Not to be released until 2:00 p.m. Japan Standard Time on Friday, May 1, 2009.

May 1, 2009
Bank of Japan

Outlook for Economic Activity and Prices

April 2009

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

[The Bank's View][1]

Economic conditions around the world have deteriorated simultaneously and sharply since the autumn of 2008 with the intensification of the turmoil in the U.S. and European financial systems and in global financial markets.[2] Recently, signs of a leveling out of economic activity are beginning to be seen globally against the backdrop of progress in inventory adjustments, and authorities in countries around the world are planning, or have already begun, to implement large-scale policy measures, which are expected to bear fruit in the near future. It is still not certain, however, whether these developments will lead to a steady recovery of the world economy. Projections regarding the world economy need to take into account how the restructuring of the U.S. and European financial systems is likely to proceed and how rapidly demand around the world, including that in emerging economies, is likely to recover. Due consideration has been paid to the uncertainties surrounding these issues in assessing the baseline scenario as well as risks to the outlook for Japan's economic activity and prices as detailed below. Meanwhile, possible spreading of the new type of influenza and its influence on economic activity need to be monitored carefully.

I. Outlook for Economic Activity

Economic conditions in Japan have deteriorated significantly. The economic growth rate for fiscal 2008 seems likely to have deviated substantially downward from the interim assessment conducted in January. In the corporate sector, exports have decreased significantly due to a sharp downturn in overseas economies, and business fixed investment has also declined substantially, reflecting the deterioration in corporate profits and financial conditions. In the household sector, private consumption has weakened against the backdrop of the deterioration in consumer sentiment and in the employment and income situation.

The outlook for Japan's economy from fiscal 2009 through fiscal 2010 is likely to greatly

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[1] The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on April 30, 2009.

[2] Since the autumn of 2008, forecasts of the real GDP growth rate by the Bank of Japan, international organizations, and private research firms have all been revised substantially downward at a rapid pace (Appendix Chart).

depend on developments in overseas economies and global financial markets. In the first half of fiscal 2009, it is expected that, while domestic private demand will continue to weaken, the pace of decline in exports and production will decelerate as inventory adjustments make progress both at home and abroad.[3] Therefore, the pace of deterioration in economic conditions will likely moderate gradually and start to level out. It is expected that, from the latter half of fiscal 2009 onward, global financial markets will regain stability and overseas economies start recovering, supported by the positive effects of policy actions taken in various countries and by the gradual adjustment of various excesses in financial and economic activity that had accumulated until around the mid-2000s. Japan's economy is also expected to recover gradually, and return to a growth rate above its potential in the latter half of the projection period, supported partly by the positive effects of measures to stabilize the financial system and of fiscal and monetary policy measures, in addition to a recovery in overseas economies and improvements in conditions in global financial markets.[4]

The key features of the outlook are as follows.

A. Overseas Economies

With the adverse feedback loop operating between financial and economic activity, overseas economic conditions are likely to continue deteriorating for the immediate future. In the United States, housing prices have declined sharply, adjustments in households' balance sheets are continuing, and lending attitudes of financial institutions remain tight. The employment situation and corporate profits are also deteriorating sharply. The resultant weakening in economic activity is having a negative impact on financial institutions' profits

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[3] In fiscal 2008, quarter-on-quarter real GDP growth rates declined substantially in the latter half of the year. Consequently, fiscal 2009 will have started from an extremely low level of real GDP, and the growth rate for fiscal 2009 will be substantially negative even if Japan's economy levels out some time in fiscal 2009. It should be noted that when fluctuations in economic activity are extremely large, quarter-on-quarter growth rates (annualized basis) may differ substantially from the growth rate for the fiscal year.

[4] Mainly reflecting the declines in the growth of capital stock due to the significant deterioration in economic conditions, Japan's potential growth rate is judged to have declined from the level previously estimated. The Bank's estimate of the potential growth rate during the current projection period is "around 1 percent" compared to "around 1.5 percent or somewhat higher" estimated in the October 2008 *Outlook for Economic Activity and Prices*.

through increased credit costs. Economic conditions in Europe are also likely to continue deteriorating due to a decrease in exports and tight financial conditions. In emerging and commodity-exporting economies, growth rates are likely to remain low.

Recently, however, signs of a leveling out of the world economy have begun to appear, as inventories worldwide are being adjusted and policy measures in China are starting to have an effect. Further ahead, from the latter half of fiscal 2009 onward, it is expected that the adjustment of various excesses in financial and economic activity that had accumulated until around the mid-2000s will make progress, and the positive effects of policy actions either implemented or being planned in various countries will gradually materialize. Overseas economies taken as a whole are therefore expected to start recovering.

B. The Corporate Sector

In the corporate sector, the terms of trade are expected to improve as the effects of the decline in commodity prices since the summer of 2008 gradually feed through. However, weak profits and the substantially depressed level of capacity utilization in the manufacturing sector will likely continue for the time being due to the deterioration in overseas economic conditions and the impact of the earlier appreciation of the yen. Such developments are also expected to adversely affect profits in the nonmanufacturing sector. Under these circumstances, business fixed investment is likely to continue decreasing in coming quarters. However, assuming that firms' expectations of medium- to long-term growth in global demand are not seriously dampened, growth in business fixed investment is expected to pick up gradually along with the recovery in exports and corporate profits.

C. The Household Sector

Private consumption is likely to weaken in coming quarters, reflecting the deterioration of the employment and income situation. Overtime hours worked have already decreased substantially, and adjustments in the number of non-regular employees are in progress. Going forward, given the likelihood of these developments leading to a substantial reduction in bonus payments and the curtailment of hiring of new graduates, the employment and income situation is likely to increase in severity in coming quarters. Further ahead, it is expected that real income will be boosted by the decline in the prices of consumer goods and services, and consumer sentiment will be underpinned by the expectation of positive effects resulting from various policy measures. However, the recovery in private consumption will likely remain sluggish during the projection period, given that improvements in the employment and income situation tend to lag behind any recovery in corporate profits.

D. Financial Conditions

The tightness in corporate financing conditions in Japan has eased somewhat relative to the latter half of calendar 2008, as seen in better issuing conditions in the CP and corporate bond markets. However, given the deterioration in corporate profits, the situation as a whole remains severe as an increasing number of firms are reporting that their financial positions are weak and lending attitudes of financial institutions are tight. In the first half of fiscal 2009, with respect to firms' demand for funds, their needs for operating funds will likely decline gradually against the backdrop of progress in inventory adjustments and declines in materials costs. Concerning the supply of funds, it is expected that improvements in the issuing conditions for CP and corporate bonds and increases in bank lending will continue due partly to the positive effects of various policy measures and continued low interest rates. The tightness in corporate financing, therefore, is likely to ease gradually. However, firms' concerns over their funding capability will likely persist, given that corporate profits will continue to be sluggish for some time and financial institutions and investors therefore remain cautious about taking on corporate credit risks.

Further ahead, it is expected that from the latter half of fiscal 2009 onward, economic activity and corporate profits will gradually pick up as global financial markets regain stability. Under these circumstances, financial conditions will likely gradually decrease in severity as the stability of Japan's financial system and financial markets is enhanced due partly to the positive effects of the various policy measures and, as a result, financial institutions' lending attitudes become favorable and investors' risk-taking capabilities improve. It is expected that these improvements in financial conditions will support the recovery of economic activity in the latter half of the projection period.

II. Outlook for Prices

Given this economic outlook, the environment surrounding prices can be summarized as follows. The current level of resource utilization, in terms of labor and production capacity, is substantially below its historical average and the negative output gap seems very large. Going forward, resource utilization is projected to recover gradually as the economy begins to recover, but the output gap is expected to remain negative even in the latter half of the projection period. Unit labor costs (labor costs per unit of output) are likely to be on a downtrend, after a temporary rise reflecting the sharp drop in production. Meanwhile, judging from developments in indicators such as long-term interest rates, medium- to long-term inflation expectations appear to be generally unchanged. In addition, commodity prices are projected to rise gradually as the world economy begins to recover.

Looking at price indices, the domestic corporate goods price index (CGPI) is expected to decline sharply in fiscal 2009 due to the earlier fall in commodity prices as well as the deterioration in demand conditions. The CGPI is projected to continue declining in fiscal 2010 due to the persistence of the negative output gap, but the rate of decline is likely to moderate against the backdrop of a moderate rise in commodity prices.

The year-on-year rate of decline in the consumer price index (CPI) for all items excluding fresh food is expected to accelerate through the middle of fiscal 2009, reflecting the decline in the prices of petroleum products, the stabilization of food prices, and the deterioration in aggregate demand conditions. Thereafter, however, assuming that medium- to long-term inflation expectations remain stable, the rate of decline in the CPI (excluding fresh food) is likely to moderate as the effects of the changes in the prices of petroleum products and food abate. Nevertheless, the rate of change in the CPI (excluding fresh food) is projected to remain negative in fiscal 2010 given the persistence of the negative output gap and continued weak developments in wages.

III. Upside and Downside Risks

The outlook above, considered the most likely projection by the Bank, is subject to both upside and downside risks with regard to economic activity and prices, and these require close attention especially when the outlook for economic activity and prices is extremely uncertain, as at present.

The following upside and downside risks bear upon the outlook for economic activity.

The first risk concerns the outcome of the adverse feedback loop operating globally between financial and economic activity. Since the autumn of 2008, the financial turmoil has been affecting not only the United States and Europe but also emerging and commodity-exporting economies, thereby leading to a global intensification of the adverse feedback loop between financial and economic activity. Should declines in asset prices and the downturn in economic activity continue despite the various policy measures being taken, the adverse feedback loop may worsen and result in a further weakening of overseas economies or a delay in the timing of their recovery. Even when strains in financial markets have eased, there is a possibility that financial institutions and investors will continue to maintain their cautious risk-taking stance and thereby restrain economic activity. Furthermore, should economic recovery in countries around the world be delayed, attention needs to be paid to a possible increase in protectionist actions triggered by such a delay since this may reduce the volume of trade and financial transactions, thereby exerting further downward pressure on the world economy.

In the United States, although some improvements have been observed in financial markets, the markets taken as a whole continue to be under great stress and labor market conditions are deteriorating rapidly. If the adverse feedback loop between financial and economic activity should intensify, reflecting a continued decline in asset prices and an increase in impaired assets, the economy may become weaker than assumed. In Western Europe, the adverse feedback loop may worsen, as in the United States, due to the deterioration in economic activity. Furthermore, a weakening of European emerging economies, which are major trading partners of Western European economies and whose share of Western European financial institutions' lending has been large, may exert further downward pressure on European economies as a whole. Many emerging and commodity-exporting economies have experienced a sharp drop in exports and an outflow of funds. Their economic downturn may lead to a further increase in the outflow of funds, and this may exert further downward pressure on economic activity.

The second risk concerns the impact of various policy measures being implemented around the globe. At present, many countries, including Japan, have taken measures to stabilize their financial systems and introduced stimulative fiscal and monetary policy measures. Specifically, the key issues are whether the United States and Europe can make progress in restoring confidence in their financial systems and whether the measures taken by countries around the world can succeed in underpinning global demand. The effects of these measures on domestic demand have already started to be observed in some countries such as China, and some improvements have been observed in financial markets in various countries. It should be noted, however, that many of the measures announced by countries around the world have only been planned or have only just begun to be implemented. Therefore, there are both upside and downside risks to the outcome of these measures and to their impact on the economies of these countries.

The third risk concerns firms' medium- to long-term expectations of future growth. In this outlook, it is assumed that firms' medium- to long-term expectations of global demand will not decline greatly despite the current significant downturn in the economy, and thus that business fixed investment will recover at a moderate pace as adjustments in overseas economies progress. However, if the adjustments in overseas economies should deepen further or become prolonged, firms' medium- to long-term growth expectations may decline further, causing the projections, especially those concerning business fixed investment, to deviate downward. There is also a risk that a decline in firms' medium- to long-term growth expectations may affect the employment and income situation, and ultimately restrain household spending through a decline in permanent income.

The fourth risk concerns developments in financial conditions in Japan. There is a possibility that, if increased strains in global financial markets have a larger negative impact on Japanese financial markets, or if the stability of the financial system is impaired by increased credit risks reflecting continued sluggishness in corporate performance, pressures acting to depress the economy from the financial side may become more marked, thereby intensifying the adverse feedback loop between financial and economic activity. On the other hand, from a longer-term perspective, attention should continue to be paid to the risk that prolonged accommodative financial conditions together with a gradual rise in the economic growth rate may lead to larger swings in financial and economic activity as well as in prices.

Turning to the outlook for inflation, it should be noted that there are also considerable uncertainties attending inflation that could cause it to deviate either upward or downward from the projection. If any of the above-mentioned upside or downside risks affecting the level of economic activity should materialize, prices may be expected to respond accordingly. There are also the following risks that are specific to prices. The first of these concerns changes in the medium- to long-term inflation expectations of households and the price-setting behavior of firms. Demand conditions in Japan are likely to remain slack, and to continue to exert downward pressure on prices. Under these circumstances, should firms and households expect a continued decline in prices, the decline in prices may accelerate along with the decline in wages. The second risk concerns developments in import prices. Considerable uncertainty surrounds developments in prices of commodities such as crude oil, leaving potential for movement in either direction. In the short run, there is a risk of commodity prices falling, reflecting the weaker-than-expected world economy. On the other hand, in the longer run, should the current extremely stimulative economic measures be maintained amid a recovery of the world economy, commodity prices may rise more than expected. Fluctuations in foreign exchange rates can also affect consumer prices not only by influencing the level of economic activity but also through changes in import prices.

IV. Conduct of Monetary Policy

To realize sustainable growth with price stability, the Bank assesses the economic and price situation from two perspectives and then outlines its thinking on the future conduct of monetary policy, taking account of the "understanding of medium- to long-term price stability" -- that is, the level of inflation that each member of the Policy Board understands, when conducting monetary policy, as being consistent with price stability over the medium to long term.[5]

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[5] The "understanding of medium- to long-term price stability" -- reviewed annually in principle and expressed in terms of the year-on-year rate of change in the CPI -- was reviewed in April 2009 and falls in the range approximately between 0 and 2 percent, with most Policy Board members' median figures at around 1 percent.

The first perspective involves assessing the most likely outlook for economic activity and prices through fiscal 2010. As noted earlier, economic conditions are likely to continue deteriorating in coming months but gradually level out thereafter, and the growth rate is expected, from the latter half of fiscal 2009, to recover at a moderate pace. The year-on-year rate of change in the CPI (excluding fresh food) is likely to record a somewhat large decline through the middle of fiscal 2009, but the rate of decline is expected to moderate gradually thereafter. If these developments continue, there are prospects for the economy to return to a sustainable growth path with price stability in the longer run.

The second perspective assesses the risks considered most relevant to the conduct of monetary policy, including risks that have a longer time horizon than the first perspective. In the area of economic activity, those that demand attention are the continued high downside risks to the economy stemming from future developments in the global financial and economic situation, changes in medium- to long-term growth expectations, and financial conditions in Japan. Regarding the outlook for prices, there is a possibility that inflation will decline more than expected, if the downside risks to the economy materialize or medium- to long-term inflation expectations decline. On the other hand, in the medium to long run, should the current extremely stimulative economic measures be maintained amid a recovery of the world economy, the rate of inflation in Japan might rise higher than projected due, for example, to a further rise in commodity prices.

Based on the examination from the two perspectives described above, there are prospects for Japan's economy to return to a sustainable growth path with price stability in the longer run. However, attention should be paid to the downside risks to economic activity and prices for the time being.

The ongoing global financial crisis and the current sharp drop in economic activity appear to have occurred during the process of the unwinding of various excesses in financial and economic activity that had accumulated until around the mid-2000s. The adjustment of these excesses is indispensable for the world economy to achieve a full-fledged recovery, and this is likely to take some time. In this situation, economic policies should prevent economic activity from deteriorating further and continue to correct the excesses as smoothly as possible. To achieve these aims, measures from two standpoints -- the provision of various safety nets, and the prevention of a sharp drop in demand -- are crucially important. Governments and central banks in countries around the globe, including Japan, have been taking various measures from these standpoints.

In order to support the economy from the monetary policy side, the Bank has taken various steps since last autumn, which can be divided into three main areas: reductions in the policy interest rate; measures to ensure stability in financial markets; and steps to facilitate corporate financing. In addition, to secure the stability of the financial system, the Bank resumed its purchases of stocks held by banks, and also decided to provide subordinated loans to banks. The Bank, paying attention for the time being to the downside risks to economic activity and prices, will continue to exert its utmost efforts as the central bank to facilitate the return of Japan's economy to a sustainable growth path with price stability.

(Appendix 1)

Forecasts of the Majority of Policy Board Members

y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2008	-3.2 to -3.1 [-3.2]	+3.3	+1.2
Forecasts made in January 2009	-2.0 to -1.7 [-1.8]	+3.0 to +3.2 [+3.1]	+1.1 to +1.2 [+1.2]
Fiscal 2009	-3.7 to -3.0 [-3.1]	-7.6 to -6.9 [-7.5]	-1.6 to -1.4 [-1.5]
Forecasts made in January 2009	-2.5 to -1.9 [-2.0]	-7.0 to -6.0 [-6.4]	-1.2 to -0.9 [-1.1]
Fiscal 2010	+ 0.8 to +1.5 [+1.2]	-2.4 to -1.4 [-1.8]	-1.1 to -0.8 [-1.0]
Forecasts made in January 2009	+1.3 to +1.8 [+1.5]	-1.5 to -0.8 [-0.9]	-0.6 to 0.0 [-0.4]

Notes:
1. Figures in brackets indicate forecast medians.
2. The forecasts of the majority of 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. It should be noted that the range does not indicate the forecast errors.
3. In the past, real GDP for the fiscal year just ended was calculated on the assumption that the level of real GDP in the January-March quarter equaled that in the October-December quarter. This time, the Bank decided to post Policy Board members' forecasts of real GDP for fiscal 2008 taking account of developments in economic data in the January-March quarter of 2009. Note, however, that the domestic CGPI for fiscal 2008 is the actual figure, and the CPI (excluding fresh food) for fiscal 2008 is calculated on the assumption that the year-on-year rate of change in the CPI for March 2009 equals that in February.
4. 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.
5. The range shown below includes the forecasts of all Policy Board members.

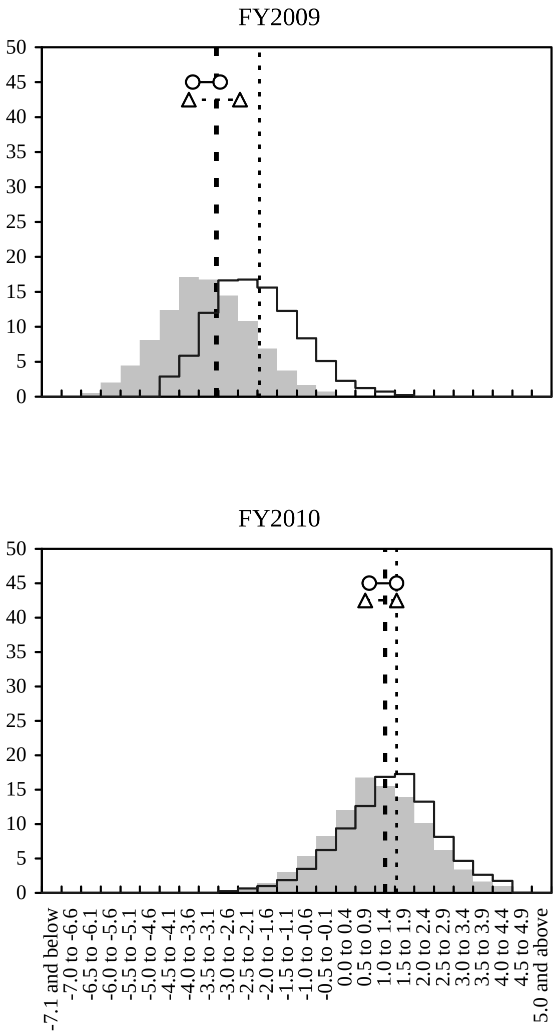
y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2008	-3.2 to -3.0	--	--
Forecasts made in January 2009	-2.0 to -1.6	+2.8 to +3.2	+1.0 to +1.2
Fiscal 2009	-3.8 to -2.5	-7.8 to -6.8	-1.8 to -1.2
Forecasts made in January 2009	-2.8 to -1.8	-7.0 to -5.0	-1.3 to -0.8
Fiscal 2010	+0.7 to +1.5	-2.6 to -1.3	-1.2 to -0.4
Forecasts made in January 2009	+1.2 to +2.0	-1.8 to -0.5	-0.7 to 0.0

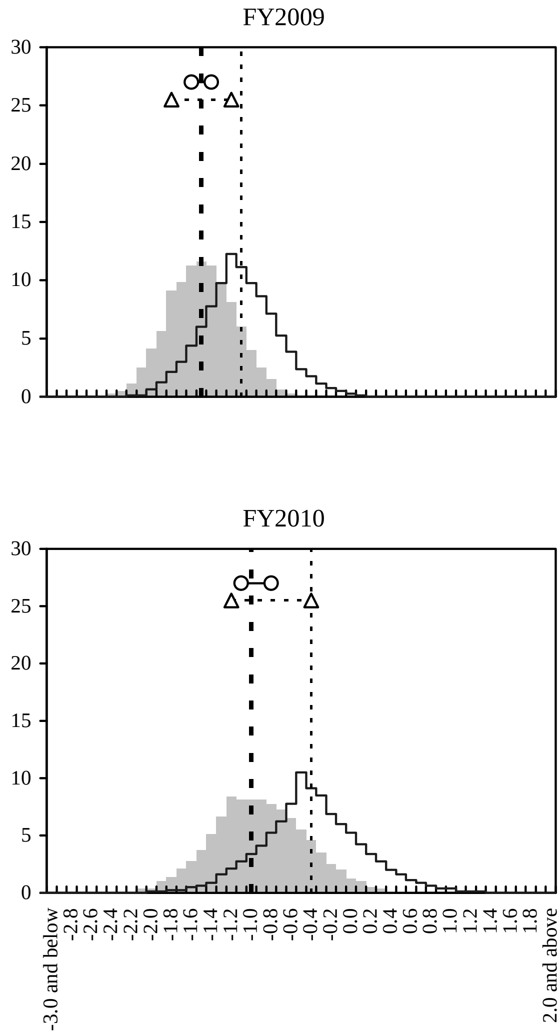
(Appendix 2)

Risk Balance Charts

(1) Real GDP



(2) CPI (Excluding Fresh Food)



Notes: 1. Vertical axes in the charts represent probability (%), while horizontal axes represent the year-on-year percentage changes in the respective indicators. Bar charts represent the probability distributions in April 2009, and solid lines represent those in January 2009.

2. Vertical dashed heavy lines indicate the median of the Policy Board members' forecasts (point estimates). ○——○ indicates the range of the forecasts of the majority of Policy Board members. △- - -△ indicates the range of the forecasts of all Policy Board members.

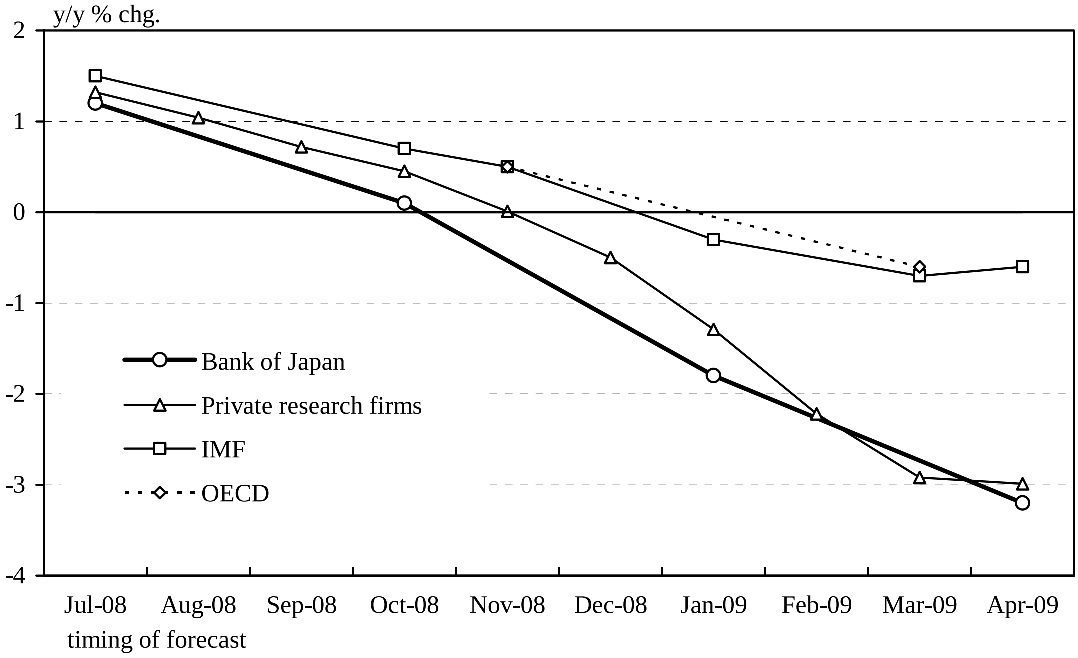
3. Vertical dashed thin lines indicate the median of the Policy Board members' forecasts (point estimates) in January 2009.

4. 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.*

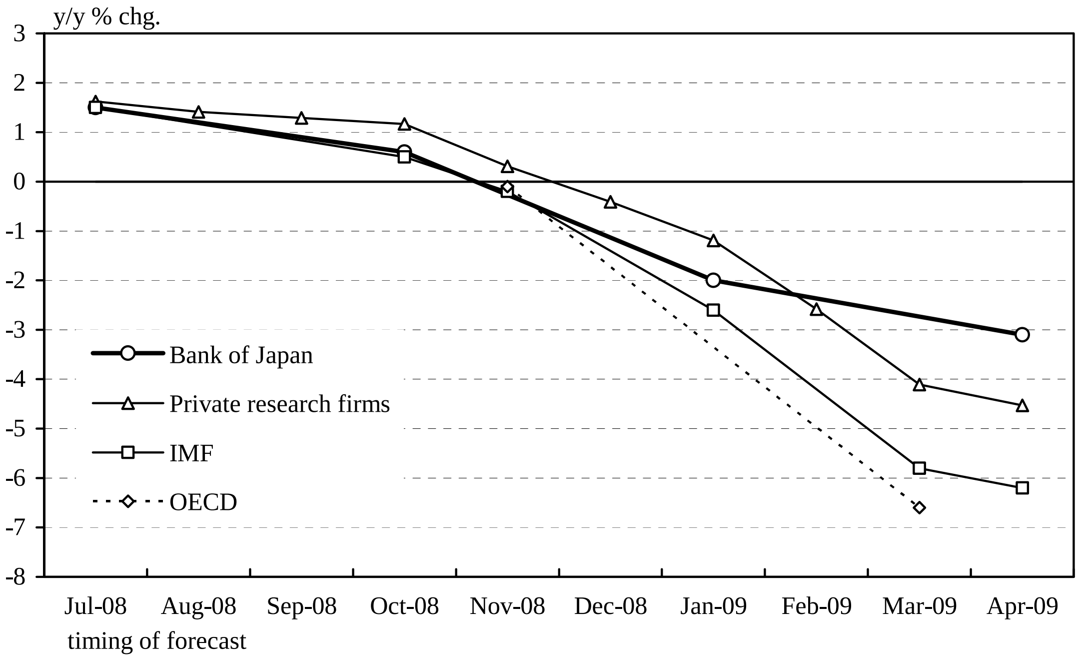
(Appendix Chart)

Revisions of Real GDP Growth Forecasts

(1) FY 2008



(2) FY 2009



Notes: 1. Figures for the Bank of Japan indicate forecast medians of Policy Board members.
2. Figures for private research firms are those of the ESP Forecast.
3. Figures for the IMF and the OECD are on a calendar-year basis.

Sources: Bank of Japan; Economic Planning Association, "ESP Forecast"; IMF, "World Economic Outlook"; OECD, "Economic Outlook," etc.

[The Background]

I. Economic Activity, Prices, and Monetary and Financial Developments in Fiscal 2008

A. Economic Developments

Looking back at economic developments in Japan during fiscal 2008, some weakness was observed in domestic private demand from around the spring of 2008, which emerged due mainly to the rise in energy and materials prices (Chart 1). Exports, previously the main engine of growth, also started to level off against the background of the slowdown in overseas economies. Subsequently, the turmoil in global financial markets and in the U.S. and European financial systems increased in severity, triggered by the failure of Lehman Brothers Holdings Inc. in the early autumn of 2008, and the world economy entered a severe adjustment phase. This had a strong negative impact on financial and economic developments in Japan, and Japan's economic conditions deteriorated significantly toward the fiscal year-end.

Specifically, exports, after leveling off in the first half of fiscal 2008, decreased substantially in the latter half -- not only to the United States and Europe but also to emerging and commodity-exporting economies -- due to the appreciation of the yen and firms' efforts to reduce inventories abroad amid the deterioration in overseas economic conditions taken as a whole (Chart 2). Real imports also started to fall, but the degree of the fall was smaller than that of exports. As a result, net exports, in terms of the real trade balance, decreased substantially in the latter half of fiscal 2008. Corporate profits, particularly of manufacturers, decreased at a faster pace. Despite the fact that energy and materials prices, which had risen sharply until the summer of 2008, started to fall in the autumn, the ratio of current profits to sales declined significantly in the latter half of fiscal 2008, since the negative effects of the drop in the sales volume far exceeded the positive effects on profits from the declines in energy and materials prices (Chart 3). The ratio of current profits to sales became negative at large manufacturers in the latter half of fiscal 2008 because of the susceptibility of their performance to overseas economic developments. Under these circumstances, business sentiment, especially of large manufacturers, deteriorated significantly. The March *Tankan* (Short-Term Economic Survey of

Enterprises in Japan) showed that business sentiment deteriorated at the fastest pace ever since the first compilation of the *Tankan*, regardless of the type of industry (manufacturing or nonmanufacturing) or firm size (large or small). Given these conditions, business fixed investment declined substantially. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly*, nominal business fixed investment in the manufacturing sector, especially in small firms, decreased at a much faster pace in the October-December quarter of 2008 than in the July-September quarter (Chart 4). As for the nonmanufacturing sector, investment by the leasing industry plunged due to the change in accounting standards for finance lease transactions, and investment by other industries was also relatively weak.[6] Private consumption weakened markedly, as the employment and income situation became increasingly severe from the autumn onward (Chart 5 [1]). Although the prices of daily necessities such as petroleum products and food regained stability, consumer sentiment indicators fell below the levels recorded around 2001-03, which were the lowest levels ever, mainly due to the drop in stock prices and growing employment uncertainty (Chart 5 [2]). Housing investment picked up briefly from the earlier fall as the effects of the revision of the Building Standard Law waned, but began decreasing again toward the end of fiscal 2008, reflecting the severe employment and income situation and the increase in inventories of unsold condominiums. Meanwhile, public investment remained sluggish due to tight national and local fiscal conditions.

Reflecting these developments in demand both at home and abroad and adjustment pressures on inventories, industrial production decreased at a much faster pace from the October-December quarter (Chart 6). In the January-March quarter of 2009, firms began

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[6] Most leased property in finance lease transactions was previously booked as fixed assets (business fixed investment) on the lessor's side (leasing companies) and treated off the balance sheet on the lessee's side (firms). However, under the new accounting standards for lease transactions, applied from the fiscal year starting on and after April 1, 2008, leased property is booked as liquid assets on the lessor's side and as fixed assets on the lessee's side. Since the difference concerns the side on which business fixed investment is counted, the aggregate amount of business fixed investment is basically unaffected, but there can be effects related to special exemptions. That is, in cases in which the lessee is a small firm or in which the value of the leased property is low, lessees do not have to change their accounting procedures. Therefore, as a whole, only the negative impact on leasing companies remains. The fact that the timing of the change in accounting procedure is not the same for all firms also affects the aggregates.

to rapidly reduce accumulated inventories at home and abroad, and production declined by more than 20 percent from the previous quarter. The indices of all industrial activity showed that, through the January-March quarter, production by manufacturers dropped sharply; there was also a significant drop in nonmanufacturing activity, especially in industries such as wholesaling and transportation, which tend to be strongly affected by developments in the manufacturing industry (Chart 7).

As a result of the significant downturn in economic activity in the latter half of fiscal 2008, real GDP in fiscal 2008 is likely to have registered a decrease of around 3 percent. This is significantly worse than the growth rate projected in the October 2008 *Outlook for Economic Activity and Prices* (Outlook Report) as well as in the interim assessment in January. The following factors lie behind the significant downturn in Japan's economy. First, global credit contraction and the resulting contraction in economic activity and trade progressed at a pace faster than anticipated. Second, the drop in global demand was particularly large for durable consumer goods and capital goods, in which Japanese manufacturers have a competitive edge, and the appreciation of the yen was also disadvantageous to Japan's exports.[7] And third, under these circumstances, Japanese firms' expectations for medium- to long-term growth declined slightly. Due to the global credit contraction, not only the U.S. and European economies but also emerging and commodity-exporting economies experienced a slowdown, and demand for capital goods and durable consumer goods in these economies dropped significantly. These developments suggest that the rapid growth of emerging and commodity-exporting economies in the past several years was supported, to no small extent, by an excessive credit expansion. Japanese business leaders also see the current global financial crisis as the unwinding of various excesses that had accumulated over the past several years, and think that it will take time for the adjustment to be completed.

Reflecting these economic developments, resource utilization in terms of labor and production capacity dropped significantly (Chart 8). The *Tankan* composite indicator, a weighted average of the diffusion indices of production capacity and employment

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[7] For details, see the Box titled "Recent Substantial Decrease in Industrial Production" in the February 2009 *Monthly Report of Recent Economic and Financial Developments*.

conditions where indices are weighted by capital and labor income shares in the national accounts, indicated that economic slack substantially increased. Moreover, the estimate of the output gap was only slightly negative in the first half of fiscal 2008, but in the latter half it declined further to its lowest recorded level.[8]

B. Price Developments

As for prices, the effects of the significant rise in commodity prices toward the middle of 2008 and the drop thereafter spread to both wholesale and retail prices in Japan with a slight time lag (charts 9 and 10). The year-on-year rate of change in the domestic corporate goods price index (CGPI) reached 7.6 percent in August 2008, but declined rapidly thereafter, and became negative around the fiscal year-end. The year-on-year rate of increase in the consumer price index (CPI) for all items excluding fresh food rose to 2.4 percent in July and August 2008 due mainly to increases in energy and food prices, but declined from September due mainly to the fall in prices of petroleum products, and moderated further to 0 percent from the beginning of 2009 (Chart 11). The year-on-year rate of change in the CPI excluding food and energy was slightly positive in the latter half of 2008, but became slightly negative from the beginning of 2009. These developments reflect the fact that, in a situation where domestic demand conditions were deteriorating, the number of firms that lowered sales prices gradually increased due to fierce competition.

Looking at the year-on-year rate of change in prices for fiscal 2008, the CGPI recorded an increase of 3.3 percent, while the CPI (excluding fresh food) is likely to have registered a rise of slightly above 1 percent. Both the CGPI and the CPI were slightly lower than projected in the October 2008 Outlook Report, due mainly to the fall in commodity prices, which was greater than anticipated. Compared with the projections in the interim assessment in January, developments in both the CGPI and the CPI were generally in line with them.

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[8] Based on available data, the negative output gap is estimated to have widened in the October-December quarter of 2008, reaching minus 3.8 percent. In view of recent developments in economic activity, the negative output gap is likely to have widened even more significantly in the January-March quarter of 2009. The negative output gaps recorded at the bottom of the last two business cycles were minus 3.5 percent in the April-June quarter of 1999 and minus 3.3 percent in the January-March quarter of 2002.

C. Financial Market Developments

After the U.S. subprime mortgage problem surfaced in the summer of 2007, global financial markets continued to be unstable. Strains intensified significantly from mid-September 2008, with a series of failures and rescues of U.S. and European financial institutions. Pressures in U.S. and European money markets mounted, and spreads between interbank rates and yields on short-term government securities widened considerably (Chart 12). Meanwhile, the turmoil in financial markets spread to emerging economies, causing the currencies of many of these economies to depreciate, sovereign risk premiums to rise, and capital to flow out.

In tandem with the turmoil in global financial markets, economic conditions deteriorated rapidly on a global basis. In this situation, central banks around the world conducted a series of large reductions in policy interest rates and also provided markets with substantial liquidity to ensure market stability. In particular, in response to intensified pressures in U.S. dollar funding markets around the world, from September the Bank of Japan and other central banks put in place temporary reciprocal currency arrangements (swap lines) with the Federal Reserve, and introduced operations to provide dollar liquidity. In addition, to address the credit contraction in corporate financing and the reduced functioning of various financial markets, some central banks started to implement unconventional measures such as purchases of private debt (Box 1). Meanwhile, governments around the world adopted and implemented policy measures to ensure financial system stability as well as expansionary fiscal measures. Thanks to these various policy measures, the intense strains in global financial markets eased somewhat toward the end of 2008. Nonetheless, financial markets worldwide remained nervous as a whole even after the turn of the year, as evident in persistent wide credit spreads, such as those on corporate bonds, and in large fluctuations in stock prices, against the background of a deterioration in corporate performance.

From last autumn, the turmoil in global financial markets began to affect Japan's financial markets. In money markets, for example, from mid-September uncollateralized overnight call rates exhibited greater dispersion due to increased risk aversion among market participants, and interbank rates on term instruments in some cases edged up (Chart 13).

Interest rates on Euroyen futures and various forward rates also edged up temporarily (Chart 14). Toward the turn of the year, however, the dispersion in call rates diminished, and after the turn of the year interest rates on term instruments declined gradually.

Long-term interest rates in Japan fell until around the end of 2008, reflecting the economic downturn, but were more or less flat thereafter (Chart 15). Japanese stock prices declined sharply from mid-September, in line with declines in U.S. and European stock prices, against the backdrop of concerns about the U.S. and European financial systems and the deterioration in global economic conditions (Chart 16). There was a temporary respite amid high expectations of various policy measures adopted around the world, but after the turn of the year stock prices continued to decline gradually due to markets' concerns about worsening economic conditions. Subsequently, however, Japanese stock prices began to rise due to the depreciation of the yen and expectations of economic recovery. The yen appreciated until around the end of 2008 against the background of concerns about a weakening of the U.S. economy, and then depreciated slightly (Chart 17).

D. The Financial Environment

The financial environment in Japan deteriorated sharply until around the end of 2008 and remained severe after the turn of the year. In this situation, the Bank took various steps, which can be divided into three main areas: reductions in the policy interest rate; measures to ensure stability in financial markets; and steps to facilitate corporate financing (Chart 18 and Box 1).

Although the overnight call rate was at an extremely low level following two policy interest rate reductions, the stimulative effects from this became increasingly limited given the significant deterioration in economic activity (Chart 19).

Firms' funding costs edged up, mainly as a result of wider credit spreads on CP and corporate bonds (Chart 20 [1] and [2]). This was because financial institutions and investors became increasingly risk-averse from the autumn of 2008 onward due to the turmoil in global financial markets and also because there was an increase in the demand for funds reflecting efforts by firms to secure more liquidity. After the turn of the year, however, the effects of the policy rate reductions and the provision of substantial liquidity by the Bank as well as various measures to facilitate corporate financing filtered through, leading to a narrowing of credit spreads on CP with high ratings and a gradual decline in bank lending rates. Consequently, firms' funding costs as a whole declined (Chart 21 [1]).

With regard to corporate funding, demand for funds rose from the autumn of 2008 as firms sought to compensate for the decline in operating cash flows and secure more liquidity. In spite of this, issuance of CP and corporate bonds dropped sharply as financial institutions and investors had substantially less appetite for investing in them against the backdrop of the turmoil in global financial markets (Chart 20 [3]). Meanwhile, bank lending, especially to large firms, increased at a faster pace toward the year-end, as firms sought to compensate for the decline in the issuance of CP and corporate bonds and to secure more liquidity, despite the more severe lending stance of private financial institutions (Chart 21 [2]). After the turn of the year, however, the issuing environment for CP and corporate bonds improved due mainly to the effects of various policy measures, and consequently the amount outstanding of CP and corporate bonds issued was on a recovery trend. The rate of growth in bank lending slowed reflecting a drop in the demand for loans to compensate for the decline in the issuance of CP and corporate bonds, but nevertheless continued to rise at a relatively high pace due to increased demand for operating funds and continued efforts to secure more liquidity. Meanwhile, financial institutions became cautious in taking credit risks against the backdrop of developments in stock prices and corporate profits, and the number of firms reporting that their financial positions were weak and that lending attitudes of financial institutions were severe increased significantly (Chart 22).

The year-on-year rate of growth in the money stock (M2) continued to be around 2 percent, while the amount outstanding of broadly-defined liquidity, which includes investment trusts and Japanese government bonds (JGBs) in addition to the money stock, declined to slightly below the previous year's level due mainly to slower growth in investment trusts (Chart 21 [3]).

Land prices started to decline in metropolitan areas, while the fall in land prices in other areas accelerated. According to the Land Price Publication (prices as of January 1, 2009), both commercial and residential land prices in the three major metropolitan areas (Tokyo, Osaka, and Nagoya) began declining (Chart 23). In particular, the fall in land prices in the 23 wards of Tokyo accelerated compared with six months ago.[9]

II. The Outlook for Economic Activity and Prices from Fiscal 2009 through Fiscal 2010

A. Projections for Economic Activity and Prices

The Bank's projections for economic activity in Japan from fiscal 2009 through fiscal 2010 assume that the pace of deterioration in economic conditions will moderate gradually and start to level out in the first half of fiscal 2009 due to gradual progress in inventory adjustments at home and abroad and some support for domestic private demand through improvements in the terms of trade. It is expected that from the latter half of fiscal 2009 onward, there will be no further decline in the medium- to long-term growth expectations of the private sector and that Japan's economy will recover gradually provided that (1) global financial markets regain stability and overseas economies start to recover gradually as the policy measures around the globe begin to show effects, and (2) the impact of the various policy measures taken in Japan starts to gradually be felt. However, the momentum of recovery in overseas economies is likely to remain only moderate through fiscal 2010 -- the end of the projection period -- since it will likely take considerable time for the adjustments of the various excesses in the global economy that had accumulated over the past several years to be completed. In this situation, the pace of recovery of Japan's economy is expected to be moderate, with pressure to adjust capital stock and employment persisting.

Expressing these projections in terms of changes in real GDP, real GDP for the first half of fiscal 2009, even if the economy were to start leveling out in this period, is likely to be lower than that for the latter half of fiscal 2008, since fiscal 2009 will have started from an extremely low level of real GDP reflecting the substantial decline in the latter half of fiscal 2008. However, it is possible that in the latter half of fiscal 2009 a relatively high positive growth rate may be attained, supported by the progress in inventory adjustments at home

[9] Land prices are compared for areas that are surveyed in both the Land Price Publication (prices as of January 1) and the Prefectural Land Price Survey (prices as of July 1).

and abroad.[10] In the latter half of the projection period, Japan's economy is expected to return to a growth rate above its potential, which is estimated to be around 1 percent, as recovery in overseas economies gradually takes hold.[11]

On a fiscal-year basis, the real GDP growth rate, after declining by around 3 percent in fiscal 2008, is likely to fall substantially in fiscal 2009, even if the economy starts to recover in the latter half of fiscal 2009, since fiscal 2009 will have started from an extremely low level of real GDP reflecting the substantial decline in the latter half of fiscal 2008. As a result, real GDP growth for fiscal 2008 and 2009 is expected to be significantly weaker than projected in the October 2008 Outlook Report and the interim assessment in January, and the decline in real GDP for the two years taken together is likely to be significantly larger than the largest previous decline recorded in fiscal 1997 and 1998 (1.5 percent in total). Therefore, even if economic growth recovers in fiscal 2010, economic conditions are unlikely to be regarded as favorable.

