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Outlook for Economic Activity and Prices

October 2012

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

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The Bank's View¹

I. Introduction

This October 2012 issue of the *Outlook for Economic Activity and Prices* (Outlook Report) presents the outlook for Japan's economy through fiscal 2014. The Outlook Report first provides a description of developments in global financial markets and overseas economies that are affecting Japan's economy, followed by the Bank of Japan's assessment of financial conditions in Japan. Next, taking these into account, the scenario for economic activity and prices considered to be the most likely by the Bank -- its baseline scenario -- is described, and upside and downside risks associated with the scenario are examined. Lastly, a summary of the Bank's basic thinking on the conduct of monetary policy is provided.

II. Global Financial Markets and Overseas Economies

As for developments in global financial markets, concern about the European debt problem has grown once again since spring 2012; namely, that the fiscal problems in the countries -- Greece, Portugal, and Ireland -- that had already received support from the European Union (EU) and the International Monetary Fund (IMF) would spread to Spain and Italy. This return of concern was caused by heightened uncertainties about the Greek reelection and Spain's financial system problem. Consequently, some nervousness came to be seen in global financial markets on the whole; for instance, with 10-year Spanish government bond yields rising to around 7.5 percent in late July 2012.

European authorities have carried out a range of policy measures in response to such developments. In July 2012, a financial support measure was compiled for the injection of capital into Spanish financial institutions. In early September, the European Central Bank (ECB) decided to launch a government bond purchasing program called Outright Monetary Transactions (OMTs). Under the OMTs, the ECB would purchase, without *ex ante* upper limits, government bonds with a remaining maturity of one to three years of countries calling for support from programs including the European Stability Mechanism (ESM) and

¹ The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on October 30, 2012.

proceeding with necessary efforts for fiscal consolidation and economic structural reform. In mid-September, the European Commission (EC) proposed a single banking supervisory mechanism within the euro area under the ECB toward the establishment of a framework that enables the ESM to inject capital directly to banks, and in mid-October, the EU leaders agreed that a legislative framework would be in place by end-2012. Thanks to these measures, investors have been somewhat less risk averse on the back of the European debt problem compared to a while ago. Nevertheless, particular attention should be paid to developments in the markets as a number of issues still involve a high degree of uncertainty, including progress in Greece's fiscal and economic structural reform, Spain's potential request for financial support from the ESM, and efforts to establish the single banking supervisory mechanism.

Looking at developments in overseas economies since the second half of 2011, the negative effects stemming from the European debt problem have spread globally through a trade channel as well as a business sentiment channel. In fact, many countries and regions have recently moved deeper into the deceleration phase, especially in the manufacturing sectors of these economies. By region, the U.S. economy has been on a moderate recovery trend on the whole, as is evident in the modest increase in private consumption and signs of a pick-up in the housing market. Nevertheless, the pace of increase in business fixed investment and production has slowed as business sentiment has become cautious on the back of uncertainties associated with developments in overseas economies and the "fiscal cliff." Economic activity in Europe has receded slowly. An adverse feedback loop among the fiscal balance, the financial system, and economic activity has been operating in peripheral countries in the euro area. Such negative effects of the debt problem have spread from peripheral countries to core countries through a decline in trade activities within the euro area and weakening business sentiment. As for the Chinese economy, exports to Europe -- which have a large weight -- have declined, and private real estate investment has slowed mainly due to the effects of policy measures to restrain speculative real estate transactions. Reflecting these developments in demand at home and abroad, the economy has been decelerating at a somewhat faster pace as inventory accumulation has continued in a wide range of industries, including materials industries, and as the inventory adjustment phase has been prolonged. Against the background of weakness in final demand in Europe and China, the pick-up in the NIEs and the ASEAN economies has

moderated, particularly in exports and business fixed investment in manufacturing in the corporate sector.²

In the Bank's baseline scenario, overseas economies are likely to remain in a deceleration phase for the time being, but will gradually emerge from that phase and turn to a moderate recovery thereafter on the assumption that global financial markets will remain stable on the whole.³

Broken down by region, the U.S. economy is expected to continue recovering at a moderate pace throughout the projection period, mainly against the background of accommodative financial conditions, albeit with the effects of fiscal austerity policy. The European economy is likely to lack momentum for recovery on the whole throughout the projection period as fiscal austerity measures continue to be implemented in peripheral countries, although core countries in the euro area are likely to post higher growth gradually due to an increase in exports to outside the area. The Chinese economy is expected to remain in a deceleration phase for the time being, but will register higher growth gradually as positive effects of economic stimulus measures on both the monetary and fiscal fronts start to appear and inventory adjustment progresses. Meanwhile, the pick-up in the NIEs and the ASEAN economies is likely to become more evident as exports gradually start increasing in a situation where domestic demand -- especially private consumption -- maintains firmness.

III. Japan's Financial Conditions

Financial conditions in Japan have been accommodative in a situation where the Bank pursues powerful monetary easing in a continuous manner. Specifically, firms' funding costs have been hovering at low levels, with the average contracted interest rates on new loans and discounts -- both the short- and long-term rates -- registering a level of 1 percent,

² In this Outlook Report, the NIEs are South Korea, Taiwan, Hong Kong, and Singapore, and the ASEAN economies are represented by Thailand, Indonesia, Malaysia, and the Philippines.

³ In October 2012, the IMF revised downward its July projections for global economic growth (calculated as the aggregate of purchasing power parity-weighted GDP growth projections for individual countries or regions) for 2012, 2013, and 2014 by 0.2-0.3 percentage point each to 3.3 percent, 3.6 percent, and 4.1 percent, respectively. The global economy, however, is projected to accelerate at a moderate pace toward the end of the projection period to reach a rate exceeding its past long-term average. For reference, the average growth rate during the 32 years from 1980 to 2011 is 3.4 percent.

even lower than that registered during the first half of the 2000s, the period of quantitative easing. Issuing conditions for CP and corporate bonds have remained favorable on the whole as demand among investors has continued to be resilient, despite the widening of some credit spreads mainly due to worsening corporate performance. A range of indicators representing firms' availability of funds, including financial institutions' lending attitudes as perceived by firms and the financial positions of firms, have been at levels exceeding the average for the period since 2000. Firms have generally been recovering their credit demand, mainly for funds related to reconstruction following the Great East Japan Earthquake as well as those associated with corporate takeover activities. Looking at funding in the corporate sector at home, the year-on-year rate of increase in the amount outstanding of bank lending has risen somewhat recently. The year-on-year rate of change in the amount outstanding of corporate bonds, especially electronic company bonds, has been negative. On the other hand, that of CP has generally been slightly positive.

As such, accommodative financial conditions in Japan have been maintained even in the face of headwinds -- that is, when the earthquake and the European debt problem hit the markets. In terms of the outlook, these accommodative financial conditions are expected to support a transition toward a self-sustaining recovery in domestic private demand. Taking into account the increasing global linkages of financial markets, however, it is necessary to maintain vigilance with regard to the possibility that global financial markets will affect Japan's financial system and its financial conditions, depending on future developments.⁴

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

A. Outlook for Economic Activity

On the basis of the aforementioned developments in overseas economies and the financial environment at home and abroad, the following examines the scenario for Japan's economy that the Bank considers to be the most likely -- that is, the baseline scenario. The baseline scenario adopted by the Bank this time presumes that the consumption tax, which currently stands at 5 percent, will rise to 8 percent in April 2014 and 10 percent in October 2015,

⁴ For more details on the assessment of financial system stability in Japan, see the October 2012 issue of the Bank's *Financial System Report*.

following the passage of the consumption tax-related legislation.⁵

Japan's economy grew at a rate of about 3 percent in the first half of 2012 as domestic demand remained firm, mainly supported by increases in both public and private reconstruction-related demand. Thereafter, however, the economy has been weakening somewhat as exports and industrial production have decreased, reflecting the fact that overseas economies have moved deeper into a deceleration phase.

Japan's economy is expected to level off more or less for the time being. Thereafter, however, as domestic demand remains resilient on the whole and overseas economies gradually emerge from the deceleration phase, the economy is expected to return to a moderate recovery path. As efforts proceed to strengthen the economy's growth potential -- such as firms' efforts to cultivate potential demand at home and abroad and the government's implementation of its growth strategy -- and the medium- to long-term growth expectations for firms and households consequently see a moderate increase toward the end of the projection period, the sustainability of economic recovery is likely to gain momentum.

More concretely, from the latter half of fiscal 2012 toward fiscal 2013, both exports and industrial production are expected to remain relatively weak over that period against the background of prolonged deceleration in overseas economies. Such weakness in exports and industrial production will exert some pressure to restrain business outlays in the manufacturing sector. Domestic demand is expected to remain resilient on the whole, mainly supported by reconstruction-related demand in a broad sense, including investment related to disaster prevention and energy. Nonetheless, it is likely that purchases of cars will decline due to the expiration of subsidies for environmentally friendly cars, and that the pent-up demand after the earthquake disaster will gradually subside. Owing to these developments, domestic demand is unlikely to increase at a pace that will offset the weakness in exports, and the economy is expected to level off more or less for the time being.

Thereafter, however, as overseas economies gradually emerge from the deceleration phase,

⁵ Legislation relating to the "Comprehensive Reform of Social Security and Tax" was passed in the Diet in August 2012.

exports and industrial production are likely to start picking up and favorable spending activity in the economy as a whole is expected to gain momentum slowly. In fiscal 2013, the economy is expected to grow at a pace that is clearly above its potential as a pick-up in overseas economies gradually becomes evident and private domestic demand increases at a robust pace, coupled with rising corporate profits and labor income, whereas support from reconstruction-related demand -- in particular, public demand -- will diminish slowly.⁶ In the second half of fiscal 2013, a front-loaded increase in demand prior to the consumption tax hike is likely to take place on a large scale, generating a considerably higher growth rate temporarily.⁷

In fiscal 2014, the underlying trend of the economy -- that is, to exclude the fluctuations stemming from the consumption tax hike -- is projected to grow at a rate somewhat higher than its potential as overseas economies are likely to register growth above the historical long-term average and the stimulative effects of low interest rates will strengthen on the back of improvement in corporate profits and higher growth expectations, all of which will underpin private domestic demand. Nonetheless, the subsequent decline in demand following the front-loaded increase prior to the consumption tax hike is likely to be seen mostly in the first half of fiscal 2014; thus, the growth rate in fiscal 2014 as a whole will probably be at a somewhat low level, slightly above 0 percent.

⁶ Japan's potential growth rate during the projection period is estimated to be "around 0.5 percent" on average, although it is expected to rise gradually toward the end of the projection period. However, estimates of the potential growth rate are subject to a considerable margin of error as they greatly depend on the specific methodology employed and could change as more data for the relevant period become available. For more details on the estimation of the potential growth rate, see Box 4 of the Outlook Report in October 2010.

⁷ The consumption tax hike will affect the economy mainly by generating a front-loaded increase in demand and subsequent decline prior to and after the tax hike (an intertemporal substitution effect). An effect from a decline in real income as a result of price rises could also take place, but given that households to some extent have already expected the future tax hike on the back of severe fiscal conditions in a somewhat long-term perspective, it is unlikely that this effect will be as substantial as that estimated mechanically from the decline in income. Altogether, the consumption tax hike on real GDP is expected to have the effect of pushing up the economic growth rate for fiscal 2013 by around 0.3 percentage point and pushing down the rate for fiscal 2014 by around 0.7 percentage point. There are still several areas for which details have yet to be finalized, including measures to accommodate large swings and to alleviate the tax burden regarding the purchases of automobiles and houses; the effect of the tax hike this time on the economy is subject to considerable uncertainty and the estimates presented above are subject to a considerable margin of error.

The timing for Japan's economy to emerge from the leveling-off period and start recovering is expected to be delayed from the previous projection, mainly reflecting the fact that overseas economies have moved deeper into the deceleration phase. The delay in the anticipated timing of the recovery is being incorporated into this baseline scenario, and the growth rate for fiscal 2012 consequently is expected to be lower than the one presented in the interim assessment in July 2012. Excluding the effect of the front-loaded increase in demand prior to the consumption tax hike, the growth rate for fiscal 2013 is also expected to be somewhat lower than the one in the previous assessment.

A more detailed explanation of the outlook, broken down by the corporate and household sectors, is as follows.

In the corporate sector, while exports -- especially those bound for Europe and China -- are likely to remain relatively weak for the time being, they are expected to reverse course and start picking up as overseas economies gradually emerge from the deceleration phase, due in particular to the policy effects to stimulate the economy in China. In the meantime, domestic demand is expected to remain resilient on the whole, mainly supported by reconstruction-related demand in a broad sense and by accommodative financial conditions. Specifically, public investment is likely to continue increasing. Against the background of firms' increasing awareness of the need for disaster prevention and business continuity, as well as their putting business resources into renewable energy-related businesses, business fixed investment -- particularly that unlikely to be affected by cyclical factors, such as investment aimed at preventing disaster and that related to energy -- is expected to remain firm. As domestic demand is expected to remain resilient on the whole and overseas economies will recover gradually, as mentioned earlier, an improving trend in corporate profits is likely to become evident slowly. Against such a backdrop, business fixed investment as a whole is expected to maintain its moderate increasing trend throughout the projection period, although it is likely to show somewhat weak movement, mainly in the manufacturing sector, due to the weakness in exports and industrial production.

Regarding the household sector, as for employment and income conditions, the supply and demand balance in the labor market is expected to remain on an improving trend on the whole, supported by resilient domestic demand. For the time being, however, weakness in exports and industrial production will exert forces to ease labor supply and demand

conditions through a decrease in overtime hours worked and in new job offers. As for the average wage per worker, the severe business performance in fiscal 2011, caused by the earthquake disaster, will exert downward pressure on bonuses this winter. Consequently, labor income is likely to stay flat more or less for the time being. Nevertheless, private consumption is expected to remain resilient on the whole, supported by firms' efforts to create new business to meet the demand of the elderly, whose consumption is relatively unsusceptible to the labor income conditions. For the time being, however, the increasing pace of private consumption is likely to decelerate, compared with that in the first half of 2012, reflecting the end of subsidies for the purchase of environmentally friendly cars and the diminishing pent-up demand that had sustained consumption at a relatively high rate. Thereafter, exports and industrial production will start to pick up reflecting the aforementioned improvement in overseas economies, and an improving trend in employment and income conditions, with some time lag, will gradually materialize, underpinning private consumption. Meanwhile, housing investment is likely to increase moderately throughout the projection period against the backdrop of reconstruction-related demand and a low interest rate environment.

B. Outlook for Prices

The Bank publishes, in a numerical form, "the price stability goal in the medium to long term," which is the inflation rate that it judges to be consistent with price stability sustainable over the medium to long term. In concrete terms, the Bank judges "the price stability goal in the medium to long term" to be in a positive range of 2 percent or lower in terms of the year-on-year rate of change in the consumer price index (CPI), and it has set a goal of 1 percent for the time being. With "the price stability goal in the medium to long term" in mind, the outlook for price developments is examined next.

Looking back at the developments in the CPI (for all items less fresh food, and the same hereafter) from a somewhat long-term perspective, the year-on-year rate of decline -- after reaching a historical trough of 2.4 percent in August 2009 -- has continued to narrow consistently since around the end of 2009 with a gradual improvement in the degree of utilization of labor and production capacity; that is, the aggregate supply and demand balance of goods and services. Against such a background, the year-on-year rate of

change in the CPI has recently been around 0 percent. As such, from a somewhat long-term perspective, there is a mild positive correlation between the rate of change in the CPI and the aggregate supply and demand balance.

As for the outlook for the environment surrounding prices, the aggregate supply and demand balance is likely to level off for the time being, reflecting the aforementioned outlook for economic activity. Thereafter, it is expected to continue a moderate improving trend with some fluctuations, caused by the effects of the consumption tax hike. Medium- to long-term inflation expectations can be assumed to remain stable throughout the projection period, given that the expectations of market participants and economists have been stable at around 1.0 percent on balance and households have not changed their views notably. As for international commodity prices, there has been a slight rise in crude oil and crop prices due to a heightened geopolitical risk and the weather. On average, however, prices are expected to remain more or less flat, reflecting the deceleration of overseas economies. Thereafter, they are likely to follow a moderate rising trend against the background of an increase in demand for food and energy arising from growth in emerging economies.

On the basis of the aforementioned environment, in terms of the outlook for prices -- excluding the direct effects of the consumption tax hike -- the domestic corporate goods price index (CGPI) is expected to decline on a year-on-year basis for the time being, reflecting some weakness in international commodity prices. After fiscal 2013, however, it is expected to return to a moderate rising trend, reflecting a modest increase in international commodity prices and the improvement in the aggregate supply and demand balance.⁸

The year-on-year rate of change in the CPI is expected to hover around 0 percent for the time being and start rising gradually thereafter as the aggregate supply and demand balance improves. In fiscal 2014, it appears likely that it will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being.

Comparing the current projection for the CPI with that in the July interim assessment, the

⁸ The effect of the consumption tax hike on prices can be estimated by assuming that the rise in the consumption tax will be fully passed on for all items taxable at present. In fiscal 2014, the domestic CGPI will be pushed up by 2.9 percentage points and the CPI by 2.0 percentage points.

year-on-year rates of change in the CPI in fiscal 2012 and 2013 are revised downward from those in July. This is partly because an improvement in the aggregate supply and demand balance is expected to delay reflecting the downward revision of economic outlook. Furthermore, the downward correction in crude oil prices also contributed to the downward revision in the CPI projection.

There are both cyclical and structural reasons why it has taken a long time for the aggregate supply and demand balance to improve. In terms of a cyclical factor, there is still room for such improvement given the considerably significant economic downturn caused by the Lehman shock. Consequently, it is expected to be in the latter half of the current projection period that the balance is largely restored, giving rise to clearer upward pressure on prices, notwithstanding the continued growth above its potential.

In terms of a structural factor, it can be pointed out that the economic growth rate has been on a declining trend. While globalization and the rapid aging of and decline in the population proceed, there has not been sufficient progress with efforts to strengthen the growth potential of the economy and review the social security system in order to enhance its sustainability. As a result, the medium- to long-term growth expectations of firms and households have been adversely affected, leading these entities to become cautious in terms of their spending behavior. The lack of progress with regard to improving the aggregate supply and demand balance, due to a chronic shortage of demand, appears to have exerted downward pressure on prices. Going forward, as efforts to strengthen the growth potential of the economy gradually materialize and the growth expectations of households and firms rise moderately, such downward pressure is projected to weaken slowly.

V. Upside and Downside Risks

A. Risks to Economic Activity

The aforementioned outlook is the scenario that the Bank considers to be the most likely -- in other words, its baseline scenario. The following upside and downside risks concerning the outlook for economic activity warrant attention.

The first risk concerns developments in global financial markets and overseas economies. As for the European debt problem, partly because a range of policy measures have been

implemented by the European authorities, a tail risk of global financial market turmoil -- due to concern about the financial system -- causing a significant global economic downturn has decreased somewhat. Nonetheless, there are still various challenges in order to overcome the European debt problem.

On the one hand, there is a possibility that credibility will be strengthened in the markets, acting as an upside risk to the global economy, if progress is made, beyond the assumption of the baseline scenario, with fiscal, financial system, and economic structural reforms in the respective countries in Europe, as well as with the fiscal and financial integration of the whole area, while market stability is secured, mainly through the ECB's initiatives to provide ample liquidity and introduce a government bond purchasing program. On the other hand, there is also a possibility that strains in global financial markets will intensify once again in case of a reemergence of concern about the implementation of such reforms, acting as a downside risk to the global economy and consequently to Japan's economy.

In addition to the channels through global financial markets described earlier, overseas economies continue to be surrounded by various risk factors. In particular, a risk of further prolonged deceleration, even if these economies manage to avoid a significant decline, requires attention. In advanced economies such as the United States and Europe, those economic entities -- that have been burdened with excess debts resulting from the emergence of credit bubbles toward the mid-2000s and the subsequent burst -- are likely to maintain cautious investment and spending attitudes until their debts return to adequate levels. Under such circumstances, advanced economies appear unlikely to accelerate with the materialization of an upside risk, and they are likely to remain vulnerable to a downside risk. While potential growth in emerging economies is higher than that in advanced economies, the former will be affected by the balance-sheet adjustment in the latter through a trade channel as well as a financial market channel. In addition, some of the emerging economies -- including China -- for which relatively high growth has been maintained so far, face various types of structural problems toward the transition to a sustainable growth path. It is necessary to pay attention to developments in these emerging economies.

Looking more closely at risk factors in respective regions, with regard to the U.S. economy, although balance-sheet repair in the household sector has been making some progress gradually on the back of a pick-up in the housing market, there is still a long way to go. In

addition to the negative effects stemming from the European debt problem, uncertainty surrounding the future course of fiscal policy, including the issue referred to as the "fiscal cliff," may exert significant restraining pressure on economic activity. On the other hand, if uncertainty surrounding fiscal policy diminishes as a result of the resolution of the fiscal cliff, this may exert upward pressure on the economy, mainly through improvement in business and household sentiment. In Europe, while some core countries including Germany may post higher growth, mainly led by exports, there is also a downside risk of the economic recession possibly continuing for longer than expected due to the debt problem in peripheral countries causing even stronger spill-over effects in core countries. In emerging and commodity-exporting economies, there remains considerable uncertainty regarding the timing of a return to a sustainable growth path and the level of potential growth rate in the medium to long term. In particular, the Chinese economy is vulnerable to the effects of the European debt problem because its share of exports to Europe is high; there is a risk that the improvement in the supply and demand balance might take a long time, especially in materials industries, burdened with excess capital stock. In addition, thanks to stimulative measures associated with monetary and fiscal policies, there have been signs of improvement in domestic demand -- for example, in terms of infrastructure investment -- but uncertainty surrounding the magnitude of such policy measures remains considerable. It is necessary to pay close attention to whether the Chinese economy will successfully make a transition from a high growth phase to a sustainable stable growth phase in the long run while the economic structure of China will change from one that places much weight on exports and fixed asset investment to one that focuses on spending, overcoming the excess capacity problem. Furthermore, given that Japan and China are closely interrelated, as is partly evident in the global supply chain network, the recent bilateral relationship is likely to have an effect on Japan as well as China. On this point, close attention should be paid to whether this may push down Japan's economy through the effects on trade, investment activities, and the number of Chinese visitors to Japan.

The second risk relates to uncertainty with regard to firms' and households' medium- to long-term growth expectations. In the baseline scenario, such expectations are likely to rise, albeit moderately, toward the end of the projection period as efforts to strengthen growth potential will gradually bear fruit. However, changes of growth expectations are possible in either the upside or downside direction depending on future developments. For

instance, given that the capturing of global demand and relocation of global business operations to enhance efficiency are critical challenges facing firms, expansion in production and business operations overseas is expected to continue. If such expansion is not compensated for by new domestic production activities, firms' and households' medium- to long-term growth expectations might decline. Similarly, with regard to problems concerning the supply and demand of electric power, there is a possibility that production could be restrained during periods of high electric power demand, depending on various factors including the weather. Attention should be paid not only to such short-term effects but also to the possibility of an eventual decline in medium- to long-term growth expectations. On the other hand, such expectations might improve if efforts in various areas aimed at strengthening the growth potential of Japan's economy -- such as exploring global demand, capturing the needs of the elderly population and diversifying domestic demand, and making innovations in energy-related technologies and business models -- proceed considerably and prove highly fruitful.

Third, there is uncertainty with regard to the effect of the consumption tax hike. In the baseline scenario, the estimates of the front-loaded increase in demand and subsequent decline prior to and after the consumption tax hike have been made, based on past episodes at home and abroad; however, such estimates are subject to change, depending on the aforementioned growth expectations and institutional changes other than the consumption tax hike. Furthermore, if the tax hike alleviates the public's concern about fiscal sustainability and the social security system, there is a possibility that it could provide a positive impetus for economic activity. On the other hand, there is a risk that consumption could be suppressed further than expected once the public increasingly starts to cut back on its spending due to a decline in real purchasing power.

Fourth, there are various problems regarding Japan's fiscal sustainability. To be specific, in the event that the general public's confidence in fiscal sustainability declines, people's increasing concern about the future, particularly the one related to the higher tax burden, could lead the economy to deviate downward from the baseline scenario. On the other hand, if the medium- to long-term path toward fiscal consolidation becomes evident and the sustainability of the social security system improves, such concern will be alleviated and this would have a positive effect on the economy. Given the progress in the globalization

of financial markets, market participants seem to be monitoring Japan's conduct of fiscal policy in a more critical way amid heightening concern about public debt in many advanced countries. In this situation, if many market participants come to believe that efforts to achieve fiscal consolidation are insufficient -- despite some progress that has been made -- this will lead to a rise in long-term interest rates, which will have adverse effects on financial institutions and consequently on Japan's economy as a whole.

B. Risks to Prices

There is also uncertainty regarding the outlook for prices, which could deviate either upward or downward from the projection. To begin with, if any of the aforementioned upside and downside risks to economic activity materialize, prices might be affected accordingly.

As for risks specific to prices, the first concerns uncertainty associated with the responsiveness of prices to the aggregate supply and demand balance. It has been observed in recent years among many advanced economies that prices tend to respond to changes in the aggregate supply and demand balance to a lesser extent, with severe price competition among firms mainly against the backdrop of globalization of the economy and deregulation. Similarly in Japan, despite improvement in the aggregate supply and demand balance, the inflation rate hardly picked up in the mid-2000s. More recently, however, factors working toward restoring price responsiveness to the supply-demand balance have also been observed, as supported by the fact that low-priced import goods from China have not increased substantially and firms have been increasingly differentiating their products and services. In the Bank's baseline scenario, taking into account these recent changes, the year-on-year rate of change in the CPI is expected to rise gradually as the aggregate supply and demand balance improves. Nevertheless, careful attention should be paid to whether firms will raise prices as anticipated in accordance with improvement in economic conditions, as there is a high degree of uncertainty concerning the extent to which prices respond to changes in the aggregate supply and demand balance.

The second risk concerns developments in firms' and households' medium- to long-term inflation expectations. As noted above, these expectations have been stable on the whole thus far. On the one hand, if firms and households increasingly expect from recent and

past price developments that the pace of increase in prices will remain slow, downward pressure may be exerted on actual prices as well as wages. On the other hand, once the efforts to strengthen growth potential proceed and firms' medium- to long-term growth expectations rise higher than expected as potential demand materializes, firms' and households' medium- to long-term inflation expectations may improve and prices may rise higher than anticipated.

The third risk concerns developments in import prices. There is a possibility that crude oil prices may show large fluctuations, mainly reflecting geopolitical risk. Crop prices may also entail uncertainty, with potential for movement in either direction depending on the weather. Fluctuations in foreign exchange rates could also affect consumer prices, both directly through changes in import prices and indirectly through changes in economic activity.

VI. Conduct of Monetary Policy

The Bank assesses the aforementioned economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy with the "price stability goal in the medium to long term" in mind.

The first perspective concerns an examination of the baseline scenario for the outlook for economic activity and prices -- that is, the scenario considered to be the most likely -- through fiscal 2014. As noted earlier, Japan's economy is expected to level off for the time being and return to the moderate recovery path as domestic demand remains resilient on the whole and overseas economies gradually emerge from the deceleration phase.

The year-on-year rate of change in the CPI, excluding the effects of the consumption tax hike, is expected to hover around 0 percent for the time being and start rising gradually thereafter as the aggregate supply and demand balance improves. In fiscal 2014, it appears likely that it will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being. In assessing comprehensively the outlook for economic activity and prices that has been described above, the Bank expects that Japan's economy will return to the sustainable growth path with price stability in the longer run.

The second perspective involves an examination of the risks considered most relevant to the conduct of monetary policy, including those that have a longer time horizon than in the first perspective. In the area of economic activity, although tail risks arising from the European debt problem are waning somewhat, a high degree of uncertainty remains concerning global financial markets and overseas economies, and it is still an important downside risk. In the meantime, medium- to long-term growth expectations could move in either the upside or downside direction depending on the outcome of the efforts to strengthen growth potential. Furthermore, the effects of the consumption tax hike on economic activity are highly uncertain given the previous episodes at home and abroad. Efforts to ensure fiscal sustainability could also significantly affect economic developments. On the price front, careful attention should be paid to the responsiveness of prices to the aggregate supply and demand balance as well as future developments in medium- to long-term inflation expectations and international commodity prices.

Financial imbalances should be examined, from the viewpoint of long-term risks that will significantly impact economic activity and prices when they materialize, although the probability of their appearance is low. Specifically, the total amount of credit by Japan's financial institutions to firms and households relative to economic activity has been around its long-term trend. As such, there is no evidence at this point that warns of financial imbalances stemming from bullish expectations. Nonetheless, while the amount outstanding of government debt has accumulated to a substantially high level, financial institutions' lending remains lackluster and their holding of government bonds tends to increase significantly. Thus, due attention needs to be paid to a possibility that some events might trigger a pick-up in long-term interest rates, which would have significant effects on financial institutions and consequently on Japan's economy as a whole. From this viewpoint, it is important to ensure that fiscal sustainability in the medium to long term be maintained and to preserve credibility in the conduct of monetary policy.⁹

As for the future conduct of monetary policy, based on the examinations from the two perspectives described above, the Bank is committed to conducting appropriate policy aimed at overcoming deflation and returning Japan's economy to the sustainable growth

⁹ For more details on the assessment of the financial system stability in Japan from the viewpoint of financial imbalances, see the October 2012 issue of the Bank's *Financial System Report*.

path with price stability by pursuing powerful monetary easing as well as supporting efforts to strengthen the growth potential of Japan's economy and to increase lending by financial institutions.

First, the Bank aims to achieve its "price stability goal in the medium to long term" of 1 percent for the time being in terms of the year-on-year rate of increase in the CPI through the pursuit of powerful monetary easing, conducting its virtually zero interest rate policy and implementing the Asset Purchase Program mainly through the purchase of financial assets. The Bank will continue with this powerful easing until it judges the 1 percent goal to be in sight. With regard to the Program, the Bank will continue pursuing powerful monetary easing in a continuous manner by steadily increasing its purchases of financial assets in order for the size of the Program to reach about 91 trillion yen by the end of 2013. In pursuing such powerful easing, the Bank will ascertain whether there is any significant risk to the sustainability of economic growth, including from the accumulation of financial imbalances.

Second, while pursuing powerful monetary easing, the Bank will also continue to engage in efforts to strengthen the foundations for Japan's economic growth as a central bank, in order to help firms and households take advantage of accommodative financial conditions and undertake investment and spending activities proactively. Japan's economy currently confronts the long-term structural challenge of declining trend growth rates amid the situation of a rapidly aging population. In order to overcome this challenge and establish a new basis for economic growth, business firms need to become more innovative in an effort to add value to their activities and explore new sources of demand both at home and abroad. With the aim of supporting such positive movements by firms, it is imperative to do the following. First, the government should seek to create a more conducive environment in such areas as regulation. Second, private financial institutions should carry out their financial intermediation function to the full extent and encourage firms to take advantage of accommodative financial conditions from the lending side. Furthermore, in a situation where the government debt to GDP ratio has become the highest among advanced economies, it is necessary that fiscal sustainability in the medium to long term be maintained as described above. Thus it is important that all economic entities -- including business firms, financial institutions, the government, and the Bank -- continue to exert

efforts within their respective roles.

The Bank will continue to conduct monetary policy in an appropriate manner. It will also do its utmost to ensure the stability of Japan's financial system, while giving particular attention to developments in global financial markets.

(Appendix)

Forecasts of the Majority of Policy Board Members

y/y % chg.

	Real GDP	Domestic CGPI	CPI (all items less fresh food)
Fiscal 2012	+1.4 to +1.6 [+1.5]	-1.2 to -0.9 [-1.1]	-0.1 to -0.1 [-0.1]
Forecasts made in July 2012	+2.2 to +2.4 [+2.2]	-0.3 to 0.0 [-0.2]	+0.1 to +0.3 [+0.2]
Fiscal 2013	+1.3 to +1.8 [+1.6]	+0.1 to +0.7 [+0.5]	+0.2 to +0.6 [+0.4]
Forecasts made in July 2012	+1.6 to +1.8 [+1.7]	+0.6 to +0.8 [+0.6]	+0.5 to +0.7 [+0.7]
Fiscal 2014	+0.2 to +0.7 [+0.6]	+3.7 to +4.4 [+4.2]	+2.4 to +3.0 [+2.8]
Excluding the effects of the consumption tax hike		+0.8 to +1.5 [+1.3]	+0.4 to +1.0 [+0.8]

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

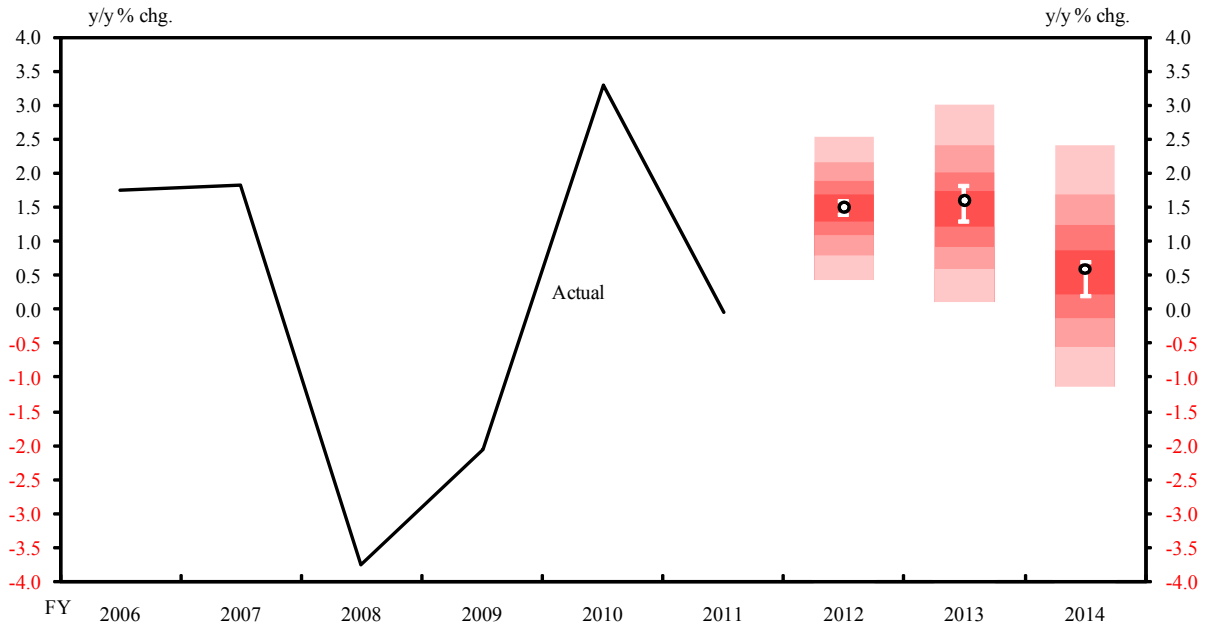
- The forecasts of the majority of the Policy Board members are constructed as follows: each Policy Board member's forecast takes the form of a point estimate -- namely, the figure to which he or she attaches the highest probability of realization. These forecasts are then shown as a range, with the highest figure and the lowest figure excluded. The range does not indicate the forecast errors.
- Individual Policy Board members make their forecasts with reference to the view of market participants regarding the future course of the policy interest rate -- a view that is incorporated in market interest rates.
- The scheduled consumption tax hikes for 2014 and 2015 -- of 8 percent and 10 percent, respectively -- are incorporated in the forecasts presented in this Outlook Report. In terms of the outlook for the CGPI and the CPI, individual Policy Board members make their forecasts based on figures excluding the direct effects of the consumption tax hike.
- The forecasts for the CGPI and the CPI for fiscal 2014 that incorporate the direct effects of the consumption tax hike are constructed as follows. First, the contribution to prices from the tax hike is mechanically computed on the assumption that the tax increase will be fully passed on for all taxable items. The domestic CGPI will be pushed up by 2.9 percentage points and the CPI by 2.0 percentage points. Second, these figures are added to the forecasts made by the Policy Board members.
- The CPI using the Chain-Weighted Index Formula has also been released as a reference. Based on this chain-weighted index, the year-on-year rate of change in the CPI toward the latter half of the projection period may be slightly lower than the above forecasts based on the Fix-Weighted Index Formula.
- The ranges shown below include the forecasts of all Policy Board members.

y/y % chg.

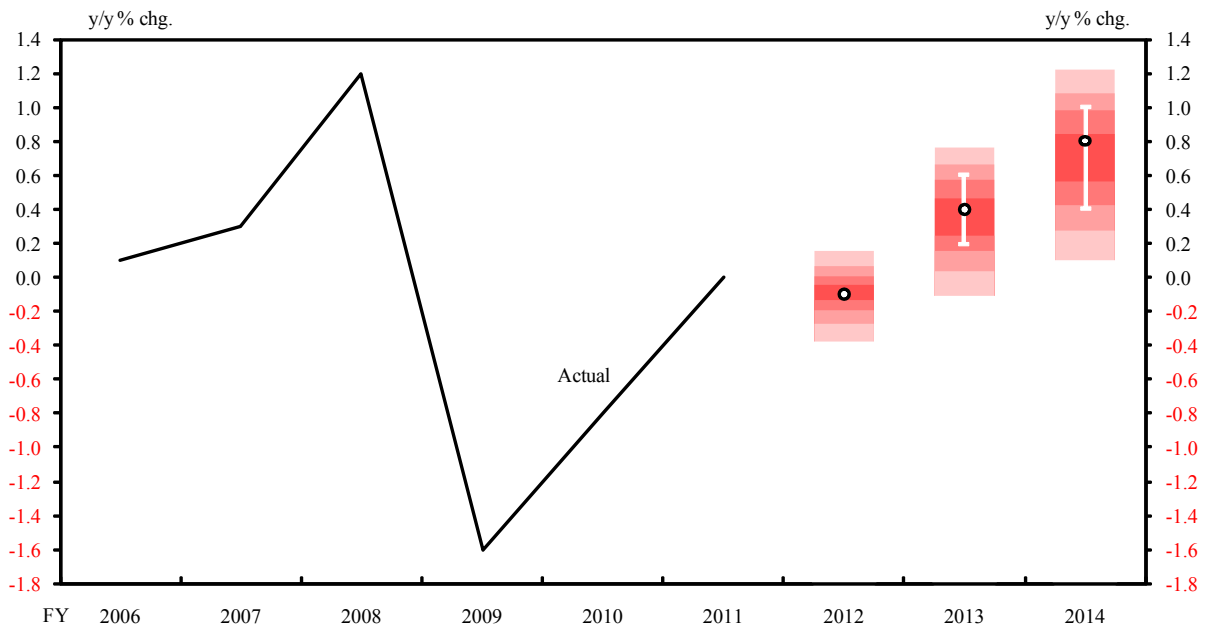
	Real GDP	Domestic CGPI	CPI (all items less fresh food)
Fiscal 2012	+1.2 to +1.7	-1.3 to -0.8	-0.1 to 0.0
Forecasts made in July 2012	+2.1 to +2.4	-0.5 to 0.0	+0.1 to +0.4
Fiscal 2013	+1.0 to +1.8	-0.2 to +0.8	-0.1 to +0.6
Forecasts made in July 2012	+1.5 to +1.8	+0.5 to +1.0	+0.4 to +0.8
Fiscal 2014	+0.1 to +0.8	+3.3 to +4.5	+2.2 to +3.0
Excluding the effects of the consumption tax hike		+0.4 to +1.6	+0.2 to +1.0

Forecast Distribution Charts of Policy Board Members

(1) Real GDP



(2) CPI (All Items Less Fresh Food)



Notes: 1. Based on the aggregated probability distributions (i.e., the Risk Balance Charts) compiled from the distributions of individual Policy Board members, the Forecast Distribution Charts are compiled as follows. First, upper and lower 10 percentiles of the aggregated distributions are trimmed and second, colors indicated below are used to show the respective percentiles of those distributions.

Upper 40% to lower 40%	Upper 30 to 40% & lower 30 to 40%	Upper 20 to 30% & lower 20 to 30%	Upper 10 to 20% & lower 10 to 20%
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2. 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*.
3. The circles in the bar charts indicate the median of the Policy Board members' forecasts (point estimates). The vertical lines in the bar charts indicate the range of the forecasts of the majority of Policy Board members.
4. The forecast for the CPI excludes the direct effects of the scheduled consumption tax hikes.

The Background

I. Economic, Price, and Financial Developments in the First Half of Fiscal 2012

Economic Activity

Looking back at Japan's economy during the period leading up to the present, economic activity started to pick up moderately toward the middle of the year as domestic demand remained firm, mainly supported by reconstruction-related demand (Chart 1). Real GDP achieved somewhat high growth, at around 3 percent (in annualized terms) in the first half of 2012, supported by the rise in domestic demand.¹⁰ After that, however, exports and industrial production have decreased as overseas economies have moved deeper into a deceleration phase while domestic demand has remained resilient on the whole. Consequently, economic activity has been weakening somewhat overall.

Specifically, as for overseas economies, the U.S. economy has continued its moderate recovery trend, whereas the European economy has receded slowly due to the effects of the sovereign debt problem. The deceleration phase in the Chinese economy has become protracted, mainly because exports to Europe, which have a large weight, have declined and since inventory adjustment pressures have intensified in a broader array of sectors including the basic materials industry. Affected partly by weakness in final demand in Europe and China, the pick-up in the NIEs and the ASEAN economies has moderated, particularly in the corporate sector. As a result, overseas economies as a whole have continued to decelerate and have moved deeper into a deceleration phase since the middle of this year (Charts 2 and 3). In reflection of these movements, exports -- which had shown some signs of a pick-up at the start of the fiscal year -- became relatively weak from around the middle of the year and have been decreasing recently (Chart 4). Under these circumstances, the accumulation of inventories and the steeper downward revision in the production forecast index indicate that the recovery in demand fell short of prior expectations in the manufacturing sector, and thus firms have come to take a more cautious

¹⁰ The semiannual real GDP growth rates on a calendar-year basis (January-June and July-December) registered a quarter-on-quarter plunge of 4.3 percent in annualized terms in the first half of 2011, due mainly to the effects of the Great East Japan Earthquake. After that, the rate picked up rapidly to an increase of 3.2 percent in the second half of 2011, and remained relatively high with an increase of 2.9 percent in the first half of 2012.

stance on production (Chart 5). At the same time, business sentiment has turned somewhat cautious, chiefly in the manufacturing sector (Chart 1 [2]).

While exports and industrial production have decreased, domestic demand has been resilient on the whole, albeit with somewhat less momentum.¹¹ Specifically, public investment has continued to increase, primarily in that related to reconstruction after the earthquake disaster (Chart 6). Business fixed investment as a whole has been on a moderate increasing trend as corporate profits have improved overall, although the manufacturing sector has started to show weakness due to the effects of the deceleration in overseas economies (Chart 7). Private consumption, after having increased moderately due to the effects of measures to stimulate demand for automobiles, has been resilient even of late, with the employment situation on an improving trend (Chart 8). Housing investment has generally been picking up, supported in part by reconstruction of disaster-stricken homes (Chart 9). Since domestic demand has remained relatively steady, economic activity tied to domestic demand, mainly in the nonmanufacturing sector, has been resilient compared with that evident in industrial production (Chart 10).

Reflecting these economic developments, utilization of labor and production capacity -- from a somewhat long-term perspective -- has maintained a moderate uptrend, albeit with some fluctuations, since the plunge caused by the Lehman shock but has ceased to increase (Chart 11 [1] and [2]). Looking at the weighted average of the *Tankan* (Short-Term Economic Survey of Enterprises in Japan) diffusion indices (DIs) of production capacity and employment conditions, where indices are weighted by capital and labor shares, the indicator has maintained its improving trend in a somewhat long term, although both the June and September readings were flat. The estimated negative output gap has also shown similar movements (Chart 11 [3]).

Prices

On the price front, the year-on-year rate of change in the domestic corporate goods price index (CGPI) has turned negative because international commodity prices fell back toward

¹¹ For the background to the firmness of domestic demand since last autumn, even amid the deceleration in overseas economies, see Box 1.

the middle of the year and iron and steel prices softened amid the loosening of supply and demand balance in Asian markets (Chart 12 [1]). Meanwhile, the corporate services price index (CSPI, excluding international transportation) has continued to narrow its pace of decline, albeit with fluctuations, on the back of a pick-up -- from a somewhat long-term perspective -- in corporate activity and profits, and the year-on-year rate of change has been around 0 percent (Chart 12 [2]). The consumer price index (CPI, all items less fresh food, and the same hereafter) continued to see a slowing in its rate of decline starting from around the end of 2009, and its year-on-year rate of change has been around 0 percent recently (Chart 13 [1]). The trimmed mean¹² and the Laspeyres chain-weighted index,¹³ both of which are regarded as methods for capturing trend changes in the CPI, also point to a mild improving trend from a long-term perspective, although they have recently been somewhat weak (Chart 13 [2]). A look at the year-on-year changes in items that comprise the CPI -- an indicator that subtracts the ratio of the number of items with declining prices from the number of items with rising prices -- confirms that, although improvement seems to have come to a pause, the indicator itself is on a gradual improving trend from a long-term perspective (Chart 14 [1]). Unit prices in the *Family Income and Expenditure Survey* have also risen markedly from a while ago (Chart 14 [2]). These developments in consumer prices can be interpreted as effects of the trend rise in international commodity prices and of the gradual improvement in the aggregate supply and demand balance feeding through to prices with some time lag, amid stable medium- to long-term inflation expectations of firms and households. Recently, however, the improvement in the year-on-year change in the CPI has paused, mainly since international commodity prices fell back toward the middle of the year. Looking at the year-on-year change in the CPI by category, the rate of decline has become slightly larger for goods on the whole, mainly since the contribution from

¹² The 10 percent trimmed mean is obtained by rearranging year-on-year rates of price change in ascending order, excluding items corresponding to both the upper and lower 10 percent tails of weights and then taking weighted averages of the remaining items. This essentially eliminates the effects of large relative price fluctuations.

¹³ The Laspeyres chain index is compiled as follows: (1) aggregates are produced after updating the weights of items of the base year and resetting the index level of individual items to 100 every year, and then (2) multiplying the previous year's chain index by the aggregated year-on-year figures obtained from the above calculation. Disregarding such factors as adopting and terminating items and revising model formulae, this is virtually equivalent to compiling an index in which the base year is updated every year.

petroleum products has gradually turned negative as a result of the decline in crude oil prices toward the middle of the year, although the negative contribution from durable goods became smaller compared to a while ago (Chart 15 [2]). As for services, housing rents have declined at a somewhat faster pace and prices for "other services" have been prone to price changes in overseas package tours, which tend to be affected by developments in crude oil prices and the foreign exchange rate, and therefore turned negative toward the middle of fiscal 2012 after having increased temporarily at the start of fiscal 2012; prices for the "meals outside the home" category remained more or less unchanged (Chart 15 [3]). Meanwhile, prices of public services have continued to edge up, mainly reflecting price changes in electricity and gas charges (Chart 15 [1]).

Financial Markets

In global financial markets, investors have remained somewhat less risk averse on the back of the European debt problem.

Concern about the European debt problem has grown once again since spring 2012, not only for Greece, Portugal, and Ireland but also for Spain and Italy; the long-term government bond yields of these countries trended upward toward July. As global investors intensified their stance on seeking safe assets, stock prices were soft for advanced and emerging countries alike; the long-term interest rates of Japan, the United States, and Germany have fallen to historical lows, and the yen and the U.S. dollar have increased their value in the foreign exchange market.

The long-term government bond yields for most European countries have subsequently declined somewhat, due to a range of policy measures taken by European authorities. For instance, the long-term government bond yield for Greece temporarily hit the 28-29 percent level in late July but has recently fallen below the 20 percent level; that for Spain was above 7 percent at its peak but has dropped to the 5.5-6.0 percent range of late (Chart 16). On the other hand, the long-term government bond yield of Germany, for example, which had declined to a historically low level, has risen slightly (Chart 17 [1]). In the stock market, U.S. and European stock prices have turned upward (Chart 18). In the foreign exchange market, besides the euro, the currencies of emerging and commodity-exporting economies

have risen against the U.S. dollar since the end of July (Chart 19). The interbank funding market has also maintained its stability (Chart 20). Nevertheless, there is still a high degree of uncertainty concerning the progress of fiscal and economic structural reform in Greece, the prospects of Spain requesting for financial support from the European Stability Mechanism (ESM), and steps toward establishing a single banking supervisory mechanism. Thus, it is necessary to pay close attention to further developments in financial markets.

Regarding the conduct of monetary policy of major central banks overseas, advanced economies have taken various measures to tackle problems that they are facing in a situation where policy rates have already been reduced to extremely low levels (Chart 21 [1]). In Europe, the European Central Bank (ECB) lowered its policy rate by 0.25 percent in July and introduced a government bond purchasing program called Outright Monetary Transactions (OMTs) in September in order to help restore the transmission channel of monetary policy. While maintaining the bank rate at 0.5 percent, the Bank of England (BOE) increased the size of its Asset Purchase Facility from 325 billion pounds to 375 billion pounds in July. In addition, the BOE launched in July the "Funding for Lending Scheme (FLS)," which provides funding to banks and building societies based on the conditions set in accordance with the amount of increase or decrease in their lending to the nonfinancial sectors; the first provision of funds was made in August. In the United States, in September, the Federal Reserve (Fed) announced changes in the duration of warranting exceptionally low levels for the federal funds rate from "at least through late 2014" to "at least through mid-2015" in order to ensure improvement in the labor market through stronger economic recovery. In conjunction with this announcement, the Fed decided to purchase additional mortgage-backed securities at a pace of 40 billion dollars per month.

While the conduct of monetary policy differs from country to country in emerging and commodity-exporting economies, more countries seem to have taken monetary easing measures in response to the deceleration in the global economy, including Europe (Chart 21 [2]). As for the emerging and commodity-exporting economies, there continues to be a high degree of uncertainty about the timing of their shift to a sustainable growth path and their medium- to long-term potential growth rates.

The Bank of Japan has been pursuing powerful monetary easing under its comprehensive monetary easing policy. In July, the Bank decided to adopt the following three measures with a view toward proceeding with powerful monetary easing in a continuous manner by steadily increasing the amount outstanding of the Asset Purchase Program: (1) a reduction in the maximum outstanding amount of the Bank's fixed-rate funds-supplying operation against pooled collateral by about 5 trillion yen and an increase in the outright purchases of treasury discount bills (T-Bills) by about 5 trillion yen; (2) the removal of the minimum bidding yield for the outright purchases of T-Bills and CP in order to ensure their smooth purchases; and (3) the integration of loan durations (currently "3 months" or "6 months") into "within 6 months" under the fixed-rate funds-supplying operation against pooled collateral. The Bank also decided in September the following measures regarding the Asset Purchase Program with a view to further enhancing monetary easing: (1) to increase the size of additional purchases of T-Bills by about 5 trillion yen and Japanese government bonds (JGBs) by about 5 trillion yen, amounting to a total increase of about 10 trillion yen, and to complete increased purchases by around end-2013; and (2) to remove the minimum bidding yield for the outright purchases of JGBs and corporate bonds.

In these circumstances, looking at financial markets in Japan, the uncollateralized overnight call rate has actually stayed at 0 percent in the money market, and the T-Bill rates -- including those with a 1-year maturity -- have fallen to around 0.1 percent (Chart 22 [1]).

Credit spreads on interbank transactions have remained stable as the balance sheets of Japanese financial institutions have maintained their soundness (Chart 20 [1]).

Premiums for U.S. dollar funding through the yen/U.S. dollar foreign exchange swap market have remained stable on the whole (Chart 20 [2]).

As for long-term interest rates, yields on government bonds up until 3 years have remained stable at extremely low levels of around 0.1 percent, as those with a shorter-term affect longer-term ones. Yields on 5-year government bonds have fallen to around 0.2 percent (Chart 22 [2]); those on 10-year government bonds have remained more or less unchanged at low levels, at around 0.8 percent (Chart 17).

Stock prices were soft toward late July, in line with sagging U.S. and European stock prices, which were affected by heightened concern about the European debt problem and by the lower-than-projected U.S. economic indicators; there were phases in which stock prices in Japan temporarily dipped to the 8,000-8,500 yen level. After that, stock prices rose temporarily as investors became somewhat less risk averse with a slight easing of concern over the European debt problem, but they have shown weakness again recently, reflecting cautious views about the economic outlook (Chart 23 [1]). In the Japanese real estate investment trust (J-REIT) market, prices fell toward the end of June as stock prices weakened, but later rose partly due to purchases made in view of high dividend yields (Chart 23 [2]).

In foreign exchange markets, the yen continued to appreciate against the U.S. dollar through the period leading up to July, but has since been moving within a relatively narrow range of around the 78-79 yen level overall. Amid increased concern over the European debt problem, the yen appreciated against the euro toward late July and temporarily reached 94-95 yen against that currency, a level last recorded in fiscal 2000. After that, the yen has been depreciating against the euro, mainly since concern over the European debt problem eased slightly as a result of measures taken by the ECB and other authorities (Chart 19 [1]).

Financial Conditions

Financial conditions in Japan have been accommodative.

Firms' funding costs have been hovering at low levels. The average interest rates on new loans and discounts have been more or less flat at low levels for both short- and long-term market interest rates (Chart 24 [1]). The issuance spread for CP has been low on the whole, although credit spreads have widened somewhat in some CP, reflecting business conditions (Chart 24 [2]). The issuance spread for corporate bonds has been at a low level overall, although it elevated somewhat recently owing to an increase in issuances of electric company bonds at a relatively high issuance spread (Chart 24 [3]). In these circumstances, interest payments by firms have remained at sufficiently low levels in relation to their profit (Chart 25 [1]). Given the current growth rates and prices, the interest rate appears to be at

a broadly neutral level (Chart 25 [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, and the levels of various DIs have been above the average for the period since 2000 (Chart 26 [1]). The financial positions of firms, including small ones, have recovered on the whole, and the levels of various indicators have also basically been above the average for the period since 2000 (Chart 26 [2]). In this situation, Japan's corporate financing conditions have been extremely accommodative, even compared with those in the United States and Europe (Chart 27). Issuance of bonds with low credit ratings has recently been slightly lower than in usual years, and some firms -- mainly in manufacturing -- have come to face further difficulties in their funding for CP and other bonds, mainly due to their deteriorated business conditions (Chart 28).

Meanwhile, demand for working capital by domestic firms has risen, due in part to increased costs of raw materials along with demand for reconstruction funds including business fixed investment; that for funds associated with corporate takeover activities as well as to gaining interests in natural resources has also continued to show an increase, reflecting firms' strategic efforts to strengthen their global businesses. In this situation, the year-on-year rate of increase in the amount outstanding of bank lending has expanded slightly (Chart 29 [1]). The amount outstanding of CP has registered a positive year-on-year growth rate. In contrast, the year-on-year rate of change in the amount outstanding of corporate bonds, especially electric company bonds for which the amount redeemed had continued to exceed the amount issued, has been negative (Chart 29 [2]).

The year-on-year rate of change in the monetary base registered a marginal decline in March-April because the year-earlier level was high as a result of large liquidity provision immediately after the disaster. Since then, it has moved back into positive territory again (Chart 30 [1]).¹⁴ The year-on-year change in money stock (M2) has been in the range of 2.0-3.0 percent; money stock as a ratio to nominal GDP has been moving gradually upward

¹⁴ The level of Japan's monetary base as a ratio to nominal GDP is the highest among advanced economies, reflecting extremely ample provision of liquidity by the Bank of Japan (see Box 2).

(Chart 30 [2]). This movement in the money stock reflects that a stream of funds to cash and deposits occurs due to their relatively high investment returns with the risks taken into account, and this in turn has an aspect of supporting fiscal deficit increases via the banking sector.

Land prices have continued to decline both in metropolitan and nonmetropolitan areas, but the rate of decline has narrowed gradually. Looking in detail at the *Land Price Survey by Prefectural Governments* for 2012 (as of July 1), both commercial and residential land prices have declined on a year-on-year basis in the three major metropolitan areas (Tokyo, Osaka, and Nagoya), as well as in nonmetropolitan areas, but the rate of decline has narrowed (Chart 31 [1]). As for the 23 wards of Tokyo on a semiannual basis, the pace of decline slowed in the first half of this year for both commercial and residential land prices compared with six months ago (Chart 31 [2]).

II. The Outlook for Economic Activity and Prices from the Second Half of Fiscal 2012 through Fiscal 2014

The Outlook for Economic Activity and Prices

As for Japan's economic outlook, exports and industrial production are expected to remain relatively weak for the time being as overseas economies continue to remain in the deceleration phase.¹⁵ On the other hand, domestic demand is expected to maintain its resilience on the whole, mainly supported by reconstruction-related demand in broader terms including investment related to disaster prevention and energy. Nevertheless, the weakness in exports and industrial production is likely to lead to some increase in postponing business fixed investment, particularly in manufacturing. Private consumption is expected to maintain its resilience, but with household income remaining more or less flat for the time being, car sales are projected to fall back following the ending of subsidies for purchasing energy-efficient cars; furthermore, pent-up demand after the earthquake disaster is expected to recede gradually. As a result, it will be difficult for domestic demand to continue increasing sufficiently enough to compensate for the weakness in exports, and

¹⁵ This economic outlook is based on the assumption that economic activity will not be constrained by a shortage in electricity supply.

economic activity is expected to remain more or less level for the time being. Thereafter, as overseas economies gradually emerge from the deceleration phase, exports and industrial production will start to pick up and spending activity in the economy as a whole will slowly gain momentum. As for fiscal 2013, although the impetus from reconstruction-related demand is expected to dissipate, notably in public demand, the economy is projected to continue expanding well above the potential growth rate, since domestic private demand will grow at a steady pace along with increases in corporate profits and labor income as the pick-up in overseas economies gradually become evident. As for the second half of fiscal 2013 in particular, the growth rate is temporarily expected to become considerably high as a temporary surge in demand prior to the consumption tax hike is expected to occur on a relatively large scale for private consumption and housing investment.¹⁶

As for fiscal 2014, overseas economies are likely to regain a growth rate higher than the historical average, and the economic stimulus effects of low interest rates will strengthen on the back of improvement in corporate profits, underpinning domestic private demand. This outlook also takes into account that, toward the end of the projection period, efforts to strengthen the economy's growth potential -- such as firms' efforts to cultivate potential demand at home and abroad and the government's implementation of its growth strategy -- will proceed and the medium- to long-term growth projections for firms and households will edge up.¹⁷ As a result, Japan's economy is expected to continue growing at a pace slightly above its potential growth rate. However, the increase in the growth rate for fiscal 2014 is likely to be small, since a backlash is expected following the front-loaded increase in demand prior to the consumption tax hike in the previous fiscal year, particularly in the first half of the fiscal year.

Expressing the outlook in terms of the annual real GDP growth rate, this is projected to be around 1.5 percent for fiscal 2012 and 2013, and around 0.5 percent for fiscal 2014.

¹⁶ This outlook incorporates the increase in the consumption tax rate to 8 percent and 10 percent in April 2014 and October 2015, respectively, following the passage of the legislation relating to the "Comprehensive Reform of Social Security and Tax." For details on the impact of the consumption tax hike on the economy, see Box 3.

¹⁷ The performance of Japan's economy in the longer term is largely affected by demographic changes. See Box 4 for details.

Comparing the current projection for fiscal 2012 and 2013 with that in the July interim assessment, the growth rate for fiscal 2012 is expected to be lower, reflecting the fact that overseas economies have moved deeper into the deceleration phase. Excluding the effect of the front-loaded increase in demand prior to the consumption tax hike, the growth rate for fiscal 2013 is expected to be somewhat lower than the one in the previous assessment.

As for the outlook in terms of price indices, the CGPI is expected to continue declining on a year-on-year basis for the time being, mainly reflecting the prolonged effects of the earlier fall in international commodity prices. Thereafter, however, it is expected to start rising slowly. The year-on-year rate of change in the CPI is expected to hover around 0 percent for the time being and start rising gradually thereafter as the aggregate supply and demand balance improves. In fiscal 2014, it appears likely that it will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being, excluding the effects of the consumption tax hike.¹⁸ Comparing the current projection for fiscal 2012 and 2013 with that in the July 2012 interim assessment, the projection for the CGPI is significantly lower for fiscal 2012 -- partly because international commodity prices are assumed to remain more or less unchanged for the time being against the background of a prolonged deceleration in overseas economies -- but almost unchanged for fiscal 2013. The year-on-year rates of change in the CPI in fiscal 2012 and 2013 are revised downward from those in July. This is partly because an improvement in the aggregate supply and demand balance is expected to be delayed. The downward correction in crude oil prices also contributed to the downward revision in the CPI projection.

The following provides supplementary details on the underlying mechanism of developments in economic activity and prices.

Government Spending

As for reconstruction expenditures, most of the budget for related projects -- amounting to at least 19 trillion yen for the first five years designated in the Basic Guidelines for Reconstruction in response to the Great East Japan Earthquake -- has been allocated for each of the following budgets: the first supplementary budget for fiscal 2011 of

¹⁸ See Box 5 for effects of the consumption tax hike on prices.

approximately 4 trillion yen; the second supplementary budget of approximately 2 trillion yen; the third supplementary budget of approximately 9.2 trillion yen; and the budget for fiscal 2012 of approximately 3.8 trillion yen. As the execution of these budgets proceeds, public investment has continued to increase, primarily in that related to reconstruction after the earthquake disaster (Chart 6). As for the outlook, public investment is projected to be on the rise or else maintain a high level throughout fiscal 2012, although it will be partly affected by bottlenecks on the supply side, including a labor shortage in the disaster-stricken areas. On the other hand, public investment from fiscal 2013 onward is projected to return to its previous downtrend as the upward impetus from reconstruction-related investment gradually dissipates.

Meanwhile, the already high level in the amount outstanding of government liabilities as a percentage of GDP is likely to increase further, even after having included the effect of the consumption tax hike, mainly due to the rise in spending associated with social security as a result of the aging population (Chart 32).

Overseas Economies

The baseline scenario regarding the outlook for overseas economies is that they are likely to remain in a deceleration phase for the time being, but will gradually emerge from that phase. The growth rates of overseas economies are projected to run slightly above the past long-term average toward the second half of the projection period, after remaining somewhat lower than the past long-term average for the time being (Chart 3 [1]). By country and region, the U.S. economy is expected to continue recovering at a moderate pace supported by accommodative financial conditions as pressures on balance-sheet repair among households ease gradually, reflecting improvement in the housing market, although the contractionary stance in fiscal policy is likely to weigh on the economy. The European economy, although it is likely to lack momentum for recovery on the whole throughout the projection period, is assumed to turn marginally toward positive growth on improvement in business and household sentiment as steps are taken to deal with the European debt problem. The Chinese economy is expected to remain in a deceleration phase for the time being, but will register higher growth gradually as positive effects of economic stimulus measures on both the monetary and fiscal fronts start to appear and inventory adjustment progresses. In

these circumstances, the pick-up in the NIEs and the ASEAN economies is likely to become more evident.

The outlook for overseas economies, however, entails various risks. Although tail risks in which the European debt problem becomes more serious, together with anxiety over the financial system, disrupting the global financial market, and shifting down overseas economies, are waning somewhat, there are still many issues to overcome before this problem is solved. Even if a plunge in the economy is avoided, there is a risk that the deceleration in the global economy may be prolonged further. First, in this regard, attention should be paid to the possibility that the ongoing weakness in the European economy may drag the global economy for a longer period through a trade and financial market channel, as well as deteriorating business sentiment. Second, for the Chinese economy, uncertainty remains regarding the effects of its economic policies. Furthermore, it is necessary to closely monitor whether smooth improvement in the supply and demand balance can be achieved as the economy overcomes the problem of production capacity overhang that is in part a result of strong investment after the Lehman shock. Third, for the United States, momentum toward recovery warrants careful monitoring given that balance-sheet repairs -- despite gradual progress among households -- are projected to weigh on the economy and uncertainty about the outlook for fiscal policies, including the issue referred to as the "fiscal cliff," remains significant.¹⁹

The aforementioned risks involve not only uncertainty associated with economic cycles, but also structural challenges from a longer-term perspective. Specifically, as for the European and U.S. economies, an important issue is how adjustments have been progressing after the credit bubble up to the mid-2000s burst as a result of the Lehman shock.²⁰ Some emerging economies, including China, face the challenge of making a smooth shift from high growth to a more sustainable pace of growth -- a transition that

¹⁹ "Fiscal cliff" refers to the concurrent expiration of large income tax cuts and extended unemployment benefits if the current laws remain unchanged toward end-2012, as well as automatic spending reductions under the Budget Control Act. There is a concern that this will increase the burden of households significantly from the beginning of 2013.

²⁰ See Box 6 for the impact of the expansion and bursting of the credit bubble on the European and U.S. economies.

Japan has gone through before.²¹

Exports and Imports

Real exports have been decreasing as overseas economies have moved deeper into a deceleration phase. As for the outlook, they are expected to remain relatively weak for the time being and increase moderately thereafter as overseas economies gradually emerge from that phase.

The pace of increase in world trade volume has recently been slowing on a global scale amid the prolonged slowdown in global economies, and this has also affected Japan's exports (Chart 33 [1]). In these circumstances, exports from Japan have continued to show some weakness relative to other countries and regions. Looking at the trend in world trade, exports from Japan rose at a slightly faster pace than global exports on the whole prior to the Lehman shock (Chart 33 [2]). After that shock, however, exports from Japan have been sluggish in comparison to global exports. This sluggishness is considered to have resulted from a complexity of factors, such as a trend decline in the competitiveness of Japanese products mainly due to the catch-up of emerging economies, the yen's appreciation, and a shift in production bases overseas. Taking these factors into account, the pace of increase in exports relative to the pace of recovery in overseas economies is projected to be somewhat subdued compared to what had been the case in the past. By types of goods, intermediate goods such as iron and steel, as well as chemical products -- which are affected by increased supply of general-purpose products in China or the Middle East -- and electric machinery-related goods including IT-related goods and durable consumer goods -- which are particularly affected by the decline in international competitiveness -- are likely to remain relatively weak compared to the past (Chart 34).²² As for automobile-related goods,

²¹ See Box 7 for details on the process of how the economy shifted from high growth to stable growth in Japan.

