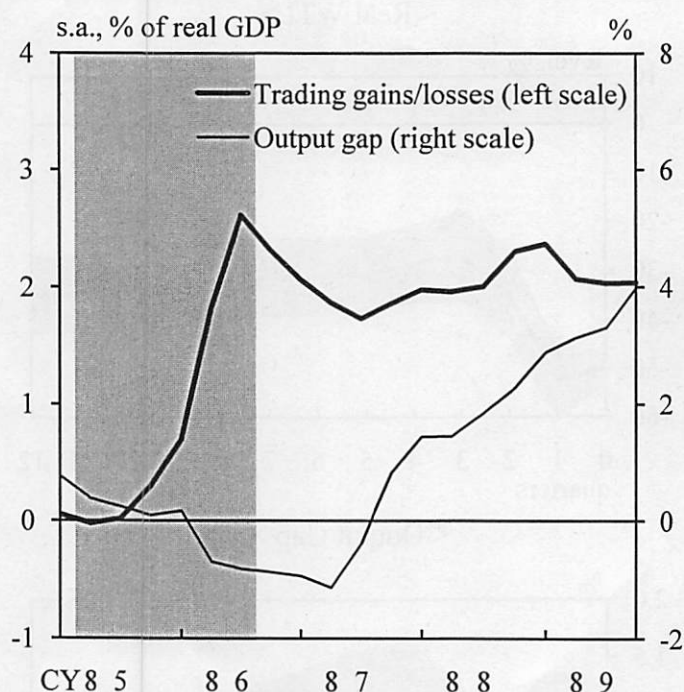
3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.

4. Japan's CPI is seasonally adjusted and adjusted to exclude the estimated effect of changes in the consumption tax rate.

Sources: Bank for International Settlements (BIS); BLS; OECD; CPB Netherlands Bureau for Economic Policy Analysis; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Cabinet Office, "National Accounts," etc.

Reverse Oil Shock

(1) Oil Price

(2) Trading Gains/Losses² and Output Gap

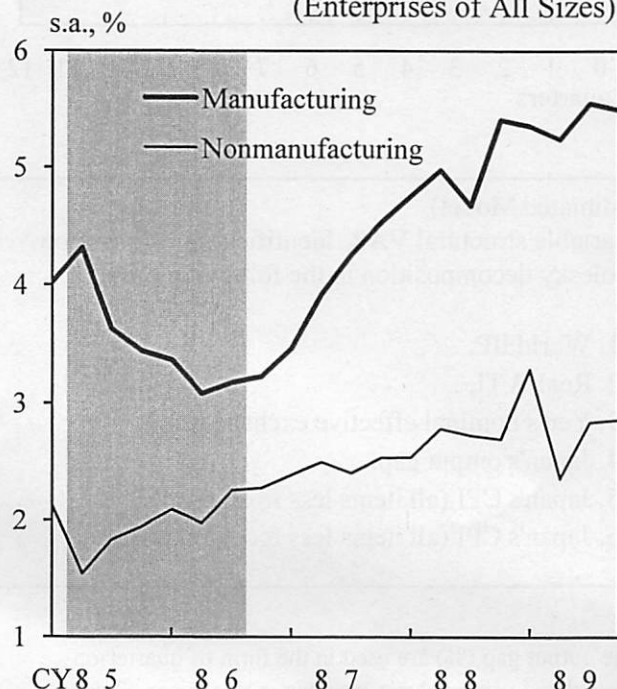
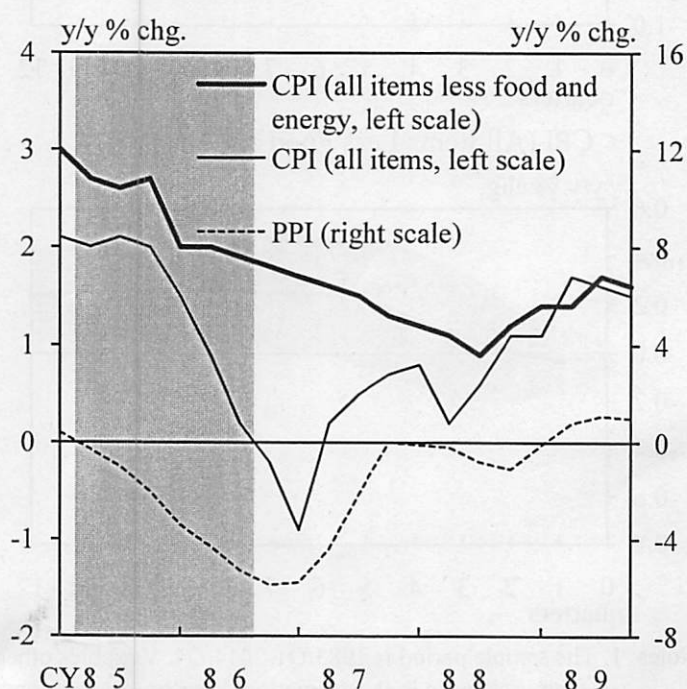
Notes: 1. Shaded areas indicate recession periods. The same applies to the charts below.