Considering these developments in terms of the investment-saving balance, while the public-sector fiscal deficit is expected to expand substantially in fiscal 2009, net saving in the private sector is likely to increase, especially in the corporate sector, where it is expected that the decline in business fixed investment and inventory investment will exceed the drop in corporate profits (Chart 25). In fiscal 2010, net saving in the private sector is then

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[10] The level of inventories on a GDP basis is likely to have been highly excessive at the end of 2008 (Chart 24 [1]). It therefore seems reasonable to assume that (1) the amount outstanding of inventories has started to decrease since early 2009, and that (2) the pace of decrease in the amount outstanding of inventories will moderate at some point during the projection period, possibly in the latter half of fiscal 2009. Given that it is the difference in inventory investment (i.e., the difference in the change in the level of inventories) from the previous period that affects the GDP growth rate, inventory investment will be making a large negative contribution to GDP during phase (1) and a positive contribution during phase (2) (Chart 24 [2] and [3]).

[11] The potential GDP growth rate was estimated by the Bank to have risen to 1.5 percent or somewhat higher in fiscal 2005 to 2007 from around 1 percent in fiscal 2003 and 2004. However, given the recent significant downturn in economic activity, the Bank's estimate of the potential growth rate has been revised downward to around 1 percent. It should be noted, however, that these estimates of the potential growth rate as well as the output gap (conceptually the difference between actual and potential output -- to be described later) are subject to a certain margin of error. See Box 2 for uncertainty about the estimates of the potential growth rate and the output gap.

expected to remain more or less unchanged, whereas the public-sector fiscal deficit is expected to decrease somewhat. Mirroring these developments, the current account surplus, after decreasing significantly in fiscal 2008, is expected to increase at a very moderate pace through fiscal 2010. Nevertheless, the level of the current account surplus for fiscal 2010 is likely to remain substantially lower than that registered at its peak for fiscal 2007, when it was equivalent to 4.8 percent of nominal GDP.

Regarding the environment surrounding prices, through the first half of fiscal 2009, the level of resource utilization, in terms of labor and production capacity, is expected to remain very low and supply and demand conditions to remain extremely slack. Going forward, resource utilization is projected to recover gradually, but to remain low during the projection period. Unit labor costs (labor costs per unit of output), after having temporarily risen significantly reflecting the economic downturn, are likely to decline rapidly from the latter half of fiscal 2009 reflecting the continued decrease in employment and wages for some time despite the economic recovery (Chart 26). Meanwhile, commodity prices are projected to start rising again as world economic growth recovers, but the pace of increase is likely to be only moderate. Looking at households' inflation expectations estimated based on the Bank's *Opinion Survey on the General Public's Views and Behavior*, the expected rate of inflation over a period of one year rose to around 1 percent in the summer of 2008, but has recently declined to around 0 percent due to a decline or leveling off in the prices of frequently purchased items such as petroleum products and food (Chart 27). The expected rate of inflation over the next five years, after having risen in the past, has also been declining at a moderate pace, but compared to the expected rate of inflation over a period of one year, it has remained relatively stable over the past several years at a slightly positive level. Judging from developments in indicators such as long-term interest rates, medium- to long-term inflation expectations appear to be generally unchanged.

Based on the above assessment, it is likely that the pace of decline in prices, including those at the retail level, will accelerate until around the middle of fiscal 2009 reflecting the sharp drop in commodity prices since the summer of 2008 and the deterioration of demand conditions in the macroeconomy. Further ahead, through fiscal 2010, it is projected that the pace of decline in consumer prices is likely to moderate as commodity prices start to rise gradually and the economy starts to recover. However, strong downward pressure on prices will likely continue given the persistence of the negative output gap in the economy.

The year-on-year rate of change in the CGPI, after recording an increase of 3.3 percent for fiscal 2008, is projected to be around minus 7.5 percent for fiscal 2009 and around minus 2 percent for fiscal 2010. The year-on-year rate of change in the CPI (excluding fresh food), after recording an increase of slightly above 1 percent for fiscal 2008, is projected to be around minus 1.5 percent for fiscal 2009 reflecting the large negative contribution of the fall in the prices of petroleum products and the large negative output gap. If the CPI indeed declines to the extent projected, this will be the largest drop ever recorded on a fiscal-year basis.[12] For fiscal 2010, the year-on-year rate of change is projected to be around minus 1 percent to record two consecutive years of decline on the basis that while the year-on-year rate of change in the prices of petroleum products will likely turn slightly positive, downward pressure from the negative output gap will persist and growth in wages will remain sluggish. Compared with the interim assessment in January, this projection of the CPI represents a downward revision for both fiscal 2009 and 2010 mainly reflecting the increase in the negative output gap. The figures also represent a significant downward revision from the projection in the October 2008 Outlook Report, with the decline in commodity prices being an additional factor.

B. The Environment Surrounding Exports and Imports

The projections in this Outlook Report are based on the assumption that, following the large contraction in the latter half of fiscal 2008 due to the adverse feedback loop operating between financial and economic activity around the world, overseas economies will (1) level out in the first half of fiscal 2009 due to progress in inventory adjustments and the effects of various policy measures and (2) return gradually to a moderate growth path from the latter half of fiscal 2009 (Chart 28 [1]).

Based on this assumption, Japan's exports, which declined considerably in the latter half of

[12] The largest decline recorded so far on a fiscal-year basis was minus 0.8 percent in both fiscal 2001 and 2002.

fiscal 2008, are likely to stop declining in the first half of fiscal 2009 and temporarily gain upward momentum due partly to progress in adjustments of inventories overseas in the latter half of fiscal 2009 (Chart 29).[13] Entering fiscal 2010, exports are expected to continue increasing -- albeit at a slower pace than immediately after the completion of inventory adjustments -- as overseas economies continue to recover and firms gain confidence in the sustainability of the recovery. However, since such a recovery in exports would start from an extremely depressed level, it is likely that even at the end of fiscal 2010 exports will still be considerably lower than at the peak reached around the end of fiscal 2007. Industrial production is expected to be strongly affected by changes in exports and domestic inventories. Specifically, industrial production is likely to stop decreasing in the first half of fiscal 2009 and in the latter half of fiscal 2009 to show a clear increase from the first half, due in part to progress in inventory adjustments. Further ahead, in fiscal 2010, production is expected to continue to recover mainly due to an increase in exports, but, similar to exports, industrial production during the projection period is likely to recover only to a level considerably lower than the peak reached around the end of fiscal 2007.

This scenario of overseas economic developments is accompanied by considerable uncertainty. Looking back on worldwide economic developments from around the mid-2000s, while the world economy enjoyed higher growth with a prolonged period of accommodative financial conditions, it also saw various excesses accumulate on both the real and financial sides of the economy (Chart 28 [2]). The ongoing global financial crisis and the slowdown in world economic growth appear to have occurred during the process of the adjustment of these excesses, and this process may be prolonged. Based on this view, countries around the world have been taking policy actions to restore financial stability as well as various monetary and fiscal policy measures, but it is very uncertain when and to what extent these measures will take effect. In some countries, such as China, policy measures have started to produce positive effects. On a global level, should such positive

[13] For example, Japanese carmakers' reduction in exports to the United States has been greater than the fall in their sales there (Chart 29 [1]). As a result, inventories of Japanese cars in the United States have started to decrease. Further progress in inventory adjustments will prepare the ground for Japan's car exports to temporarily make a relatively strong rebound and to reach a level in line with sales developments in the United States.

effects turn out to be greater than anticipated, this -- together with progress in inventory adjustments -- may cause overseas economies to grow stronger than expected. On the other hand, growth in overseas economies may well turn out to be weaker than expected, thereby adversely affecting global financial markets. This is because it may be difficult to produce policy effects sufficient to absorb the significant adjustment pressures stemming from the large-scale global credit expansion observed worldwide over the past several years. Since the U.S. and European financial systems are still unstable and the deterioration in economic activity is ongoing, due attention needs to be paid to the risk of a worsening adverse feedback loop between financial and economic activity on a global scale. If such risk materializes, the expected recovery in Japan's exports and production from the latter half of fiscal 2009 may not occur and medium- to long-term growth expectations may decline further, resulting in even more extensive adjustments in capital stock and employment.[14]

Meanwhile, imports have started to fall substantially with a slight lag behind the weakening of domestic demand and the sharp drop in production (Chart 30 [1]). They are expected to continue decreasing through the middle of fiscal 2009, but to start increasing thereafter due to a recovery in production and an increase in imports of, for example, consumer goods, which will likely be pushed up with a lag by the appreciation of the yen (Chart 30 [2] and [3]).

C. Firms' Profits and Spending Behavior

Looking at aggregate income formation, the negative year-on-year changes in real gross domestic income (GDI) and real gross national income (GNI) have expanded (Chart 31).[15]

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[14] When plotting the growth rates for overseas economies and Japan's economy, no obvious correlation is seen for the 1990s, but there is a clear positive correlation for the 2000s (Chart 28 [3]). This difference suggests that growth in overseas economies and Japan's economy has become more linked in recent years.

[15] Real GDI = real GDP + trading gains/losses

Real GNI = real GDI + net income from the rest of the world (for example, interest income and dividend income)

Trading gains/losses = nominal net exports/weighted average of export and import deflators - real net exports

A breakdown of the year-on-year changes in both shows that, during the first half of fiscal 2008, larger trading losses were the main cause of the negative changes. In the latter half of fiscal 2008, on the other hand, the swing from trading losses to trading gains was more than offset by the plunge in net exports and the weakening of domestic demand, leading to an expansion in the negative year-on-year changes.

In this situation, corporate profits have deteriorated significantly. A look at developments in the levels of the break-even point and sales in the *Financial Statements Statistics of Corporations by Industry, Quarterly* shows that the main cause for the marked deterioration in the profits of manufacturers in the October-December quarter of 2008 was a plunge in sales and that, hence, the decline in sales volume had a large impact in the deterioration of profits (Chart 32). Moreover, large manufacturers, which recorded losses in that quarter, experienced a plunge in their sales, reflecting their high export ratios, and their break-even point also increased markedly due mainly to an increase in fixed costs such as depreciation expenses and a deterioration in export profitability caused by the appreciation of the yen. Meanwhile, the decline in profits of nonmanufacturing firms as a whole was smaller than that of manufacturers, but among nonmanufacturing firms there was a remarkable contrast between large firms and small to medium-sized firms in both sales trends and profitability. Although the performance of small nonmanufacturing firms does not appear to have worsened as rapidly as that of exporting firms, they nevertheless find themselves in a severe situation because their structural weaknesses are being compounded by the current deterioration in macroeconomic conditions.

Looking ahead, in fiscal 2009, profits of manufacturers are likely to decline significantly for the second consecutive year, while profits of nonmanufacturing firms are also likely to continue declining since nonmanufacturing firms in some industries, which tend to be strongly affected by developments in manufacturers, such as transportation and wholesaling industries, will inevitably experience a fall in sales. In fiscal 2010, both manufacturing and nonmanufacturing firms are expected to record an increase in profits, yet the ratio of current profits to sales of large manufacturers is likely to recover only to the level around the previous low marked in fiscal 2001.

Looking at firms' balance-sheet data in the *Financial Statements Statistics of Corporations by Industry, Quarterly,* the amount outstanding of interest-bearing debt has been on an increasing trend since hitting its most recent bottom around early 2006 (Chart 33).[16] The ratio of interest-bearing debt to cash flow has recently risen substantially, mainly due to a significant drop in cash flows. The ratio of interest-bearing debt to equity has started to rise slightly, but the ratio is still at a low level and the capital base of firms taken as a whole has remained relatively solid.

Business fixed investment, particularly of manufacturers, has recently declined rapidly, mainly due to the drop in exports and production, the consequent marked deterioration in corporate profits, and the tightening of firms' funding conditions. Since business fixed investment is likely to remain sluggish at a low level for some time given that there is a growing sense among firms that they have excessive capacity, the decline in business fixed investment in fiscal 2009 is expected to be larger than that in fiscal 2008 (Chart 34). However, provided that (1) exports, production, and corporate profits recover, (2) funding conditions for firms improve, and (3) firms' medium- to long-term growth expectations do not decline further, business fixed investment is expected to increase slightly in fiscal 2010.

The capital stock cycle shows that, through fiscal 2008, business fixed investment generally stayed in a range consistent with an expected growth rate of around 1.5 percent or slightly higher (Chart 35). In fiscal 2009, however, business fixed investment is likely to briefly record a substantial drop due to the severe impact of the negative business cycle shock, even if firms' expectation of medium- to long-term growth, as assumed, only drops to around 1 percent.[17] In fiscal 2010, when overseas economies are expected to recover, with uncertainties abating, there are prospects of a recovery in business fixed investment. Meanwhile, with the aforementioned developments in production, capacity utilization is

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[16] The *Financial Statements Statistics of Corporations by Industry, Quarterly* only covers data of firms located in Japan. Therefore, there may be some differences with consolidated data of large Japanese firms that have many overseas subsidiaries and related firms.

[17] In the chart of the capital stock cycle, business fixed investment for fiscal 2009 will fall somewhere on the vertical line showing the investment-capital ratio at the end of fiscal 2008. If the negative year-on-year change in business fixed investment becomes larger for fiscal 2009 than fiscal 2008, it may appear as though firms' growth expectation has fallen to around 0 percent.

expected to remain low in fiscal 2010. Notwithstanding this, firms are likely to gradually start investing in newly growing business areas while scrapping and consolidating existing equipment, as long as their expectation for medium- to long-term growth does not fall further from around 1 percent.

Turning to uncertainties affecting future business fixed investment, it is the downside risks stemming from developments in overseas economies that demand the most attention. As mentioned earlier, if overseas economies undergo deeper adjustments for a prolonged period, it becomes more likely that Japan's exports and production will not recover from the latter half of fiscal 2009 and firms' medium- to long-term growth expectations will decline further, leading to a continued decrease in business fixed investment in fiscal 2010. Moreover, there is the risk that, even if overseas economies recover, business fixed investment in Japan may remain relatively weak due mainly to the transfer abroad of firms' production bases. If strains in global financial markets intensify further, the consequent deterioration in Japanese financial conditions may depress firms' spending as a whole.

D. The Employment and Income Situation and Households' Spending Behavior

Reflecting the sharp downturn in economic activity, the employment and income situation has become increasingly severe. In particular, pressures to adjust employment have increased significantly in the manufacturing sector, which has been strongly affected by the decrease in exports.

With regard to the employment situation, the year-on-year rate of change in the number of employees in the *Labour Force Survey* has been around 0 percent (Chart 36 [1]). The year-on-year rate of increase in the number of regular employees in the *Monthly Labour Survey*, after having peaked around the end of 2007, has continued to fall and for the manufacturing sector has recently become negative. In the manufacturing sector, the year-on-year rate of change in the labor input -- calculated as the number of employees multiplied by the number of hours worked per employee -- has declined by around 10 percent, mainly reflecting the decline in overtime hours worked (Chart 37 [1]).

As for the outlook for employment, the number of employees, particularly in the manufacturing sector, is likely to continue decreasing for some time, reflecting the extremely sharp downturn in economic activity. However, the following factors will mitigate the downward pressure on employment: (1) the government, labor, and employers have agreed on the basic principle that they will make the utmost efforts to maintain employment[18] and the government's support for such efforts has been expanded;[19] (2) firms will likely continue to adjust working hours, including regular working hours, instead of reducing the number of employees, unless their expectations for medium- to long-term growth decline significantly; (3) firms as a whole seem to have greater financial capacity to absorb adverse shocks than in the period around the turn of the century (Chart 33); and (4) the nonmanufacturing sector will to some extent absorb labor.[20] It is thus likely that the rise in the unemployment rate which will inevitably result from the unprecedented downturn in economic activity will not be proportional to the deterioration in economic activity. However, adjustments in employment will be protracted and the unemployment rate is likely to continue to rise gradually even in fiscal 2010, when the economy is likely to be on a recovery trend.

Looking at recent trends in nominal wages per worker, the decline in overtime payments has accelerated sharply and a marked drop in bonus payments can be observed (Chart 36 [2]). Firms are now giving priority to maintaining employment in a situation where the share of labor in income distribution has risen sharply due to the plunge in corporate profits. As a result, firms are likely to further restrain wages, and wages -- including regular payments -- are expected to decrease significantly. Even in fiscal 2010, wages are likely to

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[18] On March 23, 2009, the government, Nippon Keidanren (Japan Business Federation), the Japan Chamber of Commerce and Industry, the National Federation of Small Business Associations, and RENGO (Japanese Trade Union Confederation) jointly released a document in which they agreed to unite their efforts to stabilize and generate employment. The agreement includes (1) promoting Japanese-style work sharing; (2) expanding and bolstering the safety net for the unemployed by providing, for example, job training and placement programs; (3) providing financial support to those who have difficulty in finding jobs and are engaged in training; and (4) creating job opportunities for the long-term unemployed.

[19] As part of the economic policy package, the requirements for the usage of the Employment Adjustment Subsidy have been relaxed. The number of applications for the subsidy has already risen sharply (Chart 37 [2]).

[20] A tendency for employment to shift from the manufacturing to nonmanufacturing industries was observed during economic downturns in the past (Chart 37 [3]).

continue declining with the output gap remaining negative, although the pace of decline will moderate.

Private consumption has been weakening as a whole, as the employment and income situation has become increasingly severe. During fiscal 2009, private consumption is likely to continue decreasing due to a large decline in compensation of employees. In fiscal 2010, although the economy is expected to be on a gradual recovery trend, a recovery in private consumption will likely remain sluggish as compensation of employees is expected to continue to decline. However, the decline in private consumption seems unlikely to be so large as to prevent the economy from recovering[21] because of the following factors: (1) the implementation of various policy measures will to a certain extent alleviate heightened anxiety among households (Chart 38 [2]); and (2) the decline in prices, particularly of petroleum products, will provide an underpinning for real purchasing power. The propensity to consume is likely to remain more or less flat, as upward pressure resulting from, for example, the various tax cuts and other special subsidies and the aging of the population is expected to be offset by downward pressure from declining expectations of future rises in income.

Turning to housing investment, the number of housing starts, which had picked up briefly from the earlier fall as the effects of the revision of the Building Standard Law waned, has been decreasing again recently (Chart 39 [1]). This seems to be due to (1) the increasingly severe employment and income situation, (2) the accumulation of inventories of unsold condominiums, (3) the deterioration in funding conditions of firms in the real estate industry, and (4) growing expectations of future falls in land prices. Regarding factors that affect potential housing demand, no change has been observed in the upward trend in the number of households resulting from the diversification of lifestyles. However, the population influx into metropolitan areas from the countryside, which had exerted upward pressure on housing demand in metropolitan areas, has been affected by the economic downturn, with

[21] The deterioration in real disposable income in fiscal 2009 and fiscal 2010 is expected to be somewhat smaller than that in the latter half of fiscal 2007 and the first half of fiscal 2008 resulting from rises in the tax burden and prices (Chart 38 [1]). This is because even if compensation of employees decreases, income transfers from the government through, for example, grants and tax cuts, as well as the decline in prices will act as factors underpinning real disposable income.

net migration into Tokyo, for example, now on a downward trend (Chart 39 [2], [3], and [4]). This severe environment surrounding the housing market is likely to continue for some time.[22] Therefore, housing investment is likely to decrease through the first half of fiscal 2009 and remain more or less unchanged at a low level.

E. The Environment Surrounding Prices

Looking at recent developments in prices at the retail level, the declines in input prices have been promptly reflected in sales prices given the fierce competition amid deteriorating economic conditions (Chart 40). Although the year-on-year rate of increase in the prices of food items in the CPI basket has been declining, the decline is more pronounced in food prices calculated based on the *Family Income and Expenditure Survey* (Chart 41 [1]). In general, food prices in this survey are more susceptible to changes in economic conditions than the prices of food items in the CPI basket (Chart 41 [2]). A survey on food also suggests that there has been a shift in consumers' priorities in their purchasing decisions from "safety" to "economization" (Chart 41 [3]). With consumers increasingly prioritizing economization, competition among firms to reduce prices will likely intensify further and increase downward pressure on prices.

The year-on-year rate of increase in the CPI (excluding fresh food) has recently declined to around 0 percent mainly reflecting the decline in the prices of petroleum products, and the year-on-year rate of change in the CPI will likely turn negative and fall sharply going forward, given that the level of CPI in the previous year had been significantly inflated due to the rise in the prices of petroleum products. Although the impact of the change in the prices of petroleum products on the year-on-year rate of change in the CPI will abate some time in the latter half of fiscal 2009, the rate of change in the CPI will likely remain negative in fiscal 2010 due to the gradual strengthening of downward pressure on prices stemming from the deterioration in demand conditions.

The relationship between the output gap and changes in the CPI (excluding food and

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[22] Inventories of unsold condominiums have finally started to decrease reflecting the decline in their prices. The adjustments, however, have just begun, and it will be quite some time before they are completed.

energy) is represented in a scattergram depicting the Phillips curve for the period from the first half of the 1980s (Chart 42). This shows the following: (1) the slope of the Phillips curve for the whole period (regression line A) is relatively steep; (2) if separate Phillips curves for the period through the first half of the 1990s (regression line B) and for the period from the latter half of the 1990s (regression line C) are drawn, the latter is significantly lower, indicating that there was a large downward shift in the expected medium- to long-term rate of inflation (indicated by the y-intercept of the regression lines);[23] and (3) the slopes of the Phillips curves are very moderate for the two respective periods. These observations imply that, if the period for which a Phillips curve is drawn includes a shift in medium- to long-term inflation expectations, the curve will be rather steep. However, without such a shift, the sensitivity of the inflation rate to changes in the output gap is quite small, at least as far as past experience suggests.

Taking these observations into account, the year-on-year rate of change in the CPI (excluding fresh food) is likely to decline sharply to temporarily reach minus 2 to minus 3 percent in the first half of fiscal 2009 due to (1) a much larger negative contribution of petroleum products and (2) a decrease in the positive contribution, or maybe even a negative contribution, of the prices of goods and services that are adjusted only gradually and with a lag to changes in costs, such as electricity and gas charges, and food prices. From the latter half of fiscal 2009 onward, the year-on-year fall in the CPI (excluding fresh food) will decelerate due mainly to the leveling out of the prices of petroleum products, but the downward pressure from weaker demand will likely increase gradually. As a result, the year-on-year rate of change in the CPI (excluding fresh food), after recording slightly above 1 percent for fiscal 2008, will likely decline to around minus 1.5 percent for fiscal 2009, and continue to be negative at around minus 1 percent for fiscal 2010.[24] However, it

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[23] In the mid-1990s, the public's perception of price changes may have shifted downward due to (1) the transition from the bubble economy to a low-growth economy, (2) substantial deregulation in industries such as the distribution industry, and (3) the sharp appreciation of the yen in the mid-1990s.

[24] A technical point in this context is that especially in fiscal 2010 -- the final year for the 2005 base year CPI -- the upward so-called Laspeyres bias in the year-on-year rate of change in the CPI is likely to be large since the negative contribution of durable consumer goods prices, whose index levels declined significantly, will be smaller than that calculated using the weight reflecting each year's actual consumption basket.

is assumed that a substantial downward shift in medium- to long-term inflation expectations and a resulting acceleration of the increase in the underlying downward pressure on prices can be avoided, as economic activity will start recovering from the latter half of fiscal 2009.

This projection is subject to both upside and downside risks that depend on developments in economic activity. There are also the following risk factors that are specific to prices. The first of these concerns uncertainty regarding medium- to long-term inflation expectations. In the current projection, a small decline in medium- to long-term inflation expectations due to the persistence of the large negative output gap is factored in. However, the risk of a larger-than-expected decline in medium- to long-term inflation expectations cannot be ruled out, given the possibility that the negative output gap may become larger than in previous economic downturns. On the other hand, as a related matter, there is uncertainty regarding the estimates of the output gap. Although estimates of the output gap are always subject to a certain margin of error, uncertainties regarding the potential growth rate and the output gap increase when fluctuations in economic activity are large, as at present. It should be borne in mind that it is possible that, when measured several years later, the potential growth rate over the past few years may be revised downward and, conversely, the output gap retrospectively revised upward (Box 2).

The second risk concerns uncertainty surrounding import prices. Given recent experience, commodity prices, which declined substantially until around the end of 2008 and have remained more or less unchanged since then, may still decline or rise excessively as a result of, for example, a change in the perception of market participants regarding future supply and demand conditions for these commodities. Fluctuations in foreign exchange rates can also affect consumer prices not only by influencing the level of economic activity but also through changes in import prices.

(Box 1) Central Banks' Measures to Deal with the Global Financial Crisis

From the autumn of 2008, the turmoil in global financial markets intensified and economic conditions deteriorated worldwide. Under these circumstances, governments and central banks around the world took a series of timely fiscal, monetary, and financial system-related measures to counter the impact on economic activity, financial markets, and the financial system in their countries. In order to restore stability in financial markets and, by doing so, support economic recovery, central banks, including the Bank, took a variety of measures. These differed in their details depending on the situation faced by each central bank, but included conventional measures such as reductions in policy interest rates and, in some cases, unconventional ones such as purchases of private debt.

1. Japan[25]

In order to support the economy from the monetary policy side, the Bank has implemented various measures since the autumn of 2008, which can be divided into three main areas: reductions in the policy interest rate; measures to ensure stability in financial markets; and steps to facilitate corporate financing. As for policy interest rate reductions, the Bank lowered, in October and December 2008, the target for the uncollateralized overnight call rate, which until the early autumn had been around 0.5 percent. Regarding measures to ensure stability in financial markets, the Bank provided sufficient funds over the calendar and fiscal year-ends, expanded the range of eligible collateral, and increased the amount of outright purchases of JGBs. It also introduced the complementary deposit facility to provide substantial funds without impairing market functioning. As for steps to facilitate corporate financing, the Bank broadened the range of corporate debt accepted as eligible collateral and introduced special funds-supplying operations, through which it provides an unlimited amount of funds at low interest rates against the value of corporate debt pledged as collateral. Furthermore, the Bank embarked on the outright purchase of CP and corporate bonds, thus taking on corporate credit risks, which is exceptional for a central bank. In addition, with a view to securing the stability of the financial system, the Bank resumed its purchases of stocks held by banks and decided to provide subordinated loans to banks. The various measures on the monetary policy front and

[25] For the details of the Bank's policy measures in the current financial crisis and the effects of these measures on the Bank's balance sheet, see "The Bank of Japan's Policy Measures in the Current Financial Crisis" on the Bank's web site (http://www.boj.or.jp/en/).

the measures to secure the stability of the financial system complement each other and are both expected to support Japan's economy from the financial side.

2. United States

The Federal Reserve substantially lowered its target for the federal funds rate to a range of 0 to 0.25 percent. It also expressed the view that it anticipated that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period. With the policy rate virtually reaching the lower bound, the Federal Reserve has substantially expanded the supply of funds to financial institutions by actively utilizing the Term Auction Facility (TAF). Furthermore, with a view to improving funding conditions in individual financial markets by enhancing market liquidity and narrowing credit spreads, it has been implementing several measures such as the Term Asset-Backed Securities Loan Facility (TALF), by which it extends loans on a non-recourse basis against asset-backed securities pledged as collateral, and purchases of, for example, agency debt and Treasury securities. These measures are collectively called "credit easing policy." How any losses, should they be incurred, are to be shared between the U.S. government and the Federal Reserve has been decided in detail for each measure.

3. Europe

In October 2008, the European Central Bank started to lower the interest rate on the main refinancing operations, which is currently 1.25 percent. In addition, it actively conducted funds-supplying operations, through which it provides longer-term funds for an unlimited amount against the value of collateral at a fixed rate, and broadened the range of eligible counterparties for money market operations and of eligible collateral.

The Bank of England (BOE) reduced the official Bank Rate to 0.5 percent in March 2009. As the Bank Rate is virtually at the lower bound, the BOE has been purchasing a wide range of assets to expand the supply of money and credit. With indemnity provided by the U.K. government, the BOE is purchasing a substantial amount of gilts in addition to purchasing corporate bonds and CP to improve funding conditions for firms.

4. Coordinated Measures Taken by Central Banks

In the current financial crisis, central banks have taken a wide range of measures, taking into account developments in financial markets and economic activity in their respective economies. In addition, they have strengthened coordination efforts to deal with increased strains in global financial markets. In particular, 14 central banks concluded temporary reciprocal currency agreements with the Federal Reserve and subsequently introduced and implemented U.S. dollar funds-supplying operations.

As explained above, the measures taken by the major central banks have generally been similar in that they include reductions in the policy interest rate, measures to ensure stability in financial markets through funds-supplying operations or extending loans as a lender of last resort, and measures to directly affect particular financial markets when a decline in market functioning and tight corporate financing conditions were observed. Central banks have been making strenuous efforts to facilitate the return of their economies to a sustainable growth path with price stability, by ensuring stability in financial markets and facilitating corporate financing, fully utilizing the measures described above.

(Box 2) Uncertainty about the Measurement of the Potential Growth Rate and the Output Gap

The potential growth rate is the average economic growth rate expected to be achieved in the medium to long term. It is estimated by the Bank based on various statistics regarding labor and capital. However, estimates of the potential growth rate are substantially influenced by the actual real GDP growth recorded in the preceding years.

The Bank's estimates of the potential growth rate had risen gradually since recording their lowest level around the year 2000 (Box 2 Chart 1).[26] Until the previous Outlook Report published in October 2008, the potential growth rate had been estimated to be "around 1.5 percent or somewhat higher," reflecting economic developments during the period from around 2004. However, taking into account the significant deterioration in economic conditions since then, which will likely result in large negative growth rates for fiscal 2008 and 2009, it seems appropriate to accept that the average growth rate achievable in the medium to long term is now slightly lower than previously recognized, mainly due to the decline in the growth rate of capital stock. Therefore, in this Outlook Report, it is assumed that the potential growth rate has declined to "around 1 percent."

However, when the economy is showing large fluctuations as at present, the degree of uncertainty regarding the measurement of the potential growth rate and the output gap (the difference between actual GDP and potential GDP) is very high, and the estimates above are subject to a certain margin of error. There are two reasons for this: first, even the most recent estimate of the potential growth rate may be revised retrospectively, depending on the extent to which the economy recovers not only in fiscal 2009 and 2010 but also in years further ahead; second, if the economic structure changes significantly, underlying statistics, such as GDP data, may be subject to large retrospective revisions in the future.

In order to gain a rough image of how the estimates may be revised retrospectively as a result of fluctuations in the economy during the next few years, past potential growth rates and output

[26] For details of the estimation method, see "The New Estimates of Output Gap and Potential Growth Rate" (*Bank of Japan Review*, May 2006).

gaps have been calculated using the simplified method of smoothing GDP data (Box 2 Chart 2).[27] The results indicate that, for the period following the burst of the bubble and for 1997-98, the estimated values calculated retrospectively based on the most recent data and those calculated using data available at the time ("real-time" data) differ substantially. Looking at the output gap, for instance, this needed to be revised upward by up to 3 percentage points. Such revisions may be due to (1) changes in the trend as new GDP data are added to the series and (2) changes in the GDP data as a result of retroactive revisions, such as re-basing.

The Bank's estimate of the potential growth rate and the output gap used in this Outlook Report are calculated by the following method. First, the output gap is calculated based on data indicating the level of resource utilization in terms of capital and labor. Second, the potential growth rate is calculated based on the output gap and the actual GDP data. The estimates obtained by this method, therefore, differ somewhat from those calculated by the simplified method. It should be noted, however, that in both cases the estimates of the potential growth rate and the output gap may greatly change retrospectively as new underlying data are added or revised.

So far, the focus has been on technical matters concerning data issues, but it is also useful to consider specific economic phenomena that would result in a retrospective downward revision of the potential growth rate by providing examples for each of the possible growth components, capital, labor, and total factor productivity (TFP). First, if part of the capital stock which to date have been thought to contribute to economic growth became outdated due to a large swing in the economy resulting in large-scale structural adjustment, then the potential capital input would need to be retrospectively revised downward. Second, regarding labor input, if increases in labor market efficiency or the rise in the labor participation rates of women and the elderly, both of which have been thought to be structural, turned out at least partly to have been cyclical phenomena in a period of economic expansion, then the potential labor input would need to be

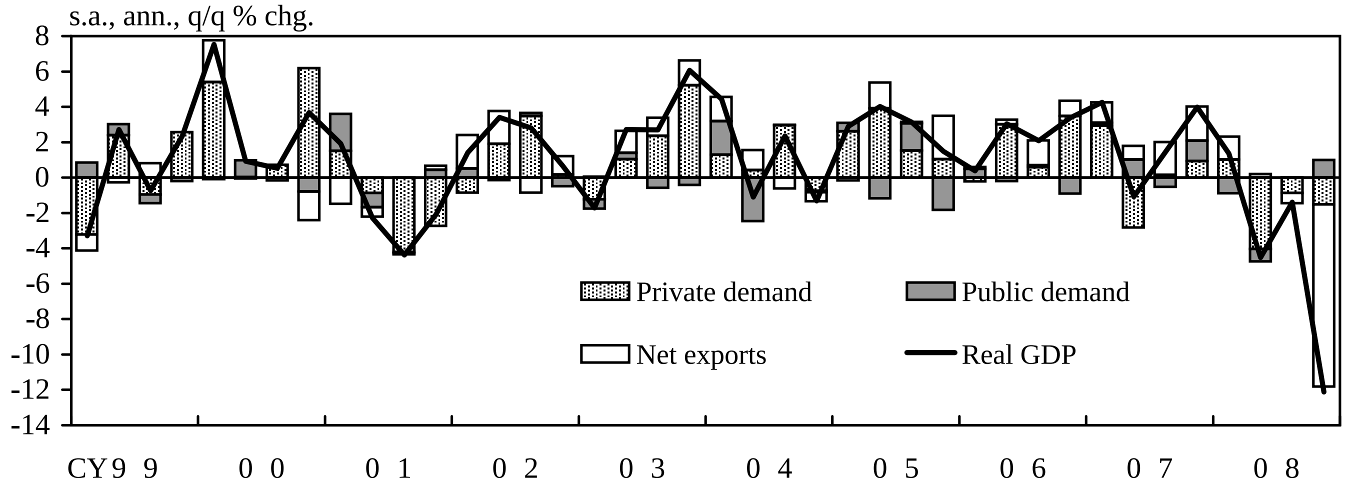
[27] Here, the Hodrick-Prescott (HP) filter was used for the data smoothing. The HP filter breaks down time-series data into a "trend component" and a "cyclical component." When the HP filter is applied to the real GDP series, the potential GDP (the trend component) and the output gap (the cyclical component) can be obtained. If the filter is applied to data characterized by great fluctuations, then the extracted trend, especially for the most recent period, will change considerably whenever new data become available.

retrospectively revised downward. And third, if economic growth above the rate of growth in capital and labor inputs (the so-called Solow residual) is attributable to merely cyclical factors rather than technological progress, then the growth rate of TFP would need to be retrospectively revised downward.

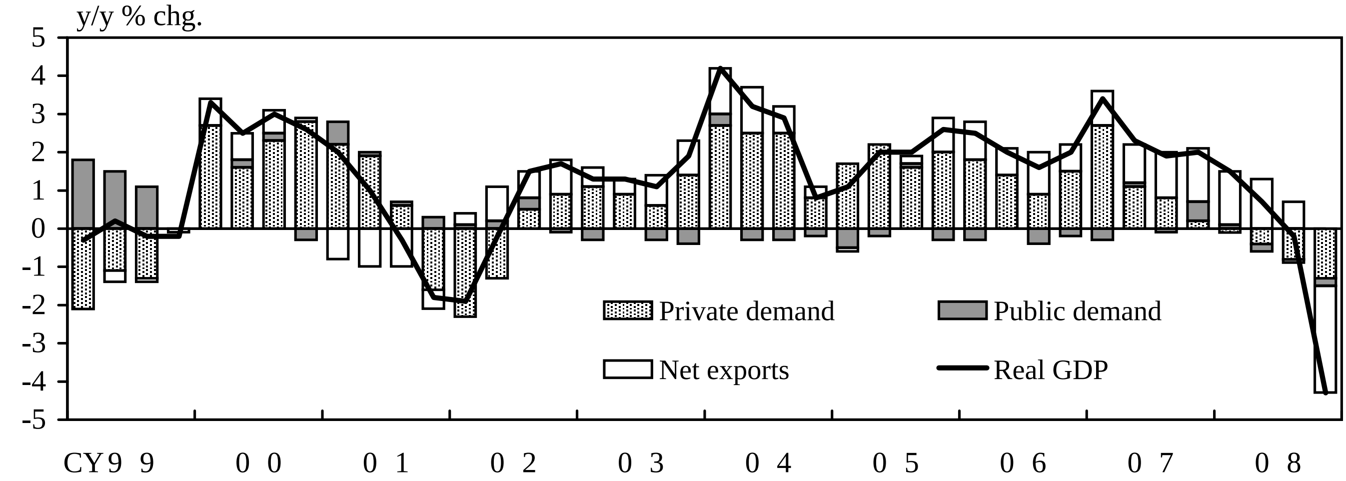
Charts

Real GDP and Indexes of Business Conditions

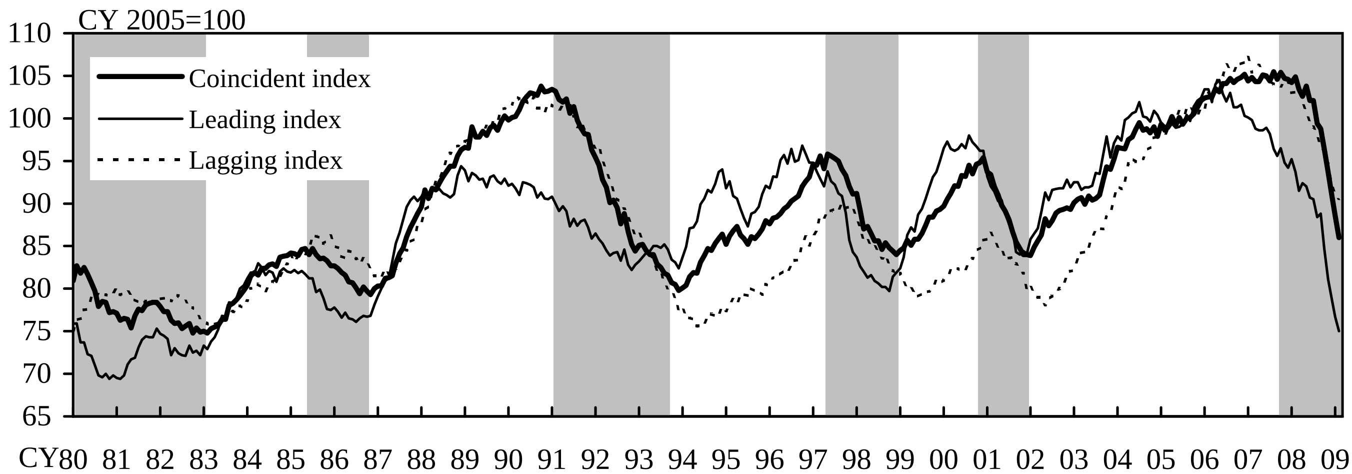
(1) Real GDP (Quarter-on-Quarter Changes)



(2) Real GDP (Year-on-Year Changes)



(3) Indexes of Business Conditions (Composite Indexes)

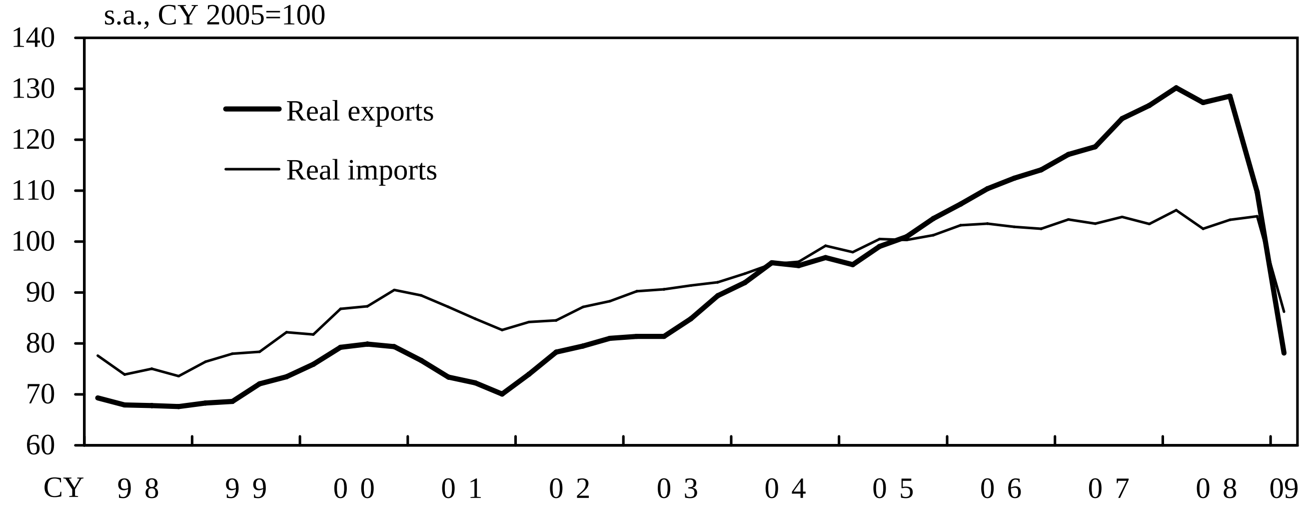


Note: Shaded areas indicate recession periods.

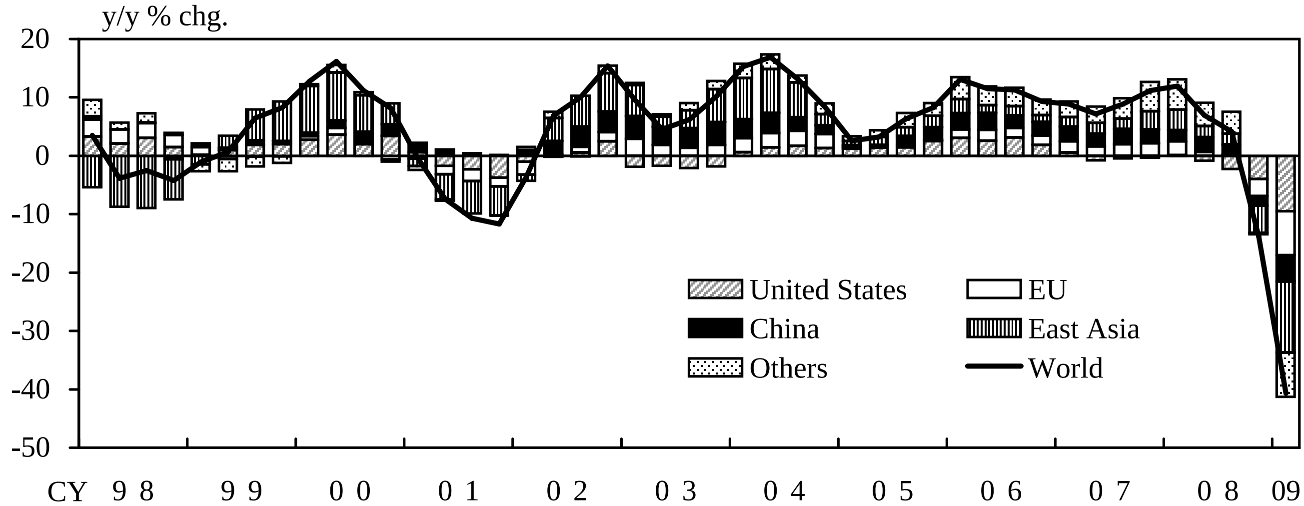
Source: Cabinet Office, "National Accounts," "Indexes of Business Conditions."