²² Looking at movements in world semiconductor shipments, actual shipments through August were lower than WSTS (*World Semiconductor Trade Statistics*) forecasts as of May on a global basis (Chart 35 [1]); this reveals that a recovery in demand has been lagging behind. Added to this, the pace of shipments to Japan has continued to be relatively weak compared with that worldwide after the Lehman shock. Judged from these movements, exports of IT-related goods from Japan as well as production were affected by the weakness in global demand in the IT-related sector, and also by the decline in their international competitiveness.

increases in exports going forward are expected to be more modest compared with past trends, as the increase in overseas demand will basically be met by the expanded production abroad. On the other hand, exports of capital goods and parts are projected to remain relatively firm, as they appear to retain their high international competitiveness, and an increased shift in production to overseas bases is also considered to induce exports to a meaningful extent in this sector.

Meanwhile, Japan's exports to China, since the peak of early last year, have shown pronounced weakness in capital goods and parts as well as intermediate goods, which comprise a large weight among exports to China (Chart 36 [1] and [2]). This was because the weakness in exports from China to Europe had indirect effects through the supply chain (Chart 36 [3]); added to this, China has seen an accumulation of inventories of goods including raw materials and construction machinery in the presence of excess capacity, this has possibly weighed down on Chinese imports. A survey conducted on major Chinese firms by the People's Bank of China shows that the manufacturing sector as a whole faces an overhang in inventories -- at a level in line with that seen after the Lehman shock -- and there has also been a rapid increase in the number of firms perceiving their production capacity as excessive (Chart 36 [4]). Taking these factors into account, the supply and demand conditions will remain eased, at least for the time being, and the pace of growth in exports from Japan to China is likely to stay somewhat subdued relative to the pace of growth of the Chinese economy as a whole.

On the other hand, real imports have trended upward. Regarding the outlook, these are projected to continue trending moderately upward; although partly affected by relatively weak industrial production for the time being, imports of fuels used for thermal power generation will remain at a high level and domestic demand will continue to be resilient on the whole. As mentioned earlier, the consumption tax hike is projected to lead to a temporary surge in demand, followed by a subsequent fall; however, taking account of the considerably high import penetration ratio that results in a stronger relationship between imports and domestic demand, imports will also see ups and downs, and this will smooth out fluctuations in the real GDP to a certain extent.

External and Saving-Investment Balances

The trade balance, after having recorded a deficit in fiscal 2011 for the first time since fiscal 1979, has moved deeper into deficit since the start of fiscal 2012 (Chart 37 [1]). This is attributable to (1) somewhat weak exports amid the prolonged slowdown in overseas economies, (2) a rise in import prices reflecting a trend increase in international commodity prices, and (3) an increase in real imports due to growing fuel imports as a result of halted operations at nuclear power plants. As for the outlook, the trade balance is unlikely to narrow its deficit markedly for the time being in light of relatively weak exports. After that, the deficit is generally expected to narrow mildly, along with the gradual increase in exports, albeit with fluctuations caused by the ups and downs in imports in light of the consumption tax hike.

Japan's current account surplus has remained intact, despite a deficit in the trade balance, as the income balance has continued to register a relatively large surplus on the back of the accumulation of external assets. As for the outlook, the current account surplus is expected to narrow slightly, since the surplus in the income balance is likely to shrink somewhat for the time being given that the slowdown in overseas economies could possibly lead to a decline with some time lag in the yield on external assets, and that the trade balance is to continue registering a deficit. After that, the current account surplus is expected to widen at a mild pace, albeit with fluctuations, as the pace of recovery in overseas economies picks up again, narrowing the trade deficit.

Looking at a saving-investment balance that conceptually corresponds to and is inextricably linked to a current account balance, excess saving will continue on the whole throughout the projection period since the private sector will display excess saving on a large scale, chiefly in the corporate sector, whereas the general government will continue to register a large deficit (Chart 37 [2]).

The Environment surrounding Corporate Profits

Corporate profits have been improving on the whole, notably in domestic demand-oriented sectors, although some impacts from the deceleration in overseas economies have been seen,

especially in manufacturing (Chart 38). As for the outlook, they are projected to continue on their moderate improving trend on the whole, supported by resilient domestic demand.

From a somewhat long-term perspective, corporate profitability has been on a moderate improving trend since the 2000s; the profitability of nonmanufacturing in particular has been moving at historical highs (Chart 39 [1]). These movements are attributable to both supply and demand factors. On the demand side, domestic demand -- which has a tied link with the nonmanufacturing sector -- remains resilient since autumn last year; on the supply side, from a somewhat long-term perspective, (1) various costs, including those in personnel expenses were reduced, and (2) industry consolidation has proceeded in sectors such as retailing and services, where the exit of firms with low profitability brought about an increase in market share, in turn enabling firms to improve their profit margins (Chart 39 [2]).

Business Fixed Investment

In light of these developments in corporate profits, business fixed investment has been on a moderate increasing trend. As for the outlook, it is likely to slow down on the whole for the time being, since the weakness in exports and industrial production on the back of the slowdown in overseas economies is likely to lead to some increase in postponing investment, notably in manufacturing (Chart 40 [1]). However, given that the level of business fixed investment has remained low in the middle of the recovery phase following the period of a plunge after the Lehman shock, investment associated with maintenance and repair can be expected to increase (Chart 40 [2]). Moreover, investment related to seismic strengthening and new energy, which are less likely to be affected by economic cycles, is also expected to increase (Chart 40 [3] and [4]). Underpinned by investment in these areas, business fixed investment as a whole is expected to maintain its moderate increasing trend. In this regard, business fixed investment plans for fiscal 2012 (including software investment but excluding land purchasing expenses) in the September *Tankan* were set noticeably higher than the actual outcomes of the past few years, even in a situation where overseas economies have continued to be in the deceleration phase (Chart 41). Taking account of these factors, even if firms, mainly in manufacturing, eventually revise their plans downward to a certain extent, the uptrend itself is likely to be maintained on the

whole. In fiscal 2013, the uptrend in business fixed investment is projected to become evident along with an improvement in overseas economies. As for fiscal 2014 -- toward the end of the projection period -- cyclical factors are likely to slow growth in business fixed investment, but the uptrend in such investment is expected to remain intact as support from monetary easing can be anticipated in an environment of a moderate increase in firms' growth expectations, as described below.

Turning to the assessment of business fixed investment in this projection based on its relation with medium- to long-term economic growth, the viewpoint of the capital stock cycle indicates that firm growth can be expected for the time being even if firms' expected growth rates remain at around 0.5 percent (Chart 42). After that, with the ratio of business fixed investment to existing capital stock -- that is, the growth rate of capital stock -- moving gradually upward, the growth rate of business fixed investment itself is expected to head for deceleration in cyclical terms. However, this projection assumes that the slowdown in business fixed investment does not become pronounced toward the end of the projection period. This is because the medium- to long-term growth expectations of firms are projected to rise, albeit very slowly, as the effects of various efforts to strengthen firms' growth potential gradually come to materialize, assisted partly by the progress in regulatory reform and business reconstruction.²³ Assessing these developments against various representative indicators, the ratio of business fixed investment to GDP is expected to increase at a very mild pace from its current low level and move slightly above the long-term average in the second half of the projection period (Chart 43 [1]). The ratio of business fixed investment to cash flow at present generally matches the current level of firms' expected growth rates, and this ratio is projected to move up at a very moderate pace, in line with the rise in growth expectations (Chart 43 [2]). Furthermore, looking at the ratio of business fixed investment to capital stock, such investment declined after the Lehman shock to a level considerably below the long-term equilibrium, but is expected to rise gradually in the second half of the projection period to a level close to that of the long-term equilibrium estimated from the potential growth rate as the long-term equilibrium

²³ For instance, the government's growth strategy puts emphasis on areas associated with the environment and energy. Specifically, with the implementation of the Feed-in Tariff Scheme for Renewable Energy that started in July this year, investment is projected on a large scale, including that in mega solar power plants, for which tariffs are set at a high level (Chart 40 [4]).

increases very gradually in line with the potential growth rate (Chart 43 [3]).²⁴

As to the effects on the financial side, seen from a somewhat long-term perspective, the accommodative financial conditions are expected to underpin business fixed investment going forward in light of a certain recovery in firms' risk appetite that reflects improvement in their financial positions (Charts 44 and 26). In the context of investment profitability, the effects of monetary easing are projected to strengthen gradually toward the end of the projection period, reflecting a rise in the rate of return on capital due to economic recovery, together with a moderate decline in real interest rates in reflection of higher inflation rates, as mentioned below. With factors such as a further expansion of production bases overseas in the manufacturing sector, as well as the decline in international competitiveness weighing on business fixed investment, however, the effects of improved investment profitability are likely to be somewhat reserved compared with those of the past.

The Employment and Income Situation

As for the employment and income situation, supply and demand conditions in the labor market have been on an improving trend (Chart 45 [1]). The number of employees has been registering a year-on-year increase. This increase is largely attributable to employment among small firms -- notably, increases in part-time employees -- which is strongly related to domestic demand (Chart 46 [1]). In this situation, scheduled cash earnings per hour of part-time employees, as well as scheduled cash earnings of full-time employees, have inched upward lately (Chart 45 [2]). Recently, however, the number of hours worked has peaked and the improving trend in the number of new job offers has come to a standstill, mainly in the manufacturing sector, in line with the decline in industrial production (Chart 45 [3] and [4]). In terms of the outlook, improvement in labor market conditions is expected to come to a pause for the time being while industrial production remains relatively weak. As for wages per employee, the lackluster business performance in fiscal 2011, which was affected by the earthquake disaster, is expected to continue to weigh down on winter bonuses (Chart 46 [2]). As a result, labor income is likely to remain more or less flat for the time being (Chart 46 [3]). After that, it is expected that wages, particularly the hourly wages of part-time employees, will edge up and labor income

²⁴ Movements of the potential growth rate will be mentioned later on.

will rise in accordance with improvement in supply and demand conditions in the labor market, reflecting a recovery in economic activity. This, however, is expected to become evident from fiscal 2013 onward only when exports and industrial production pick up markedly.

Judging the degree of excess in labor in the economy based on labor productivity, labor productivity per worker has continued to run below the long-term trend but the discrepancy has narrowed compared to a while ago, indicating that the degree of excess in labor has receded (Chart 47 [1]). As for the outlook, the unemployment rate is expected to continue its moderate downtrend as labor productivity gradually returns to its long-term trend in accordance with economic recovery (Chart 47 [2]). Labor share is expected to trend downward at a mild pace, once the economy returns to its moderate recovery path (Chart 47 [3]). Toward the second half of the projection period, however, labor share is projected to stop declining, to around a level slightly above the average of 2004-2007, or the second half of the previous economic expansion phase. During the previous expansion phase, factors such as regulatory reforms led to a sharp increase in nonregular employment -- mainly in those among temporary workers, thereby exerting downward pressure on wages. In the current phase, on the other hand, downward pressure from these factors is considered to be less pronounced.

Households' Spending Behavior²⁵

Private consumption showed relatively high growth through to the first half of this year even amid lackluster developments in household income (Charts 48 and 8). A recovery in economic activity and in labor market conditions following the plunge after the earthquake disaster, as well as the improving trend in consumer confidence, are considered to have been the basic background. In addition, a multiple of other factors have been at work, such as (1) the materialization of pent-up demand after the earthquake disaster, (2) the impact of policy initiatives including subsidies for purchasing energy-efficient cars, (3) an increased willingness to consume among the elderly, partly fueled by firms' efforts to

²⁵ In the projection period, private consumption and housing investment are likely to be affected by the consumption tax hike, notably by the front-loaded increase in demand prior to the hike and the subsequent decline. See Box 3 for details.

capture new demand, and (4) the possible merits of the yen's appreciation.

Regarding the outlook, private consumption -- albeit with fluctuations caused by the upsurge in demand following the consumption tax hike and the subsequent fall -- is basically expected to remain resilient, supported by firms' efforts to capture new demand, such as in businesses targeting the needs of the elderly, in an environment where the employment and income situation continues on its improving trend. For the time being, however, car sales are projected to fall back following the ending of subsidies for purchasing energy-efficient cars; added to this, pent-up demand -- which had supported consumption growth to date -- is likely to recede gradually. Consequently, private consumption, despite maintaining its resilience, is expected to remain more or less flat after having registered relatively high growth through to the first half of this year. Developments in private consumption by component through to the first half of this year show that growth has been seen across the board, with conspicuous strength in durable consumer goods and services (Chart 49 [1]). More specifically, as for consumption of durable goods, the number of new passenger-car registrations rose to a high level, chiefly in new models of mini vehicles and small cars, boosted in part by subsidies for purchasing energy-efficient cars. With applications for subsidies for purchasing environmentally friendly cars already closed, however, the number of registrations is expected to temporarily fall back to levels well below the long-term equilibrium, as estimated from developments in income and population (Chart 49 [2]). Consumption of services is expected to remain solid on the whole, but the pace of growth is expected to slow as pent-up demand wanes (Chart 49 [3]).

Throughout the projection period, growth in real disposable income is projected to remain moderate due to the rise in income taxes to finance the budget related to reconstruction, as well as to the increase in the consumption tax rate. However, supporting factors are projected to remain, such as an increased willingness to consume by the elderly on the back of firms' efforts to capture new demand.²⁶ As a result, private consumption is basically expected to stay somewhat stronger relative to household income, and it is anticipated that

²⁶ Details on private consumption by the elderly are available in Box 5 in the *Outlook for Economic Activity and Prices* (April 2012).

the propensity to consume will inch up very gradually over the projection period.

Housing investment has generally been picking up (Chart 9). As for the outlook, such investment is expected to continue to generally pick up as potential demand -- the realization of which had been held down after the Lehman shock -- gradually materializes, assisted in part by the reconstruction of disaster-stricken homes and by effects from monetary easing.

The Environment surrounding Prices

International commodity prices have picked up slightly on the whole, after having fallen back through mid-2012 (Chart 50). They are expected to remain more or less unchanged for the time being, reflecting the deceleration in overseas economies. Thereafter, however, as overseas economies gradually emerge from the deceleration phase, they are projected to follow a moderate uptrend, with increasing demand in food and energy against the background of economic growth in emerging economies. Given these movements in international commodity prices, domestic energy-related and food prices are also expected to continue on a moderate uptrend throughout the projection period.²⁷

As for the expected inflation rate in the medium to long term, a survey conducted among market participants and economists shows that this has generally been stable over the past few years, at around 1 percent (Chart 51). Another survey conducted among households indicates that the rate has been stable and slightly positive and is expected to remain stable during the projection period.

From a somewhat long-term perspective, the aggregate supply and demand balance has continued its gradual improving trend after the plunge resulting from the Lehman shock, albeit with fluctuations caused by various factors such as the earthquake disaster (Chart 52 [1]). As for the outlook, the balance is likely to level off for the time being, on the basis of

²⁷ International commodity prices of grain have been in a high range recently, and the effects may eventually spill over to consumer prices to some extent. These market developments, however, are largely driven by temporary supply shocks against the background of unseasonable bad weather, and are therefore expected to fall back once these effects subside. Taking the yen's appreciation also into account, upward pressure on prices as significant as that observed in 2008 cannot be expected.

the aforementioned developments of the economy, but will follow a moderate uptrend thereafter, albeit with fluctuations resulting from the effects of the consumption tax hike, as the economy grows at a rate faster than its potential rate.²⁸

Taking the above into account, the year-on-year rate of change in the CPI is expected to hover around 0 percent for the time being and start rising gradually thereafter as the aggregate supply and demand balance improves. In fiscal 2014, it appears likely that it will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being, excluding the effects from the consumption tax hike.

In the relatively long run, there is a broad positive correlation between the CPI and the aggregate supply and demand balance (Chart 53 [1] and [2]). In fact, the year-on-year rate of decline in the CPI has been slowing gradually so far against a backdrop of moderate improvement in the aggregate supply and demand balance (Chart 54 [1]). The relationship between the aggregate supply and demand balance and the CPI involves a significant degree of uncertainty, and thus should be viewed with caution. The outlook for prices in this October Outlook Report, which reads that, in fiscal 2014, it appears likely that the year-on-year rate of change in the CPI will move steadily closer toward the Bank's "price stability goal in the medium to long term" of 1 percent for the time being, excluding the effects from the consumption tax hike, is based on the Bank's baseline scenario that the inflation rate will gradually rise in line with the average relationship between the CPI and the aggregate supply and demand balance over the past 30 years or so (Chart 53).

In this regard, improvement in the CPI was restrained vis-à-vis developments in the aggregate supply and demand balance through the mid-2000s, when the economy continued

²⁸ Japan's potential growth rate had temporarily dropped to around 0 percent, partly due to a decline in the growth rate of capital stock reflecting the economic plunge after the Lehman shock (Chart 52 [2]). Since then, the rate has been gradually increasing against the background of gradual recovery in economic activity. Based on a standard production function approach, Japan's potential growth rate during the projection period is estimated to be "around 0.5 percent," although it will gradually rise toward the end of the period due to such factors as capital accumulation. Estimates of the potential growth rate are subject to a considerable margin of error, however, as they greatly depend on the specific methodology employed and could change as more data for the relevant period become available.

to grow at a moderate pace. Looking at developments in the most recent period, the year-on-year rate of change in the CPI has recovered to around 0 percent, which is roughly in line with developments in the aggregate supply and demand balance, and the trimmed mean -- an indicator of basic trends of fluctuations -- has similarly been improving (Chart 54 [1]). Excluding (1) food and energy, which are susceptible to fluctuations in commodity market and foreign exchange developments, (2) durable consumer goods, which are affected by technological innovation and quality adjustment, and (3) tobacco, for which prices fluctuate in response to regulatory changes, goods prices have been improving in line with the aggregate supply and demand balance (Chart 54 [2]). Meanwhile, the service prices in the private sector (excluding housing rent), given their high correlation with the hourly wages of part-time employees, are projected to gradually turn positive as wages rise moderately together with improvement in the labor supply and demand situation (Chart 54 [3]).

In the previous phase of economic expansion, the rate of increase in the CPI was restrained vis-à-vis developments in the aggregate supply and demand balance, because the following factors other than said balance -- in other words, negative price shocks -- are considered to have been at work: (1) increased imports of inexpensive products from China; (2) moves to increase the efficiency of the distribution system in accordance with deregulations; and (3) partly led by those factors, widespread adoption of firms' low pricing strategies as well as consumers' preference for inexpensive goods and services. On this point, a look at recent developments gives rise to the possibility that a rise in wages in the coastal regions of China may have led to a situation where downward pressure on prices arising from inexpensive imports has become less significant. In fact, import prices of consumer goods have been on a rising trend in the past one to two years (Chart 55 [1]). Moreover, moves to increase the efficiency of the distribution system against the backdrop of deregulation that had continued over a long period of time appear to have run their course for now (Chart 55 [2]). Additional downward pressure on prices in this regard appears to have eased as well. Amid these changes, firms' pricing strategies suggest a shift in direction, aside from the aforementioned rise in market share in the retail and services industries (Chart 39 [2]). The difference between the output prices DI and the input prices DI for small firms -- which are released in the *Tankan* and considered indicators of margins of the retail industry --

continued on an uninterrupted narrowing through the mid-2000s, but has bottomed since then and started on an expanding trend in recent years (Chart 55 [2]). Survey results of firms' price-setting behavior confirm that, compared with the survey conducted around 2000, more firms' pricing strategies focus on securing profits in a situation where the share of their own products in the market has increased and the products and services have become increasingly differentiated (Chart 55 [3]). Meanwhile, as for consumers' purchasing behavior, the unit prices in the *Family Income and Expenditure Survey*, which reflect changes in the actual items purchased, have recently been relatively strong compared to developments in the CPI (Chart 14 [2]).

Pressure to cut prices is something that always exists to a certain extent in a highly competitive environment, and uncertainty about the future remains high. Nevertheless, taking into account changes seen of late, the projection assumes that negative price shocks as severe as that experienced toward the mid-2000s -- the previous phase of economic expansion -- will not materialize this time. Throughout the projection period, therefore, the relationship between the aggregate demand and supply balance and prices is expected to become more evident compared with that during the previous phase of economic expansion.

In the past, the year-on-year rate of change in the Laspeyres chain-weighted CPI tended to be lower than that in the fixed-weighted CPI, and the gap became larger as more time passed from the base year, which is currently 2010. Based on this observation, the year-on-year rate of change in the chain-weighted CPI in fiscal 2014 -- toward the end of the projection period -- may be slightly lower than the forecast in this Outlook Report, which is based on the usual fixed-weighted CPI. With regard to the latest weighted index, however, the gap between the chain-weighted CPI and the fixed-weighted CPI is expected to remain relatively small. This is because the weights of some items such as TVs -- for which prices tend to fall faster, and thus tend to lead to a gap between the chain-weighted

index and the fix-weighted index -- have been declining since 2011, and the pace of price falls themselves have become relatively small compared with some time ago.²⁹

²⁹ Expenditures for durable consumption goods such as TVs increased significantly in 2010, the current base year, due to the eco-point system -- that is, subsidies for purchasing energy efficient products -- but the share of such goods has become significantly smaller since fiscal 2011 because of the backlash referenced earlier. This is considered to be contributing to making the gap between the fix-weighted index and the chain-weighted index smaller.

(Box 1) Background to the Firmness of Domestic Demand since Last Autumn

Looking at economic developments in Japan up to the first half of 2012, domestic demand, mainly private consumption, remained firm while overseas demand was somewhat weak, reflecting the deceleration in overseas economies (Chart 56). It has consistently been observed that domestic demand has remained relatively firm since the Lehman shock. Such a tendency has been particularly pronounced since autumn 2011, when the rapid pick-up in economic activity after the Great East Japan Earthquake came to an end and concern over the European debt problem sharply intensified.

Looking at real GDP and its main components during the economic recession and subsequent recovery, real GDP as a whole showed a large decline after the Lehman shock and even now has not recovered the peak registered in the previous economic expansion. This is essentially because the pick-up in exports has been slower, compared to previous economic recoveries, as the pace of recovery in the U.S. and European economies has been moderate as a result of the bursting of the credit bubbles (see Box 6), and consequently the recovery in business investment has also been delayed. In contrast, private consumption declined sharply after the Lehman shock but then recovered remarkably. It quickly recovered even from the fall realized after the earthquake, and has already exceeded the level registered at the peak of the previous economic recovery. Public investment also declined temporarily after the impacts of post-financial crisis policy measures to stimulate economic activity wore off, but currently stands at a high level due to reconstruction-related demand following the earthquake disaster. Meanwhile, although the level of business investment is rather low, it has been recovering gradually over the past one to two years even though exports leveled off.

There are several conceivable reasons for the relative firmness in domestic demand. First, regarding cyclical developments, while the economy was in the process of recovery from the considerable downturn suffered in the aftermath of the financial crisis, demand -- that had been temporarily restrained on a wide scale -- came to be realized as the economy endeavored to achieve recovery. Second, the effects of a number of policy measures underpinned domestic demand. The execution of a reconstruction budget and subsidies

and tax breaks for purchases of automobiles and houses contributed to growth through increases in government expenditure and private consumption. All these factors are temporary in nature, and their effects are expected to gradually subside over time. That said, more lasting and structural factors are also underpinning domestic demand, and this represents a third reason for the relative firmness in domestic demand. Specifically, concerning private consumption, the elderly's increasing willingness to consume has contributed to the firmness in private consumption, as firms are targeting senior citizens to capture latent demand, as pointed out in the April 2012 issue of the Outlook Report. In terms of business spending, investments in disaster prevention and business continuity, as well as those related to new energy and environmentally-related businesses, have all helped underpin demand. In addition to the aforementioned factors, there is a fourth one -- namely, the maintaining of stability in Japan's financial system, a continued accommodative financial environment, and improvement in firms' financial positions have provided important support for the recovery in private domestic demand.

(Box 2) International Comparison of the Monetary Base

In order to measure the degree of monetary easing, it is important to examine the extent to which financial conditions and costs for firms' borrowing have become accommodative rather than looking at quantitative indicators such as the monetary base.³⁰ Viewed from such a perspective, financial conditions in Japan have been extremely accommodative compared with those in the United States and Europe (Chart 27).

Related to this, it has been pointed out that the increase in the monetary base in Japan following the Lehman shock is lower than in the United States and Europe (Chart 57 [1]). There are two issues that require attention. First, it looks obvious that the amount of money necessary for smooth economic activity is different among countries, depending on the size of the economy; thus, the monetary base should be assessed not in terms of its absolute level but relative to economic activity -- for example, using GDP. Second, when looking at changes in the monetary base during a certain period of time, the way in which the monetary base increases could vary considerably depending on which period of time one might want to look at. In the United States, the monetary base remained at a substantially low level prior to the Lehman shock, reflecting the fact that financial institutions' reserves held at the Federal Reserve stayed extremely low at around 0.3 percent relative to nominal GDP. Because of this, after the financial crisis, the monetary base in the United States appears to have increased more rapidly than that in Japan. Actually, however, the Bank of Japan has been increasing liquidity provision substantially since the second half of the 1990s, much earlier than the United States and Europe. Comparing the ratio of the monetary base relative to nominal GDP since the second half of the 1990s, it has been around 25 percent in Japan, much higher than in the United States and Europe, for which the ratios have been around 10.5-11 percent (Chart 57 [2]).

Next, comparing the ratio of the monetary base between two countries with the foreign exchange rate, there is no relationship between them (Chart 58 [1] and [2]). This reflects that the foreign exchange rate tends to fluctuate due to a number of factors such as growth

³⁰ Concerning indicators for assessing the financial conditions of respective economies, see Box 4 of the Outlook Report in October 2011.

rate differentials between the two countries and the degree of investors' risk aversion. For instance, during the period when the monetary base increased in 2003-05 against the background of the Bank of Japan's quantitative easing, the yen was on an appreciating trend. After March 2006, when the monetary base declined on the back of the termination of quantitative easing, the yen was instead on a depreciating trend; in particular, the yen in terms of its nominal effective rate in the first half of 2007 was at its weakest in recent years. Comparing the euro/U.S. dollar rate with the ratio of the monetary base between the United States and the euro area, there is no relationship between them either (Chart 58 [3]).

(Box 3) Effects of the Consumption Tax Hike on the Economy

The consumption tax hike can be expected to affect the economy through two main routes. First, it may generate a front-loaded increase and subsequent decline in demand prior to and after the tax hike (intertemporal substitution effect). Second, it may depress real incomes as a result of price rises.

The first route of the increase and decline in demand is expected to occur primarily in the household sector. Demand in the corporate sector is unlikely to be affected through that route as the consumption tax it pays on business fixed investment and the purchase of raw materials can essentially be offset by future consumption tax payments. Looking at GDP by major components, when the consumption tax was raised from 3 percent to 5 percent in April 1997, a substantial increase in demand was observed in goods consumption and housing investment, followed by a large backlash (Chart 59). Estimates for the timing of the increase and reversal show that the front-loaded increase and subsequent decline in demand were concentrated on the two quarters prior to and after the tax hike for private consumption,³¹ and for roughly one year for housing investment (Chart 60).

Meanwhile, when the consumption tax was introduced at 3 percent in April 1989, the effects of the front-loaded increase and decline were smaller than in April 1997. In 1989, other factors -- such as the abolition of the commodity tax in the same month -- may have contributed to flattening the swing in demand. Inventories are run down during the period in which the surge in demand arises, and this exerts downward pressure on GDP. Moreover, part of such an increase in demand will be met by increased imports, which are deducted from GDP. One should bear in mind that these movements in inventories and imports may contribute to smoothing swings in GDP.

Considering the magnitude of the increase and decline, the surge this time may become much larger than the one in 1997 given that the rate of increase in the tax rate is larger if the second rate planned for fiscal 2015 is taken into account. However, if the purchases of

³¹ Looking at the types of private consumption immediately prior to the tax hike, demand increased to some extent even for services, which are difficult to store.

automobiles and houses -- items largely susceptible to swings because they are both storable and expensive -- are subject to measures designed to moderate swings or alleviate increased burdens after the rate rise, there is a possibility that such swings in demand will be smoothed to some extent. It is important to note that the overall framework of policy measures associated with the consumption tax hike has not been finalized.

Regarding the second route, whereby the consumption tax hike may generate a decline in real income as a result of price rises, Japan's experiences in 1989 and 1997, as well as overseas examples of indirect consumption tax increases, show no clear evidence for such an effect. To start with, in cases where households anticipate that the tax hike will ultimately bring them benefits through public services and social security, the burden they recognize may not be as large as the tax hike. Moreover, from a somewhat long-term perspective, given the severity of fiscal conditions, not a few households may have already factored the tax hike into their behavior to some degree. If this is the case, the pressure to further push down expenditures at the time of the actual tax hike will be alleviated. Furthermore, if the tax hike mitigates households' concern about the sustainability of the public finance and social security systems to some extent, it may even provide positive impetus to household expenditures. In this Outlook Report, taking these points into account, the extent to which the decline in real income accompanying the tax hike will push down household spending is not considered to be as large as the outcome derived from a simple calculation. After the consumption tax increase in 1997, the economy went into a sharp recession; fundamentally, this was because of (1) declines in overseas economies after the Asian financial crisis and (2) the sharp deterioration of the financial environment after a sequential collapse of large financial institutions in Japan (Chart 61).

Using the events of 1997 as a baseline and taking into account the aforementioned points, the effect of the consumption tax hike is assumed to boost the growth rate in fiscal 2013 by about 0.3 percentage point while the backlash reduces the growth rate in fiscal 2014 by about 0.7 percentage point. The degree to which the planned consumption tax increases will affect the economy is subject to considerable uncertainty and should be viewed with caution, as this depends heavily on expectations for economic growth and systemic changes other than the consumption tax hike.

**(Box 4) The Performance of Japan's Economy from the Perspective
of Demographic Changes**

When comparing the performance of Japan's economy with those of overseas economies, the assessment may differ depending on how demographic changes are incorporated in the analysis (Chart 62).

To illustrate this point, let us look at the period of economic recovery after the Lehman shock in 2008. Setting the level of real GDP in 2007 at 100 and looking at its development since then, the level of Japan's economy in the first half of 2012 was 99 -- falling short of the pre-Lehman level. In other advanced economies, the levels in the first half of 2012 were 97 for the United Kingdom, 99 for the euro area, and 102 for the United States. Japan stands somewhere in the middle.

In contrast, such an assessment changes somewhat when one looks at the economy in terms of per capita GDP. None of the economies or regions has restored their levels of economic activity to those registered before the Lehman shock. Amongst all, Japan has registered the smallest decline. Furthermore, in terms of real GDP per working-age person, Japan is the only country that exceeds the level seen before the Lehman shock. Indeed, the level of real GDP per working-age person in Japan in the first half of 2012 exceeded the one in 2007 by almost 3 percent.

To sum up, it is evident that the decline in the working-age population in Japan weighs on its economy, even during the last four years, when the economy was in a recovery phase following the Lehman shock. While demographic changes will not be influenced by monetary policy, they have a significant impact on the performance of the macro-economy. One should therefore take account of the effect of such changes when assessing medium- to long-term developments in Japan's economy.

(Box 5) Effect of the Consumption Tax Hike on Prices

Taking into account consumer price index movements in 1989, when the consumption tax was introduced, and 1997, when the tax rate was raised, the prices of taxable items can be expected to rise by the full amount of the tax increase (Chart 63 [1]).

Regarding the domestic corporate goods prices, all items are taxable and the year-on-year change in fiscal 2014 is expected to increase by about 3 percentage points, equivalent to the increase in the consumption tax rate (Chart 63 [2] and [3]). In contrast, for consumer prices, based on the current tax code, nearly 30 percent of items are not subject to or exempt from taxation (Chart 63 [2]). Those items include service prices such as rents and public service prices such as medical costs. As they will not be affected by the consumption tax hike, the impact on the year-on-year change in CPI (all items less fresh food) in fiscal 2014 can be expected to be about 2 percentage points, compared with a 3 percentage point rise in the consumption tax rate (Chart 63 [3]).

The swing in economic activity as a result of a front-loaded increase and subsequent decline in demand will cause short-term fluctuations in the output gap. Nonetheless, based on previous experiences, this is not expected to have a large impact on prices. As for the aggregate supply and demand balance in fiscal 2013, when the surge in demand is expected, it is unlikely, as in 1997, that inflation rates will rise sharply through the tightening of the demand and supply balance and the rise in wages.³²

³² According to the Ministry of Health, Labour and Welfare, wages increased at an accelerated pace in major private firms before and after the consumption tax was introduced in 1989 (4.4% (1988)→5.2% (1989)→5.9% (1990)). In contrast, a similar rise in wages was not observed when the consumption tax was raised in 1997; rather, they were on a declining trend (2.9% (1996)→2.9% (1997)→2.7% (1998)).

**(Box 6) Effect of the Bursting of the Credit Bubble
on the European and U.S. Economies**

Advanced economies, such as the United States and Europe, are experiencing an event that has a long history of being repeated: that is, the bursting of a large bubble, causing a financial crisis, brings a long period of economic adjustment and unavoidable low growth, as seen in Japan as well (Chart 64).

The recovery of the U.S. economy has been sluggish as a result of considerable damage to household balance sheets in the aftermath of the subprime loan problems. Although more than six years have already passed since the peak of house prices in spring 2006, the recovery in real GDP has progressed at the same -- or even a slightly slower -- pace compared with Japan's economy after its bubble burst. In addition, recent problems associated with fiscal policy, including the "fiscal cliff," have been generated mainly in the aftermath of fiscal policy responses following the financial crisis. In that sense, they can be interpreted as aftereffects of the bursting of the bubble.

In the euro area, amid an air of optimism following the introduction of the single currency, the euro, lax fiscal management in countries such as Greece and excessive investment in real estate in southern Europe caused serious problems that remain on the balance sheets of governments, financial institutions, and households. European financial institutions have also suffered large losses from the U.S. subprime loan problem. Because a single currency has been adopted in the euro area, there is a unique problem that has made coping with a bursting bubble even more complicated and difficult; that is, countries that have become less competitive cannot adopt monetary policy for their sake and alleviate the severe pressure for adjustment by depreciating their currencies.

An important point when considering the effect of a bubble bursting on the economy is that economic entities with excessive debt have a strong tendency to restrain investment and spending, and to prioritize debt repayment until debt returns to appropriate levels and the foundation for new growth is laid out. While such balance-sheet adjustment continues, both investment and spending activities by businesses and households remain lackluster, and the pace of economic growth is much more likely to be slow despite aggressive monetary easing.³³

³³ See Reinhart and Rogoff (2009), *This Time Is Different: Eight Centuries of Financial Folly*, Princeton: Princeton University Press, which analyzes past episodes of financial crisis. This study analyzes postwar financial crises in 14 other countries, including the Japanese experience with bubble bursting, the Nordic banking crisis, and the Asian financial crisis. It shows that it takes 4.4 years on average for real GDP per capita to return to the pre-crisis level after the financial crisis, longer than for normal economic recessions.

**(Box 7) Transition from the High Growth Era to the Stable Growth Era:
Japan's Experience**

(Characteristics of the High Growth Era in Japan and its End)

In Japan, the so-called High Growth Era, which started in the late 1950s, came to an end in the early 1970s (Chart 65 [1]). While the first oil shock -- an exogenous factor -- made some contribution, endogenous factors inherent in Japan's economy exerted a large effect during the process in which average annual growth decelerated from around 10 percent to around 4-5 percent.

Economic growth during the High Growth Era was largely supported by the following factors, each having impacts to differing degrees depending on phase: (1) the accumulation of capital stock through vigorous business investment in the private sector; (2) increasing labor supply in the manufacturing sector on the back of a labor shift from primary industries such as agriculture; and (3) the realization of a high rate of productivity growth that was partly the result of the aforementioned factors.³⁴ Looking back at the "Izanagi Boom" (1965-70), which took place toward the end of the High Growth Era, there was an increasing awareness that Japan's economy had reached a turning point where the growth rate declined as the economy shifted from investment-driven growth to consumption-driven growth. Such awareness was triggered by the recession after the Tokyo Olympics boom. Certainly, private consumption increased at a relatively high pace mainly driven by the purchase of durable goods, but in reality business investment continued to be a driver for growth and -- from the supply side -- boosted economic growth, including the dissemination of durable goods, accompanied by a high rate of technological progress (Chart 65 [3] and [4]).³⁵ Looking at trends in the labor market, the continuing rise in the working-age population, as well as increasing labor supply in the growing manufacturing sector on the

³⁴ For example, Yutaka Kosai's (1986) *The Era of High-Speed Growth*, estimates the TFP (Total Factor Productivity) to have grown at an annual 2.4 percent from 1960 to 1965, and 5.5 percent from 1965 to 1970.

³⁵ The growth in consumer spending in this period was due to (1) the realization of a large middle class and equal society that formed a basis of a large consumer economy, and (2) the increase in the number of households due to the workforce movement to urban areas that created durable consumer goods demand.

back of labor movement from outlying areas (although somewhat decelerated), also helped the economy grow at a rapid pace (Chart 65 [2]).

(Transition to the Stable Growth Era)

Endogenous factors behind the ending of the High Growth Era included a weakening in the increase in labor input in the manufacturing sector on the back of a labor movement from primary industry, as a result of a substantial decline in primary industry, as well as a general decline in the pace of the productivity increase for the economy as a whole. The labor share had already started rising even before the first oil shock, suggesting that the pace of growth was becoming increasingly difficult to maintain due to labor input constraints. Meanwhile, there were numerous factors behind the decline in the pace of the productivity increase, including (1) changes regarding the industrial structure, such as the weakening of the labor shift from the agriculture sector to the manufacturing sector; (2) the degree of diffusion of various durable consumer goods already reaching substantial levels; (3) a slower pace in the introduction of technology intended to catch up with the United States and Europe; (4) investment shifting away from machinery, which tends to embody technological progress, to construction and public investment, as symbolic of an infrastructure investment boom.

During the process of transition from the High Growth Era to the Stable Growth Era from the late 1970s, the economy temporarily recorded negative growth partly due to the effects of the oil crisis, and the adjustment in business investment dragged on, as evidenced by several years of declining private business investment. The share of gross fixed capital formation to nominal GDP including public investment peaked at 36 percent in 1973 before declining substantially to 30 percent in 1977 (Chart 65 [1]).³⁶ This is because, as economic growth rates remain on a declining trend, the growth rate of capital stock providing the supply side declines and so does the flow of business investment. In addition, during this transition, partly as the result of the infrastructure investment boom, excess capacity became apparent in the manufacturing sector, particularly in raw material industries, and it took a long time to dispose of excess inventory.

³⁶ For reference, China's ratio of gross fixed capital formation to nominal GDP increased substantially even after the Lehman shock, and was around 46 percent as of 2011.

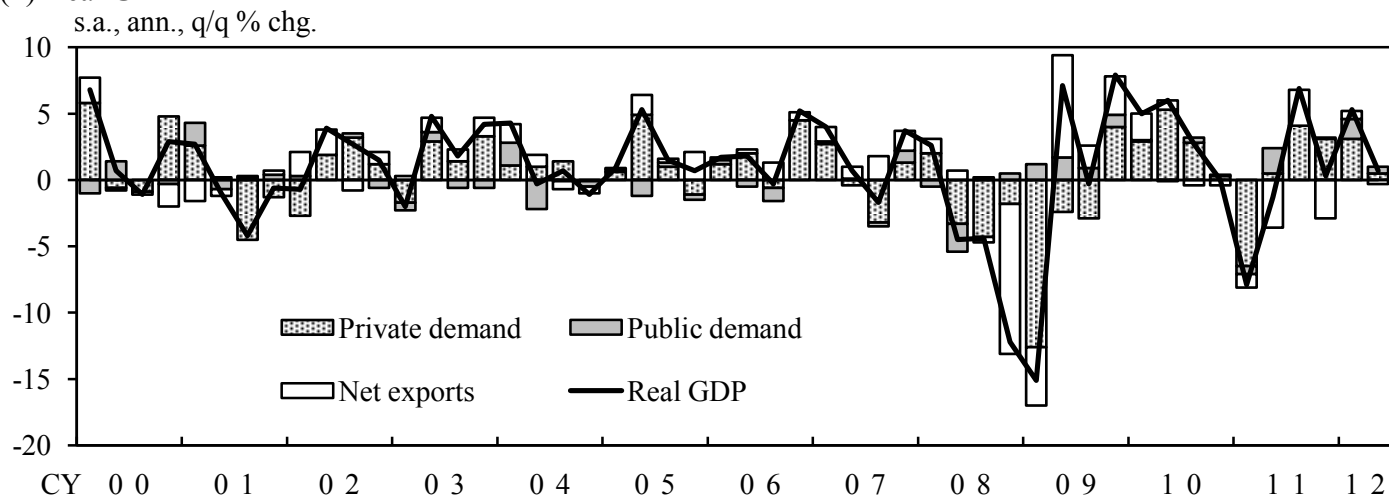
While the Japanese economy of the mid-1970s thus suffered from the oil crisis and capital stock adjustment, it managed to avoid falling into long-lasting and painful downturns and recovered to an annual growth rate of about 4-5 percent by the latter half of the 1970s (Chart 65 [4]). The transition to the Stable Growth Era in just a few years was made possible by the following factors. First, in terms of labor input, while the labor shift from the agricultural sector decelerated, the working-age population kept increasing. Second, in terms of technological progress, there was a shift from the introduction of "catching-up" type technology to domestically-initiated technological innovation, such as technology for saving energy and resources. Lastly, exports offset the decline in business investment to some extent, thereby underpinning economic growth (Chart 65 [2] and [4]).

Charts

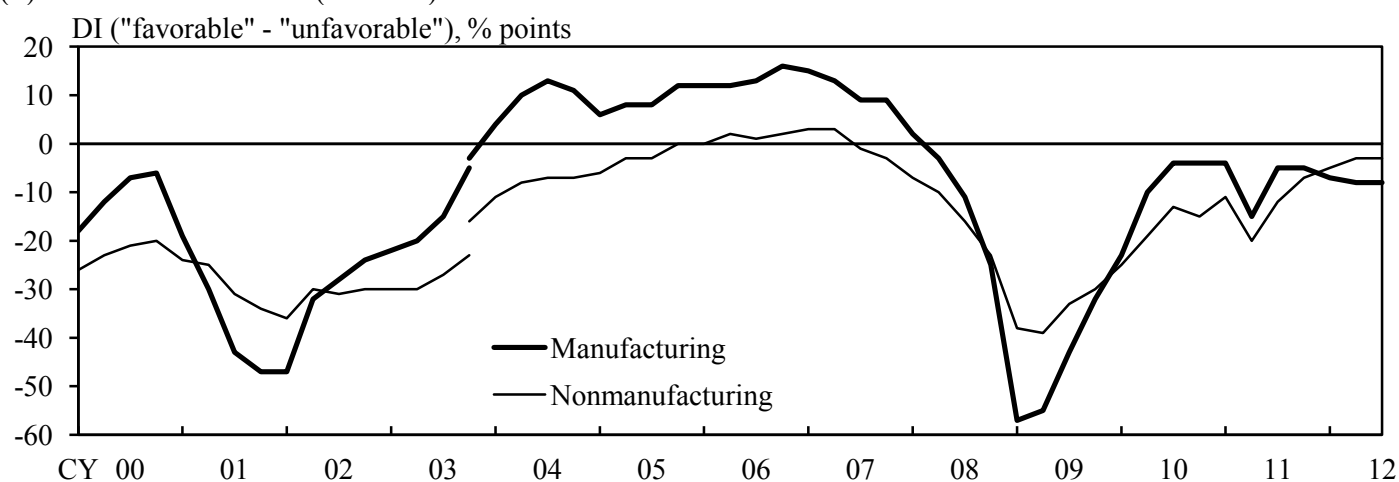
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Chart 2	Overseas Economies	Chart 37	Current Account and Investment-Saving Balance
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Real GDP and Business Conditions

(1) Real GDP

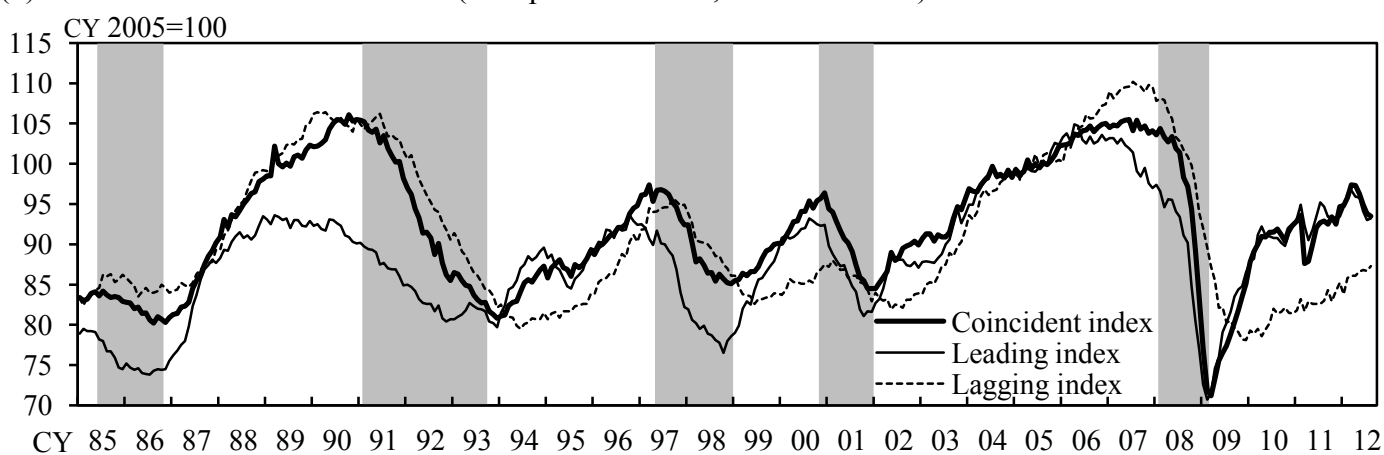


(2) Business Conditions (*Tankan*)



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.

(3) Indexes of Business Conditions (Composite Indexes, Cabinet Office)



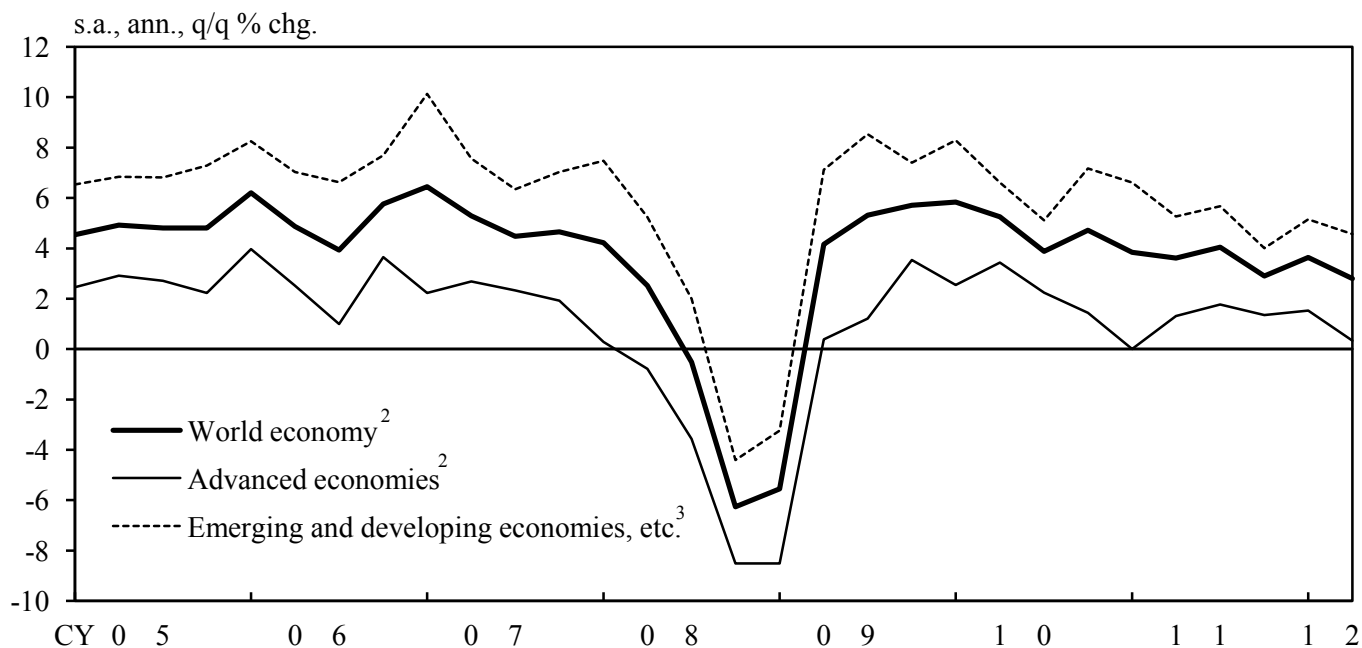
Note: Shaded areas indicate recession periods.

Sources: Cabinet Office, "National Accounts," "Indexes of Business Conditions";

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

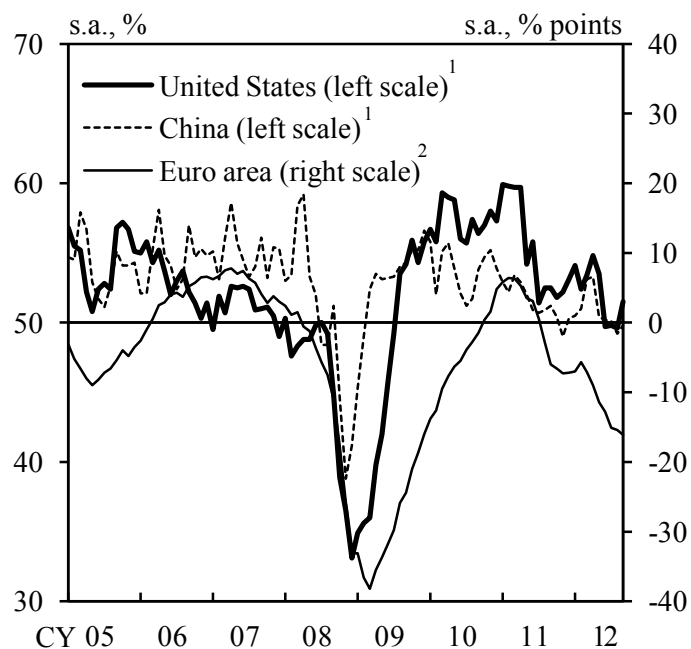
Overseas Economies

(1) Real GDP Growth Rates of the World Economy¹

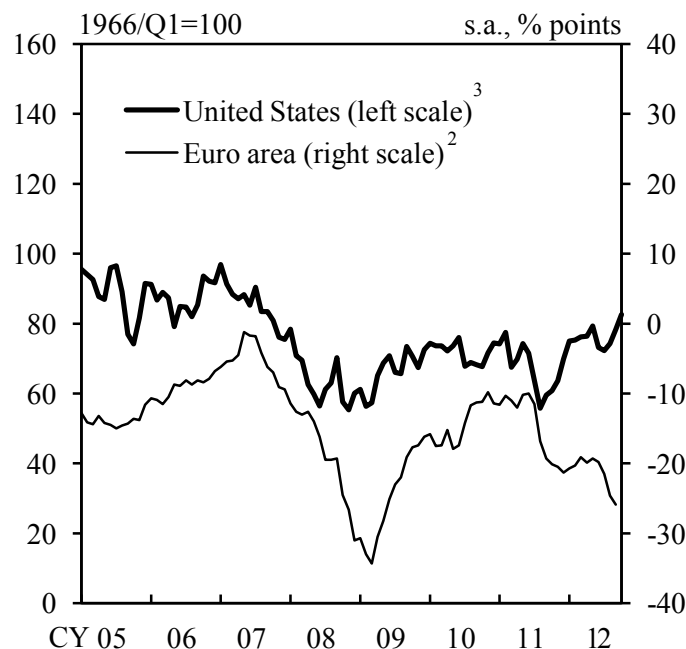


- Notes: 1. Figures are calculated using GDP based on purchasing power parity (PPP) shares of the world total from the IMF.
 2. The world economy covers 186 countries. The advanced economies are the United States, the euro area (17 countries), the United Kingdom, and Japan.
 3. Including estimated quarterly growth rates based on historical annual data on real GDP growth rates.

(2) Business Confidence



(3) Consumer Confidence

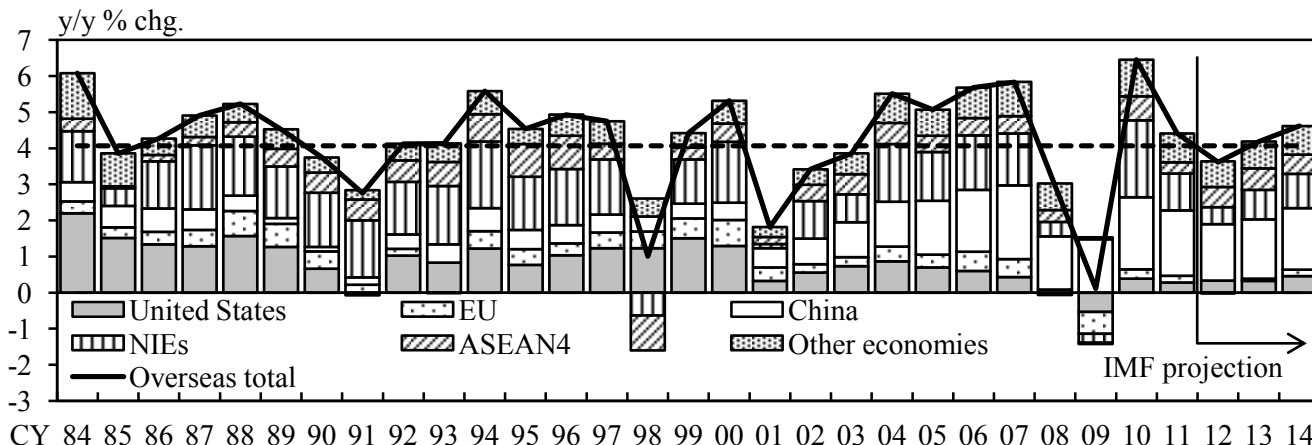


- Notes: 1. Figures for the United States are based on the Manufacturing ISM Report on Business, and those for China are based on Manufacturing PMI published by National Bureau of Statistics of China. A reading of 50 percent on those indices generally indicates a turning point between economic expansion and contraction in the manufacturing sector.
 2. Taken from the Economic Sentiment Indicator of the European Commission. Figures for business confidence are based on the Industrial Confidence Indicator, and those for consumer confidence are based on the Consumer Confidence Indicator. A reading of 0 percentage points generally indicates a turning point between economic expansion and contraction.
 3. Figures are based on the Thomson Reuters/University of Michigan Consumer Sentiment Index.

Sources: IMF, "World Economic Outlook"; European Commission; Thomson Reuters; HAVER; Bloomberg, etc.

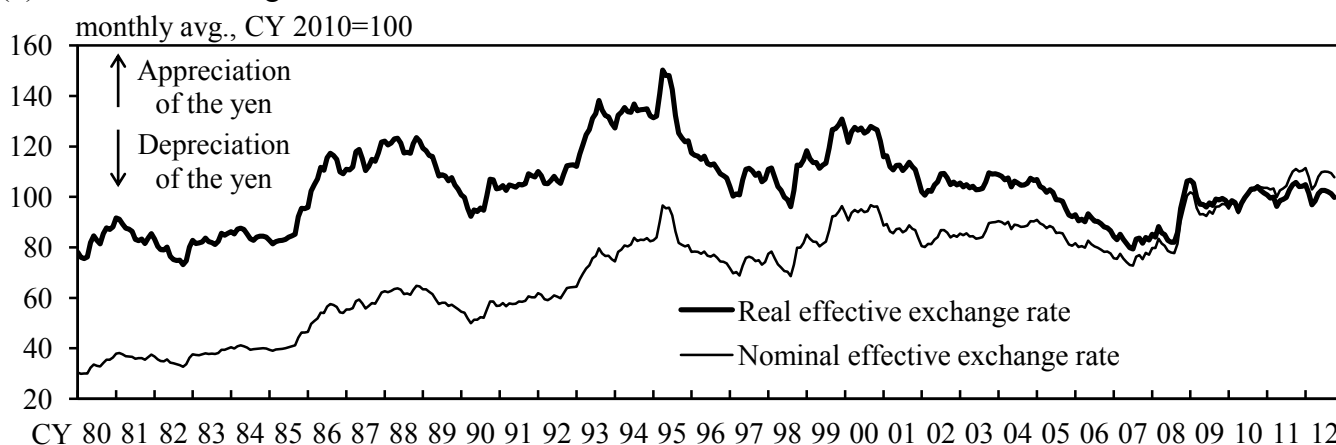
Overseas Economies and Exchange Rates

(1) Real GDP Growth Rates of Overseas Economies



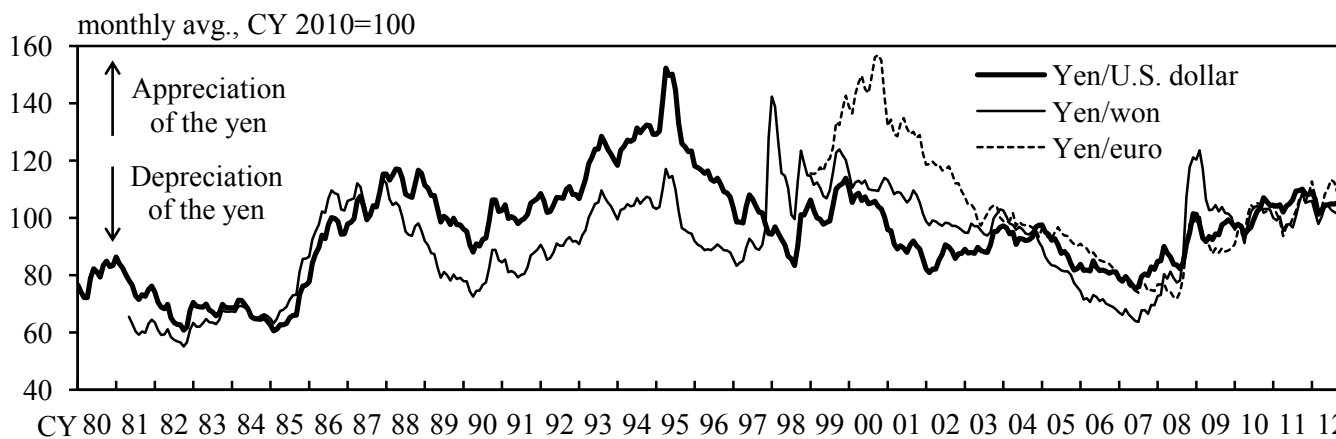
Note: The figures for the overseas total are the weighted averages of real GDP growth rates by value of exports from Japan to each economy. The broken line indicates the average of 1980-2011 (4.1 percent).

(2) Effective Exchange Rates of the Yen



Note: Figures are based on the broad indices of the BIS effective exchange rates, and those prior to 1994 are calculated using the narrow indices. Figures for October 2012 are calculated using the Bank of Japan's nominal effective exchange rate of the yen.

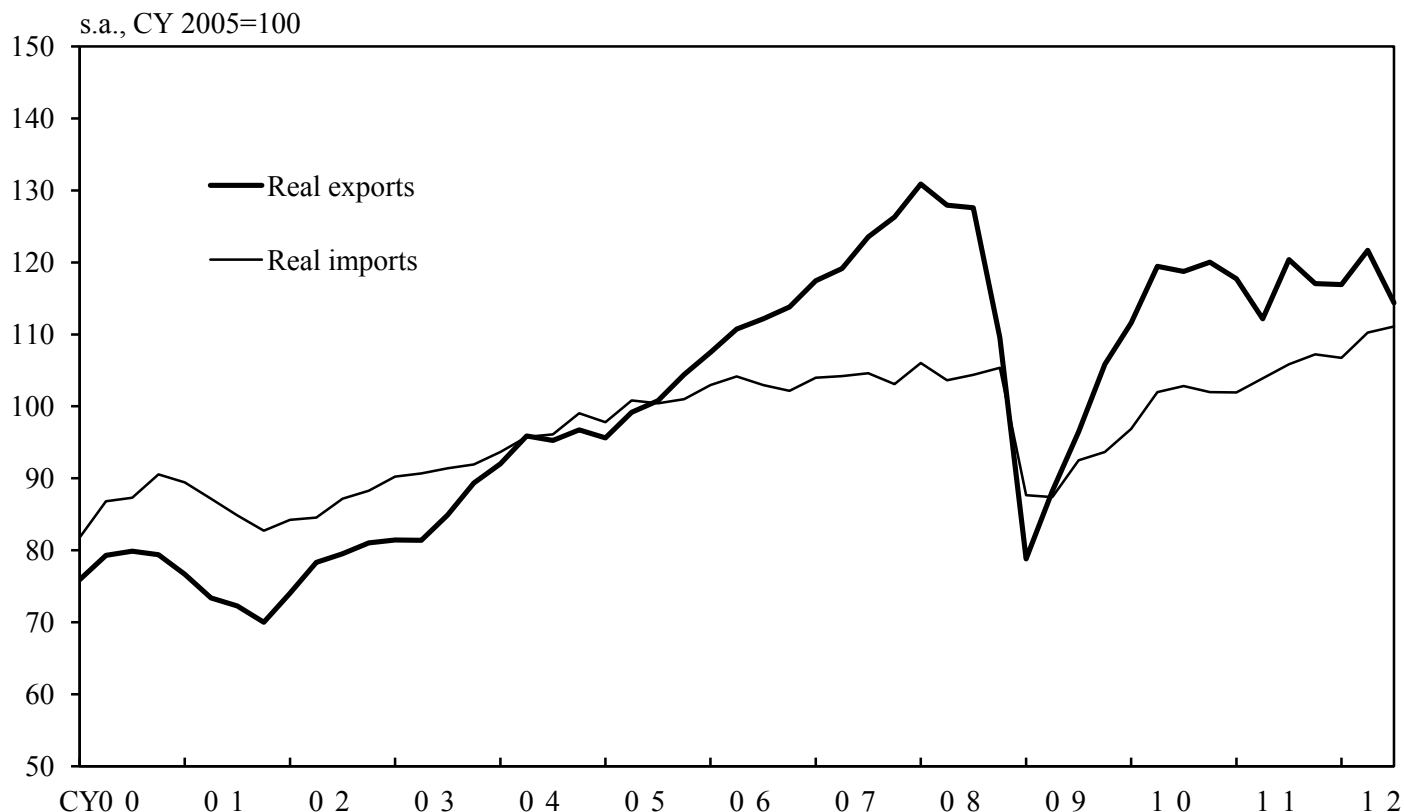
(3) Real Exchange Rates of the Yen



Note: Figures are calculated as the yen's nominal exchange rate against a currency multiplied by (Japan's CPI / the corresponding countries' or regions' CPI). The CPI of each country and region is based on the index of all items.

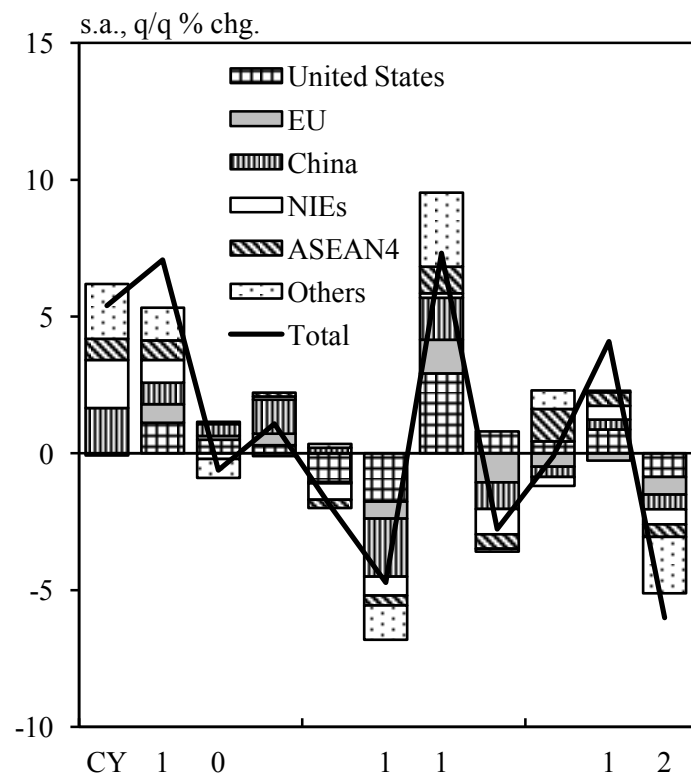
Exports and Imports

(1) Real Exports and Real Imports

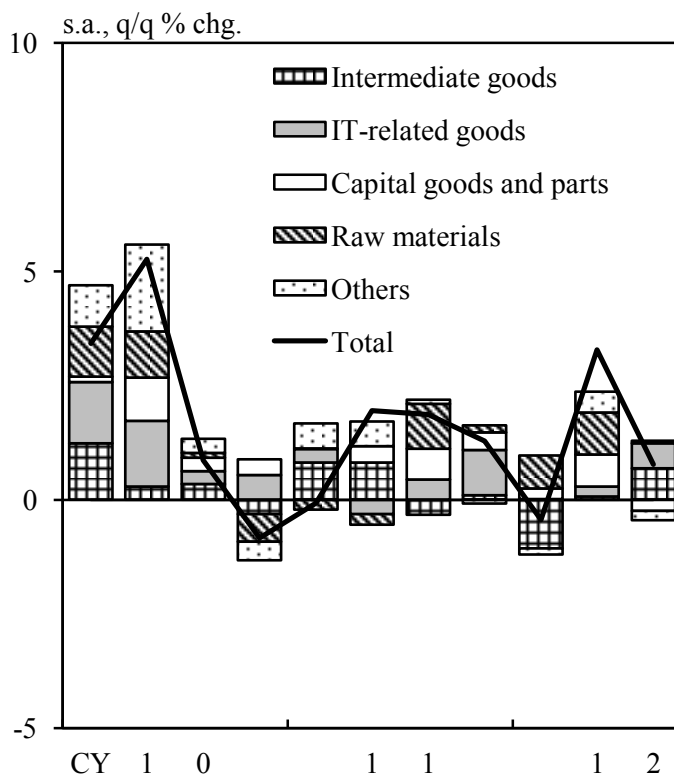


Note: Figures are the value of exports and imports in the "Trade Statistics" deflated by the "Export and Import Price Index." From May 2012 and onward, deflators are calculated by extending the 2005 base deflators using monthly changes of the 2010 base price indices. The same method applies hereafter.

