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Bank of Japan

# **Outlook for Economic Activity and Prices**

October 2006

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

## **[The Bank's View]<sup>1</sup>**

### **(Outlook for Economic Activity and Prices)**

Japan's economy is expanding moderately. Economic activity has been generally in line with the projection in the April 2006 *Outlook for Economic Activity and Prices* (hereafter the Outlook Report), although so far developments in the corporate sector have been somewhat stronger than projected while those in the household sector have been somewhat weaker.

From the second half of fiscal 2006 through fiscal 2007, the economy is likely to experience a sustained period of expansion with domestic and external demand increasing and the positive influence of the strength in the corporate sector feeding through into the household sector. As the economic expansion lengthens and matures, the growth rate is likely to slow gradually from around 2.5 percent for fiscal 2006 to around 2 percent for fiscal 2007, approaching the potential growth rate.

The outlook rests on the following underlying assumptions and mechanisms. First, exports are likely to remain on the increase, reflecting the continuing expansion of overseas economies. Although the pace of expansion in the U.S. economy has been decelerating recently, overseas economies as a whole are likely to keep expanding across a broader range of regions. Second, strong corporate performance is likely to continue. Corporate profits are expected to remain high and the ratio of firms' profits to sales is likely to remain at a high level. Business fixed investment is likely to continue increasing, partly because firms are factoring increasing overseas demand into their investment decisions given the ongoing progress of globalization. Through fiscal 2007, however, the growth rate of business fixed investment is expected to decline, in view of the capital stock cycle, since firms are still displaying a strong tendency to evaluate investment profitability strictly. Third, it is likely that the positive influence of the strength in the corporate sector will continue to feed through into the household sector via channels such as increases in household income and dividends. The number of employees is likely to continue to rise steadily. The rate of

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<sup>1</sup> The text of "The Bank's View" was decided by the Policy Board at the Monetary Policy Meeting held on October 31, 2006.

increase in wages has so far been moderate due partly to persistent labor cost restraint by firms, but the increase is expected to become clearer over time, given that labor market conditions are tightening steadily. Against this backdrop, private consumption is likely to continue increasing steadily. And fourth, the extremely accommodative financial conditions are likely to continue to support private demand. Lending by private banks is on the rise, and short-term interest rates have been very low relative to the state of economic activity and prices.

Given this economic outlook, the environment surrounding prices is likely to change gradually. First, a higher level of resource utilization, namely in production capacity and labor, is being observed. The output gap is positive and is likely to widen at a moderate pace going forward. Second, although unit labor costs (labor costs per unit of output) continue to decline, they are expected to stop declining and start increasing slightly in line with the deceleration in productivity growth and clearer increases in wages resulting from the prolonged economic expansion. And third, results of various surveys show that firms and households are shifting up their inflation expectations for both the short term and the medium to long term.

Looking at various indices for inflation, the domestic corporate goods price index (CGPI) in the first half of fiscal 2006 exceeded the April projection, mainly reflecting rises in international commodity prices. While the prices of crude oil and other commodities and foreign exchange rates will influence the CGPI significantly, it is likely to continue its upward trend.

The movement of the consumer price index (CPI; excluding fresh food, on a nationwide basis) has been generally in line with the April projection: year-on-year changes have been on a positive trend. The year-on-year rate of increase in the CPI is likely to gradually rise from the 0.0-0.5 percent range in fiscal 2006 to around 0.5 percent in fiscal 2007.<sup>2</sup>

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<sup>2</sup> This outlook for inflation is based on the 2005-base CPI. In August 2006, the CPI was rebased from a 2000 base to a 2005 base, and year-on-year figures back as far as January 2006 were revised retroactively. This rebasing caused the year-on-year rate of increase in the CPI from January 2006 to July to decline by around 0.5 percentage point on average. However, the difference between the 2000-base CPI and the 2005-base CPI is expected to decrease in the future, as most of the effects stemming from changing the calculation methods for, for instance, mobile telephone charges, will

### **(Positive and Negative Deviations)**

The outlook described above is the most likely projection based on the underlying assumptions and mechanisms mentioned earlier. It should be noted that there exist the following upside and downside risks to the outlook.