Exports and Imports

(1) Real Exports and Real Imports

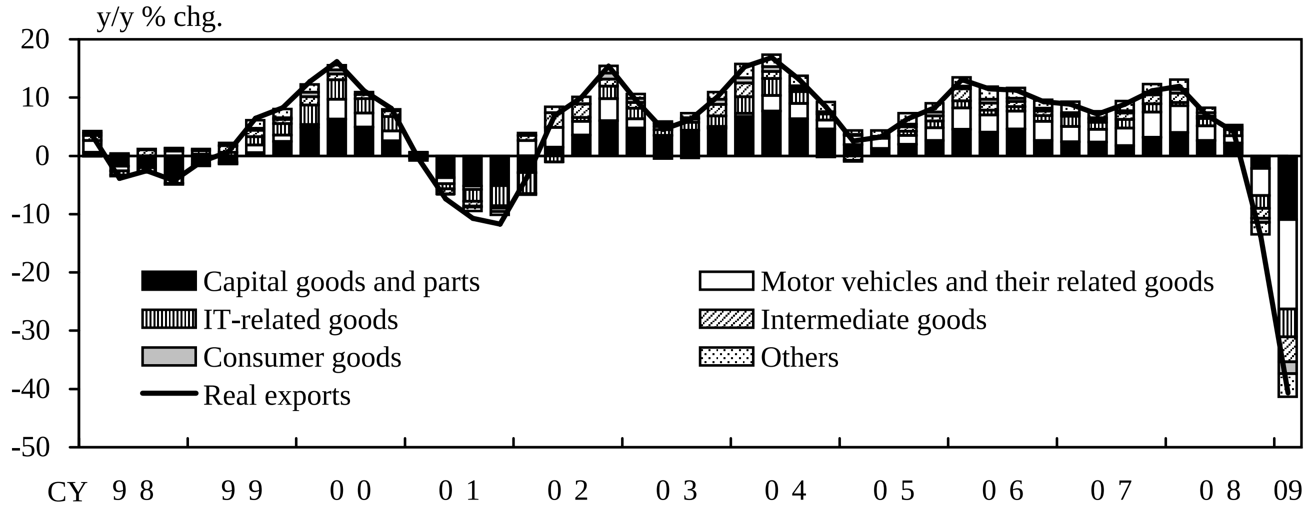


(2) Real Exports (Breakdown by Region)



Note: Data for East Asia: NIEs and ASEAN4.

(3) Real Exports (Breakdown by Goods)

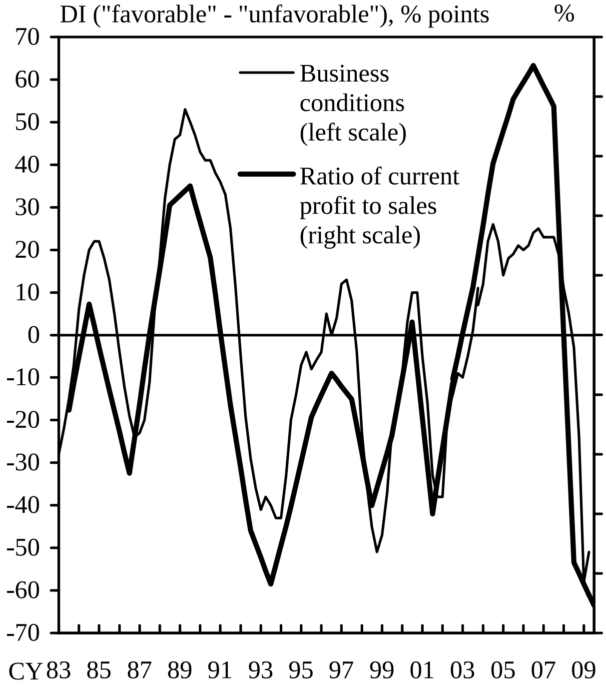


Sources: Ministry of Finance, "The Summary Report on Trade of Japan";
Bank of Japan, "Corporate Goods Price Index."

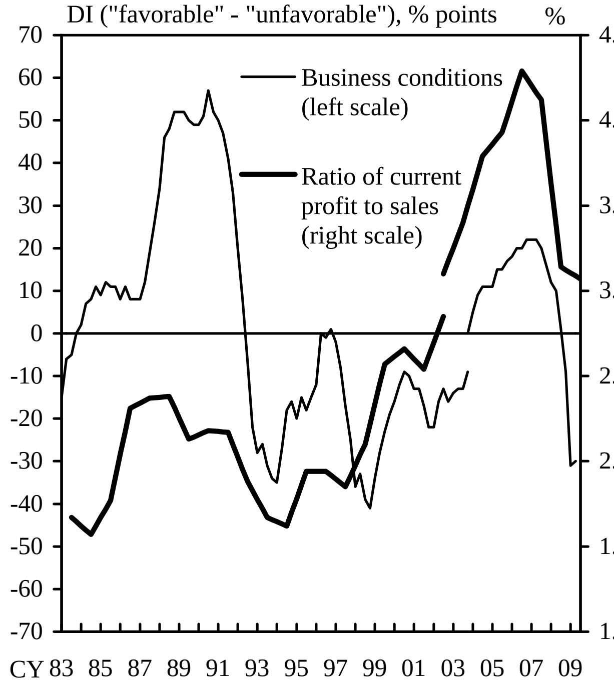
Current Profits

(1) Large Enterprises

(a) Manufacturing

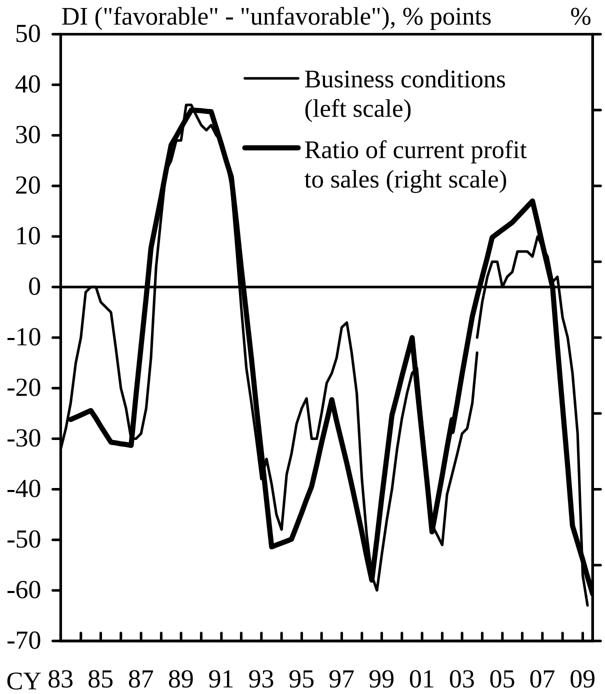


(b) Nonmanufacturing

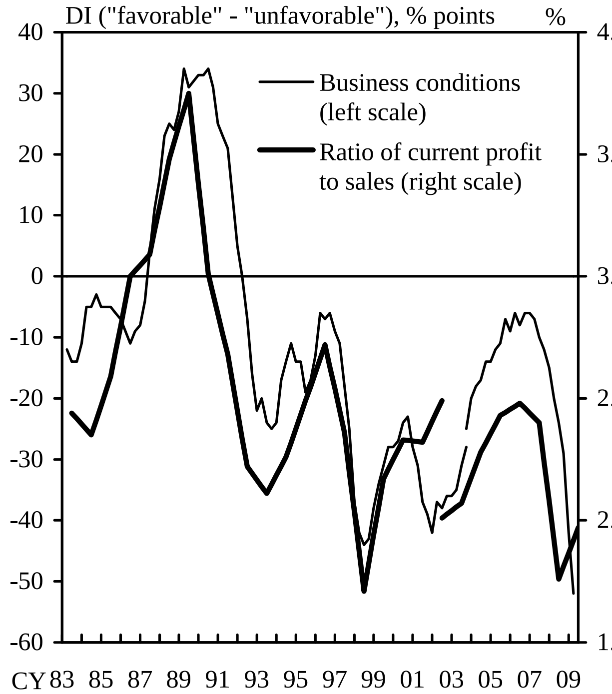


(2) Small Enterprises

(a) Manufacturing



(b) Nonmanufacturing



Notes: 1. Figures of business conditions DI for 2009/Q2 are the forecasts in the March 2009 survey.

2. Figures for the ratio of current profit to sales are on a fiscal-year basis, plotted at the Q3 of each year. Figures from fiscal 2008 are the forecasts in the March 2009 survey.

3. In the March 2004 survey, the *Tankan* underwent major revisions, including the addition of new sample enterprises to the survey. The data show some discontinuities that coincided with these timings.

4. Figures for business conditions DI on a new basis are from the December 2003 survey.

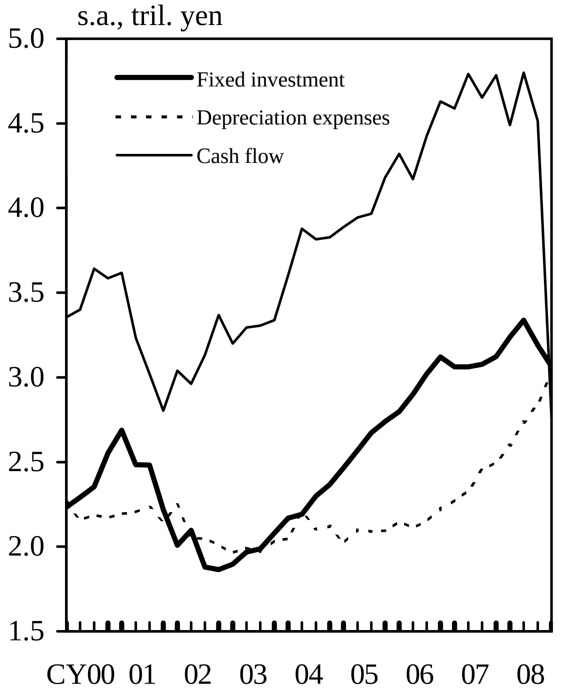
5. Figures for ratio of current profit to sales on a new basis are from fiscal 2002.

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

Fixed Investment

(1) Large Enterprises

(a) Manufacturing

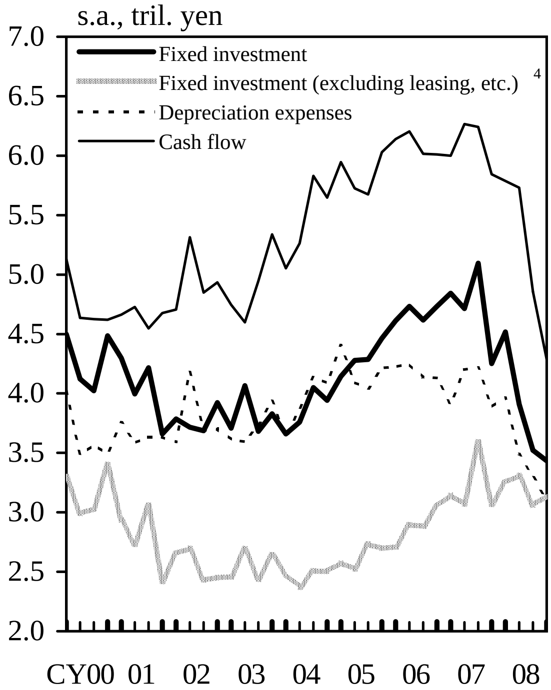


Fixed investment: q/q % chg.

2008/Q3: -4.4%

2008/Q4: -4.0%

(b) Nonmanufacturing



Fixed investment: q/q % chg.

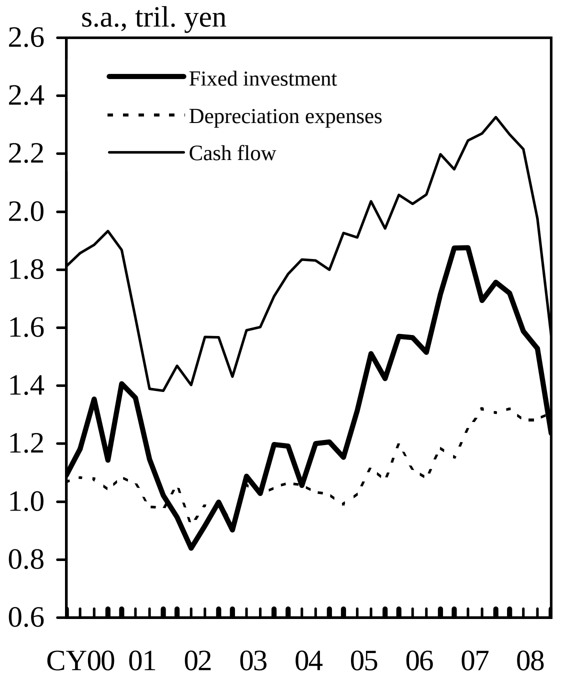
2008/Q3: -9.9%

2008/Q4: -2.6%

Excluding leasing, etc.: +2.6%

(2) Medium-Sized and Small Enterprises

(a) Manufacturing

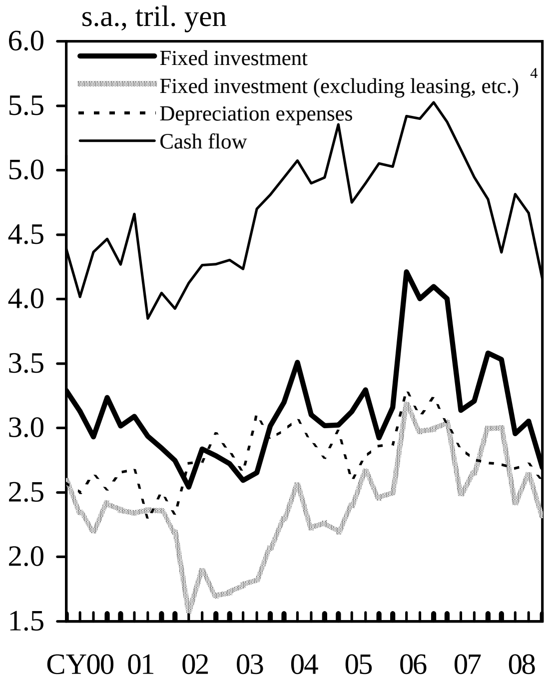


Fixed investment: q/q % chg.

2008/Q3: -3.7%

2008/Q4: -19.1%

(b) Nonmanufacturing



Fixed investment: q/q % chg.

2008/Q3: +3.3%

2008/Q4: -11.8%

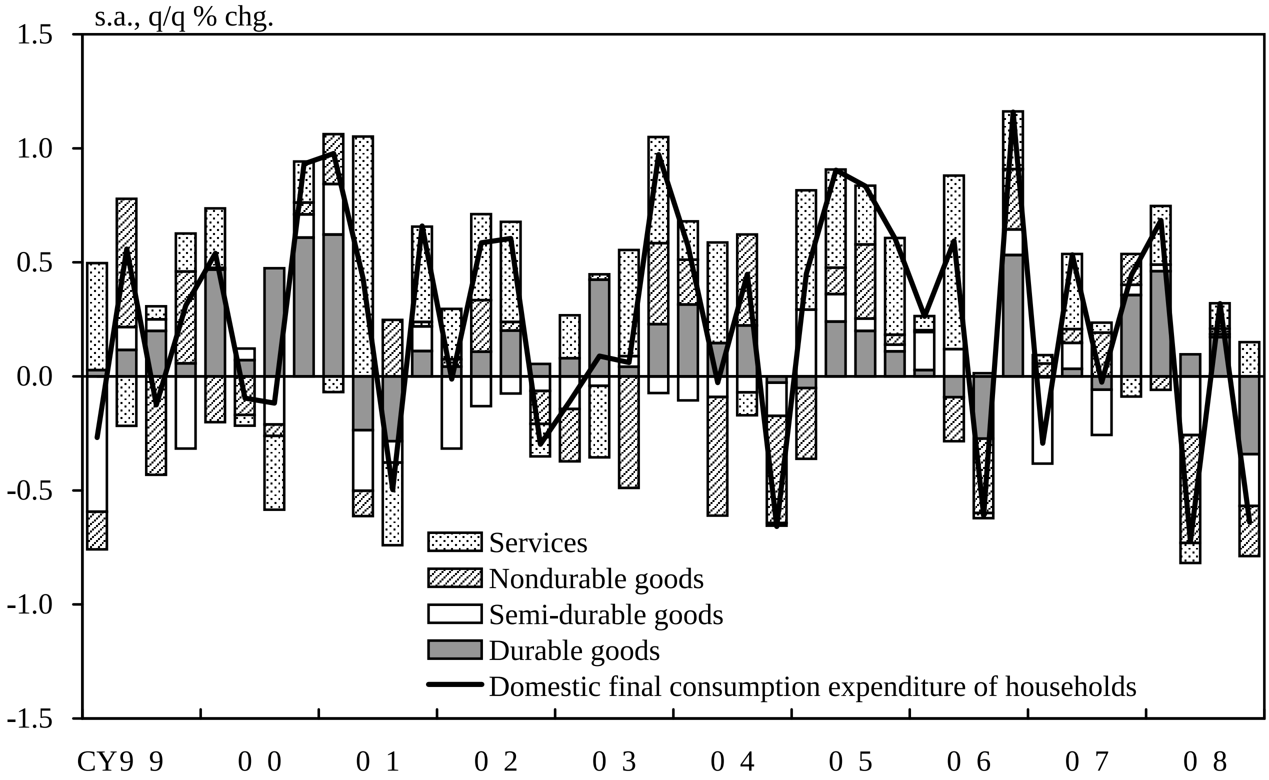
Excluding leasing, etc.: -12.1%

Notes: 1. "Large enterprises" refers to enterprises with capital stock of 1 billion yen or more, and "medium-sized and small enterprises" refers to enterprises with capital stock of 10 million yen or more but less than 1 billion yen.
2. Cash flow = depreciation expenses + current profits × 1/2
3. Figures exclude finance and insurance.
4. Figures up to 2004/Q1 exclude business services. Figures from 2004/Q2 exclude leasing, miscellaneous rental and leasing goods, advertising, and miscellaneous business services.

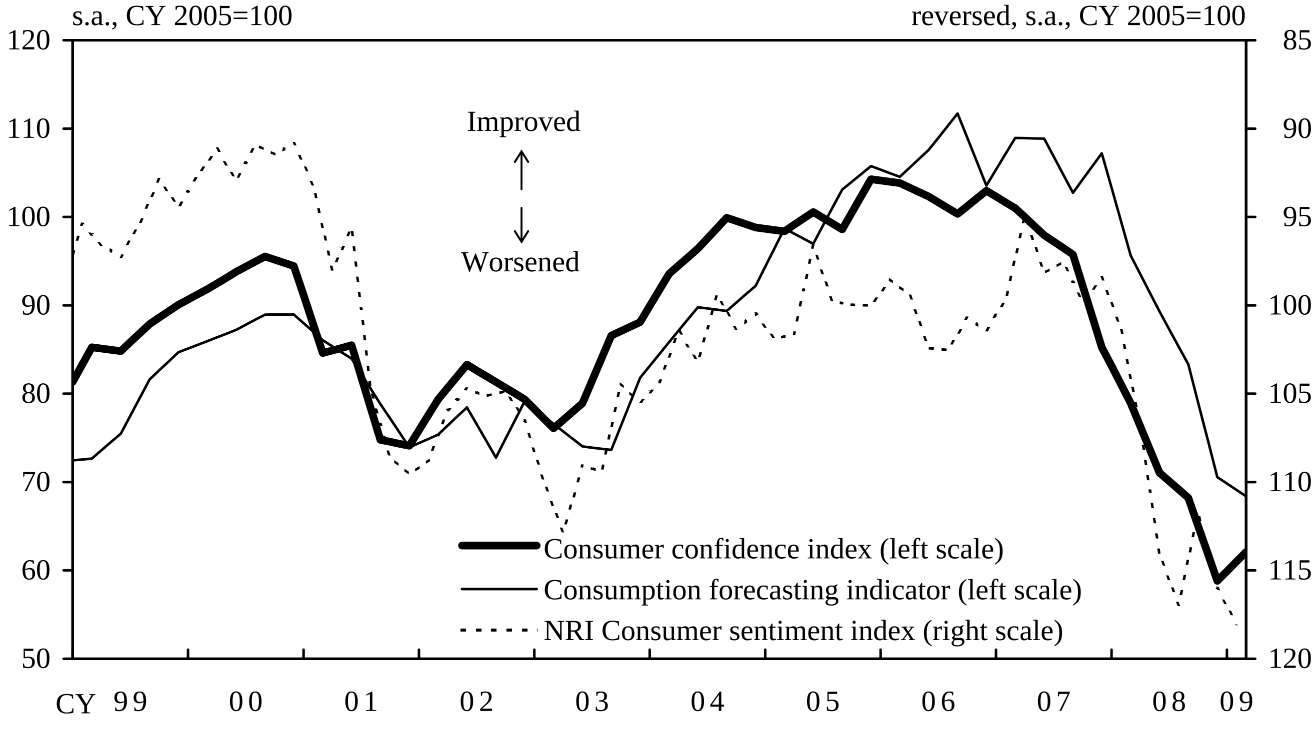
Source: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly."

Private Consumption

(1) Breakdown of Real Domestic Final Consumption Expenditure of Households



(2) Consumer Confidence

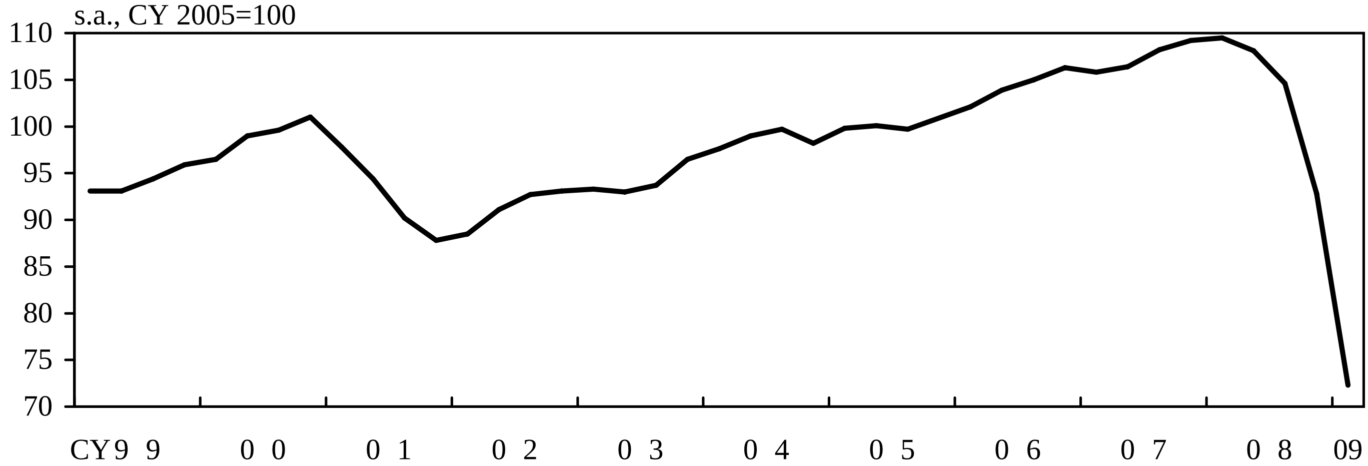


Sources: Cabinet Office, "National Accounts," "Consumer Confidence Survey";
Nikkei Inc., "Consumption Forecasting Indicator";
Nippon Research Institute (NRI), "Consumer Sentiment Survey."

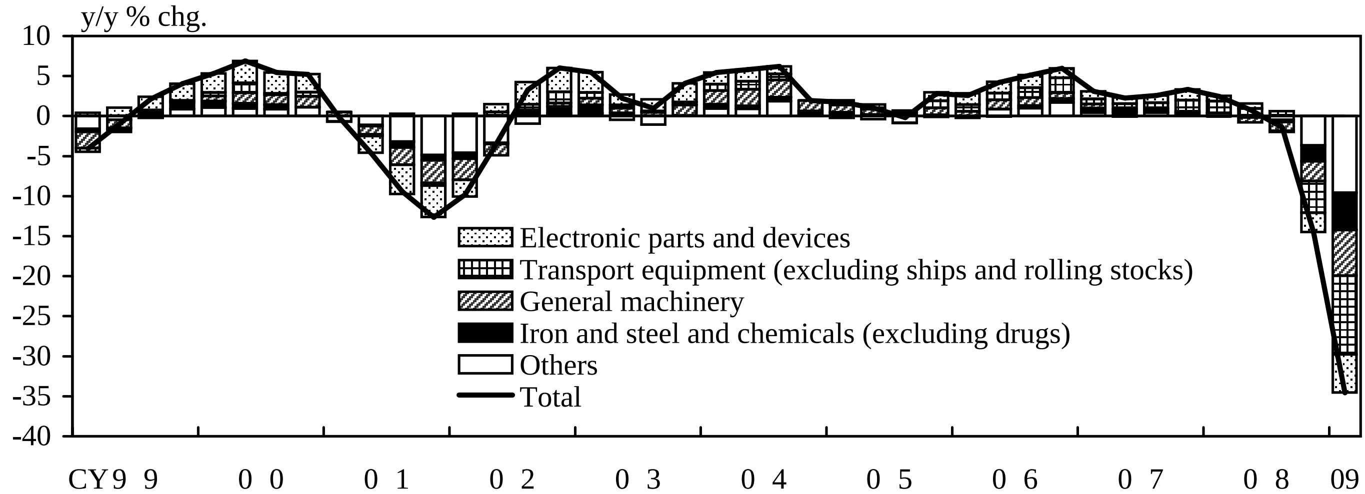
Chart 6

Production

(1) Industrial Production

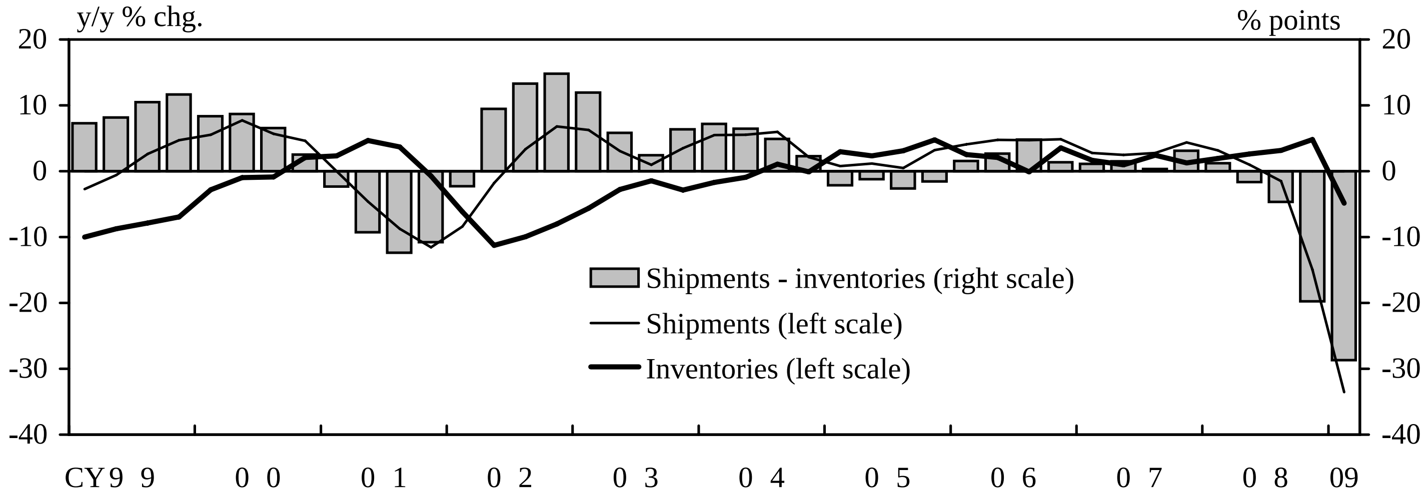


(2) Production (Breakdown by Industry)



Note: Figures up to CY 2003 are on the 2000 base.

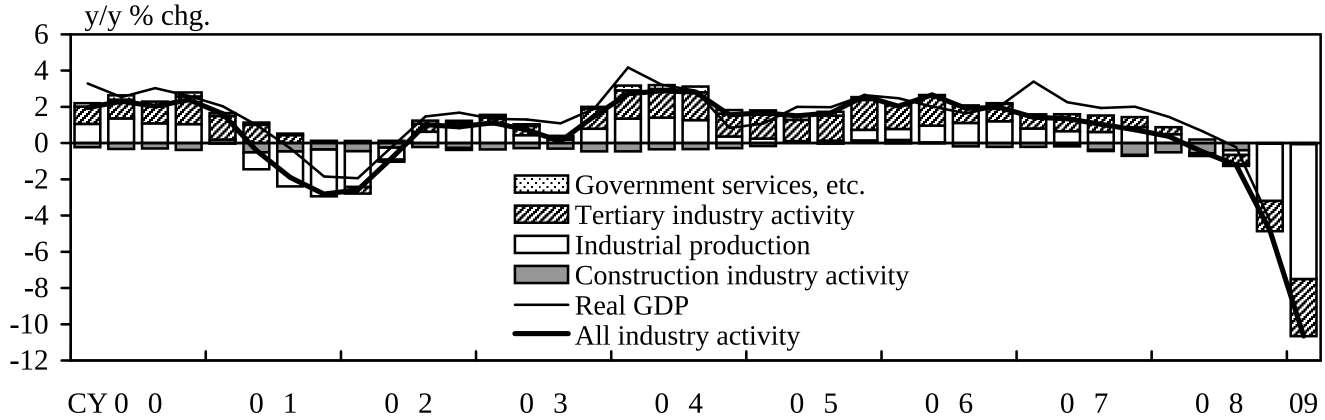
(3) Shipment-Inventory Balance (Mining and Manufacturing)



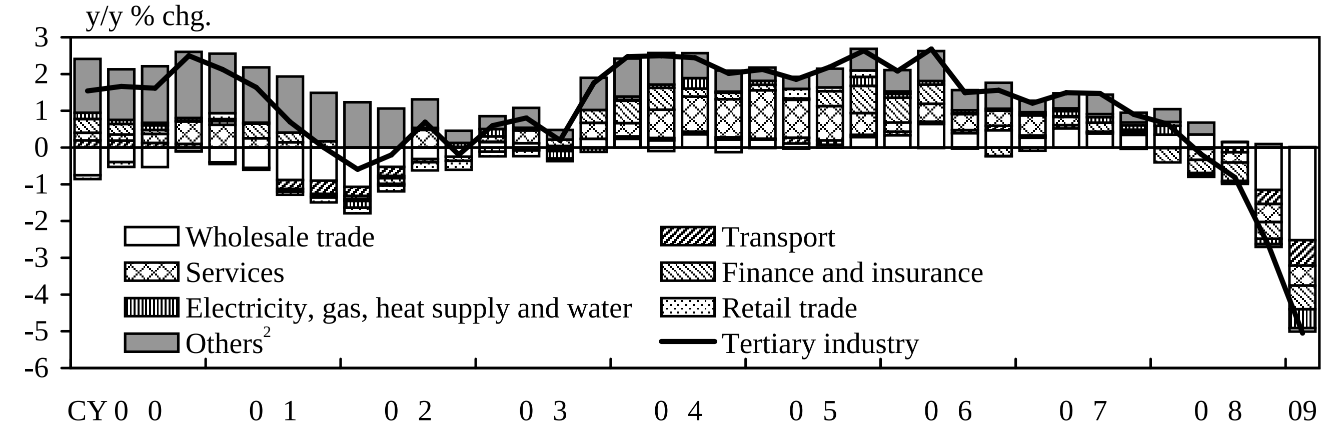
Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Production."

All Industry Activity

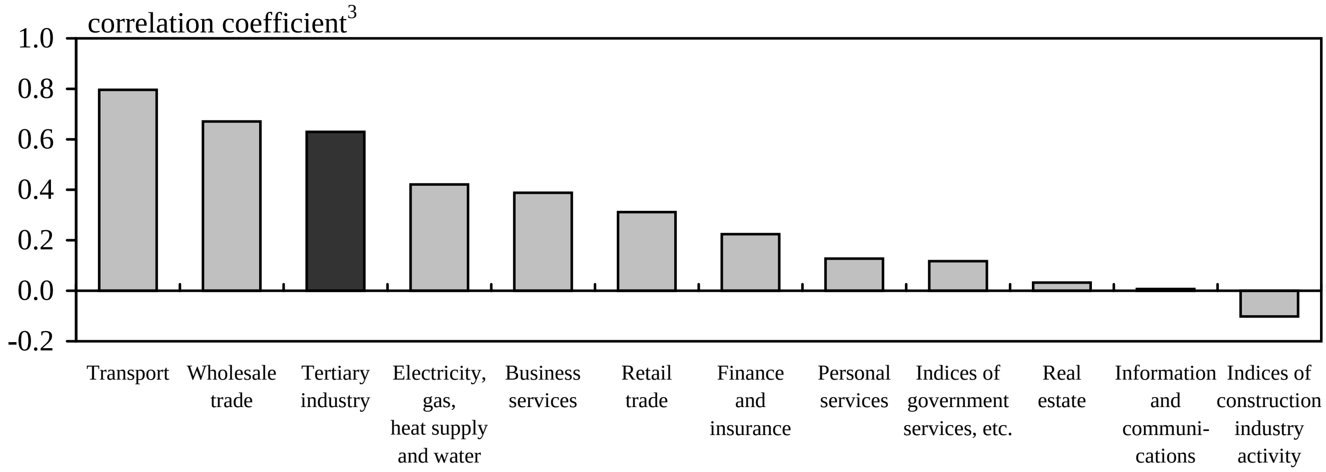
(1) All Industry Activity (Breakdown by Industry) and Real GDP[1]



(2) Tertiary Industry Activity[1]



(3) Correlation in Activity of Several Industries with Industrial Production

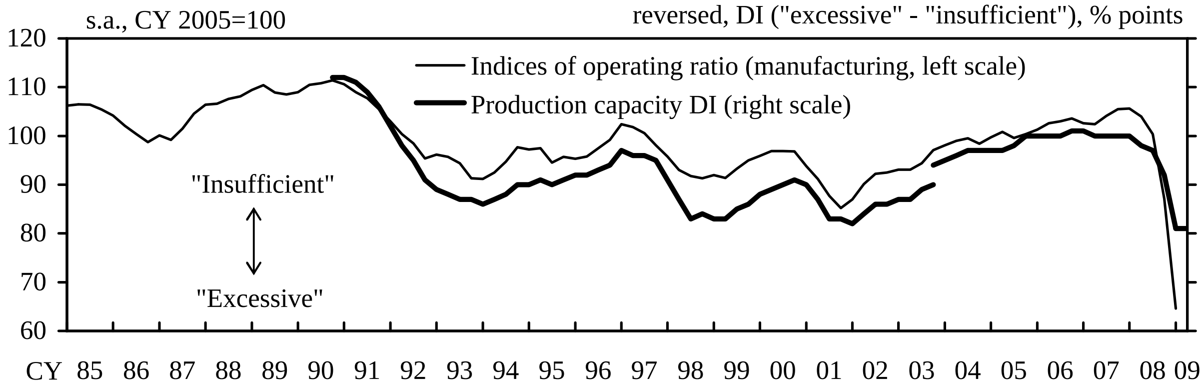


Notes: 1. Figures for 2009/Q1 are those of the January-February averages.
2. Consisting of: information and communications; real estate; eating and drinking places, accommodations; medical, health care and welfare; learning support; and compound services.
3. The correlation coefficients are estimated between the year-on-year changes in indices of industrial production (defined in indices of all industry activity) and those of indices of tertiary industry activity, indices of construction industry activity and indices of government services, etc. The sample period is from January 1994 to December 2008.

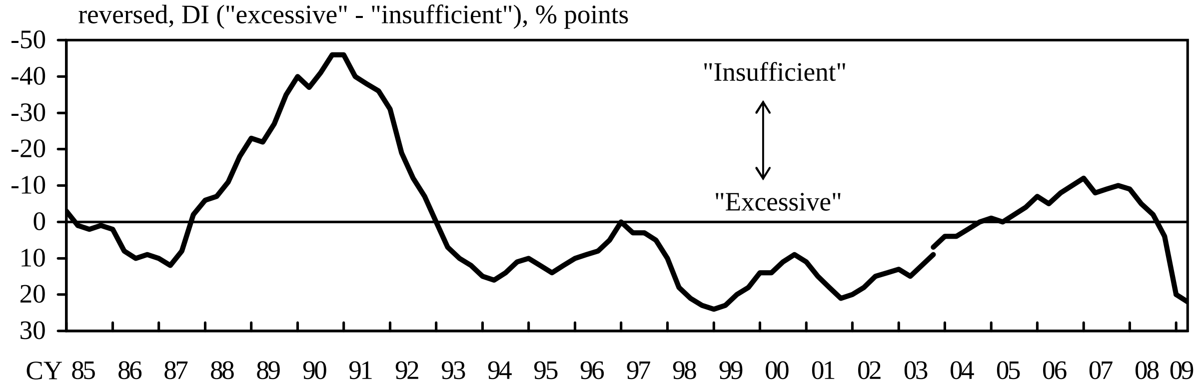
Sources: Ministry of Economy, Trade and Industry, "Indices of All Industry Activity," "Indices of Tertiary Industry Activity"; Cabinet Office, "National Accounts."

Resource Utilization

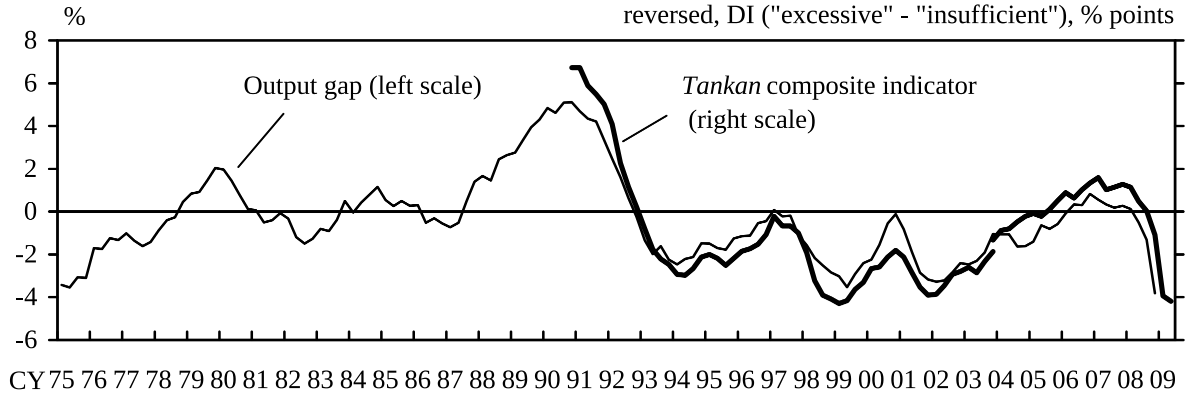
(1) Production Capacity and Capital Utilization[1,2,4]



(2) Employment Conditions DI[1,2]



(3) *Tankan* Composite Indicator and Output Gap[1,2,3]

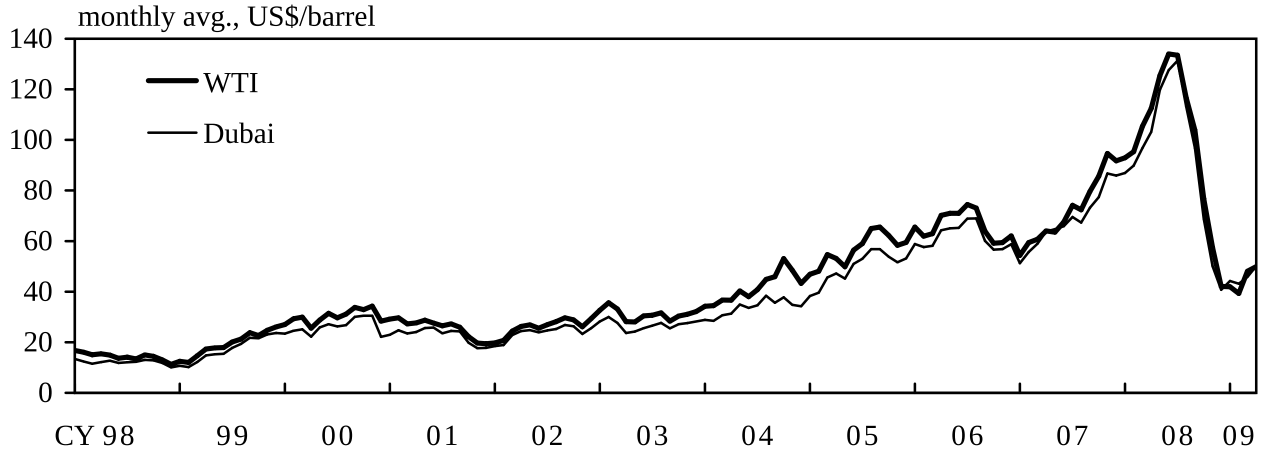


Notes: 1. Figures of DI's are based on all-size enterprises and all industries.
The *Tankan* has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on a new basis.
2. Figures of DI's for 2009/Q2 are the forecasts in the March 2009 survey.
3. The *Tankan* composite indicator is calculated as the average of DI's of production capacity and employment conditions, weighted by capital and labor shares in the national accounts (FY 1990-2007 average). 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, May 2006).
4. Figure for indices of operating ratio for 2009/Q1 is the January-February average.

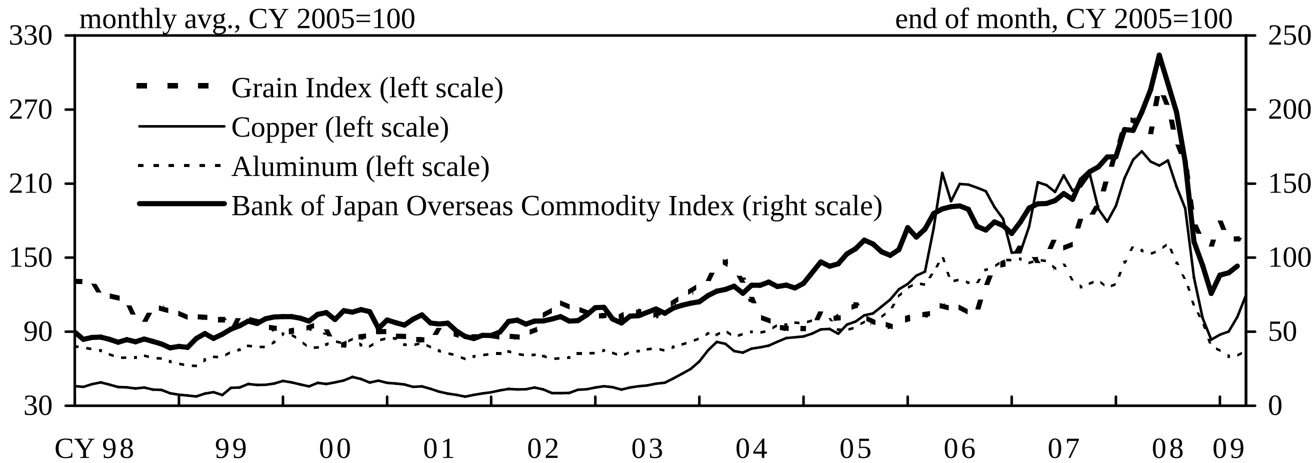
Sources: Cabinet Office, "National Accounts"; Cabinet Office and Ministry of Finance, "Business Outlook Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service"; Ministry of Economy,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

Commodity Prices

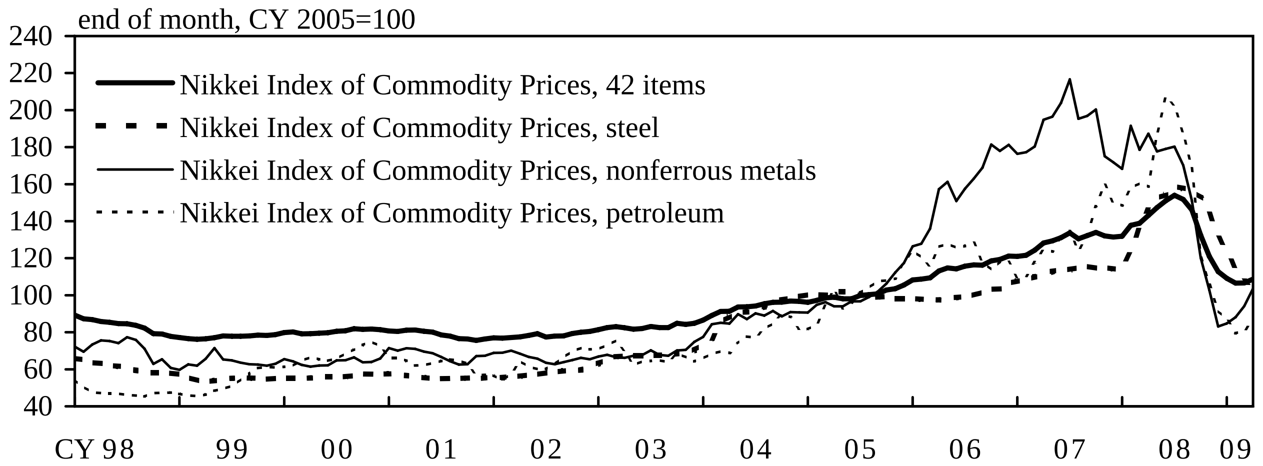
(1) Oil Prices[1]



(2) International Commodity Prices[1,2]



(3) Domestic Commodity Prices[3,4]

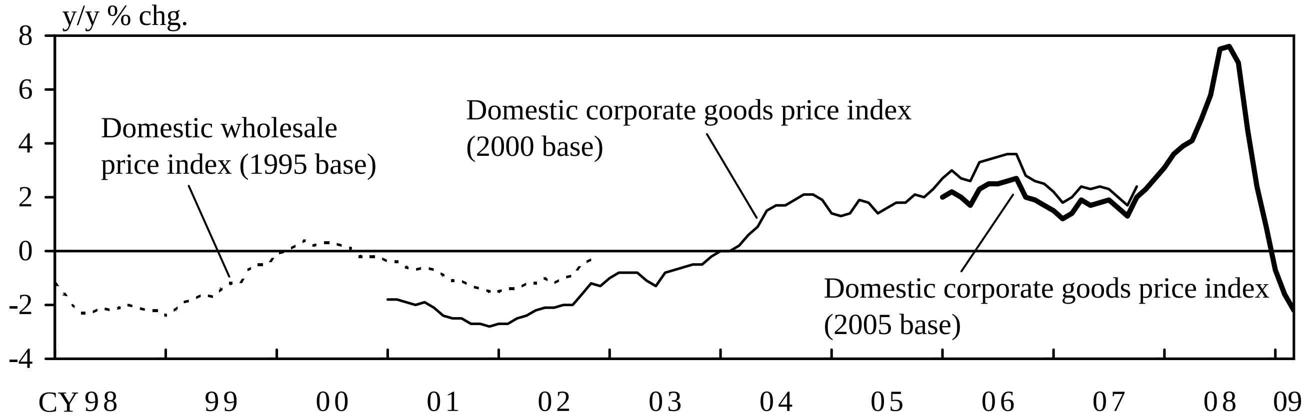


Notes: 1. Figures for April 2009 are the averages up to April 29.
2. The Grain Index is the weighted average of prices of three selected items (wheat, soybeans, and corn) in overseas commodity markets. The weights are based on the value of imports in the Trade Statistics of Japan.
3. Steel: steel bars, H sections, steel plates, etc. Nonferrous metals: unwrought copper, unwrought aluminum, etc. Petroleum: gasoline, kerosene, gas oil, fuel oil C.
4. Figures for April 2009 are those as of April 24.