(2) Real Exports by Region



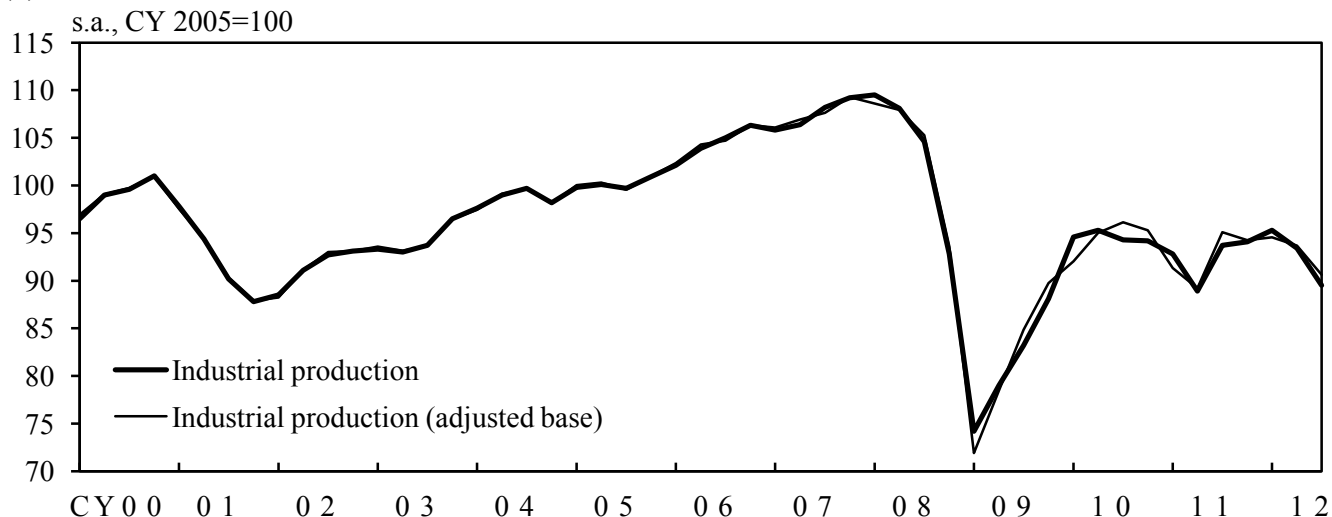
(3) Real Imports by Goods



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

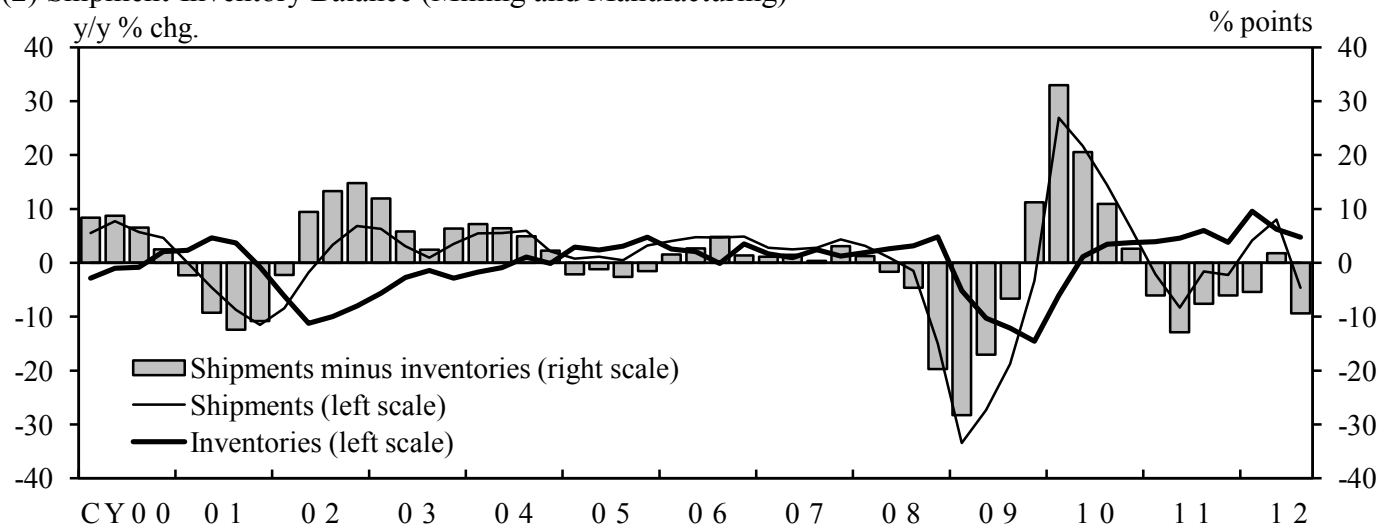
Production

(1) Industrial Production

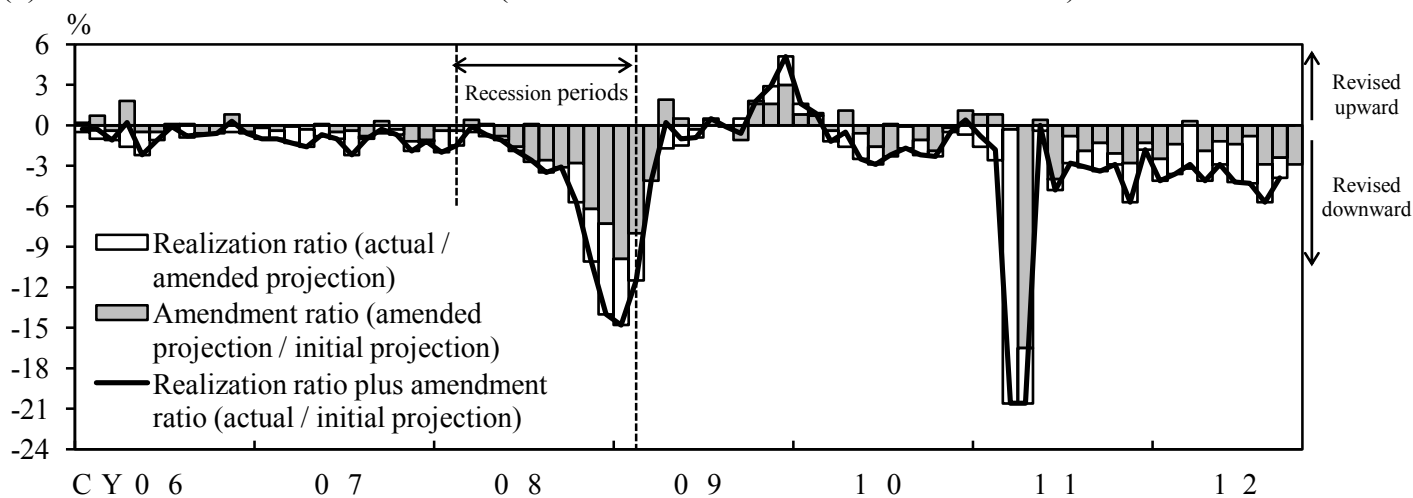


Note: Industrial production (adjusted base) is calculated by detecting large fluctuations after the Lehman shock as outliers (estimation by the Research and Statistics Department, Bank of Japan).

(2) Shipment-Inventory Balance (Mining and Manufacturing)



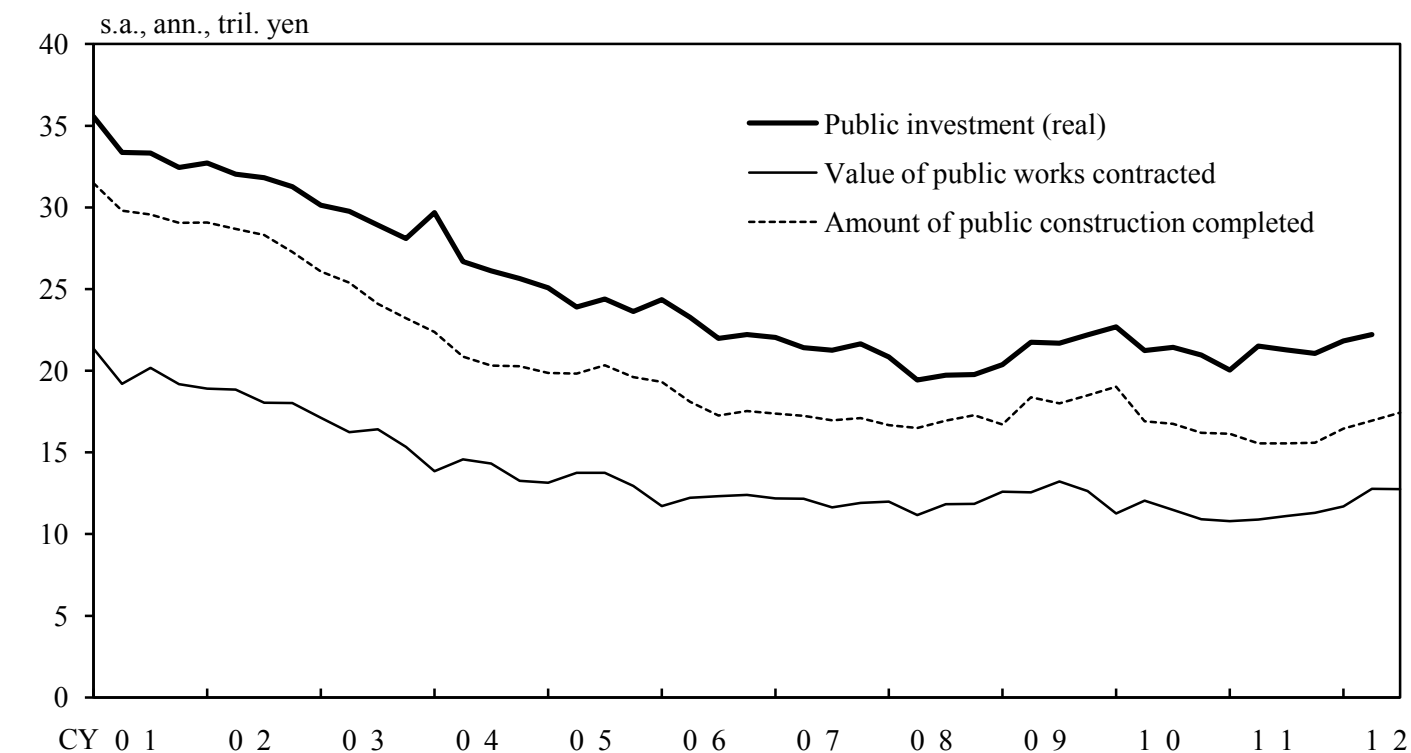
(3) Realization and Amendment Ratio (Revisions in Indices of Production Forecast)



Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Production."

Public Investment

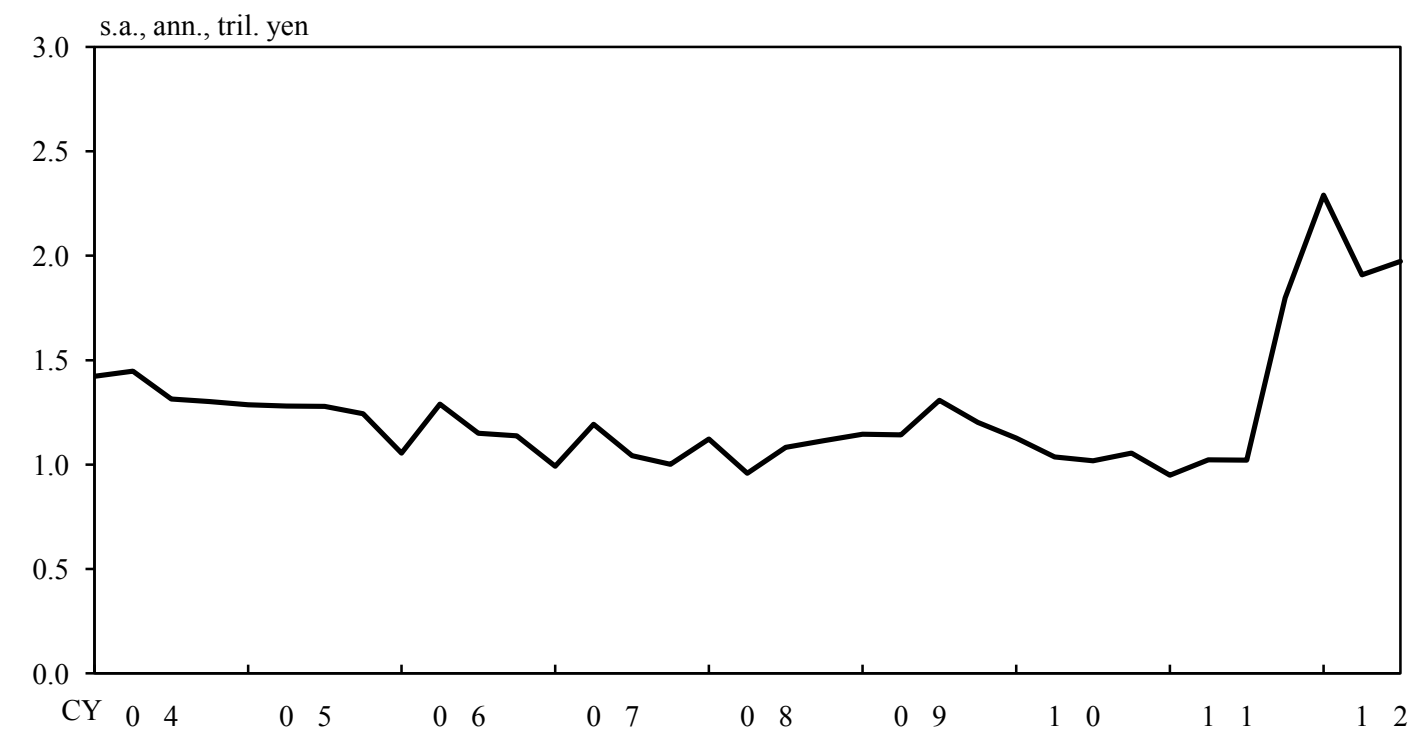
(1) Indicators of Public Investment



Notes: 1. Figures for the value of public works contracted and the amount of public construction completed are seasonally adjusted by X-12-ARIMA.

2. The figure for the amount of public construction completed for 2012/Q3 is the July-August average.

(2) Value of Public Works Contracted in the Tohoku Region



Note: Figures are seasonally adjusted by X-12-ARIMA.

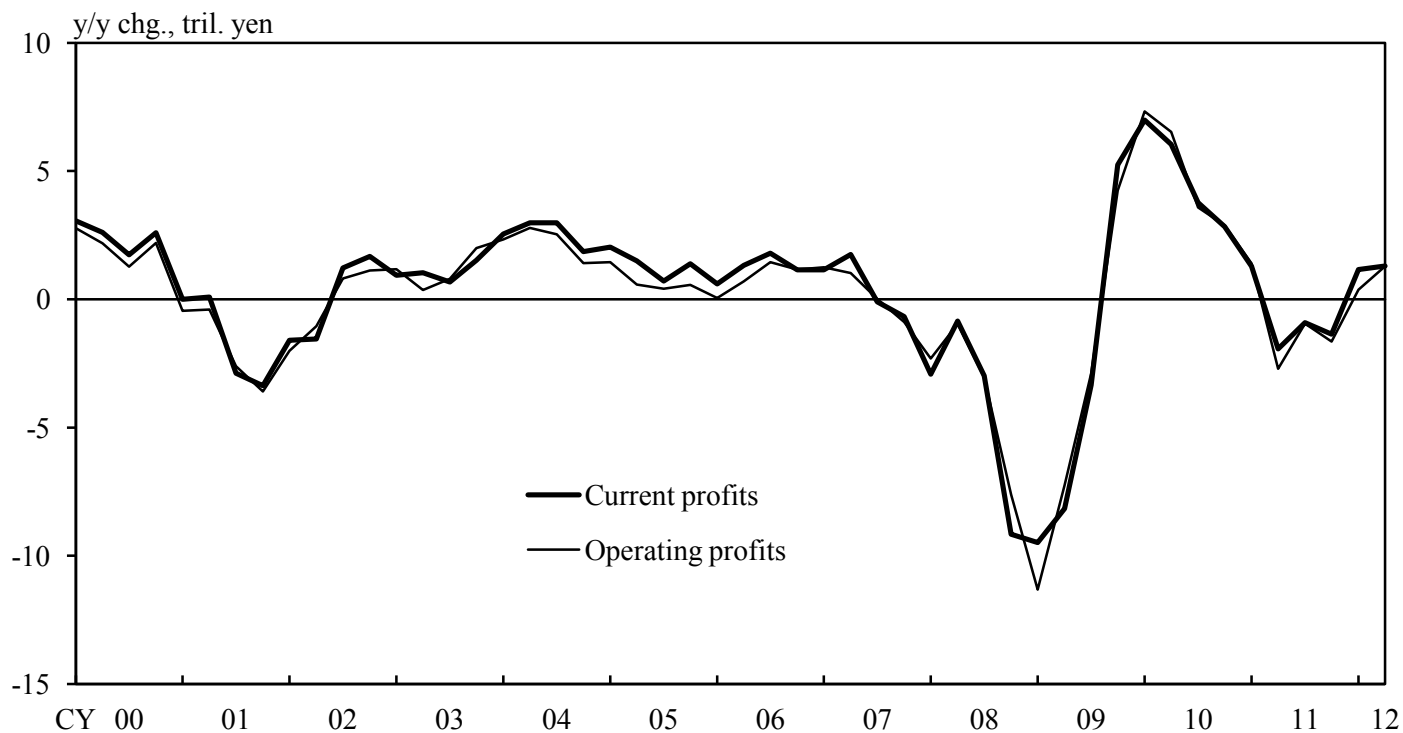
Sources: Cabinet Office, "National Accounts";

East Japan Construction Surety, etc., "Public Works Prepayment Surety Statistics";

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

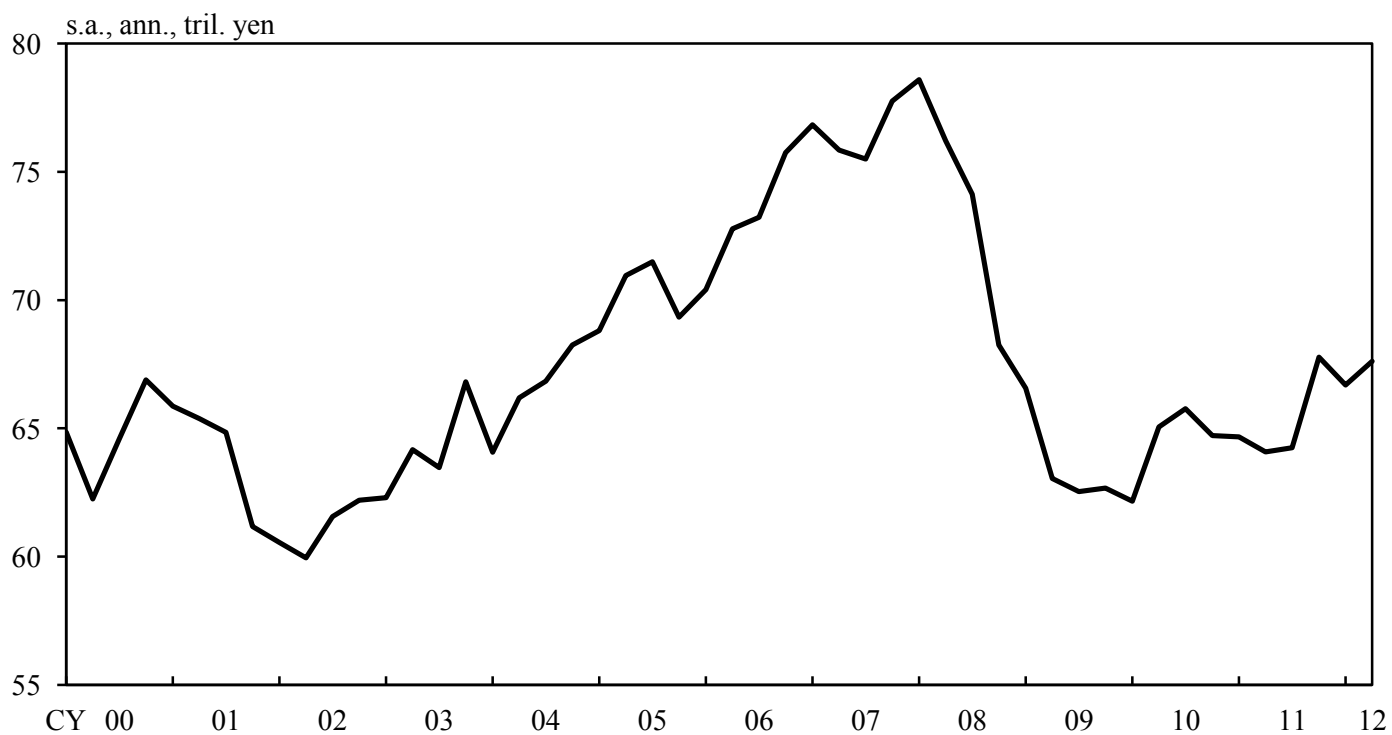
Corporate Profits and Fixed Investment

(1) Corporate Profits



Note: Taken from the "Financial Statements Statistics of Corporations by Industry, Quarterly." Figures are based on all enterprises except finance and insurance.

(2) Fixed Investment

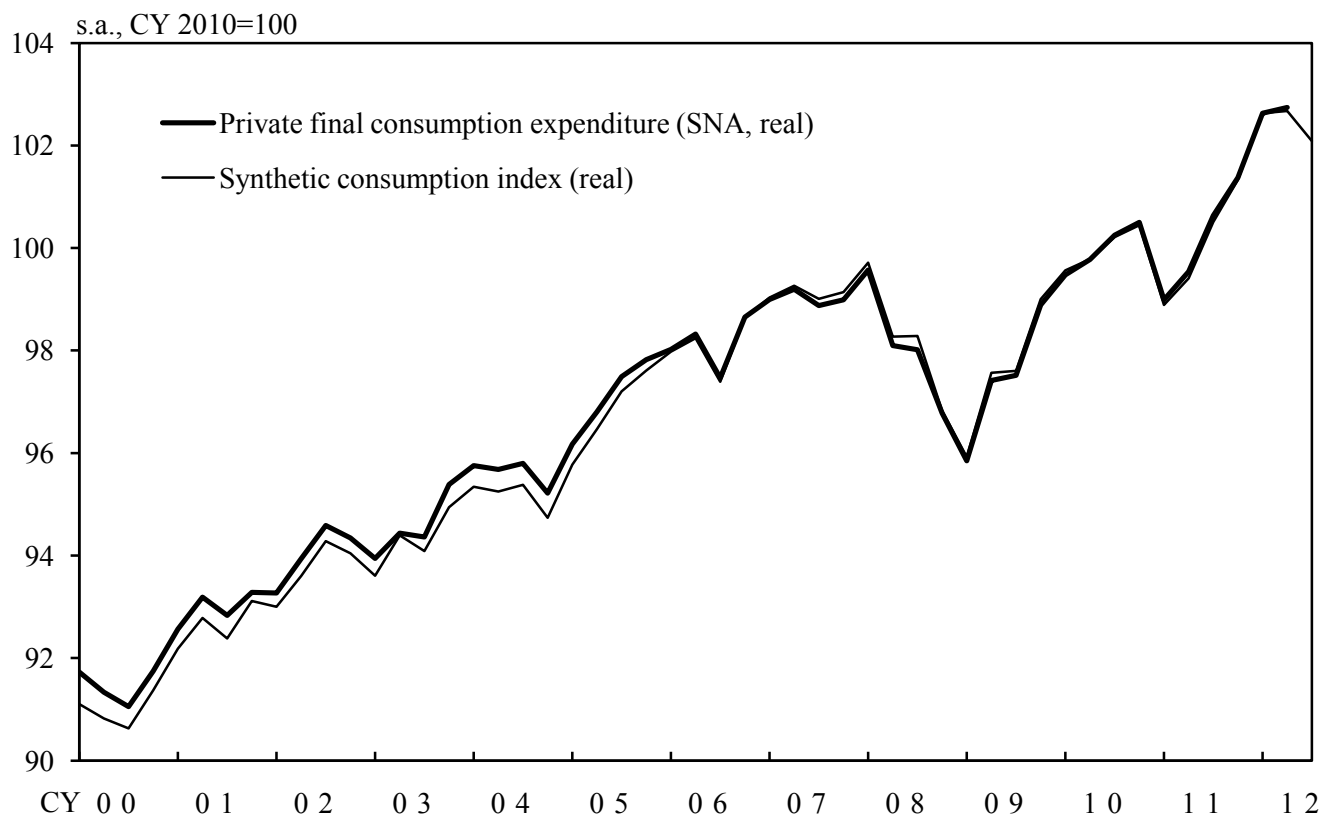


Note: Taken from "National Accounts." The figure represents real private non-residential investment.

Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"; Cabinet Office, "National Accounts."

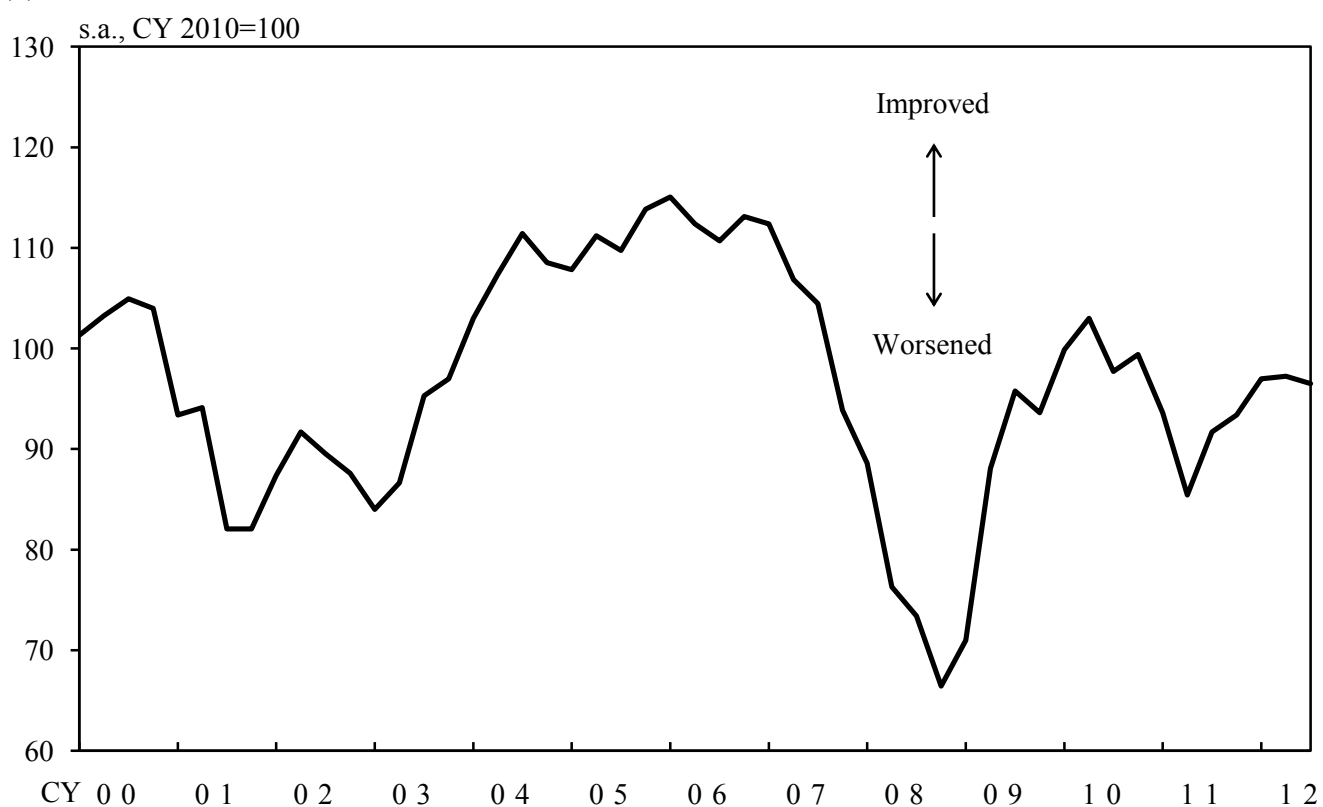
Private Consumption

(1) Private Final Consumption Expenditure and Synthetic Consumption Index



Note: The figure for the synthetic consumption index for 2012/Q3 is the July-August average.

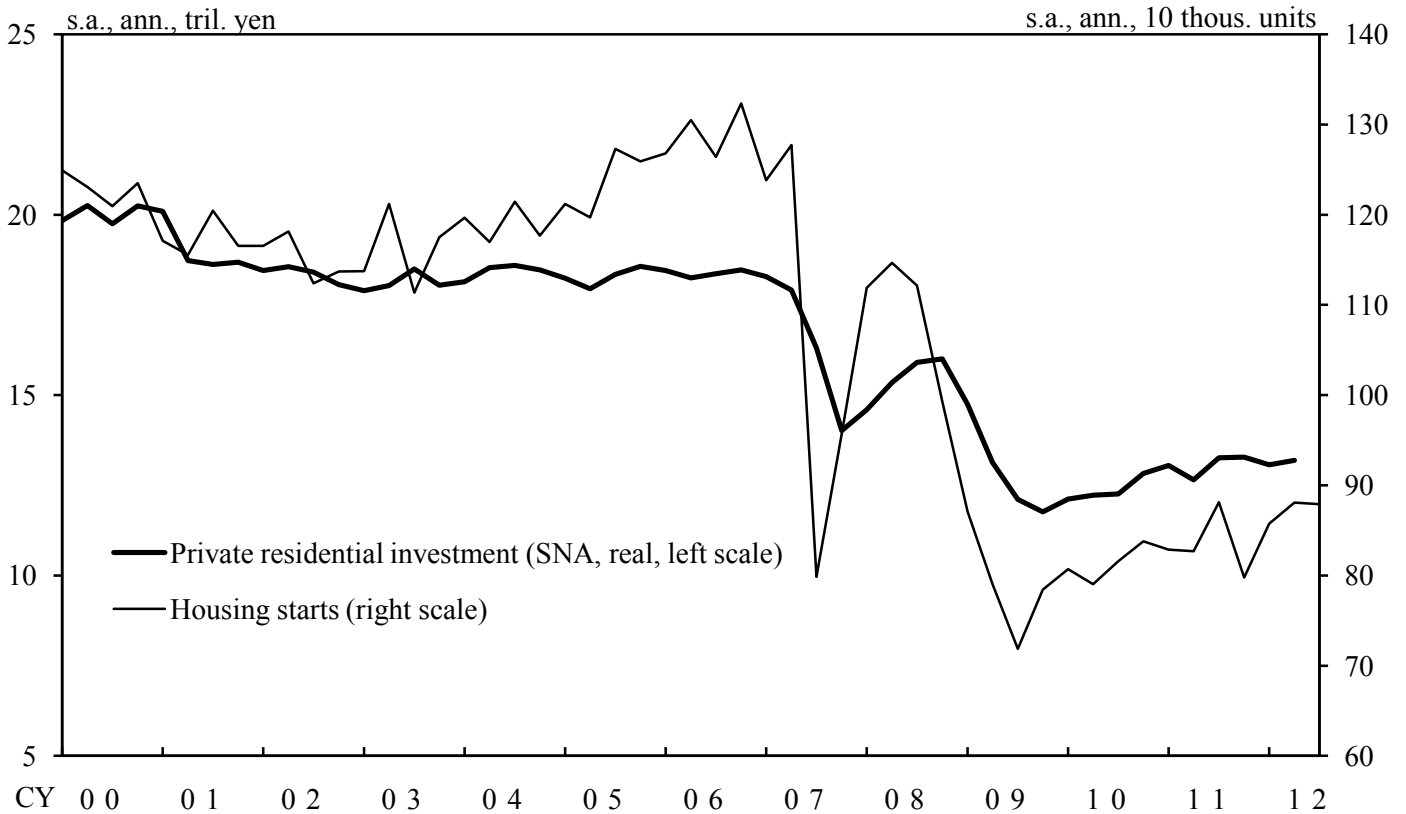
(2) Consumer Confidence Index



Source: Cabinet Office, "National Accounts," "Consumer Confidence Survey,"
 "Synthetic Consumption Index."

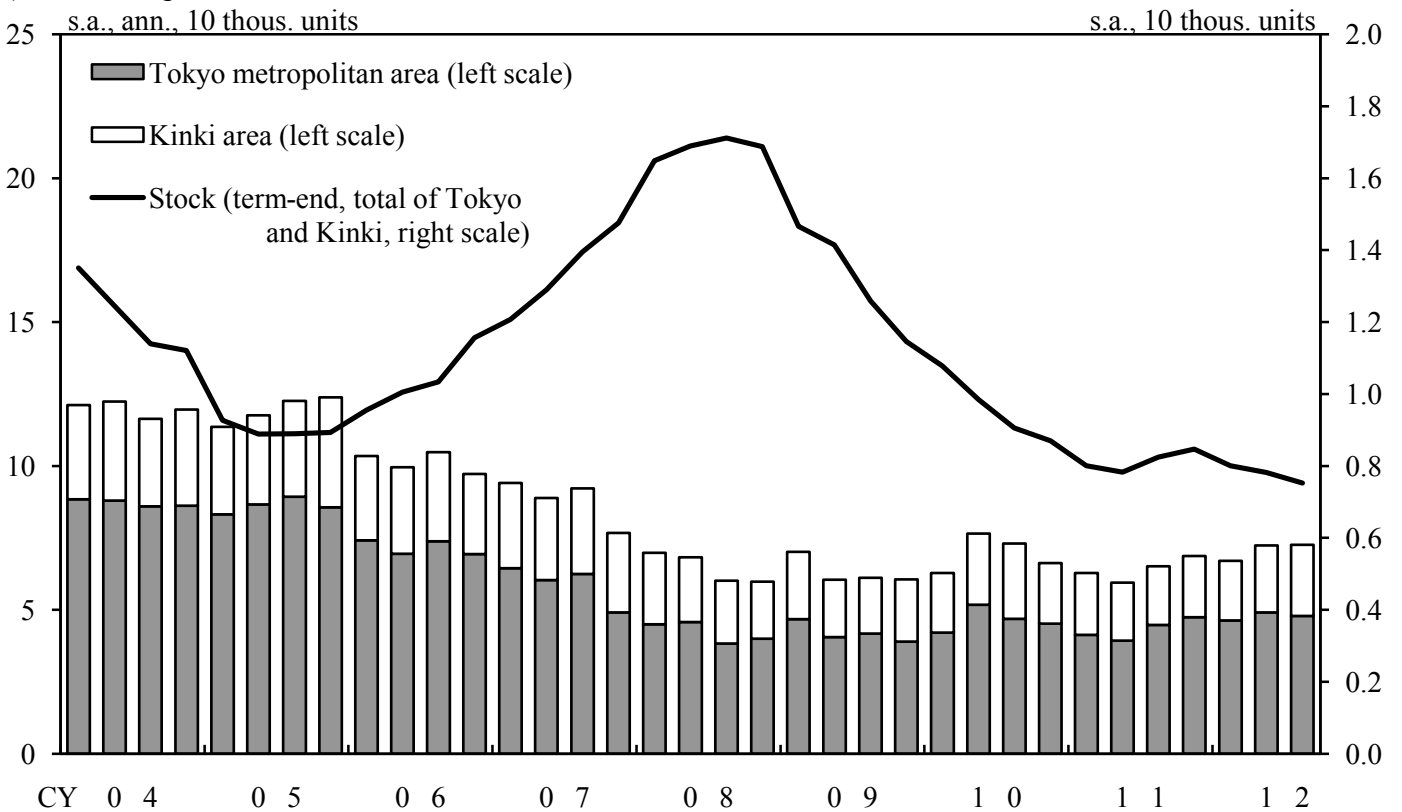
Housing Investment

(1) Housing Starts and Private Residential Investment



Note: The figure for housing starts for 2012/Q3 is the July-August average.

(2) Sales of Apartments

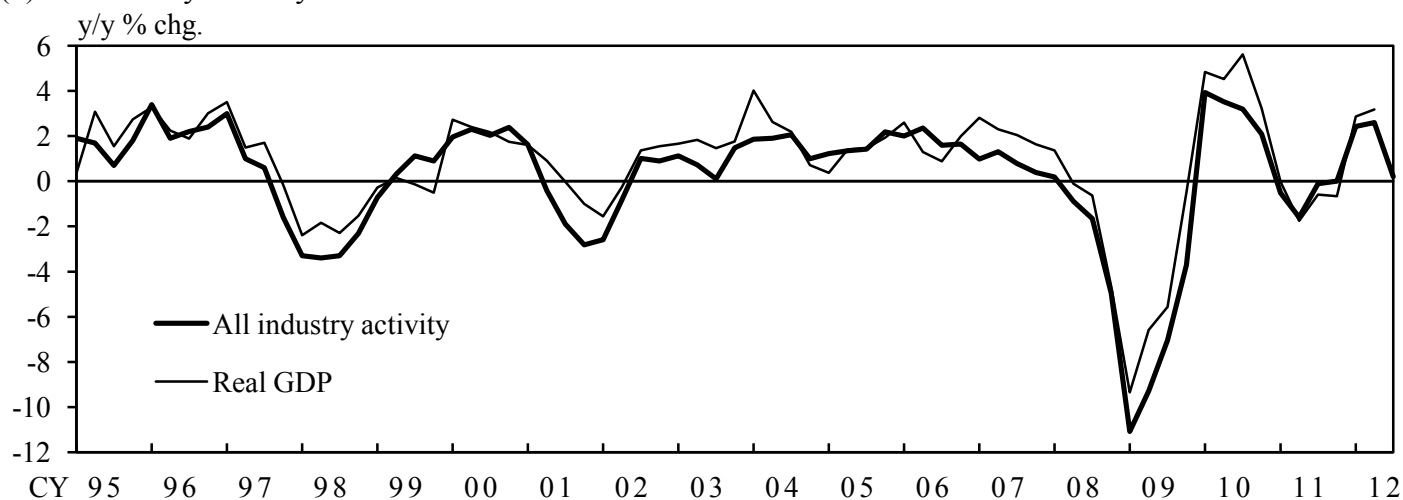


Note: Figures are seasonally adjusted by X-12-ARIMA.

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

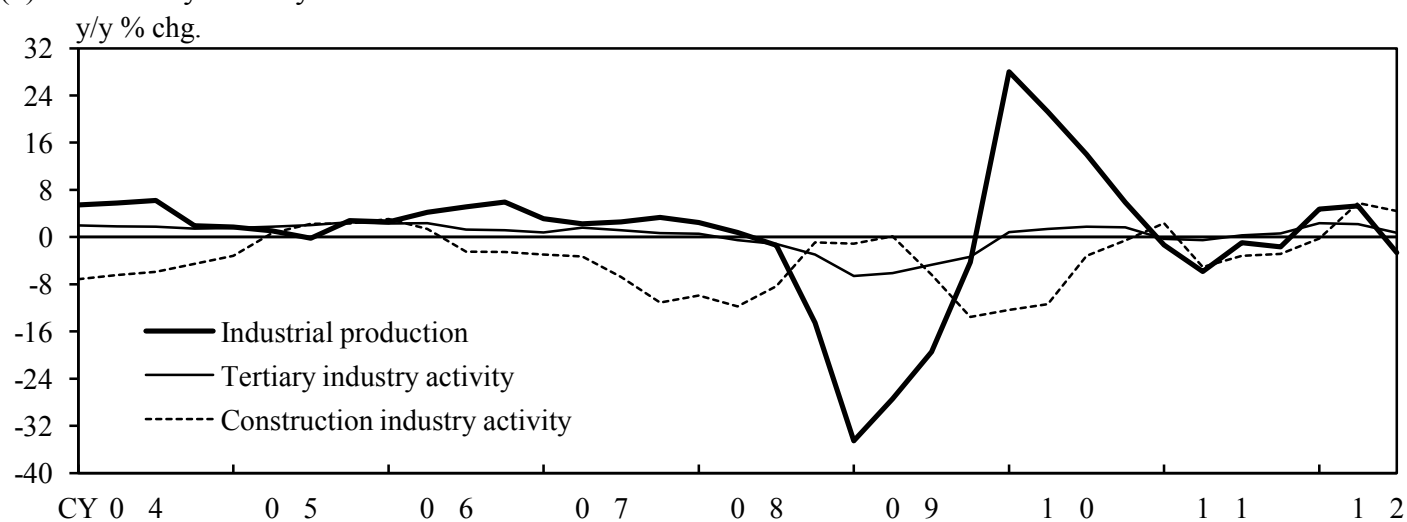
All Industry Activity

(1) All Industry Activity and Real GDP

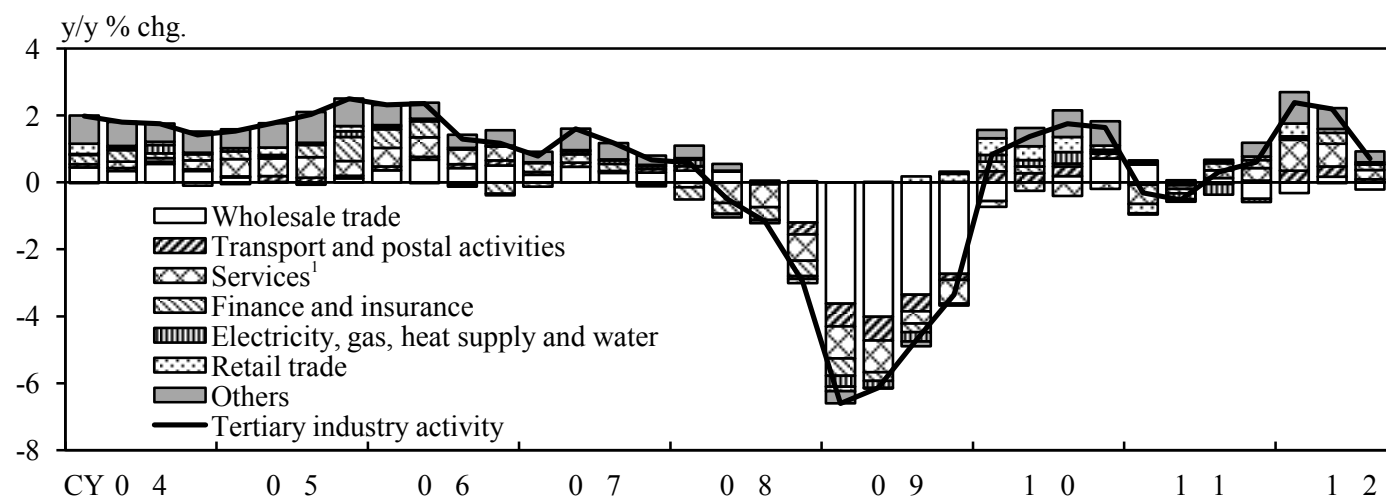


Note: Figures for 2012/Q3 are July-August averages. The same rule applies to the charts below.

(2) All Industry Activity



(3) Tertiary Industry Activity

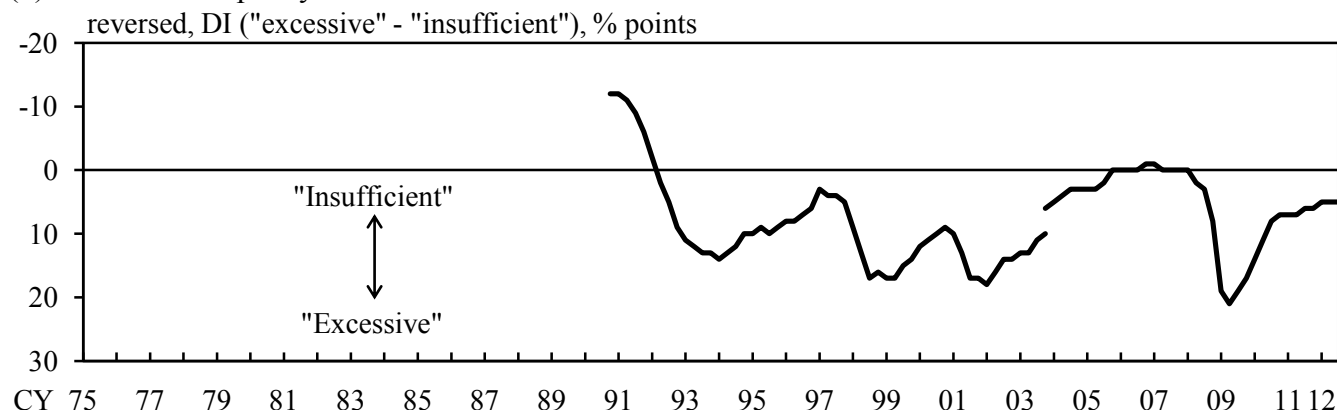


Note: 1. Consisting of scientific research, professional and technical services; living-related and personal services and amusement services; and miscellaneous services (except government services, etc.).

Sources: Ministry of Economy, Trade and Industry, "Indices of All Industry Activity," "Indices of Tertiary Industry Activity"; Cabinet Office, "National Accounts."

Resource Utilization

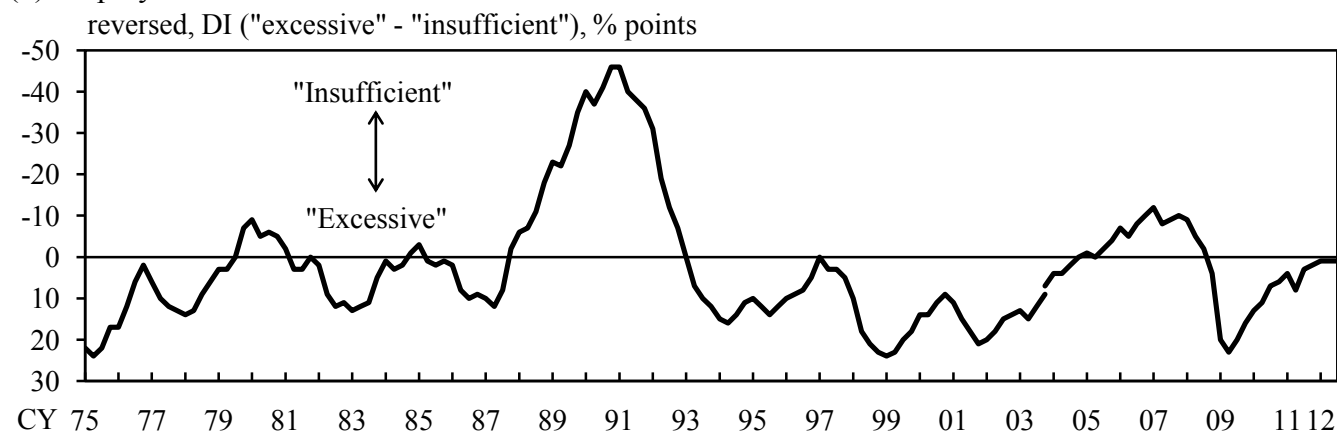
(1) Production Capacity DI



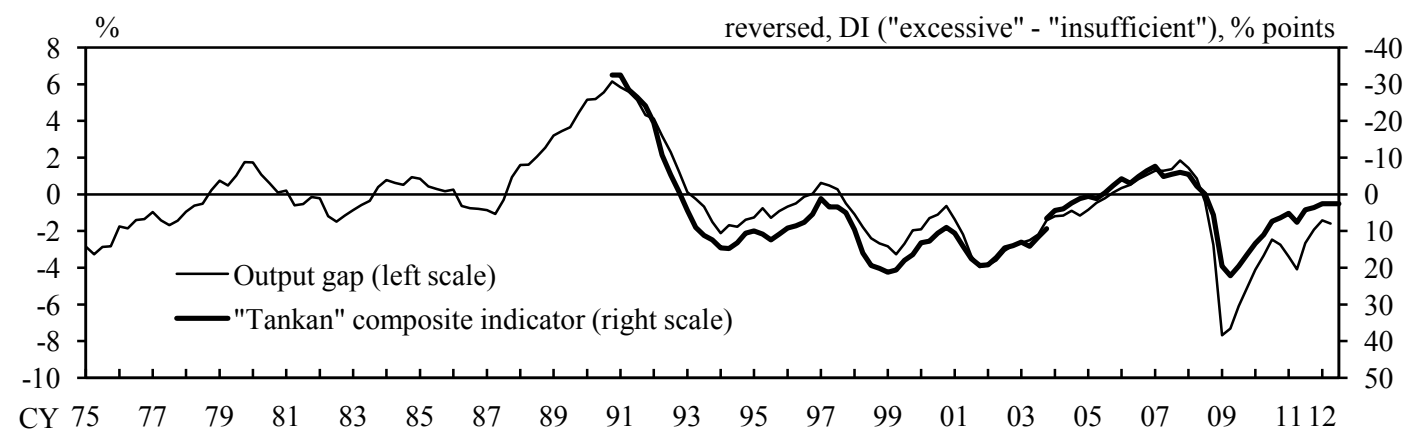
Notes: 1. Figures for the DI are based on all enterprises. The same definition applies to the charts below.

2. 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. The same definition applies to the charts below.

(2) Employment Conditions DI



(3) Tankan Composite Indicator and Output Gap

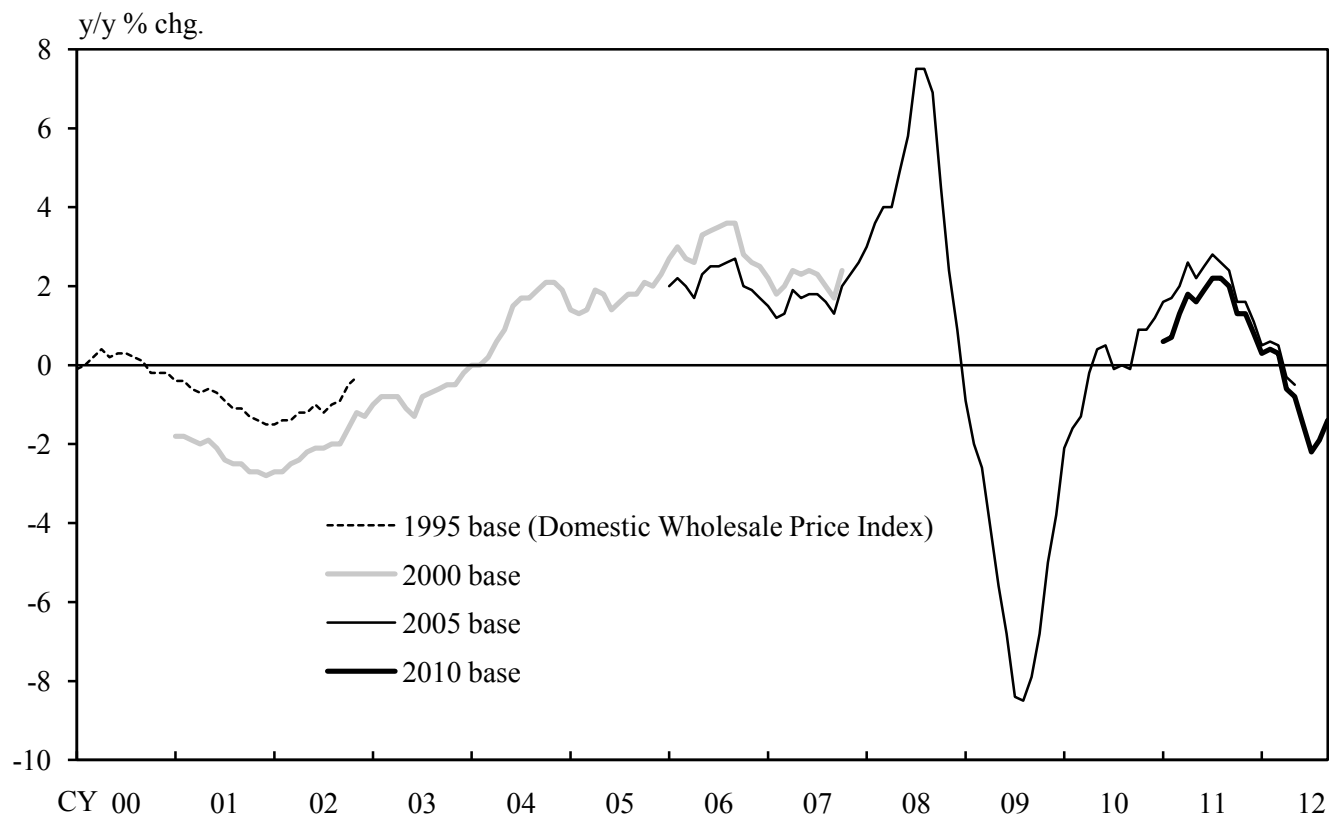


Note: Figures for the "Tankan" composite indicator are weighted averages of the production capacity DI and employment conditions DI. The fiscal 1990-2010 averages of capital and labor shares in "National Accounts" are used as the weight. The output gap is estimated by the Research and Statistics Department, 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.

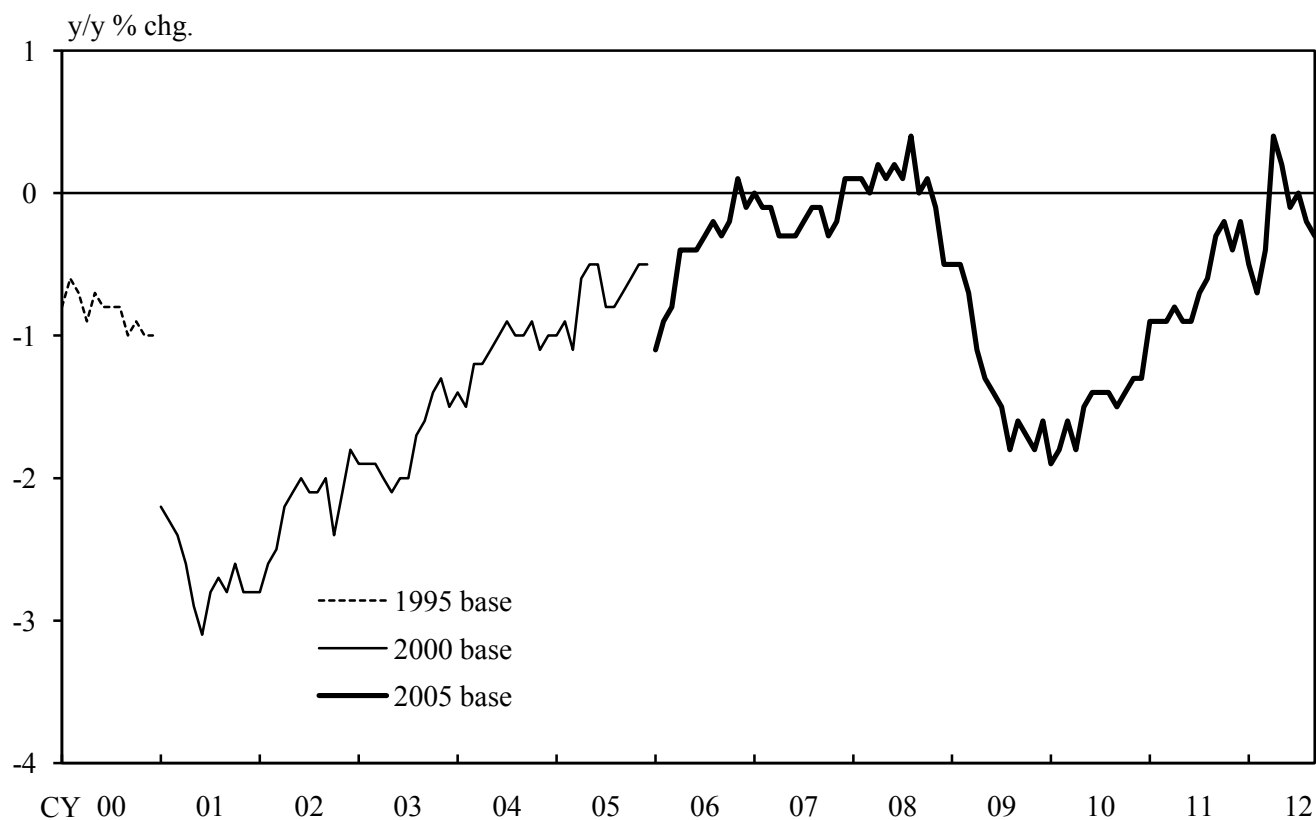
Sources: Cabinet Office, "National Accounts"; Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service"; Ministry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

Corporate Prices

(1) Domestic Corporate Goods Price Index



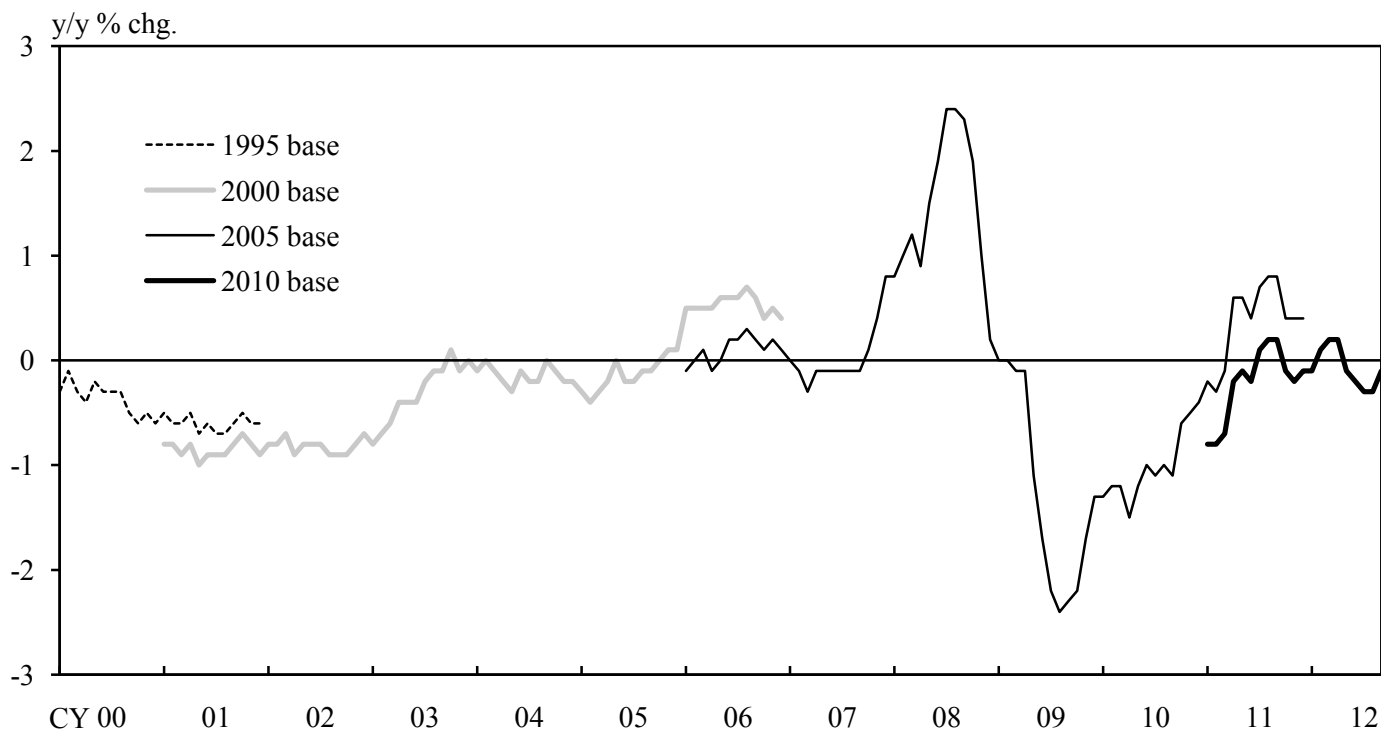
(2) Corporate Services Price Index (Excluding International Transportation)



Source: Bank of Japan, "Corporate Goods Price Index," "Wholesale Price Index," "Corporate Services Price Index."

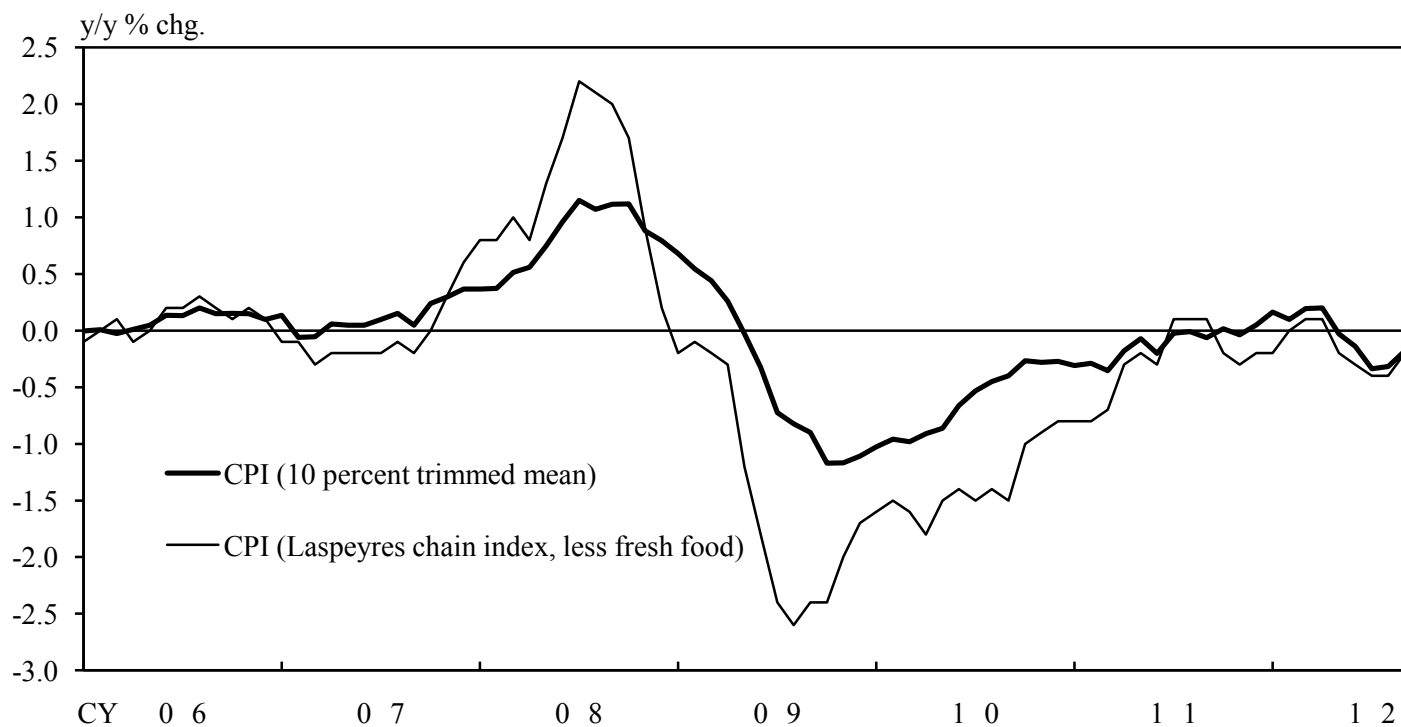
Consumer Price Index (1)

(1) Consumer Price Index



Note: Less fresh food.

(2) Trimmed Mean and Laspeyres Chain Index

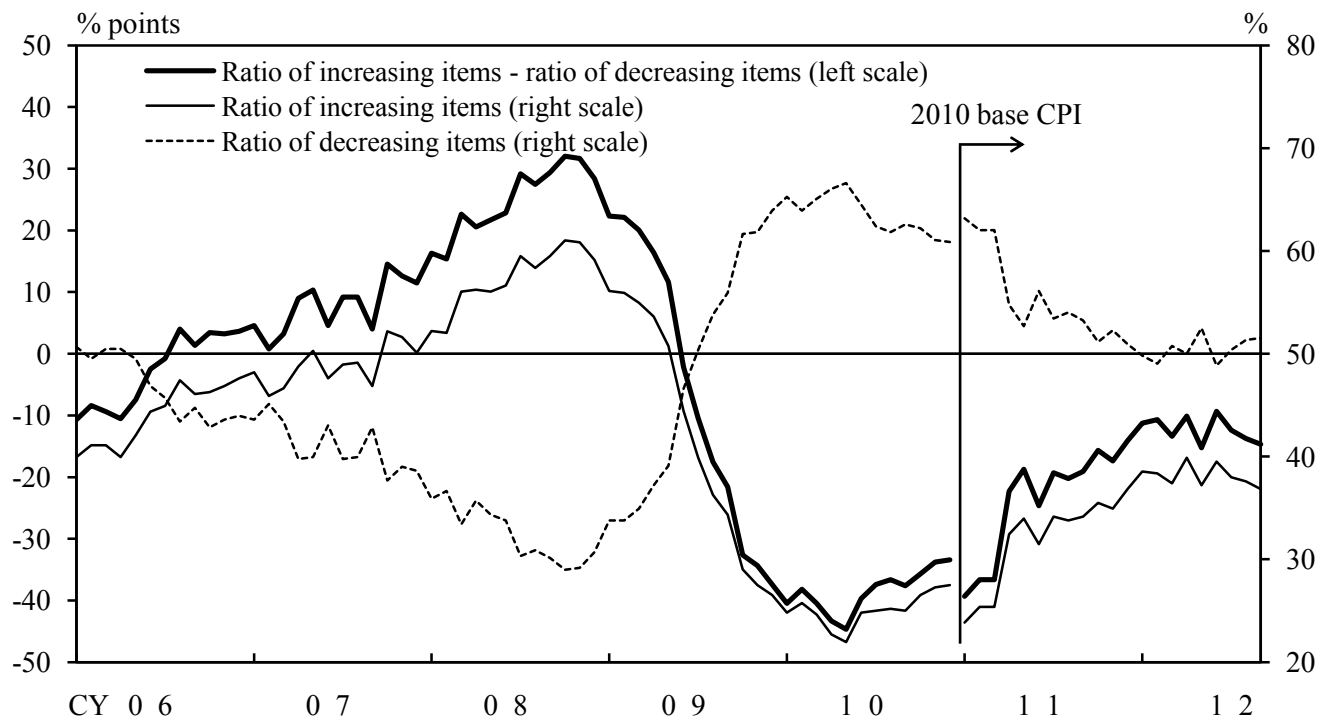


Notes: 1. Figures for the 10 percent trimmed mean are weighted averages of items; these items are obtained by rearranging year-on-year rates of price change in ascending order and then excluding items in both the upper and lower 10 percent tails by weight.
 2. Figures for the Laspeyres chain index for 2006 are the year-on-year rates for the fixed-base method. The year-on-year figures for the Laspeyres chain index up to 2010 are on the 2005 base, and those from 2011 onward are on the 2010 base.