The first risk concerns the growth path of the global economy. The U.S. economy is likely to realize a soft landing and to move toward sustainable growth. However, if a greater-than-expected downward adjustment in housing prices occurs, it may lead to lower growth rates via, for example, a deceleration of growth in private consumption. In addition, higher resource utilization, namely in production capacity and labor, coupled with, for example, the impact of past rises in crude oil prices may lead to higher inflation expectations. In such a case, there may be adverse effects not only on the U.S. but also on the global economy operating, for instance, through the reactions of financial markets. In China, the economy continues to expand strongly, and there is a possibility that this growth will accelerate during the projection period, influenced by developments in fixed asset investments and exports. Global economic developments may also be influenced by international commodity prices, such as crude oil prices, depending on their future movements. These developments in economies abroad may cause Japanese exports and production to deviate either upward or downward from their expected trajectory. Japanese business fixed investment may also be affected, as firms are factoring expanding external demand into their investment plans.

If the pace of the expansion of overseas economies decelerates unexpectedly, inventory adjustments may occur, for example, in IT-related goods where the pace of increase in supply has been rapid. Even in such a case, however, high corporate profitability as well as the fact that Japanese firms have on the whole completed adjusting excesses in employment and production capacity may act as a cushion minimizing the impact on the overall economy.

The second risk is a further acceleration of business fixed investment. Although firms,

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disappear after the first year. Given this, the basic view on the CPI in the current projection remains the same as that in the April projection, which was based on the 2000-base CPI.

mainly manufacturers, have been stepping up their business fixed investment, an excessive build-up of capital stock has not so far been observed in the economy overall. However, given the extremely accommodative financial conditions, firms may further accelerate investment based on optimistic projections of future profitability, such as favorable expectations regarding the growth rate, financing costs, and foreign exchange rates. Such acceleration may push up overall growth in the short run, but may lead in turn to an excessive build-up of capital stock that could precipitate an economic slowdown. Developments in asset prices, such as a more widely observed upturn in land prices, particularly those in major cities, may also increase private demand.

Turning to the outlook for the inflation rate, attention needs to be paid to factors that may cause the rate to deviate either upward or downward from the projection. The first factor is uncertainty regarding the sensitivity of prices to changes in the output gap. Wages and prices may face upward pressure if the output gap remains positive and continues to widen at a moderate pace with an accompanying increase in the expected rate of inflation. On the other hand, if productivity keeps rising and wage increases lag behind in spite of the prolonged economic expansion, there may be no upward shift in the inflation rate. The second factor is developments in the prices of crude oil and other commodities. There are substantial uncertainties in this regard which could cause prices to move in either direction. The third factor is the impact from the change in the potential growth rate. The potential growth rate of the Japanese economy seems to have been increasing in recent years. An increase in the potential growth rate generates downward pressure on prices from the supply side, whereas it may give rise to upward pressure on prices from the demand side via higher spending due to improved expectations regarding income and rates of return.

### **(Conduct of Monetary Policy)**

In line with the new framework for the conduct of monetary policy released on March 9, 2006, the Bank assesses economic activity and prices from two perspectives, taking account of the "understanding of medium- to long-term price stability," and outlines its view on the future course of monetary policy.

The Bank first assesses the outlook that it deems most likely for economic activity and

prices through fiscal 2007 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. According to this perspective (the first perspective), Japan's economy is likely to continue expanding with domestic and external demand increasing. The year-on-year rate of increase in the CPI (excluding fresh food, on a nationwide basis) is expected to rise gradually through fiscal 2007, as the level of excess demand in the economy (the positive output gap) is increasing at a moderate pace and downward pressure from declining unit labor costs is weakening. In sum, Japan's economy is likely to achieve sustainable growth under price stability.