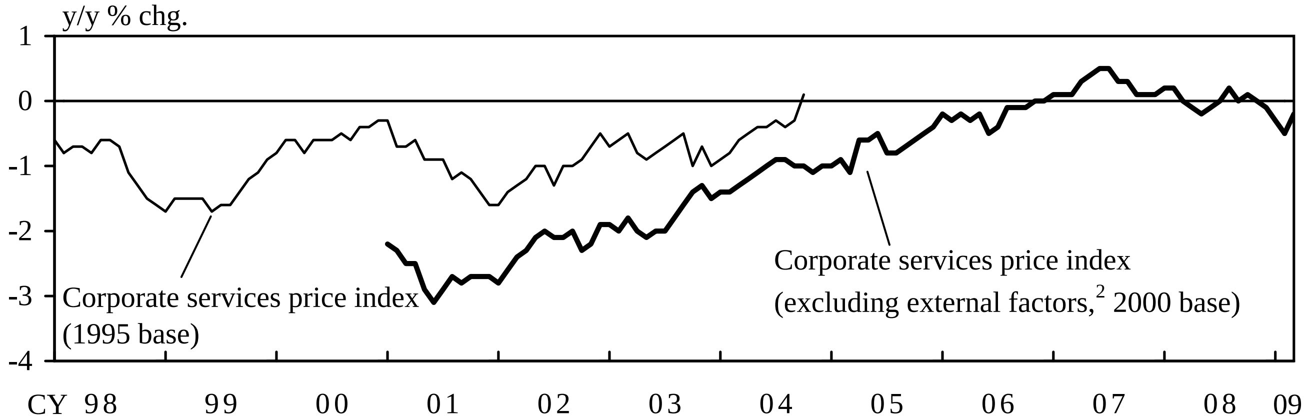
Sources: Bank of Japan, "Bank of Japan Overseas Commodity Index"; *The Nihon Keizai Shimbun* , etc.

Prices

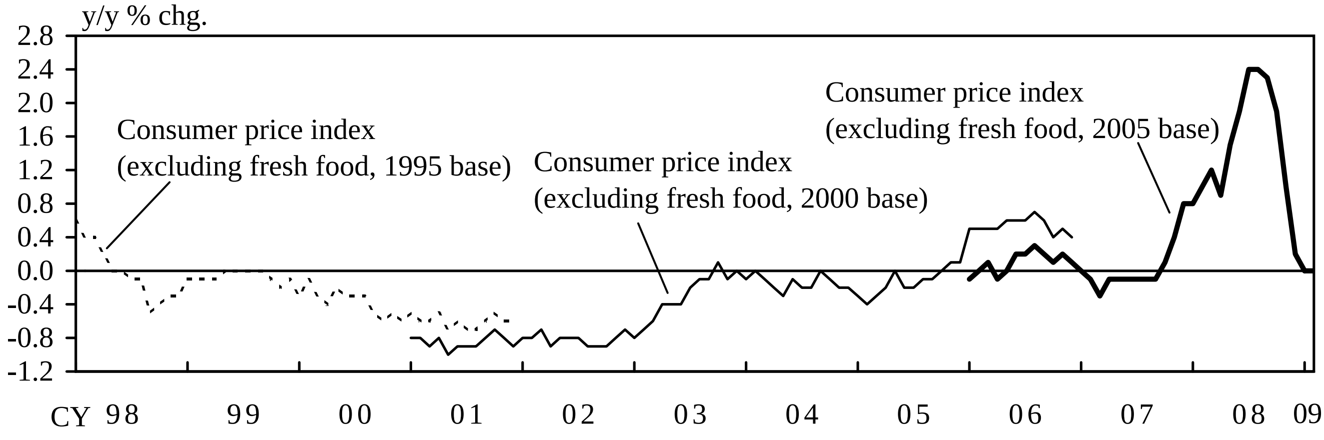
(1) Domestic Corporate Goods Price Index[1]



(2) Corporate Services Price Index[1]



(3) Consumer Price Index[1]

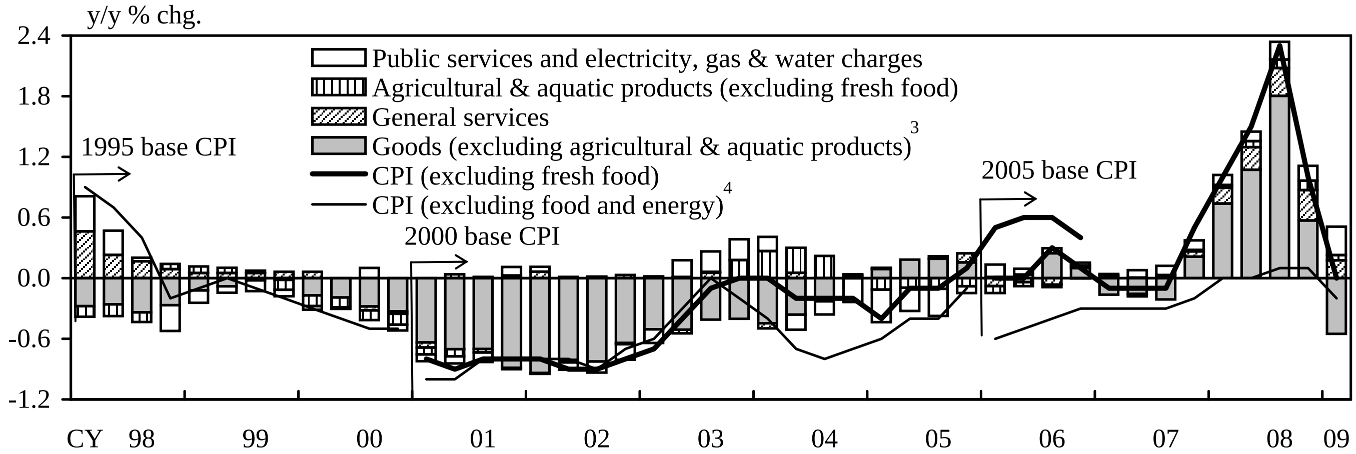


Notes: 1. Adjusted to exclude the effect of a change in the consumption tax rate.
2. External factors: international air passenger transportation, ocean liner, ocean tramper, ocean tanker, oceangoing ship chartering services, and international air freight.

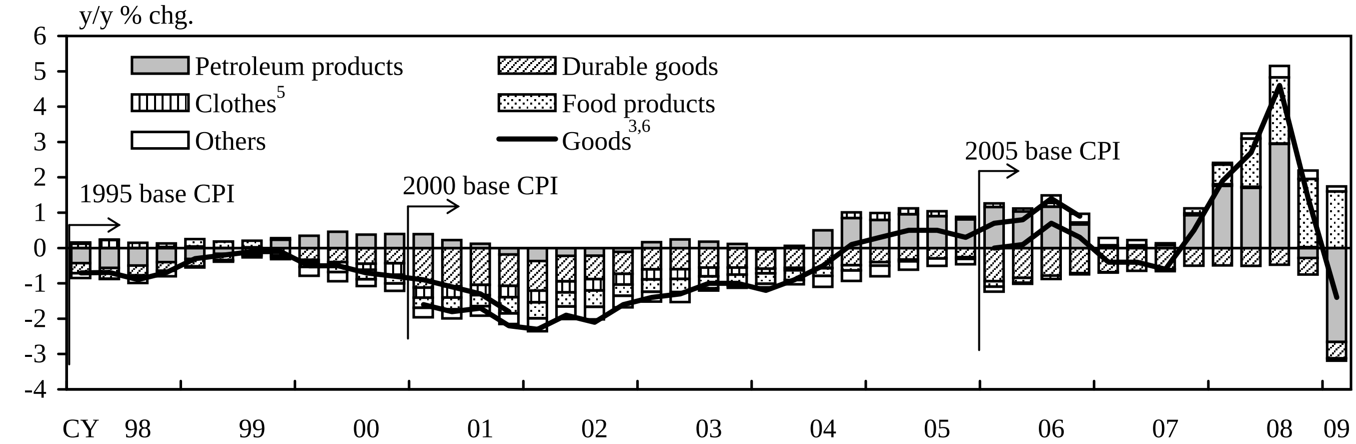
Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bank of Japan, "Corporate Goods Price Index," "Wholesale Price Index," "Corporate Services Price Index."

Consumer Price Index

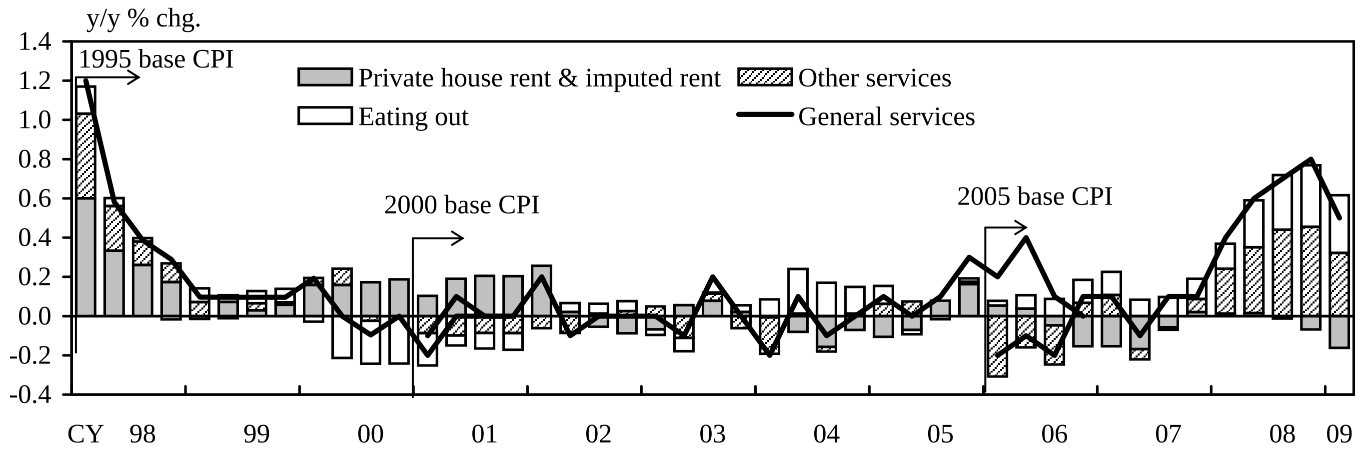
(1) Consumer Price Index (Excluding Fresh Food)



(2) Goods (Excluding Agricultural & Aquatic Products)[3]



(3) General Services

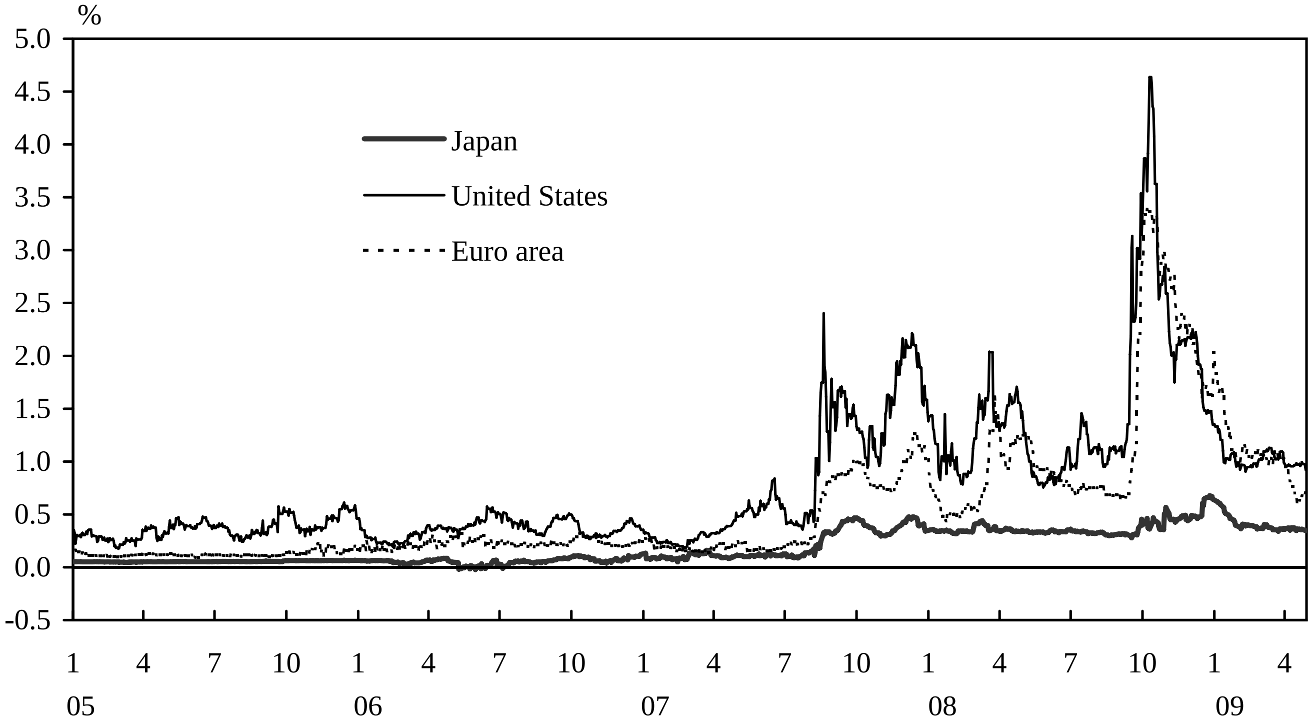


Notes: 1. Figures are adjusted to exclude the effect of a change in the consumption tax rate.
2. Figures for 2009/Q1 are the January-February averages.
3. The items are basically the same as the definition published by the Ministry of Internal Affairs and Communications. However, electricity, gas & water charges are excluded from goods.
4. Alcoholic beverages are excluded from food.
Energy: electricity, gas manufactured & piped, liquefied propane, kerosene, and gasoline.
5. Including shirts, sweaters & underwear.
6. Excluding agricultural & aquatic products.

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

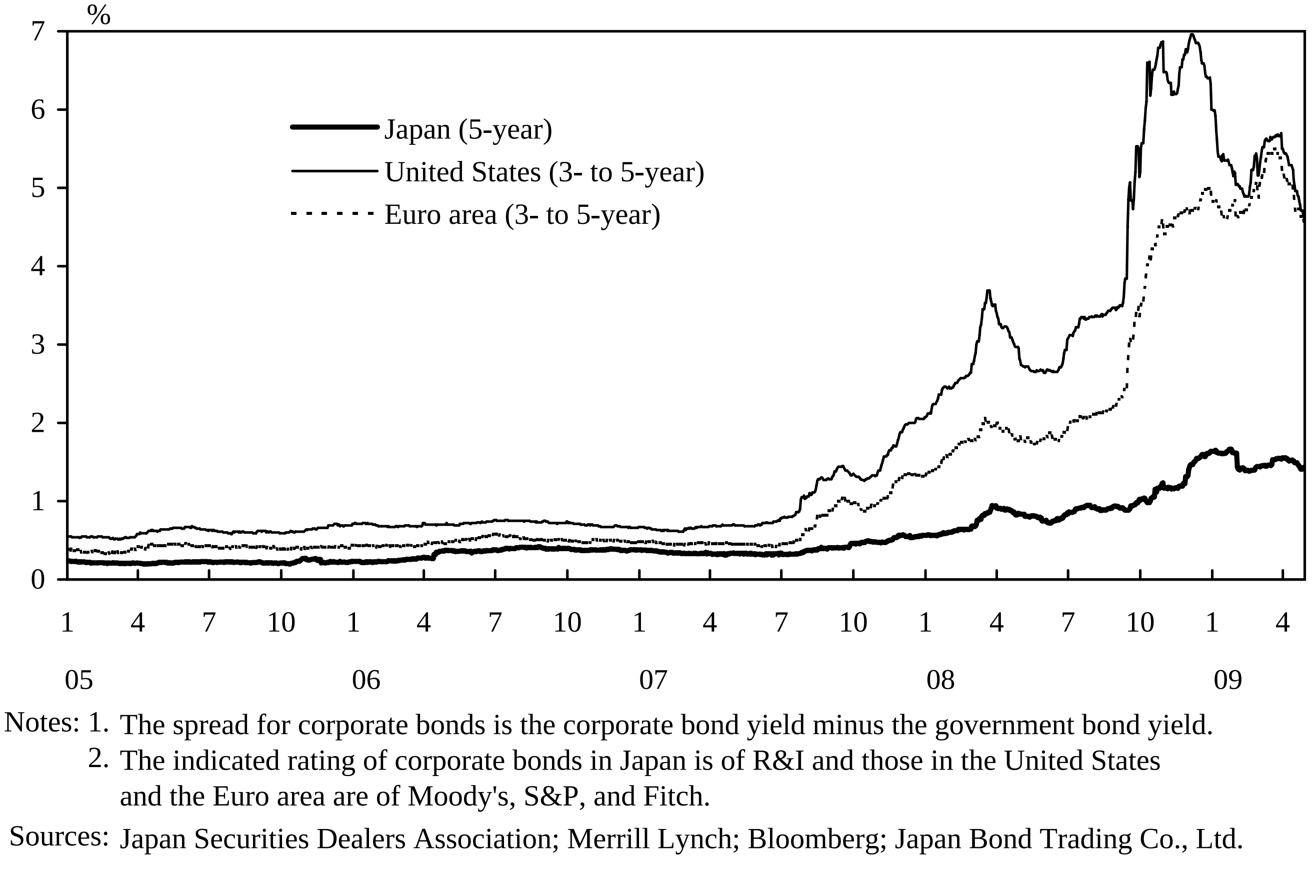
Credit Spread in Major Economies

(1) Spread for Term Instruments in Major Economies



Notes: 1. The spread for term instruments is Libor (3-month) minus the short-term government security (3-month) yield.
2. The FB rate is used for the Japanese short-term government security rate until February 2009, when FBs and TBs were integrated to form T-bills. Thereafter, the T-bill rate is used.
3. The German short-term government security yield is used for the Euro area.

(2) Spread for Corporate Bonds in Major Economies

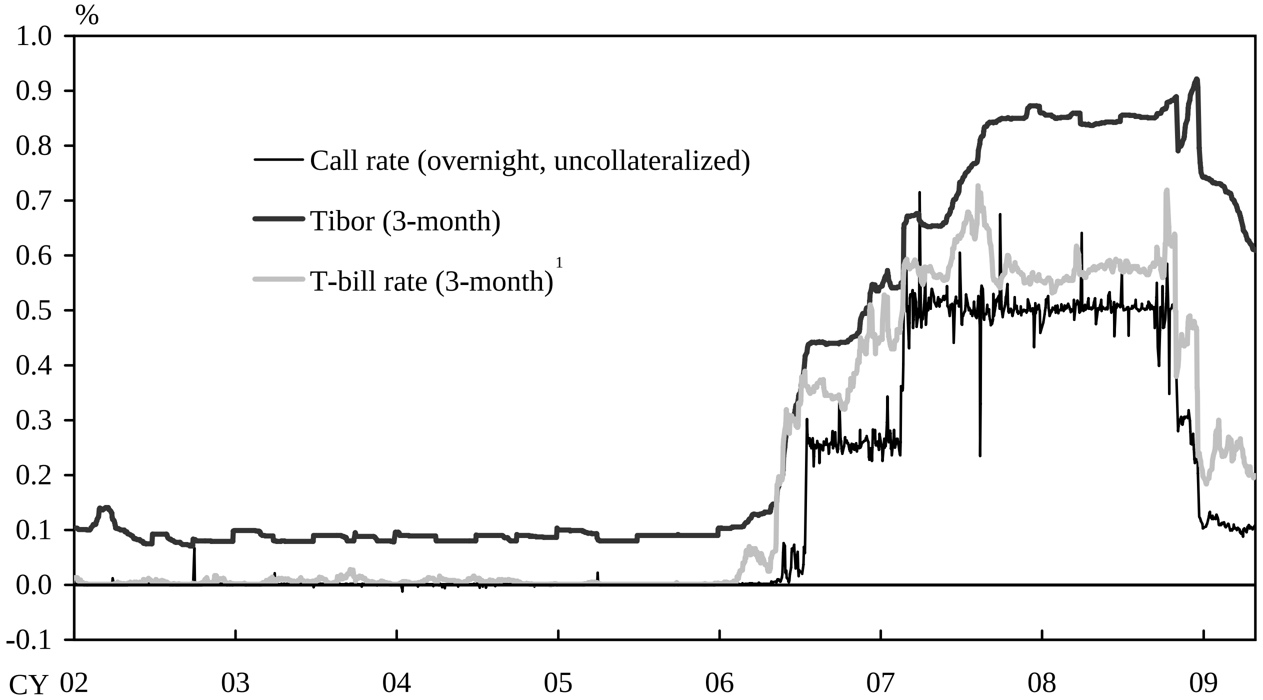


Notes: 1. The spread for corporate bonds is the corporate bond yield minus the government bond yield.
2. The indicated rating of corporate bonds in Japan is of R&I and those in the United States and the Euro area are of Moody's, S&P, and Fitch.

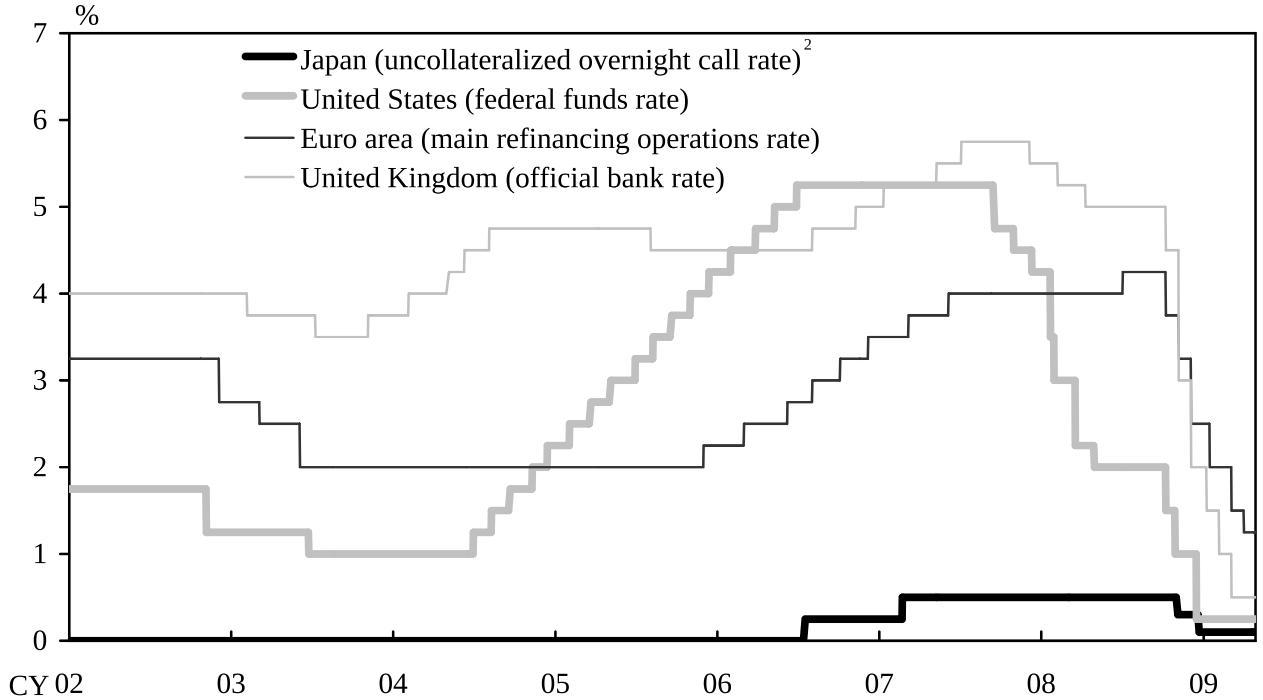
Sources: Japan Securities Dealers Association; Merrill Lynch; Bloomberg; Japan Bond Trading Co., Ltd.

Short-Term Interest Rates

(1) Short-Term Interest Rates



(2) Policy Interest Rates in Major Economies

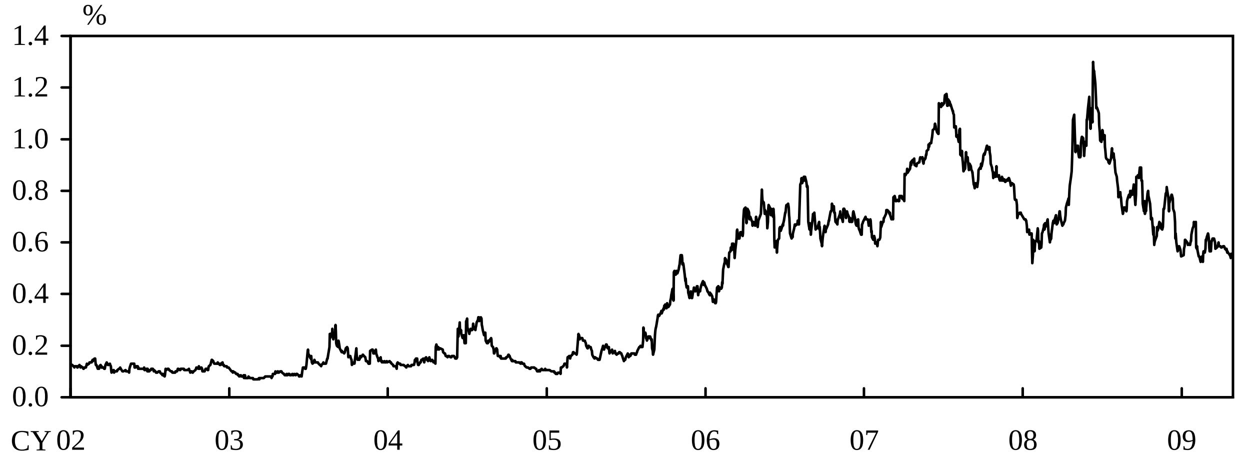


Notes: 1. The FB rate is used prior to the integration of FBs and TBs to form T-bills in February 2009.
2. The policy interest rate of Japan is considered 0 percent during the period when the operating target of money market operations was the outstanding balance of current accounts at the Bank of Japan.

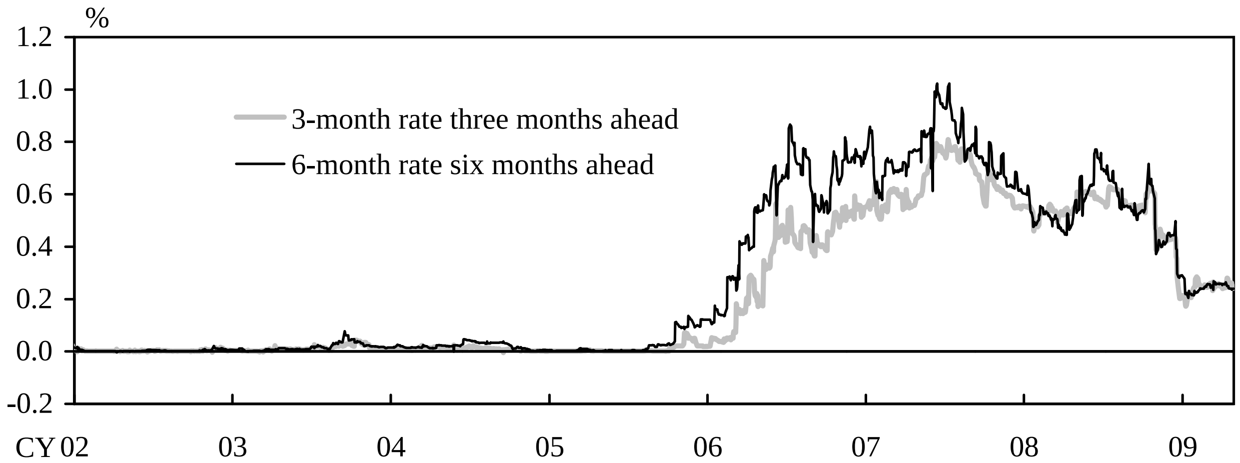
Sources: Bank of Japan; other central banks; Bloomberg.

Market Participants' Expectations on Interest Rates in the Future

(1) Euroyen Interest Rate Futures (3-Month, Leading Contract Months)

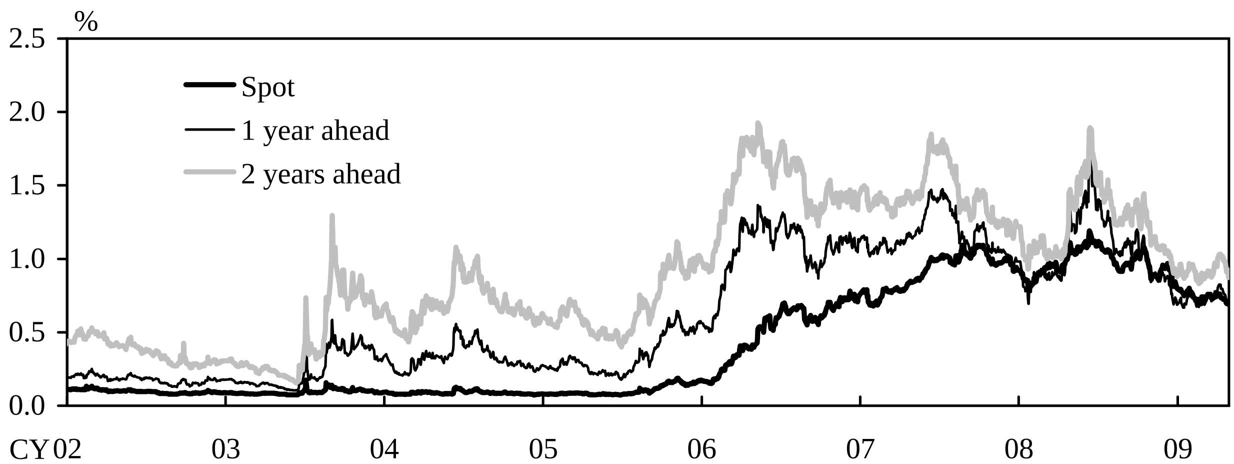


(2) Implied Forward Rates (3-Month, 6-Month)



Note: Calculated from the T-bill rates (3-month, 6-month, 1-year). The FB rate and TB rate are used prior to the integration of FBs and TBs to form T-bills in February 2009.

(3) Implied Forward Rates (1-Year)

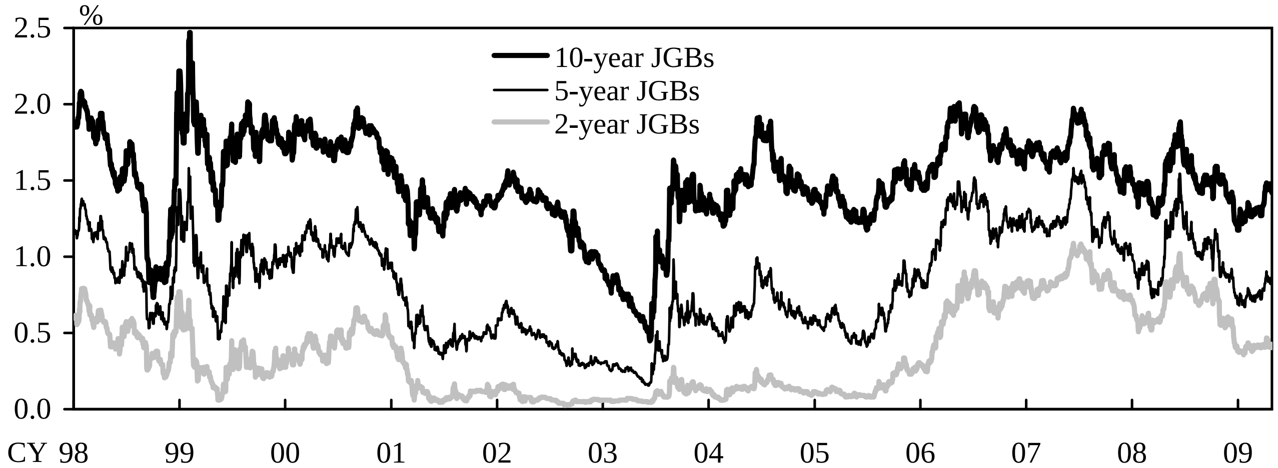


Note: Calculated from yen-yen swap rates.

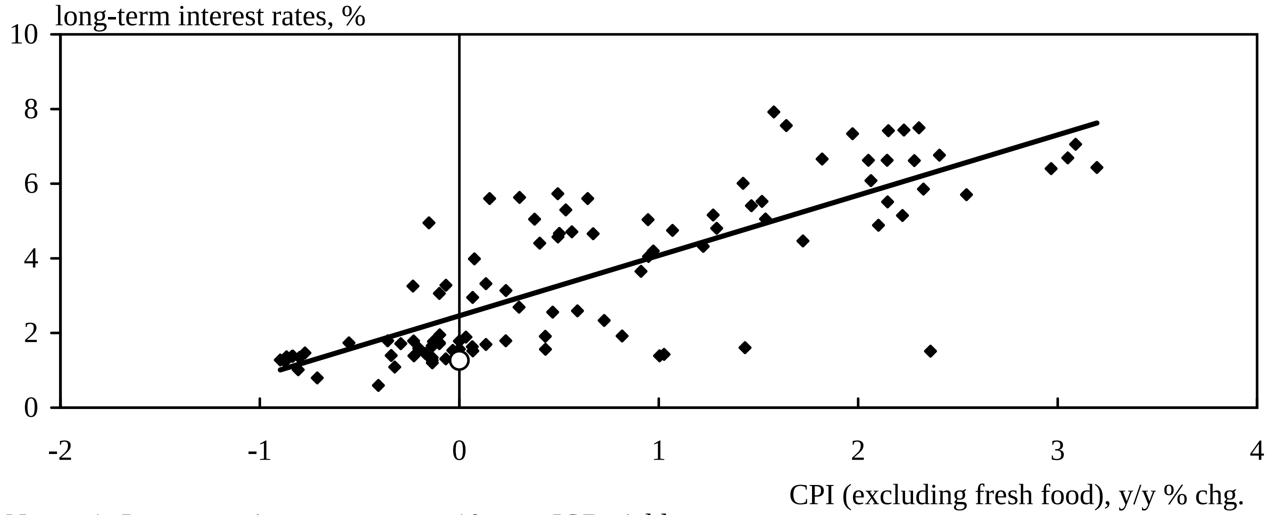
Sources: Tokyo Financial Exchange; Reuters; Bloomberg.

Long-Term Interest Rates

(1) Government Bond Yields

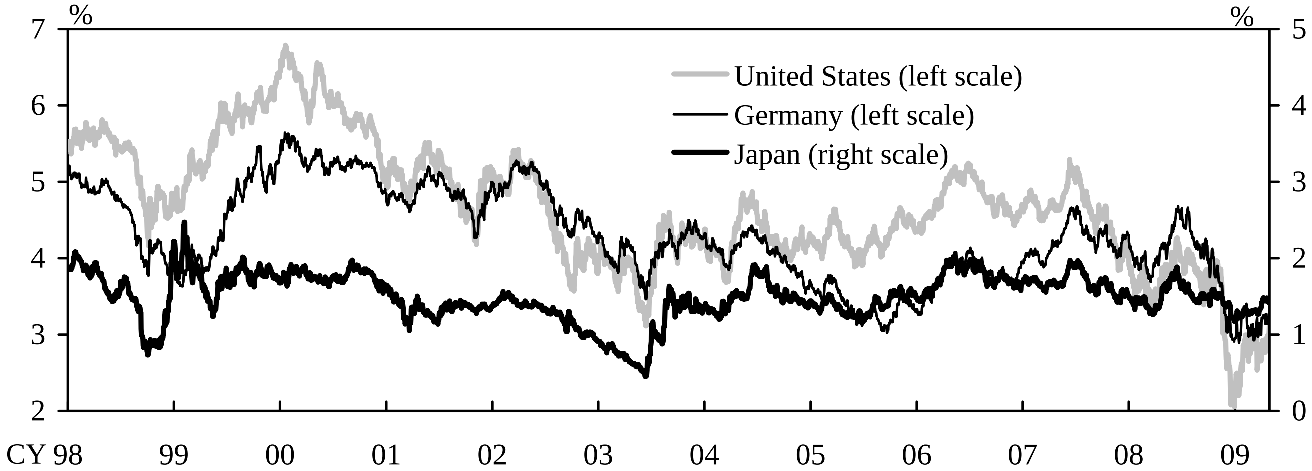


(2) Long-Term Interest Rates and Change in the Consumer Price Index



Notes: 1. Long-term interest rates are 10-year JGB yields.
2. The CPI is adjusted to exclude the effects of changes in the consumption tax rate.
3. The sample period is 1983/Q3-2009/Q1. The figure for 2009/Q1 is the average of the figures for January and February (indicated by a white circle).

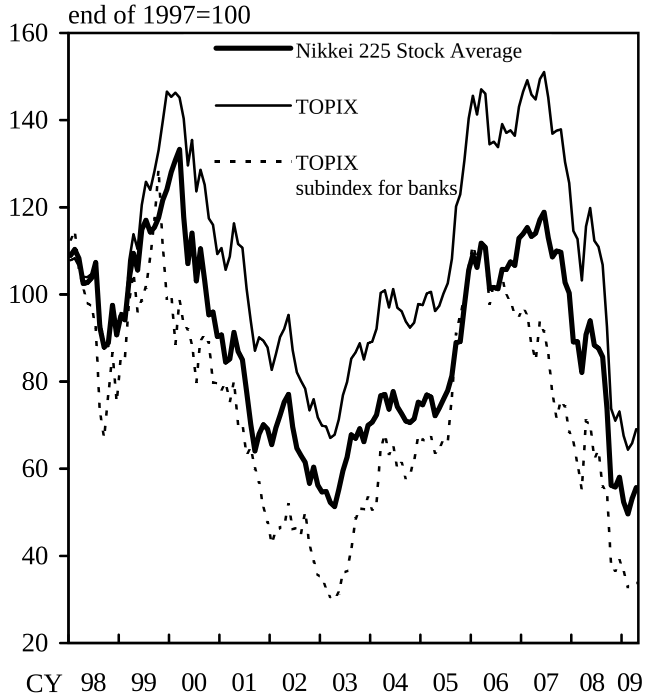
(3) Long-Term Interest Rates in Major Countries (10-Year Government Bond Yields)



Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Japan Bond Trading Co., Ltd.; Bloomberg.

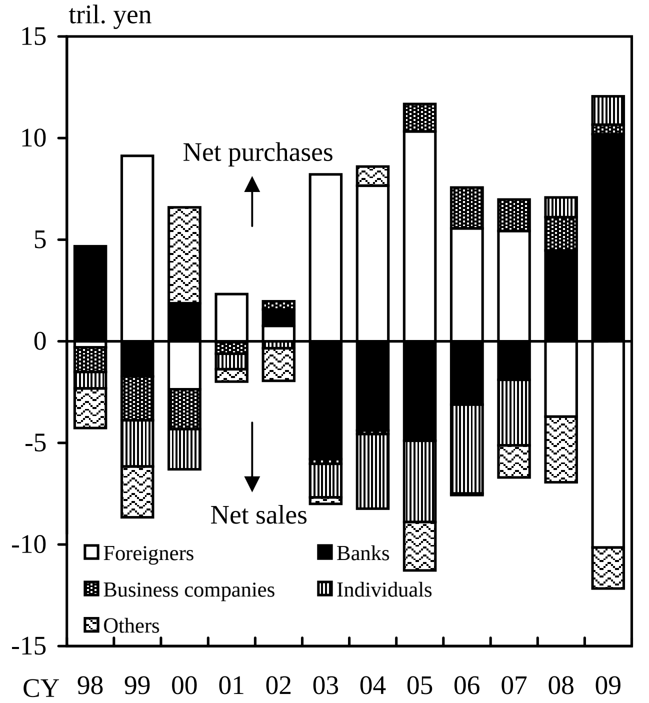
Stock Prices

(1) Stock Prices



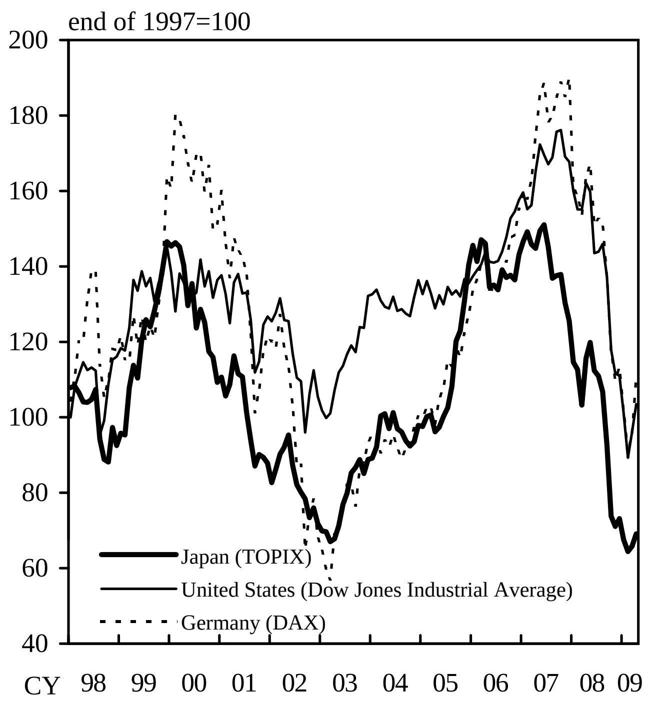
Note: Data are at end of month. Figures for April 2009 are the latest available data.