2. Trading gains/losses and real GDP are from the "Provisional Estimates of GDP for Benchmark Year 2005."

3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.

(3) Ratio of Current Profits to Sales

(Enterprises of All Sizes)¹

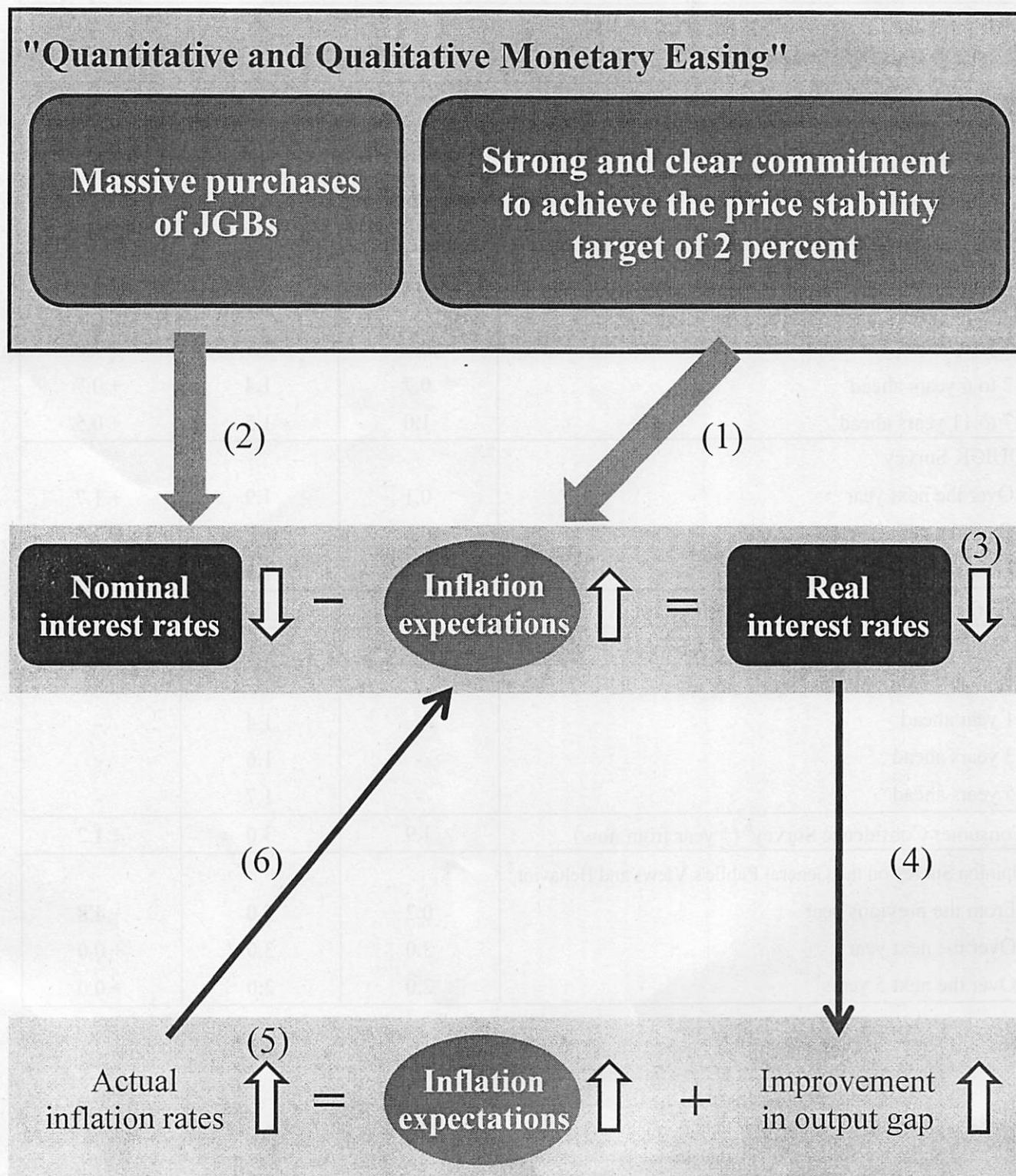
(4) Price Indices²

Notes: 1. Excluding "Finance and Insurance." Seasonally adjusted by X-12-ARIMA.

2. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate. Figures for the PPI from 1989/Q2 onward are adjusted to exclude the effects of the consumption tax, using indices excluding the consumption tax.

Sources: Ministry of Finance, "Trade Statistics," "Financial Statements Statistics of Corporations by Industry, Quarterly"; Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bank of Japan, "Corporate Goods Price Index," etc.

Mechanism of Quantitative and Qualitative Monetary Easing



Downward Pressure on Real Interest Rates through QQE (1)

(1) Observational Approach: Nominal Interest Rates

%, % points

I. 2013/Q1	II. 2014/Q4	Difference: II - I
0.7	0.4	- 0.3

Note: Figures are quarterly averages of 10-year JGB yields.

(2) Observational Approach: Inflation Expectations¹

%, % points

	I. 2013/Q1	II. 2014/Q4	Difference: II - I
ESP Forecast ²			
1 year ahead	0.2	1.1	+ 1.0
2 to 6 years ahead ³	0.7	1.4	+ 0.7
7 to 11 years ahead ³	1.0	1.5	+ 0.5