Next the Bank assesses the risks considered most relevant to conducting monetary policy, looking over a longer time horizon and taking account of the cost incurred should risks materialize, however improbable they might be. From this perspective (the second perspective), it can be seen that, with corporate profitability high and prices on a positive trend, the stimulative effect of monetary policy on economic activity and prices may be amplified. For instance, if the expectation takes hold that interest rates will remain low for a long time regardless of economic activity and prices, there is a risk in the medium to long term of larger economic swings, resulting in large fluctuations in the rate of inflation, channeled, for example, via financial and corporate investment activities. Meanwhile, there is also the downside risk that economic expansion and rising prices may stall. However, even in such a case, the risk of the economy falling into a vicious circle of declining prices and deteriorating economic activity seems small, since the Japanese financial system has regained stability and the economy has now cast off its excesses in production capacity, employment, and debt.

With regard to the future course of monetary policy, as a result of the assessment of economic activity and prices from the two perspectives described above, the Bank will adjust the level of interest rates gradually in the light of developments in economic activity and prices, while maintaining the accommodative financial conditions ensuing from very low interest rates for some time.

### Forecasts of the Majority of Policy Board Members<sup>3,4</sup>

y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2006	+2.3 to +2.5 [+2.4]	+2.9 to +3.5 [+3.0]	+0.2 to +0.3 [+0.3]
Forecasts made in April 2006	+2.1 to +3.0 [+2.4]	+1.4 to +1.8 [+1.5]	+0.6 to +0.6 [+0.6]
Fiscal 2007	+1.9 to +2.4 [+2.1]	+1.1 to +1.5 [+1.2]	+0.4 to +0.5 [+0.5]
Forecasts made in April 2006	+1.8 to +2.4 [+2.0]	+0.8 to +1.1 [+1.0]	+0.7 to +0.9 [+0.8]

Notes: 1. Brackets indicate the median of the forecasts.

2. Individual Policy Board members make the above 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.

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<sup>3</sup> Forecasts of the majority of Policy Board members are the figures to which the individual members attach the highest probability. They are shown as a range, with the highest and lowest figures excluded. It should be noted that the range does not indicate the forecast errors.

<sup>4</sup> The forecasts of all Policy Board members are as follows.

y/y % chg.

	Real GDP	Domestic CGPI	CPI (excluding fresh food)
Fiscal 2006	+2.2 to +2.5	+2.9 to +3.5	+0.2 to +0.3
Forecasts made in April 2006	+2.1 to +3.0	+1.3 to +1.8	+0.5 to +0.7
Fiscal 2007	+1.8 to +2.6	+1.0 to +1.7	+0.4 to +0.6
Forecasts made in April 2006	+1.6 to +2.5	+0.7 to +1.3	+0.7 to +1.0

## [The Background]

### 1. Economic Activity, Prices, and Monetary and Financial Developments

#### (Economic Activity and Prices in the First Half of Fiscal 2006)

Japan's economy is expanding moderately with a virtuous circle of production, income, and spending in operation (Chart 1).<sup>5</sup>

Growth in exports of IT-related goods weakened temporarily, reflecting the effects of partial production adjustments in East Asia. Nevertheless, with expansion continuing in overseas economies as a whole, exports, mainly of capital goods and parts and automobile-related goods, continued to increase (Charts 2 and 3). Corporate profits remained high despite the substantial rise in prices of materials, such as crude oil. Large manufacturers in particular have made successive upward revisions to their profits due to the weaker yen as well as growth in exports (Chart 4). In this situation, business sentiment generally has stayed at favorable levels, and business fixed investment continued to increase (Chart 5). The September *Tankan* (Short-Term Economic Survey of Enterprises in Japan) indicated that large firms' business fixed investment plans for fiscal 2006 are strong, showing growth of slightly over 10 percent year on year. Small firms' business fixed investment plans have been revised upward, at virtually the same pace as in fiscal 2004 and fiscal 2005 when the year-on-year increase in actual business fixed investment was about 10 percent (Chart 6). With the increases in domestic and external demand continuing, industrial production also remained on the rise (Chart 7).