(2) Trading Volume by Investor Type



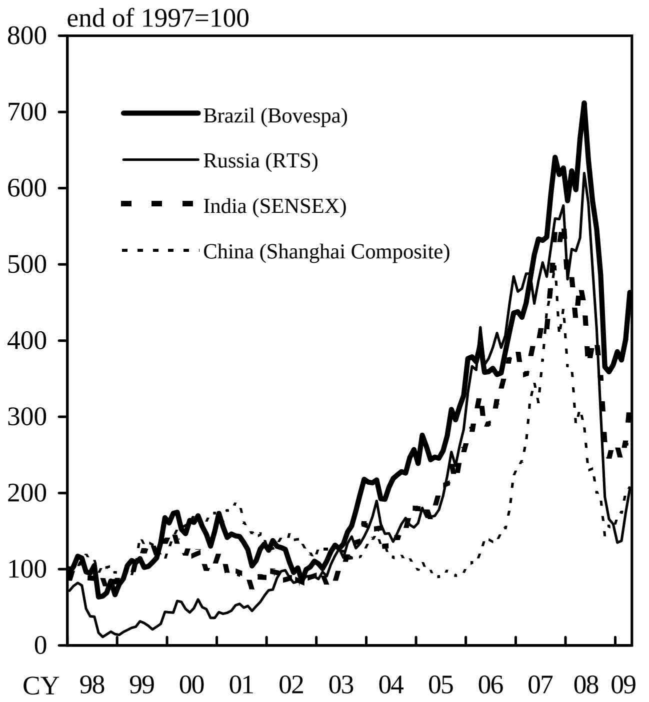
Notes: 1. Figures are the sum of the first and second sections of the Tokyo, Osaka, and Nagoya stock exchanges.
2. Figures for 2009 are those of January-March in terms of annual amount.

(3) Stock Prices in Major Countries



Note: Data are at end of month. Figures for April 2009 are the latest available data.

(4) Stock Prices in the BRIC Economies

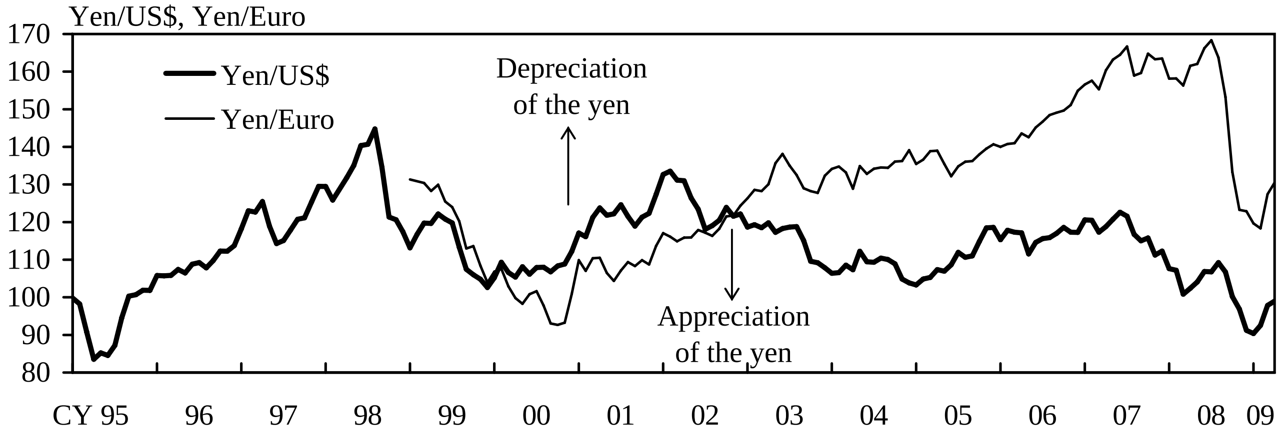


Note: Data are at end of month. Figures for April 2009 are the latest available data.

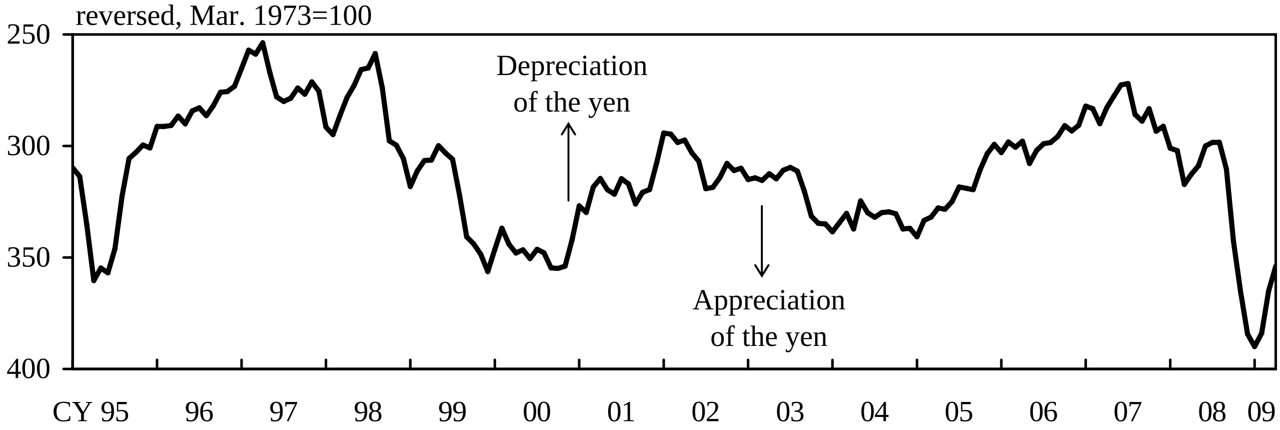
Sources: *The Nihon Keizai Shimbun* ; Tokyo Stock Exchange; Bloomberg.

Exchange Rates

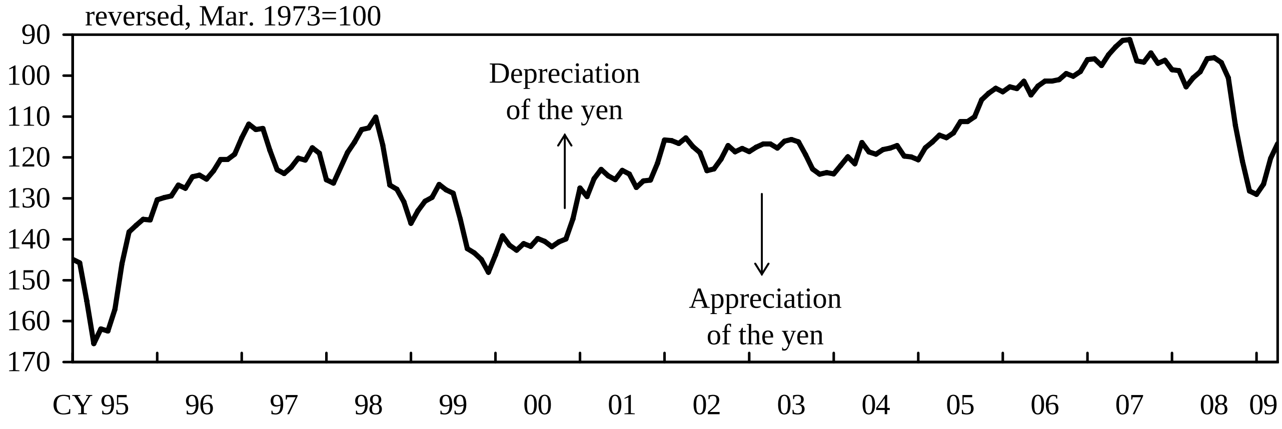
(1) Yen/US$ and Yen/Euro[1]



(2) Nominal Effective Exchange Rate[1,2]



(3) Real Effective Exchange Rate[1,3]



Notes: 1. Monthly average. Figures for April 2009 are averages up to the latest available data.
2. The nominal effective exchange rate is a weighted average of the yen's exchange rates against 15 currencies that have a large share among Japanese total exports.
3. The real effective exchange rate is a weighted average of the yen's real exchange rates against 15 currencies that have a large share among Japanese total exports. The yen's real exchange rates are calculated from the nominal exchange rates and price indexes of the relevant countries.

Source: Bank of Japan.

The Bank of Japan's Actions since Autumn 2008

Monetary Policy Measures

1. Reductions in the Policy Interest Rate

- 0.5% → 0.3% (Oct. 2008) → 0.1% (Dec. 2008)

2. Measures to Ensure Stability in Financial Markets

- Introduction and expansion of U.S. dollar funds-supplying operations (an unlimited amount against the value of eligible collateral)

- Provision of sufficient funds over the fiscal year-end

  37.8 trillion yen as of the end of fiscal 2007 → 44.7 trillion yen as of the end of fiscal 2008

- Increase in outright purchases of JGBs

  14.4 trillion yen per year → 16.8 trillion yen per year (Dec. 2008) → 21.6 trillion yen per year (Mar. 2009)

3. Steps to Facilitate Corporate Financing

- Increase in the frequency and size of CP repo operations

- Introduction and expansion of special funds-supplying operations to facilitate corporate financing (an unlimited amount against the value of eligible collateral at low interest rates)

- Introduction of outright purchases of CP and ABCP (upper limit of the amount purchased: 3 trillion yen)

- Introduction of outright purchases of corporate bonds (upper limit of the amount purchased: 1 trillion yen)

- Expansion in the range of corporate debt eligible as collateral (A-rated or higher → BBB-rated or higher)

  3.9 trillion yen (3.9 trillion yen*) as of the end of Nov. 2008 → 10.3 trillion yen (9.8 trillion yen*) as of the end of Mar. 2009

  *The total amount of eligible collateral for special funds-supplying operations to facilitate corporate financing

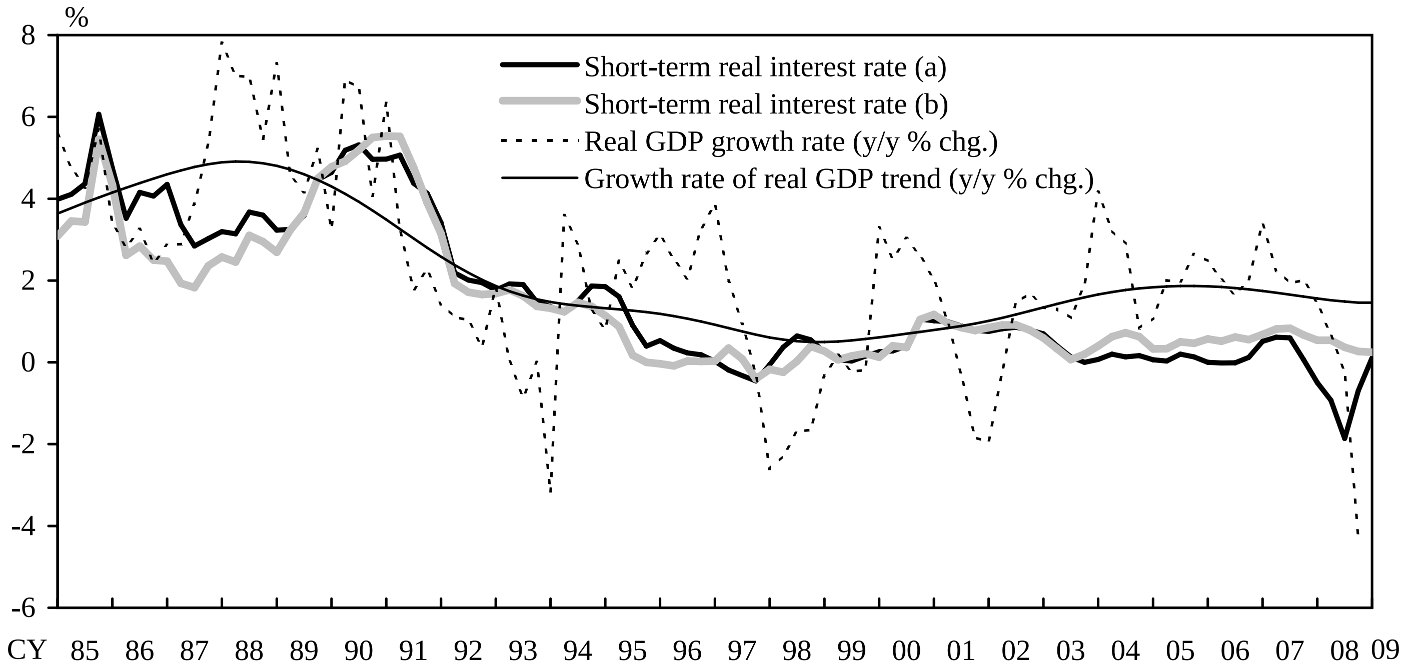
Measures to Secure the Stability of the Financial System

- Purchases of stocks held by banks (upper limit of the amount purchased: 1 trillion yen)

- Provision of subordinated loans to banks (upper limit of the amount loaned: 1 trillion yen)

Interest Rates and Economic Activity

(1) Short-Term Real Interest Rate and Real GDP Growth Rate



Notes: 1. Short-term real interest rate (a) = call rate (overnight, uncollateralized) - y/y % chg. in the consumer price index (excluding fresh food)

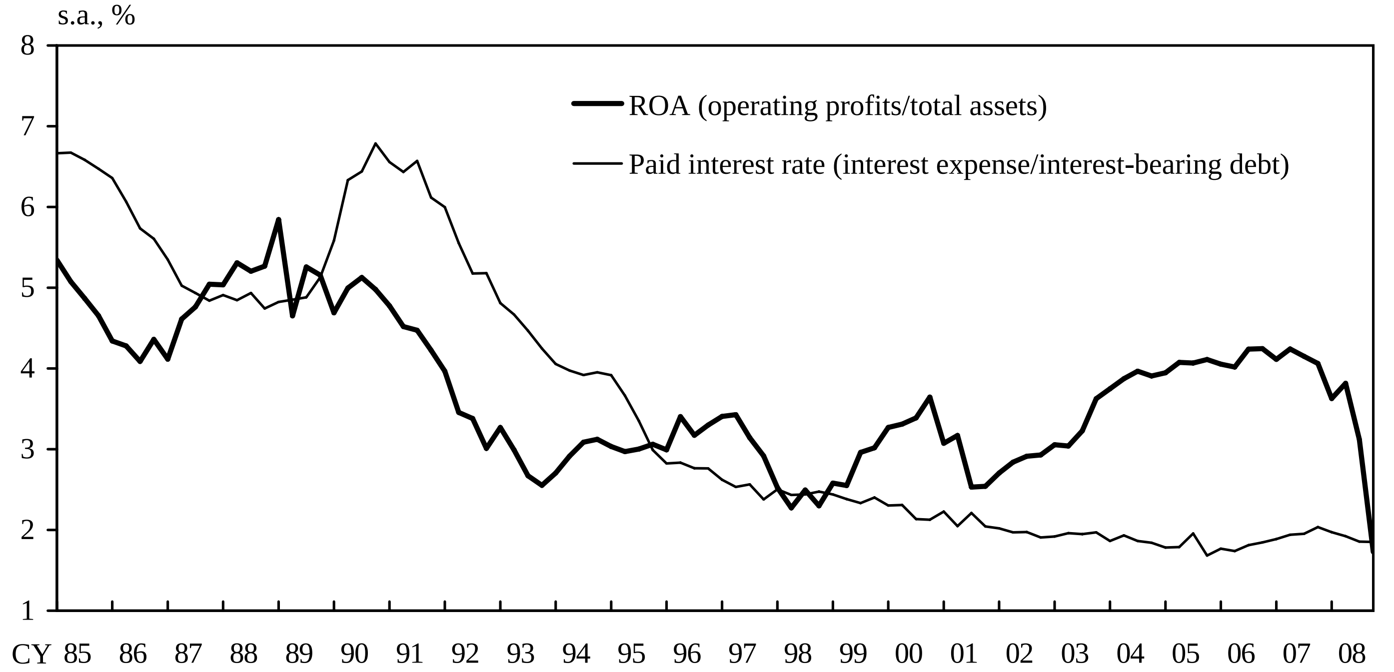
2. Short-term real interest rate (b) = call rate (overnight, uncollateralized) - y/y % chg. in the consumer price index (excluding food [alcoholic beverages are excluded from food] and energy)

3. Figures for the consumer price index are adjusted to exclude the effect of changes in the consumption tax rate.

4. Real GDP trend is calculated by applying the HP filter.

(2) ROA and Paid Interest Rate

("Financial Statements Statistics of Corporations by Industry, Quarterly," All Enterprises)

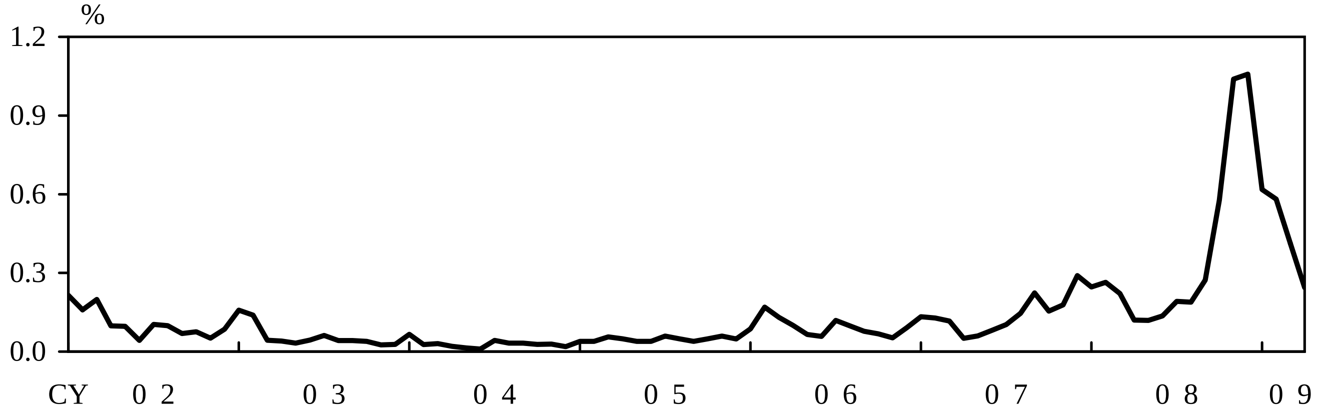


Note: Interest-bearing debt = long- and short-term borrowings + corporate bonds + bills receivable discounted outstanding

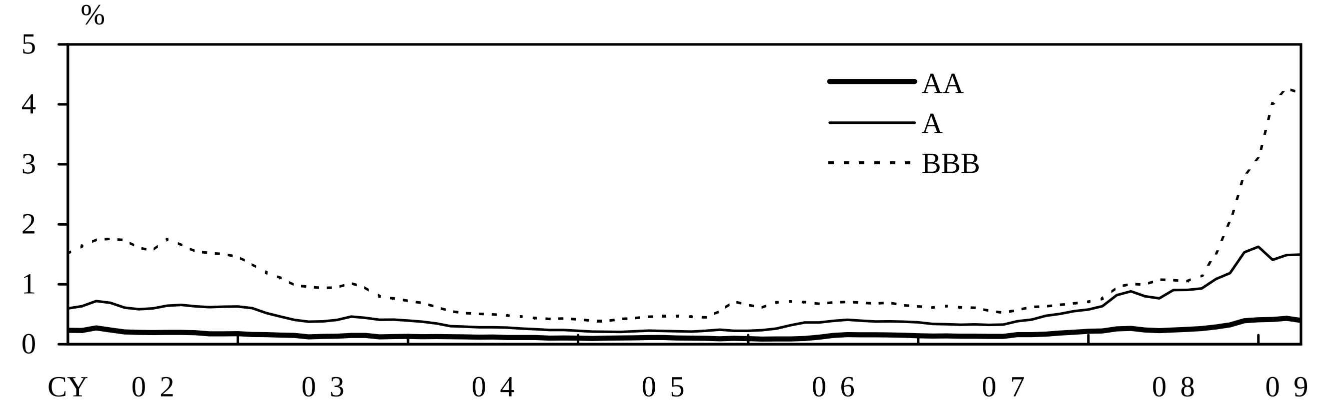
Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"; Bank of Japan.

Commercial Paper and Corporate Bonds Markets

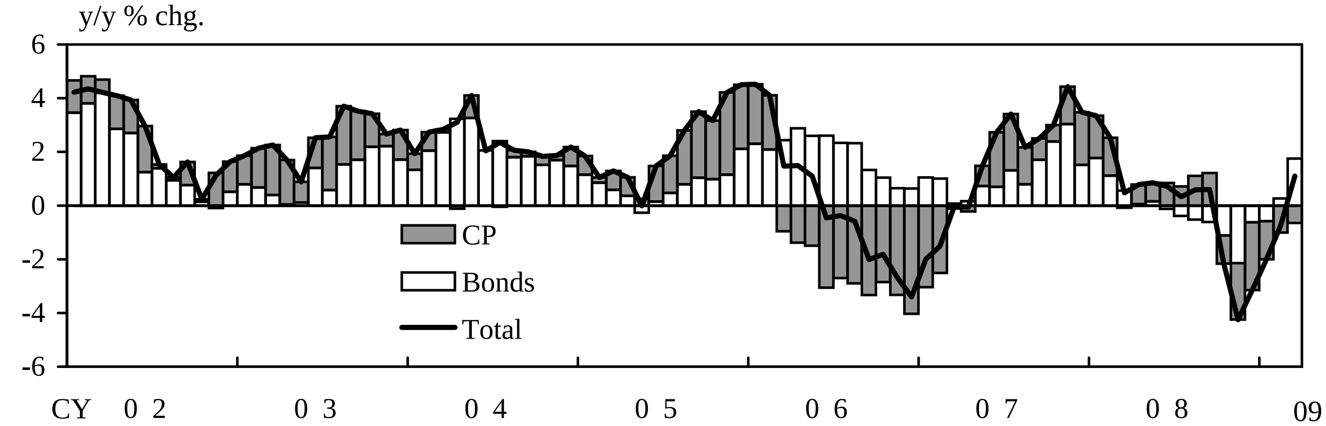
(1) Spread for CP (3-Month)[1,2,3]



(2) Spread for Corporate Bonds (5-Year)[3,4,5]



(3) Amount Outstanding of CP and Corporate Bonds[6,7]

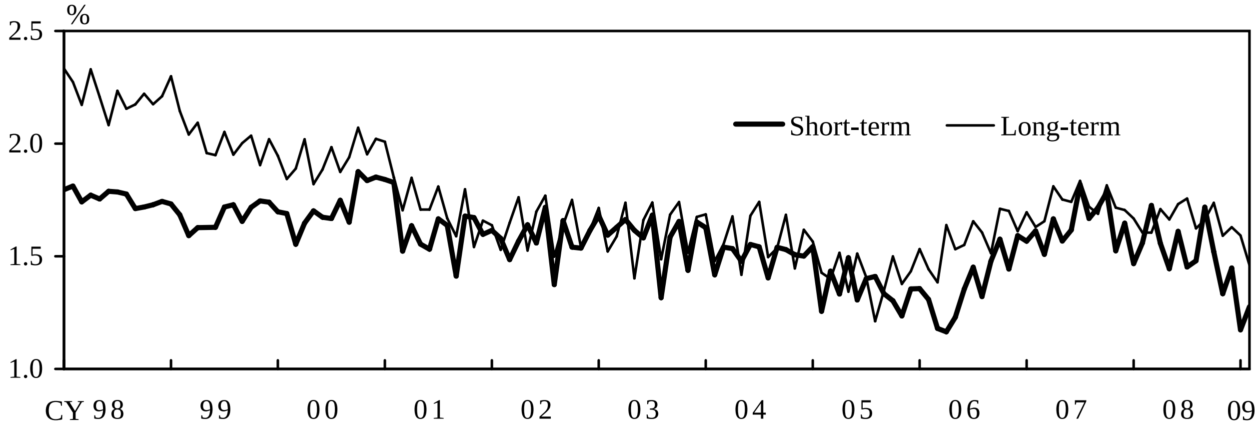


Notes: 1. The spread for CP is the average issuance rate of CP (rated a-1 or higher) minus the short-term government security yield.
2. The FB rate is used prior to the integration of FBs and TBs to form T-bills in February 2009.
3. The spreads for both CP and corporate bonds in April 2009 are averages up to the latest available data.
4. The spread for corporate bonds is the corporate bond yield minus the government bond yield.
5. The indicated ratings of corporate bonds are of R&I.
6. Figures for CP are those of dematerialized CP (that issued by business corporations and ABCP). Figures from April 2002 to March 2008 are those underwritten by city banks, securities companies, and other financial institutions that hold current accounts at the Bank of Japan (excluding CP issued by foreign corporations other than ABCP). Figures from January to March 2002 are those underwritten mainly by city banks (excluding CP issued by nonresidents).
7. Figures for corporate bonds are the sum of those issued in domestic and overseas markets.

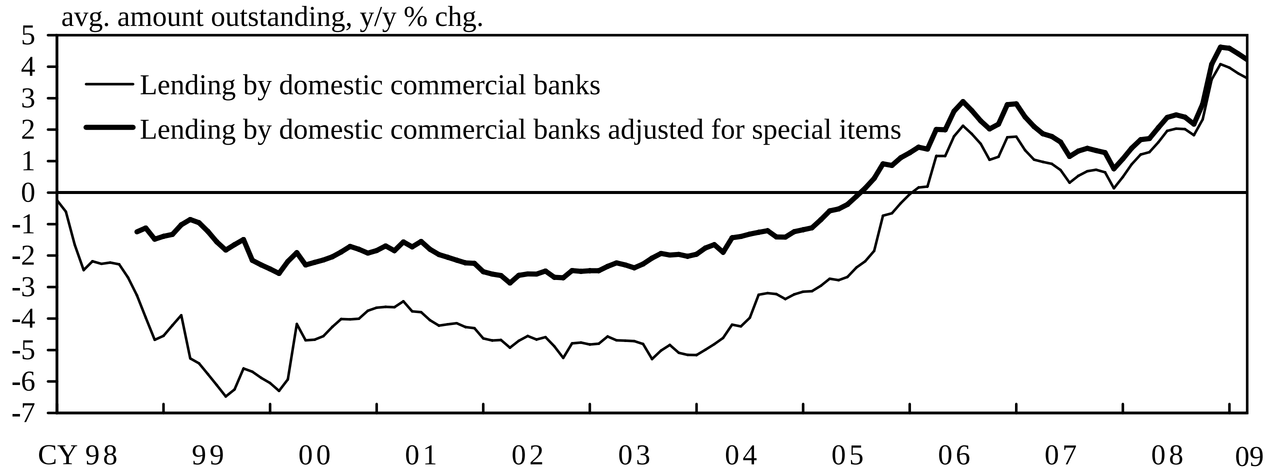
Sources: Bank of Japan; Japanese Bankers Association; Japan Bond Trading Co., Ltd.; Japan Securities Dealers Association; I-N Information Systems.

Bank Lending and Money Stock

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

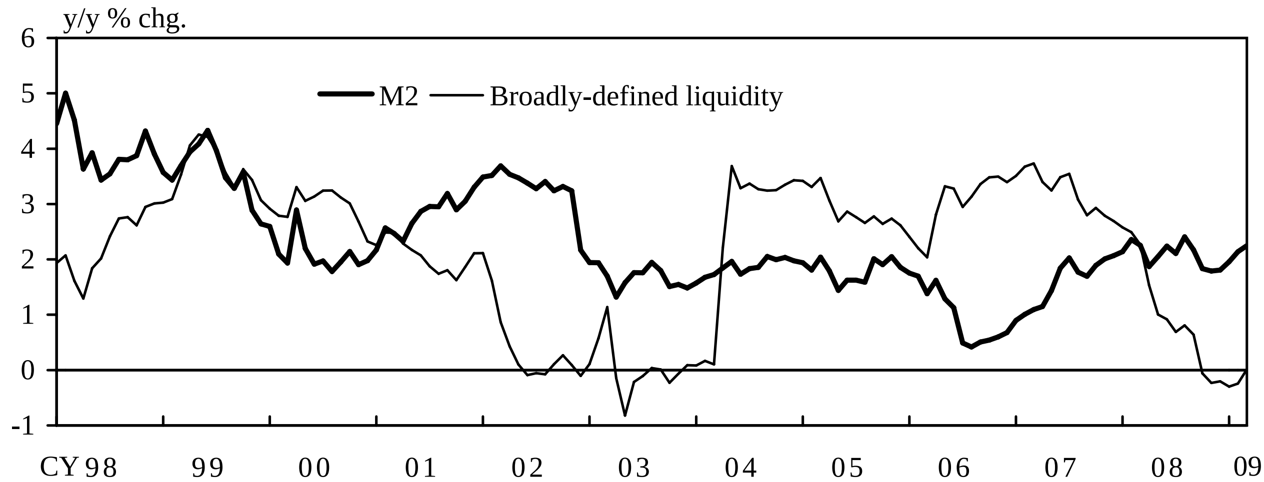


(2) Lending by Domestic Commercial Banks



Note: Adjusted figures exclude fluctuations from liquidations of loans, loan write-offs, etc.

(3) Money Stock



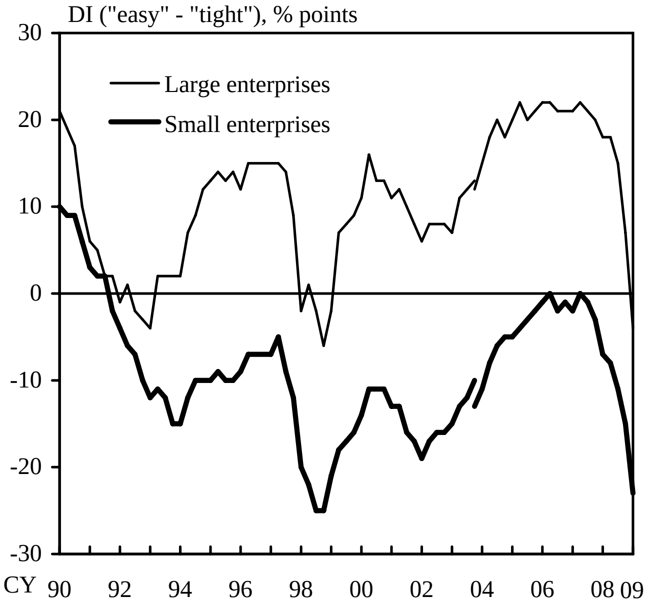
Notes: 1. Figures for M2 up to March 2004 are the former series of the figures for M2+CDs.
2. Figures for broadly-defined liquidity up to March 2004 are the former series of the figures for broadly-defined liquidity, subtracting the figures for repurchase agreements and those for securities lending with cash collateral transactions.

Source: Bank of Japan, "Principal Figures of Financial Institutions," "Money Stock," "Average Contracted Interest Rates on Loans and Discounts."

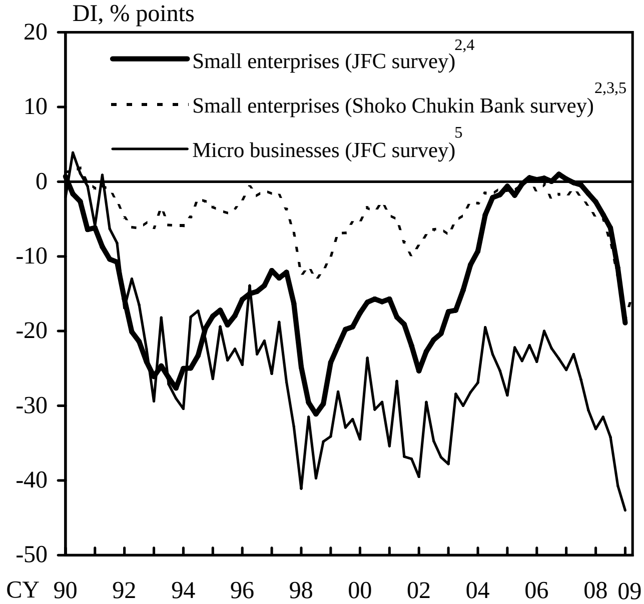
Corporate Finance-Related Indicators

(1) Financial Position

(a) *Tankan*[1]

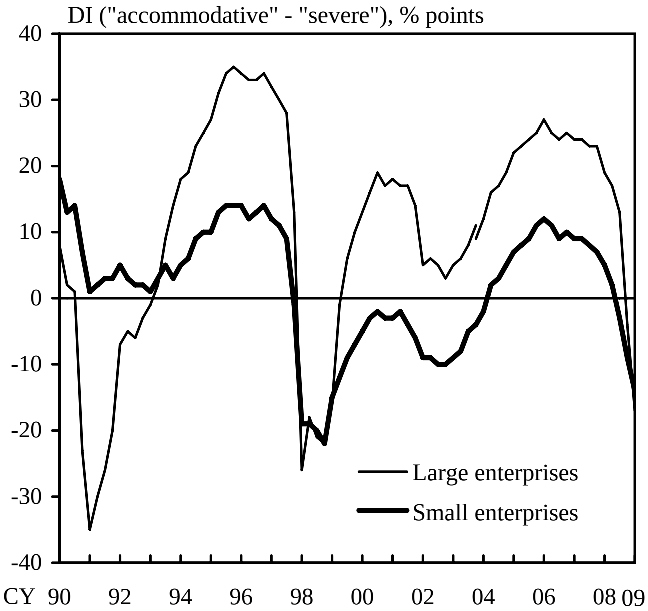


(b) Other Surveys

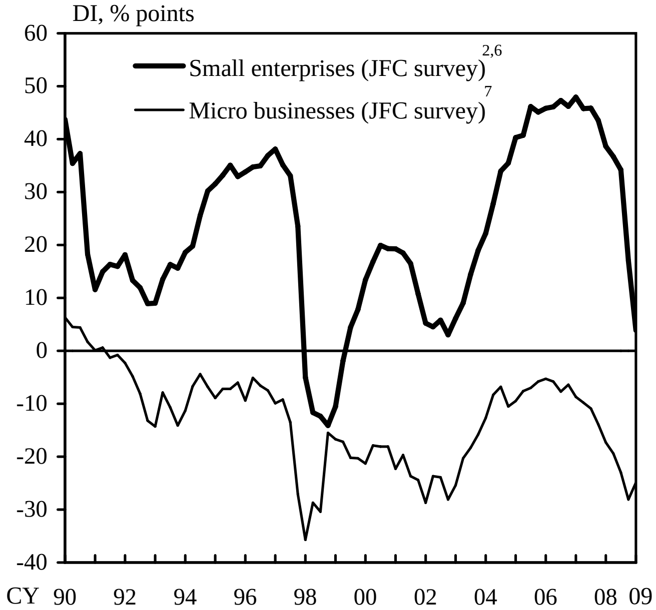


(2) Lending Attitude of Financial Institutions as Perceived by Firms

(a) *Tankan*[1]



(b) Other Surveys



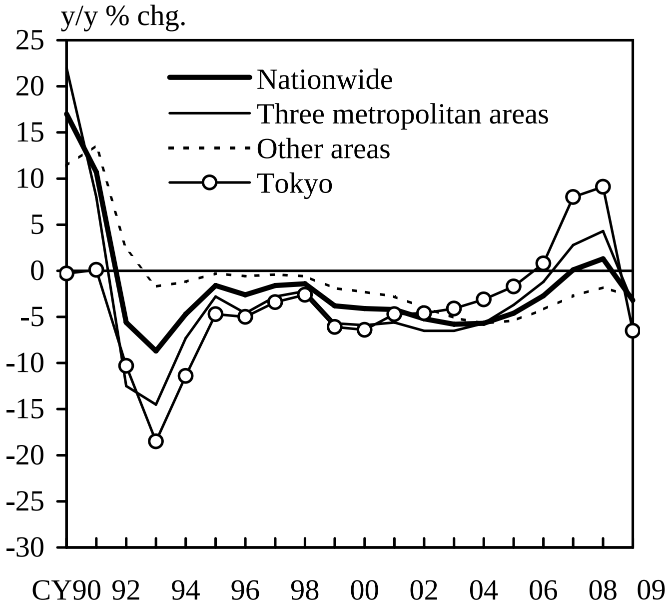
Notes: 1. Data of the *Tankan* are based on all industries. The *Tankan* has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on a new basis.
2. Figures are quarterly averages of monthly data.
3. Figures for 2009/Q2 are those of April 2009.
4. DI of "easy" - "tight."
5. DI of "easier" - "tighter."
6. DI of "accommodative" - "severe."
7. DI of "more accommodative" - "more severe."

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)."

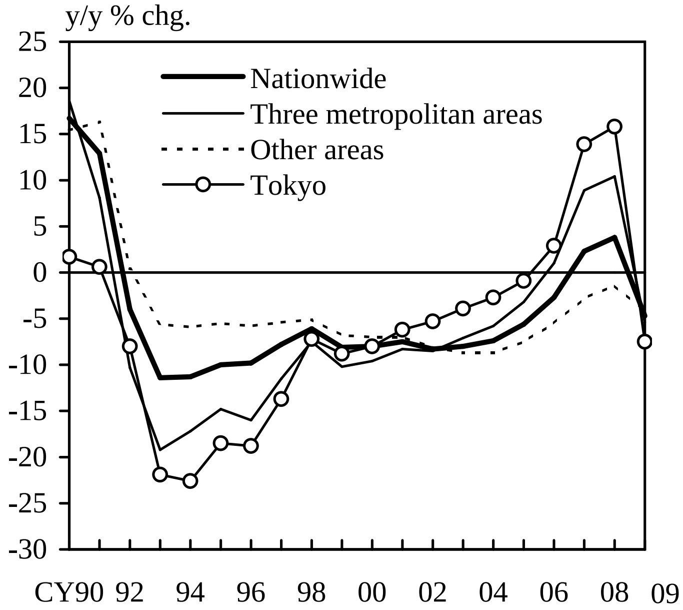
Land Prices

(1) Land Price Publication (As of January 1)

(a) Residential Land

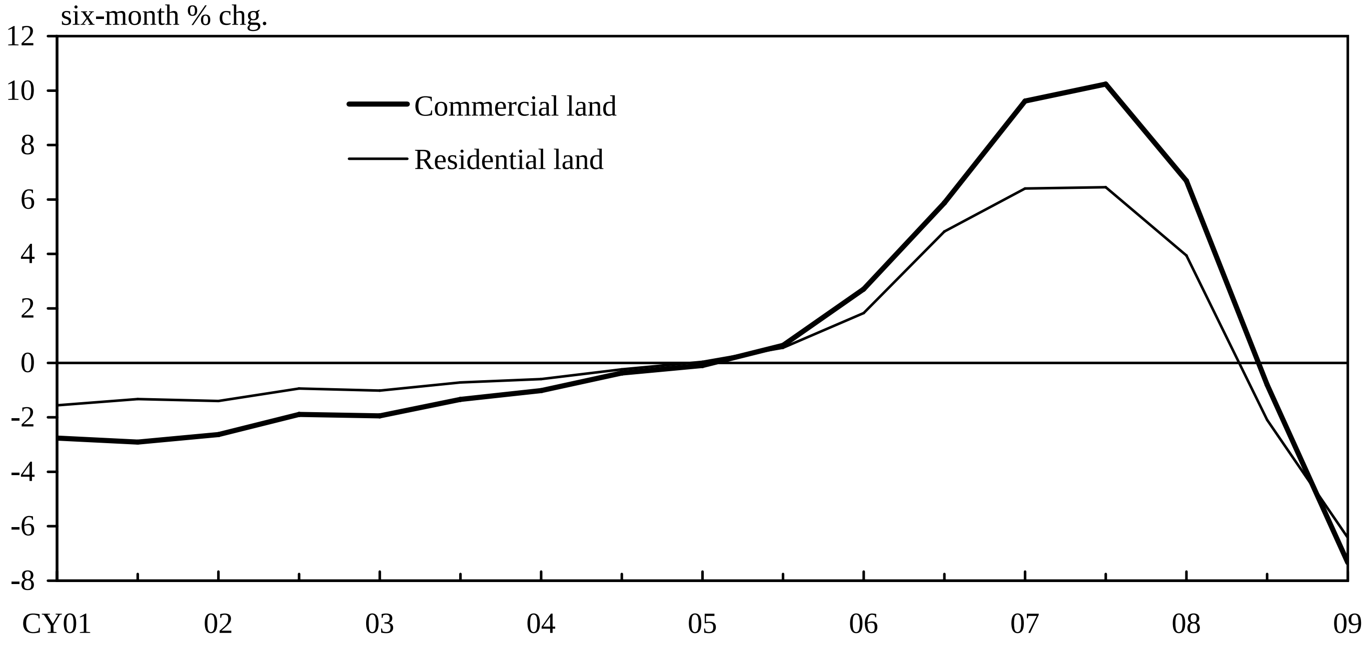


(b) Commercial Land



Note: 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 23 Wards of Tokyo

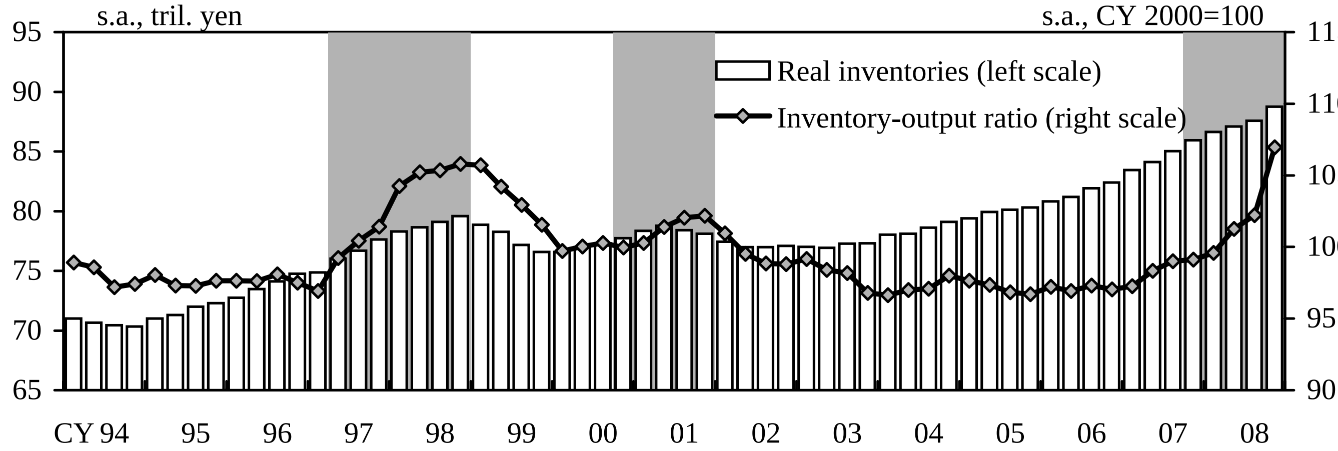


Note: Figures in the chart are six-month percentage change in land prices available in both "Land Price Publication" and "Prefectural Land Price Survey" (as of July 1) (residential: 58 points, commercial: 44 points).

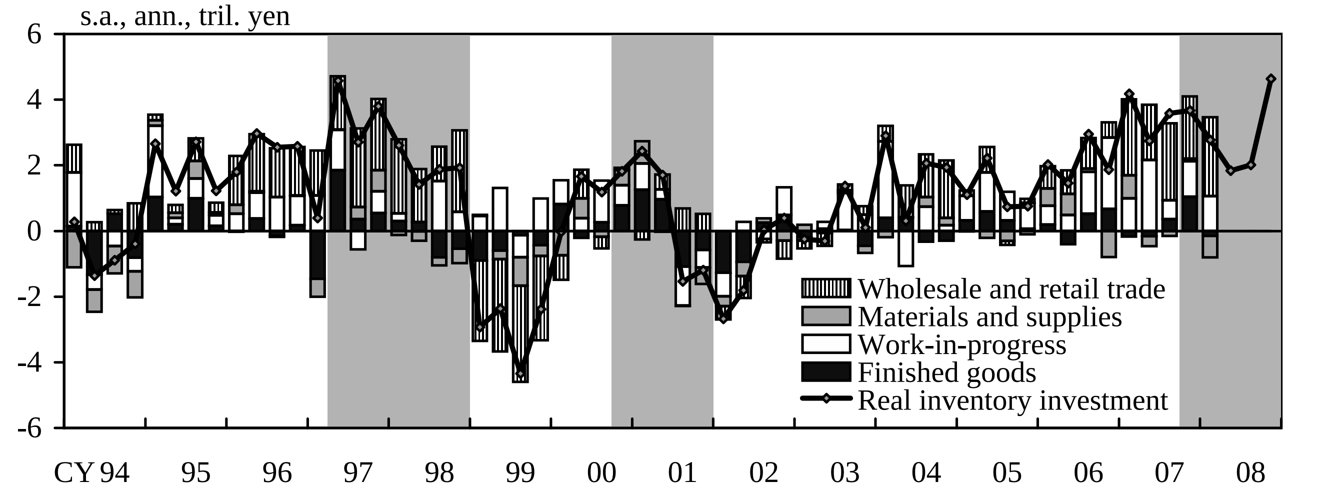
Source: Ministry of Land, Infrastructure and Transport, "Land Price Publication," "Prefectural Land Price Survey."