QUICK Survey			
Over the next year	0.1	1.9	+ 1.7
Over the next 2 years	0.6	1.7	+ 1.1
Over the next 10 years	1.1	1.5	+ 0.4
BEI for inflation-indexed JGBs ⁴ (10 years)	-	1.1	-
Inflation swap rate (10 years)	0.8	1.1	+ 0.2
"Tankan" ⁵ (outlook for general prices)			
1 year ahead	-	1.4	-
3 years ahead	-	1.6	-
5 years ahead	-	1.7	-
Consumer Confidence Survey ⁶ (1 year from now)	1.9	3.0	+ 1.2
Opinion Survey on the General Public's Views and Behavior ⁷			
From the previous year	0.2	5.0	+ 4.8
Over the next year	3.0	3.0	+ 0.0
Over the next 5 years	2.0	2.0	+ 0.0

Notes: 1. Figures for daily and monthly indexes are quarterly averages.

2. Figures exclude the effects of the consumption tax hikes.

3. Figures for 2013/Q1 are based on the December 2012 survey.

4. Figures are based on "new" inflation-indexed JGBs (see the notes to Chart 42 for details).

5. Figures are averages of all industries and enterprises.

6. Figures are for all households and are weighted averages. The weighted average is calculated based on the assumption described in the notes to Chart 43.

7. Figures are medians.

Sources: JCER, "ESP Forecast"; QUICK, "QUICK Monthly Market Survey (Bonds)"; Cabinet Office, "Consumer Confidence Survey"; Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan," "Opinion Survey on the General Public's Views and Behavior"; Bloomberg.