The positive influence of the strength in the corporate sector fed steadily through to the household sector, albeit at a moderate pace. Household income rose moderately, reflecting improvements in employment and wages (Chart 8). Looking at employees by type,

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<sup>5</sup> Indexes of Business Conditions (Composite Indexes) continue to show an improving trend. In August 2006, the coincident index posted its all-time high, exceeding the bubble-period peak in October 1990. Based on the Cabinet Office's reference dates for business cycles, in May 2006 the current economic expansion overtook the bubble boom, known as the Heisei boom (51 months during 1986-91), and in October matched the Izanagi boom (57 months during 1965-70) which until then had been the longest postwar economic expansion phase.

growth in the number of full-time employees became more evident compared with that of part-time employees. While overtime payments and special payments continued to rise, regular payments, which make up the core of wages, remained flat year on year mainly due to persistent labor cost restraint by firms, and as a result nominal wages per worker as a whole showed only a moderate increase. Private consumption, mainly outlays for services and durable consumer goods such as electrical appliances, maintained their upward trend, and housing investment increased at a moderate pace (Chart 9). Movements in some retail sales indicators, however, exhibited a degree of weakness partly due to unfavorable weather conditions.<sup>6</sup>

With the continuing economic expansion, resource utilization, namely in production capacity and labor has risen steadily. The September *Tankan* indicated that firms are facing the strongest constraints in terms of employment levels and production capacity in more than a decade (Chart 10).<sup>7</sup> Although the estimates are subject to a certain margin of error, the output gap in the economy, or the GDP gap, is now estimated to be positive. This contrasts with the beginning of the current recovery phase, when the output gap indicated significant excess supply.

With the output gap continuing to be positive, the year-on-year rate of change in the domestic CGPI increased to the 3-4 percent level influenced by the substantial rise in prices of international commodities such as crude oil (Charts 11 and 12). The year-on-year rate of change in the CPI (excluding fresh food, on a nationwide basis) indicated a positive trend, even in terms of the 2005 base-year series, although retroactive revisions following the rebasing of the index had caused the rate of change to be revised downward (Chart 13). Prices of goods particularly petroleum products and clothes continued their positive

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<sup>6</sup> The Bank conducts research and analysis on regional economic conditions at its branches, and releases its assessment in the "Regional Economic Report" quarterly. The October 2006 Regional Economic Report provides the results of the Bank's detailed research on private consumption in each region. For a brief summary of the assessment of recent regional economic conditions, please refer to the Reference attached.

<sup>7</sup> The *Tankan* composite indicator is the weighted average of the diffusion indices of production capacity and employment conditions, where indices are weighted by capital and labor income shares in the national accounts. The composite indicator showed that excesses in production capacity and employment levels had been dispelled by September 2005 and recent figures indicate increasing shortages.

contribution to the CPI, while prices of other goods were on a moderate improving trend. As for services prices, mobile telephone charges, which fall into the category of "other services," continued to make a negative contribution, while the price of eating out made a slightly larger positive contribution to the index than previously.

In the April 2006 Outlook Report, the Bank projected that from fiscal 2006 through fiscal 2007, Japan's economy would be likely to experience a sustained period of expansion, with the corporate and household sectors well in balance, as strength in the corporate sector continued to feed through into the household sector. As described above, with Japan's economy expanding moderately, economic activity has been generally in line with the April projection, although so far developments in the corporate sector, for instance in corporate profits and business fixed investment, have been somewhat stronger than projected while those in the household sector, for example in wages and private consumption, have been somewhat weaker. With regard to prices, the domestic CGPI exceeded the April projection, mainly reflecting rises in international commodity prices. On the other hand, year-on-year changes in the CPI have been on a positive trend, generally in line with the April projection (Box).

#### **(Outlook for Economic Activity through Fiscal 2007)**

From the second half of fiscal 2006 through fiscal 2007, Japan's economy is likely to experience a sustained period of expansion with domestic and external demand increasing and the positive influence of the strength in the corporate sector feeding through into the household sector. As the economic expansion lengthens and matures, the growth rate is likely to slow gradually, approaching the potential growth rate. The underlying assumptions and mechanisms on which this economic outlook is based are generally unchanged from the April Outlook Report.