Inventory Investment

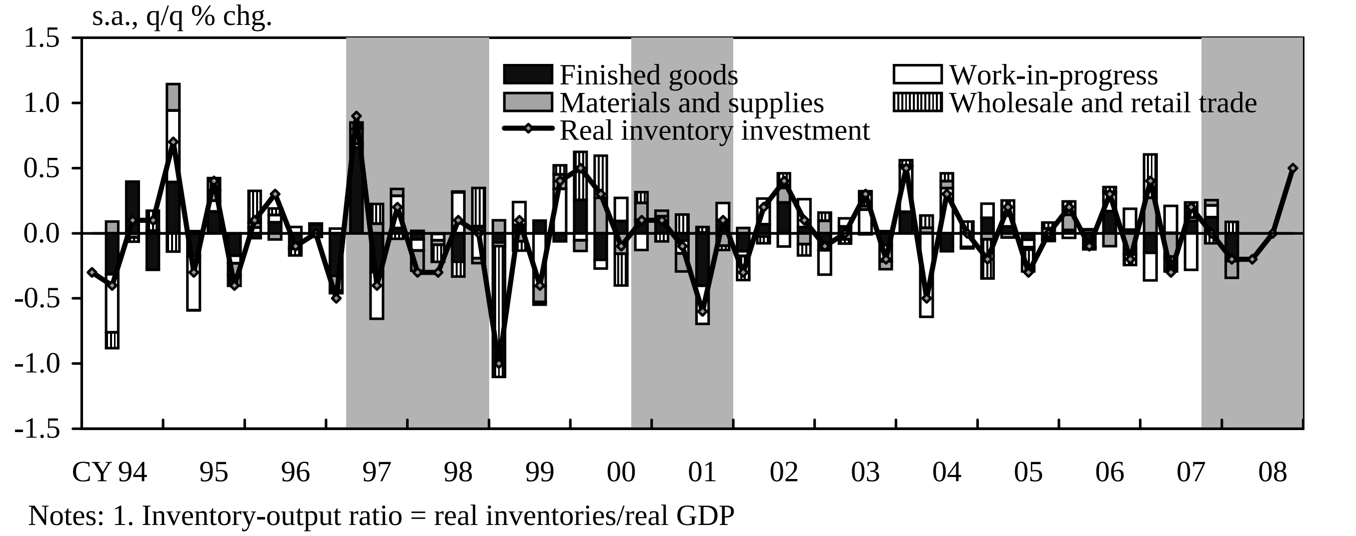
(1) Real Inventories and Inventory-Output Ratio[1,2,3]



(2) Real Inventory Investment (Changes in Real Inventories)[2,3]



(3) Contributions of Real Inventory Investment to Real GDP Growth Rate[3]

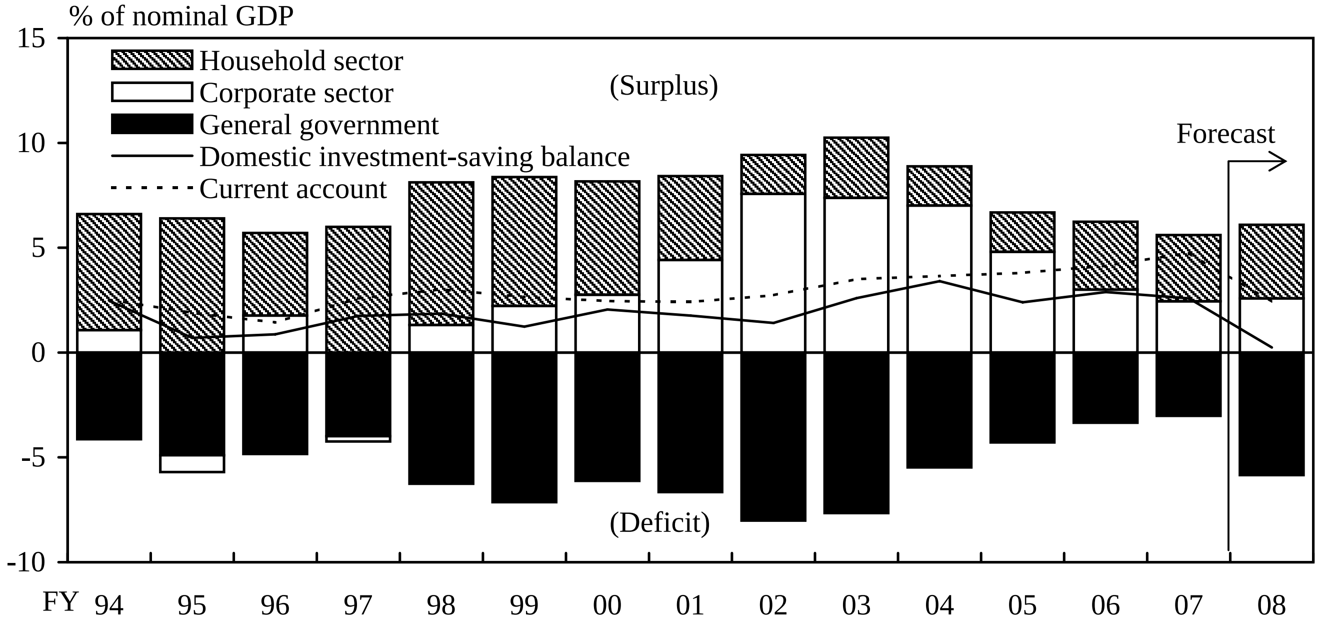


Notes: 1. Inventory-output ratio = real inventories/real GDP
2. Real inventories are calculated by use of the quarterly basis time-series data of real inventory investment, with reference to the nominal inventories at the end of 2000.
3. Shaded areas indicate recession periods.

Source: Cabinet Office, "National Accounts."

Investment-Saving Balance

(1) Investment-Saving Balance

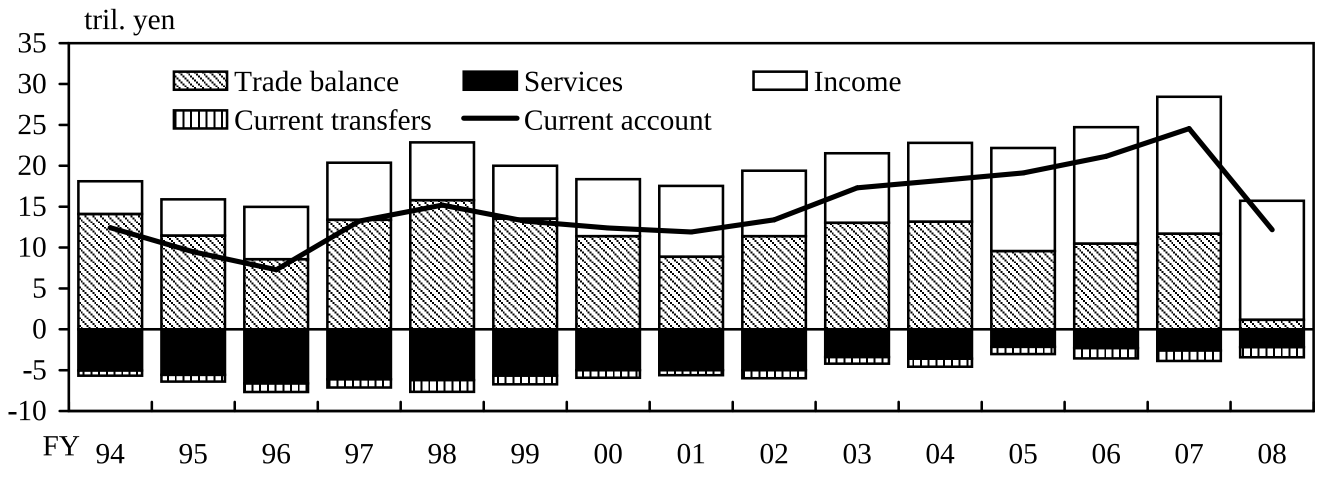


Notes: 1. The following factors are excluded from the domestic investment-saving balance: (1) redemption of JGBs held by the Deposit Insurance Corporation of Japan; (2) transfer of Japan National Railways' long-term debt and cumulative debt of the National Forestry Project (state-owned forests and fields) to the general account of the general government; (3) transfer of assets and liabilities of Japan Expressway Holding and Debt Repayment Agency to the general account of the general government; and (4) transfer of reserves in the special account for the Fiscal Investment and Loan Program to the special account for the government debt consolidation fund of the general government.

2. Figures for the current account, nominal GDP, private final consumption expenditure, and private housing investment in fiscal 2008 are calculated by use of the average year-on-year rate of change in the period from April 2008 to December 2008. The domestic investment-saving balance in fiscal 2008 is estimated by subtracting 2.2 percentage points (the difference between the domestic investment-saving balance and current account in fiscal 2007) from the current account.

3. The figure for the investment-saving balance of the general government in fiscal 2008 is based on the "Medium- to Long-term Fiscal Policy and an Economic and Fiscal Outlook for the Next Ten Years." 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 nominalizing the real disposable income in Chart 38 (1). The figure for the balance of the corporate sector is the residue.

(2) Current Account

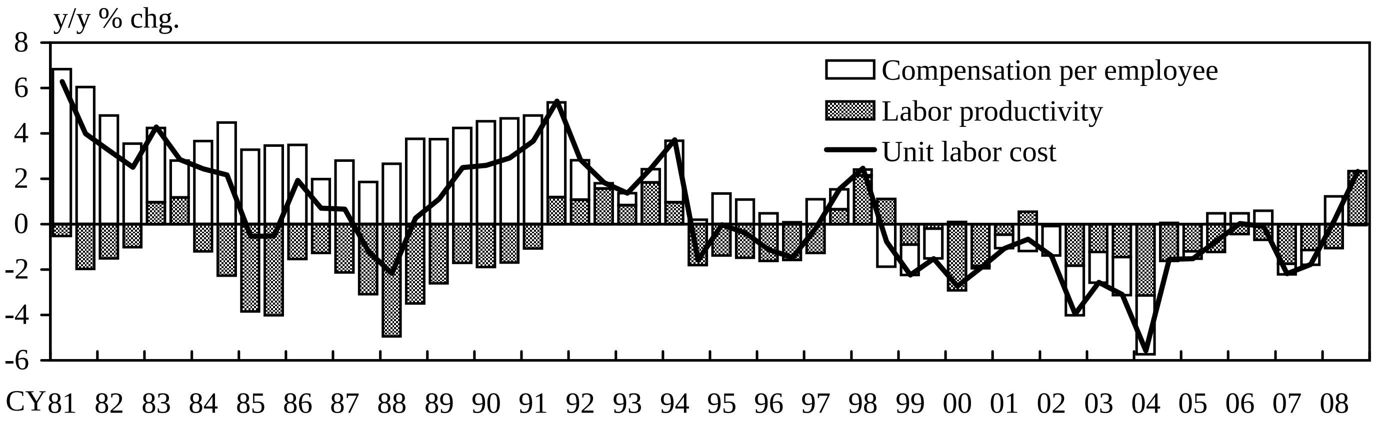


Note: Figures for fiscal 2008 are calculated by use of the average year-on-year rate of change in the period from April 2008 to February 2009.

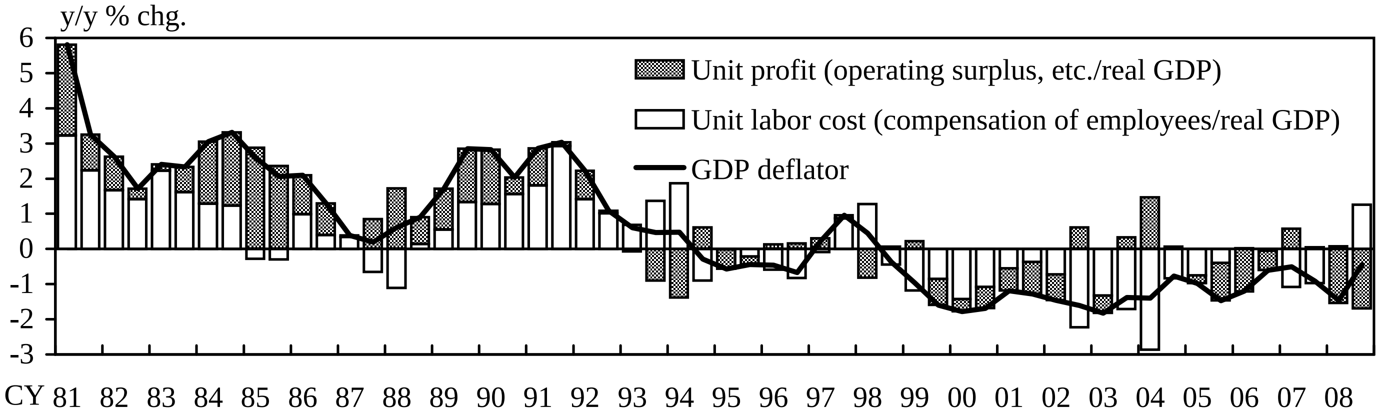
Sources: Cabinet Office, "National Accounts," "Medium- to Long-term Fiscal Policy and an Economic and Fiscal Outlook for the Next Ten Years"; Ministry of Finance and Bank of Japan, "Balance of Payments."

Wages and Prices

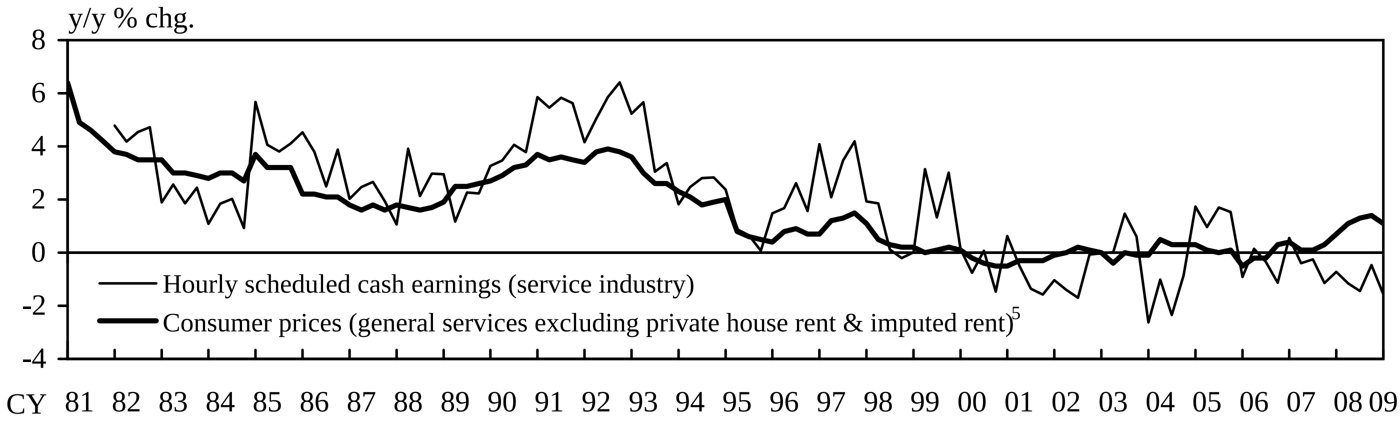
(1) Unit Labor Cost[1]



(2) Decomposition of GDP Deflator in Terms of Distribution[1,2]



(3) Service Prices and Wages[3,4]



Notes: 1. Up to 1994, fixed-based series are used (base year=1995). From 1995, chain-linked series are used (base year=2000).

2. Operating surplus, etc., includes (1) operating surplus and mixed income, (2) consumption of fixed capital, (3) taxes on production and imports, (4) subsidies, and (5) statistical discrepancy.

3. Figures for 2009/Q1 are the January-February averages.

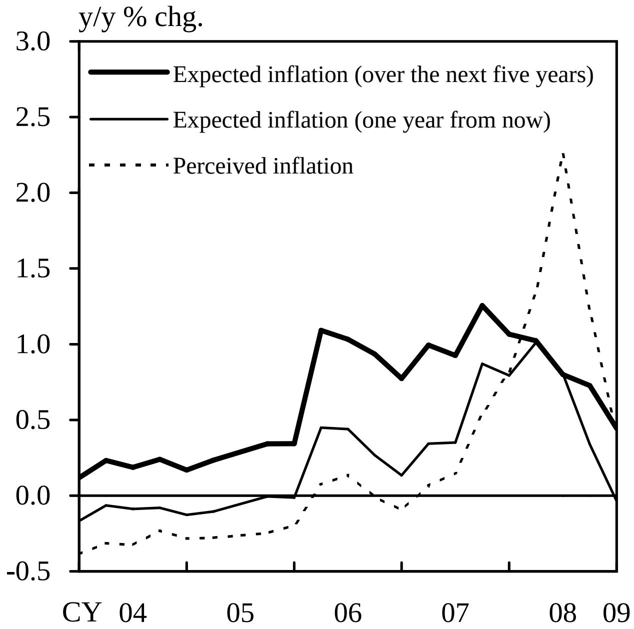
4. Wages are the sum of wages in "eating and drinking places" and "services" of the previous industrial classification up to 2000. From 2001, they are the sum of wages in "eating and drinking places," "accommodations," and "miscellaneous education learning support," and "services" of the new industrial classification. Data are for establishments with at least 30 employees.

5. Adjusted to exclude the effect of a change in the consumption tax rate.

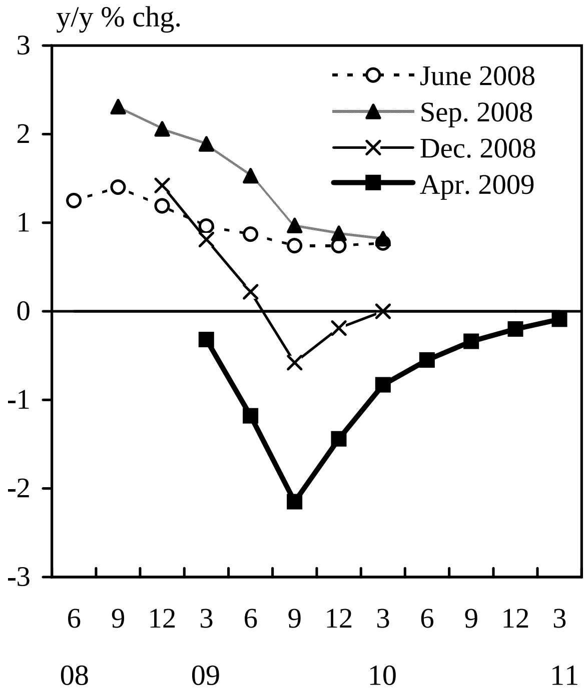
Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Labour Force Survey," "Consumer Price Index."

Outlook for Prices

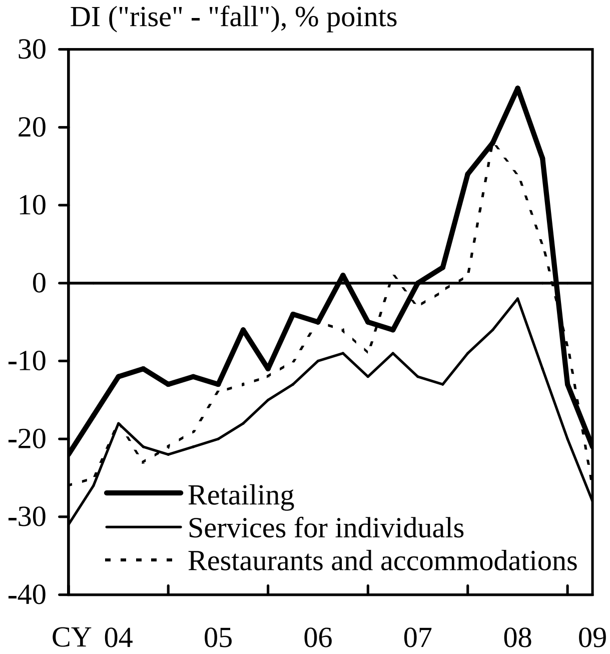
(1) Households[1]



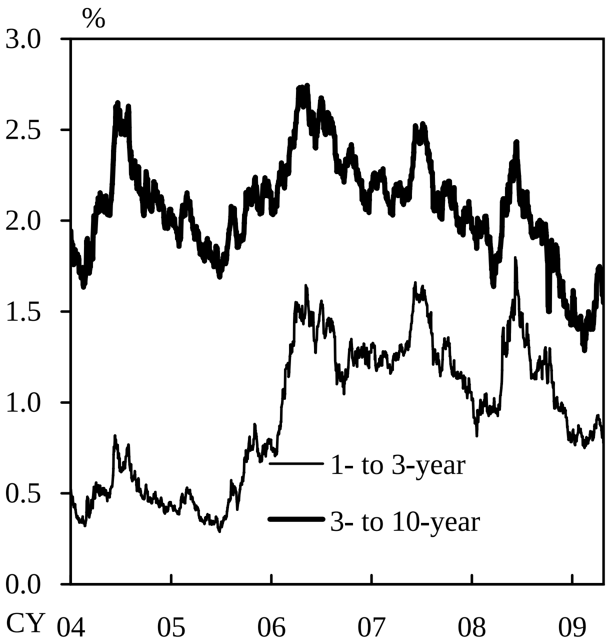
(2) Economists (ESP Forecast)[2]



(3) Firms (*Tankan*)[3]



(4) Implied Forward Rates[4]

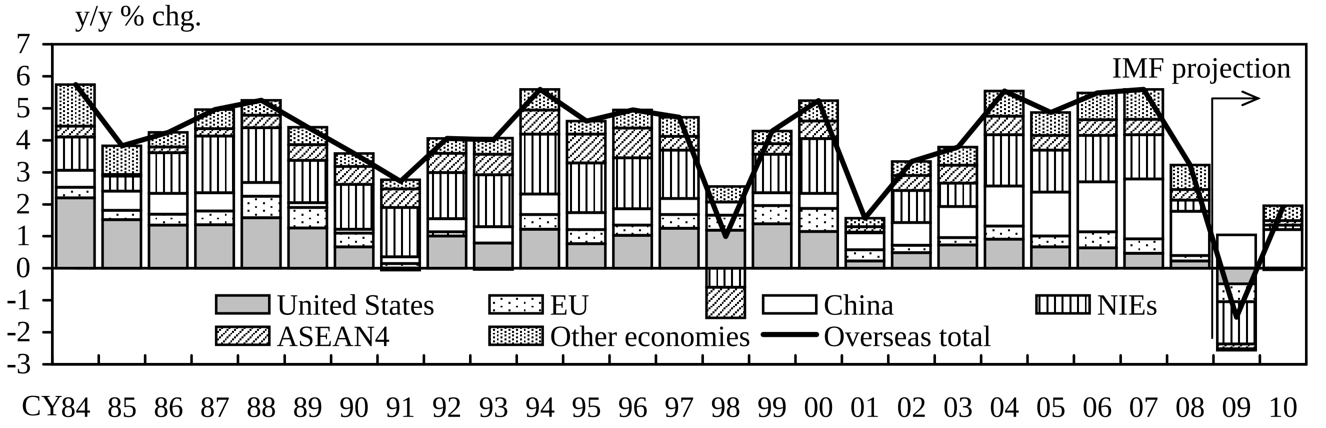


Notes: 1. Figures are estimated based on the results of "Opinion Survey on the General Public's Views and Behavior," using a modified Carlson-Parkin method. For details, see Sekine, Yoshimura, and Wada (2008), "On Inflation Expectations," Bank of Japan Review Series, 2008-J-15 (available in Japanese only).
2. Figures are the average of economists' projections in the ESP Forecast.
3. Change in output prices of all-size enterprises (forecasts of one quarter ahead) in the *Tankan.*
4. Figures are calculated from yen-yen swap rates.

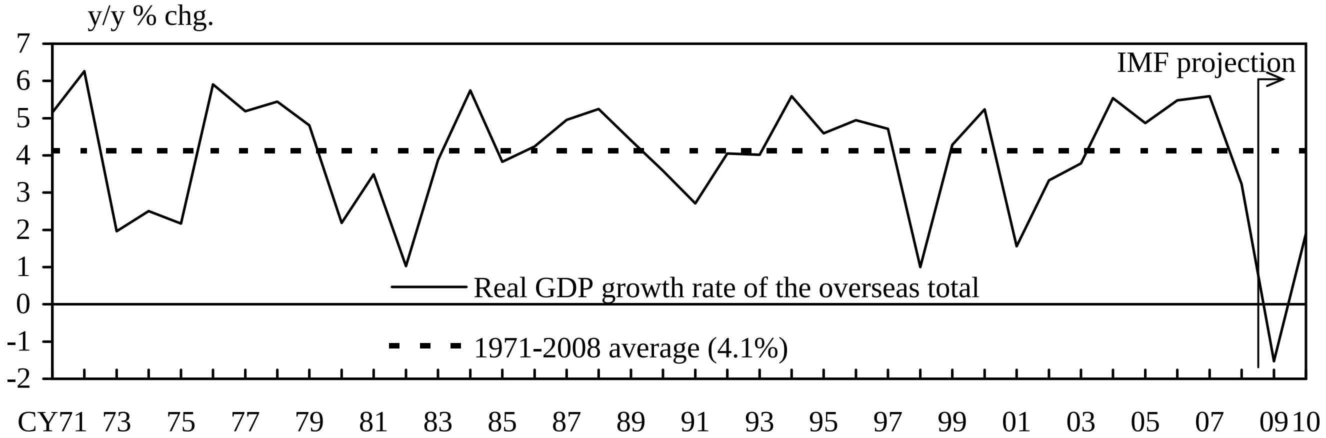
Sources: Bank of Japan, "Opinion Survey on the General Public's Views and Behavior," "*Tankan,* Short-Term Economic Survey of Enterprises in Japan"; Economic Planning Association, "ESP Forecast."

Overseas Economies

(1) Real GDP Growth Rates of Overseas Economies[1]

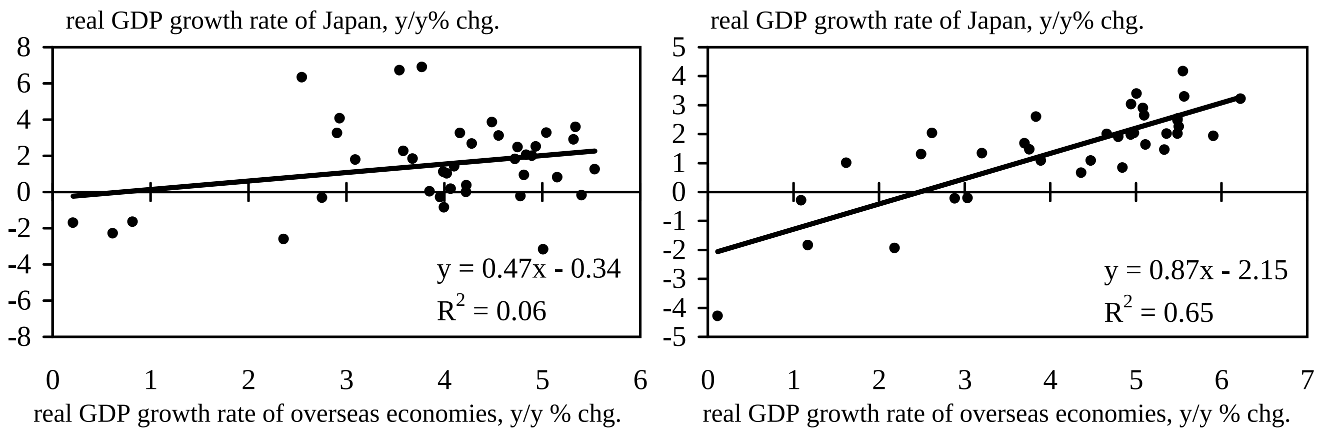


(2) Real GDP Growth Rates of Overseas Economies (Long-Term Time Series)[1,2]



(3) Association in Real GDP Growth Rates between Japanese and Overseas Economies[1]

(a) 1990/Q1-1999/Q4 (b) 2000/Q1-2008/Q4



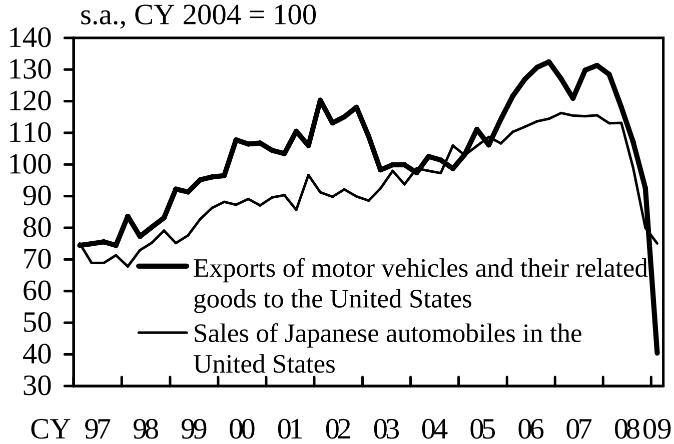
Notes: 1. Real GDP growth rate of the overseas total is the weighted average of real GDP growth rates by values of exports from Japan to each economy.

2. Data up to 1979 are based on the UN data, and data since 1980 are based on the IMF data.

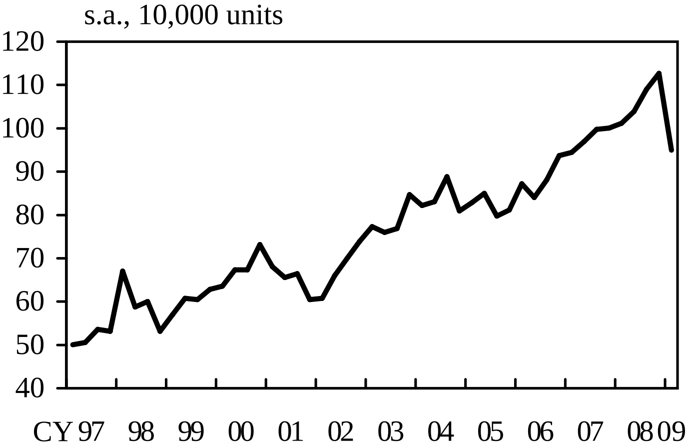
Sources: IMF, "World Economic Outlook"; Ministry of Finance, "The Summary Report on Trade of Japan"; Cabinet Office, "National Accounts"; United Nations (UN), "National Accounts Main Aggregates," etc.

Overseas Inventories

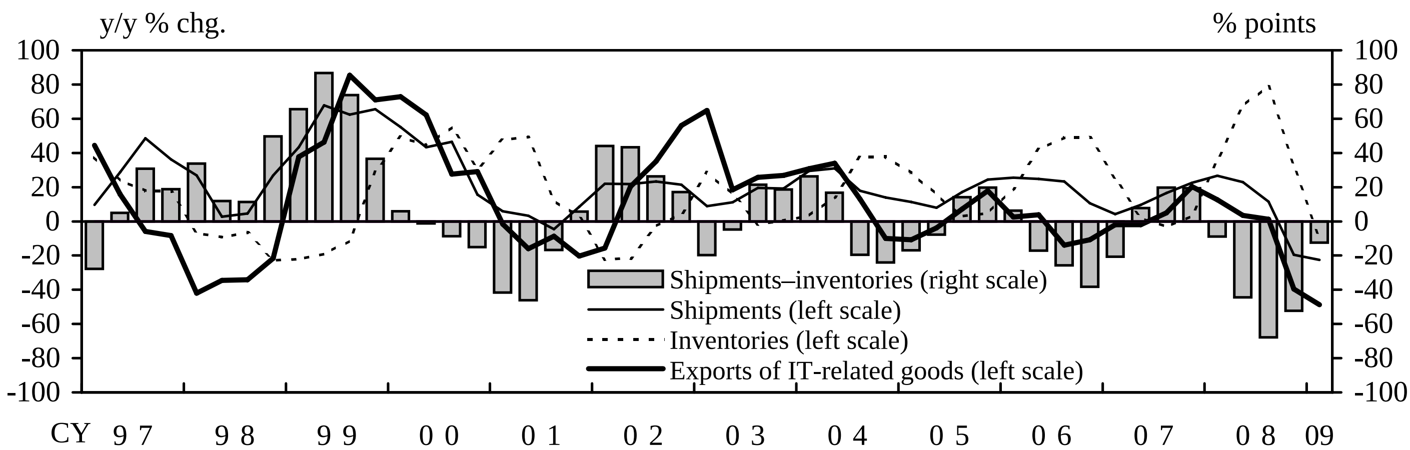
(1) Sales of Japanese Automobiles in the United States and Exports of Motor Vehicles and Their Related Goods to the United States[1]



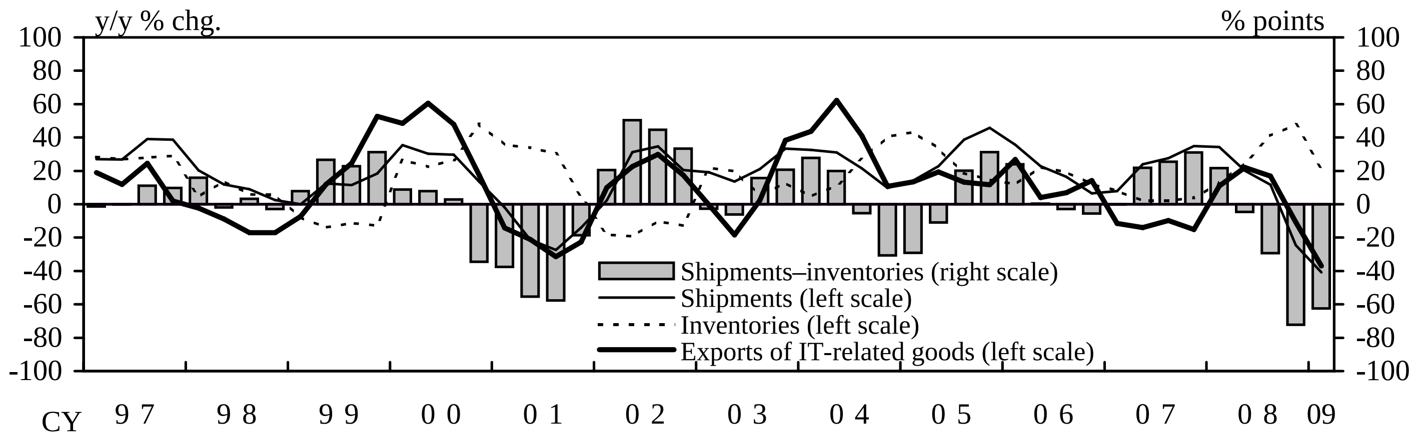
(2) Inventories of Japanese Automobiles in the United States



(3) Exports of IT-Related Goods to Korea and Shipment-Inventory Balance of IT-Related Goods in Korea[2]



(4) Exports of IT-Related Goods to Taiwan and Shipment-Inventory Balance of IT-Related Goods in Taiwan[2]

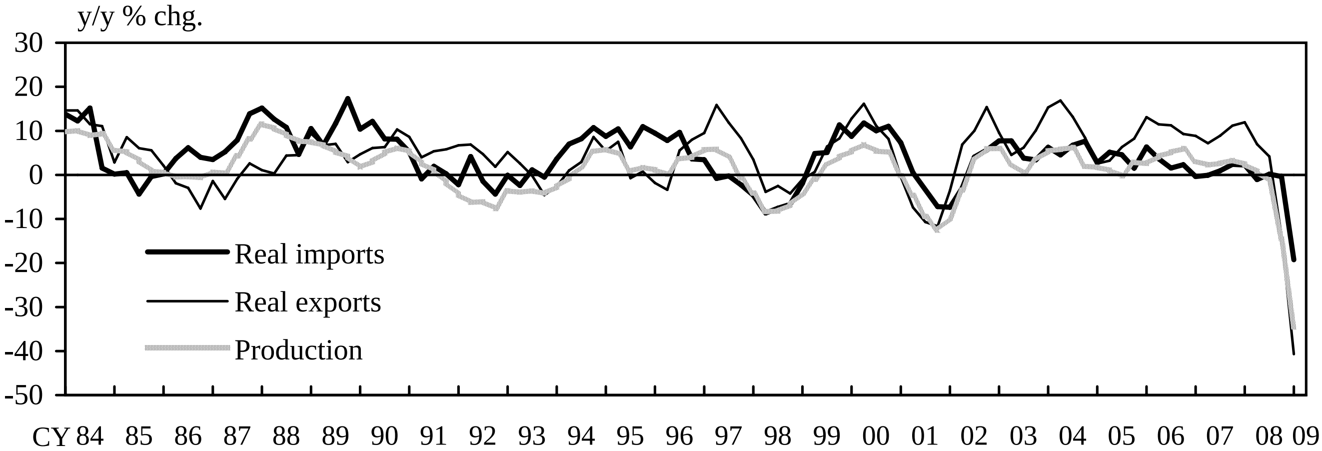


Notes: 1. Sales of Japanese automobiles in the United States for 2009/Q1 are the January-February average.
2. Shipments and inventories for 2009/Q1 are the January-February average.

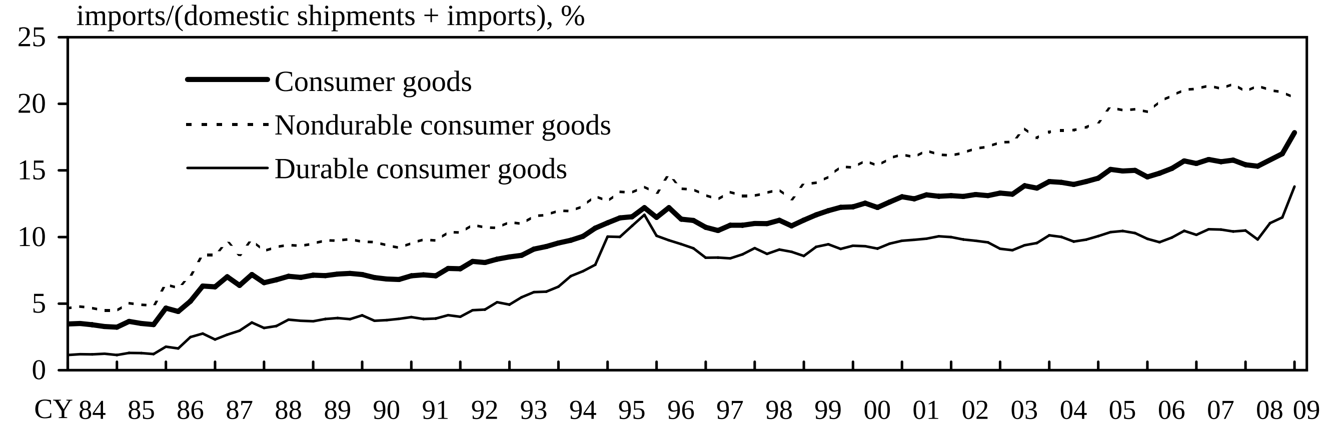
Sources: Ministry of Finance, "The Summary Report on Trade of Japan"; Bank of Japan, "Corporate Goods Price Index"; Japan Automobile Manufacturers Association, Inc., "Automobile & Motorcycle Statistics"; Automotive News Inc., "Automotive News"; CEIC.

Import Penetration

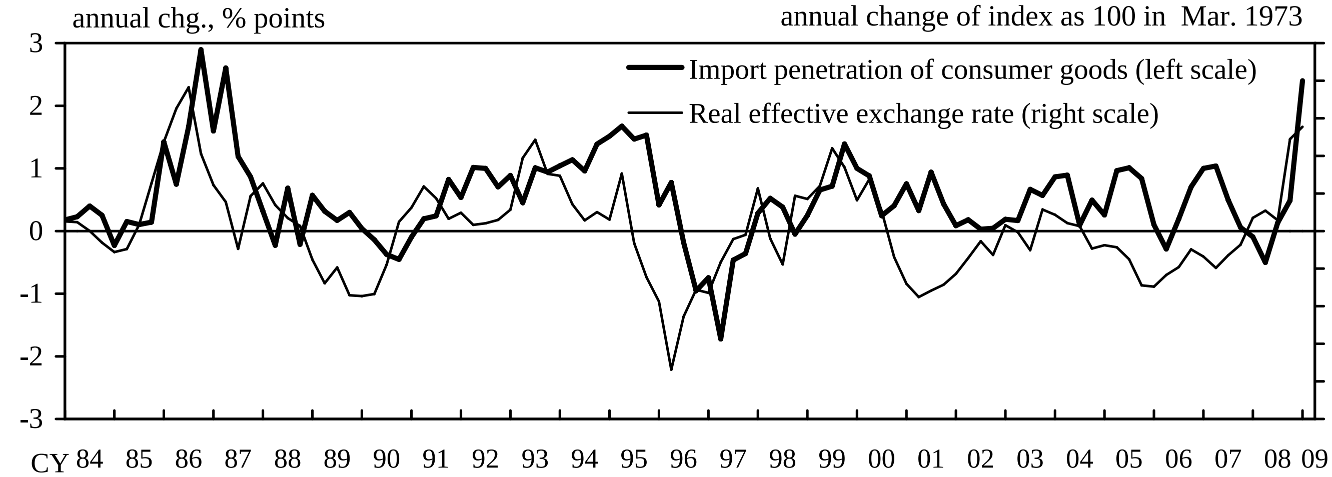
(1) Real Exports and Imports and Production



(2) Import Penetration of Consumer Goods[1,2]



(3) Import Penetration of Consumer Goods[1,2] and Real Effective Exchange Rate[2]



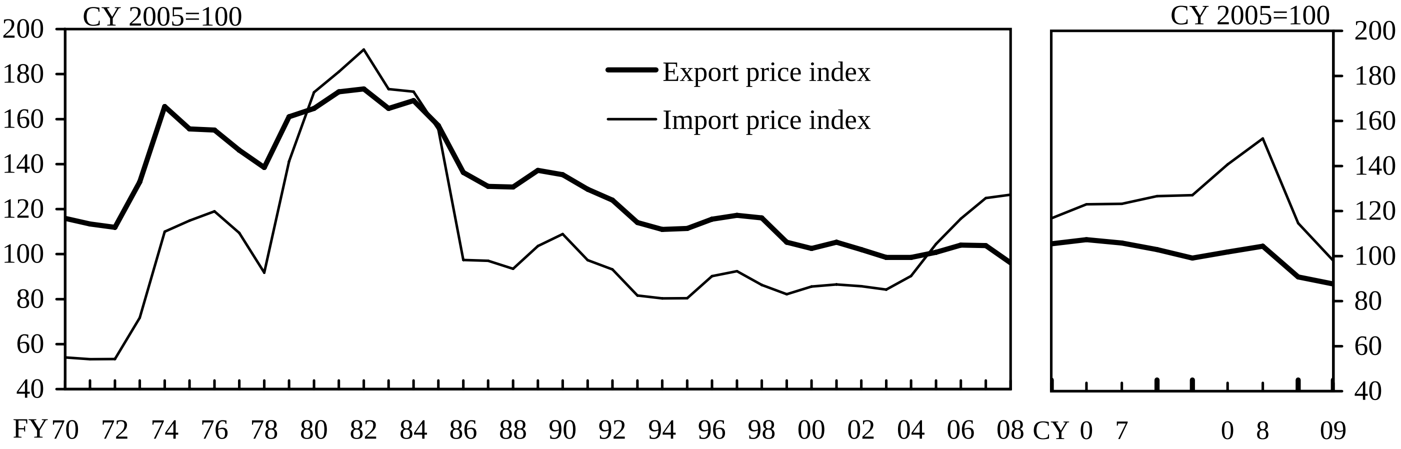
Notes: 1. Figures up to CY2002 are calculated by use of the connected indices of "Indices of Domestic Shipments and Imports."
2. Figures for 2009/Q1 are the January-February averages.