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

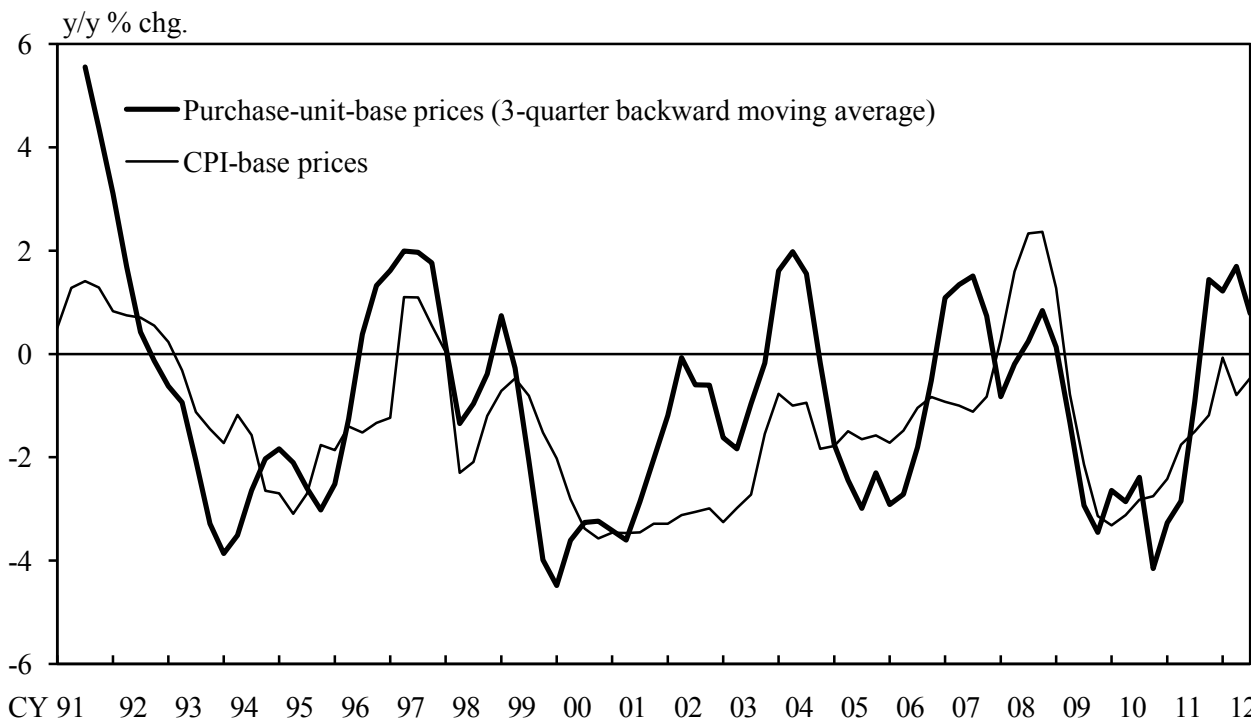
Consumer Price Index (2)

(1) Ratio of Increasing and Decreasing Items



Note: Proportion of items whose year-on-year rates of price change increased/decreased. CPI less fresh food.

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



Notes: 1. Figures are the weighted averages of the items of food products, agricultural, aquatic & livestock products (less fresh food), clothes, durable goods, and other goods that are continuously available in both the CPI and the "Family Income and Expenditure Survey."

2. Definitions of the items are basically the same as those published by the Ministry of Internal Affairs and Communications.

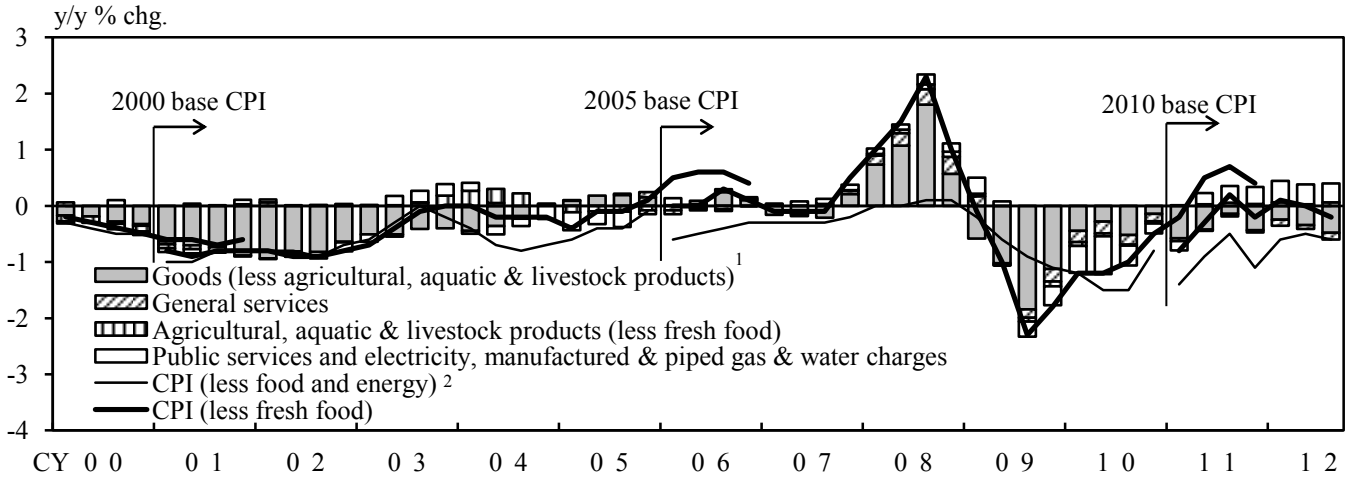
3. Other goods exclude clothes (including shirts, sweaters & underwear); food products; agricultural & aquatic products; durable goods; petroleum products; and electricity, gas & water charges.

4. Figures for 2012/Q3 are July-August averages.

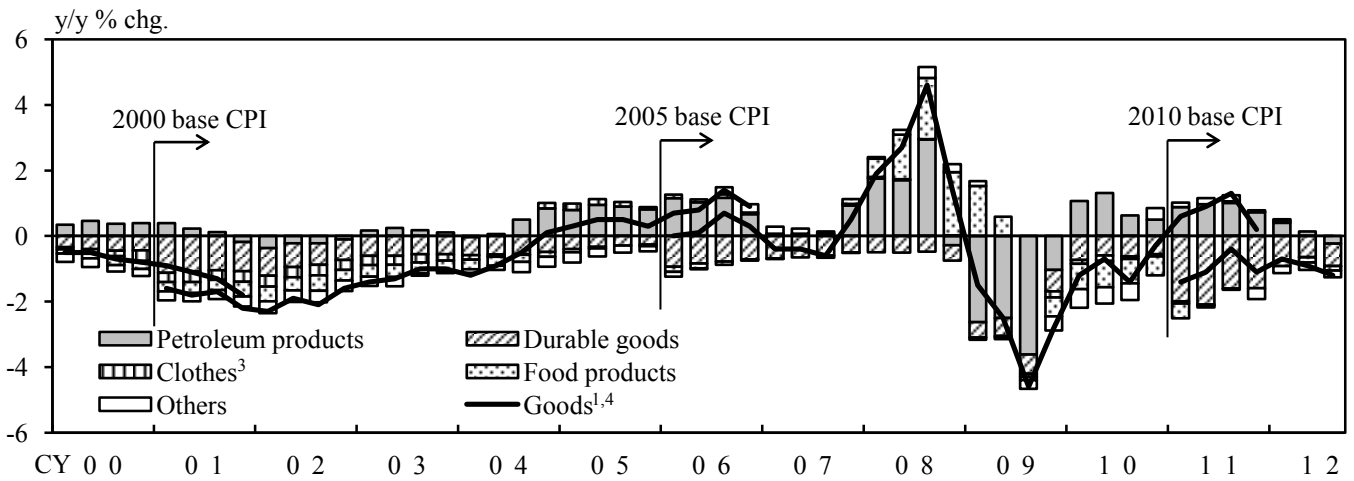
Source: Ministry of Internal Affairs and Communications, "Consumer Price Index," "Family Income and Expenditure Survey."

Consumer Price Index (3)

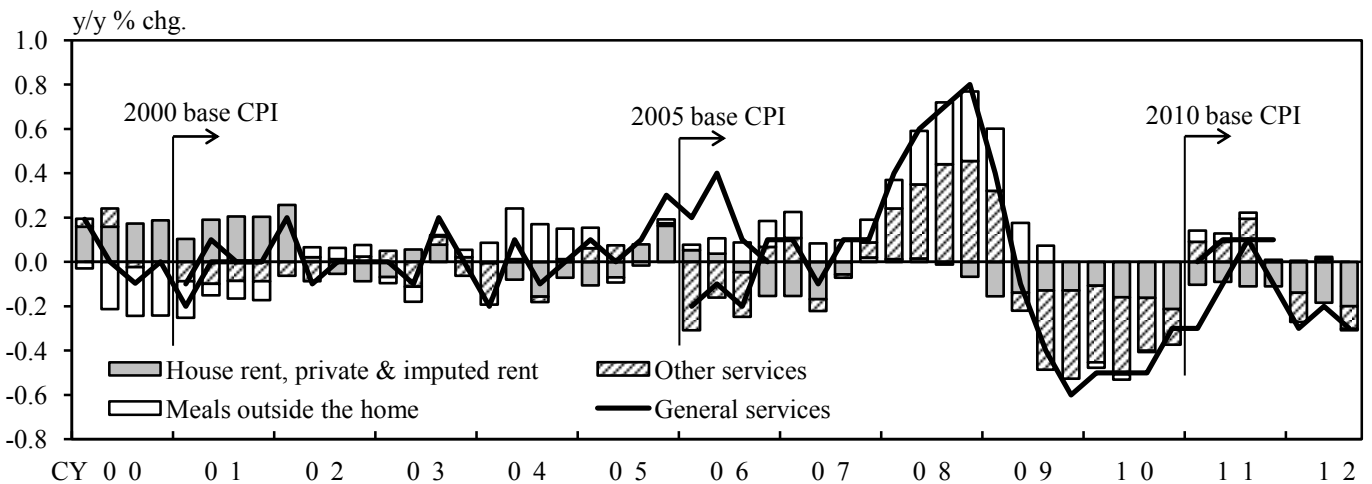
(1) Consumer Price Index (Less Fresh Food)



(2) Goods (Less Agricultural, Aquatic & Livestock Products)¹



(3) General Services



Notes: 1. The items are basically the same as those defined by the Ministry of Internal Affairs and Communications.

However, electricity, manufactured & piped gas & water charges are excluded from goods.

2. Alcoholic beverages are excluded from food.

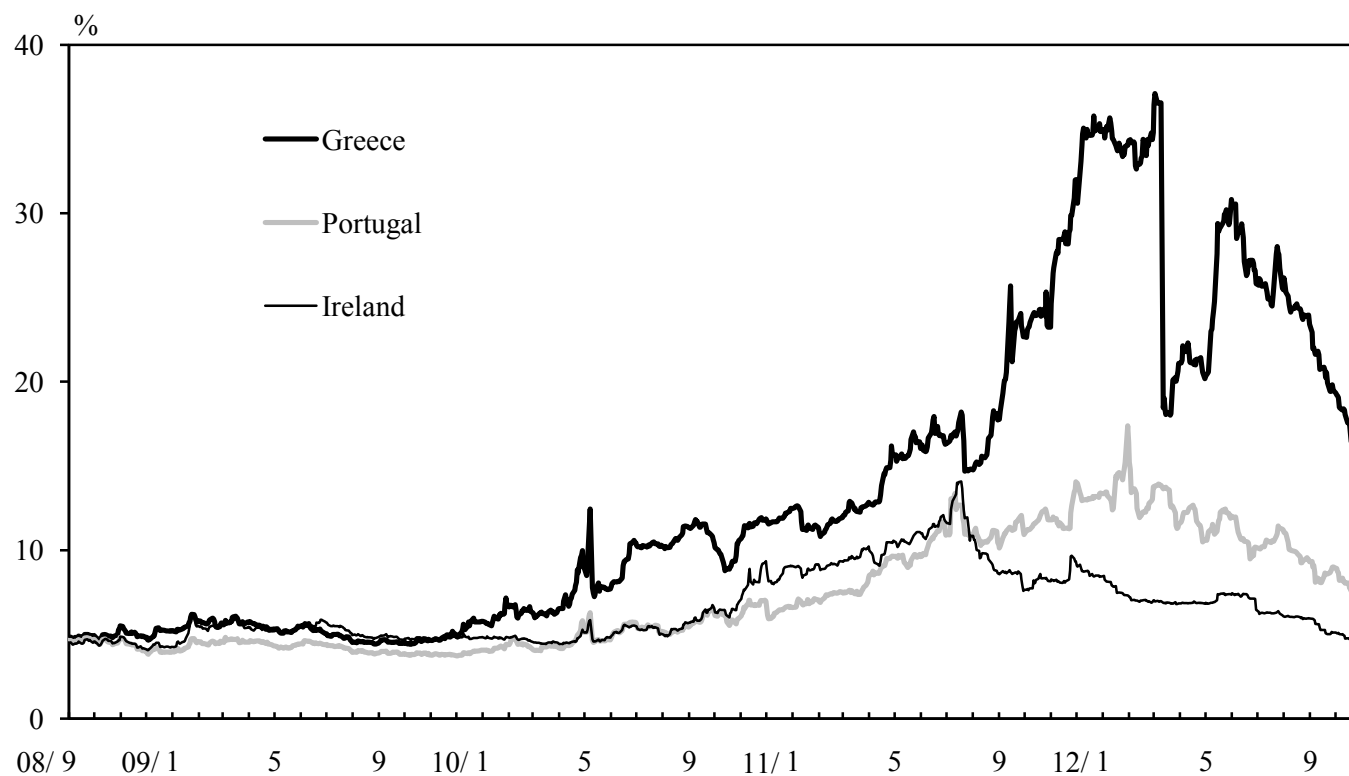
3. Including shirts, sweaters & underwear.

4. Less agricultural, aquatic & livestock products.

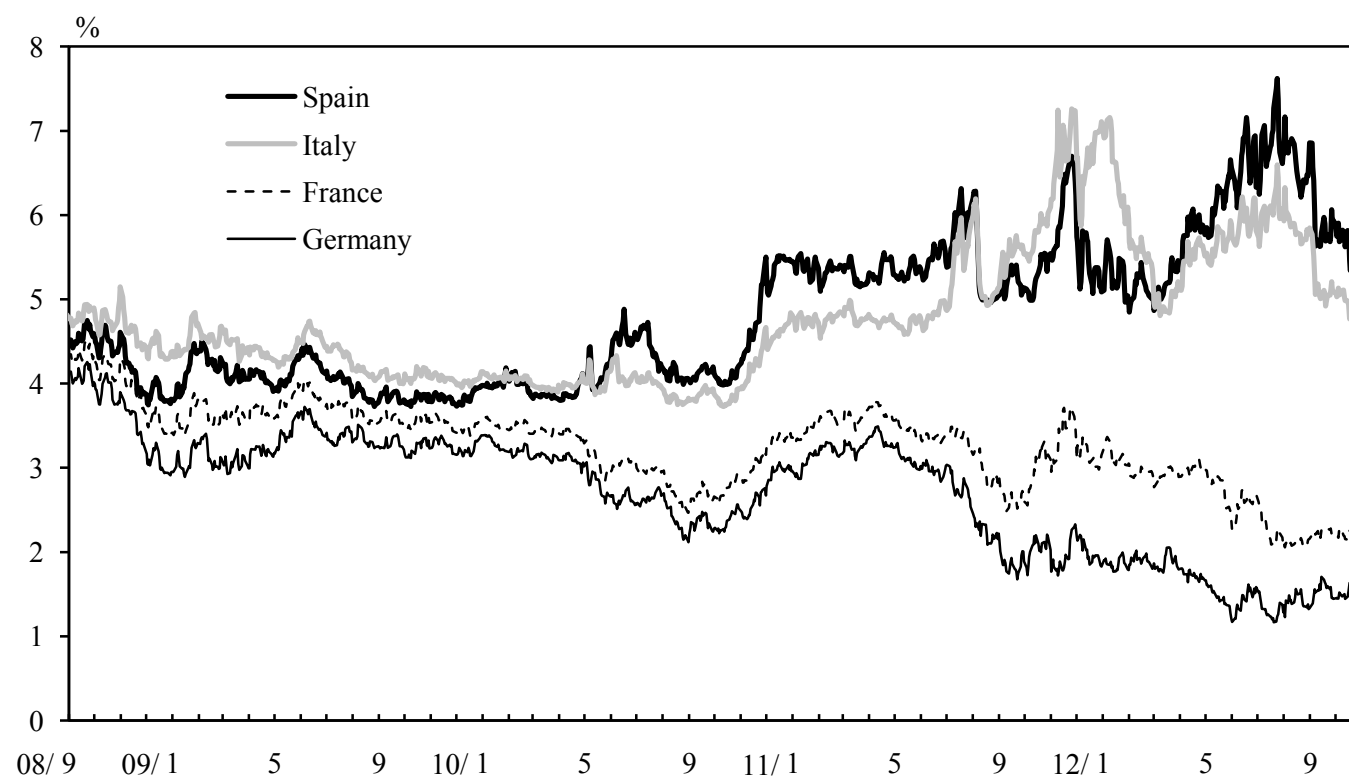
5. The year-on-year rates of change other than those of the CPI (less fresh food), CPI (less food and energy), and general services are calculated using published indices.

Long-Term Government Bond Yields in Europe

(1) Greece, Portugal, and Ireland



(2) Spain, Italy, France, and Germany



Note: 10-year government bond yields. The yields for Irish bonds for October 12, 2011 onward are 9-year government bond yields.

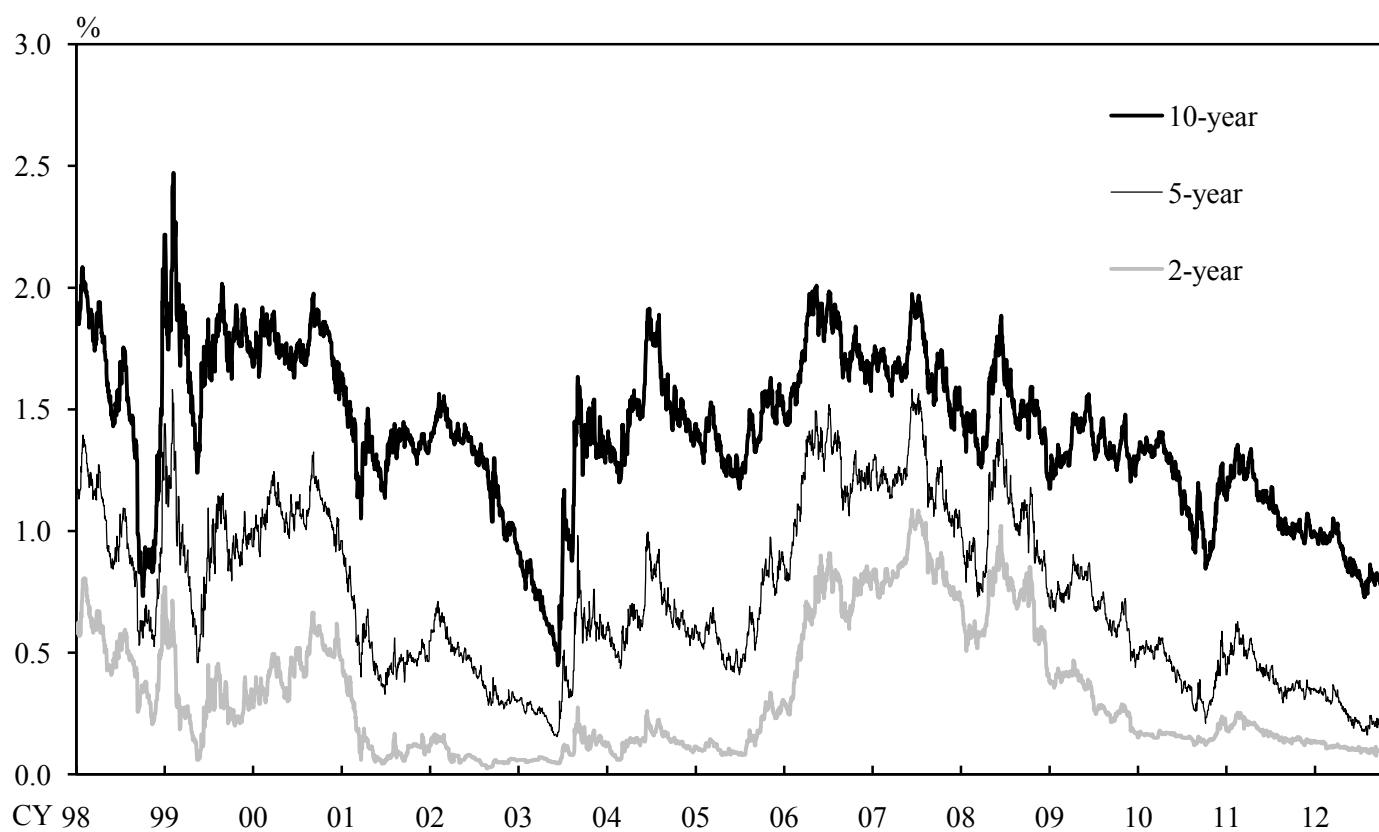
Source: Bloomberg.

Long-Term Interest Rates

(1) Long-Term Interest Rates in Major Economies (10-Year Government Bond Yields)



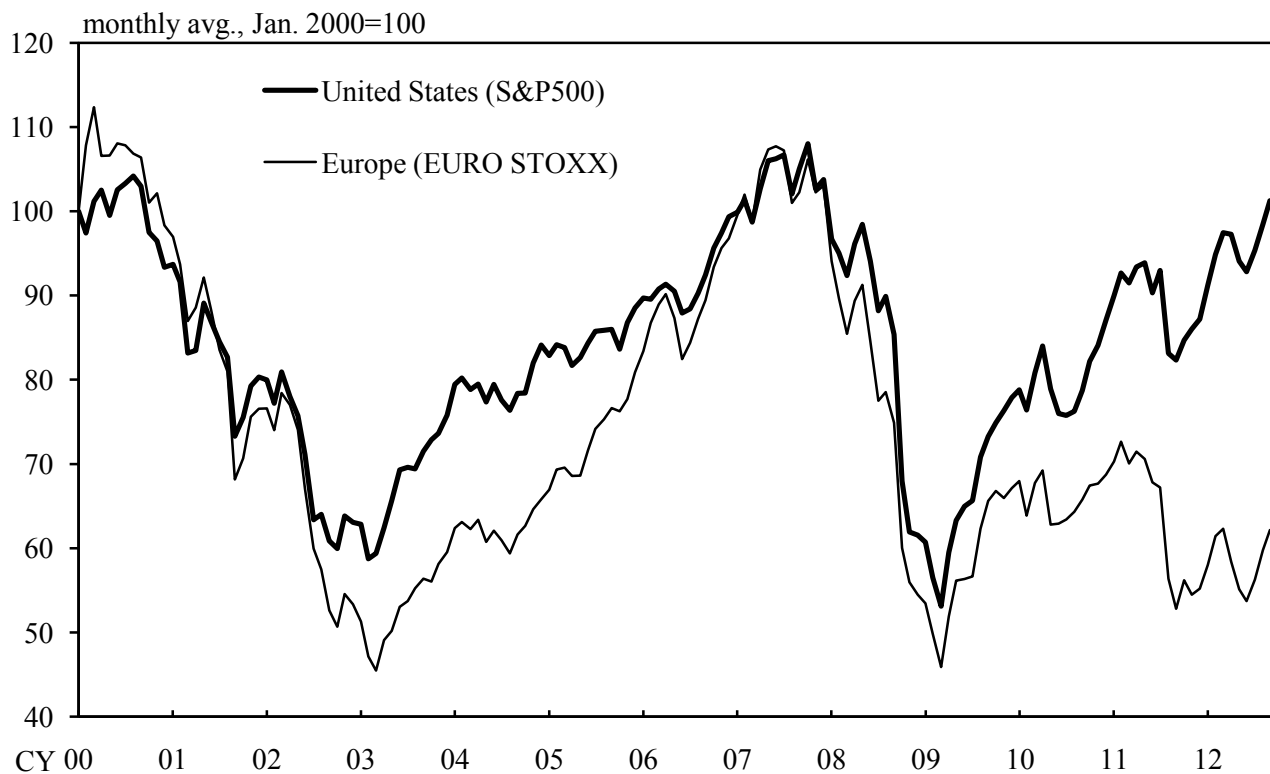
(2) Japanese Government Bond Yields



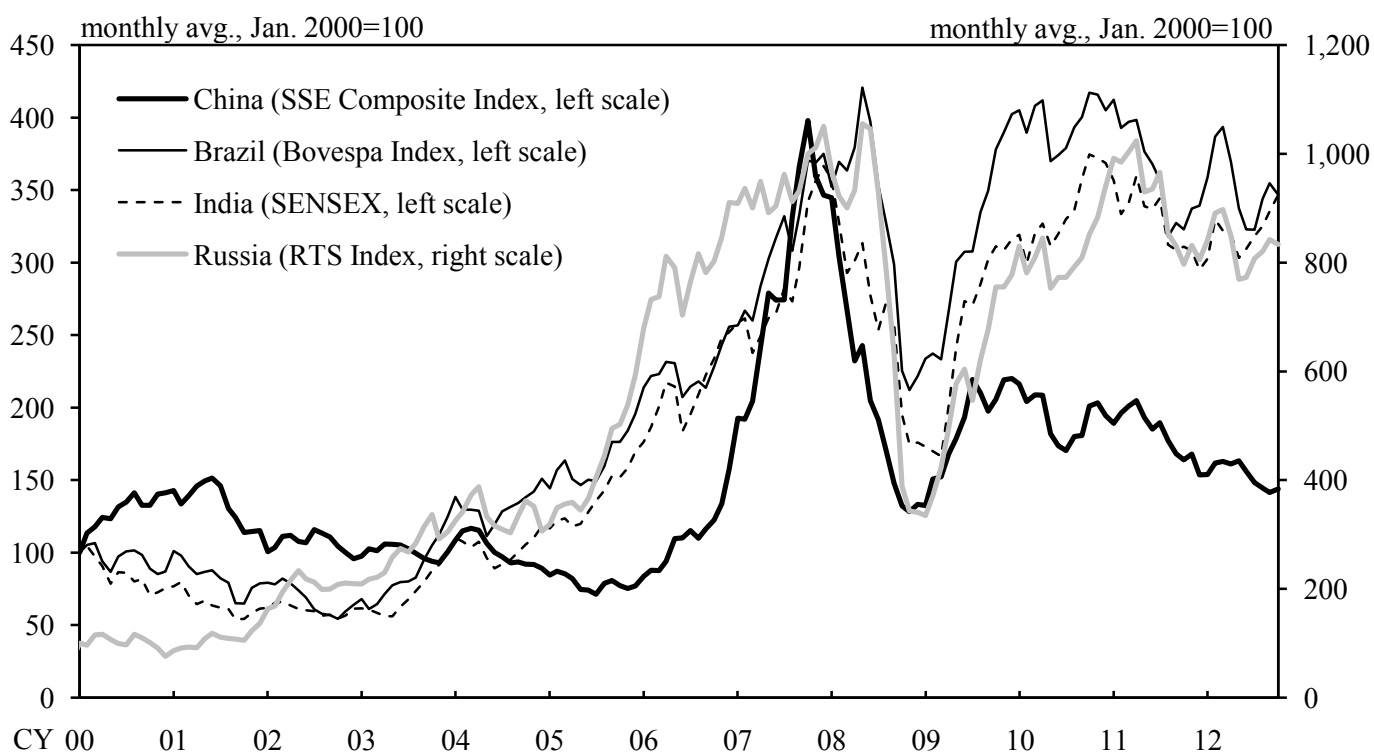
Source: Bloomberg.

Overseas Stock Prices

(1) United States and Europe

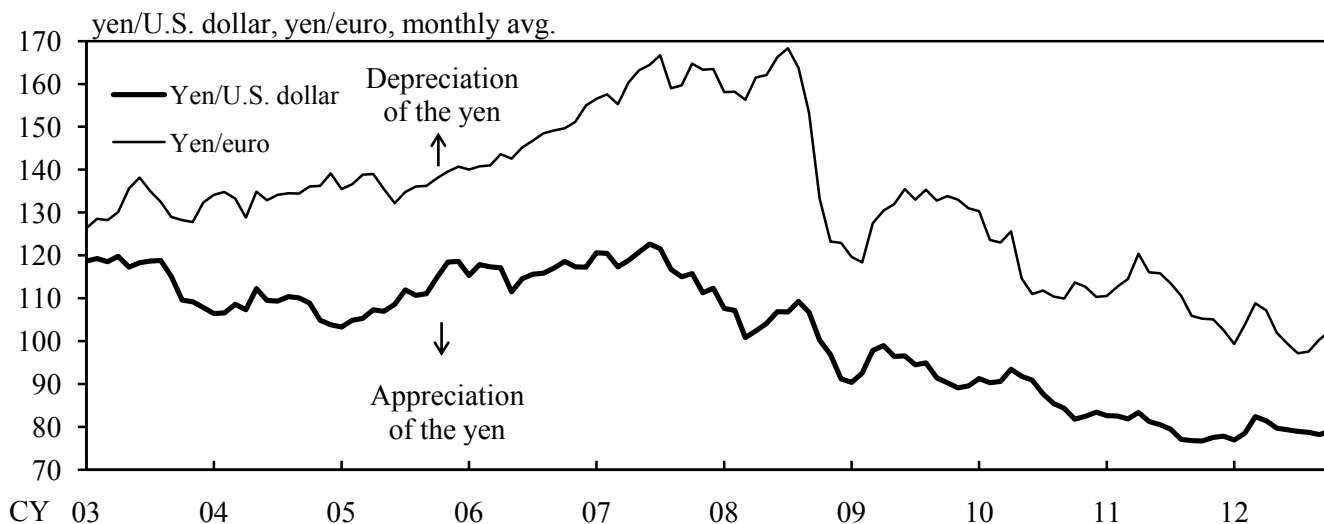


(2) Emerging Economies

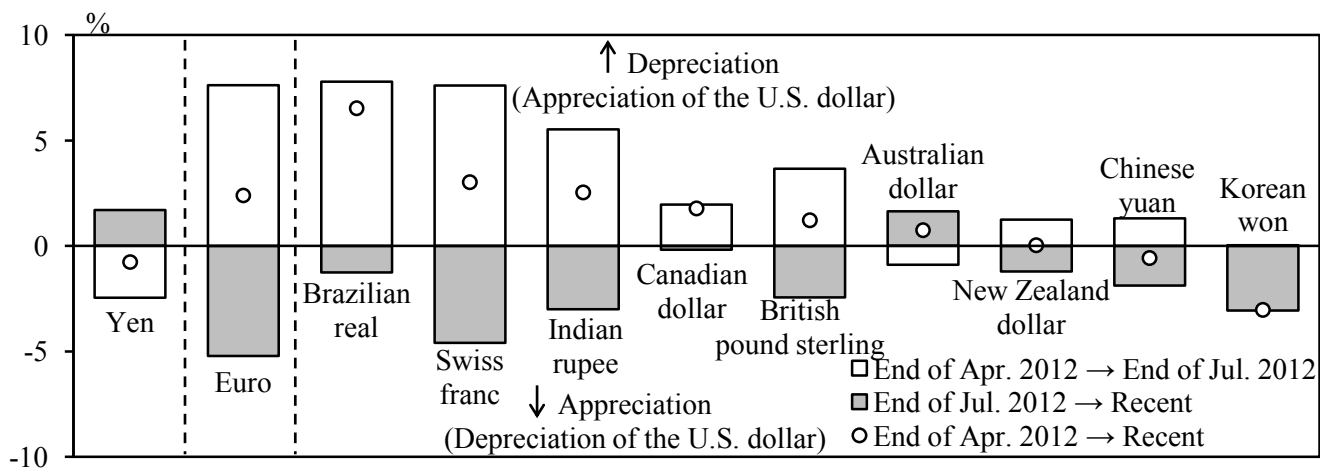


Exchange Rates

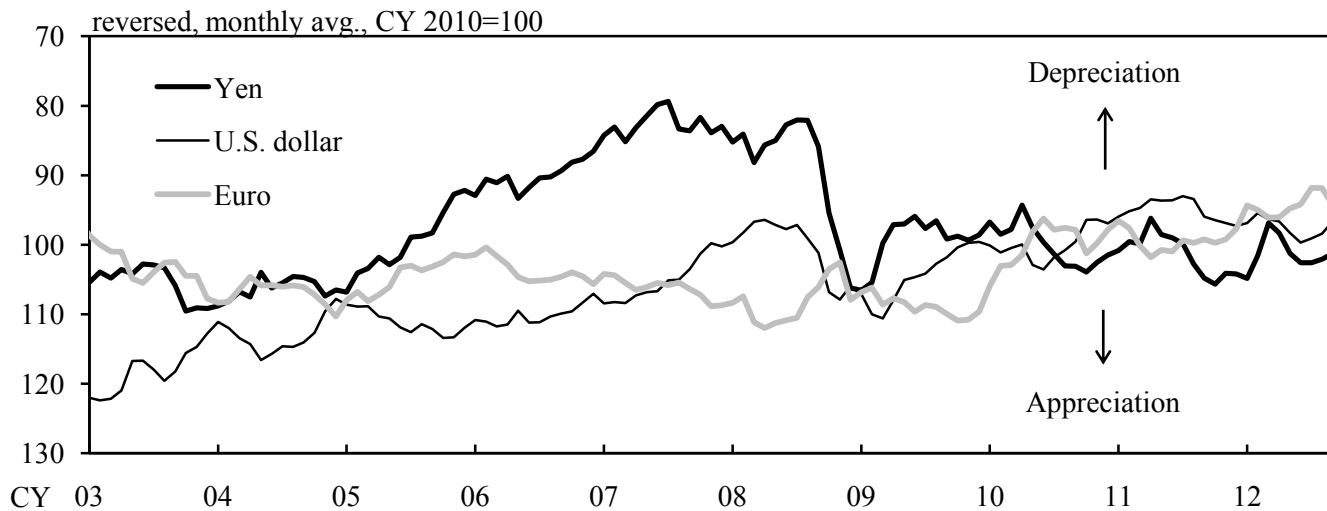
(1) Yen/U.S. Dollar and Yen/Euro



(2) Rates of Change in Individual Currencies against the U.S. Dollar (since the End of April 2012)



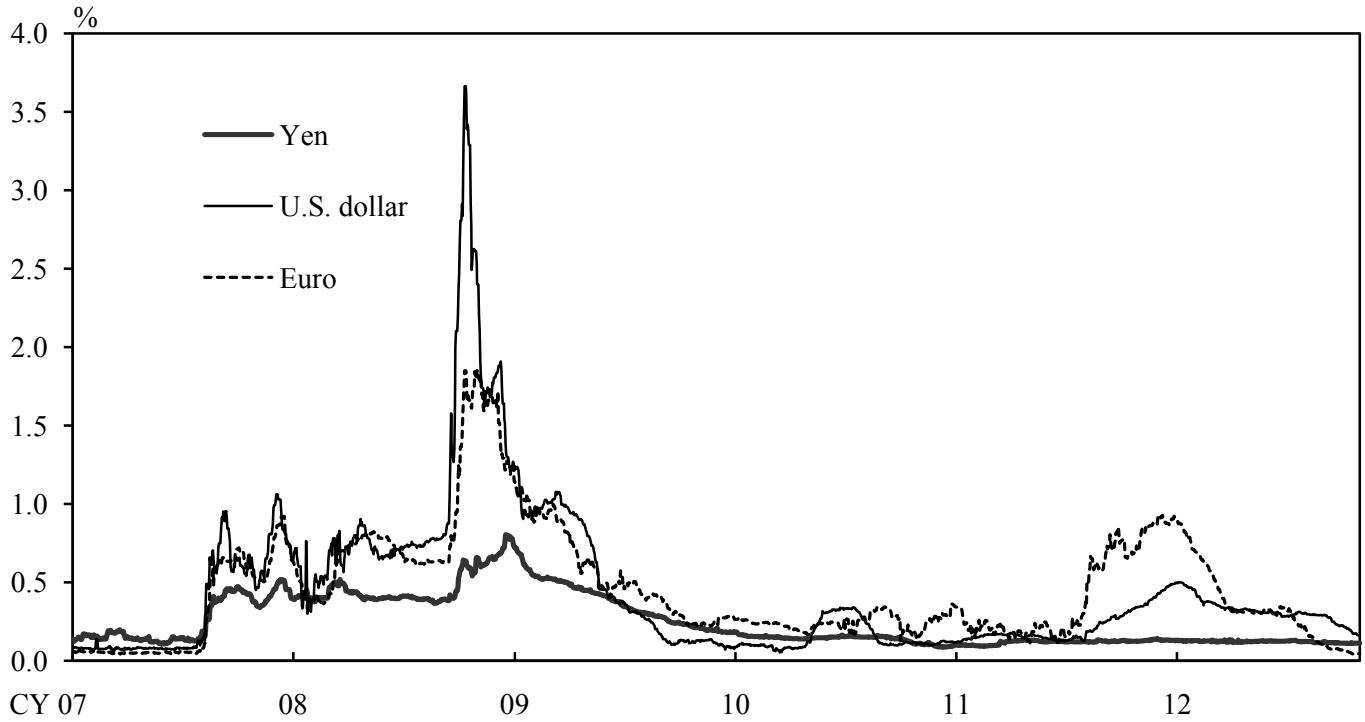
(3) Real Effective Exchange Rates



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

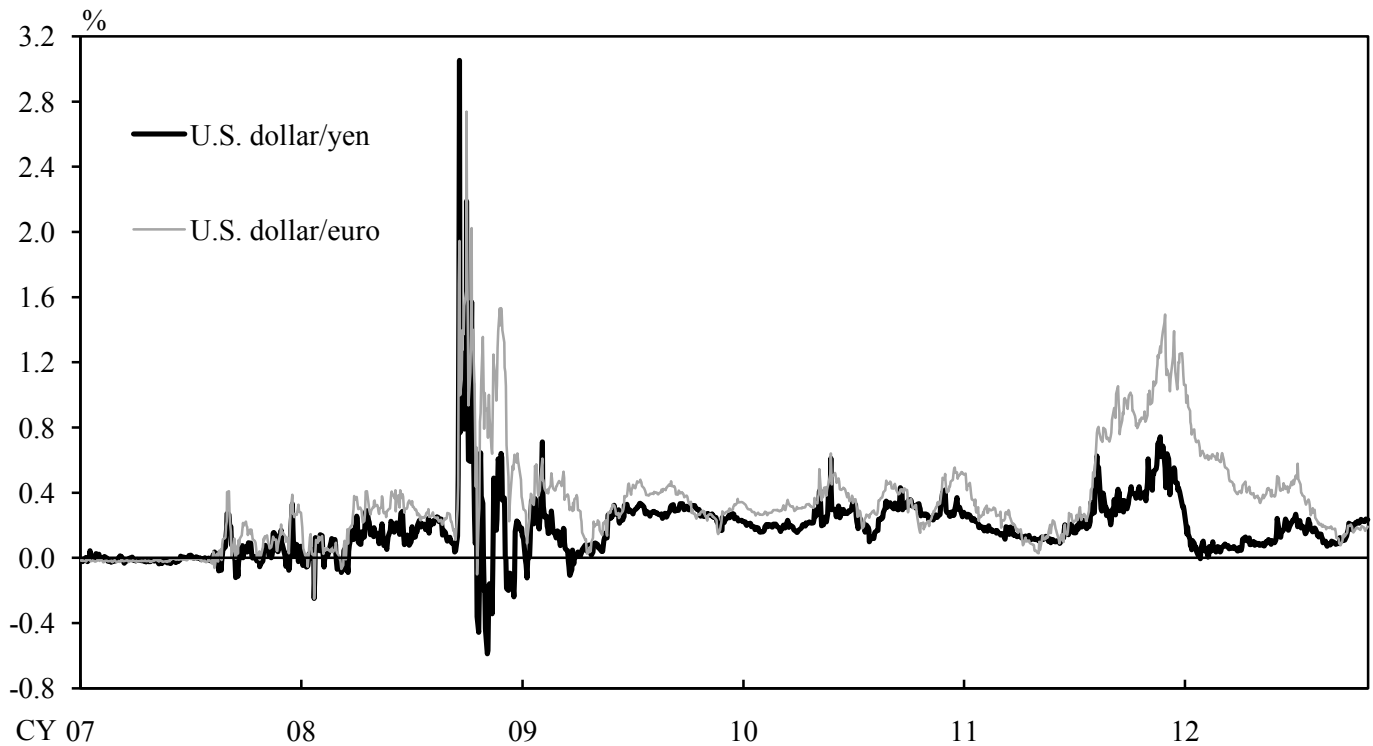
Funding Conditions for Financial Institutions

(1) 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).

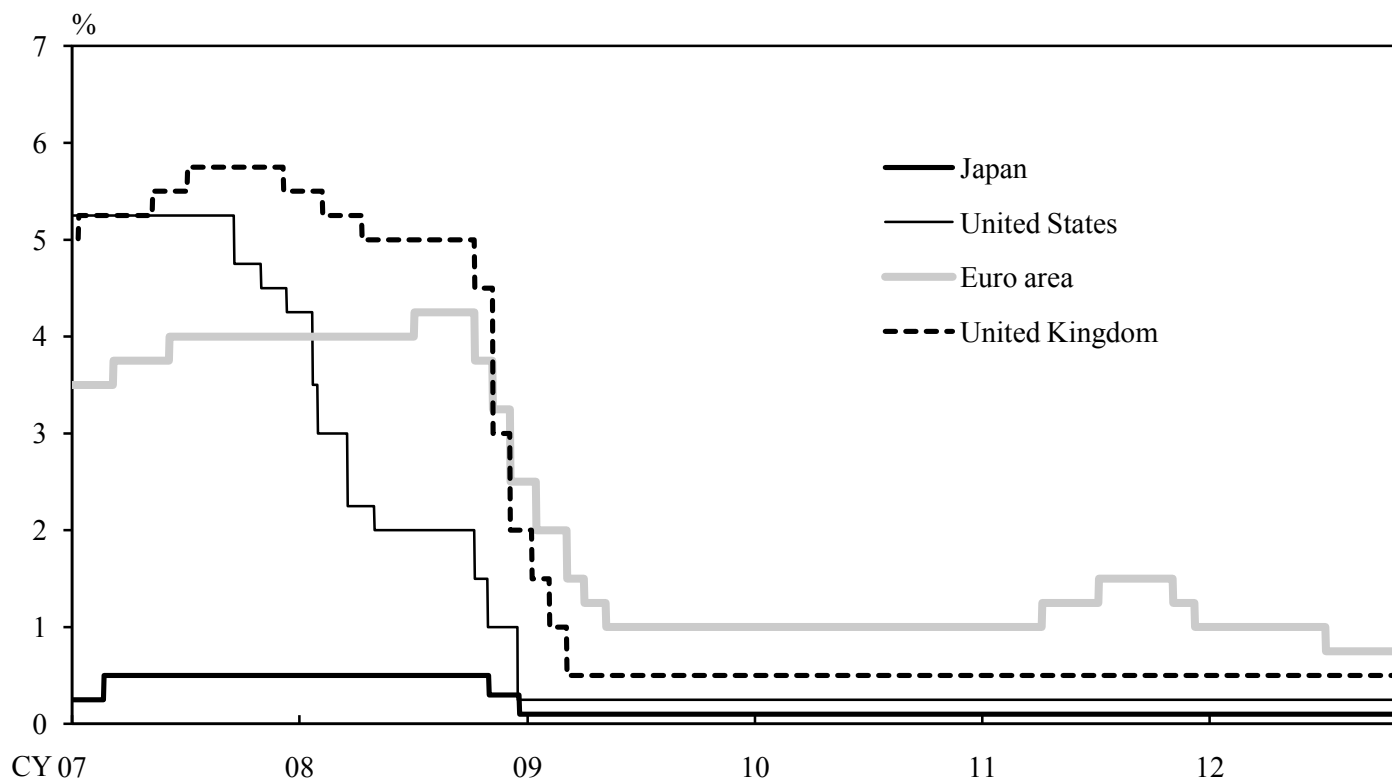
(2) Dollar Funding Premiums through Foreign Exchange Swaps



Note: Rates for funding the U.S. dollar from the yen or the euro minus 3-month U.S. dollar LIBOR.
Source: Bloomberg.

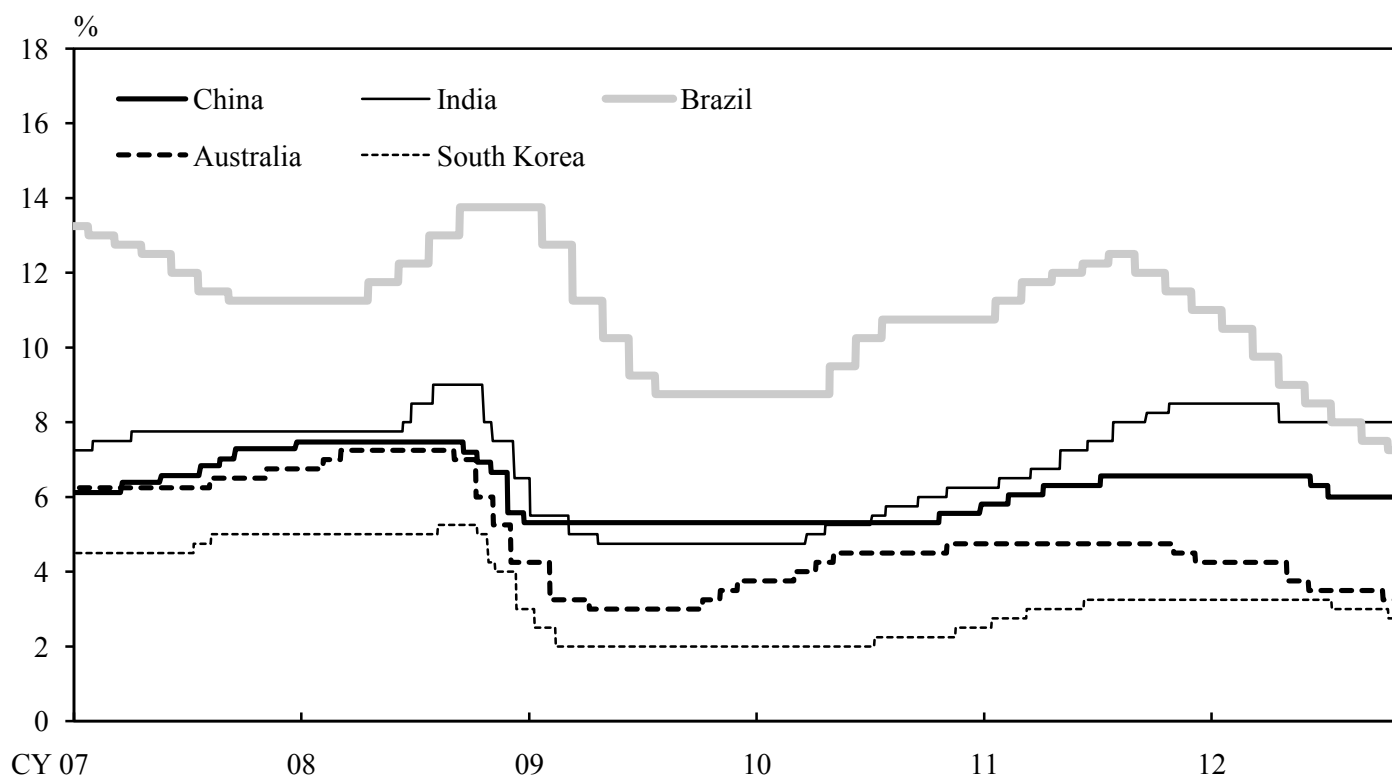
Policy Interest Rates

(1) Advanced Economies



Note: In the United States, from December 16, 2008, the target range for the federal funds rate is 0 to 0.25 percent and the interest rate applied to reserve balances is 0.25 percent. In Japan, from October 5, 2010, the Bank of Japan has encouraged the uncollateralized overnight call rate to remain at around 0 to 0.1 percent and the interest rate applied to the complementary deposit facility is 0.1 percent.

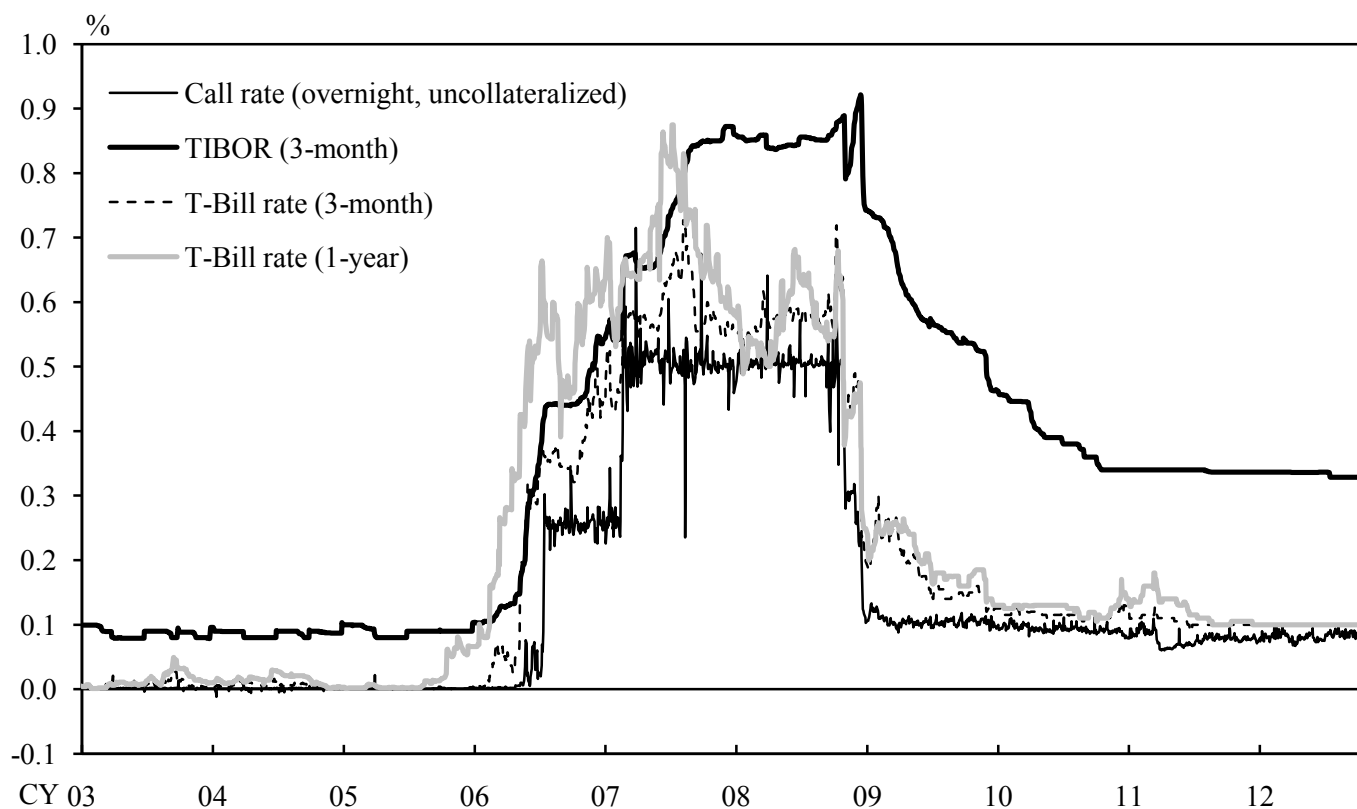
(2) Emerging and Commodity-Exporting Economies



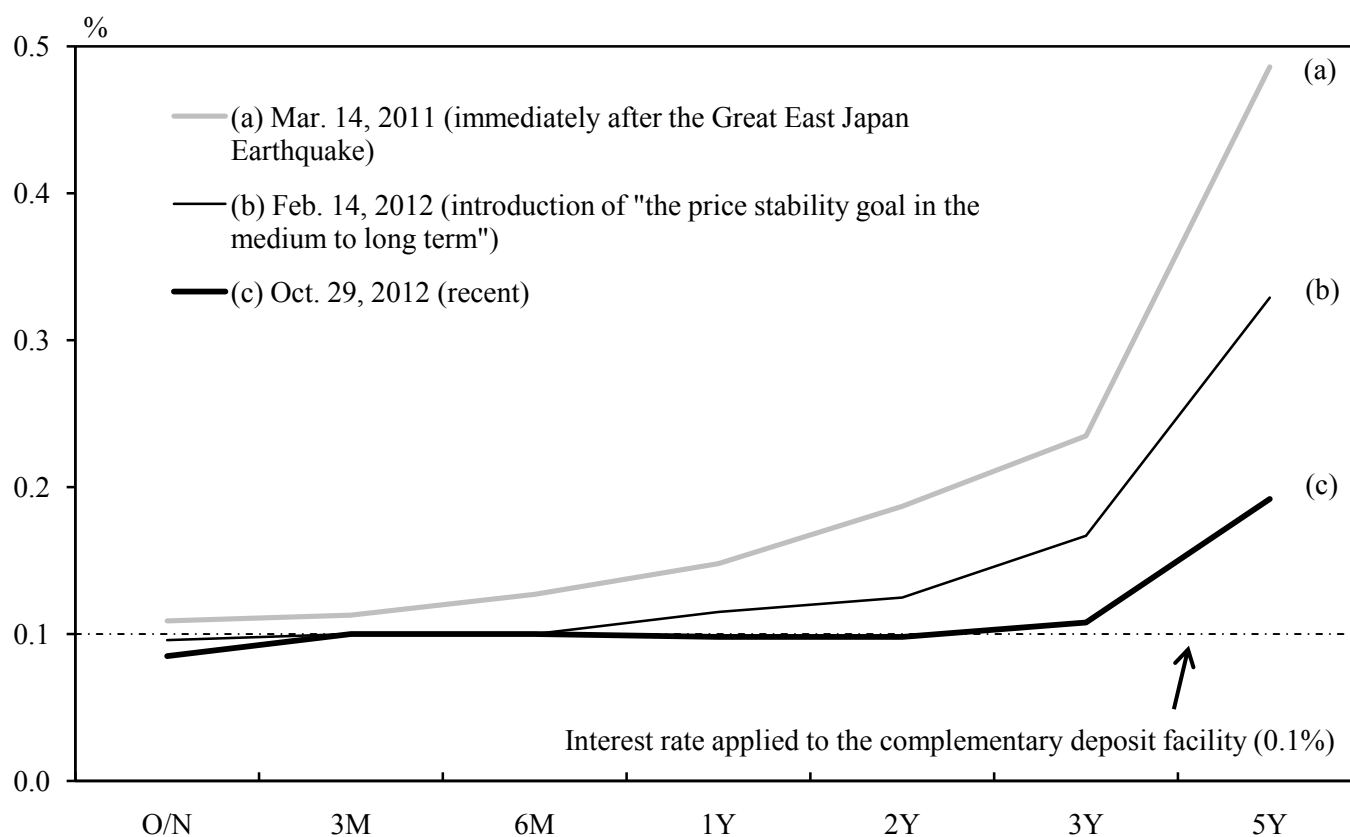
Sources: Bank of Japan; Bloomberg.

Short-Term Interest Rates and Yield Curves

(1) Short-Term Interest Rates

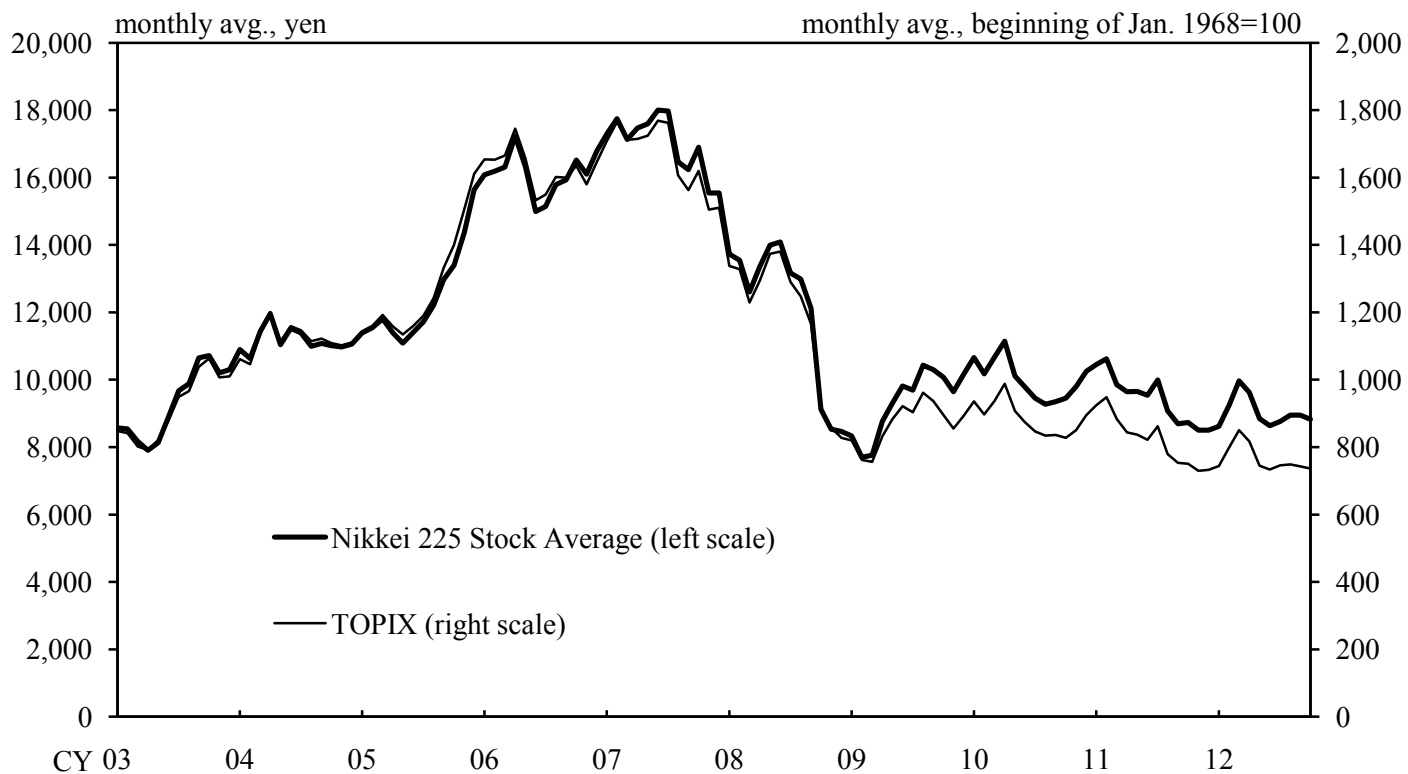


(2) Yield Curves

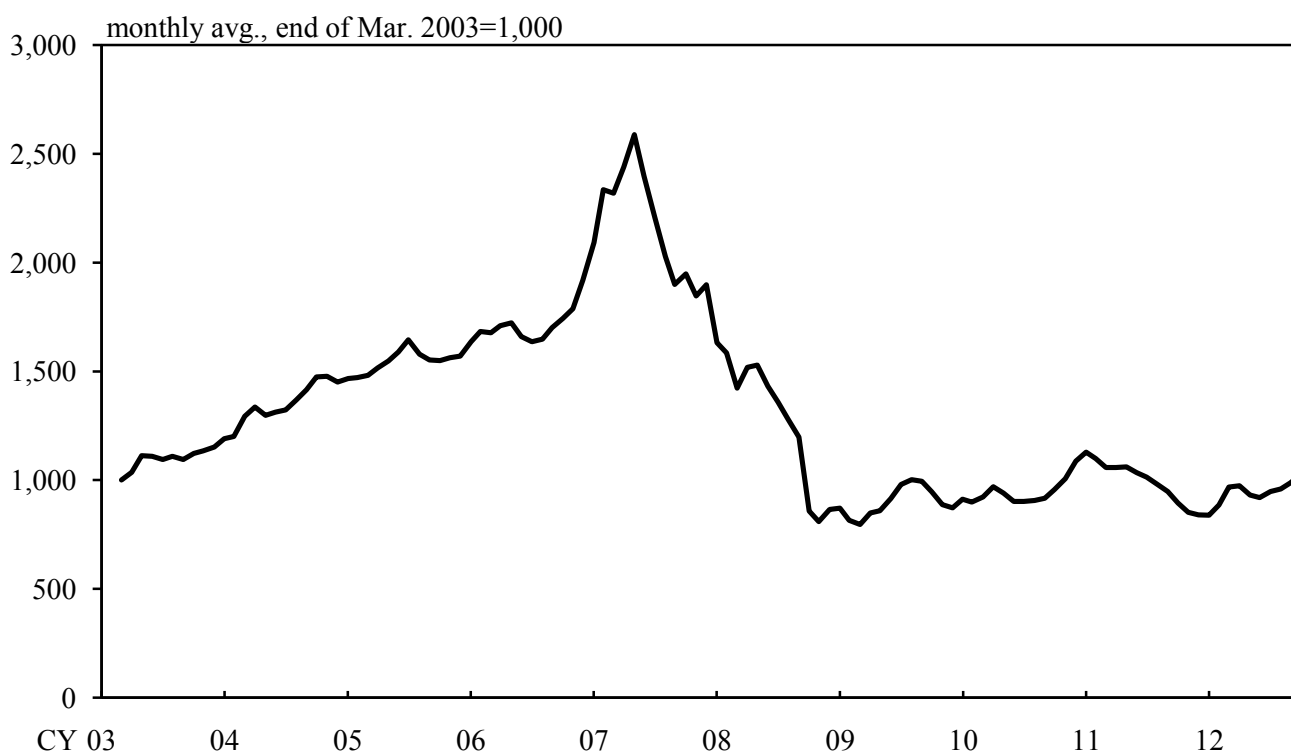


Stock Prices and the J-REIT Market

(1) Stock Prices



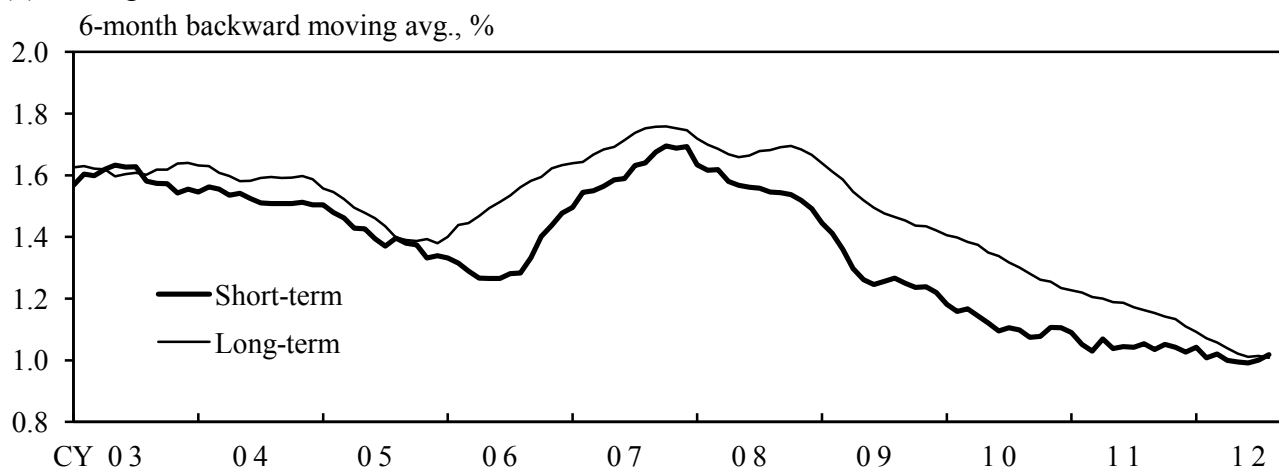
(2) TSE REIT Index



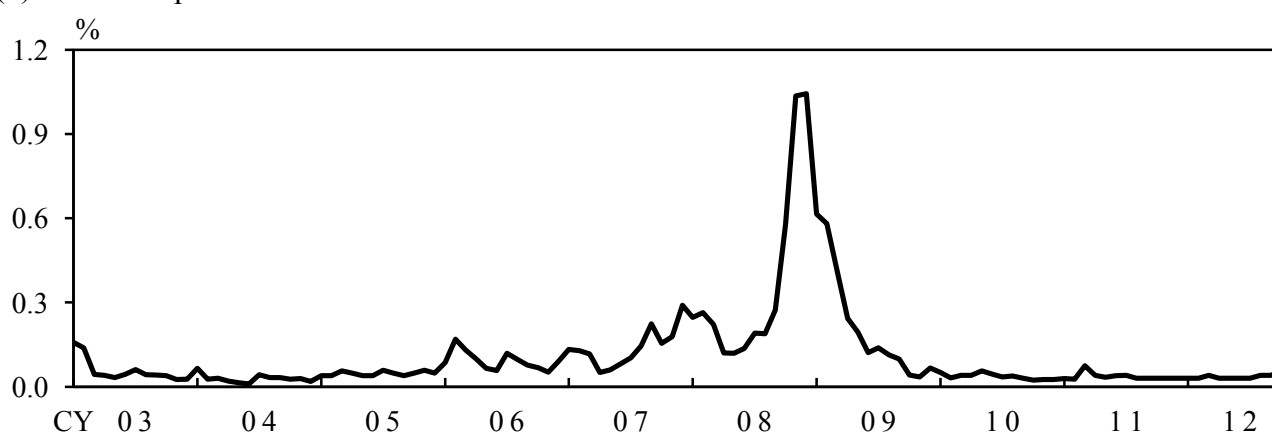
Source: Bloomberg.