Specifically, although fiscal reform is likely to continue to exert downward pressure on economic activity, a virtuous circle operating between production, income, and spending is likely to be sustained on the back of generally favorable developments in overseas economies and the extremely accommodative financial environment in Japan. In the light of the ongoing progress of globalization, firms, mainly manufacturers, are seeking to

reinforce their capacity to supply goods and services by increasing capital equipment as they look to capture profit opportunities in overseas markets. Through fiscal 2007, firms are expected to generally maintain strong business fixed investment plans as overseas economies as a whole continue to expand. A further pick-up in corporate activity, such as increased production, stimulated by sustained growth in exports and business fixed investment, is likely to have positive effects on the household sector. As for the employment and income situation, labor market conditions are likely to become tighter, as suggested by data such as the diffusion index for employment conditions in the September *Tankan*, which indicated a further increase in the number of firms perceiving their holdings of labor as insufficient. Given these points, through fiscal 2007 the pace of increase in household income is expected to accelerate slightly with regular payments rising (Chart 14). As a result, the growth rate of disposable income is likely to increase to some extent, even taking into account the abolition of the across-the-board income tax credits and expected rises in premiums for public pension insurance. In this situation, increases in household spending are likely to continue, in turn feeding back to the corporate sector, including the nonmanufacturing sector, with the likelihood being that this will become a mutually reinforcing trend.

However, the growth rate of business fixed investment is likely to decline, in view of the capital stock cycle, as the economic expansion lengthens (Chart 15). Accordingly, the household sector's share of private spending is likely to increase gradually, thereby reducing that of the corporate sector (Chart 16).<sup>8</sup>

In terms of real GDP, the growth rate is likely to slow gradually from around 2.5 percent for fiscal 2006, slightly exceeding the potential growth rate, to around 2 percent for fiscal 2007 due to a slowdown in the pace of increase in business fixed investment, thus approaching the 1.5-2.0 percent range estimated as the potential growth rate.

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<sup>8</sup> Experience of past economic expansions suggests that in the early stages business fixed investment increases at a rapid pace, but as the period of economic expansion lengthens, the pace of investment growth decelerates, and the household sector's share of spending increases relative to that of the corporate sector.

### **(Outlook for Prices through Fiscal 2007)**

Given this economic outlook, the environment surrounding prices is likely to change gradually as mentioned in the April Outlook Report. As the economy continues to expand at a pace slightly above its potential, the output gap, already positive, is likely to widen at a moderate pace (Chart 17). The rate of decline in unit labor costs (labor costs per unit of output) has so far been narrowing at a very moderate pace, reflecting the fact that the year-on-year rate of change in regular payments has been at around zero percent as firms persist in restraining labor costs (Chart 18). Nevertheless, unit labor costs are expected to stop declining and start increasing slightly, since it is likely that productivity growth will decelerate and labor market conditions will place upward pressure on wages as the economic expansion lengthens and matures.<sup>9</sup>

Although such upward pressure on prices is likely to be offset, to some extent, by downward pressure stemming from intense competition among firms facing deregulation, advances in information and communication technology, and economic globalization, on the whole the uptrend in prices is likely to become firmly established. As evidenced by various surveys, firms and households are shifting up their inflation expectations for both the short term and the medium to long term (Chart 19).

Based on this assessment, the domestic CGPI is likely to increase by about 3 percent in fiscal 2006, mainly reflecting past rises in international commodity prices, and then by 1.0-1.5 percent in fiscal 2007. The year-on-year rate of increase in the 2005-base CPI (excluding fresh food, on a nationwide basis) is likely to gradually rise from the 0.0-0.5 percent range in fiscal 2006 to around 0.5 percent in fiscal 2007 (Box).

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<sup>9</sup> As the economic expansion lengthens and matures, the household sector's share of private spending, namely private consumption, increases while that of the corporate sector, namely business fixed investment, decreases. In line with this shift, relative shares of production are likely to start favoring nonmanufacturers over manufacturers. Since the nonmanufacturing sector is generally regarded as highly labor intensive and having relatively low productivity, this rise in its relative importance in terms of production means that the overall rate of productivity growth in the economy is expected to decelerate.