Downward Pressure on Real Interest Rates through QQE (2)

(1) Regression Approach

(a) Estimation Equation and Results

$$\begin{aligned} \text{JGB yields (10-year, \%)} &= 0.197 - 0.042 \times \text{share of the Bank's JGB holdings}^1 (\%) \\ &\quad (0.128) \quad (0.007) \\ &+ 0.197 \times \text{U.S. Treasury yields (10-year, \%)} \\ &\quad (0.044) \\ &+ 0.212 \times \text{inflation expectations}^2 (\text{over the next 10 years, \%}) \\ &\quad (0.117) \\ &+ 0.422 \times \text{expected real GDP growth rate}^3 (\text{over the next 10 years, \%}) \\ &\quad (0.184) \end{aligned}$$

Figures in parentheses are standard errors.
Adjusted R-squared: 0.947
Estimation period: 2005/Q4 - 2014/Q4 (quarterly data)

(b) Downward Pressure on Long-Term Yields

chg. from the end of Mar. 2013 to the end of Dec. 2014

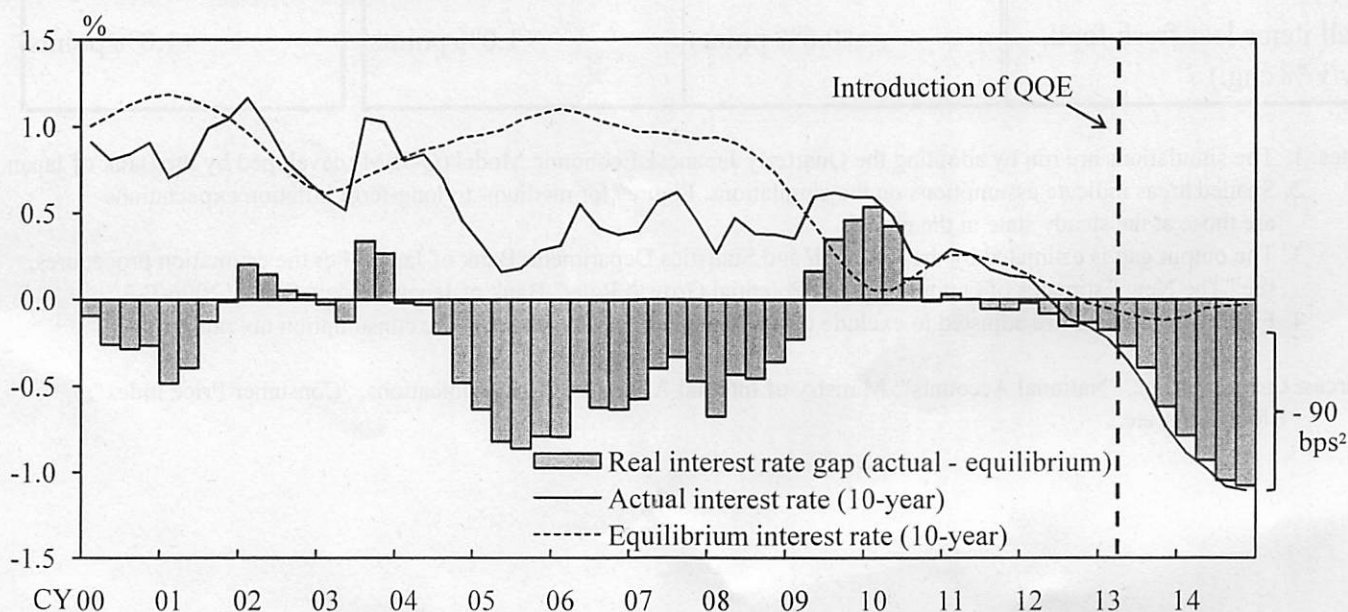
Increase in the amount outstanding of the Bank's JGB holdings	Increase in the share of the Bank's JGB holdings ¹	Downward pressure on long-term yields
+110 tril. yen	+19.3% points	-80 bps

Notes: 1. Ratio of the Bank's JGB holdings to the total amount outstanding of JGBs. Figures are calculated taking into account changes in the average remaining maturity of the Bank's amount outstanding of JGBs (excluding floating-rate JGBs and inflation-indexed JGBs).