Bank Lending Rates, and Spreads for CP and Corporate Bonds

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

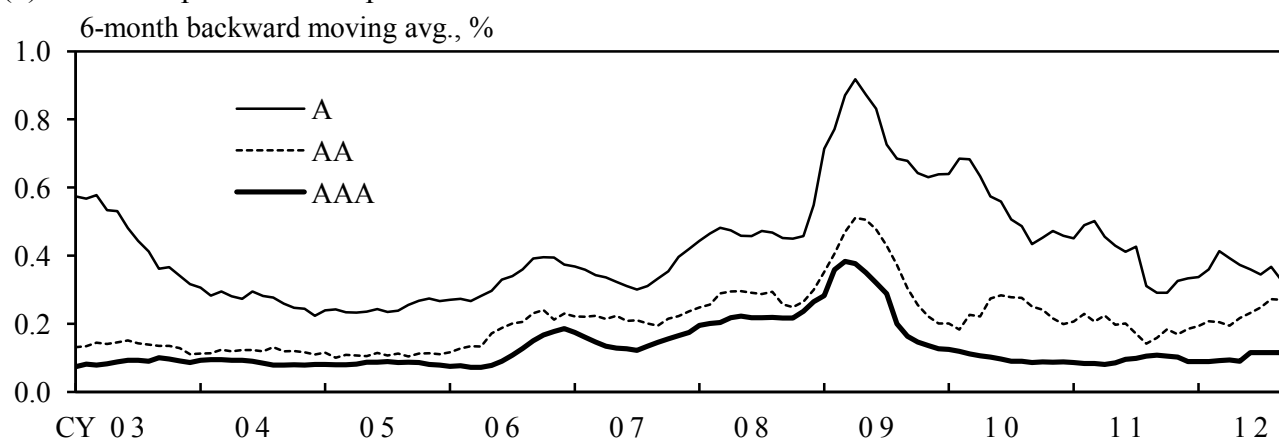


(2) Issuance Spreads for CP



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

(3) Issuance Spreads for Corporate Bonds

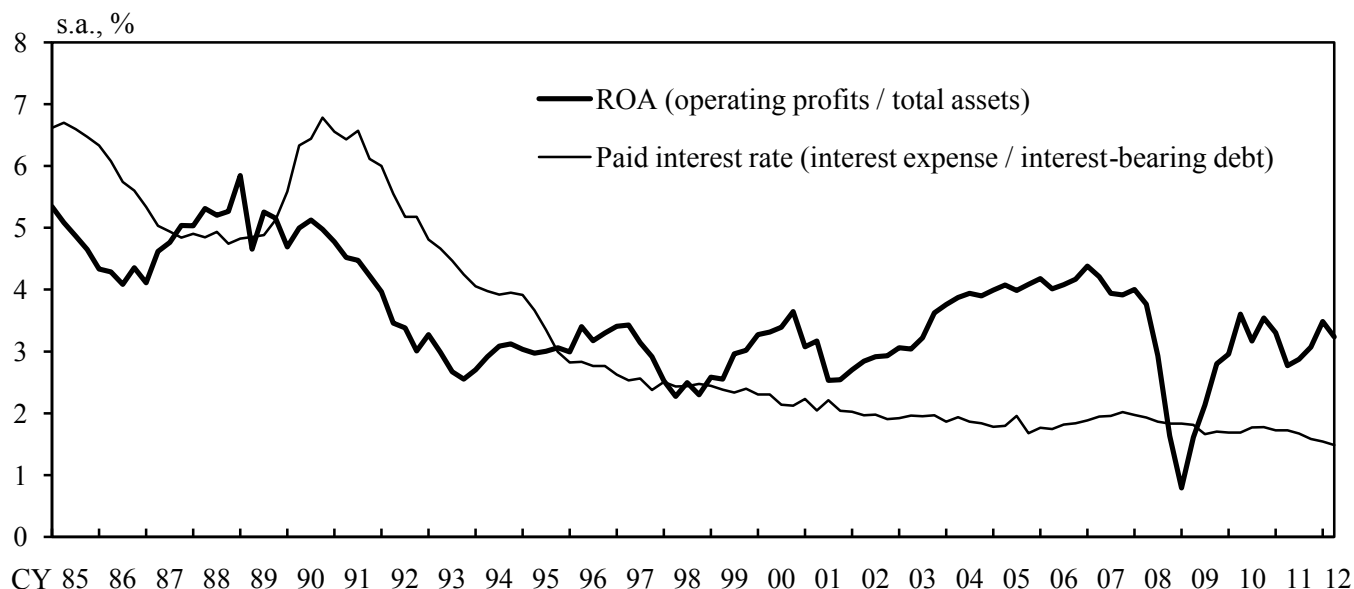


- Notes: 1. The issuance spreads for corporate bonds are the issuance rate of these bonds minus the government bond yield.
 2. Figures are the average of all maturities issued in domestic markets, based on the launch date.
 3. Bonds issued by banks and securities companies, etc., are excluded.
 4. Bonds are classified by the highest ratings among Moody's, S&P, R&I, and JCR.

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

Interest Rates and Economic Activity

(1) ROA and Paid Interest Rate

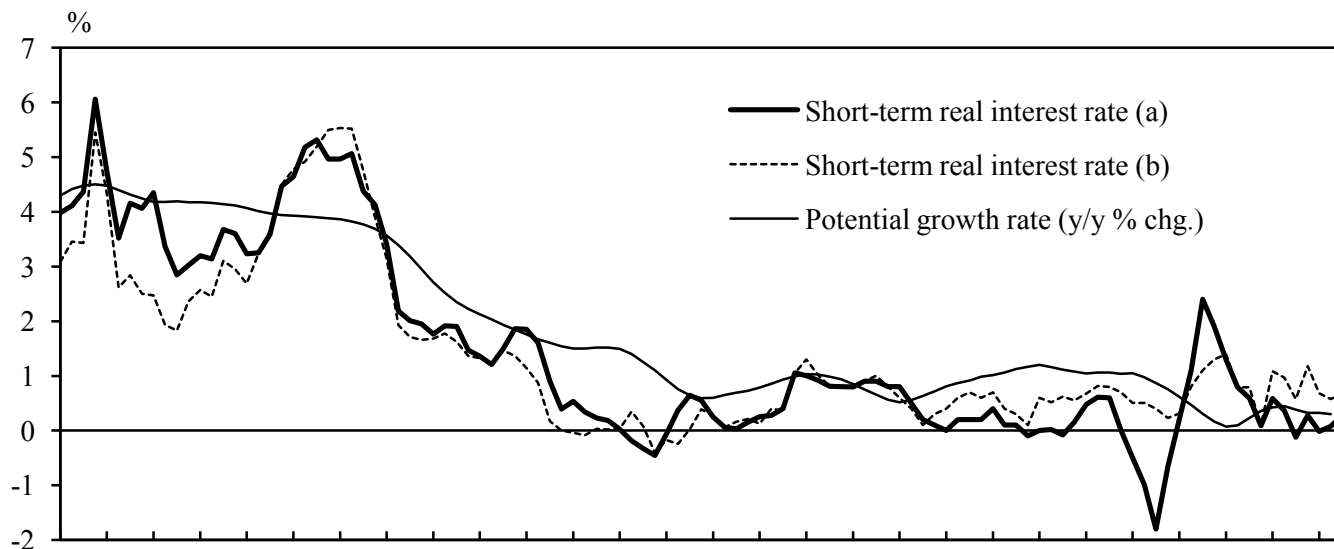


CY 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

Notes: 1. Figures are taken from the "Financial Statements Statistics of Corporations by Industry, Quarterly," and are based on all-size enterprises and all industries. Finance and insurance are excluded.

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

(2) Short-Term Real Interest Rate and Growth Rate



CY 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

Notes: 1. Short-term real interest rate (a) = call rate (overnight, uncollateralized) - year-on-year percentage change in the CPI (all items less fresh food)

2. Short-term real interest rate (b) = call rate (overnight, uncollateralized) - year-on-year percentage change in the CPI (all items less food [alcoholic beverages are excluded from food] and energy)

3. Figures for the CPI are adjusted to exclude the effects of changes in the consumption tax rate. From 2001/Q1, high school fees are excluded.

4. The potential growth rate 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.

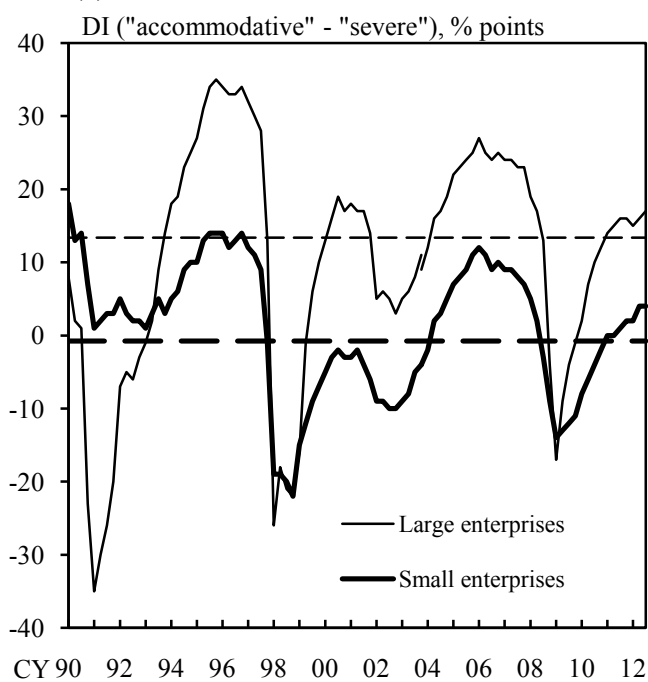
Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index";

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

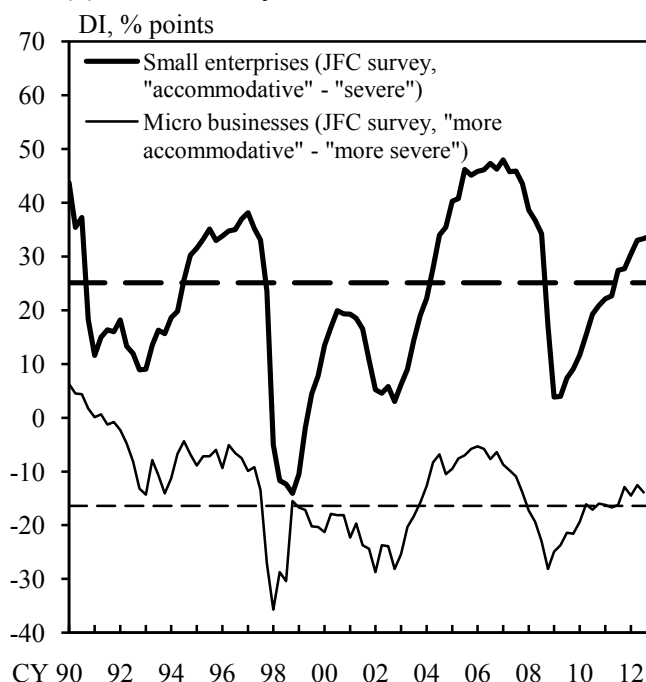
Cabinet Office, "National Accounts," etc.

Corporate Finance-Related Indicators

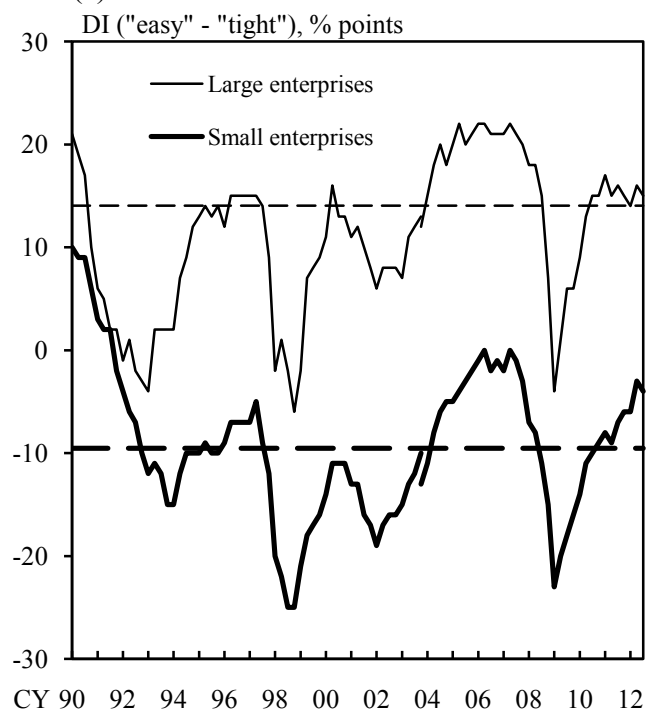
(1) Lending Attitude of Financial Institutions as Perceived by Firms

(a) *Tankan*

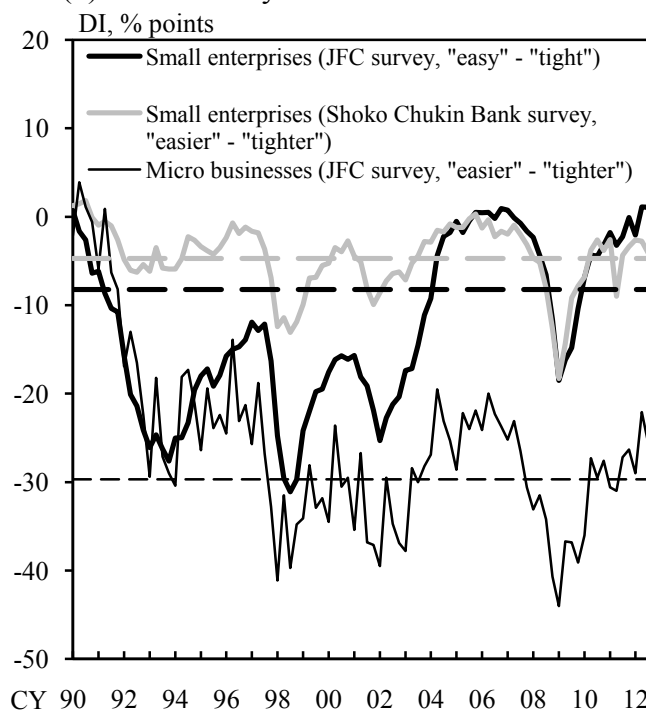
(b) Other Surveys



(2) Financial Position

(a) *Tankan*

(b) Other Surveys



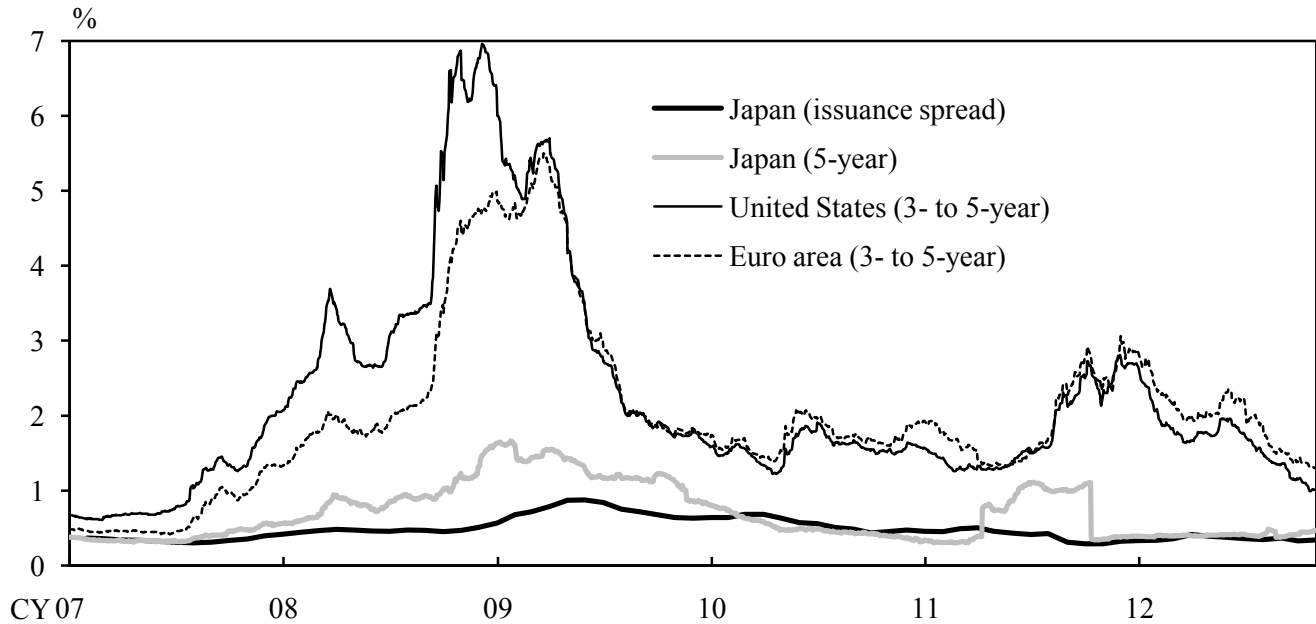
Notes: 1. Data from the "Tankan" are based on all industries. The "Tankan" was revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis. Broken lines are the averages since 2000.

2. Figures for the JFC survey (small enterprises) and the Shoko Chukin Bank survey for 2012/Q4 are those of October.

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)."

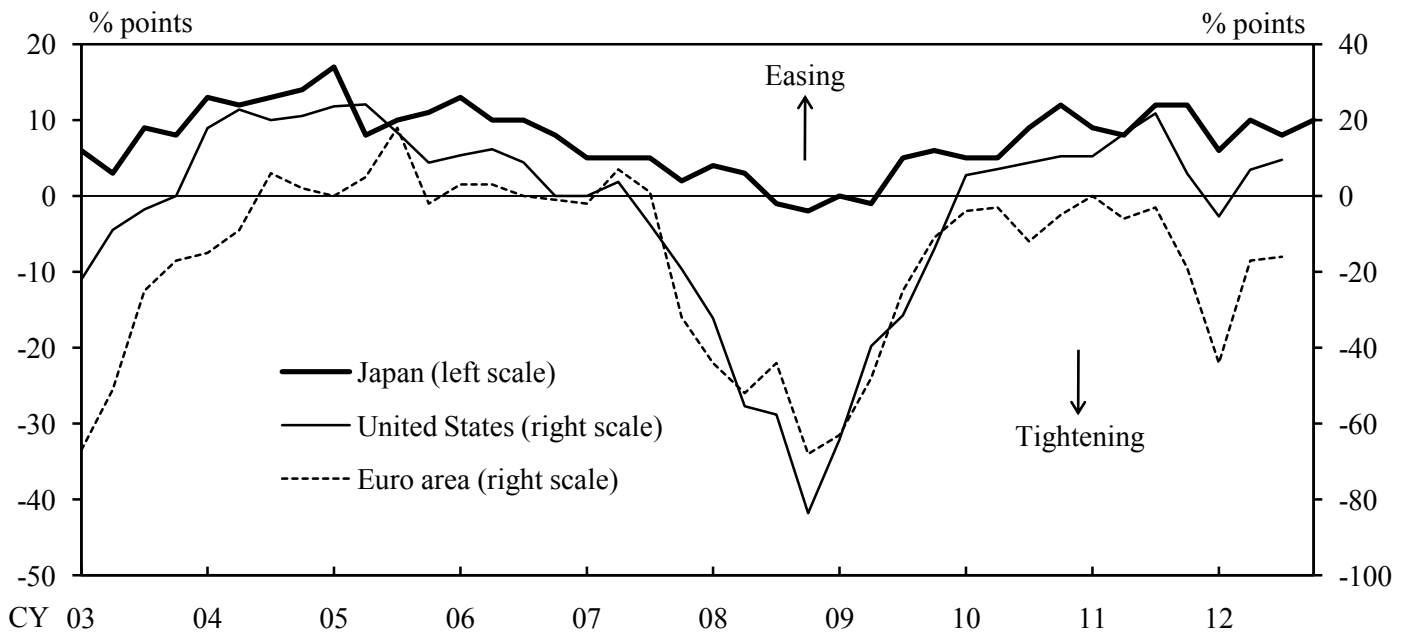
Funding Conditions for Firms (1)

(1) Credit Spreads for Corporate Bonds in Major Economies



- Notes: 1. The credit spreads for corporate bonds (rated A) are the corporate bond yields minus the government bond yields. The indicated ratings of corporate bonds in Japan are of R&I, and those in the United States and the euro area are of Moody's, S&P, and Fitch.
2. For the issuance spread, see Chart 24.
3. The credit spread in Japan fluctuated significantly because of a change in the credit rating of some firms with wide spreads.

(2) Bank's Lending Stance to Large Firms

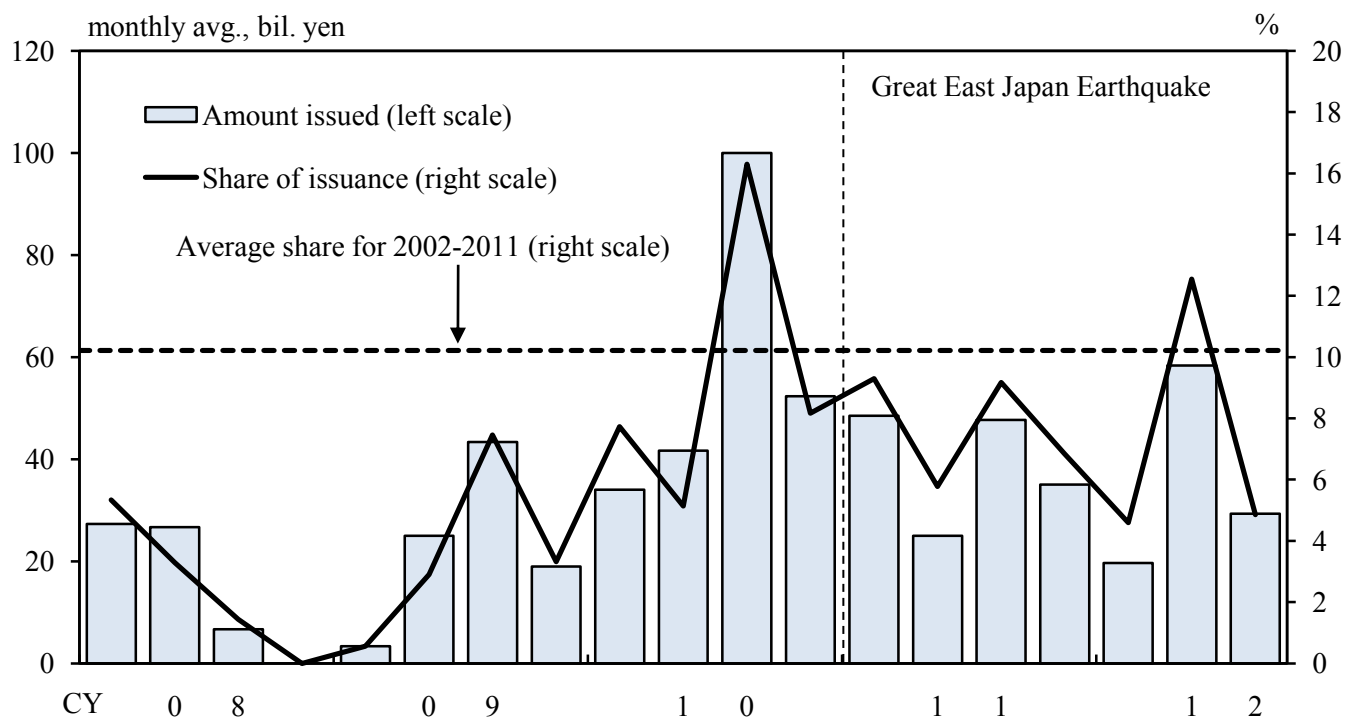


- Notes: 1. Figures for the United States are based on large and medium-sized firms.
2. Japan: "eased considerably" + 0.5 × "eased somewhat" - 0.5 × "tightened somewhat" - "tightened considerably"
3. United States and euro area: "eased considerably" + "eased somewhat" - "tightened somewhat" - "tightened considerably"

Sources: Japan Securities Dealers Association; Capital Eye Ltd.; I-N Information Systems; Bloomberg; Bank of Japan, "Senior Loan Officer Opinion Survey on Bank Lending Practices at Large Japanese Banks"; Federal Reserve Board; European Central Bank.

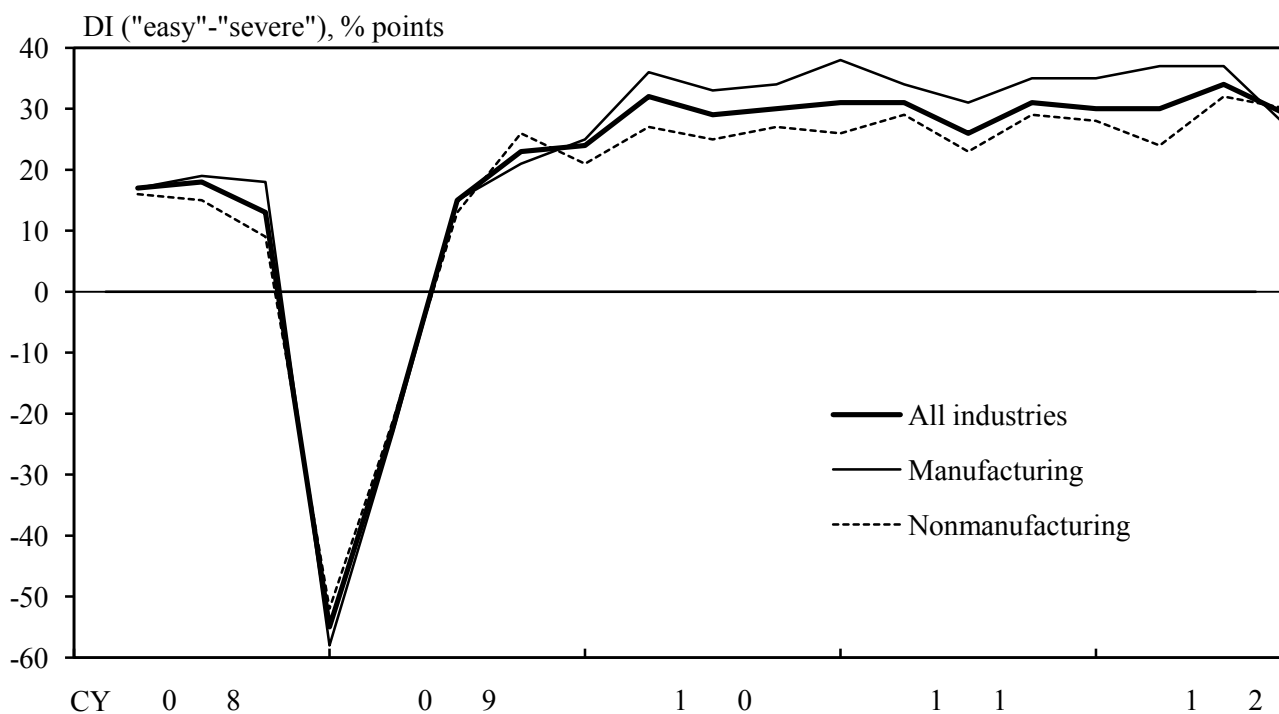
Funding Conditions for Firms (2)

(1) Amount of BBB-Rated Corporate Bonds Issued



- Notes: 1. Figures indicate the amount of straight bonds issued in domestic market, based on the launch date. The bonds issued by banks are excluded.
 2. Bonds are classified by the highest ratings among Moody's, S&P, R&I, and JCR.
 3. Share of issuance represents that of BBB-rated bonds to the total (sum of AAA, AA, A, and BBB-rated bonds).

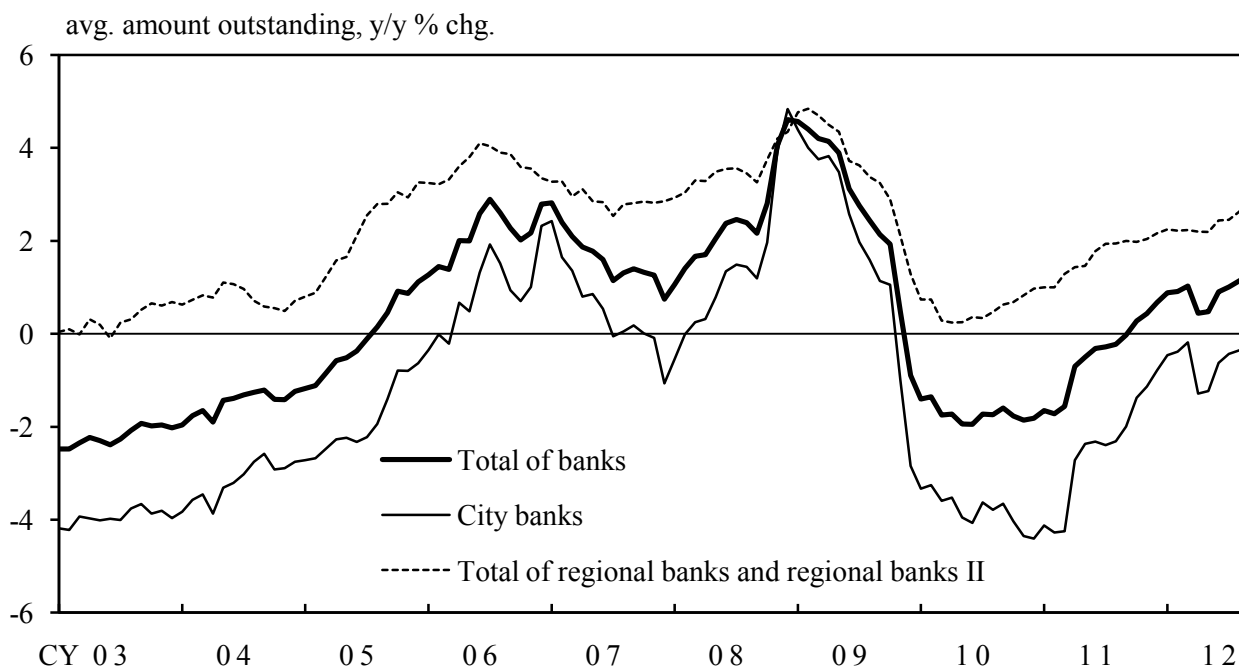
(2) Conditions for CP Issuance (*Tankan*)



Note: Based on large, CP-issuing enterprises.
 Sources: I-N Information Systems; Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

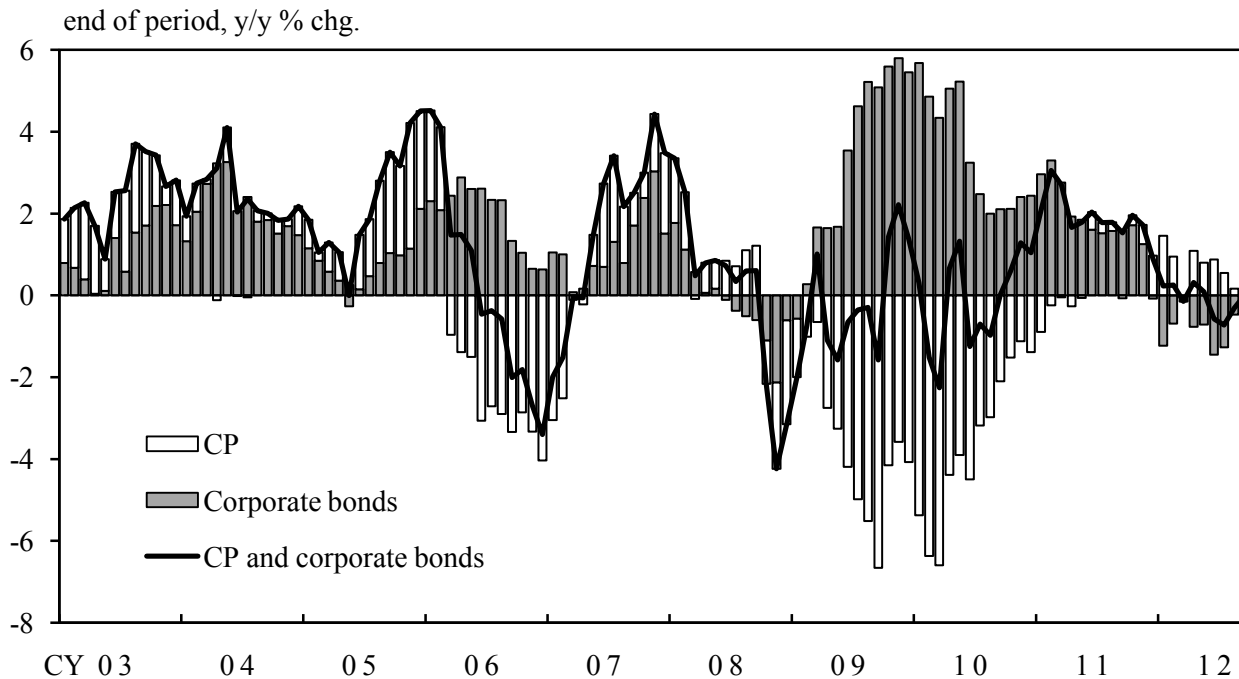
Amount Outstanding of Bank Lending, CP, and Corporate Bonds

(1) Lending by Domestic Commercial Banks



Note: Fluctuations from liquidations of loans, loan write-offs, etc., are excluded.

(2) Amount Outstanding of CP and Corporate Bonds



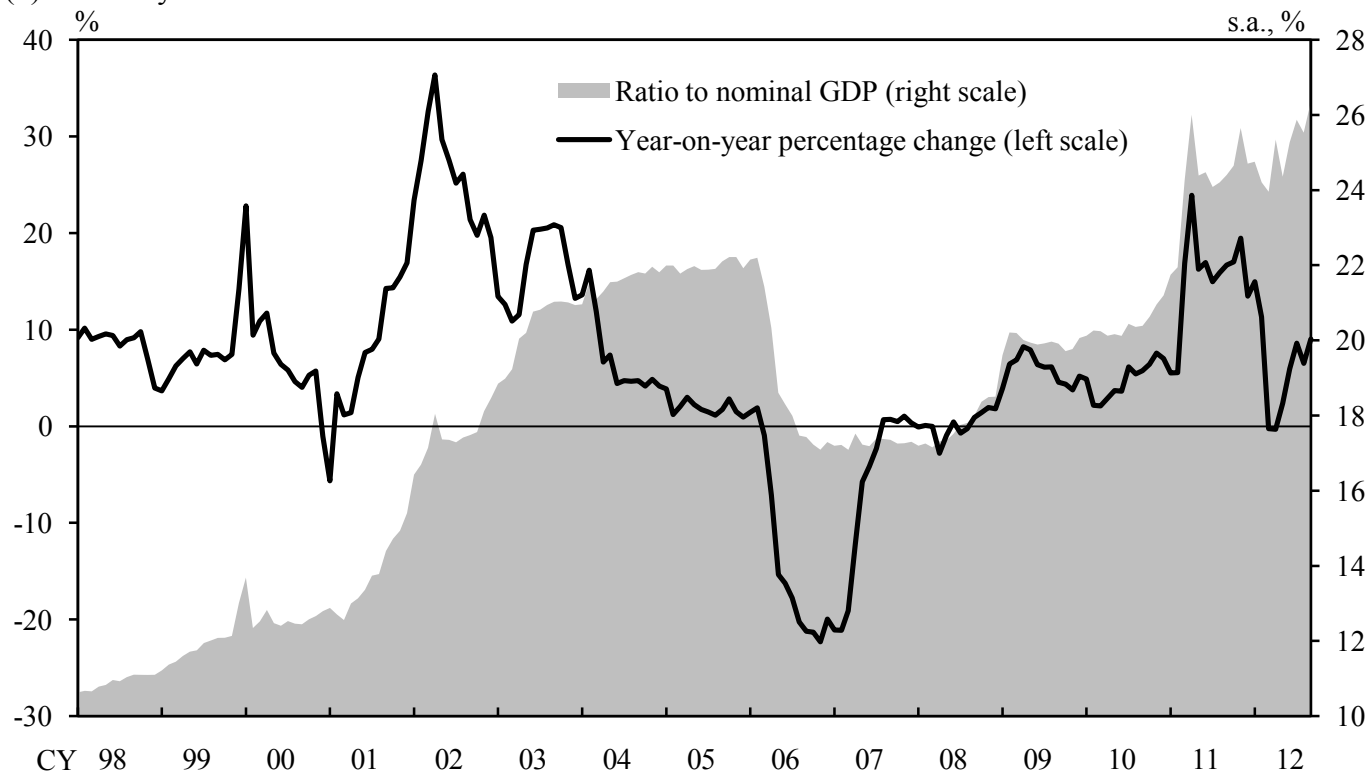
Notes: 1. Figures for CP are those of short-term corporate bonds registered under the book-entry transfer system. Those issued by banks, securities companies and others such as foreign corporations are excluded; ABCP is included. Figures up to March 2008 are those compiled by the Bank of Japan.

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 under the book-entry transfer system. The series is spliced at April 2008 with the one published by the Japan Securities Dealers Association.

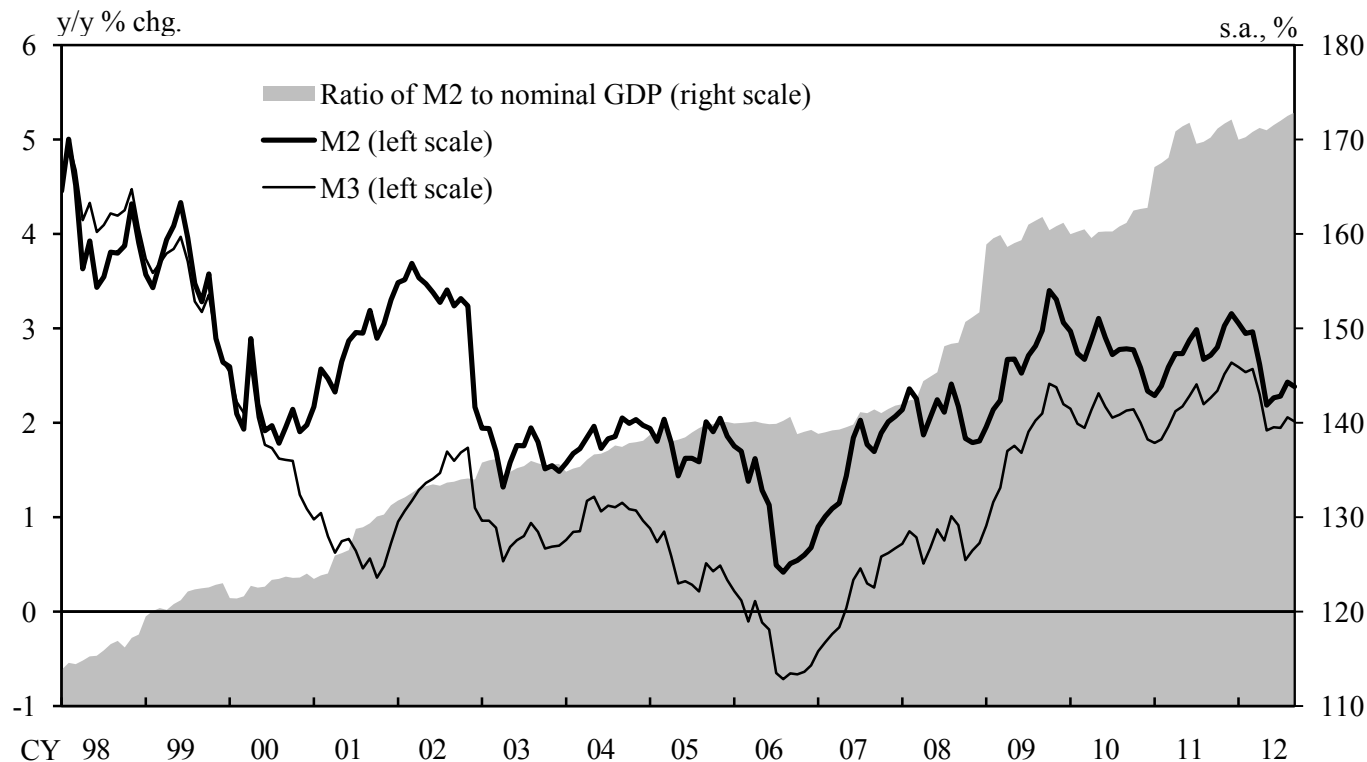
Sources: Bank of Japan, "Principal Figures of Financial Institutions"; Japan Securities Depository Center; Japan Securities Dealers Association; I-N Information Systems.

Monetary Base and Money Stock

(1) Monetary Base



(2) Money Stock



Notes: 1. Figures for nominal GDP for 2012/Q3 are those for 2012/Q2.

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

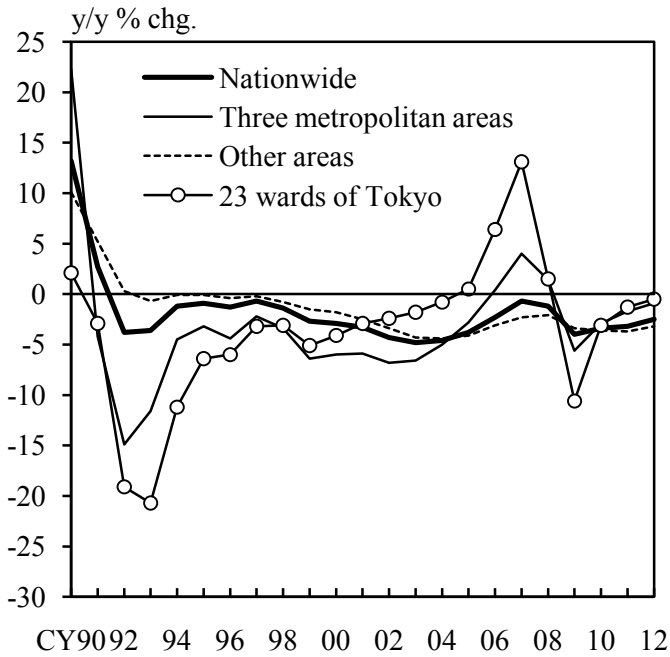
3. Figures for M3 up to March 2003 are the former series of the figures for M3+CDs minus the figures for pecuniary trusts.

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

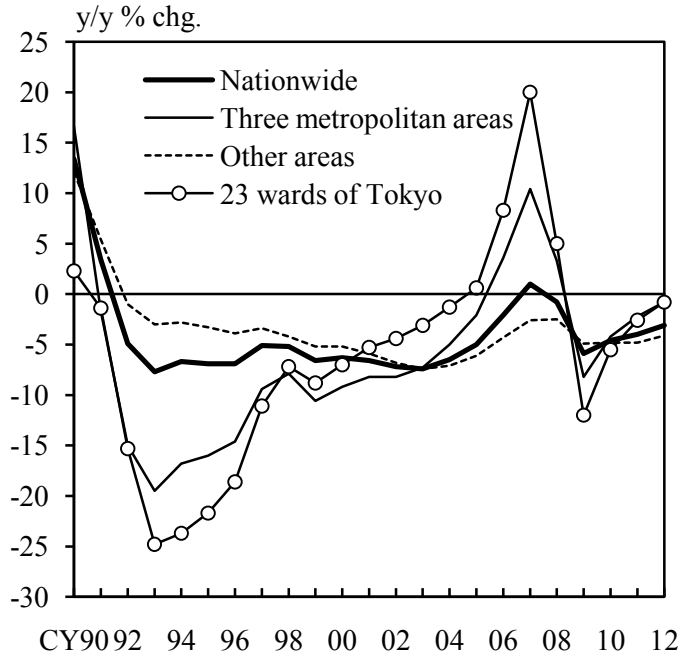
Land Prices

(1) Prefectural Land Prices

(a) Residential Land



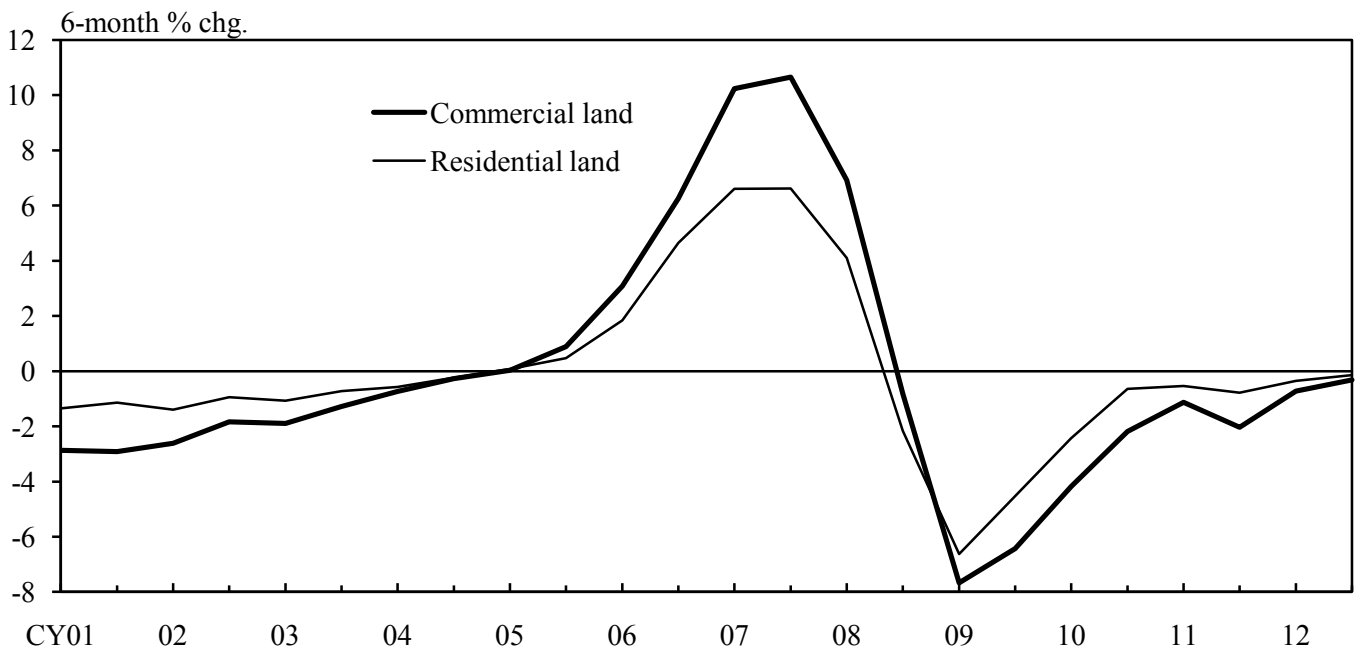
(b) Commercial Land



Notes: 1. Figures are as of July 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.

(2) Land Prices in the 23 Wards of Tokyo

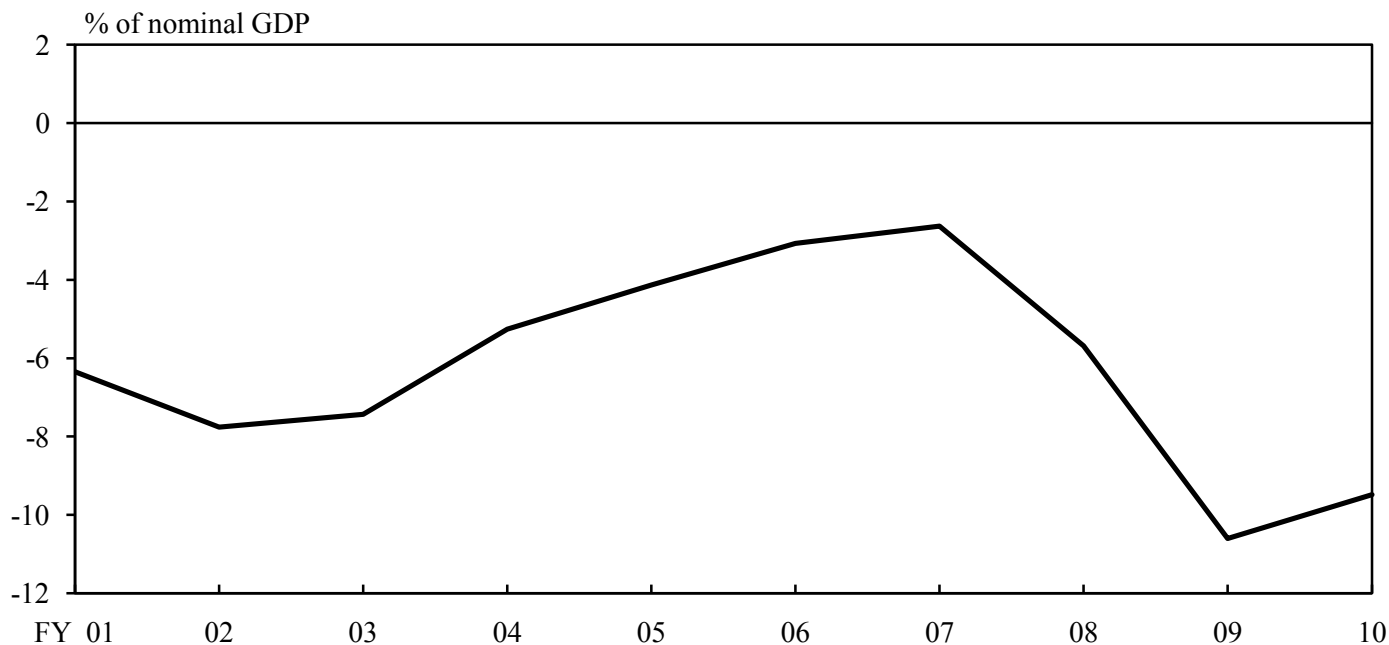


Note: Figures are 6-month percentage changes in land prices available in both "Public Notice of Land Prices" and "Land Price Survey by Prefectural Governments" (residential: 42 points; commercial: 32 points).

Source: Ministry of Land, Infrastructure, Transport and Tourism, "Public Notice of Land Prices," "Land Price Survey by Prefectural Governments."

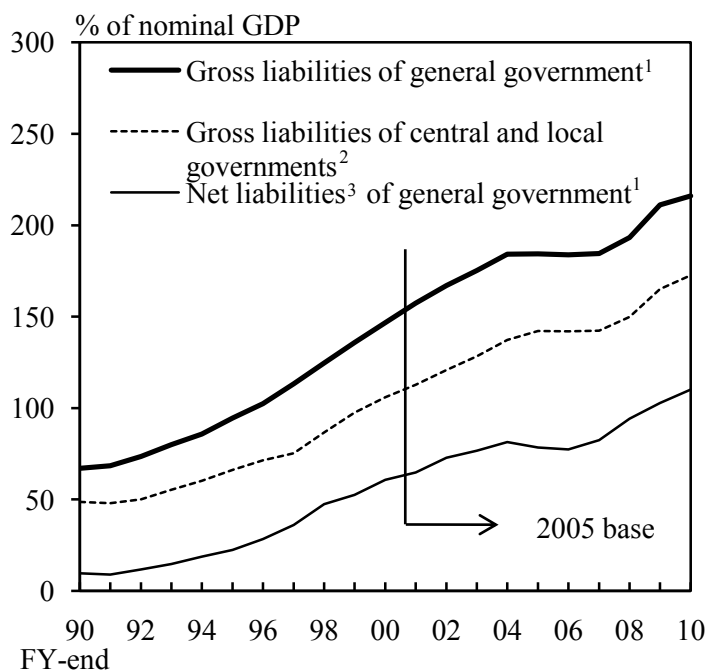
Government Liabilities

(1) Fiscal Balance



Note: The following factors are excluded from the fiscal balance: (1) redemption of JGBs held by the Deposit Insurance Corporation of Japan (fiscal 2001 and 2002); (2) transfer of reserves in the special account for the Fiscal Investment and Loan Program (public financial institutions) to the special account for the government debt consolidation fund of the general government (fiscal 2006 and 2008); and (3) transfer of reserves in the special account for the Fiscal Investment and Loan Program to the general account of the general government (fiscal 2009 and 2010).

(2) Government Liabilities in Japan



(3) Liabilities of General Government^{1,4}

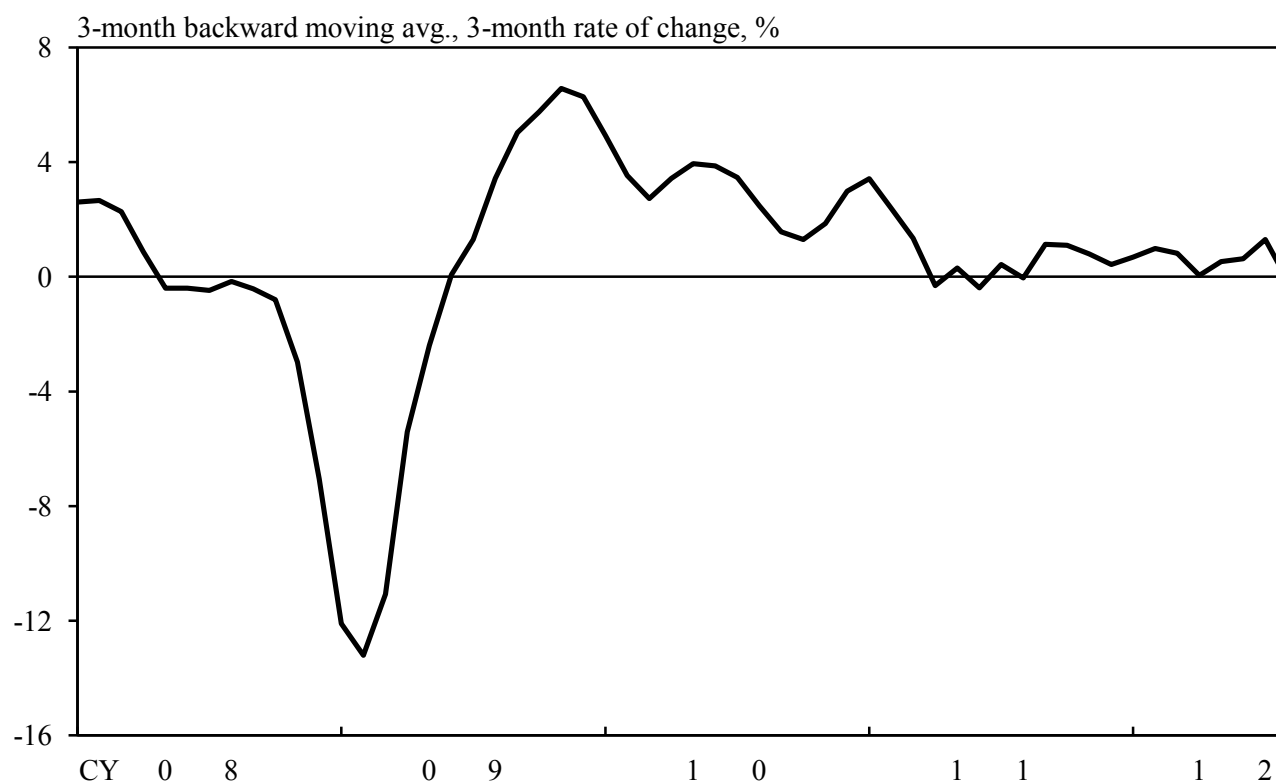
	Fiscal balance	Gross liabilities	Net liabilities ³
Japan	-9.5	205.5	125.5
United States	-9.7	102.7	80.1
Germany	-1.0	87.2	52.0
United Kingdom	-8.4	97.9	68.3
Italy	-3.8	119.7	93.7
France	-5.2	100.1	63.0
Canada	-4.5	83.8	33.3

- Notes: 1. General government consists of the central government, local governments, and social security funds.
 2. Outstanding debt in "Economic and Fiscal Projections for Medium to Long Term Analysis (August 2012)."
 3. Gross liabilities minus financial assets.
 4. Fiscal balance and government liabilities (of the general government) are the OECD projections in calendar 2011.

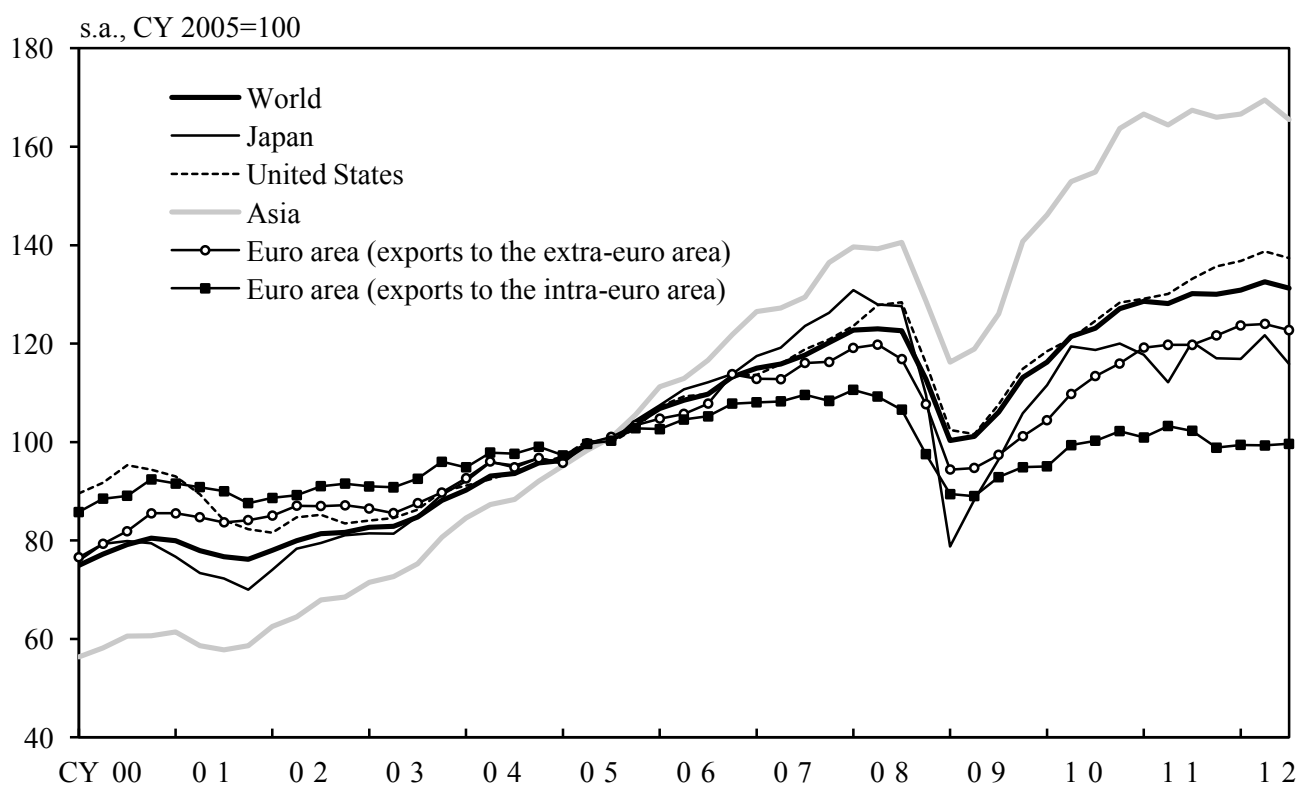
Sources: Cabinet Office, "National Accounts," "Economic and Fiscal Projections for Medium to Long Term Analysis"; OECD, "Economic Outlook."

World Trade

(1) World Trade Volume



(2) World Export Volume

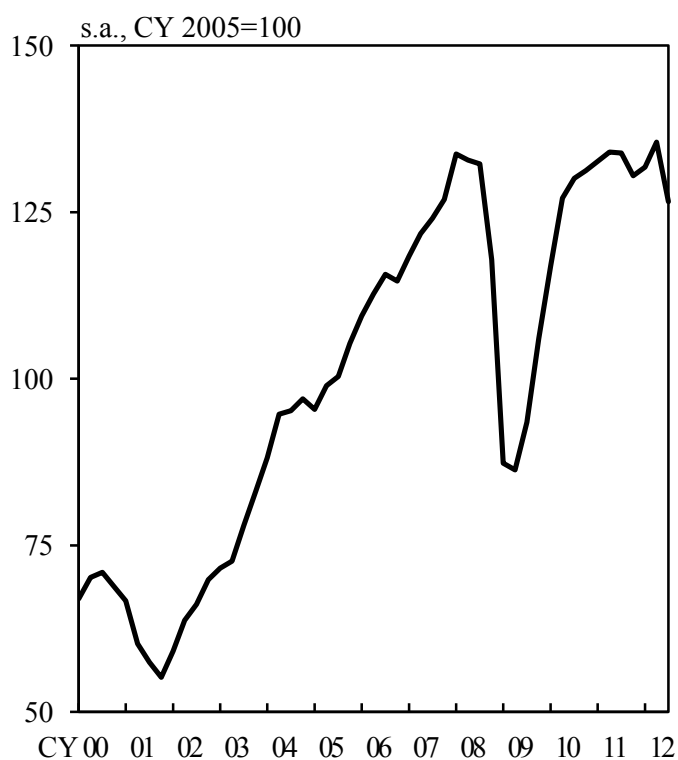


Note: Figures for the euro area (exports to the extra-euro area and exports to the intra-euro area) for 2012/Q3 are those of July. The other figures for 2012/Q3 are July-August averages.

Sources: CPB, "World Trade Monitor"; Eurostat.

Real Exports by Goods

(1) Capital Goods and Parts (30.3%)

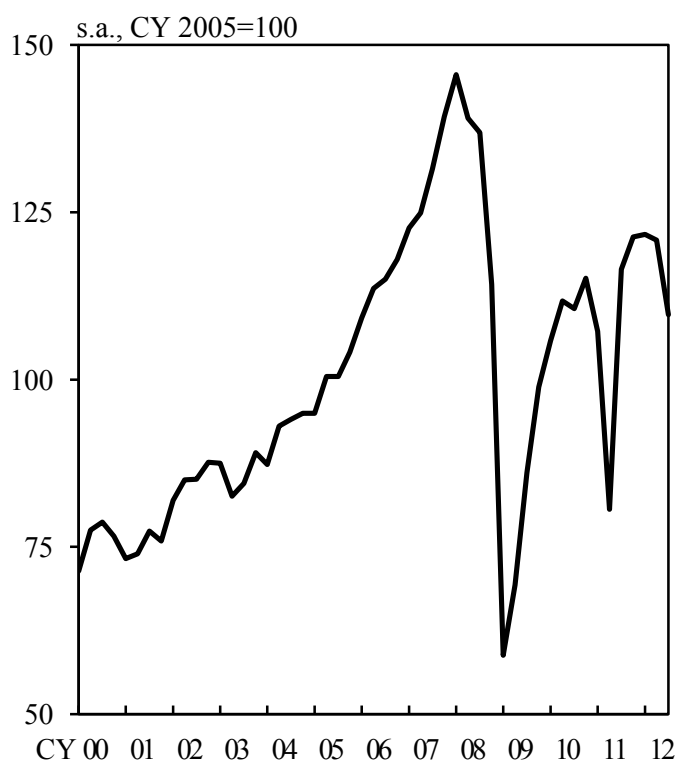


(2) Intermediate Goods (20.9%)



Note: Shares of each type of goods (in total amount of exports) in 2011 are shown in parentheses. The same definition applies to the charts below.