### **(Developments in Monetary Aggregates)**

Looking at the environment for corporate finances, accommodative monetary conditions are likely to be maintained, as the lending attitude of financial institutions is expected to remain positive (Chart 20). Despite the fact that cash flow remains at high levels, firms are increasing their spending, especially in business fixed investment, and becoming much less inclined to shed interest-bearing liabilities from their balance sheets. Indeed, more firms are increasing their debts. In this situation, growth in the amount outstanding of lending by private banks has been gradually increasing. The rate of change is likely to remain positive going forward as the economic expansion is sustained (Chart 21).

The growth rate of the money stock ( $M_2$ +CDs) has been declining recently: this is mainly due to households and firms shifting funds to financial assets not included in the money stock, such as investment trusts and Japanese government bonds, as the financial system has regained stability and the return on financial assets other than bank deposits has risen. Looking back over the relatively long term, since the second half of the 1990s the growth rate of the money stock has been higher than that of nominal GDP and the ratio of the money stock to nominal GDP has risen to a significantly high level. This reflected increased holdings of cash and bank deposits by households and firms, as these were regarded as relatively safe and attractive investment instruments in a situation where concern about financial stability was increasing and rates of return on other financial assets were declining. Thus, the recent decrease in the rate of money stock growth may be construed as an indication of restored confidence in the stability of the financial system and improved returns on financial assets other than cash and bank deposits. Given the investment preferences displayed by households and firms, the growth rate of the money stock is unlikely to accelerate in the near future. However, taking underlying factors into consideration, such developments in the money stock seem compatible with moderate price increases and sustainable economic growth.

## 2. Examining the Mechanism of Changes in Economic Activity and Prices

### (Environment Surrounding Exports)

This outlook is based on the following view regarding the environment surrounding exports: although the pace of expansion in the U.S. economy has been decelerating recently, the economy is likely to realize a soft landing and to move toward sustainable growth; and overseas economies as a whole are likely to keep expanding across a broader range of regions.<sup>10</sup> Recent developments in Japan's exports show that goods, particularly capital goods and automobiles, in which Japanese firms have a competitive edge, have been exported to an increasing number of countries. Therefore, an uptrend in Japan's exports as a whole is likely to continue, even if the pace of growth in the U.S. economy slows slightly (Chart 3). However, if a greater-than-expected downward adjustment in housing prices occurs in the United States, it may lead to lower growth rates in the U.S. economy via, for example, a deceleration of growth in private consumption. In addition, higher resource utilization in the United States, namely in production capacity and labor, coupled with, for example, the impact of past rises in crude oil prices may lead to higher inflation expectations. In such a case, there may be adverse effects not only on the U.S. but also on the global economy operating, for instance, through the reactions of financial markets.

If the pace of the expansion of overseas economies decelerates unexpectedly, adjustment pressure may build up in the IT-related sector (Chart 22). Global demand for IT-related goods has so far been on a steady uptrend due partly to the rapid growth in emerging market economies, such as the BRIC economies, and firms are becoming stricter in their inventory management. However, the pace of global increase in the supply of IT-related goods has also been rapid, and thus if downside risks to the outlook of the U.S. economy materialize, the balance between supply and demand of IT-related goods may be disturbed.

In China, the economy continues to expand strongly, and there is a possibility that this

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<sup>10</sup> These views are broadly shared by international organizations and private research institutes. For example, the *World Economic Outlook* released in September 2006 by the International Monetary Fund (IMF) forecasts that the global economy will expand at a significant pace in 2006 and 2007 similar to the growth in 2004 and 2005 of about 5 percent.

growth will accelerate during the projection period, influenced by developments in fixed asset investments and exports. In the euro area, sustained economic recovery is likely against the background of the continuing recovery in private consumption and business fixed investment, although the pace of growth in exports and production may decelerate moderately. Global economic developments may also be influenced by international commodity prices, such as crude oil prices, depending on their future movements.