Sources: Bank of Japan, "Corporate Goods Price Index"; Ministry of Economy, Trade and Industry, "Indices of Industrial Production," "Indices of Domestic Shipments and Imports"; Ministry of Finance, "The Summary Report on Trade of Japan."

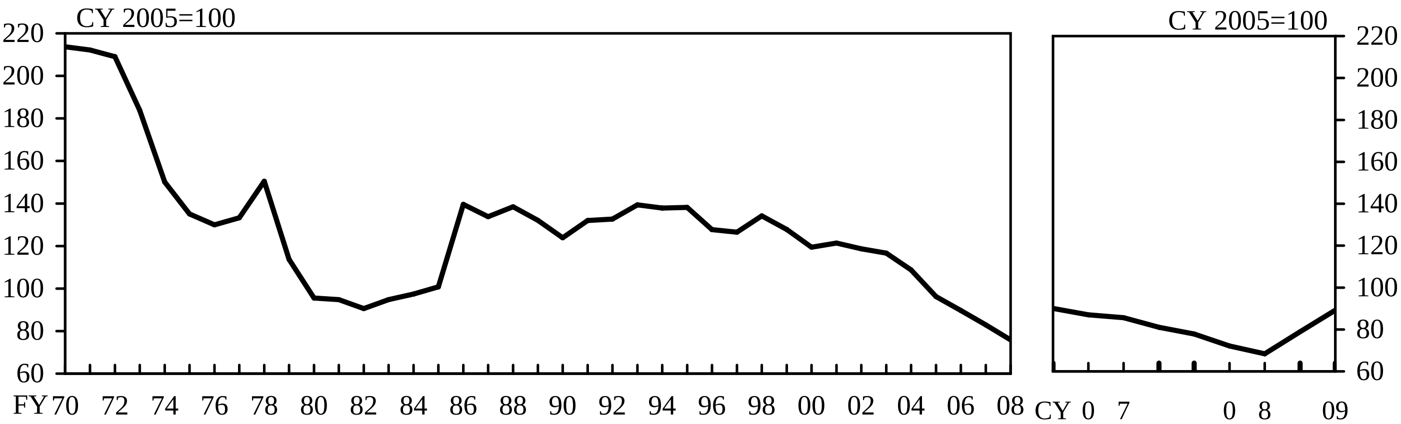
Chart 31

Aggregate Income Formation

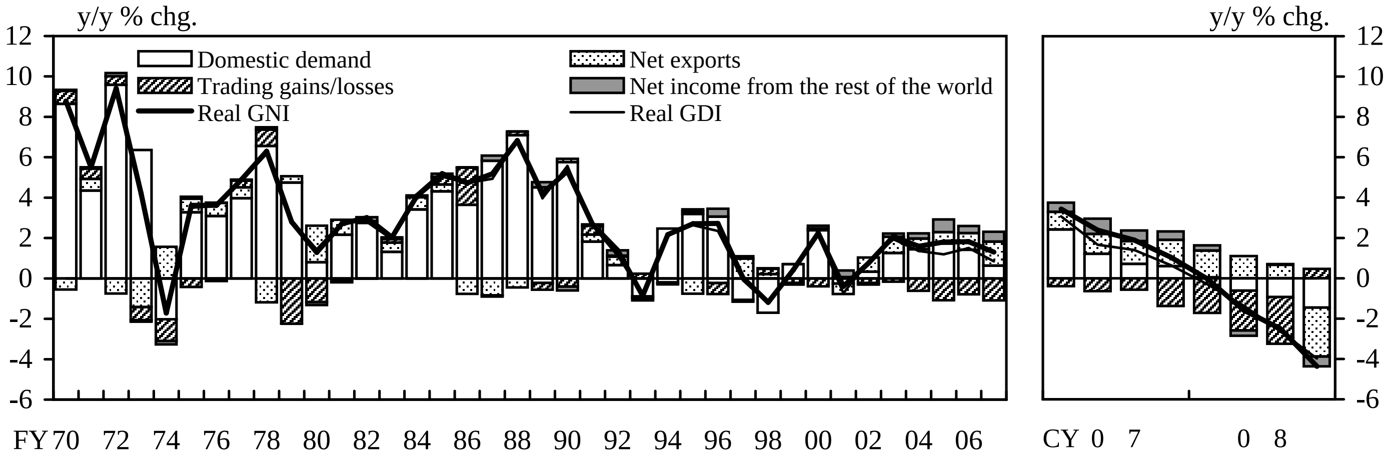
(1) Export and Import Price Indexes[1]



(2) Terms of Trade Index (Export Price Index/Import Price Index)[1]



(3) Real GDI and Real GNI[2,3]



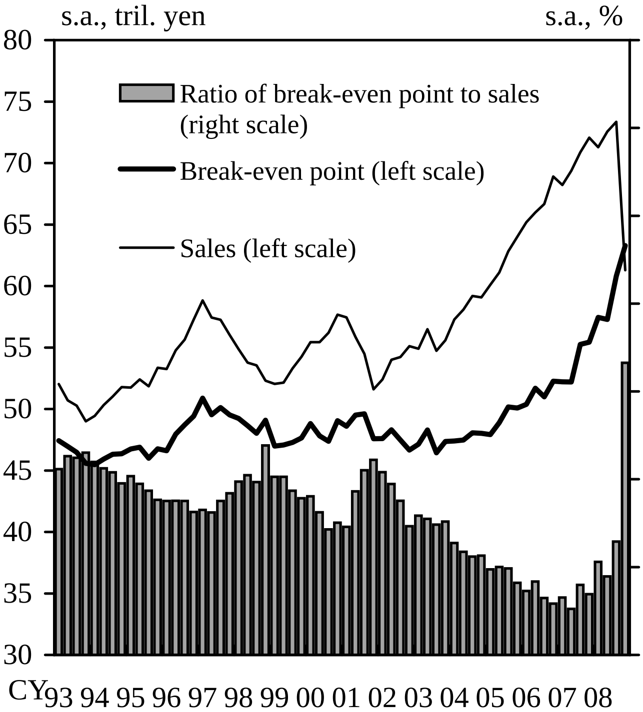
Notes: 1. The price indexes are on a yen basis.
2. Figures of components indicate their contributions to changes in real GNI.
3. Real GDP = domestic demand + net exports
Real GDI = real GDP + trading gains/losses
Real GNI = real GDI + net income from the rest of the world
= real GDP + trading gains/losses + net income from the rest of the world

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

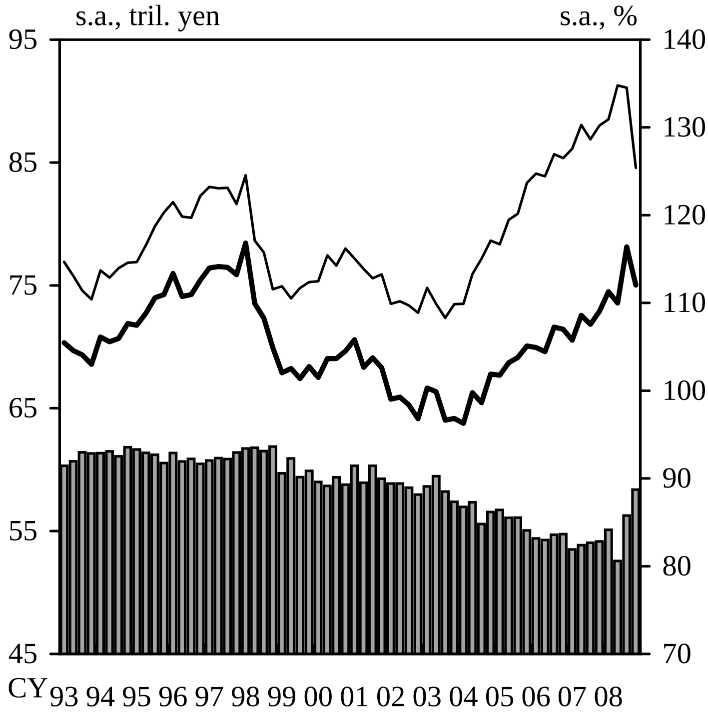
Ratio of Break-Even Point to Sales

(1) Large Enterprises

(a) Manufacturing

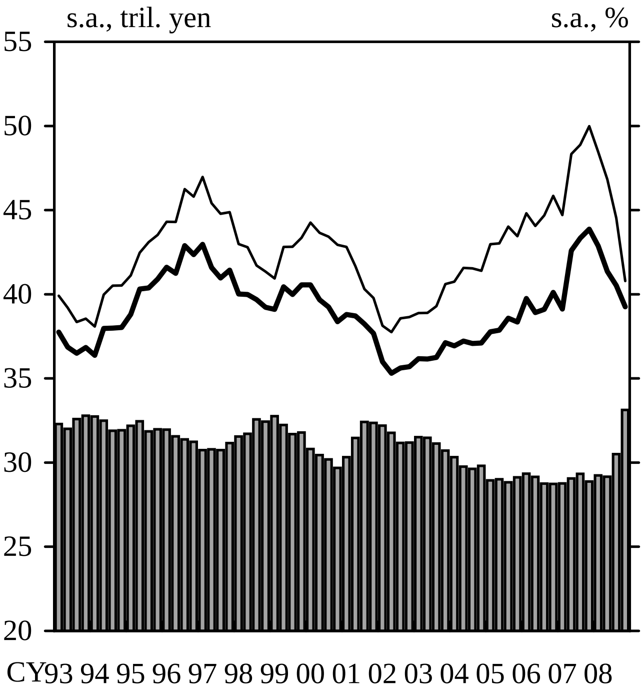


(b) Nonmanufacturing

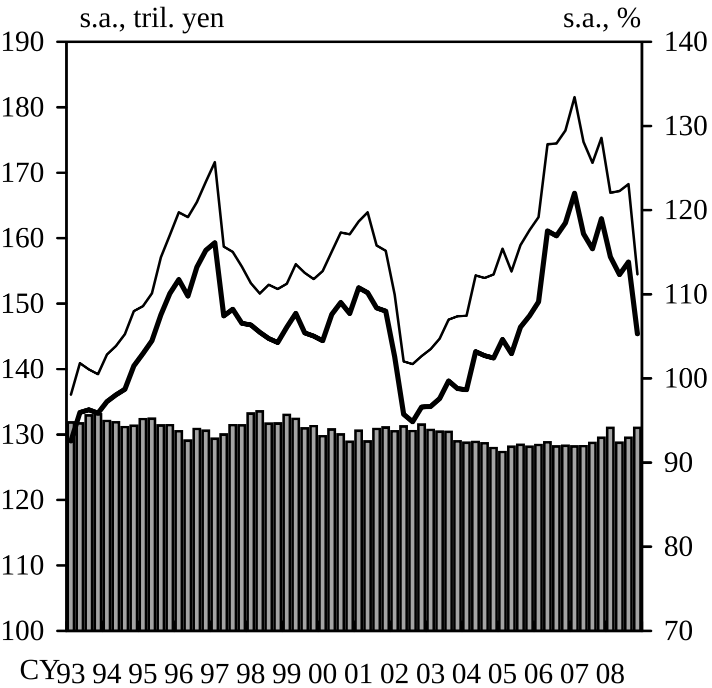


(2) Medium-Sized and Small Enterprises

(a) Manufacturing



(b) Nonmanufacturing



Notes: 1. "Large enterprises" refers to firms with capital stock of 1 billion yen or more, and "medium-sized and small enterprises" refers to firms with capital stock of 10 million yen or more but less than 1 billion yen.

2. Break-even point = fixed cost/marginal profit ratio

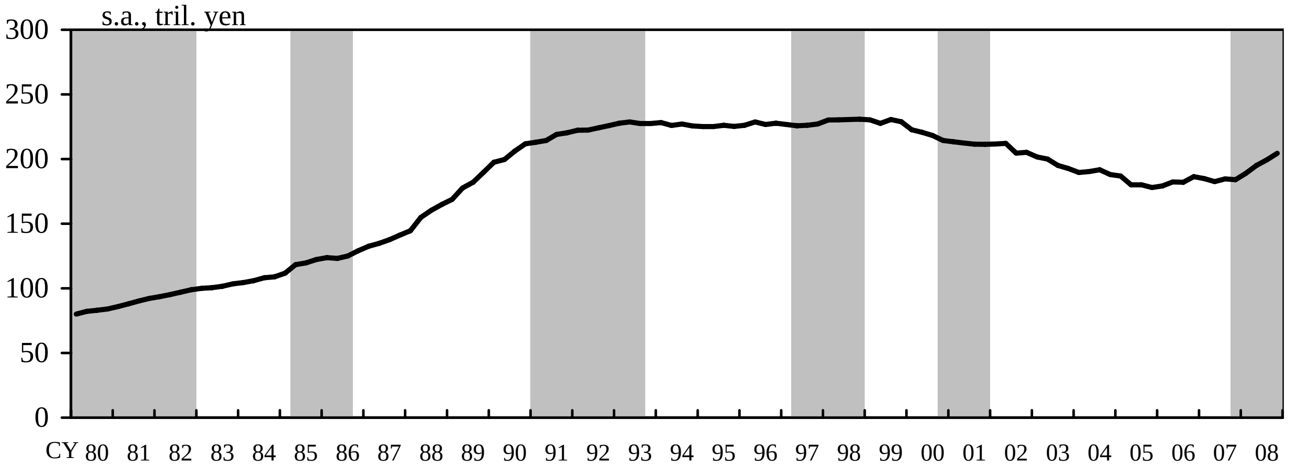
3. Fixed cost = personnel expenses + depreciation and amortization expenses + net non-operating expenses + selling, general and administrative expenses × 0.7

4. Marginal profit ratio = 1 - variable cost ratio = 1 - (sales - fixed cost - ordinary profits) / sales

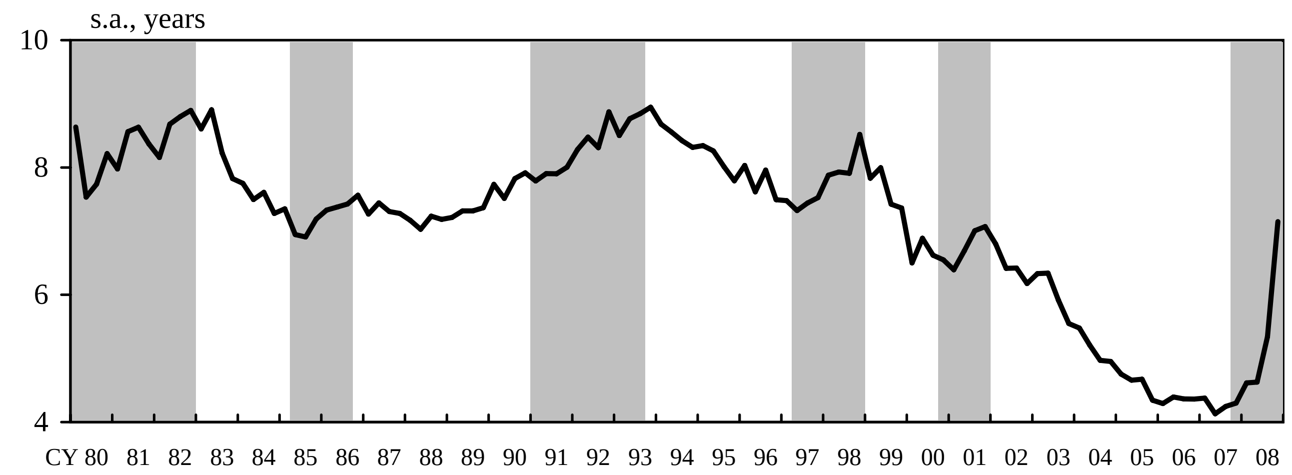
Source: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly."

Corporate Financial Position

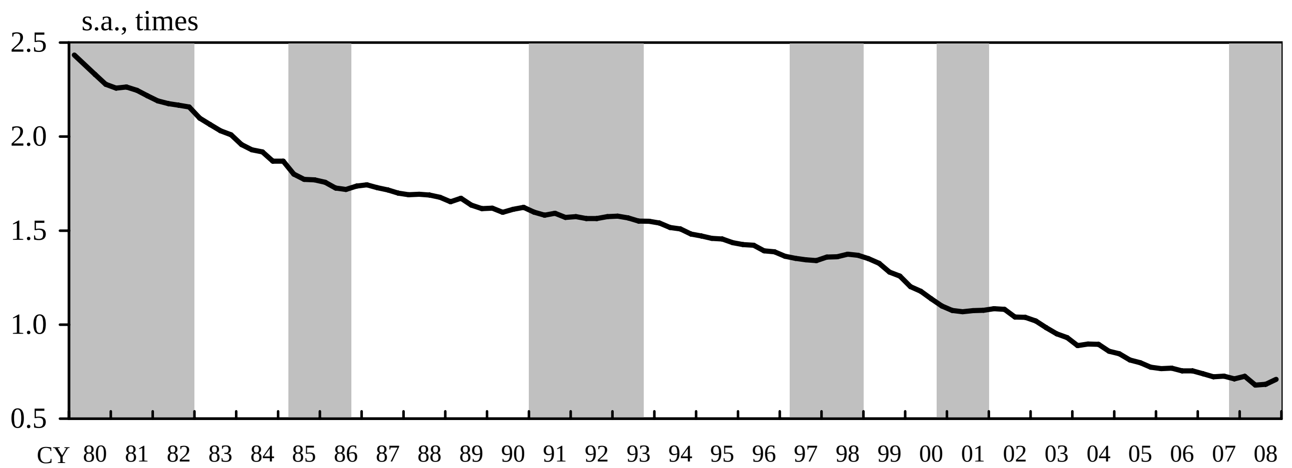
(1) Interest-Bearing Debt



(2) Interest-Bearing Debt/Cash Flow



(3) Interest-Bearing Debt/Equity Capital

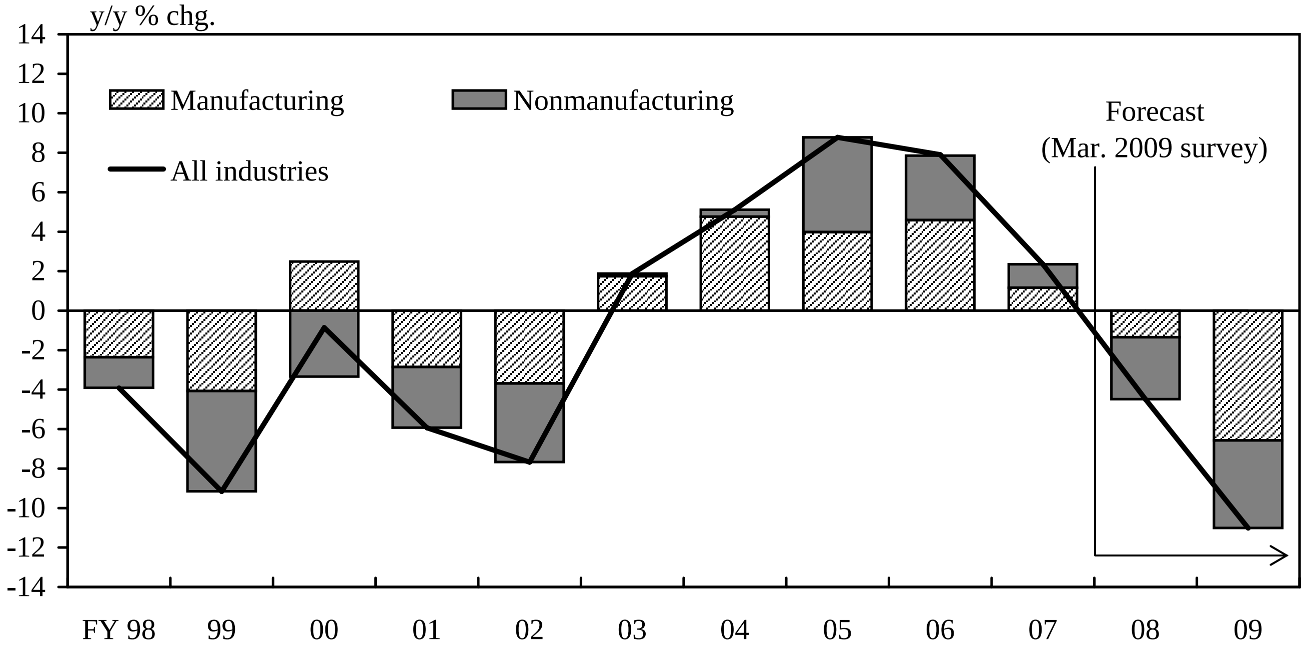


Notes: 1. Figures refer to enterprises with capital stock of 1 billion yen or more.
2. Interest-bearing debt = long-and short-term borrowings + bonds
3. Cash flow = annualized depreciation expenses + annualized ordinary profits/2
4. Equity capital = earned surplus + capital surplus + capital stock
5. Shaded areas indicate recession periods.

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

Fixed Investment Plans

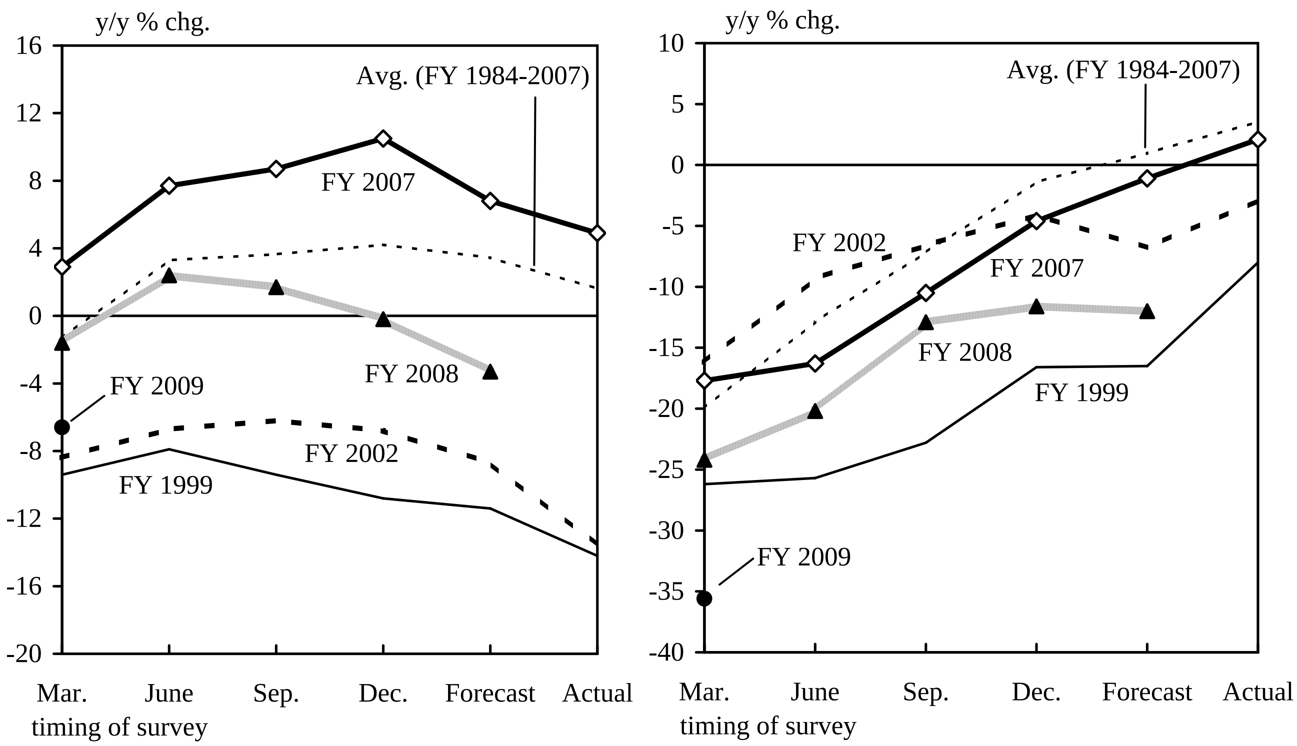
(1) Fixed Investment Plans as Surveyed (*Tankan,* All-Size Enterprises)



Note: Figures up to fiscal 2002 include land purchasing expenses and exclude software investment.
Figures from fiscal 2003 exclude land purchasing expenses and include software investment.

(2) Developments of Fixed Investment Plans (*Tankan,* All Industries)

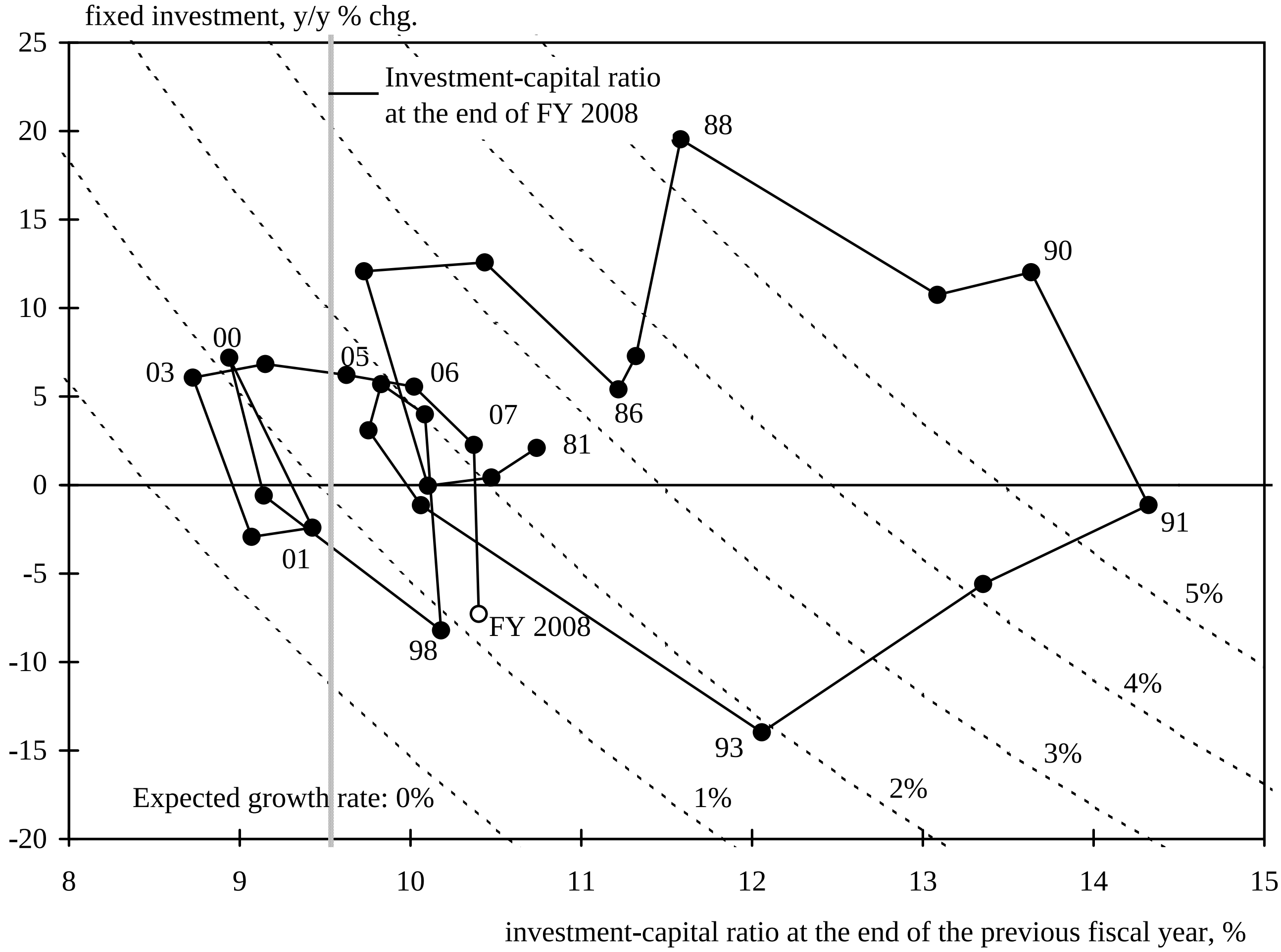
(a) Large Enterprises (b) Small Enterprises



Note: Figures include land purchasing expenses and exclude software investment.

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

Capital Stock Cycle



1. Capital stock cycle in the chart shows 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.

   Year-on-year rate of change in fixed investment (y-axis) × investment-capital ratio at the end of the previous fiscal year (x-axis) = expected growth rate + trend of capital coefficient + depreciation rate

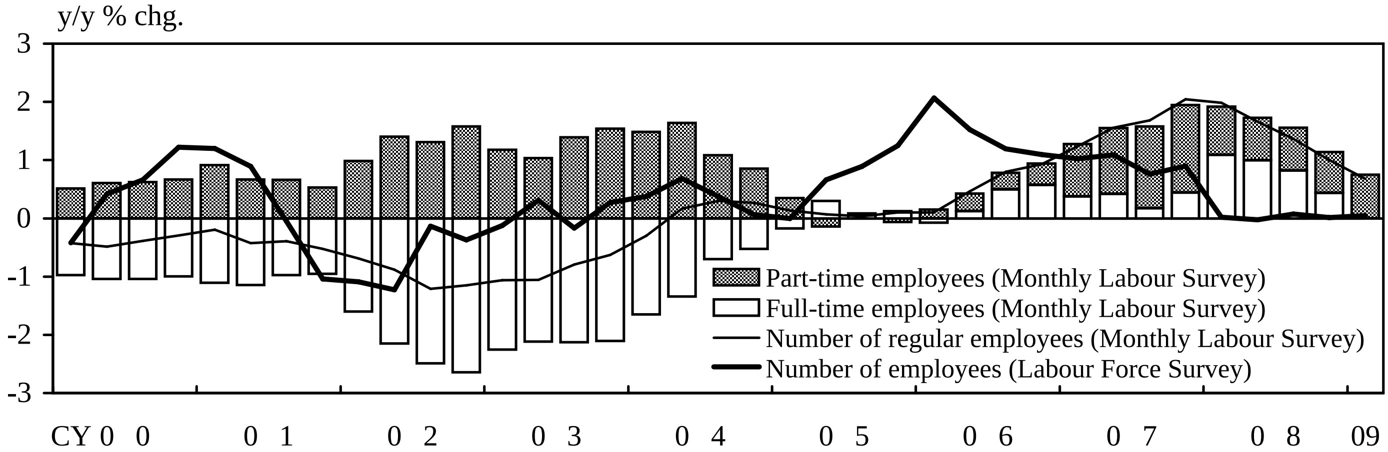
3. The phase of fixed investment at a certain time can be evaluated in relation to the hyperbolic curve corresponding to the expected growth rate at that time.

Note: Fixed investment for fiscal 2008 is calculated on the assumption that the quarter-on-quarter growth rate of 2009/Q1 is the same as the average of those of 2008/Q2-Q4.

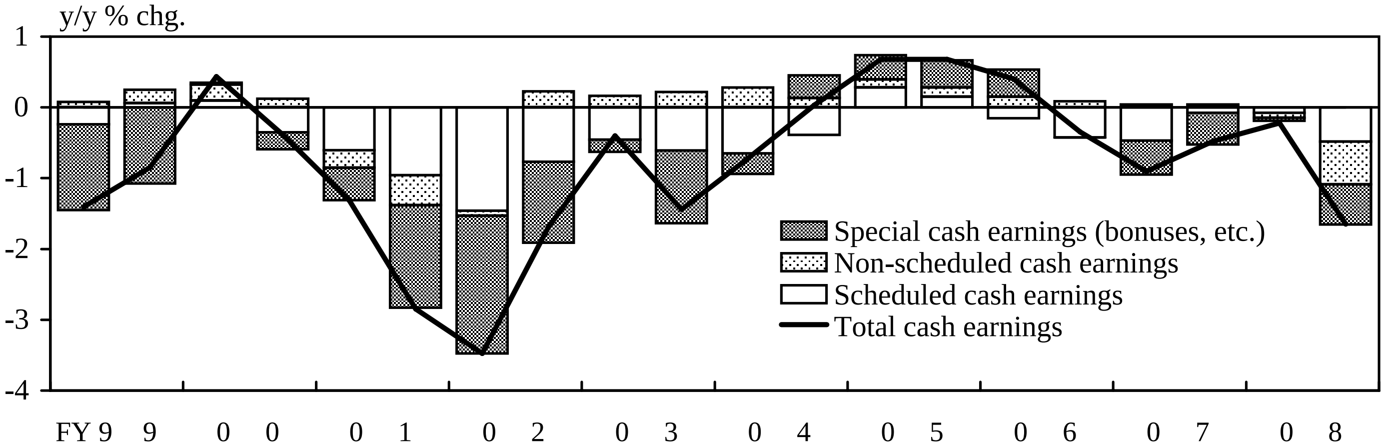
Sources: Cabinet Office, "National Accounts," "Annual Report on Gross Capital Stock of Private Enterprises," "Preliminary Quarterly Estimates of Gross Capital Stock of Private Enterprises"; Ministry of Economy, Trade and Industry, "Census of Manufactures"; Research Institute of Economy, Trade and Industry, "Japan Industrial Productivity Database 2008."

Labor Market Conditions

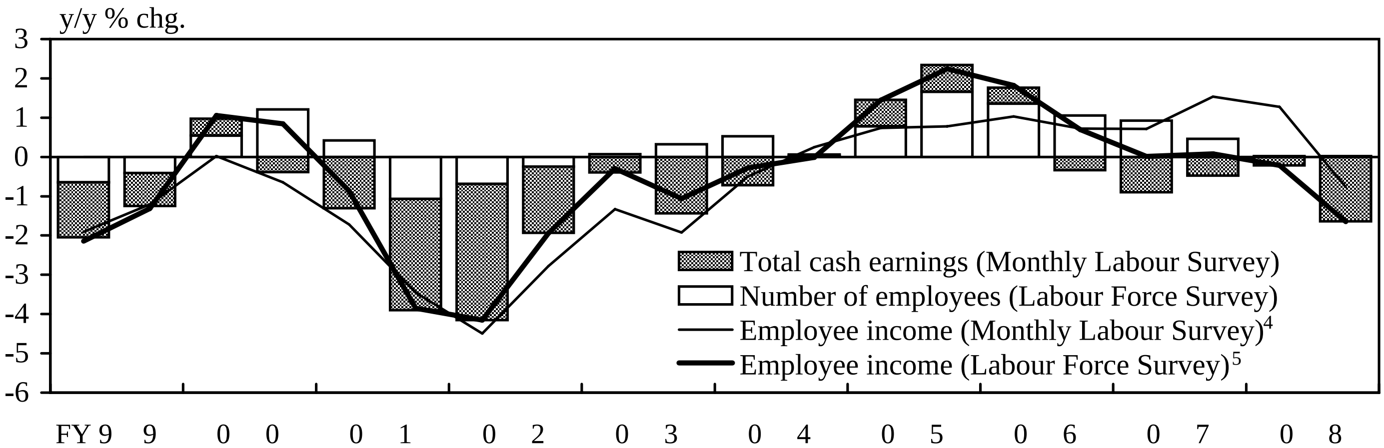
(1) Number of Employees[1,2]



(2) Total Cash Earnings (Monthly Labour Survey)[1,3]



(3) Employee Income[1,3]

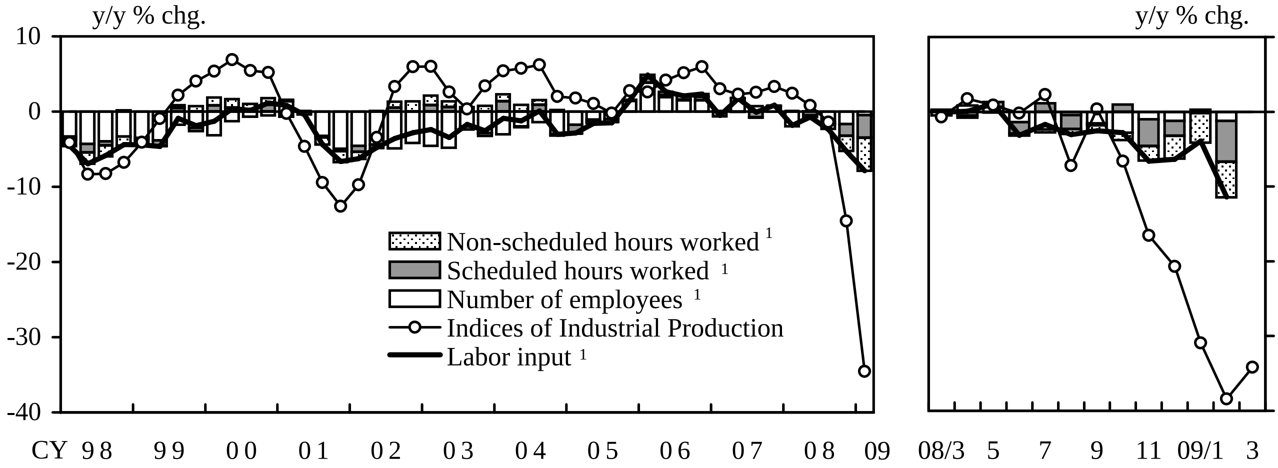


Notes: 1. Data from "Monthly Labour Survey" are for establishments with at least five employees.
2. Figures for 2009/Q1 are the January-February averages.
3. Figures for the second half of fiscal 2008 are the October 2008-February 2009 averages.
4. Calculated as the number of regular employees (Monthly Labour Survey) multiplied by total cash earnings (Monthly Labour Survey).
5. Calculated as the number of employees (Labour Force Survey) multiplied by 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."

Manufacturing Labor Input

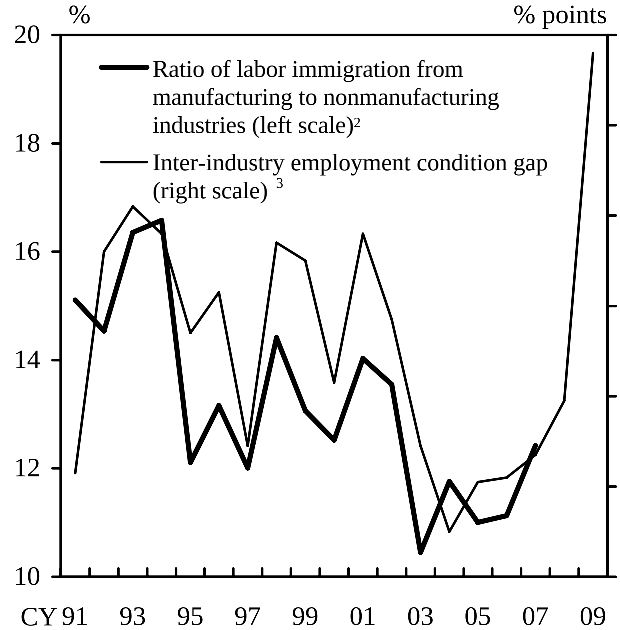
(1) Indices of Industrial Production and Manufacturing Labor Input

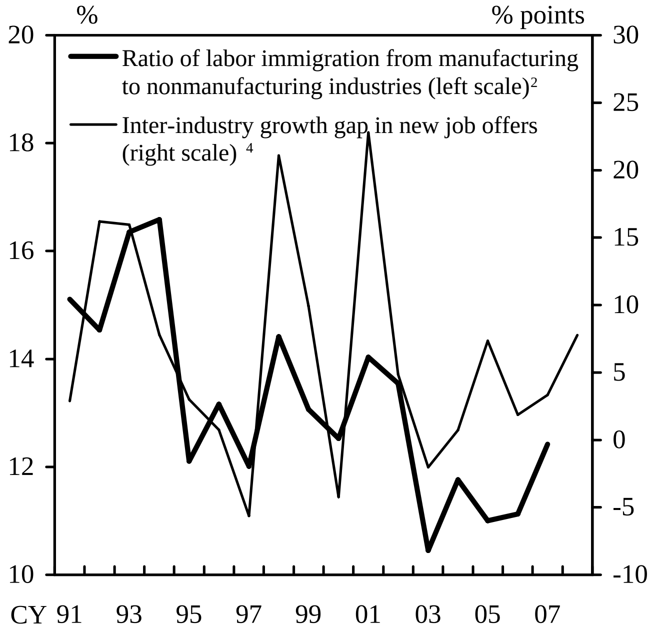


(2) Number of Applicants of Government Subsidies for Employment Adjustment

	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009
Establishments (thous.)	0.2	1.8	12.6	30.6
Employees subsidized (ten thous.)	0.9	13.9	88.0	186.6

(3) Employment Opportunities in Nonmanufacturing Industries



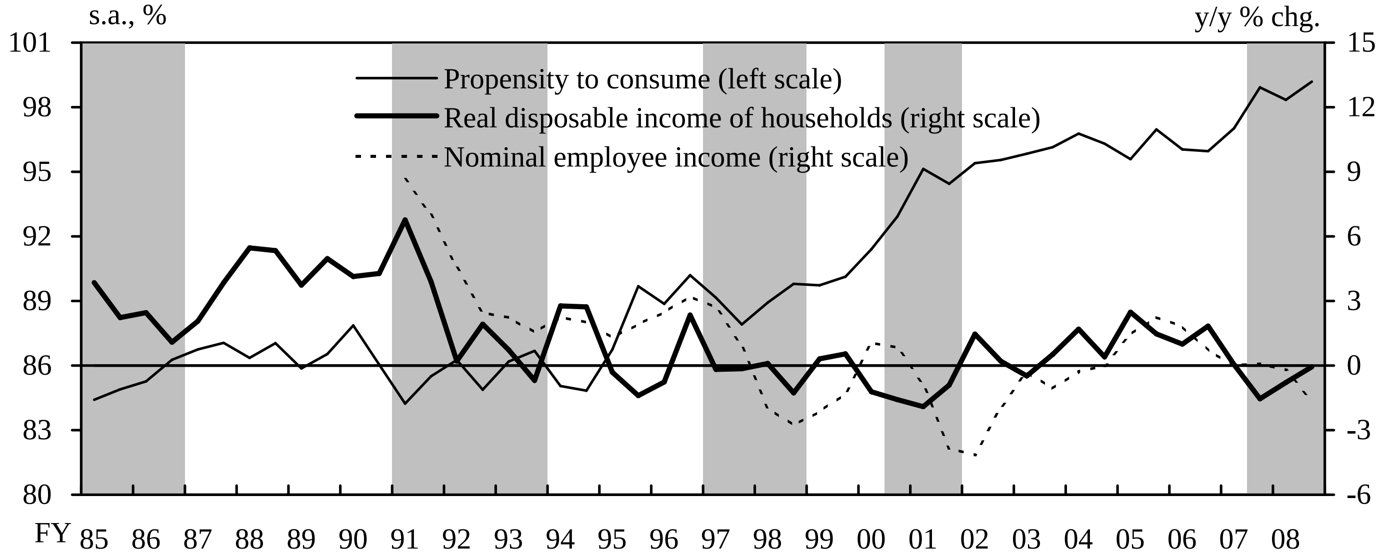


Notes: 1. Figures for 2009/Q1 are the January-February averages.
2. The ratio of employees who immigrated from manufacturing industries to nonmanufacturing industries to total employees in nonmanufacturing industries who changed jobs in the previous year.
3. The differential in the annual average of *Tankan* employment conditions DI ("excessive" – "insufficient") between manufacturing and nonmanufacturing industries. The figure for 2009 is the January-June average, but forecasts by responding enterprises are used for April-June.
4. The differential in the annual percentage change of new job offers between manufacturing and nonmanufacturing industries.