2. Figures are taken from the "QUICK Monthly Market Survey (Bonds)."

3. Figures are taken from the "Consensus Forecasts."

(2) Equilibrium Interest Rates Approach¹



Notes: 1. For details, see "The Natural Yield Curve: Its Concept and Developments in Japan," Bank of Japan Research Laboratory Series, 2015-E-3.

2. The difference from 2013/Q1.

Sources: Consensus Economics Inc., "Consensus Forecasts"; QUICK, "QUICK Monthly Market Survey (Bonds)"; Bank of Japan, "Monetary Base and the Bank of Japan's Transactions," "Flow of Funds," "Japanese Government Bonds held by the Bank of Japan"; Bloomberg, etc.

Estimated Transmission Effects of QQE

Changes in Economic Indicators from 2013/Q1 to 2014/Q4

	Estimations using macroeconomic model		Actual
	Simulation 1	Simulation 2	
Real interest rates	-0.8% points	-0.8% points	[slightly less than -1% point]
Medium- to long-term inflation expectations	+0.5% points	+0.5% points	-
Stock prices (TOPIX)	+18%	+40%	+40%
Exchange rate (yen/U.S. dollar)	+8%	+25%	+24%
Output gap	+1.1% points	+3.0% points	+2.0% points
CPI (all items less fresh food, y/y % chg.)	+0.6% points	+1.0% points	+1.0% points

- Notes: 1. The simulations are run by adopting the Quarterly Japanese Economic Model (Q-JEM) developed by the Bank of Japan.
 2. Shaded areas indicate assumptions on the simulations. Figures for medium- to long-term inflation expectations are those at the steady state in the model.
 3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.
 4. Figures for the CPI are adjusted to exclude the estimated effect of changes in the consumption tax rate.

Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bloomberg, etc.

Economic Assessment by Region (Regional Economic Report)

Region	Assessment in January 2015	Changes from the previous assessment	Assessment in April 2015
Hokkaido	The economy has been recovering moderately, although some weakness has been observed in some aspects. Meanwhile, the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike has been easing.	⇒	The economy has been recovering moderately, although some weakness has been observed in some aspects.
Tohoku	The economy has been recovering moderately, while the effects of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have been waning gradually.	⇒	The economy has been recovering moderately.
Hokuriku	The economy has continued to recover moderately as a trend. Meanwhile, effects such as those of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have been waning on the whole.	↗	The economy has been recovering.
Kanto-Koshinetsu	The economy has continued to recover moderately as a trend, and effects such as those of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have been waning on the whole.	⇒	The economy has continued to recover moderately.
Tokai	The economy has continued to recover as a trend, and the effects of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have been waning on the whole.	↗	The economy has continued to recover steadily.
Kinki	The economy has been recovering moderately as a trend, while the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike has been observed.	↗	The economy has been recovering.
Chugoku	The economy has been recovering moderately as a trend, although somewhat subdued growth has been observed on the production side. Meanwhile, the effects of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have begun to wane on the whole.	⇒	The economy has been recovering moderately.
Shikoku	The economy has continued to recover moderately as a trend, and the effects of the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike have been waning on the whole.	⇒	The economy has continued to recover moderately.
Kyushu-Okinawa	The economy has been recovering moderately. Meanwhile, the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike has been easing.	⇒	The economy has been recovering moderately.

Note: The Regional Economic Report (summary) is available on the Bank of Japan's web site (<http://www.boj.or.jp/en/research/brp/rer/rer150413.htm/>).

Source: Bank of Japan, "Regional Economic Report (Summary) April 2015."