(3) Motor Vehicles and Related Goods (20.6%)

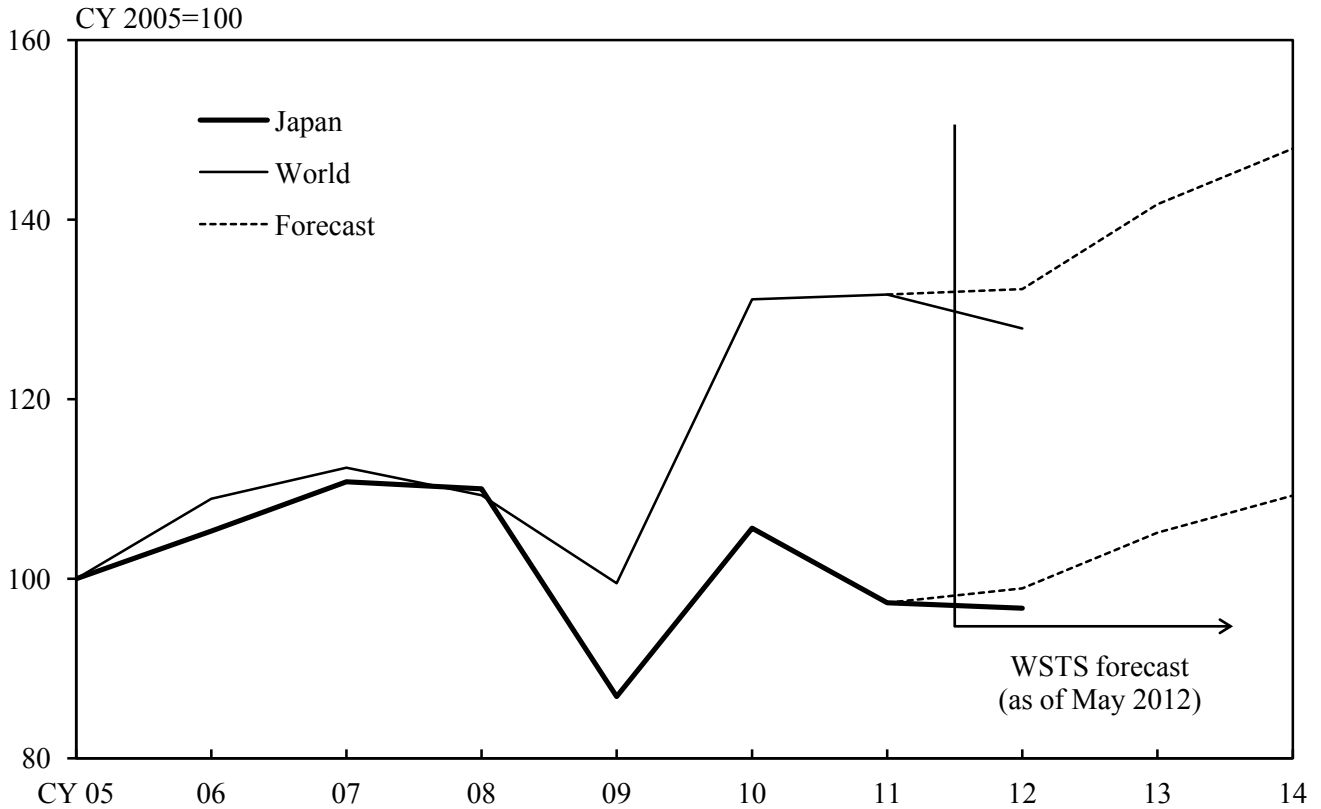


(4) IT-Related Goods (10.0%)



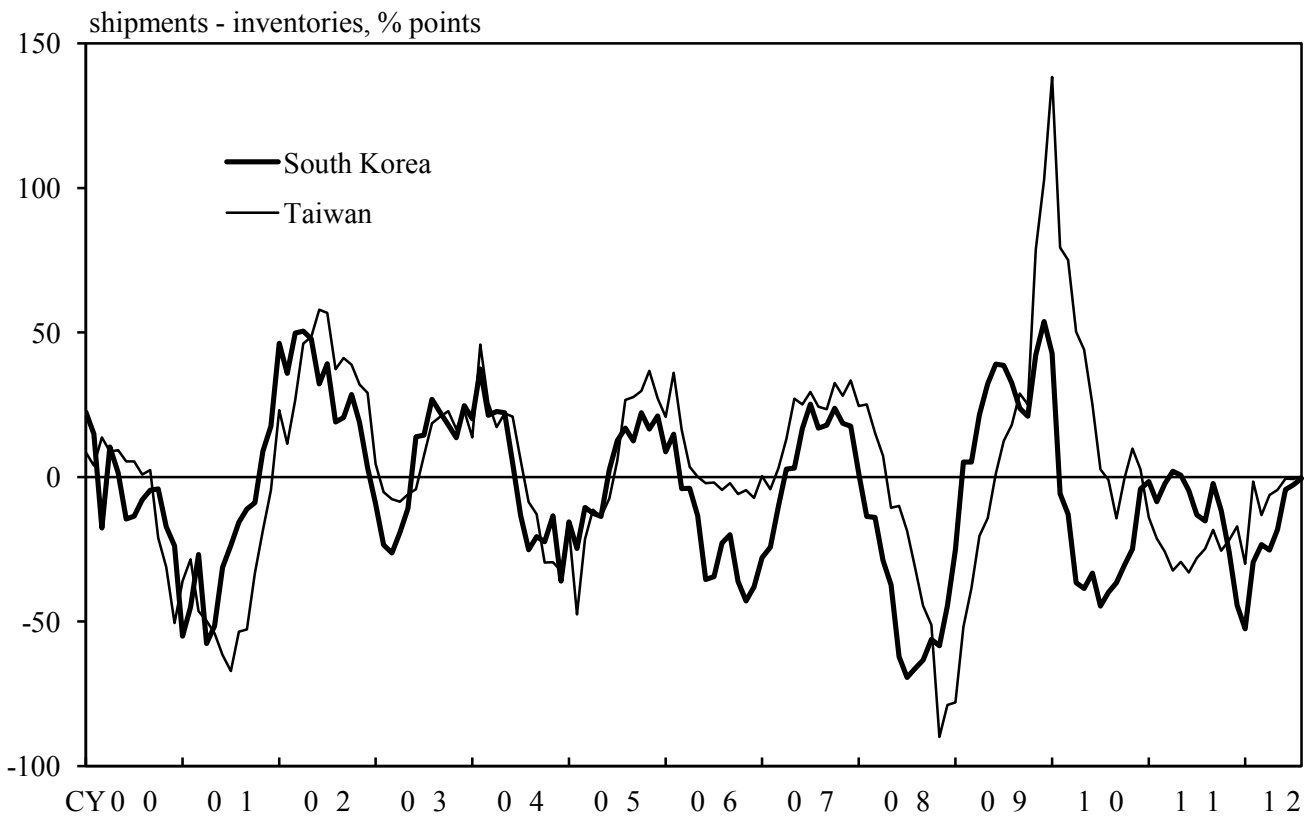
Cycles of Global Demand for IT-Related Goods

(1) Forecast of World Semiconductor Shipments



Note: Figures for the 2012 actual results are January-August averages. The monthly figures in 2012 are seasonally adjusted by X-12-ARIMA.

(2) Shipment-Inventory Balance of IT-Related Goods in South Korea and Taiwan



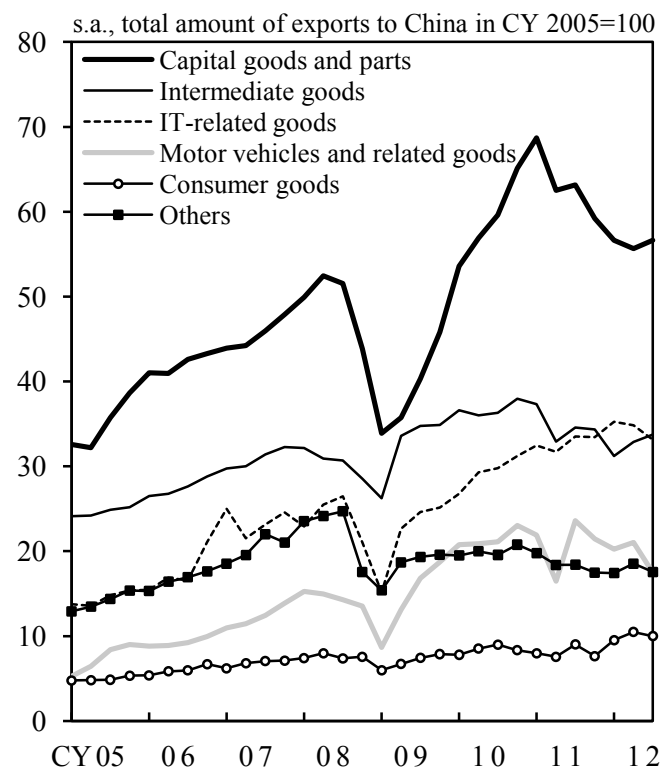
Sources: WSTS; CEIC.

Environment surrounding Exports to China

(1) Export Shares by Goods (CY 2011)¹

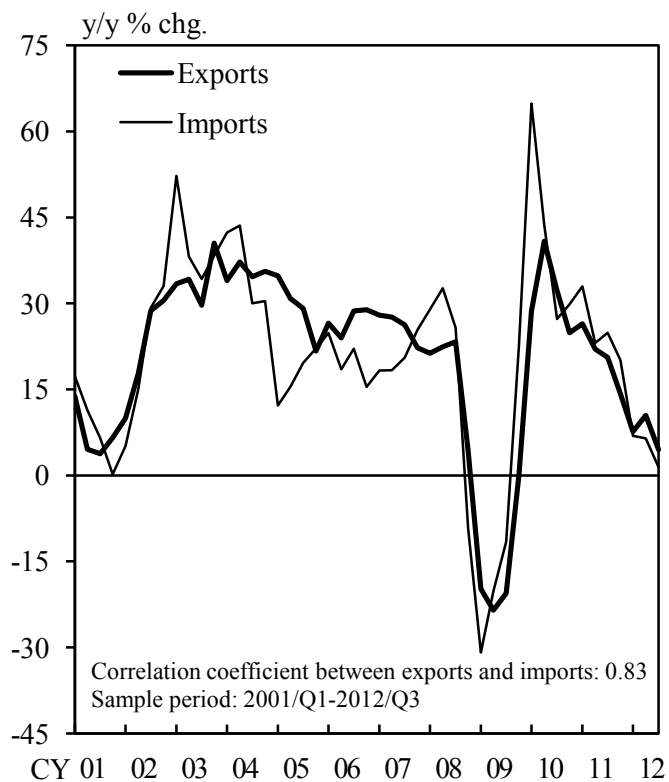
	%	
	To world	To China
Capital goods and parts	30.3	33.3
Intermediate goods	20.9	24.2
IT-related goods	10.0	13.8
Motor vehicles and related goods	20.6	12.9
Consumer goods	3.2	3.4
Others	15.0	12.3

(2) Real Exports to China by Goods

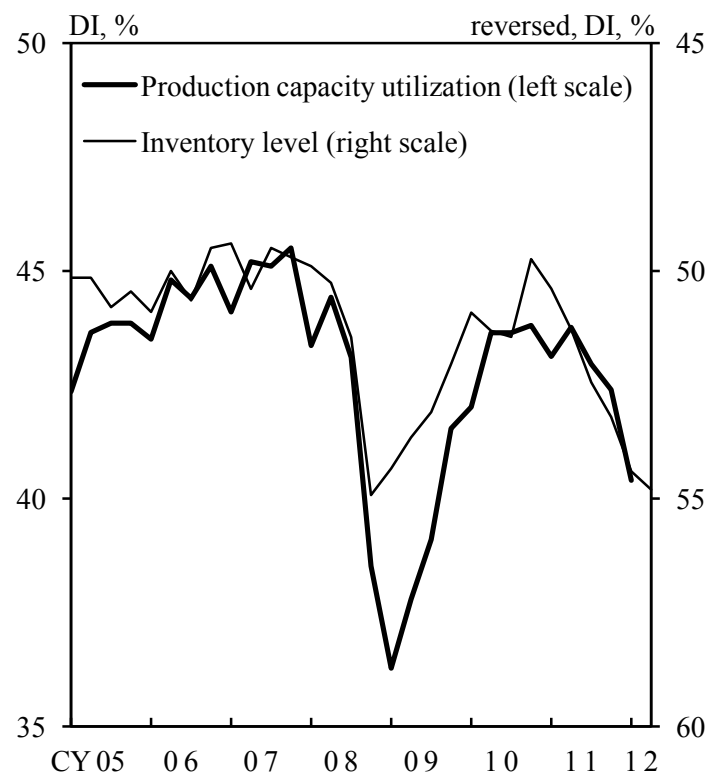


Note: 1. Shares of each type of goods (in total amount of exports) in 2011.

(3) Exports and Imports of China



(4) Diffusion Indices of Business Survey of 5000 Enterprises¹

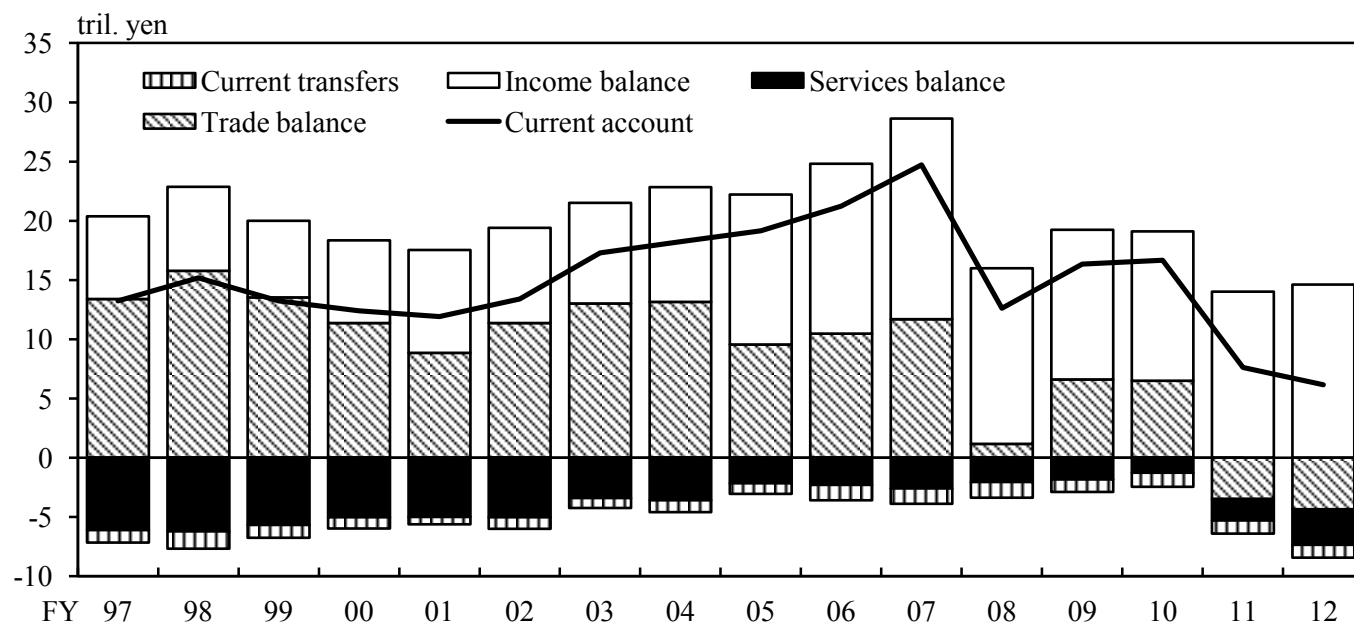


Note: 1. The DIs are calculated based on the proportion of three types of answers: "positive," "unchanged," and "negative." The range of the indices is 0-100 percent.

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

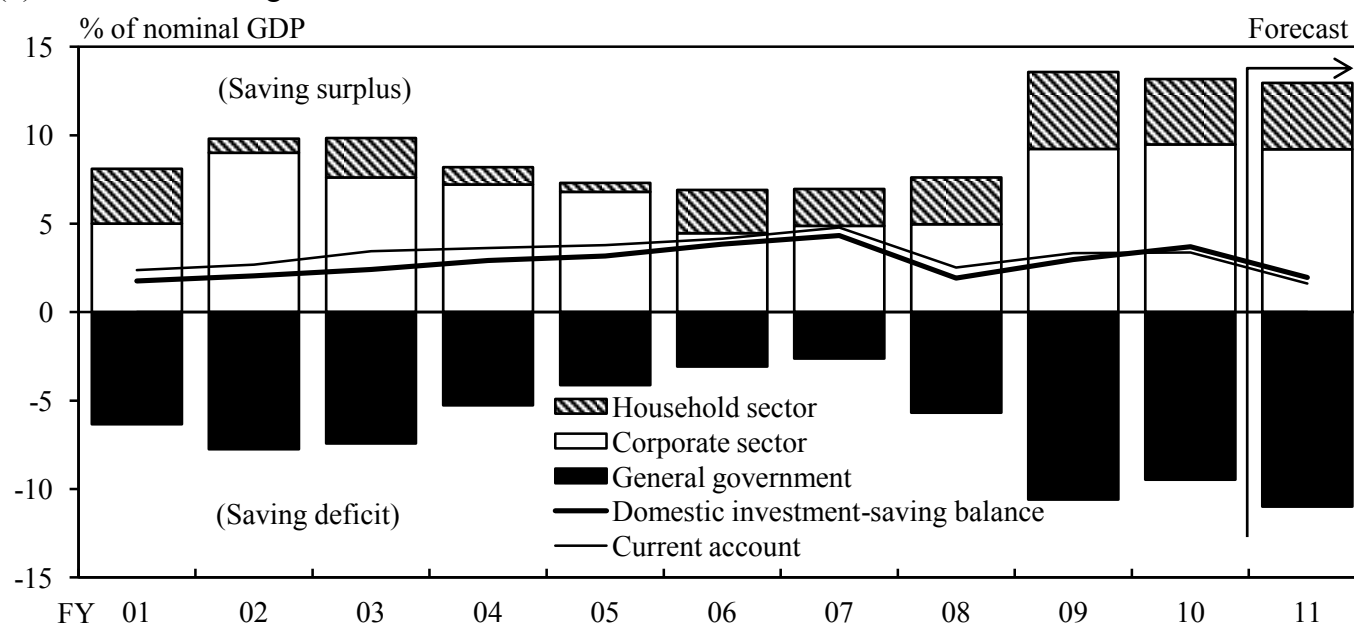
Current Account and Investment-Saving Balance

(1) Current Account



Note: Figures for fiscal 2012 are April-August averages.

(2) Investment-Saving Balance

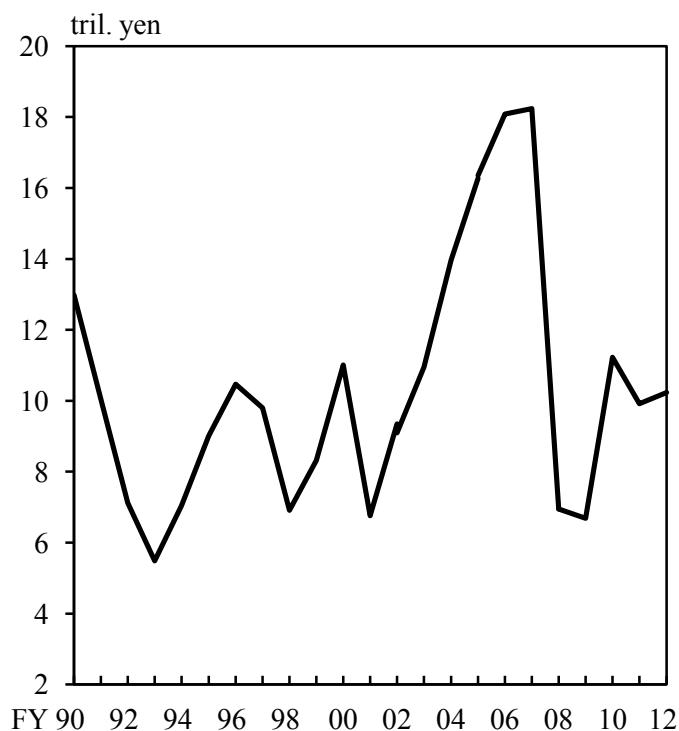


- Notes:
- The following factors are excluded from the domestic investment-saving balance: (1) redemption of JGBs held by the Deposit Insurance Corporation of Japan (fiscal 2001 and 2002); (2) transfer of assets and liabilities of the Japan Expressway Holding and Debt Repayment Agency to the general account (fiscal 2005); (3) transfer of reserves in the special account for the Fiscal Investment and Loan Program (public financial institutions) to the special account for the government debt consolidation fund of the general government (fiscal 2006 and 2008); and (4) transfer of reserves in the special account for the Fiscal Investment and Loan Program to the general account of the general government (fiscal 2009 and 2010).
 - The domestic investment-saving balance for fiscal 2011 is estimated by subtracting -0.3 percentage point (the difference between the domestic investment-saving balance and the current account in fiscal 2010) from the current account.
 - The figures for nominal GDP and the investment-saving balance of the general government in fiscal 2011 are based on the "Economic and Fiscal Projections for Medium to Long Term Analysis (August 2012)." The figure for the balance of the household sector is estimated by subtracting private final consumption expenditure and private housing investment from personal disposable income, which is calculated by the nominal disposable income in Chart 48. The figure for the balance of the corporate sector is the residue.

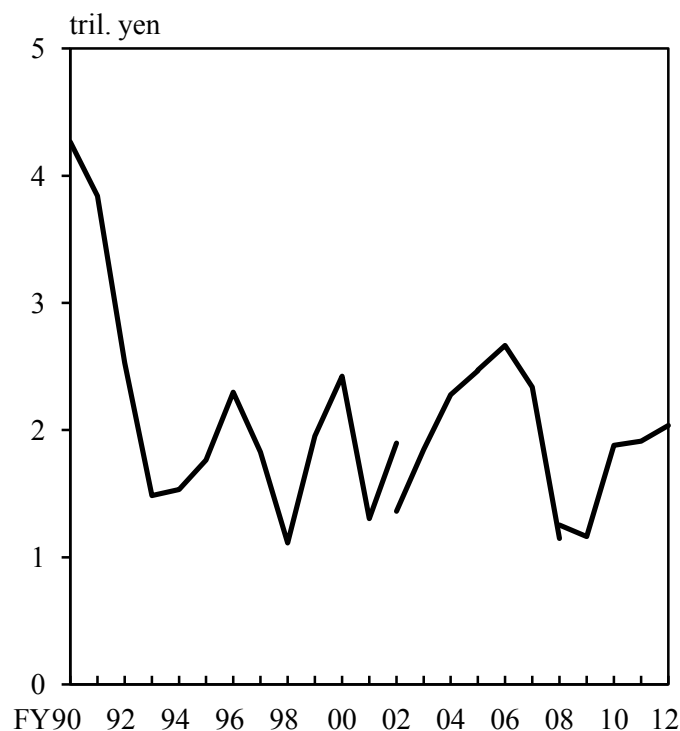
Sources: Cabinet Office, "National Accounts," "Economic and Fiscal Projections for Medium to Long Term Analysis"; Ministry of Finance and Bank of Japan, "Balance of Payments."

Corporate Profits

(1) Large Manufacturing Enterprises



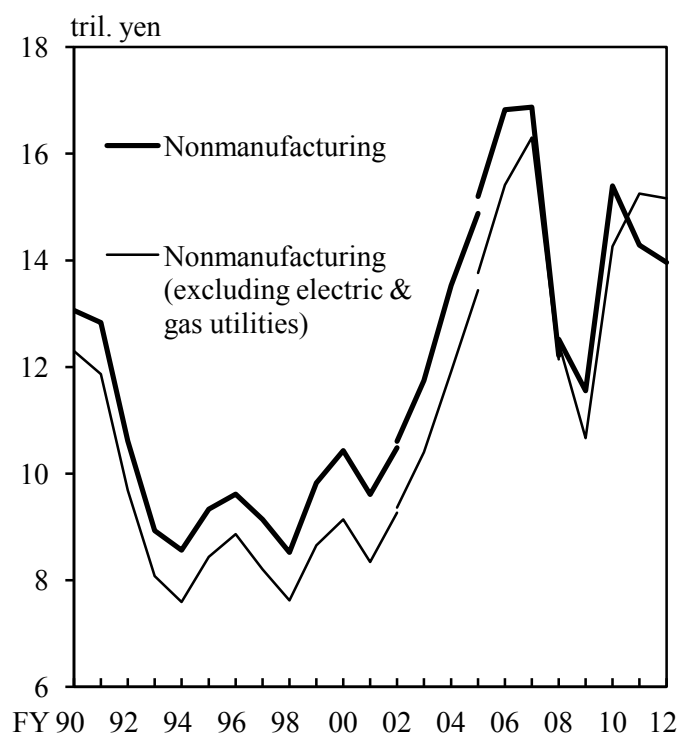
(2) Small Manufacturing Enterprises



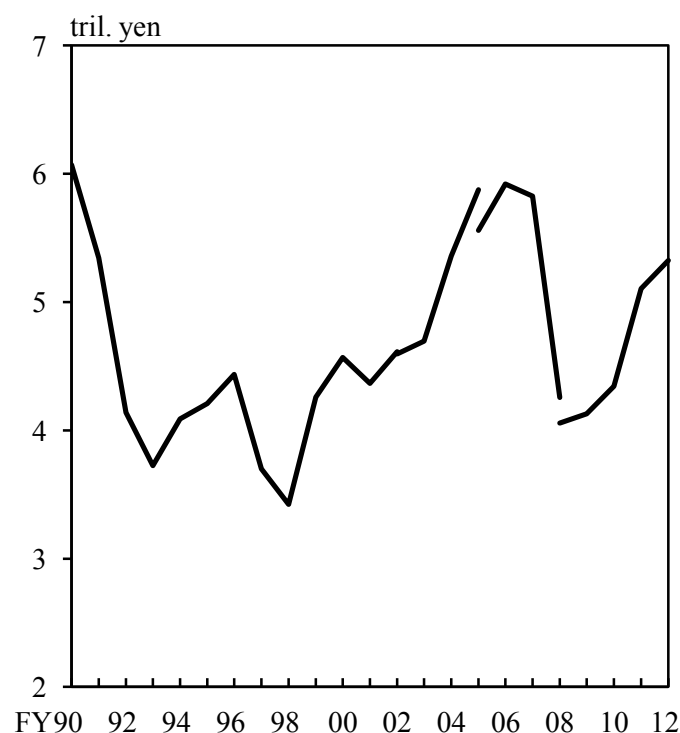
Notes: 1. Based on current profits. Figures for fiscal 2012 are the forecasts in the September 2012 survey. The same definition applies to the charts below.

2. In the March 2004 survey, the "Tankan" underwent major revisions, including the addition of new sample enterprises to the survey. In the March 2007 and March 2010 surveys, regular revisions were made to the sample enterprises. The data show some discontinuities that coincided with these timings. The same discontinuities appear in the charts below.

(3) Large Nonmanufacturing Enterprises

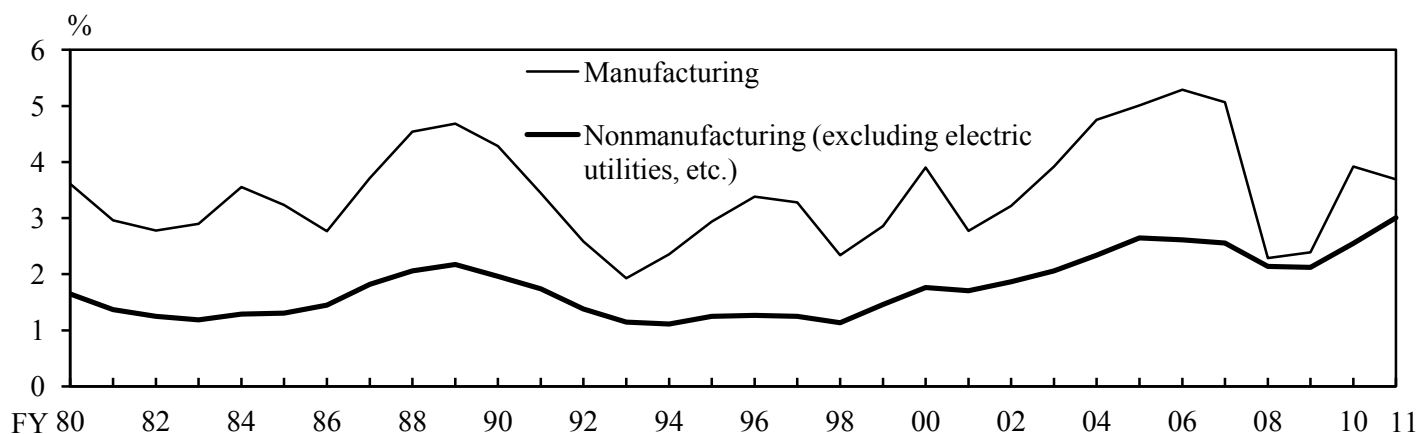


(4) Small Nonmanufacturing Enterprises



Environment surrounding Corporate Profits in Nonmanufacturing

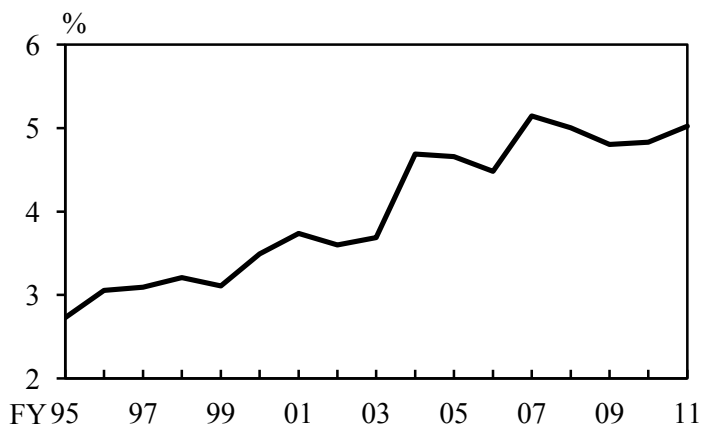
(1) Ratios of Current Profits to Sales



Note: Based on all-sized enterprises. Nonmanufacturing excludes production, transmission and distribution of electricity, pure holding companies, other services, finance and insurance.

(2) Market Shares of Leading Companies

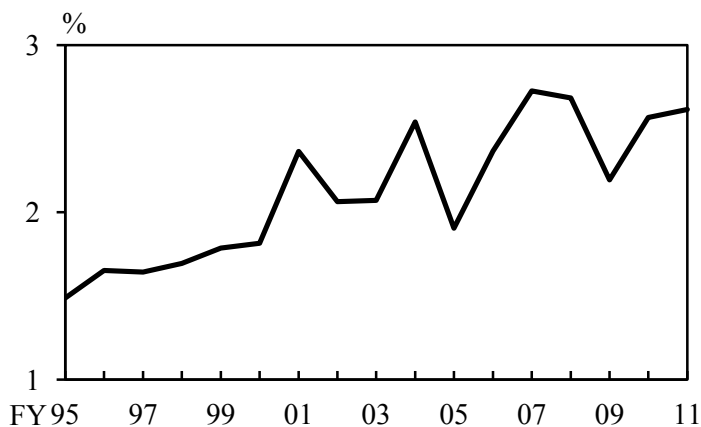
(a) Retail Trade



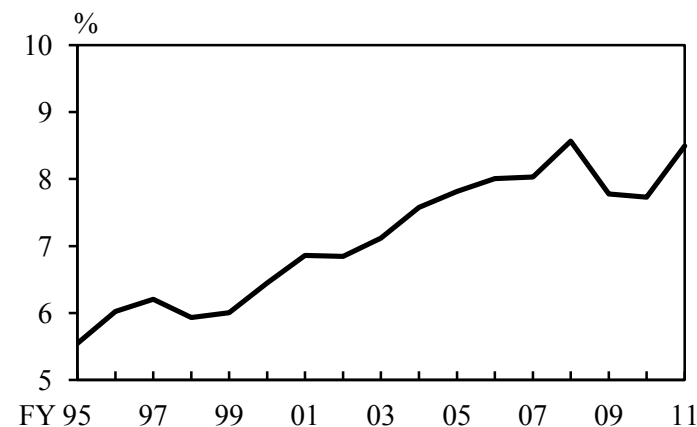
(b) Wholesale



(c) Services



(d) Construction

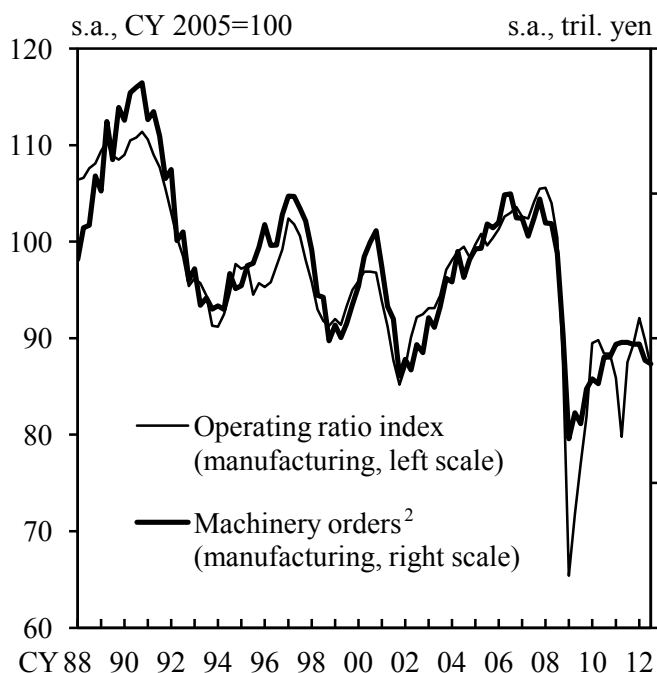


Note: Market share = consolidated sales of companies comprising the "Nikkei Stock Average" / aggregate sales taken from the "Financial Statements Statistics of Corporations by Industry, Annually." The companies whose sales are not continuously available from fiscal 1980 (from fiscal 1988, for retail trade companies) are excluded from the samples of the numerator. The denominator of the service industry excludes pure holding companies and other services.

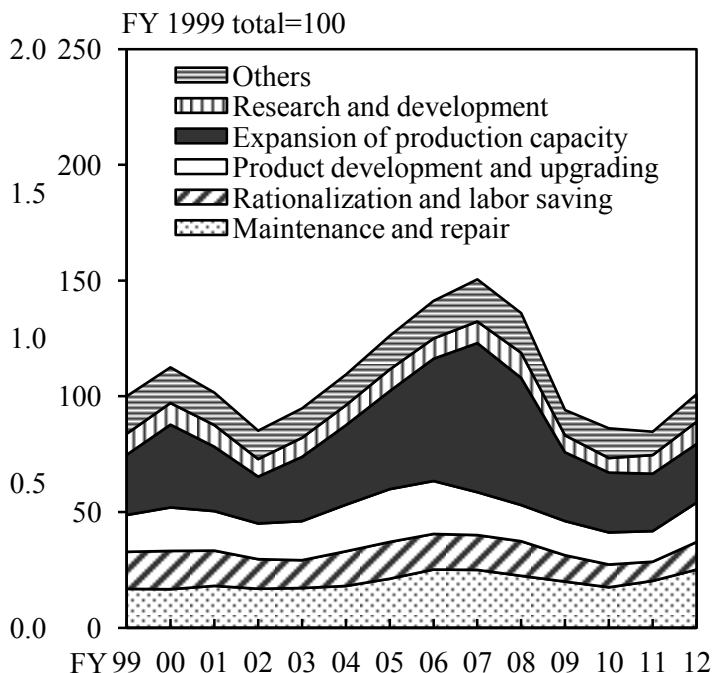
Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Annually"; Nikkei Financial QUEST.

Environment surrounding Business Fixed Investment

(1) Operating Ratio Index and Machinery Orders¹

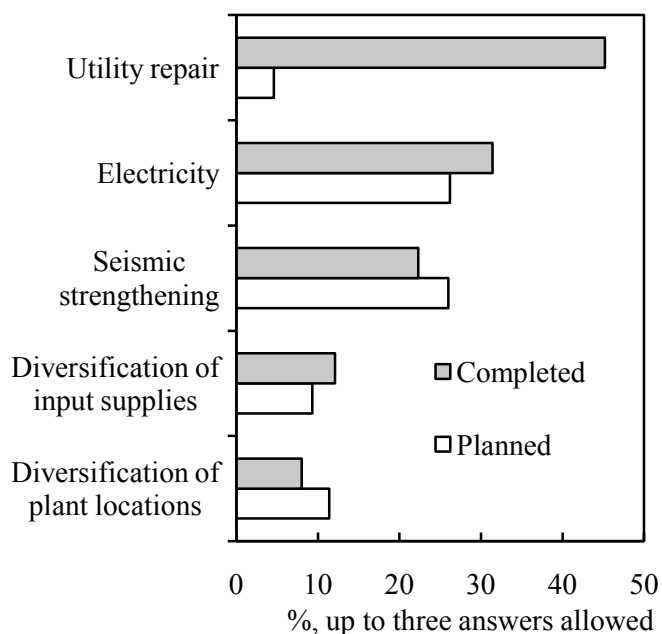


(2) Investment Motives³

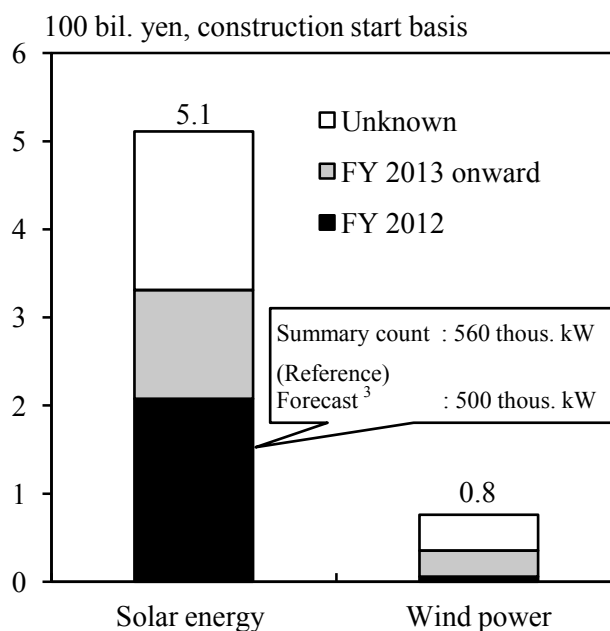


Notes: 1. Figures for 2012/Q3 are July-August averages.
2. Figures up to fiscal 2004 are estimated by the Cabinet Office.
3. Figures are for manufacturing. Figures for fiscal 2012 are plans.

(3) Investment after the Great East Japan Earthquake¹



(4) Renewable Energy-Related Investment²



Notes: 1. Taken from the "Opinion Poll on Corporate Behavior" in the June 2012 survey.
2. Figures are calculated by summing up large projects reported from April 2011 to August 2012. Missing values are replaced with the estimates using the construction cost per kW from "Cost Review Committee Report" by the National Policy Unit.
3. The figure is estimated by the Agency for Natural Resources and Energy.

Sources: Cabinet Office, "Orders Received for Machinery"; Ministry of Economy, Trade and Industry, "Indices of Industrial Production"; Development Bank of Japan, "Survey on Planned Capital Spending," "Opinion Poll on Corporate Behavior"; The Heavy & Chemical Industries News Agency, "Industrial Facilities & Engineering News," etc.

Business Fixed Investment Plans as Surveyed

(1) Business Fixed Investment



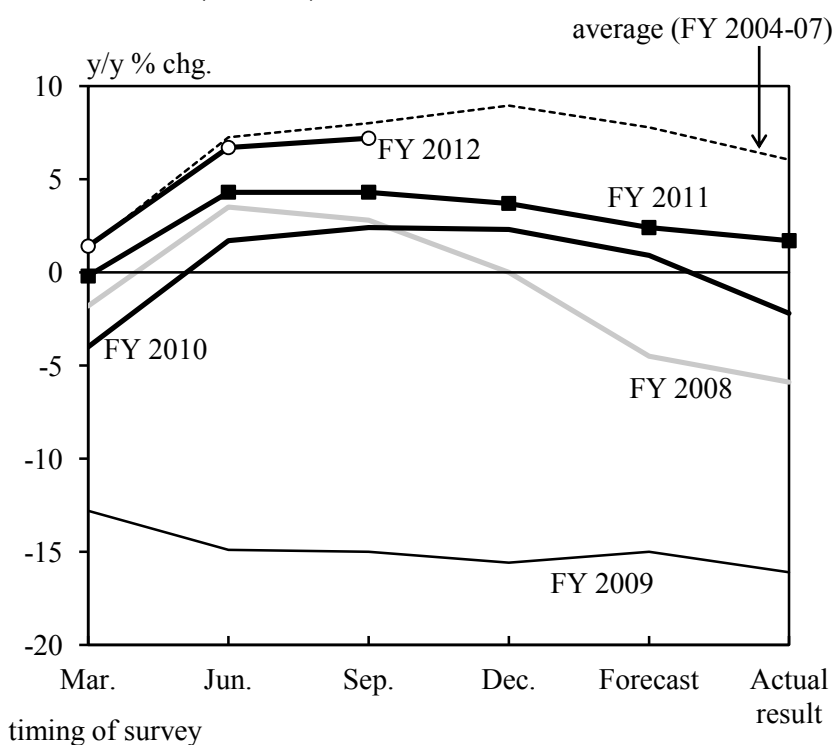
Notes: 1. Taken from "National Accounts." The figure represents nominal private non-residential investment. That for fiscal 2012 is the year-on-year change for 2012/Q2.

2. Based on all enterprises. Figures include software investment and exclude land purchasing expenses.

Since the introduction of the new accounting standard for lease transactions beginning on April 1, 2008, figures up through fiscal 2008 are based on the previous standard and figures from fiscal 2009 onward are based on the new standard.

The same definition applies to the chart below. The figure for fiscal 2012 is the forecast in the September 2012 survey.

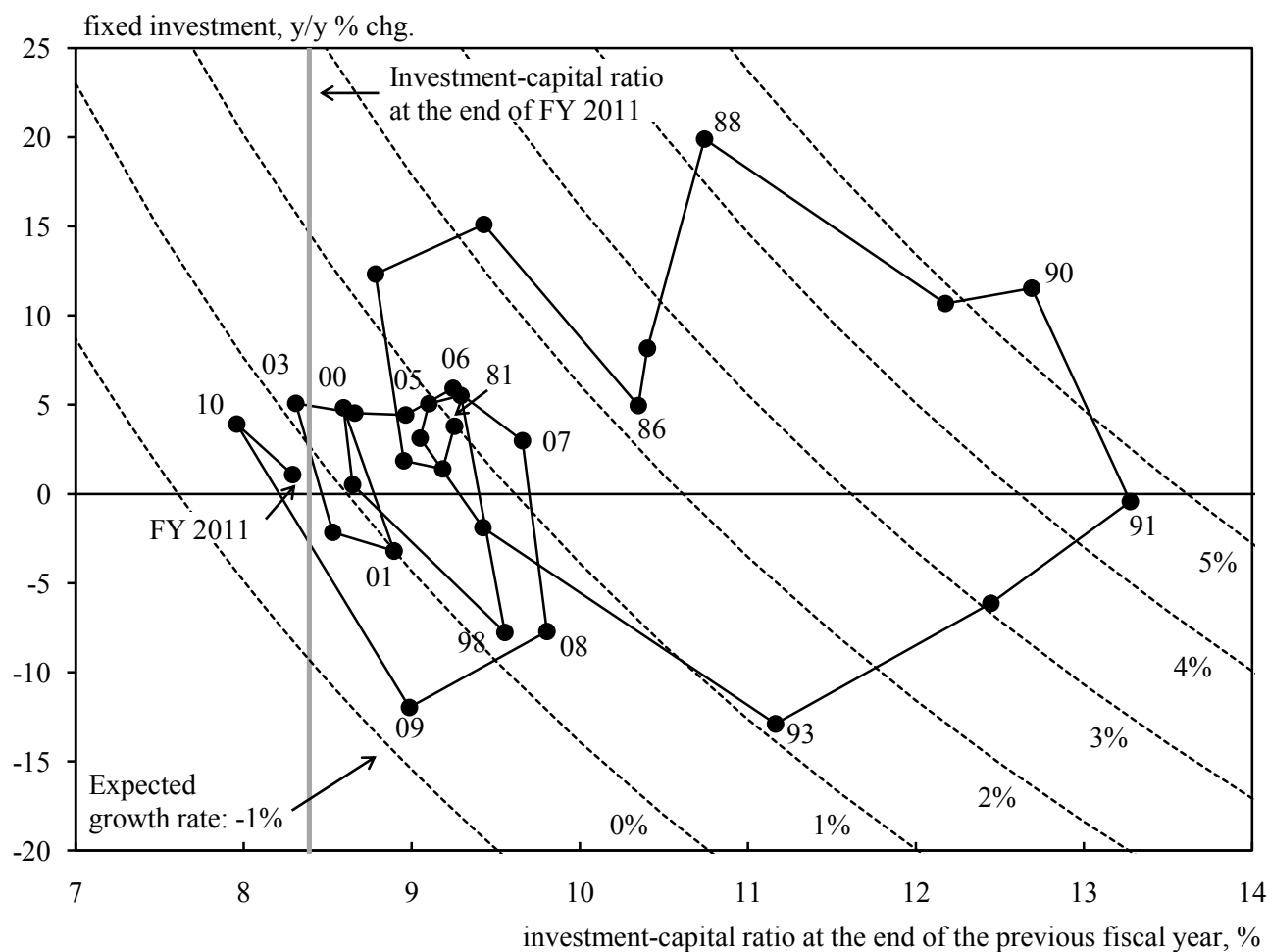
(2) Business Fixed Investment Plans (*Tankan*)



Note: Sample enterprises were revised in the March 2010 survey. Therefore, as for fiscal 2009, figures up through the December survey are based on the previous data sets, and the figures for "forecast" and "actual result" are on the new basis.

Sources: Cabinet Office, "National Accounts"; Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

Capital Stock Cycles

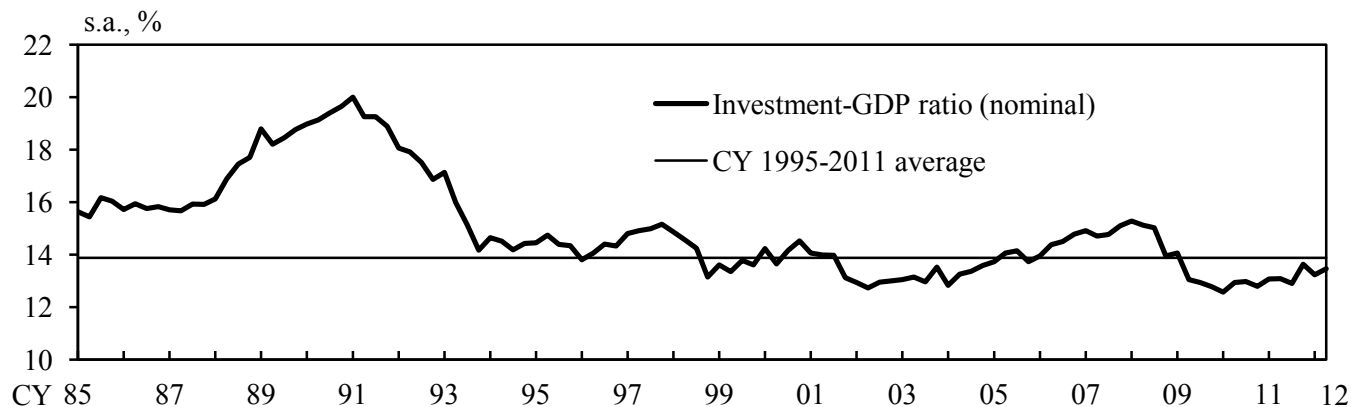


1. Capital stock cycles in the chart show the relationship between the investment-capital ratio and the year-on-year rate of change in fixed investment.
2. As these variables have the following relation, a hyperbolic curve can be drawn for a given expected growth rate.

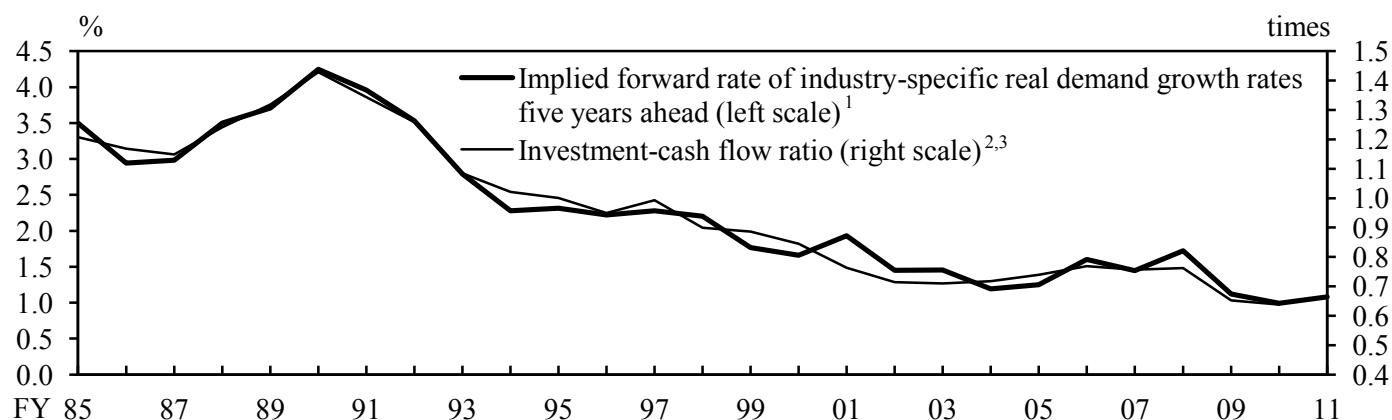
$$\text{Year-on-year rate of change in fixed investment (y-axis)} \times \text{investment-capital ratio at the end of the previous fiscal year (x-axis)} = \text{expected growth rate} + \text{trend growth rate of capital coefficient} + \text{depreciation rate}$$
3. The phase of fixed investment at a certain time can be evaluated in relation to the hyperbolic curve corresponding to the expected growth rate at that time.

Business Fixed Investment

(1) Investment-GDP Ratio (Nominal)



(2) Cash Flow and Business Fixed Investment



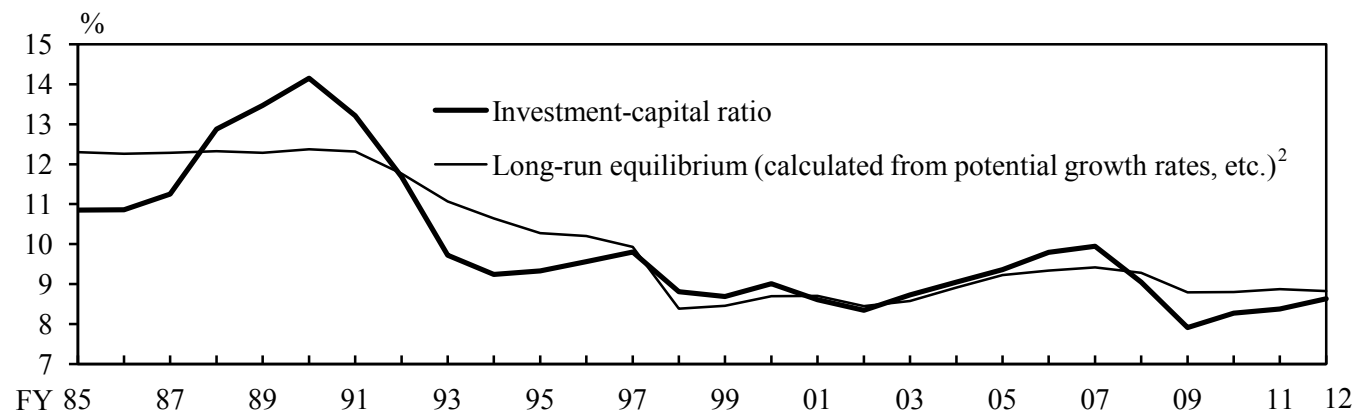
Notes: 1. Calculated using the "Annual Survey of Corporate Behavior." The survey period is January or February in each fiscal year.

2. Taken from "National Accounts."

3. Cash flow = consumption of fixed capital + (operating surplus + net property income) / 2

Figures up to fiscal 2000 are based on the 2000 base.

(3) Investment-Capital Ratio (I_t / K_{t-1})¹



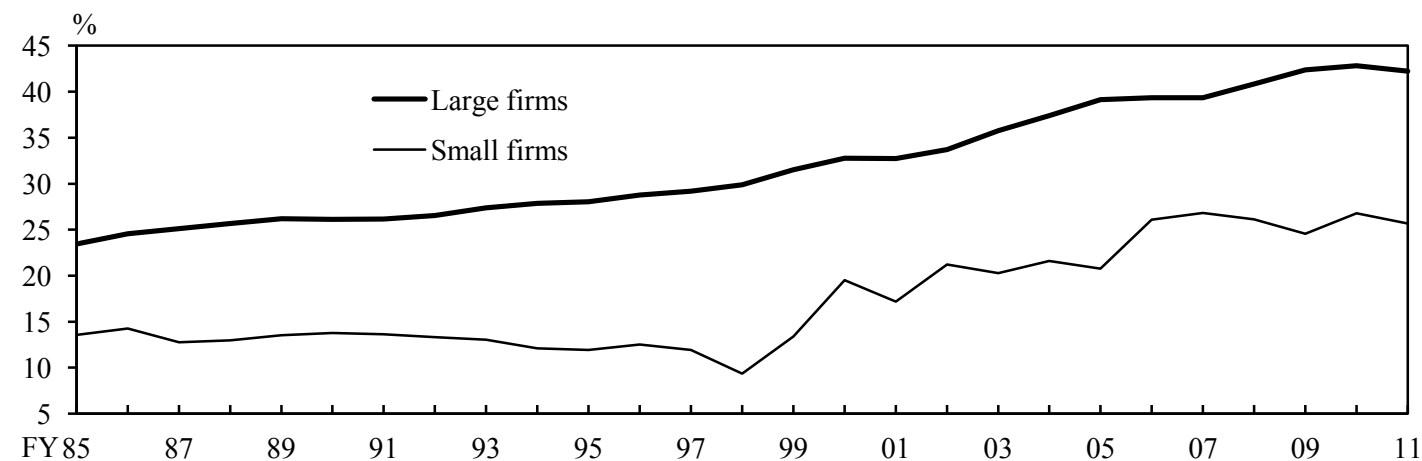
Notes: 1. Figures for fiscal 2012 are those for 2012/Q2.

2. $(I_t / I_{t-1}) \cdot (I / K)_{t-1}$ = potential growth rate + trend growth rate of capital coefficient + depreciation rate (see the explanation in Chart 42). Since the left-hand term equals I_t / K_{t-1} , the equation can be expressed as I_t / K_{t-1} = potential growth rate + trend growth rate of capital coefficient + depreciation rate. The long-run equilibrium of I_t / K_{t-1} is calculated by using this equation.

Sources: Cabinet Office, "National Accounts," "Annual Survey of Corporate Behavior";
 Research Institute of Economy, Trade and Industry, "Japan Industrial Productivity Database," etc.

Monetary Easing and Business Fixed Investment

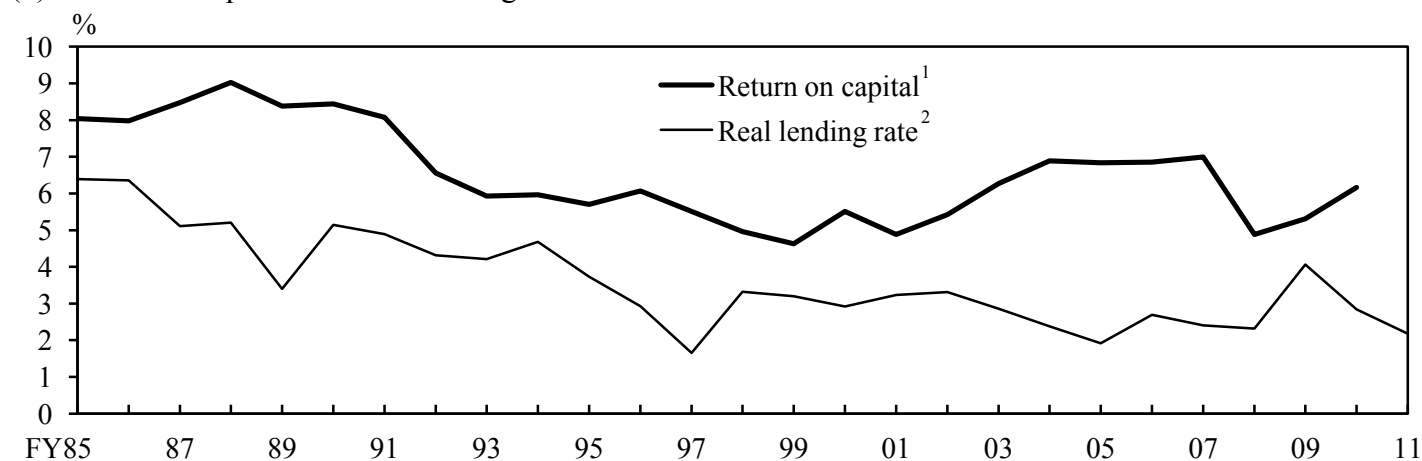
(1) Ratios of Net Worth



Note: Figures are based on all industries except finance and insurance. "Large firms" refers to firms with capital of 1 billion yen or more, and "small firms" refers to firms with capital less than 100 million yen.

Ratio of net worth = (net assets - subscription rights to shares) / liabilities and net assets.

(2) Return on Capital and Real Lending Rate

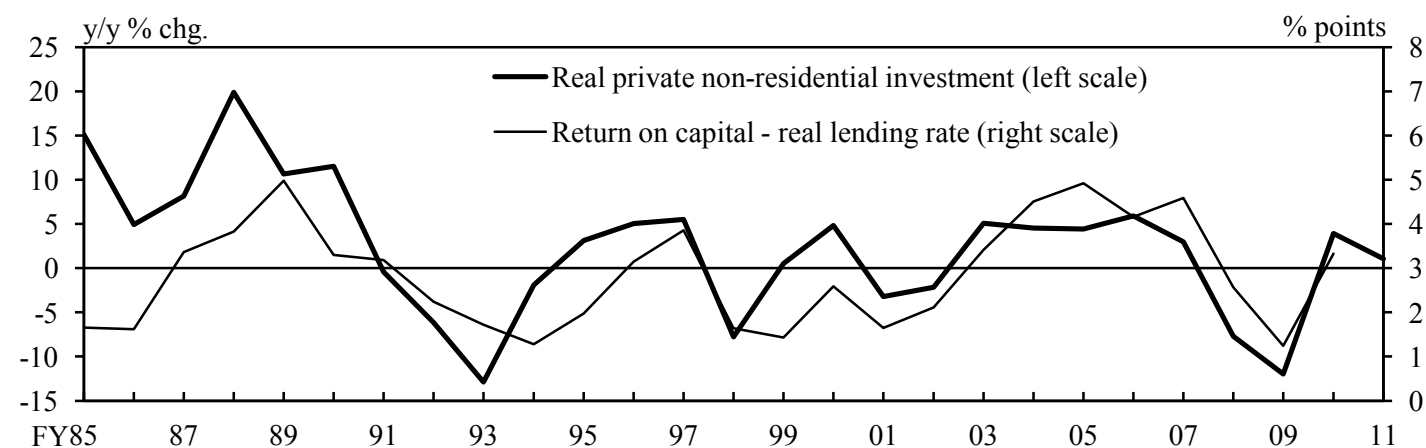


Notes: 1. Return on capital = operating surplus / nominal capital stock. The nominal capital stock is calculated by nominalizing the real capital stock using the private non-residential investment deflator. The same definition applies to the chart below.

2. Real lending rate = long-term prime lending rate - year-on-year change in the domestic demand deflator.

The same definition applies to the chart below.

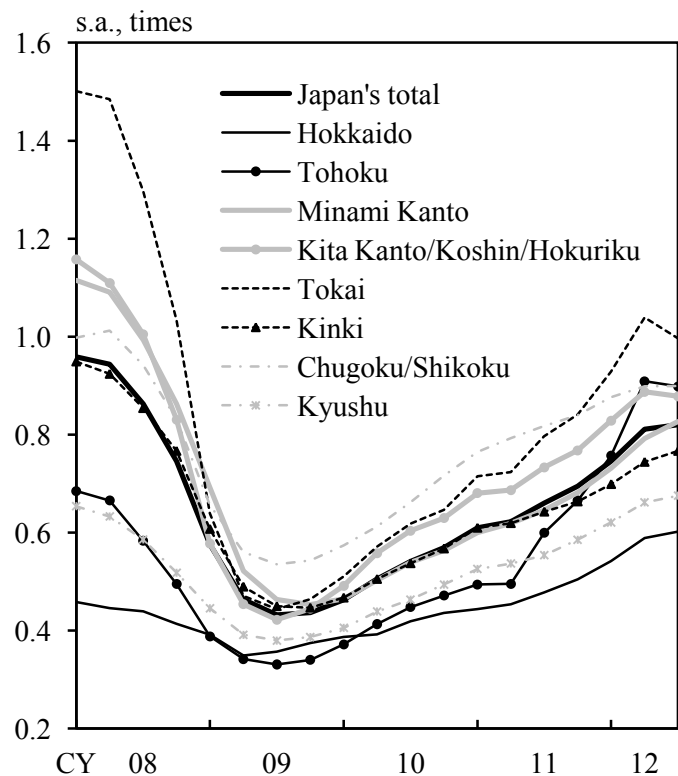
(3) Business Fixed Investment and Capital Cost and Return



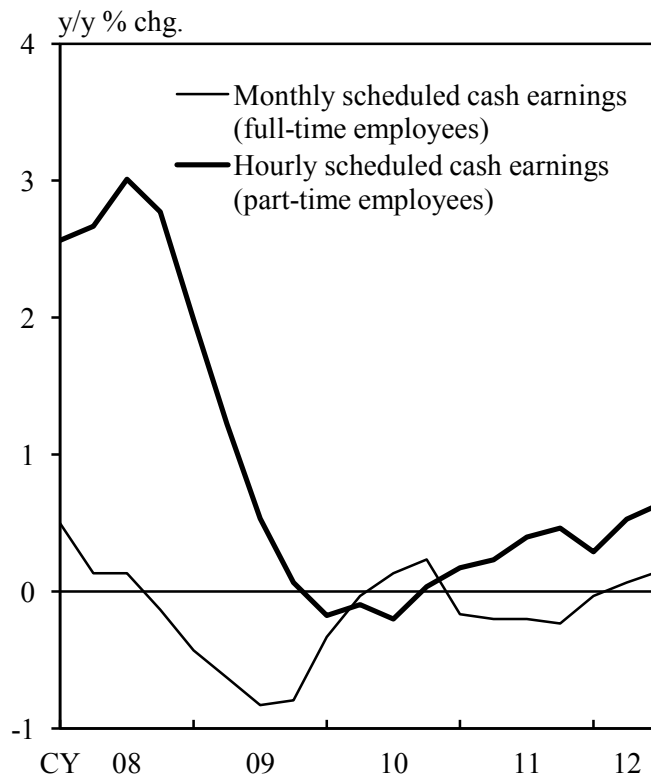
Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Annually"; Cabinet Office, "National Accounts," etc.

Labor Supply and Demand (1)

(1) Active Job Openings-to-Applicants Ratio

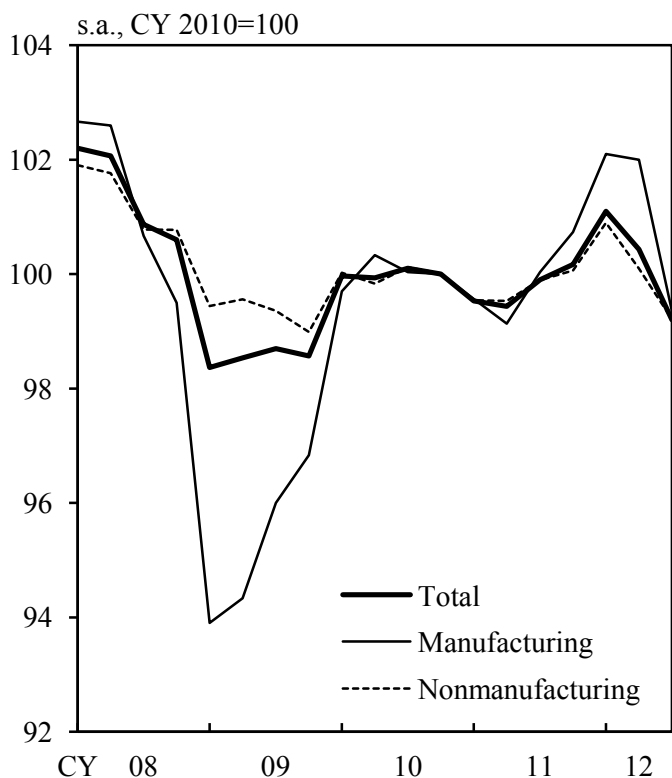


(2) Scheduled Cash Earnings^{1,2}

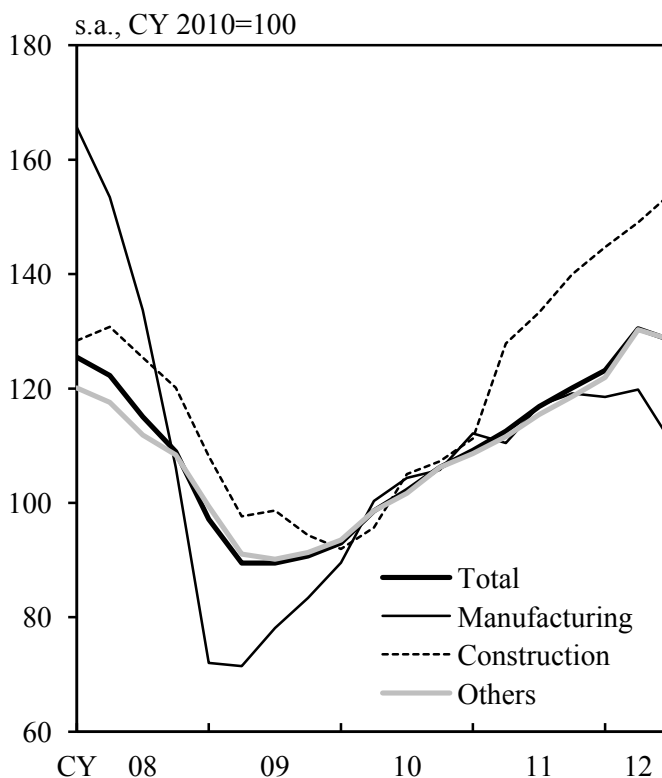


Notes: 1. For establishments with at least five employees. The same definition applies to the data for (3).
2. Figures for 2012/Q3 are July-August averages.

(3) Total Hours Worked¹



(4) New Job Openings²

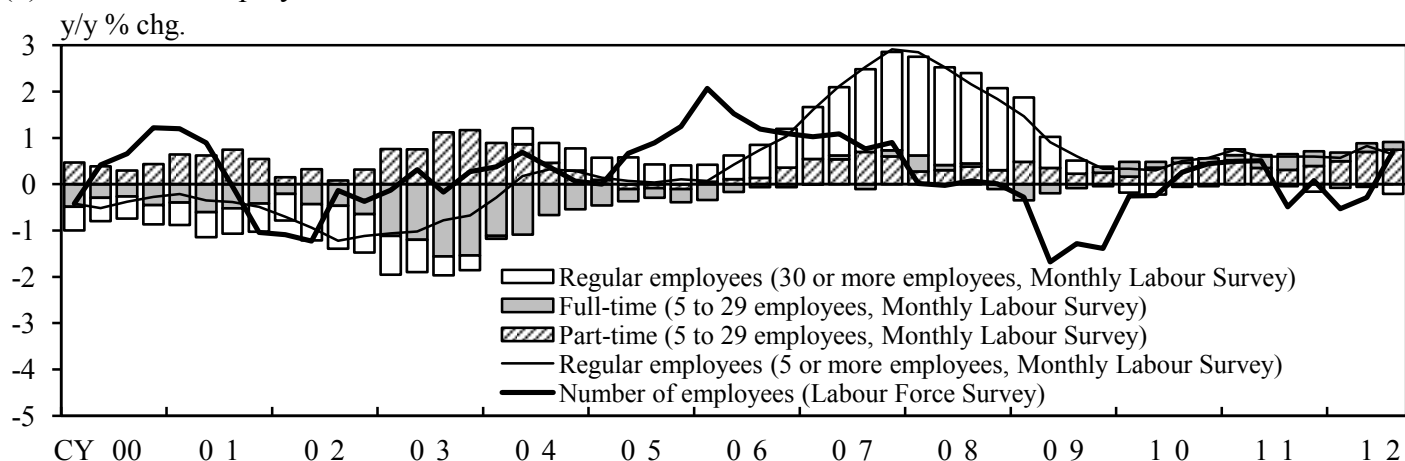


Notes: 1. Figures for 2012/Q3 are July-August averages.
2. Seasonally adjusted by X-12-ARIMA.