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

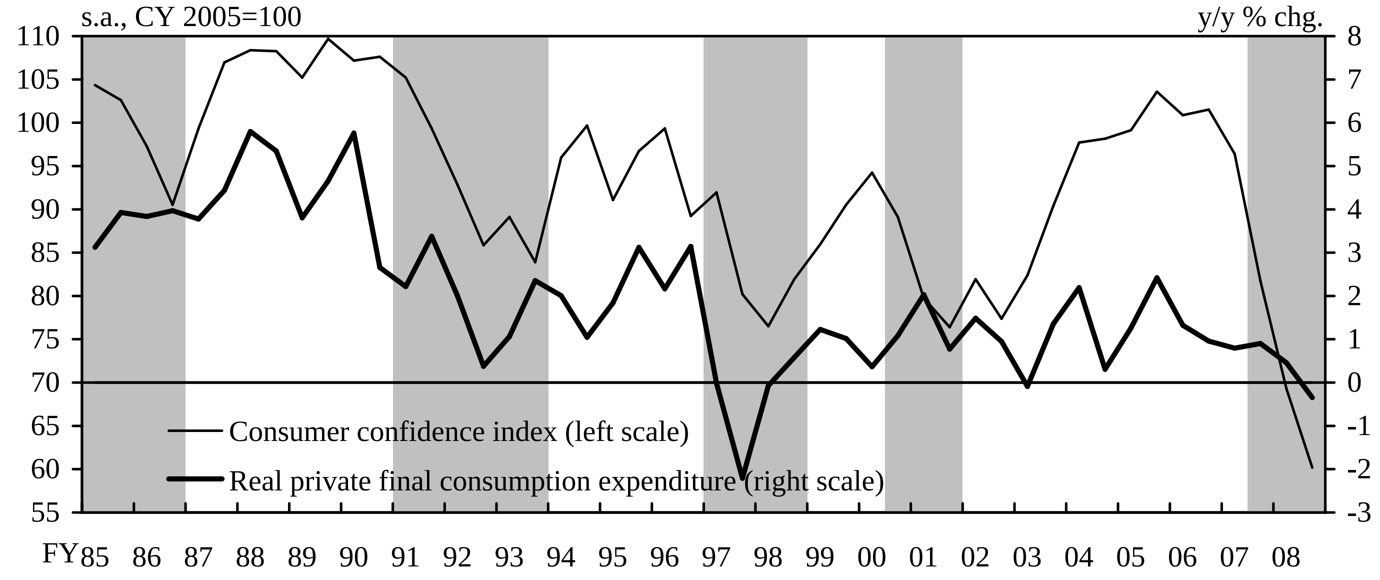
Private Consumption and Consumer Confidence

(1) Propensity to Consume and Real Disposable Income of Households



Notes: 1. Shaded areas indicate recession periods.
2. Propensity to consume = consumption/disposable income
3. Figures of the propensity to consume for fiscal 2008 are estimated by the Research and Statistics Department, Bank of Japan.
4. Real disposable income of households is deflated by the private final consumption expenditure deflator.
5. Nominal employee income is calculated as the number of employees (Labour Force Survey) multiplied by total cash earnings for establishments with at least five employees (Monthly Labour Survey). Figures for the second half of fiscal 2008 are those of the October 2008-February 2009 average.

(2) Consumer Confidence Index and Real Private Final Consumption Expenditure

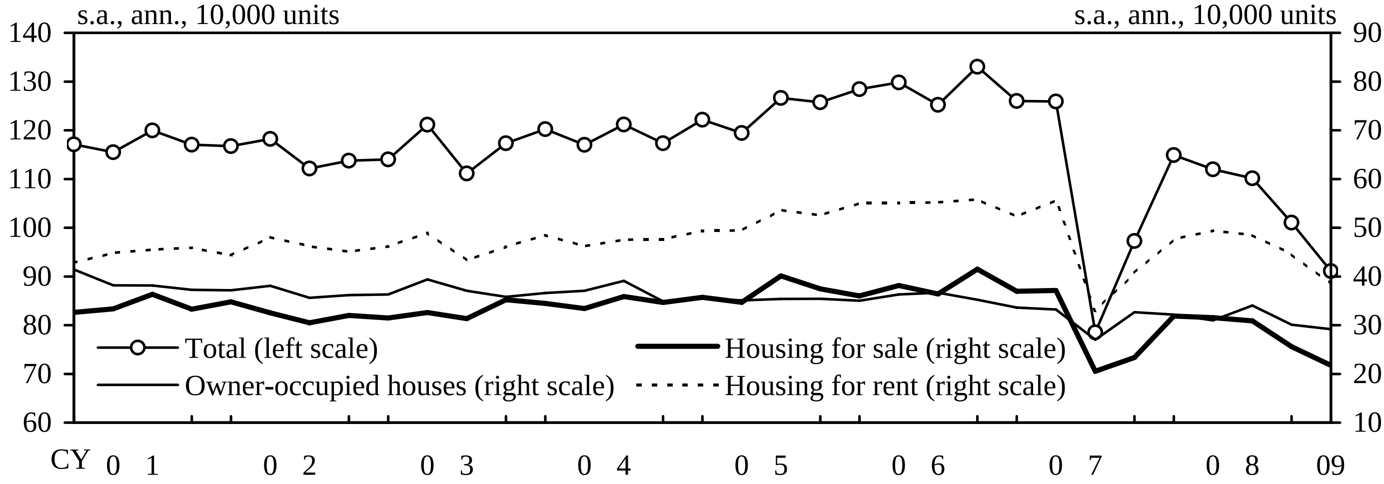


Notes: 1. Shaded areas indicate recession periods.
2. The figure for real private final consumption expenditure for the second half of fiscal 2008 is its year-on-year percentage change in 2008/Q4.

Sources: Cabinet Office, "National Accounts," "Consumer Confidence Survey"; Tokyo Stock Exchange; Ministry of Finance, "Survey of the Amount Settled of Tax and Stamp Revenues"; Ministry of Internal Affairs and Communications, "Labour Force Survey," "Estimates of Local Tax Revenue"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Bank of Japan, "Flow of Funds Accounts."

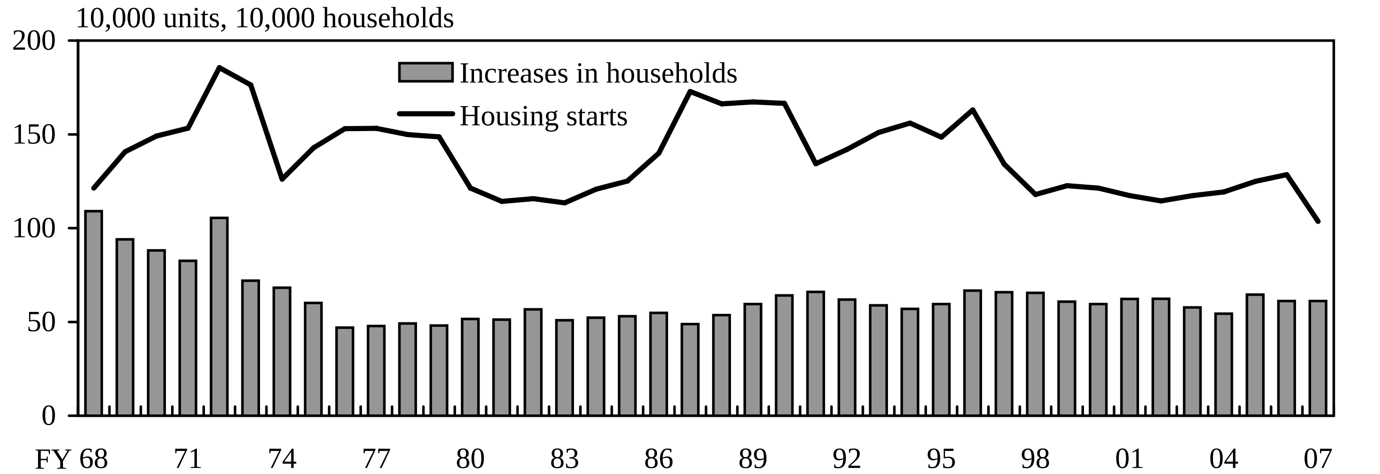
Housing Investment

(1) Housing Starts

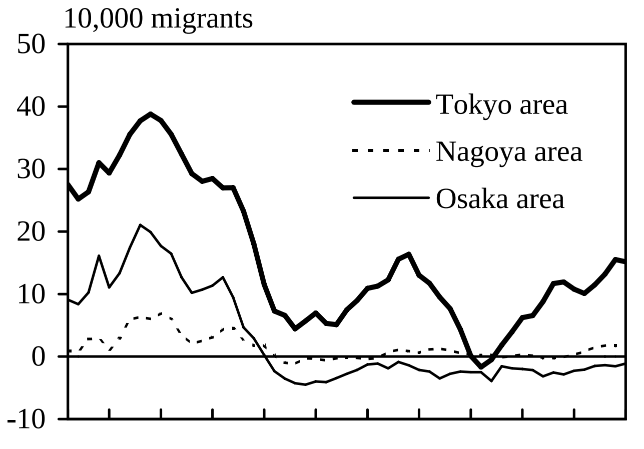


Note: Figures for 2009/Q1 are those of January-February averages.

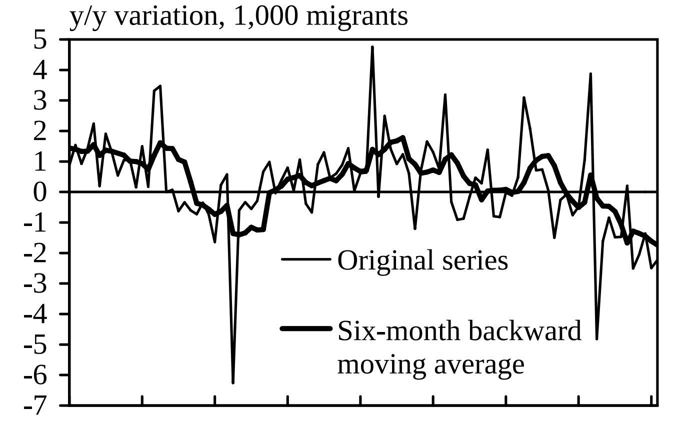
(2) Housing Starts and Increases in Households



(3) Net Migration into the Three Metropolitan Areas



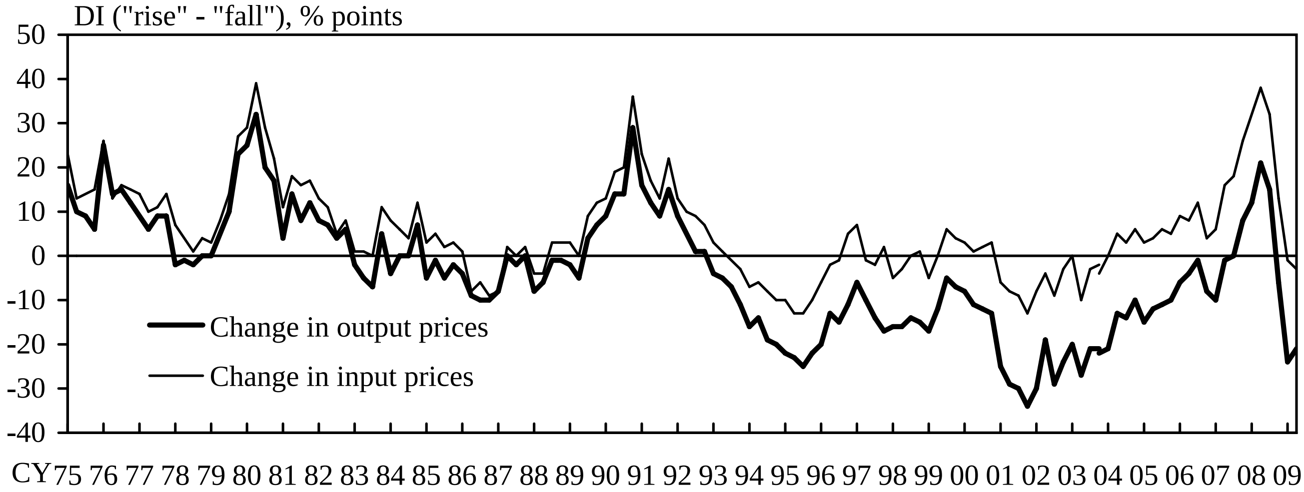
(4) Net Migration into Tokyo-to



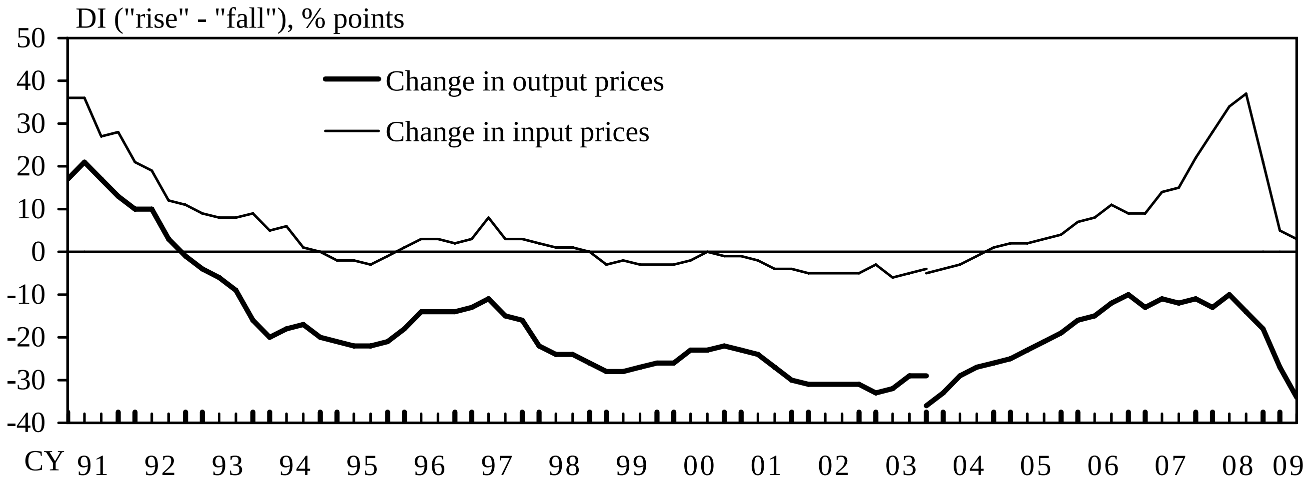
Sources: Ministry of Land, Infrastructure, Transport and Tourism, "Statistics on Building Construction Starts"; Ministry of Internal Affairs and Communications, "Population, Demographics and Number of Households Derived from the Basic Resident Registers," "Report on Internal Migration Derived from the Basic Resident Registers."

Change in Output Price and Input Price

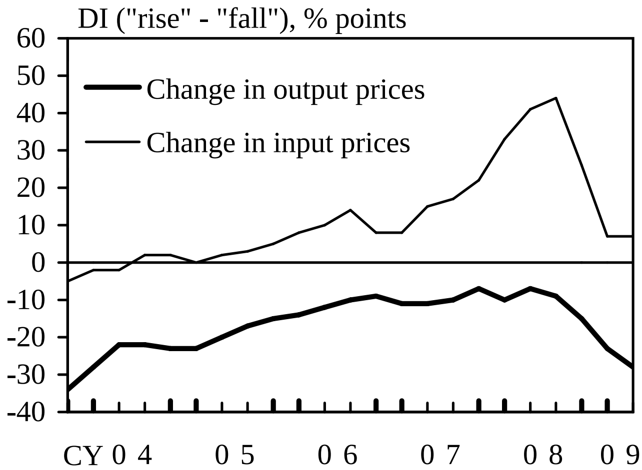
(1) Retailing



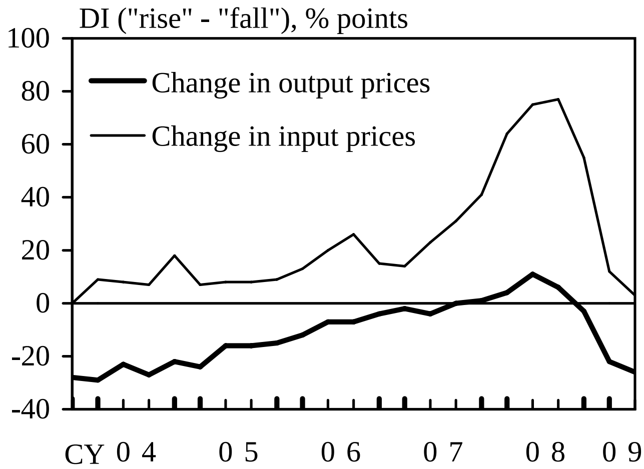
(2) Services



(3) Services for Individuals



(4) Restaurants and Accommodations

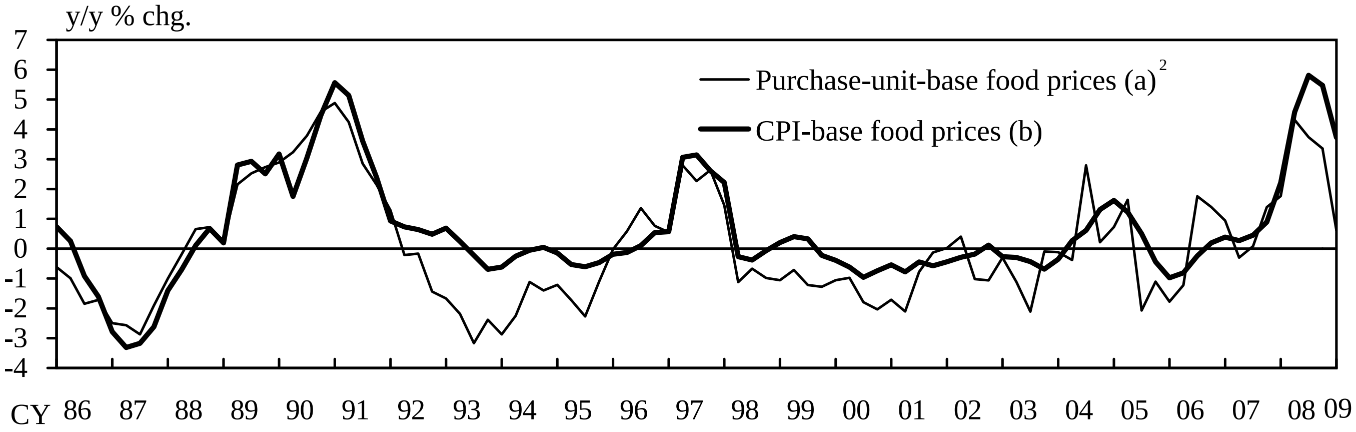


Note: Figures are based on all-size enterprises. Figures for 2009/Q2 are the forecasts in the March 2009 survey. The *Tankan* has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on a new basis.

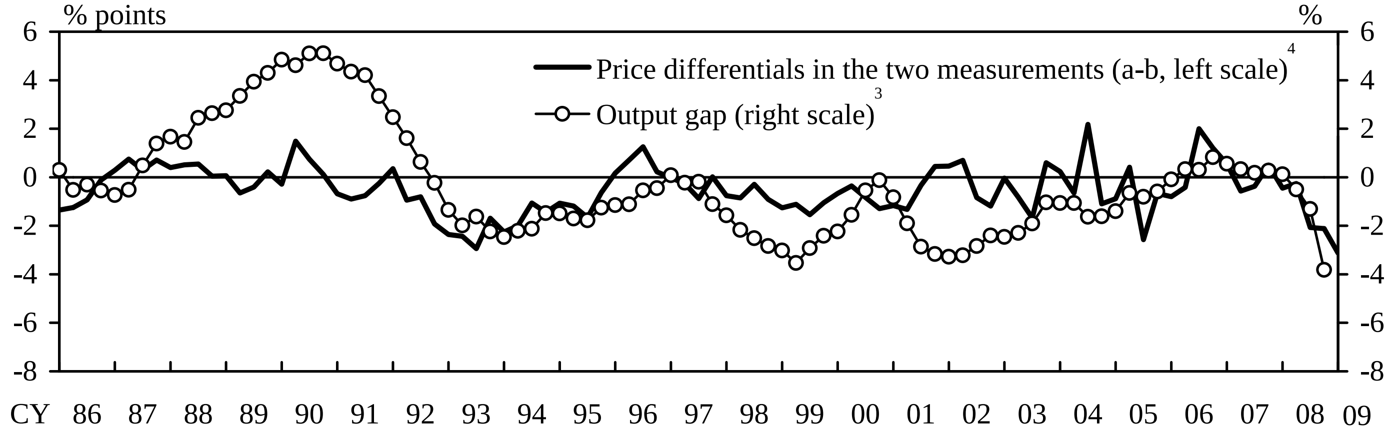
Source: Bank of Japan, "*Tankan,* Short-Term Economic Survey of Enterprises in Japan."

Food Prices Facing Consumers

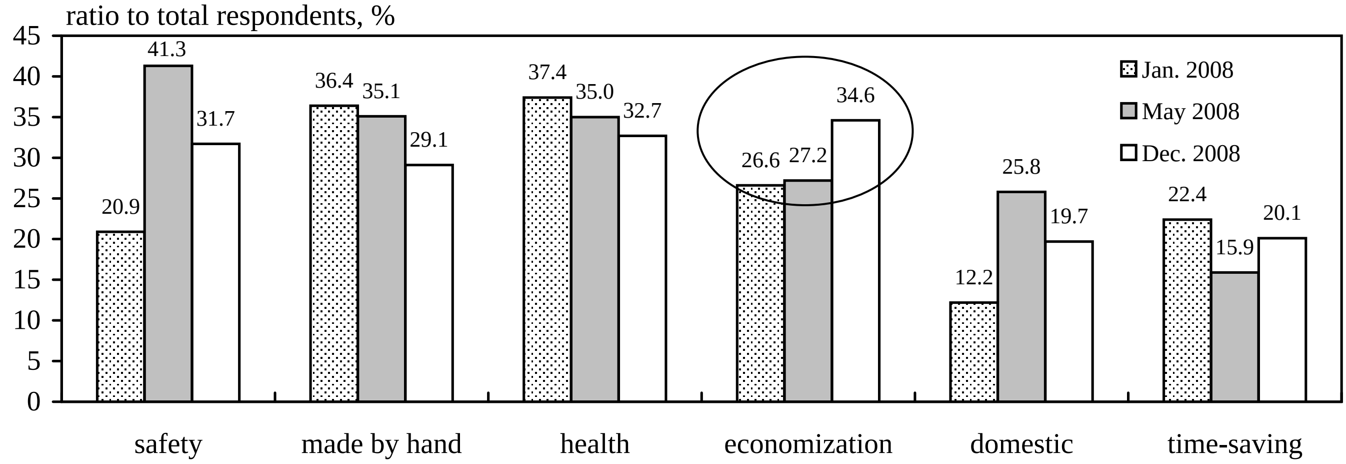
(1) Purchase-Unit-Base and CPI-Base Food Prices[1,4]



(2) Price Differentials in the Two Measurements of Food Prices and the Output Gap



(3) Consumers' Concerns on Foods



Notes: 1. Selected food items are those for which data are continuously available in both of Ministry of Internal Affairs and Communications' two kinds of statistics referred to below.

2. Purchase-unit-base food prices are the weighted sum of unit prices of the selected food items. The CPI weights are used.

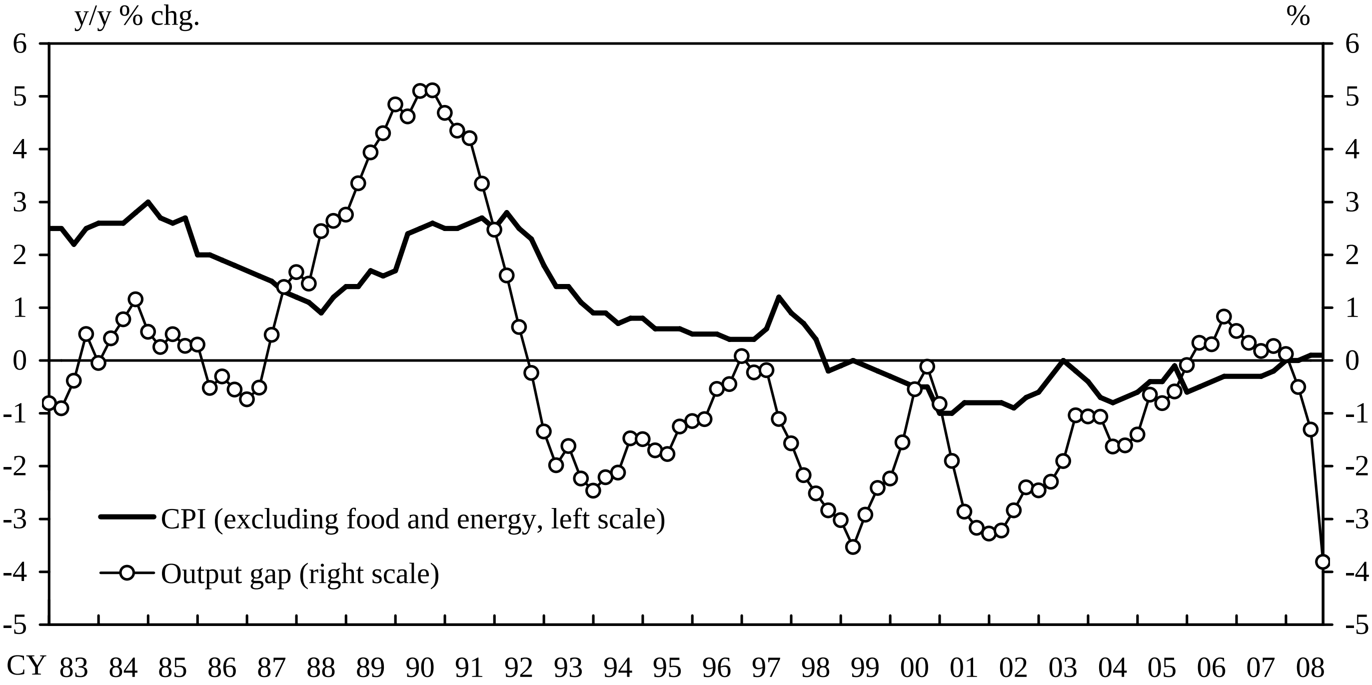
3. The output gap is estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate" (Bank of Japan Review Series, May 2006).

4. Figures for 2009/Q1 are the January-February averages.

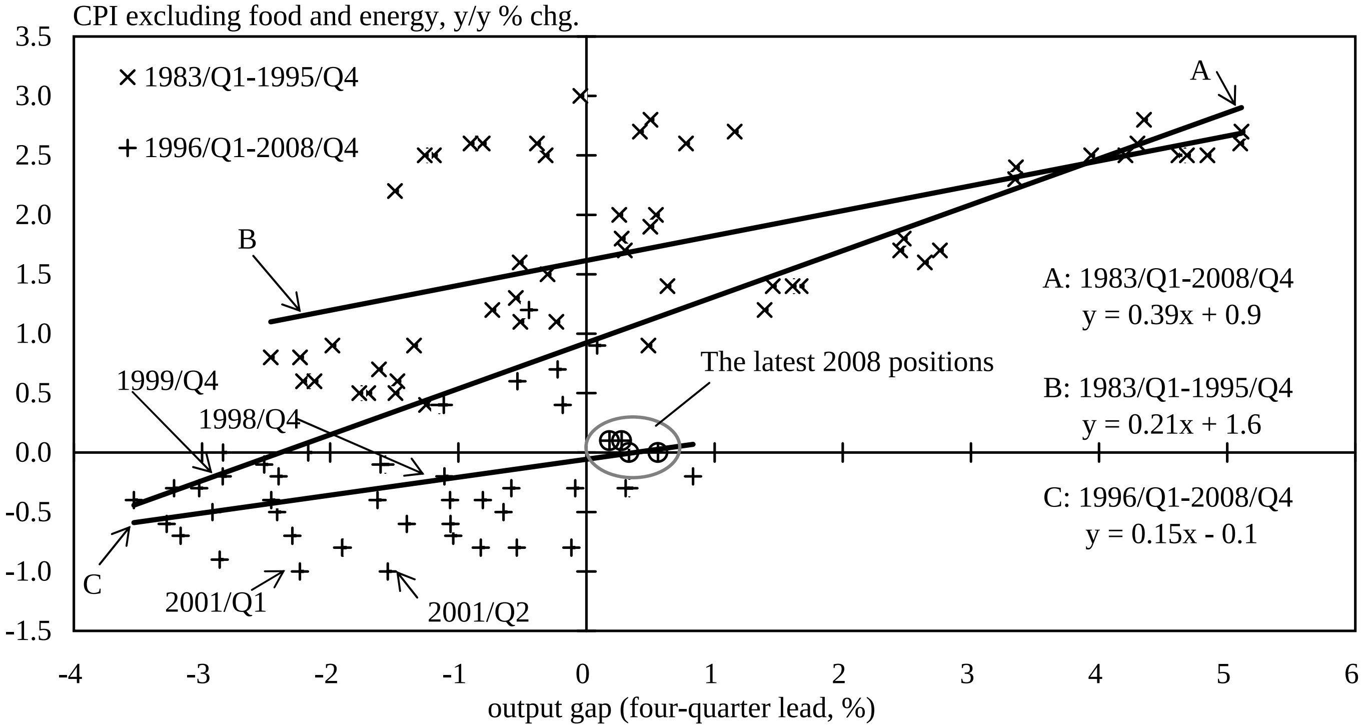
Sources: Ministry of Internal Affairs and Communications, "Monthly Report on the Family Income and Expenditure Survey," "Consumer Price Index"; Japan Finance Corporation, "Consumer Behavior Survey."

Phillips Curve

(1) Output Gap and CPI



(2) Phillips Curve



Notes: 1. CPI excluding food and energy is adjusted to exclude the effect of a change in the consumption tax rate.
2. Alcoholic beverages are excluded from food.
Energy: electricity, gas manufactured & piped, liquefied propane, kerosene, and gasoline.
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, May 2006).

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

Reference

Economic Assessment by Region (Regional Economic Report)

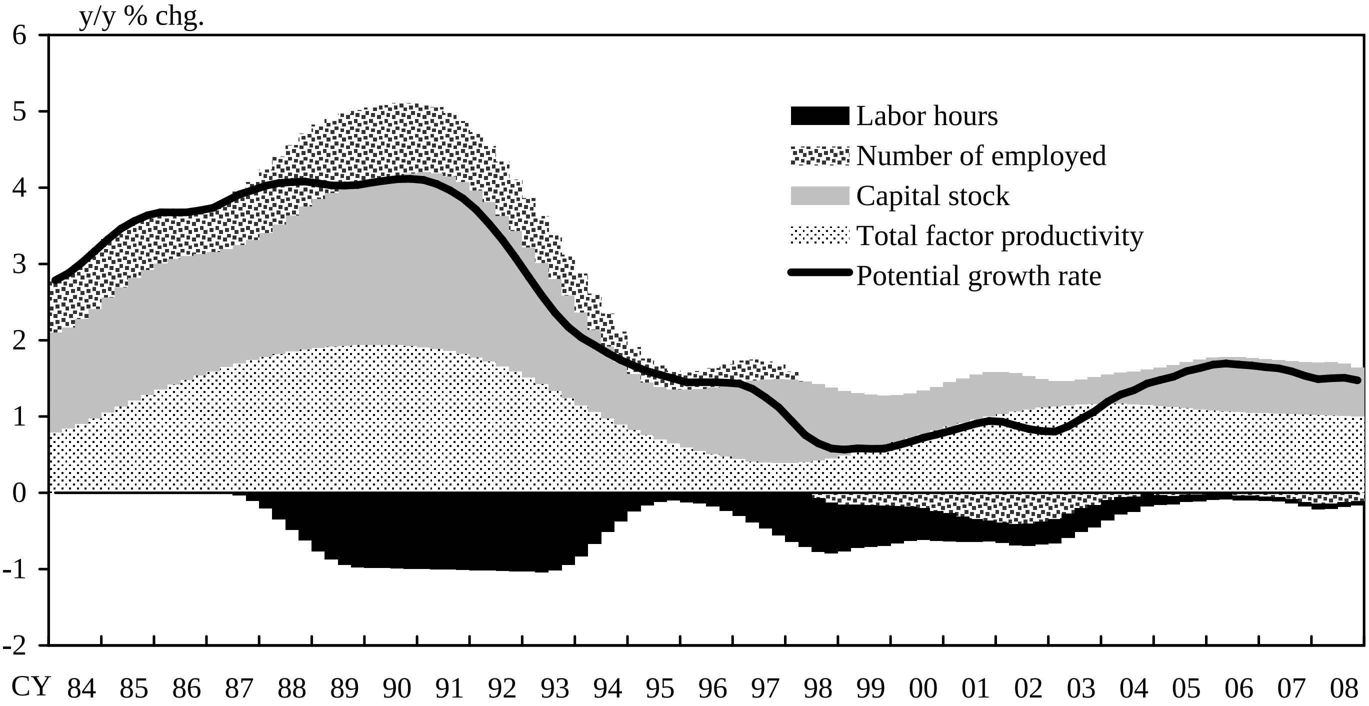
Region	Assessment in April 2009	Revision of assessment from January to April	Assessment in January 2009
Hokkaido	Economic conditions are becoming increasingly severe, and the economy is stagnant.	Downward.	Economic conditions are becoming increasingly severe.
Tohoku	Economic conditions are deteriorating significantly and becoming increasingly severe.	Downward.	Economic conditions are deteriorating.
Hokuriku	Economic conditions are deteriorating significantly.	Downward.	Economic conditions are deteriorating.
Kanto-Koshinetsu	Economic conditions are deteriorating significantly.	Downward.	Economic conditions are deteriorating.
Tokai	The level of economic activity is declining rapidly.	Unchanged.	The level of economic activity is declining rapidly.
Kinki	Economic conditions are deteriorating significantly, and the economy is in a severe situation.	Downward.	Economic conditions are deteriorating.
Chugoku	Economic conditions are deteriorating.	Unchanged.	Economic conditions are deteriorating.
Shikoku	Economic conditions are deteriorating.	Downward.	Weakness in economic activity has become widespread.
Kyushu-Okinawa	Economic conditions are deteriorating significantly.	Downward.	Economic conditions are deteriorating.

Note: The Regional Economic Report (summary) is available on the Bank of Japan's web site (http://www.boj.or.jp/en/type/ronbun/chiiki_rep/chiiki0904.htm).

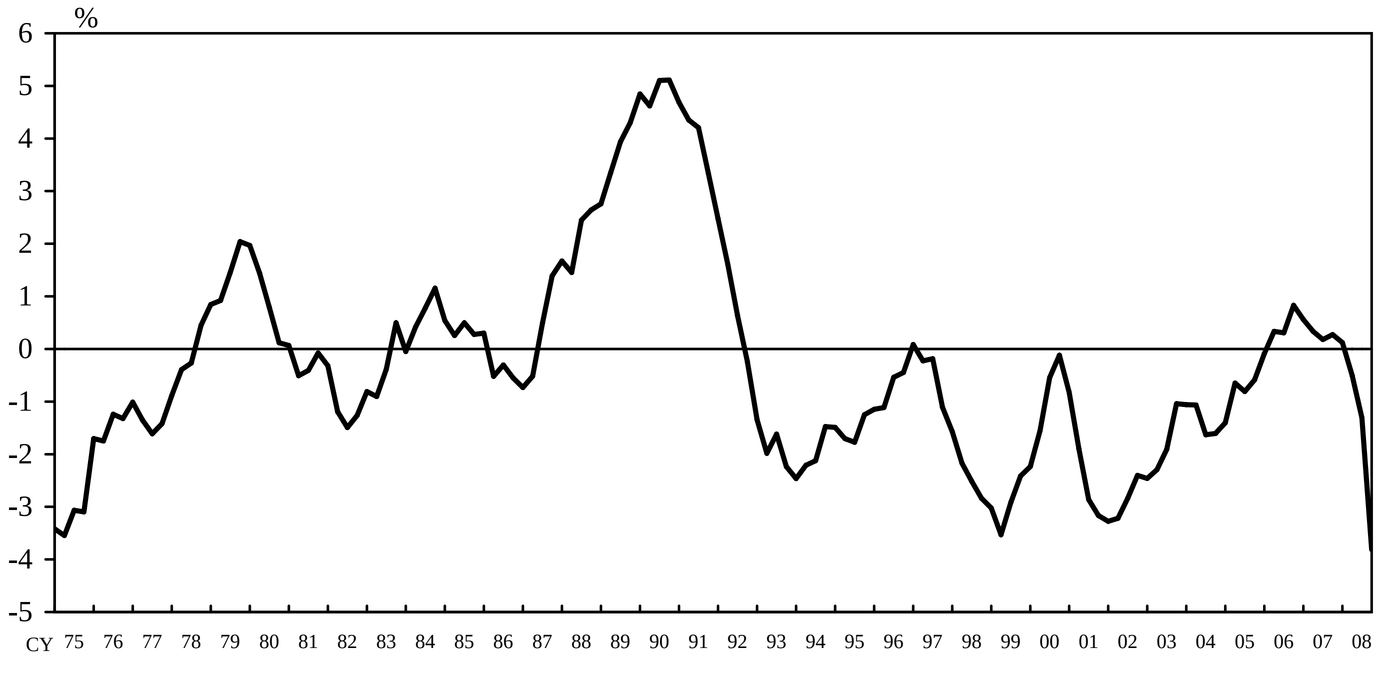
Source: Bank of Japan, "Regional Economic Report (Summary) April 2009."

Potential Growth Rate and Output Gap

(1) Potential Growth Rate



(2) Output Gap

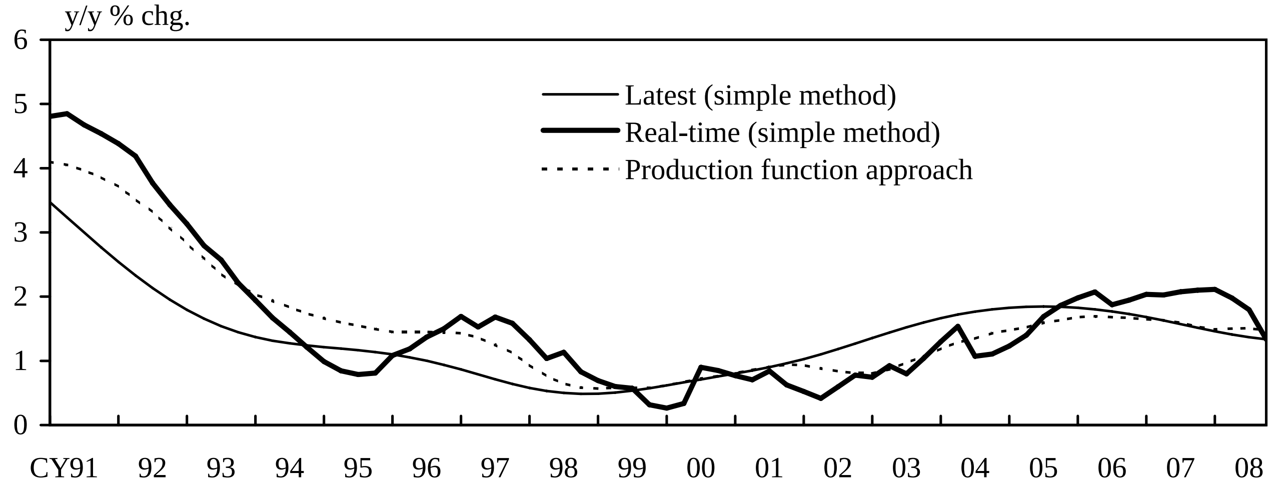


Note: The potential growth rate and the output gap are estimated by the Research and Statistics Department, Bank of Japan. For the estimation procedures, see "The New Estimates of Output Gap and Potential Growth Rate" (Bank of Japan Review Series, May 2006).

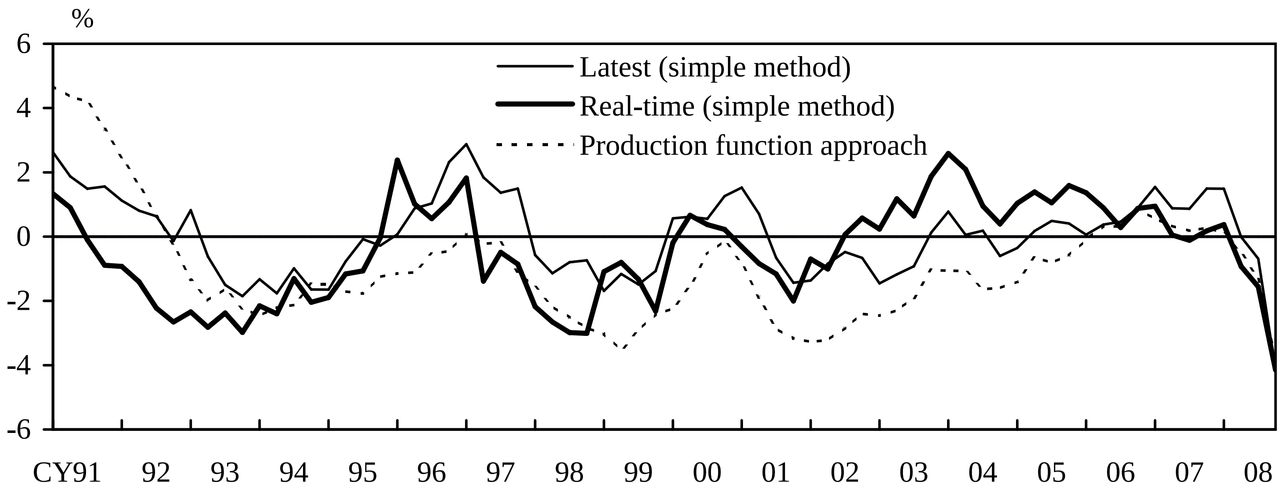
Sources: Cabinet Office, "National Accounts"; Cabinet Office and Ministry of Finance, "Business Outlook Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Monthly Labour Survey," "Report on Employment Service"; Ministry of Economy, Trade and Industry, "Indices of Industrial Production," etc.

Uncertainty about the Estimates of the Potential Growth Rate and the Output Gap

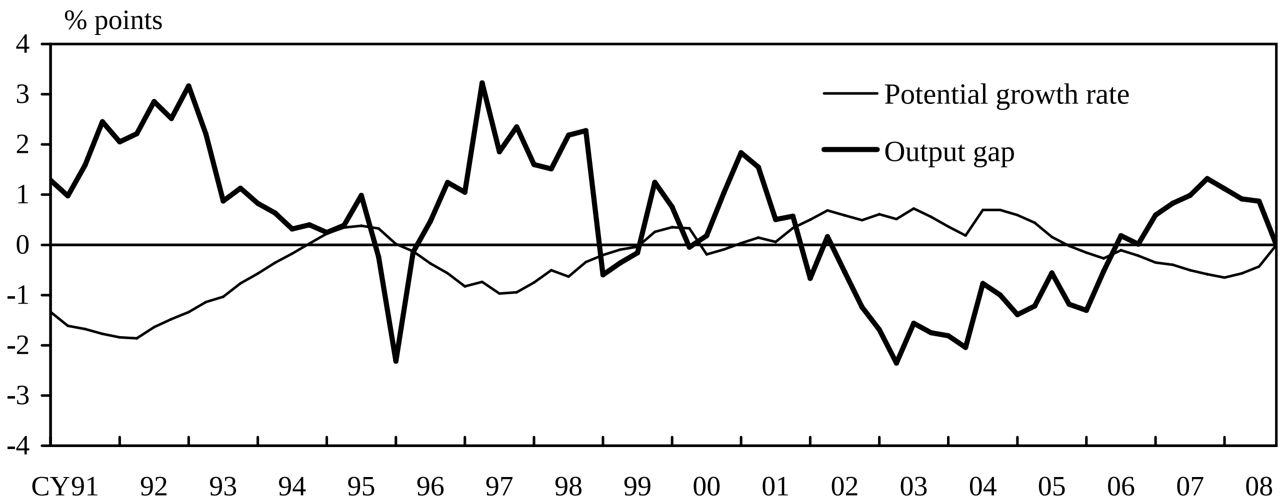
(1) Estimates of the Potential Growth Rate



(2) Estimates of the Output Gap



(3) Revisions in Estimates (Real-Time to Latest)



Notes: 1. All figures are estimated by the Research and Statistics Department, Bank of Japan.
2. "Latest (simple method)" is the HP filter estimate using the latest release of the real GDP from 1970/Q2 to 2008/Q4. "Real-time (simple method)" consists of the end-of-sample values of each HP filter estimate using the GDP series from 1970/Q2 available during each quarter. The smoothing parameter is 1,600. For "production function approach," see "The New Estimates of Output Gap and Potential Growth Rate" (Bank of Japan Review Series, May 2006).

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