Source: Ministry of Health, Labour and Welfare, "Report on Employment Service," "Monthly Labour Survey."

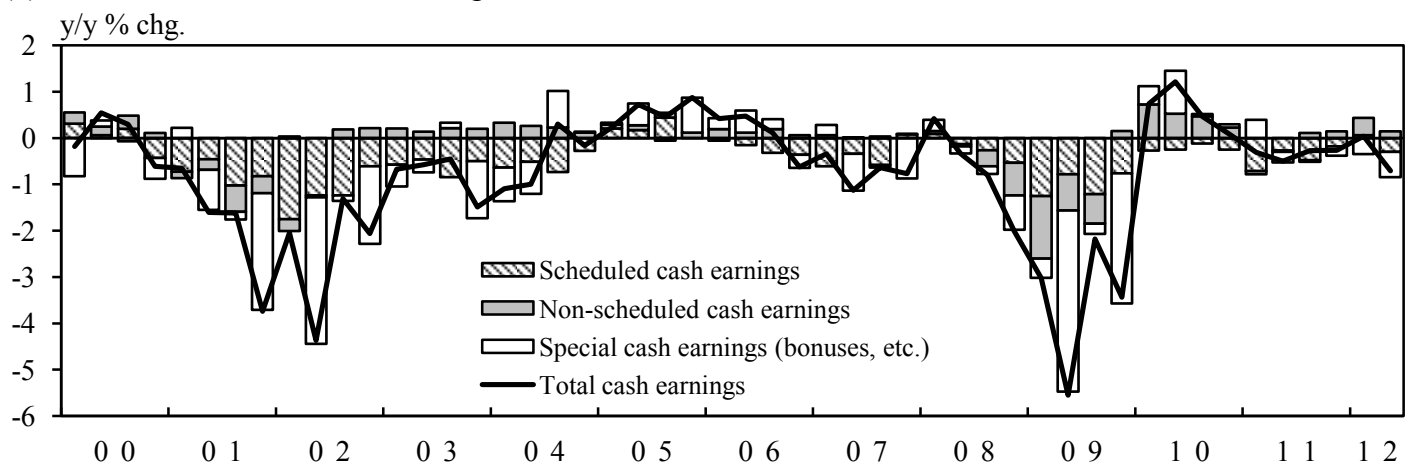
Employee Income

(1) Number of Employees



Note: Figures for 2012/Q3 are July-August averages.

(2) Breakdown of Total Cash Earnings

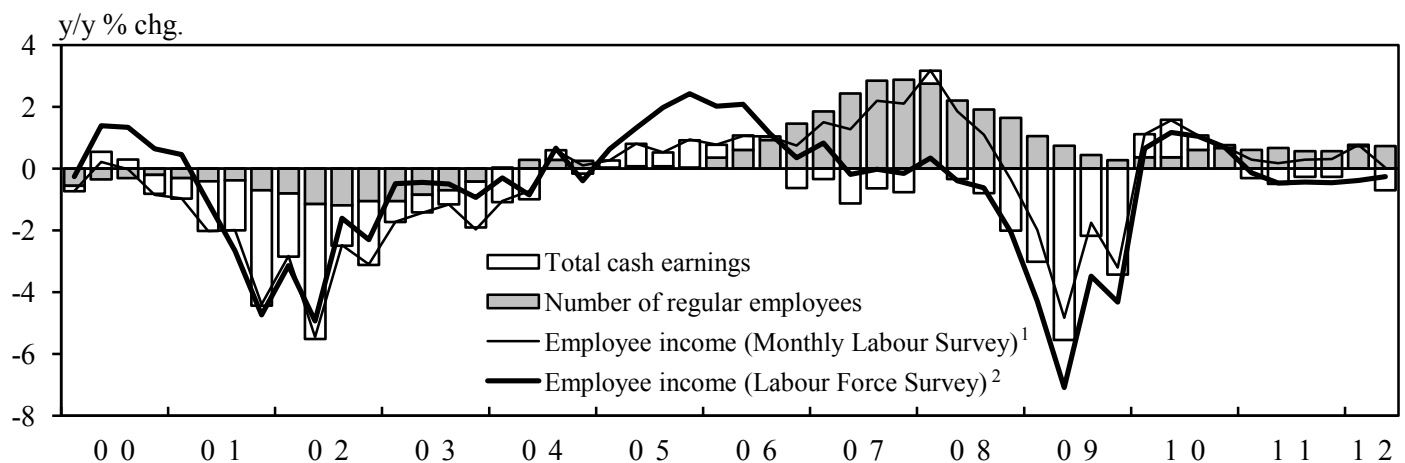


Note: Data from the "Monthly Labour Survey" are for establishments with at least five employees.

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

The same definition applies to the chart below.

(3) Breakdown of Employee Income



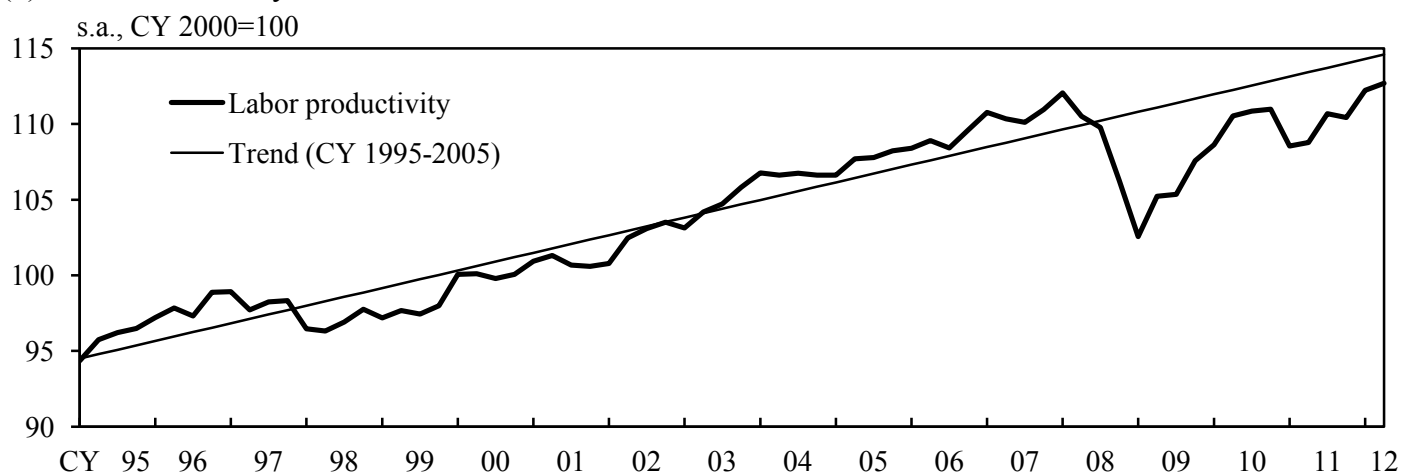
Notes: 1. Calculated as the "number of regular employees" (Monthly Labour Survey) times "total cash earnings" (Monthly Labour Survey).

2. Calculated as the "number of employees" (Labour Force Survey) times "total cash earnings" (Monthly Labour Survey).

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

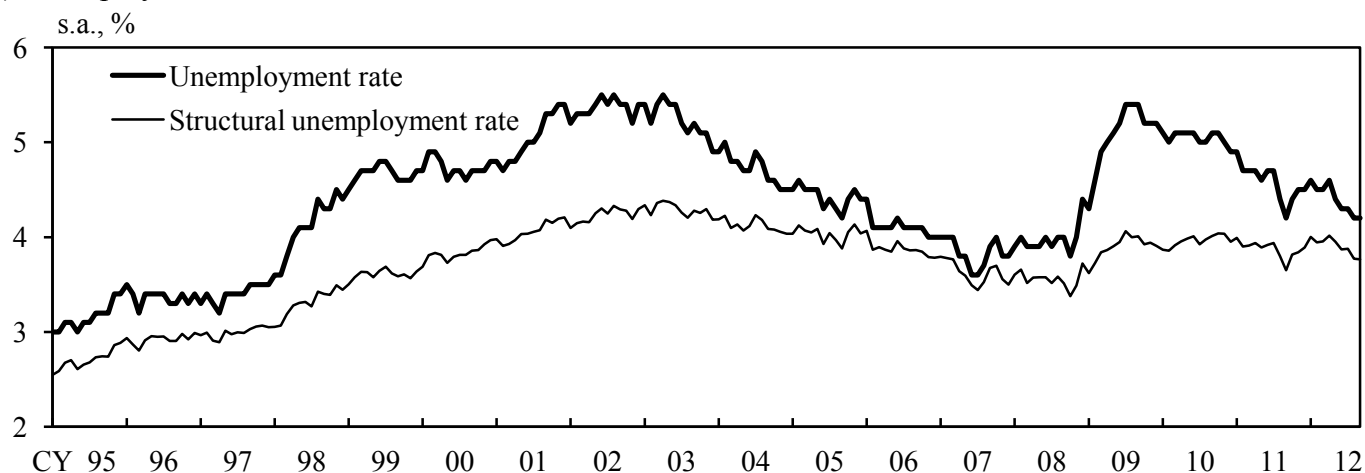
Labor Supply and Demand (2)

(1) Labor Productivity



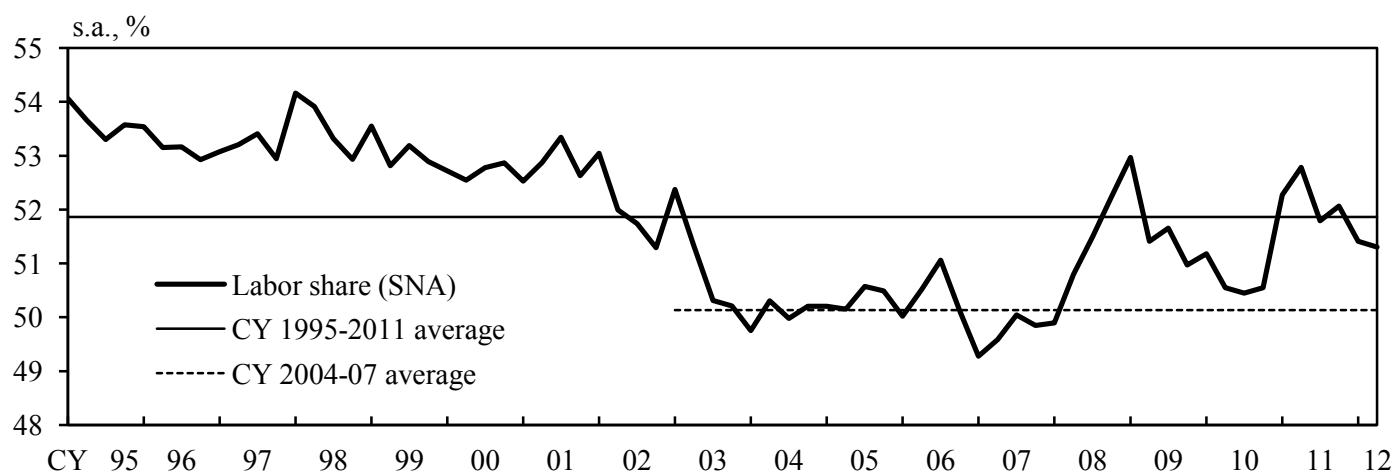
Note: Labor productivity = real GDP / number of employed persons

(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) Labor Share

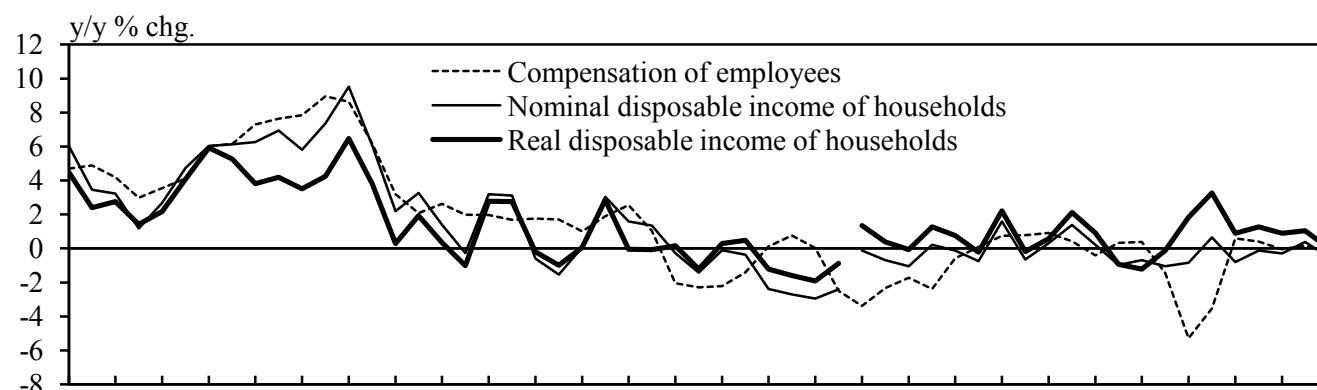


Note: Labor share = compensation of employees / nominal GDP × 100

Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Report on Employment Service."

Disposable Income of Households, Propensity to Consume, and Saving Rates

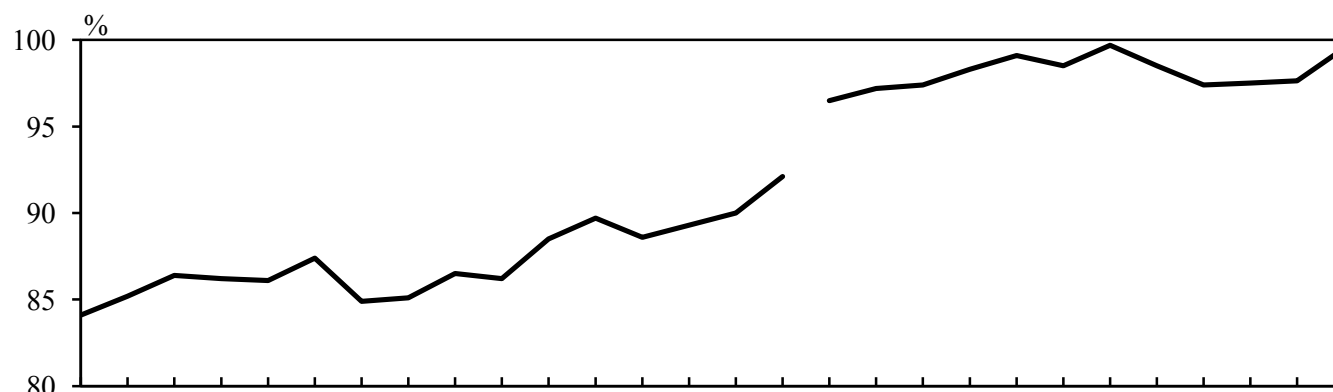
(1) Compensation of Employees and Disposable Income of Households



FY 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

- Notes: 1. The figure for compensation of employees for the first half of fiscal 2012 is calculated using the average year-on-year rate of change in the period from 2011/Q3-2012/Q2.
 2. Figures for disposable income of households up through fiscal 2001 are on the 2000 base. From fiscal 2002, they are on the 2005 base.
 3. Figures for 2011 and 2012 are estimated by the Research and Statistics Department, Bank of Japan. They include estimated transfers of income from the government to households through the economic policy packages. The same procedure applies to the charts below.

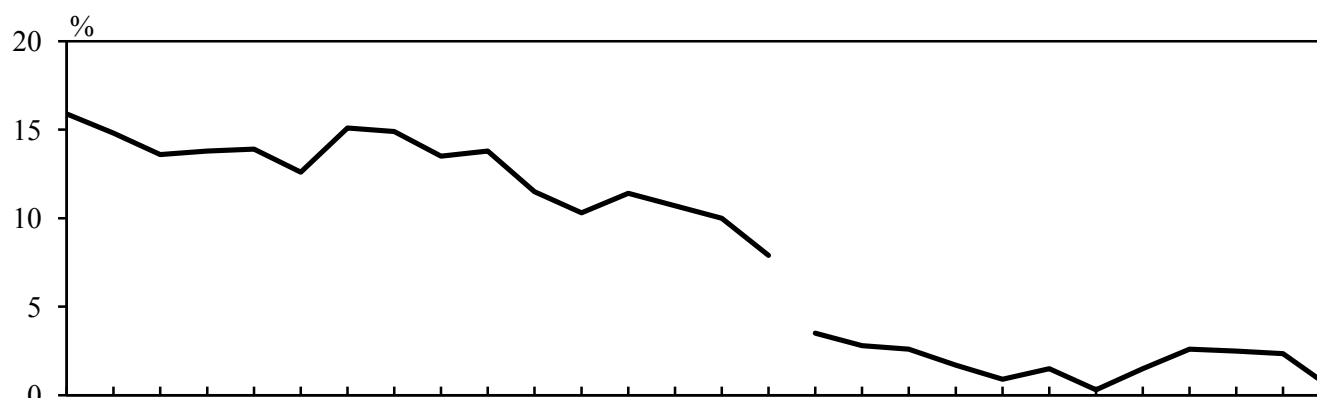
(2) Propensity to Consume



FY 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

- Note: Figures are on a National Accounts basis. They are on the 2000 base up through fiscal 2000 and on the 2005 base from fiscal 2001 onward. The same definition applies to the chart below.

(3) Household Saving Rates



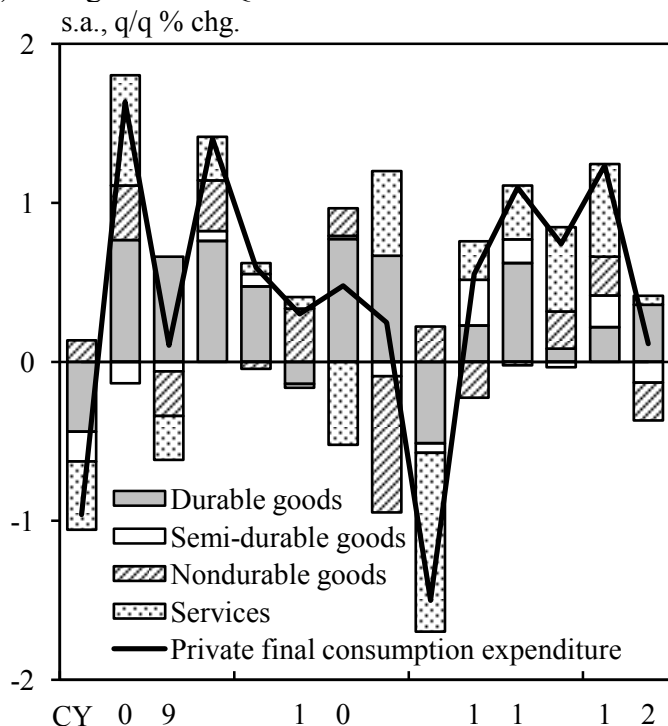
FY 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

- Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Budgets for fiscal 2009-12, etc.

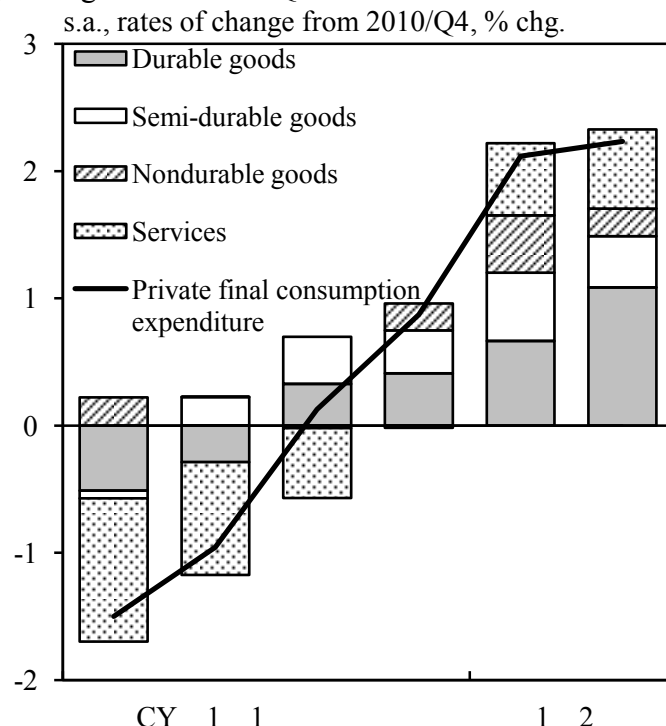
Developments in Private Consumption

(1) Private Consumption by Type (Real)

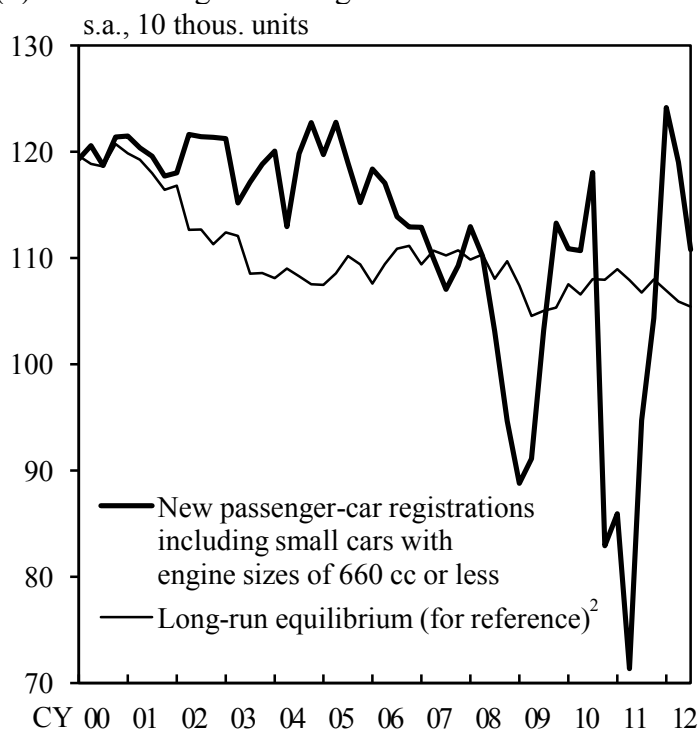
(a) Changes from a Quarter Earlier



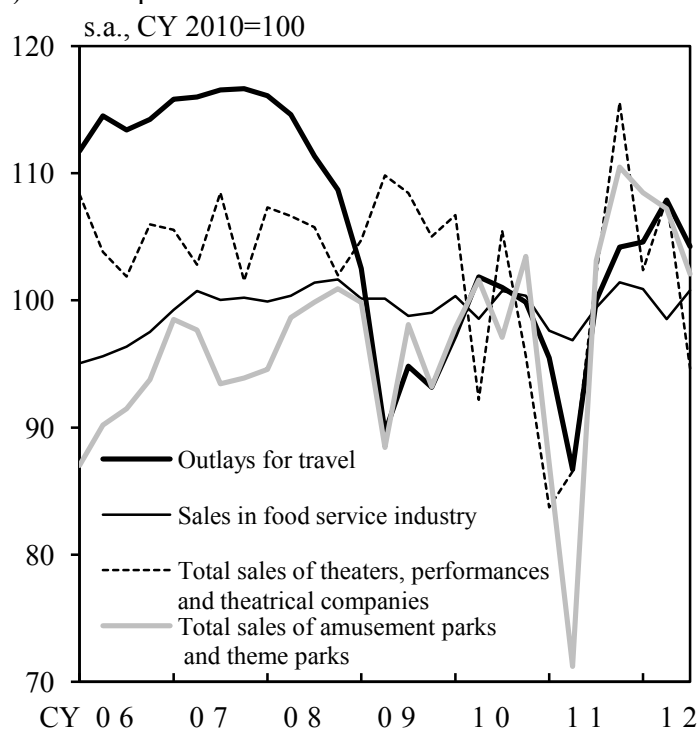
(b) Changes from 2010/Q4



(2) New Passenger-Car Registrations¹



(3) Consumption of Services^{1,3}



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

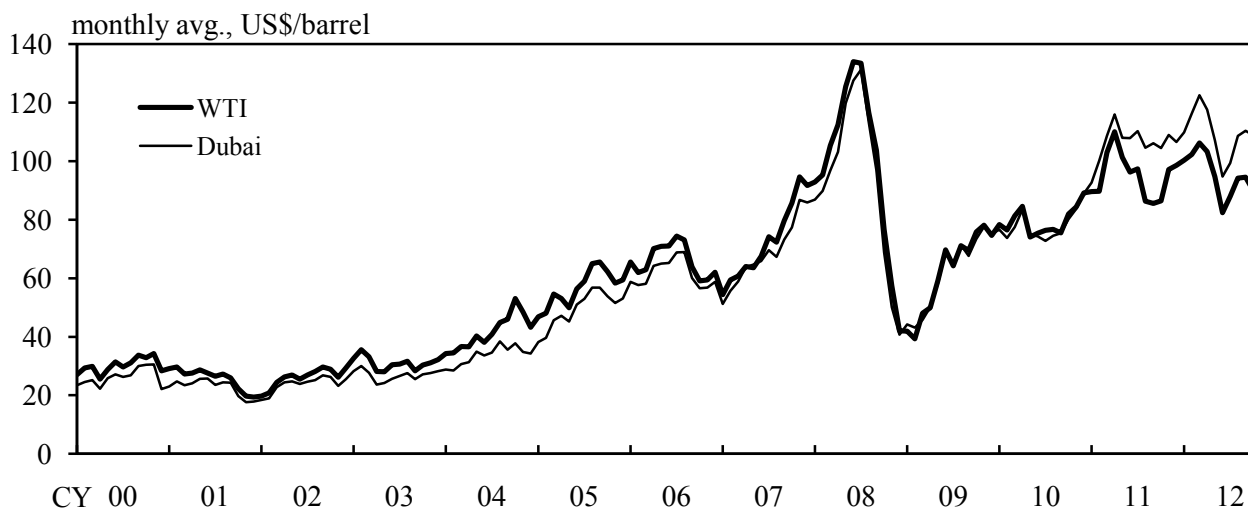
2. Estimated by income, population and the total stock of cars owned, controlling for the front-loaded increase in demand and subsequent decline around the time of the consumption tax hike in 1997.

3. Figures for 2012/Q3 on outlays for travel, total sales of “theaters, performances and theatrical companies” and of “amusement parks and theme parks” are the July-August averages.

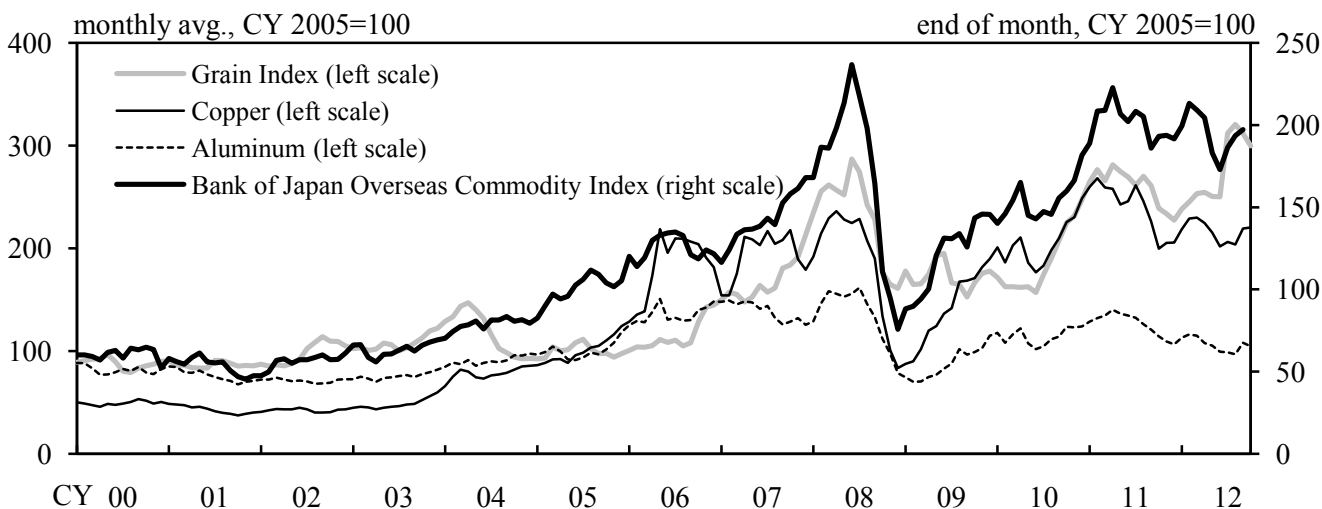
Sources: Cabinet Office, "National Accounts"; Japan Automobile Dealers Association, "Domestic Sales of Automobiles"; Japan Tourism Agency, "Major Travel Agents' Revenue"; Japan Food Service Association, "Gaishoku Sangyou Shijou Doukou Chousa (Research on the Food Service Industry)"; Ministry of Economy, Trade and Industry, etc.

International Commodity Prices and Overseas Economies

(1) Oil Prices

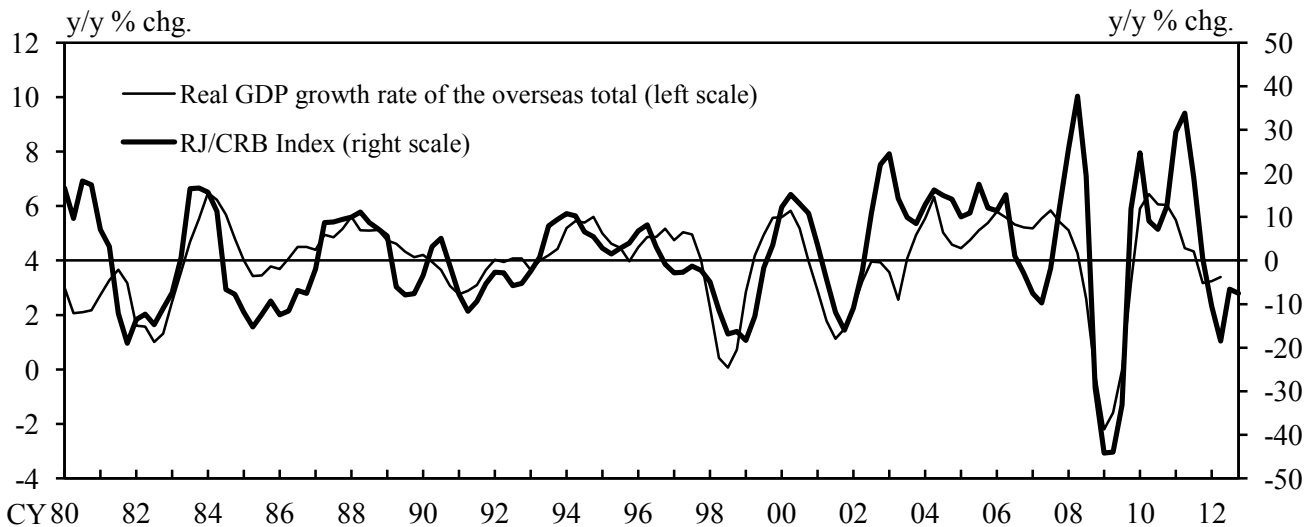


(2) Nonferrous Metals and Grain Prices



Note: The Grain Index is the weighted average of prices of three selected items (wheat, soybeans, and corn) in overseas commodity markets. The weights are based on the value of imports in the Trade Statistics of Japan.

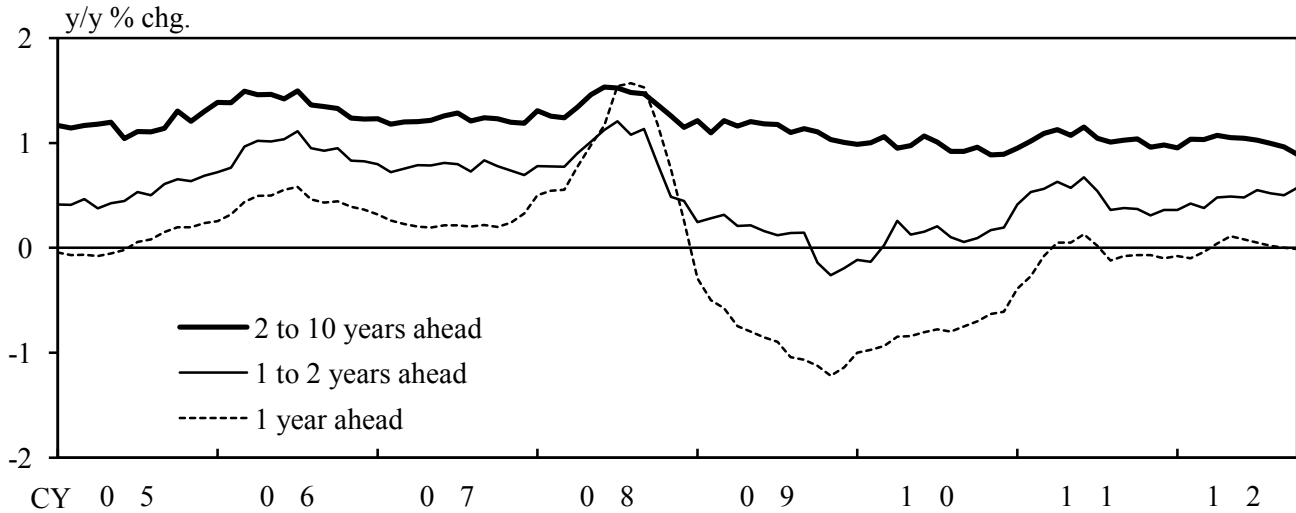
(3) International Commodity Prices and Overseas Economies



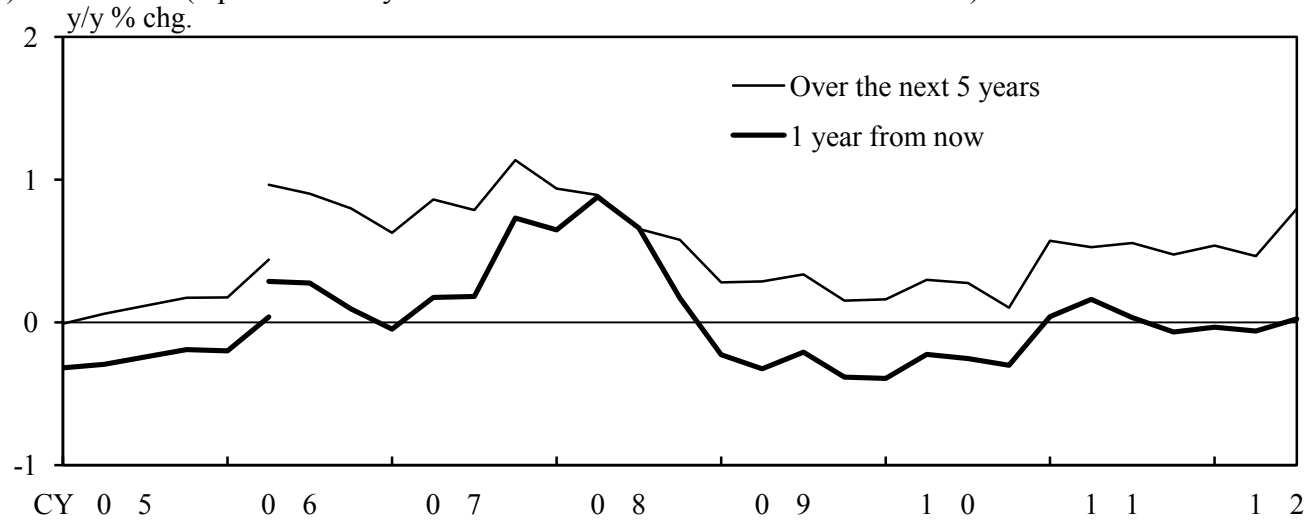
Sources: Bank of Japan, "Bank of Japan Overseas Commodity Index"; IMF, "World Economic Outlook," etc.

Inflation Expectations

(1) Market Participants (Quick Bond Monthly Survey)

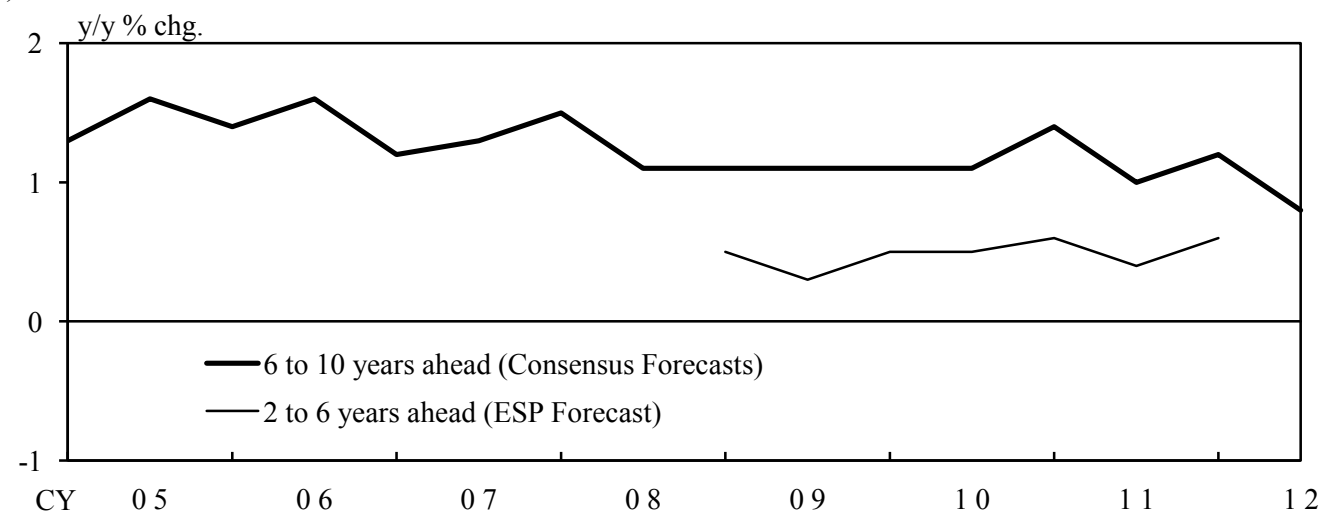


(2) Households (Opinion Survey on the General Public's Views and Behavior)



Note: Figures for households 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).

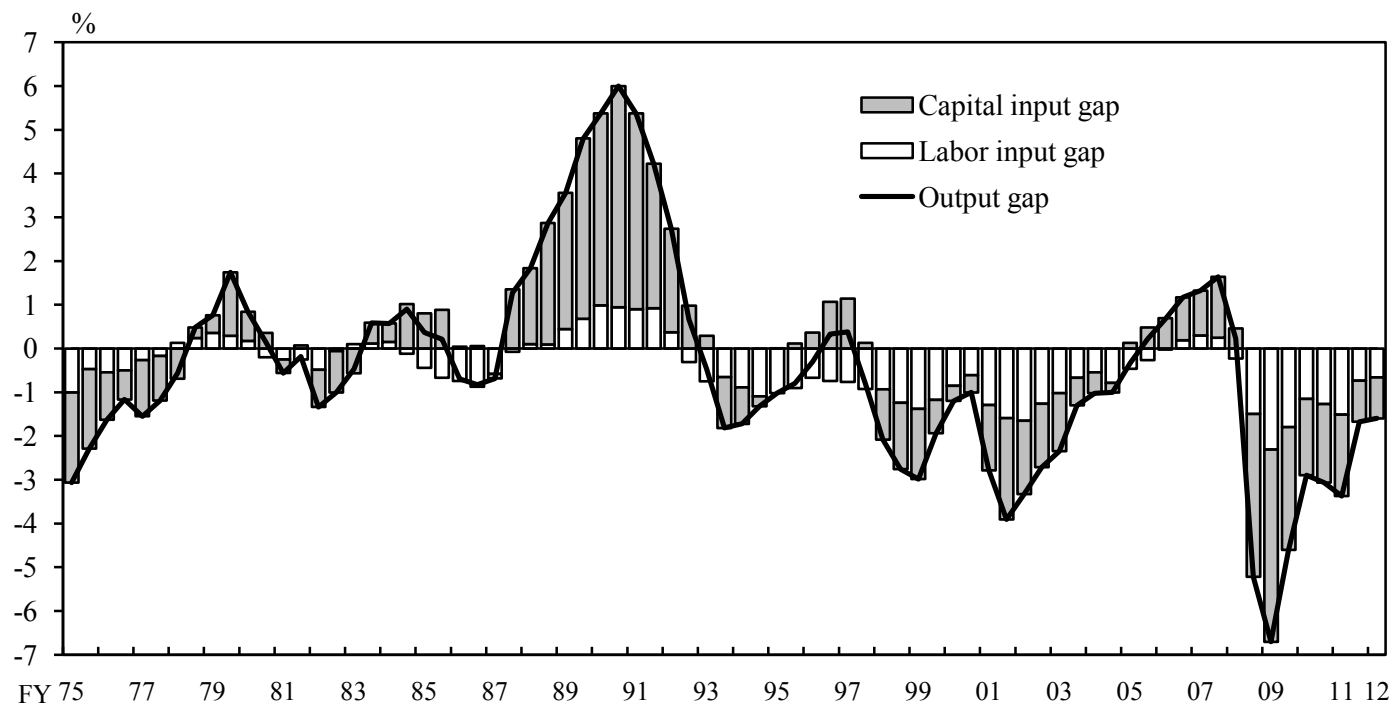
(3) Economists



Sources: QUICK, "Quick Bond Monthly Survey"; Bank of Japan, "Opinion Survey on the General Public's Views and Behavior"; Consensus Economics Inc., "Consensus Forecasts"; JCER, "ESP Forecast."

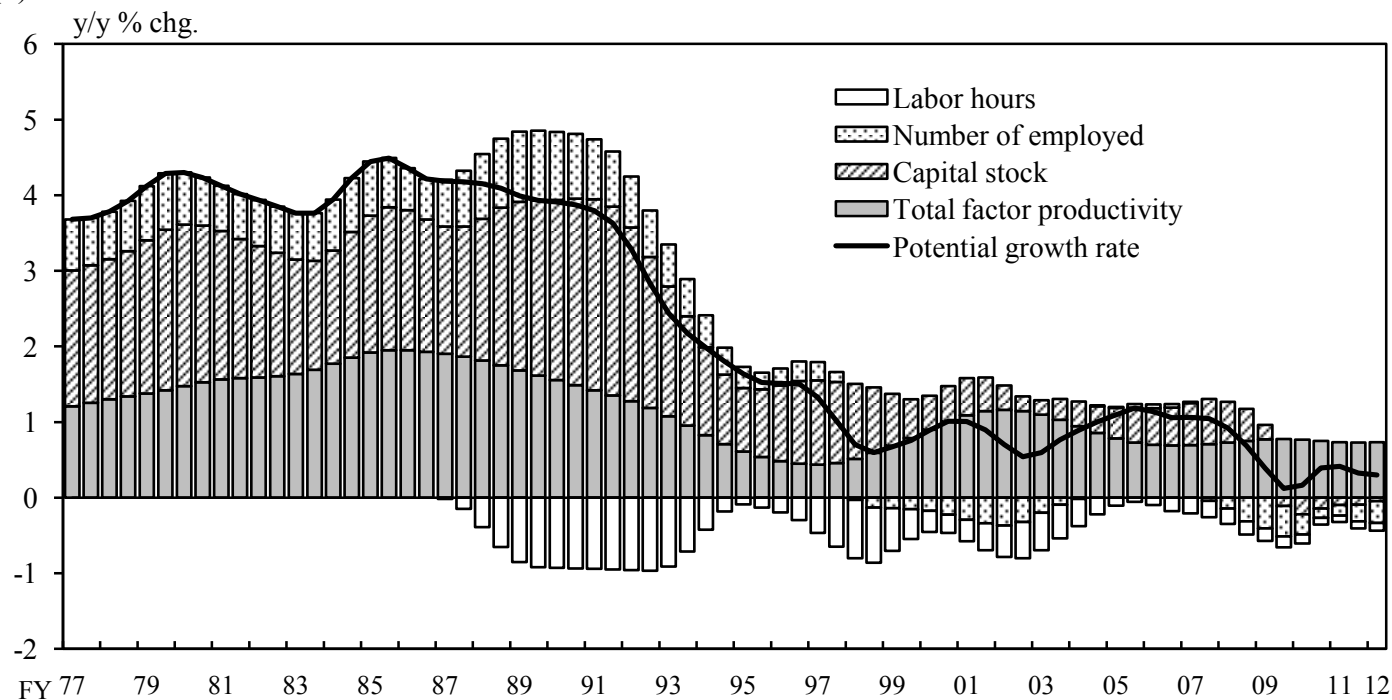
Output Gap and Potential Growth Rate

(1) Output Gap



- Notes: 1. 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 definition applies to the chart below.
2. Figures for the first half of fiscal 2012 are those of 2012/Q2. The same rule applies to the chart below.

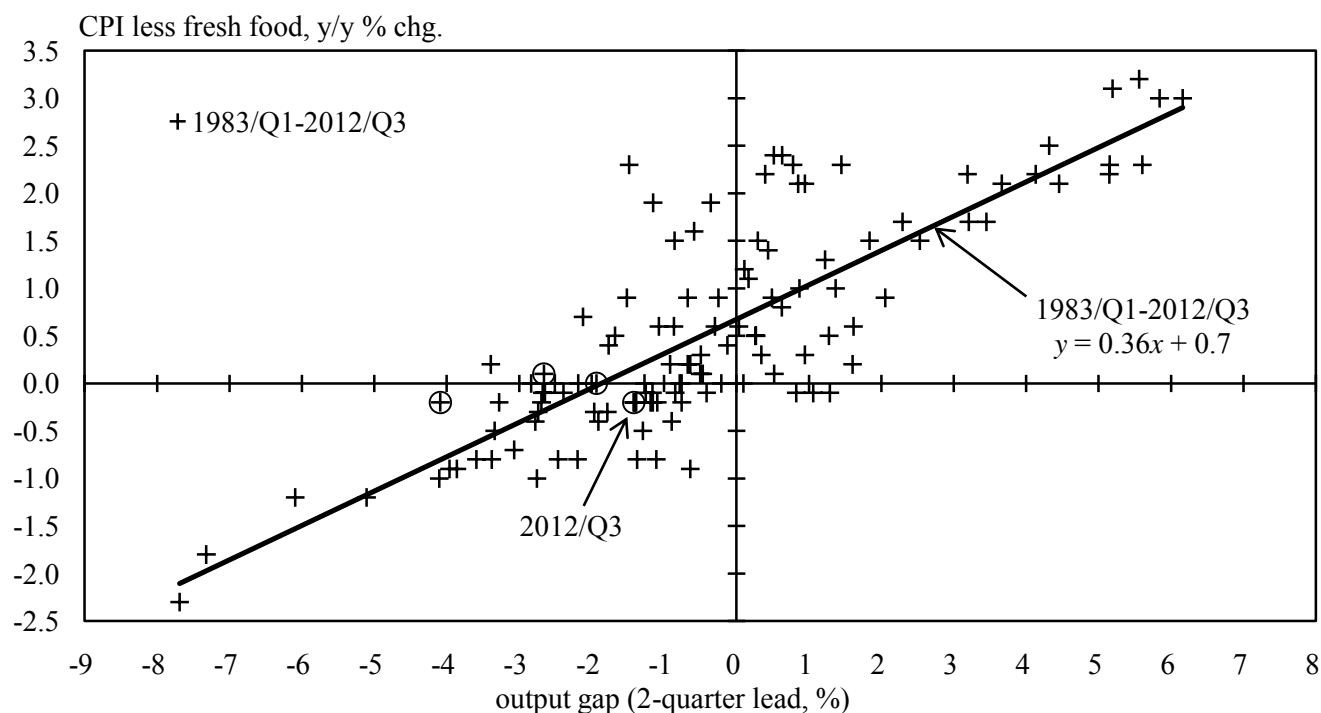
(2) Potential Growth Rate



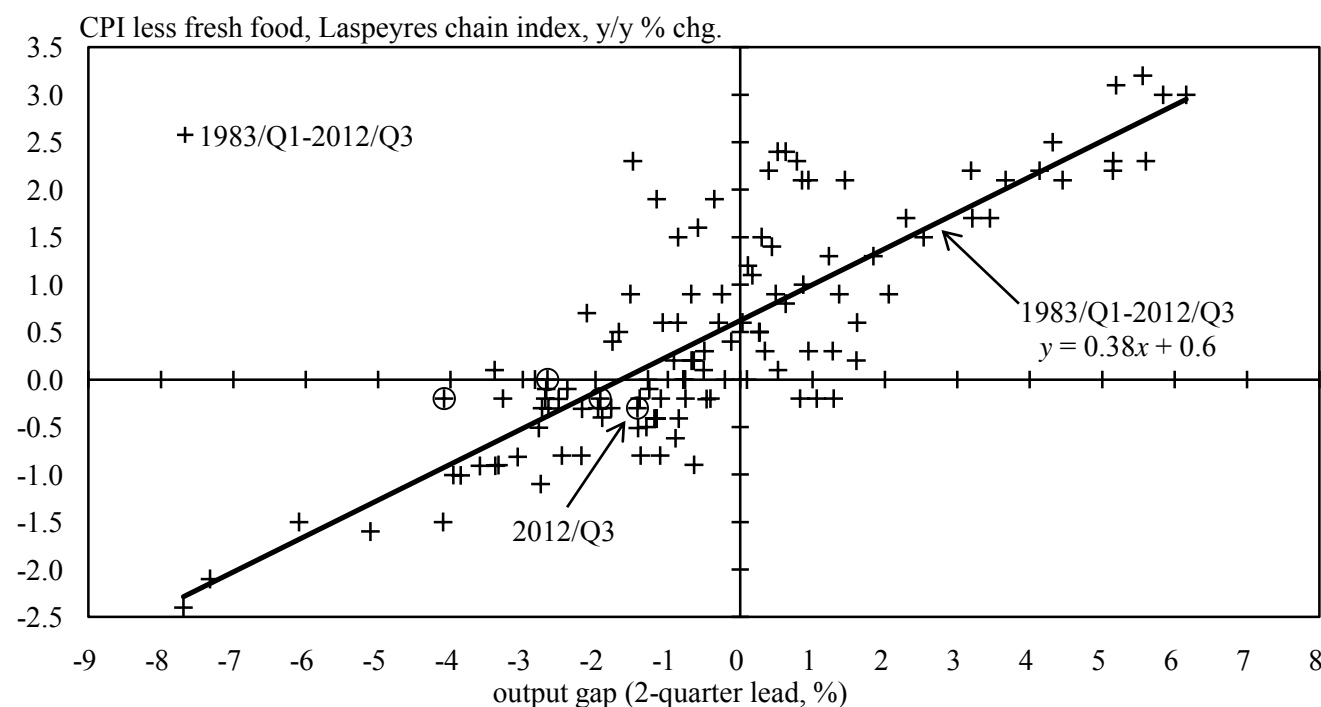
Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service"; Ministry of Economy, Trade and Industry, "Indices of Industrial Production"; Bank of Japan,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

Output Gap and Inflation Rate

(1) Phillips Curve (CPI Less Fresh Food)^{1,2,3,5}



(2) Phillips Curve (CPI Less Fresh Food, Laspeyres Chain Index)^{1,2,3,4,5}

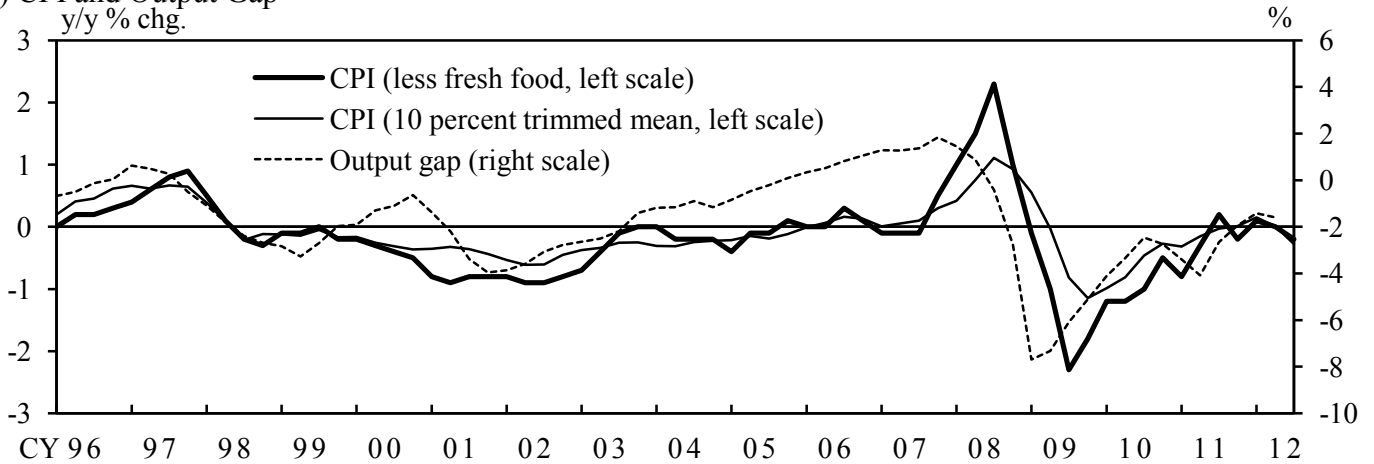


- Notes: 1. The circled marks are the latest four positions.
 2. Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate.
 3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.
 4. Figures for the CPI (Laspeyres chain index) up through 2000/Q4 are based on the fixed-base index, and figures from 2001/Q1 are based on the Laspeyres chain index. Figures for the Laspeyres chain index on the 2000 base are estimated by the Research and Statistics Department, Bank of Japan.
 5. 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.

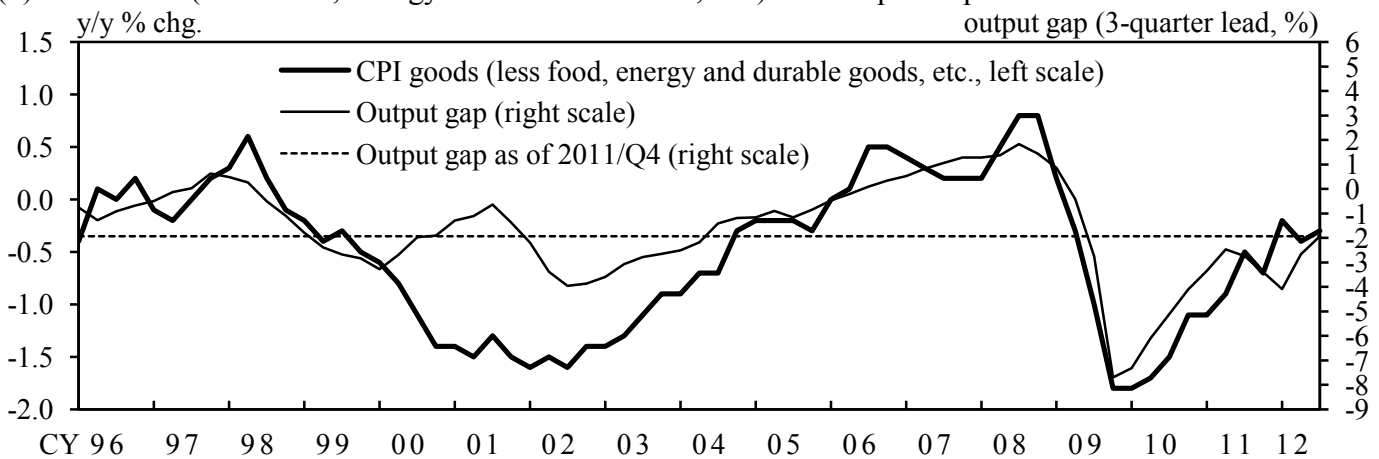
Environment surrounding Prices (1)

(1) CPI and Output Gap



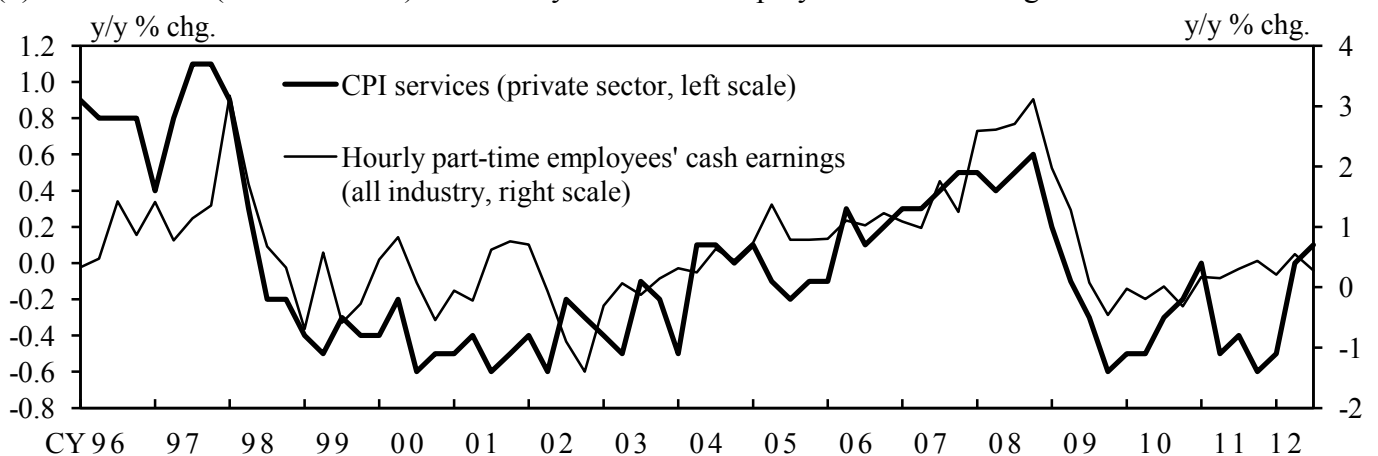
Note: Figures for the CPI are adjusted to exclude the effect of changes in the consumption tax rate. The same definition applies to the charts below.

(2) CPI Goods (Less Food, Energy and Durable Goods, etc.) and Output Gap



Note: Figures for CPI goods (less food, energy and durable goods, etc.) exclude "food" and "energy," which are affected by exchange rates and international commodity prices, "durable goods," which largely reflects technological innovations, and "tobacco," which fluctuates with tax rate changes, etc.

(3) CPI Services (Private Sector) and Hourly Part-Time Employees' Cash Earnings



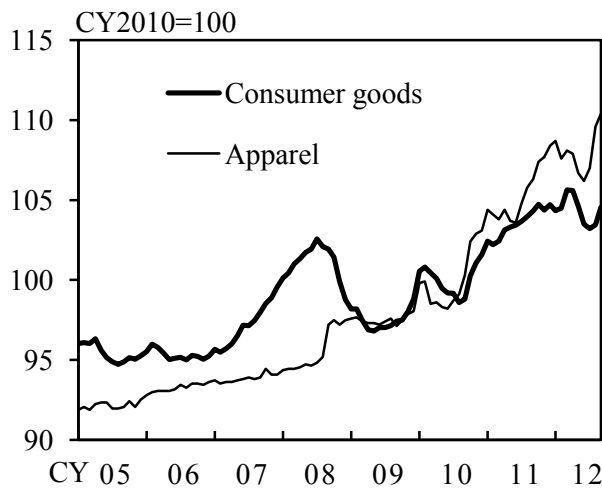
Notes: 1. Figures for CPI services (private sector) are the weighted averages of "services related to domestic duties (in "general services"), "services related to communication, culture & recreation (less "package tours to overseas" and "mobile telephone charges")," and "tutorial fees."

2. Figures for 2012/Q3 are July-August averages.

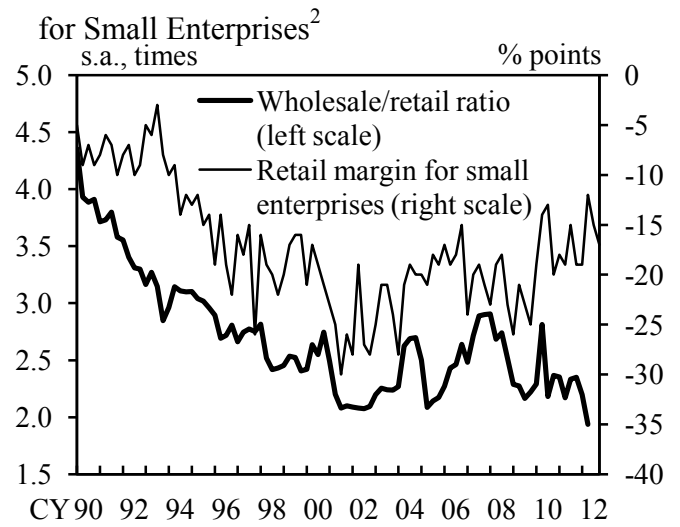
Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Cabinet Office, "National Accounts"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," etc.

Environment surrounding Prices (2)

(1) Import Price Index (Contract Currency Basis)¹



(2) Wholesale/Retail Ratio and Retail Margin

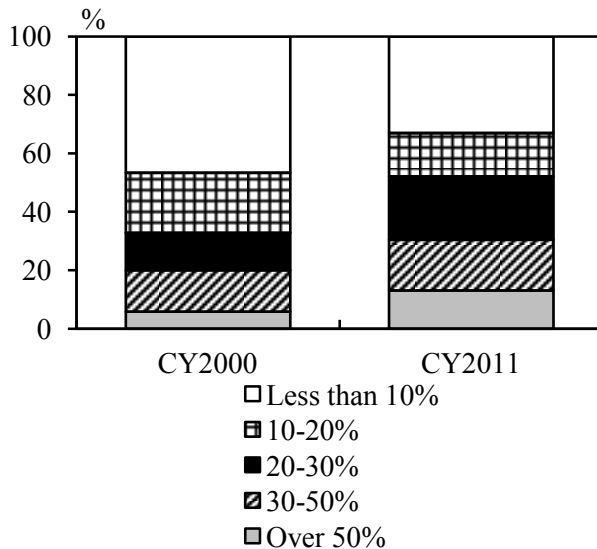


Notes: 1. Figures up to 2009 are linked indices calculated using 2005 based indices.

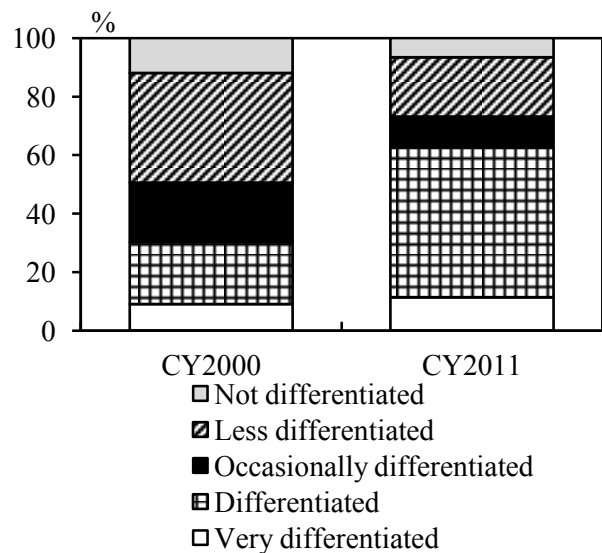
2. Wholesale/retail ratio = wholesale sales / retail trade sales. Retail margin = change in output price DI - change in input price DI in the "Tankan." The Figure for 2012/Q4 is the forecast by enterprises.

(3) Price-Setting Behavior of Japanese Companies

(a) Domestic Market Share



(b) Production Differentiation



(c) Factors Determining Price-Setting

Rank	CY 2000		CY 2011	
	All industries	Retailing	All industries	%
1	Market condition	Market share	Profits	(56.7)
2	Market share	Market condition	Prices of similar products	(14.2)
3	Customer set	Direct cost plus fixed mark-up	No response, others	(8.6)
4	Direct cost plus fixed mark-up	Customer set	Market share	(7.9)
5	Regulatory agency or law	Regulatory agency or law	Maintenance of production volume	(6.3)

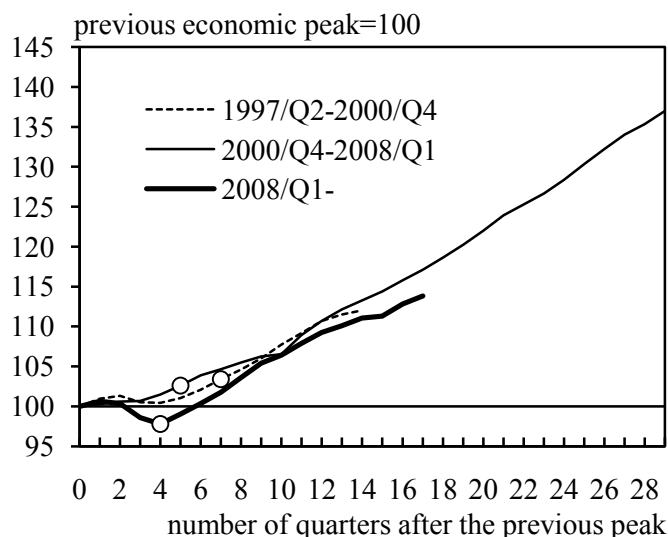
Notes: 1. The survey in 2000 is by the Bank of Japan (the number of respondents: 630 companies). That in 2011 is by the Ministry of Finance and Mizuho Research Institute (the number of respondents: 127 companies).

2. (a) shows the proportion of the companies whose share in the domestic market is within the range of each option.

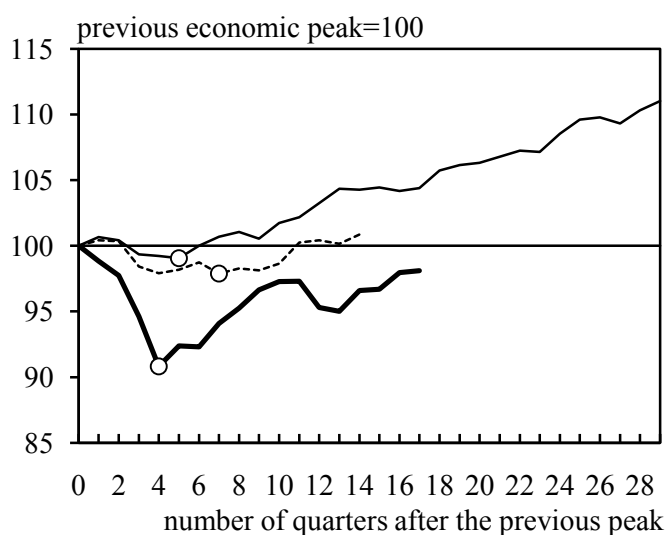
Sources: Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan," "Corporate Goods Price Index," "Survey of Price-Setting Behavior of Japanese Companies"; Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"; Ministry of Economy, Trade and Industry, Mizuho Research Institute.

Overseas Economies and Major Components of Real GDP

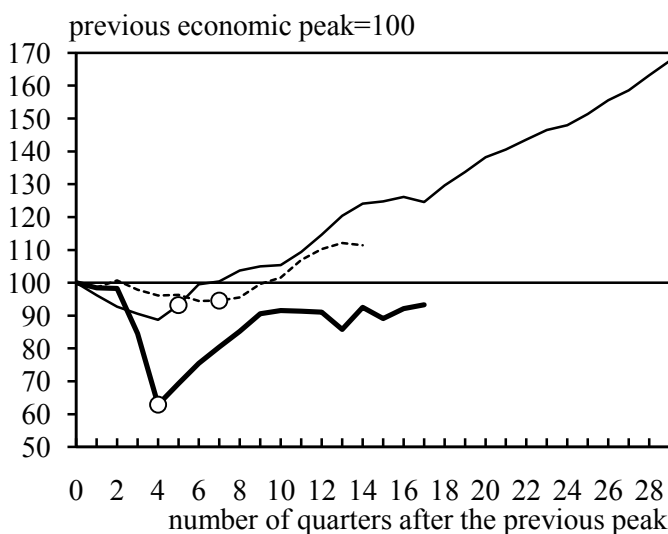
(1) Overseas Economies



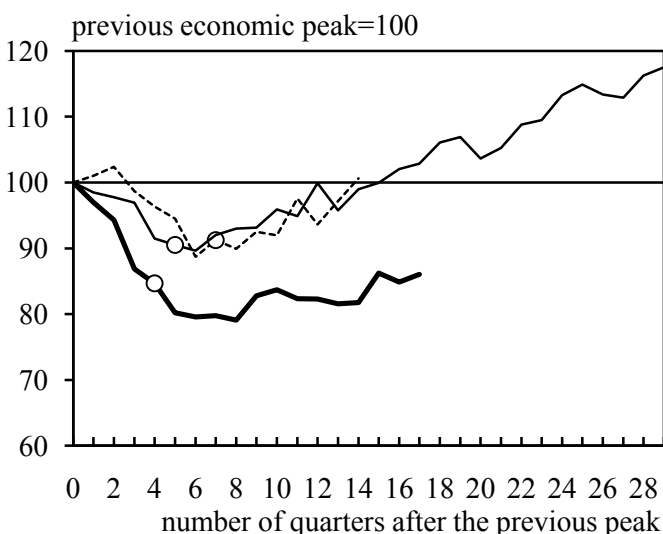
(2) Real GDP



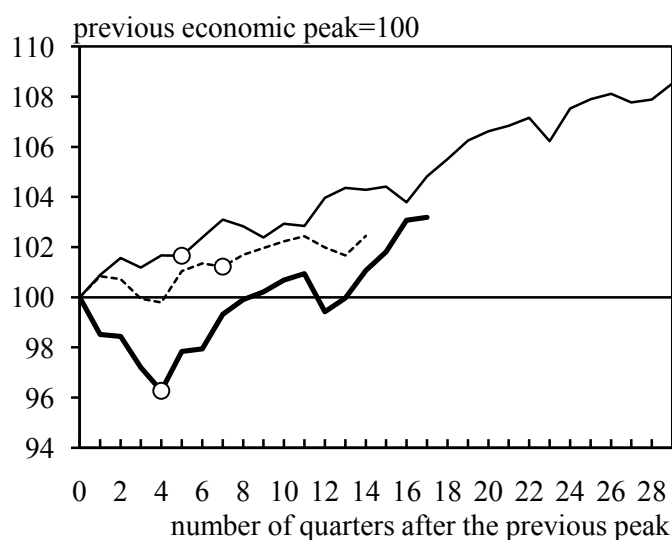
(3) Exports



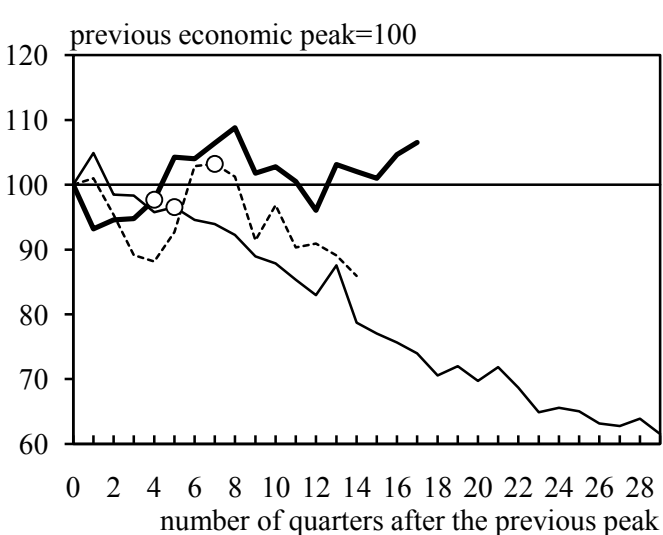
(4) Business Fixed Investment



(5) Private Consumption



(6) Public Investment

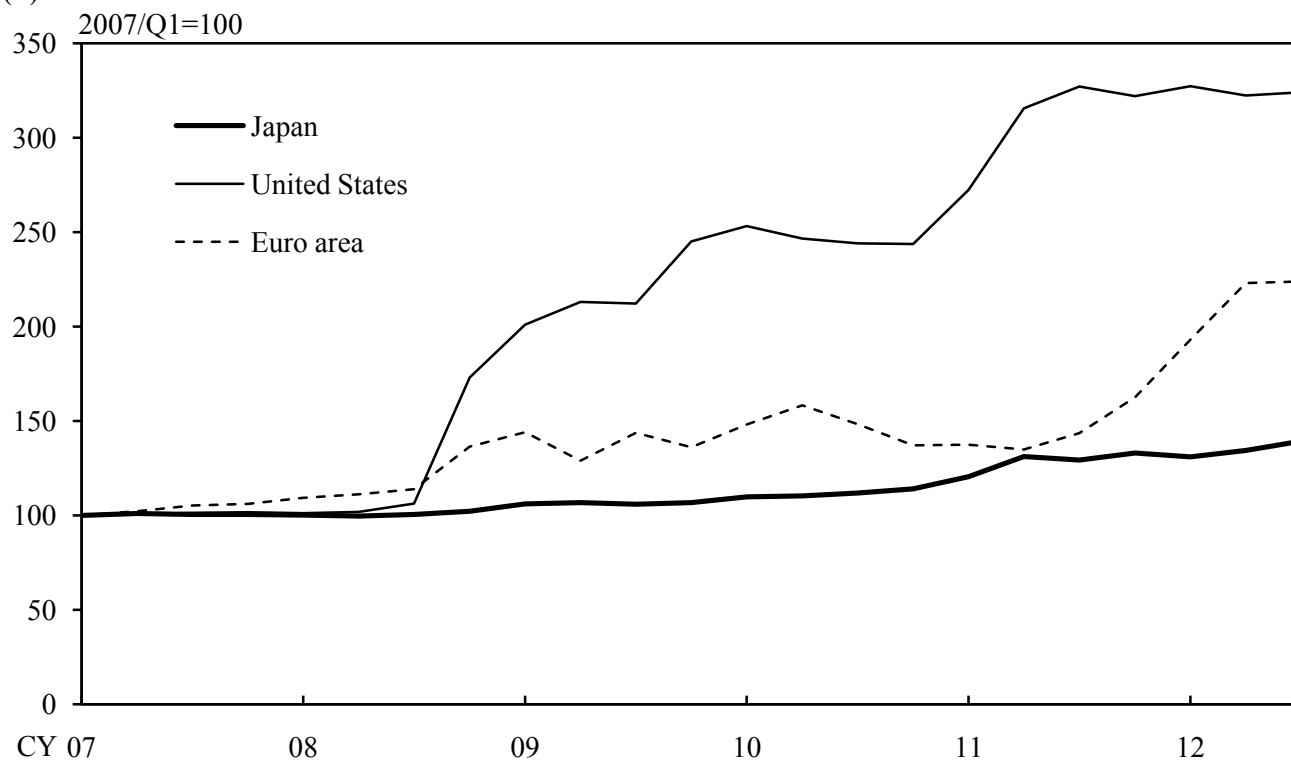
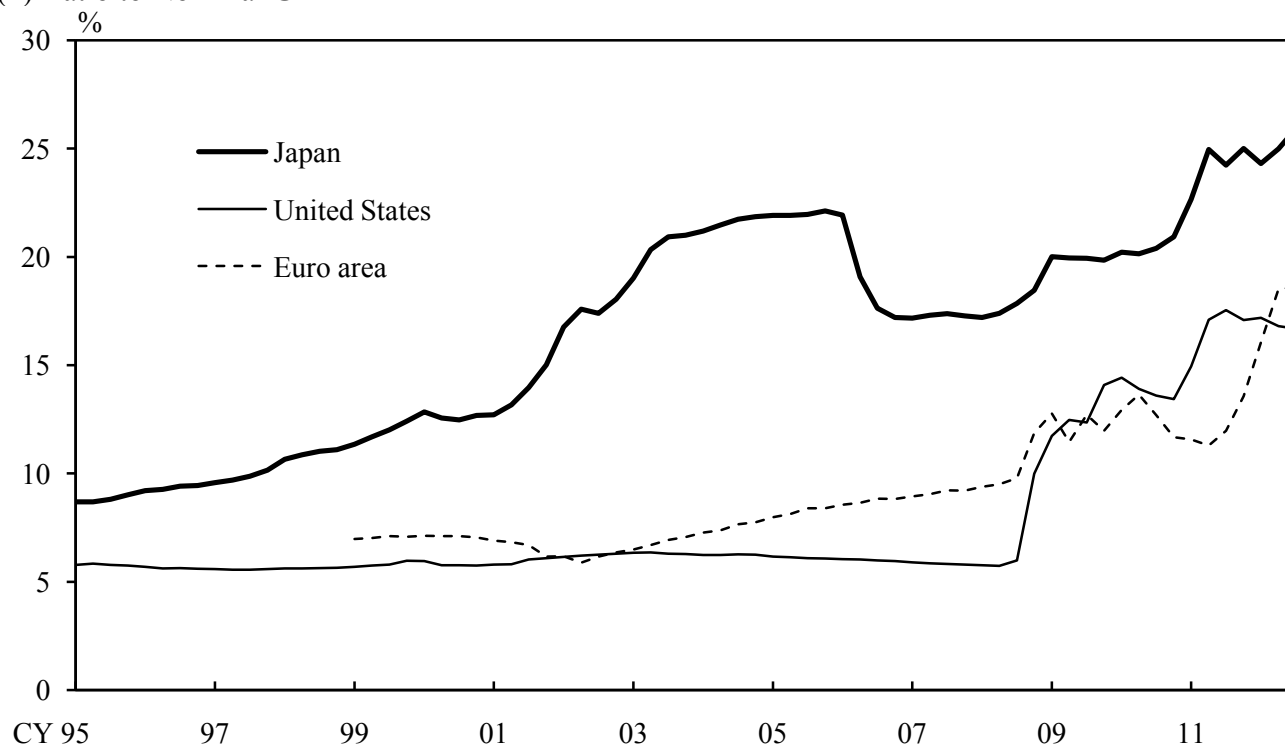


Notes: 1. In the above charts, variables are plotted from a peak to the next peak.

2. Circles in the charts indicate economic troughs.

Sources: Cabinet Office, "National Accounts," etc.

Monetary Base

(1) Level¹(2) Ratio to Nominal GDP^{1,2}

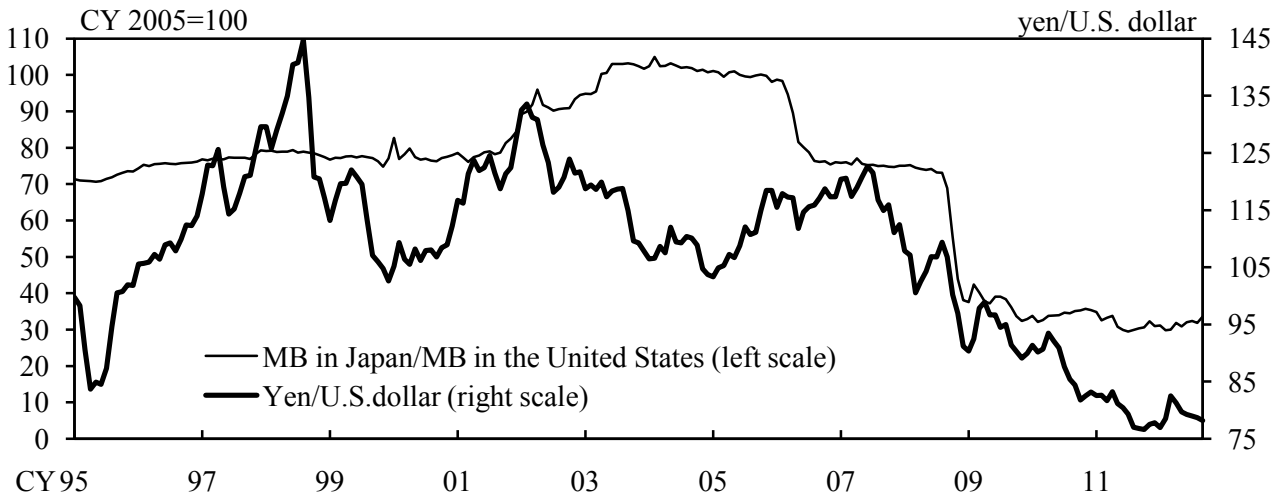
Notes: 1. Monetary base is the sum of banknotes in circulation, coins in circulation, and current account deposits at a central bank.

2. Figures for Japan and the euro area for 2012/Q3 are calculated using their nominal GDP figures for 2012/Q2.

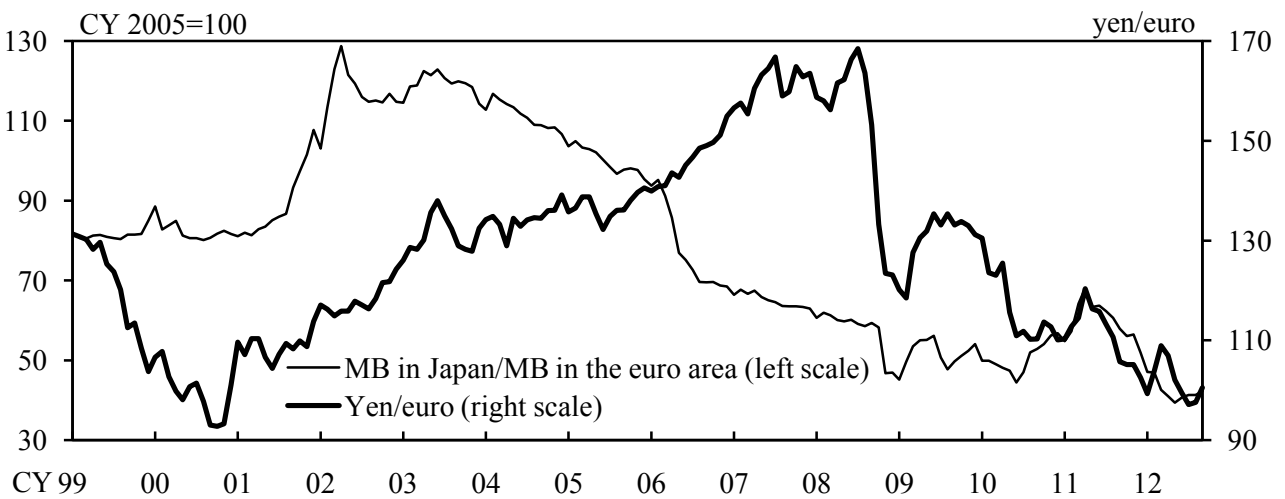
Sources: Cabinet Office; Bank of Japan; Federal Reserve Board; Bureau of Economic Analysis; European Central Bank; Eurostat.

Monetary Base and Exchange Rates

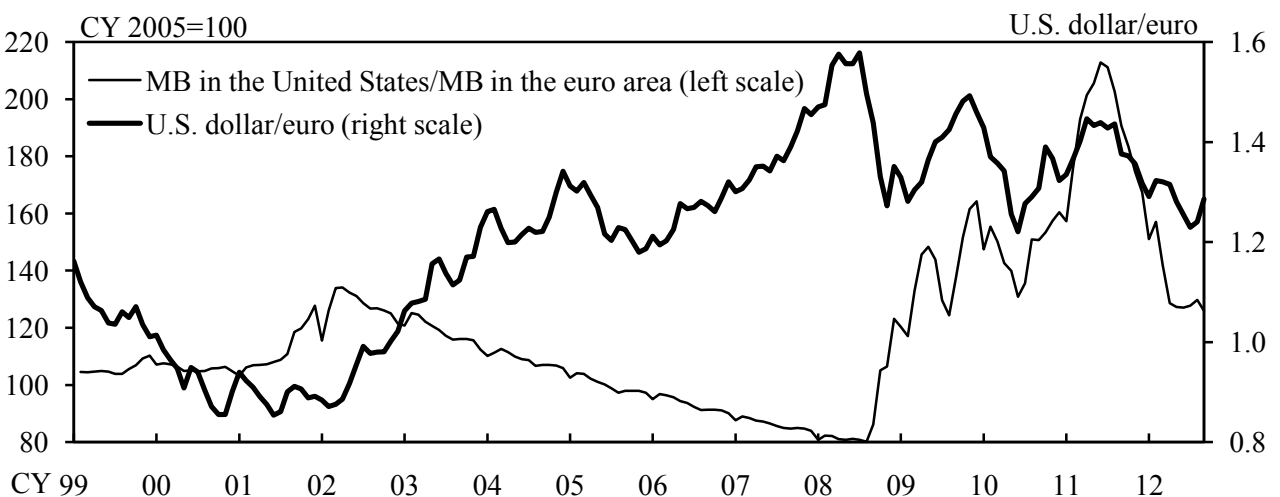
(1) Japan and the United States



(2) Japan and the Euro Area



(3) The United States and the Euro Area

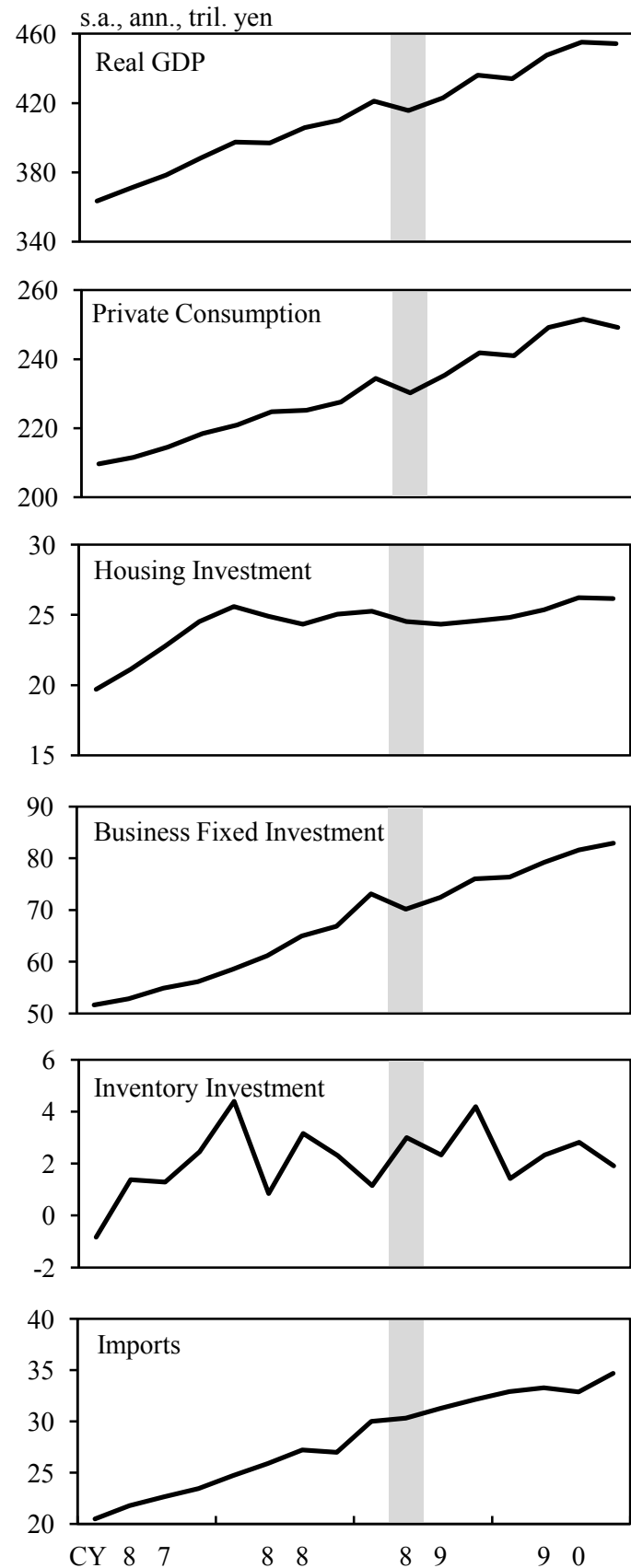


Note: Monetary base (MB) is the sum of banknotes in circulation, coins in circulation, and current account deposits at a central bank.

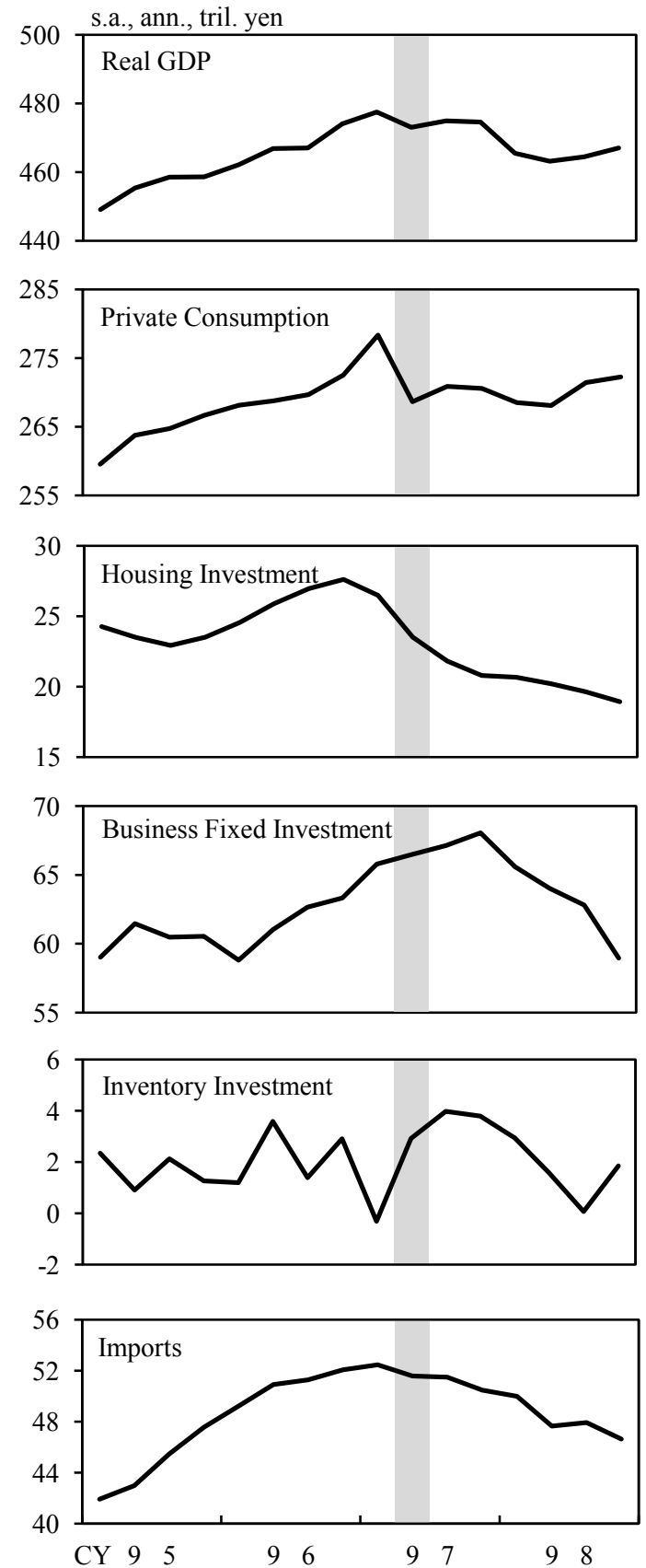
Sources: Bank of Japan; Federal Reserve Board; European Central Bank; Bloomberg.

Effects of the Consumption Tax Hike (1)

(1) Real Economy before and after the Introduction of the Consumption Tax (in April 1989)



(2) Real Economy before and after the Consumption Tax Hike (in April 1997)

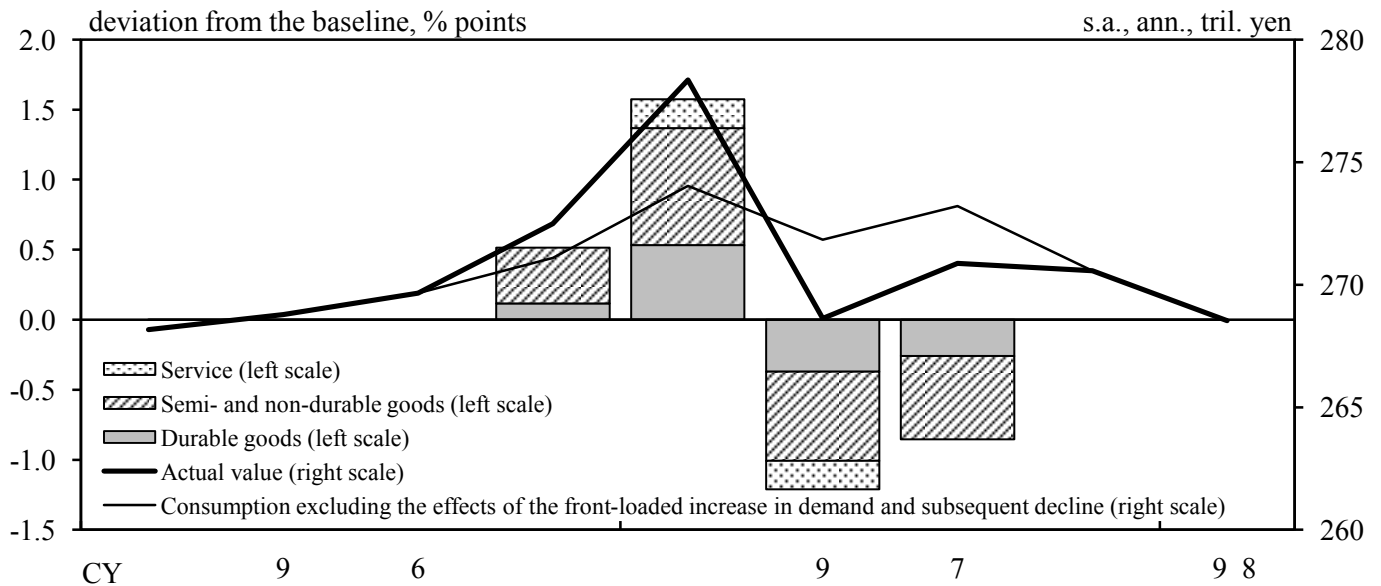


Note: Shaded areas indicate the time of the consumption tax hike.

Source: Cabinet Office, "National Accounts."

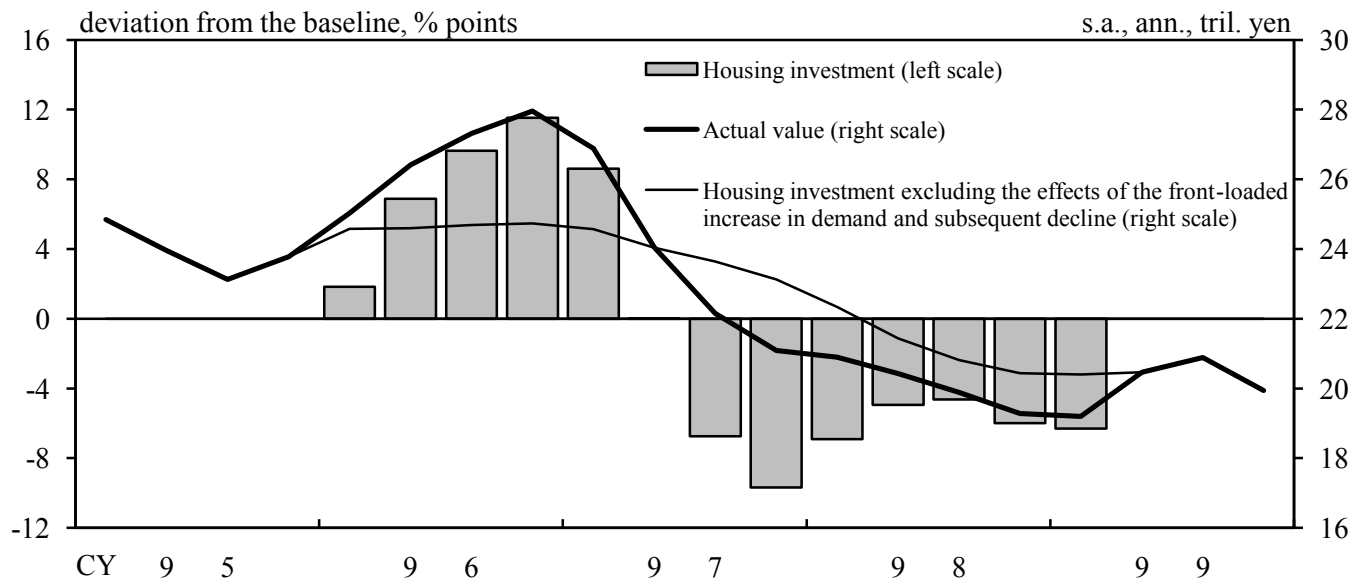
Effects of the Consumption Tax Hike (2)

(1) Private Consumption



- Notes: 1. The effects of the front-loaded increase in demand and subsequent decline are estimated by the Research and Statistics Department, Bank of Japan. The estimates are obtained by first regressing each type of consumption expenditure on compensation of employees, temporary income, financial assets, household units, and dummy variables around the time of the consumption tax hike and then extracting coefficients on the dummy variables. The estimation periods are 1980/Q1-2011/Q4.
2. The dependent variable is consumption per capita aged 15 and over. Temporary income = disposable income - compensation of employee.

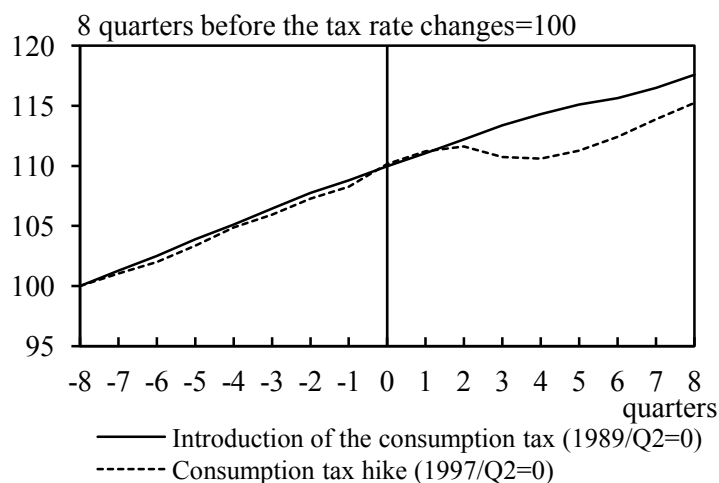
(2) Housing Investment



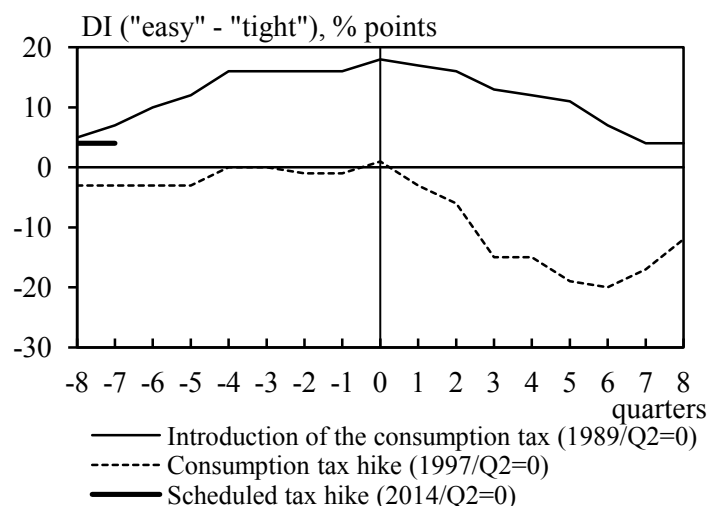
- Notes: 1. The effects of the front-loaded increase in demand and subsequent decline are estimated by the Research and Statistics Department, Bank of Japan. The estimates are obtained by first regressing housing investment on non-human capital, human capital, housing stock, the potential rate of growth, the real interest rate, and dummy variables around the time of the consumption tax hike and then extracting coefficients on the dummy variables. The estimation periods are 1980/Q4-2009/Q4.
2. The dependent variable is housing investment per capita.
3. Non-human capital is the real net worth in "National Accounts." Human capital is the trend for real disposable income.

Comparison of Economic Developments by Period

(1) Overseas Economies

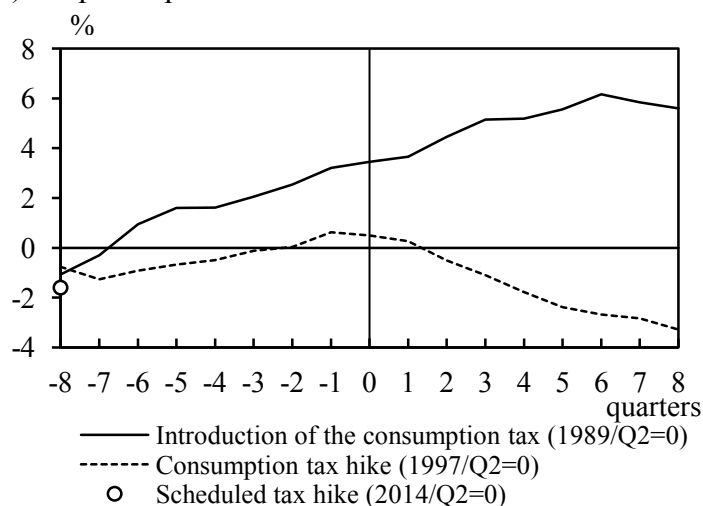


(2) Financial Position

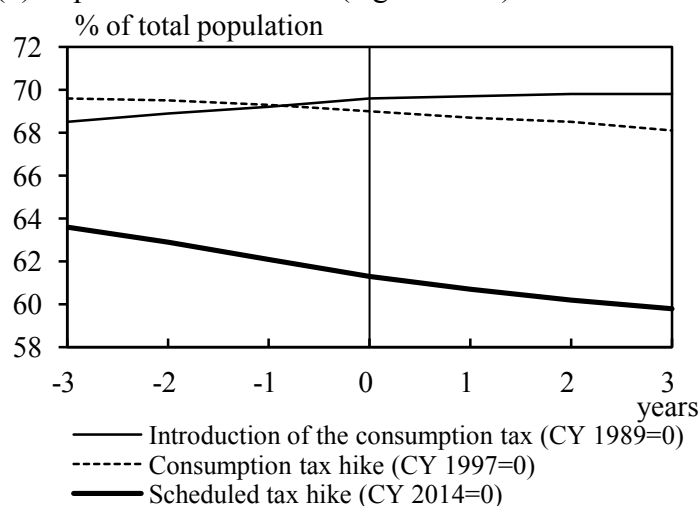


Note: For the overseas economies, see Chart 3.

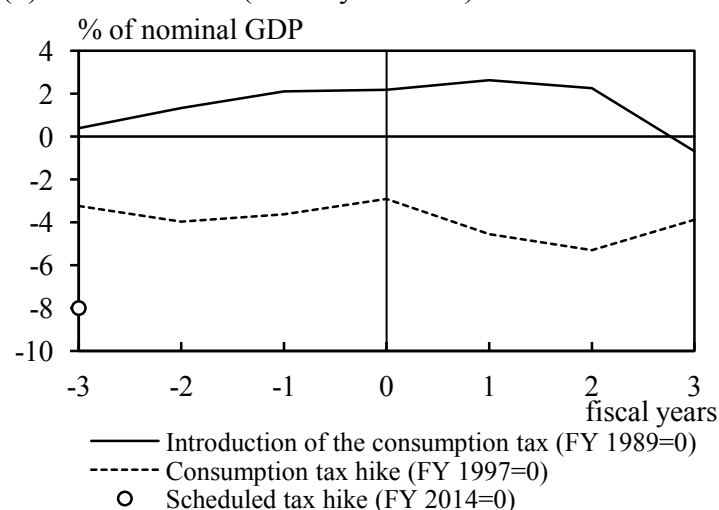
(3) Output Gap



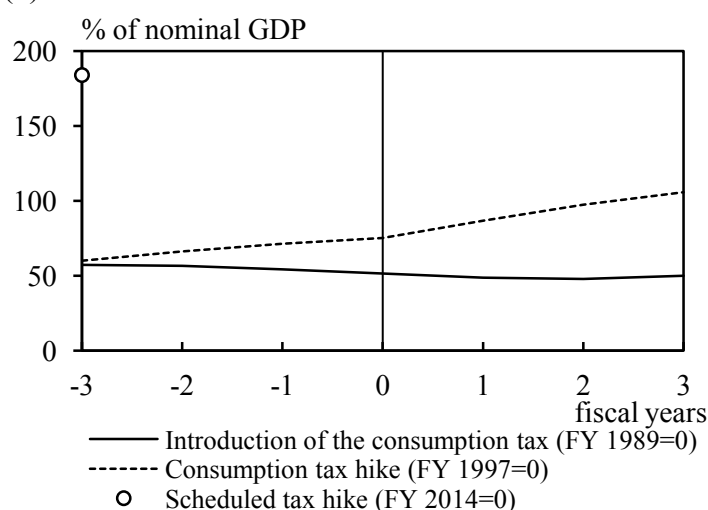
(4) Population of Workers (Aged 15-64)



(5) Fiscal Balance (Primary Balance)¹



(6) Government Liabilities²



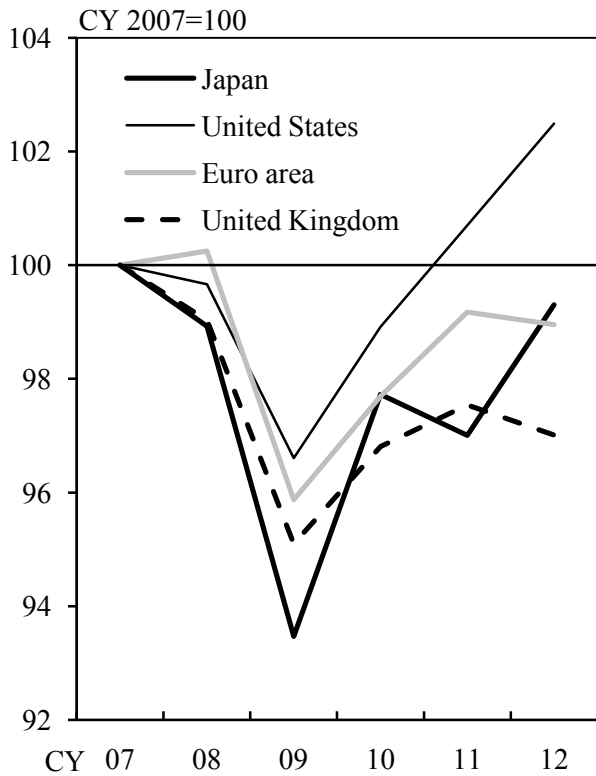
Notes: 1. Based on "Annual Report on National Accounts (the 2000 base and the 2005 base)."

2. Outstanding debt in "Economic and Fiscal Projections for Medium to Long Term Analysis (August 2012)."

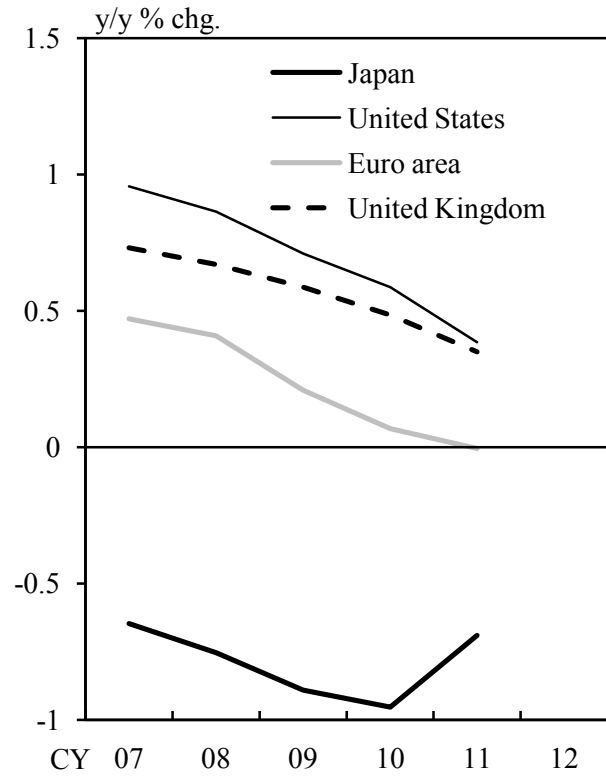
Sources: Cabinet Office, "National Accounts," "Economic and Fiscal Projections for Medium to Long Term Analysis"; National Institute of Population and Social Security Research, "Future Population Estimates of Japan"; CEIC; Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan," etc.

Advanced Economies' Real GDP after the Lehman Shock

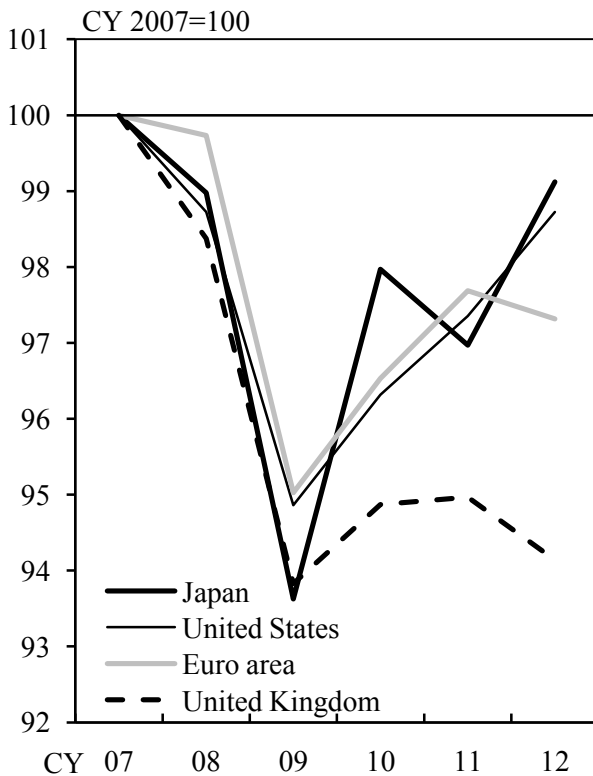
(1) Real GDP



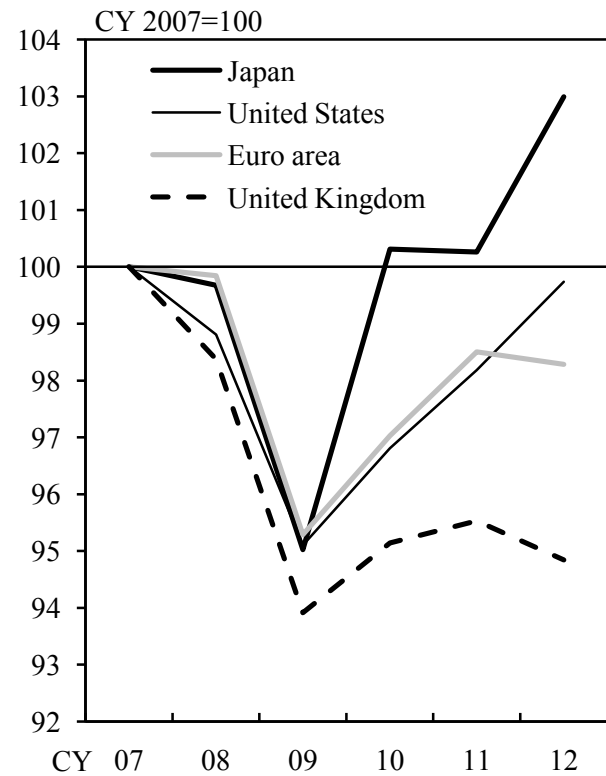
(2) Growth Rate of Working-Age Population



(3) Real GDP per Capita



(4) Real GDP per Working-Age Person



Notes: 1. A working-age person refers to one between 15 and 64 years old.

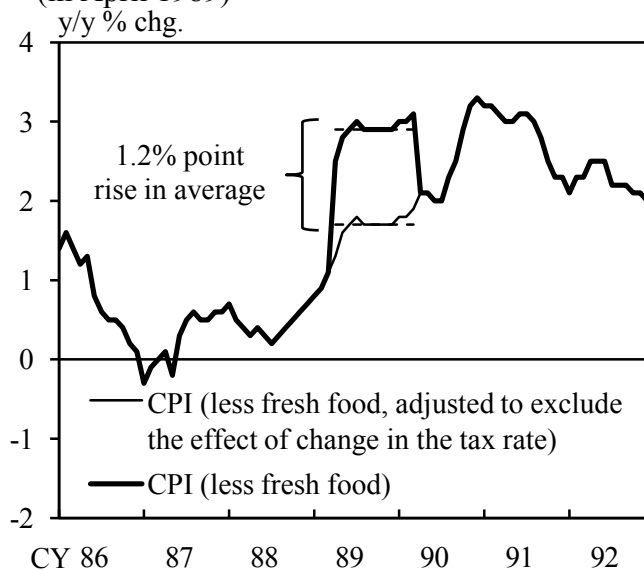
2. Figures for 2012 are January-June averages. Figures for the population for 2012 in (3) and (4) are calculated using the growth rate for 2011.

Sources: Cabinet Office, "National Accounts"; World Bank; Bureau of Economic Analysis; Eurostat; Office for National Statistics.

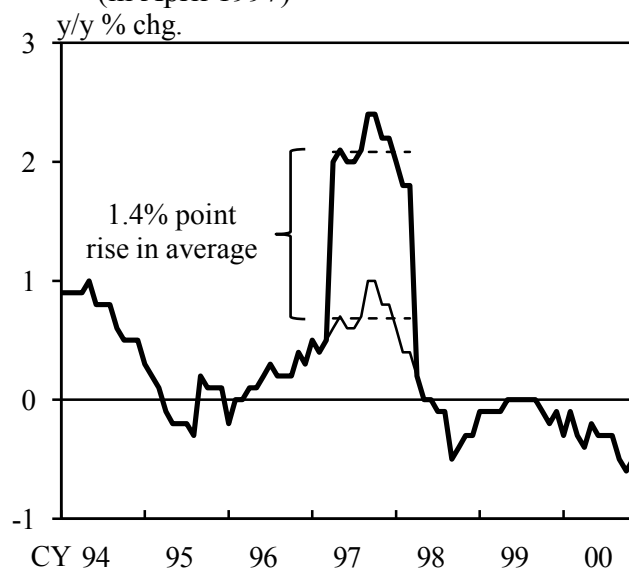
Consumption Tax Rate and Price Indices

(1) CPI in the Past Phases

(a) At the Consumption Tax Introduction¹ (in April 1989)



(b) At the Consumption Tax Hike^{2,3} (in April 1997)



Notes: 1. Estimated using the level shift command of X-12-ARIMA as the commodity tax abolishment occurred at the same time.

2. Estimated by assuming that the tax increase is fully passed on to the taxable items in the CPI and summing up their weights.

3. In 1997, the year-on-year rate of price change in the CPI rose toward the end of the year. This was caused by the increase in the "medical treatment" (+31 percent to the previous year, accounting for +0.4 percentage point increase in the CPI (less fresh food)) in September 1997, which reflected the rise in the ratio of partial cost sharing.

(2) Non-Taxable Items and Tax-Exempt Items in Price Indices

	Weight per 10,000	Examples of non-taxable items and tax-exempt items
DCGPI	0	-
CPI	2,874	
Goods	4	School textbooks
General services	2,137	House rent (private), imputed rent, high school fees (private), package tours to overseas, etc.
Public services	733	Medical treatment, automotive insurance premium (option), charges for accident insurance, etc.

Notes: 1. Weights of CPI components are proportionate to the "all items, less fresh food."

2. Weights of CPI components are the sum of weights of non-taxable items prescribed by Consumption Tax Act and "package tours to overseas," in which most of the services included are tax-exempt transactions.

(3) Effects of the Scheduled Consumption Tax Hikes on Price Indices

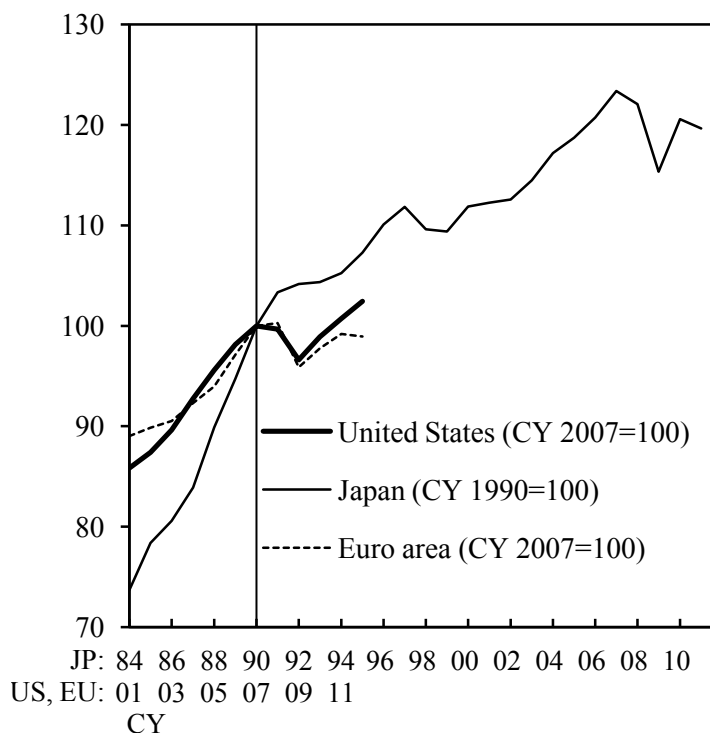
		% points	
		DCGPI	CPI (less fresh food)
Apr. 2014	Rate increase from 5% to 8%	2.9	2.0
Oct. 2015	Rate increase from 8% to 10%	1.9	1.3

Note: The tax increases are assumed to be fully passed on to the prices.

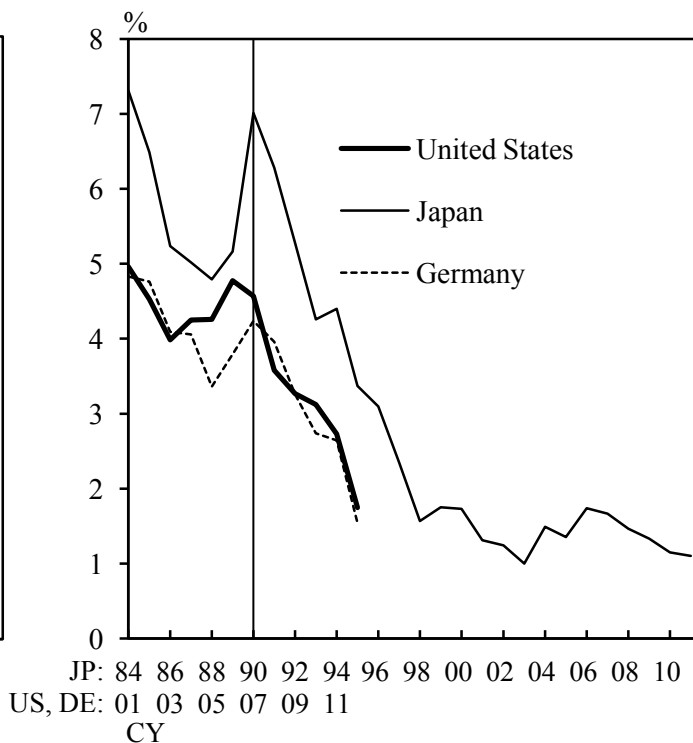
Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bank of Japan, "Corporate Goods Price Index"; National Tax Agency, etc.

Balance-Sheet Adjustment in Advanced Economies

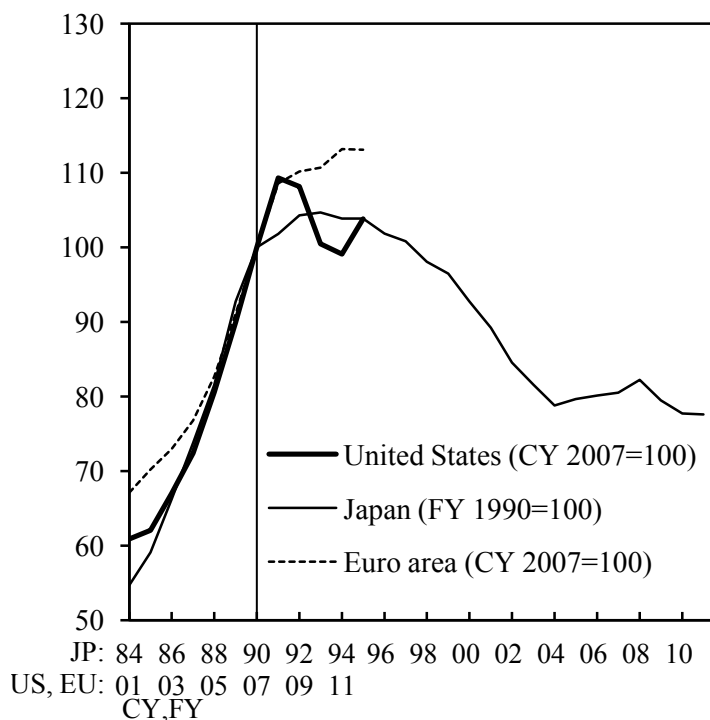
(1) Real GDP



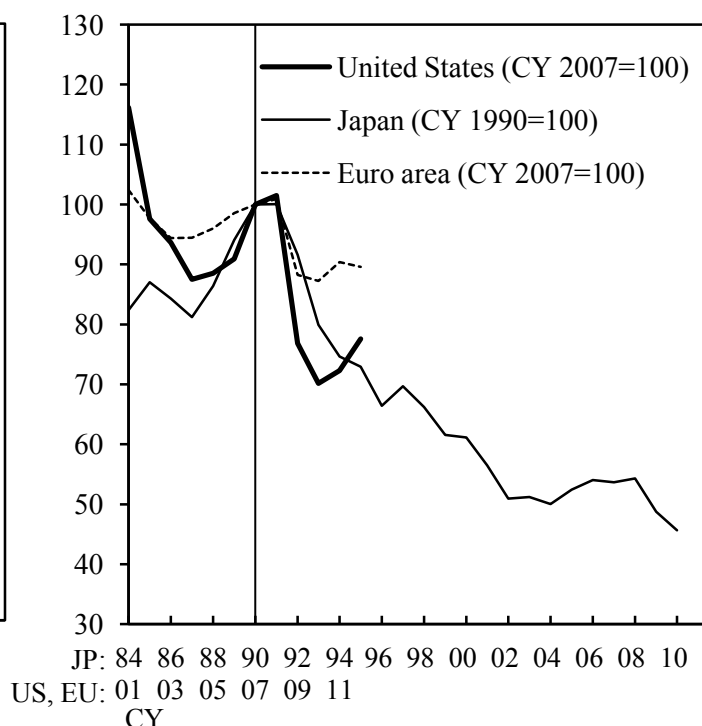
(2) Long-Term Interest Rates



(3) Lending



(4) Fixed Investment to Free Cash Flow Ratio

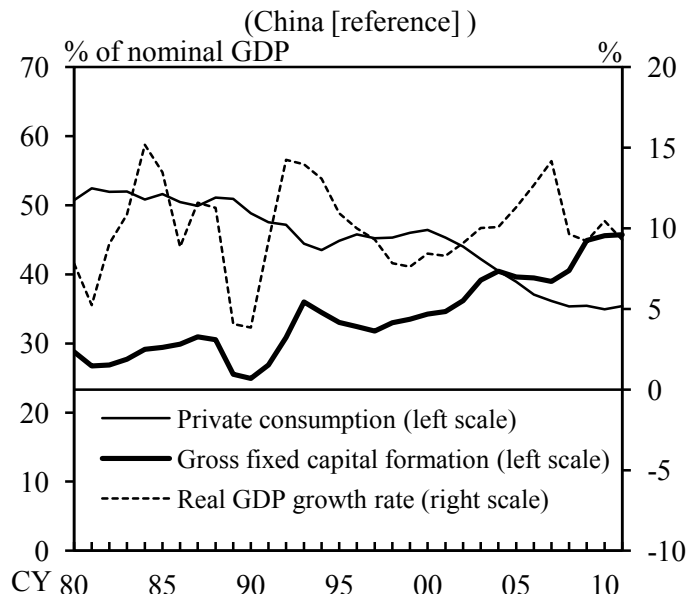
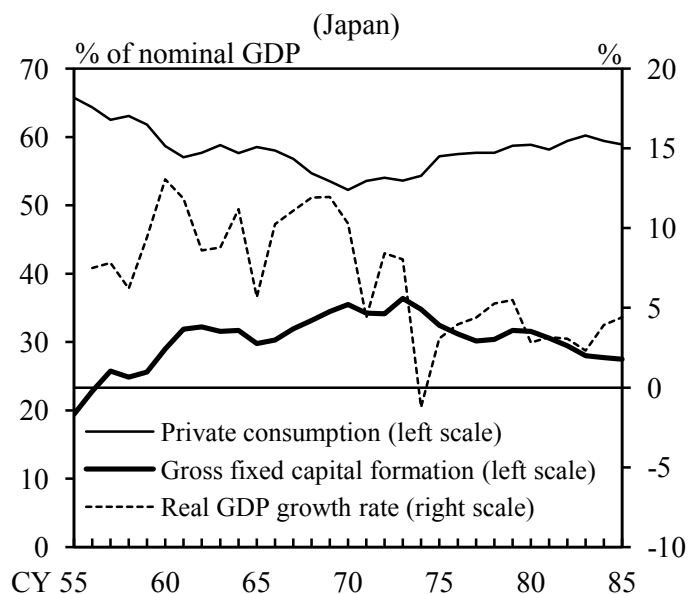


- Notes: 1. Lending data for the United States and the euro area are on a calendar-year basis, and those for Japan are on a fiscal-year basis.
2. "Cash flow" means "cash flow before paying dividend" for the figures of the United States and "consumption of fixed capital + gross operating surplus / 2" for those of the euro area. The figures for Japan are the same as the ones in Chart 43.

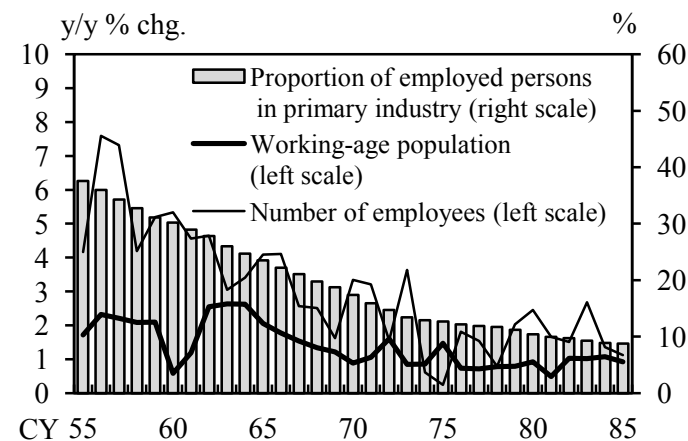
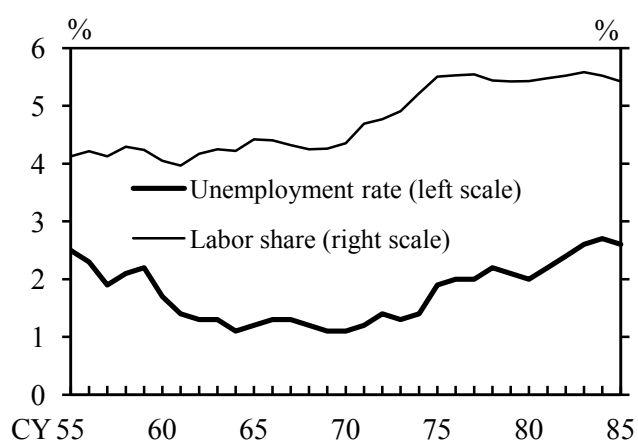
Sources: Cabinet Office, "National Accounts"; Bank of Japan, "Flow of Funds Accounts"; Japan Securities Dealers Association, "Reference Price for over-the-counter bond transactions"; Bureau of Economic Analysis; Federal Reserve Board; Eurostat; European Central Bank; Bloomberg.

Transition from High Growth to Stable Growth: Japan's Experience

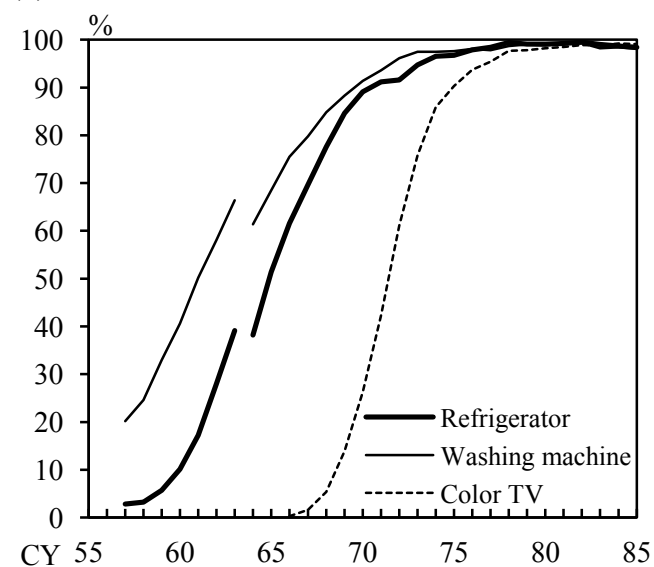
(1) Investment, Consumption-GDP Ratio, and Real GDP Growth Rate



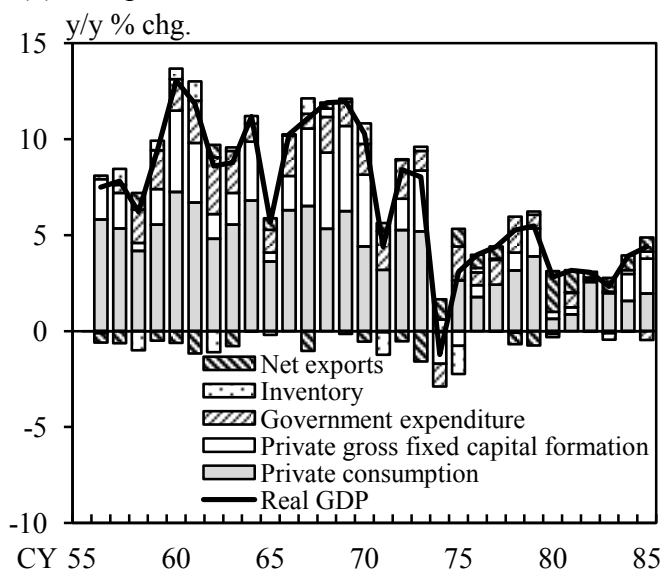
(2) Labor Market and Demographic Factor



(3) Penetration Rates for Durable Goods¹












(4) Composition of Real GDP Growth Rate



Note: 1. Figures up through 1963 are based on non-farmers in urban areas.

Sources: Ministry of Internal Affairs and Communications, "Historical Statistics of Japan"; Cabinet Office, "Monthly Consumer Confidence Survey"; CEIC, etc.

Economic Assessment by Region (Regional Economic Report)

Region	Assessment in July 2012	Changes from the previous assessment	Assessment in October 2012
Hokkaido	The economy has shown signs of picking up.		The economy has recently begun to show signs of weakness, although signs of a pick-up continue to be observed.
Tohoku	The economy has been recovering with a wide range of economic activities exceeding pre-earthquake levels, mainly due to a further rise in demand stemming from the disaster.		Although there seem to be some signs of weakness, the economy has been recovering as a whole, aided mainly by a significant increase in public investment.
Hokuriku	The economy continues to pick up as a whole, although the effects of the slowdown in overseas economies have been observed.		The economy has been more or less unchanged.
Kanto-Koshinetsu	The economy has begun to pick up moderately with firm domestic demand, supported mainly by reconstruction-related demand and improvement in consumer sentiment.		The economy has been more or less unchanged.
Tokai	The economy has been recovering moderately.		The recovery in economic activity has come to a pause.
Kinki	The economy continues to pause generally, although there are signs of picking up.		The economy continues to pause as a whole, but there seem to be some signs of weakness.
Chugoku	The economy is generally more or less unchanged, although there are signs of picking up.		The economy is more or less unchanged as a whole, but there seem to be signs of weakness, particularly in production, mainly reflecting a decline in exports.
Shikoku	The economy has been picking up.		The economy has been on a pick-up trend, but the pace of the pick-up has moderated.
Kyushu-Okinawa	The economy is picking up as a whole, although some signs of weakness have continued to be observed.		The pace of the pick-up in economic activity has moderated as a whole, mainly due to weaker exports and production.

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/rer121022.htm/>).

Source: Bank of Japan, "Regional Economic Report (Summary) October 2012."