These developments in economies abroad accompanied by developments in the yen's exchange rate may cause Japanese exports and production to deviate either upward or downward from their expected trajectory. Japanese business fixed investment may also be affected, as firms are factoring expanding external demand into their investment plans.

### **(Firms' Spending Behavior in the Global Economy)**

The current strong business fixed investment continues to be led by the manufacturing sector, although the nonmanufacturing sector has started to step up its fixed investment. The acceleration in business fixed investment reflects the fact that, in the light of the ongoing progress of globalization, firms, mainly manufacturers, are seeking to reinforce their capacity to supply goods and services by increasing capital equipment as they look to capture profit opportunities in overseas markets (Chart 23). Firms have also become gradually more inclined to increase dividends and hire new graduates, but at the same time, they persist in restraining labor costs as well as selling, general and administrative expenses (Chart 24).<sup>11</sup> Such corporate behavior may be interpreted as meaning that the management of firms, amid intensifying global competition and greater exposure to the discipline of the capital market, is becoming more attentive to increasing corporate value by minimizing costs while carrying out necessary investments and returning profits to shareholders.

Since firms are very careful in choosing their investment projects, business fixed investment as a whole has, despite recent acceleration, generally been kept within cash flow and the pace of increase in capital stock is moderate (Chart 6). As a result, at present there seem to be no signs of overinvestment that will exert later adjustment pressure on capital stock.

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<sup>11</sup> The ratio of fixed costs, such as labor costs, to sales tends to decline in a recovery phase. In the current recovery phase, the decline in the ratio is considerably faster than the past declines.

Although the uptrend in business fixed investment is likely to continue, it is probable that firms will, based on careful evaluation of investment profitability, slow the pace of increase in their fixed investment as the growth in capital stock gradually accelerates.

However, given the extremely accommodative financial conditions, firms may further accelerate investment based on optimistic projections of future profitability, such as favorable expectations regarding the growth rate, financing costs, and foreign exchange rates. Such acceleration may push up overall growth in the short run, but may lead in turn to an excessive build-up of capital stock that could precipitate an economic slowdown. Developments in asset prices, such as a more widely observed upturn in land prices, particularly those in major cities, may also increase private demand, including business fixed investment.

#### **(The Employment and Income Situation and Households' Spending Behavior)**

Although the number of employees has continued to increase and labor market conditions have been tightening steadily, the year-on-year rate of change in regular payments, which constitute the core of wages, has recently been at around zero percent. The reason for core wages not rising despite the tightening of labor market conditions seems to be that firms are still maintaining their restraint on labor costs, while employees, having experienced a severe employment situation, continue to prefer stable employment to a wage increase. Such behavior by firms and employees is likely to continue for some time.

Despite the above, further tightening of labor market conditions through fiscal 2007 seems inevitable, since the population of those 15 years old and over has been leveling off and in line with the continuing economic expansion the number of employees is likely to keep increasing by somewhat over 1 percent each year. Wages for temporary and part-time workers have already started to rise, and major firms are planning to increase significantly the number of their employees, including full-time employees. Considering these points, it is assumed that, as in the April Outlook Report, upward pressure on wages including regular payments will increase moderately, in line with gradual changes in the behavior of firms and employees (Chart 14).

An increase in regular payments, which tends to be recognized as constituting a change in permanent income, is likely to enhance the sustainability of growth in private consumption, especially spending on services and durable goods (Chart 9).<sup>12</sup> Housing investment is also likely to be on a moderate increasing trend given the favorable income environment and the gradually increasing expectations of rises in interest rates and land prices.

### **(Environment Surrounding Price Changes)**

Turning to the outlook for consumer prices, the year-on-year rate of increase in the CPI is expected to rise gradually, reflecting increasing upward pressure on wages and the moderate widening expected in the already positive output gap. This outlook, however, assumes that the year-on-year rate of increase in the CPI will not noticeably accelerate even with a moderate widening of the positive output gap, since it takes into account the possibility that prices may be less sensitive to changes in the output gap than in the past (Chart 17). This is a development observed not only in Japan but also worldwide. In the background lie factors that include deregulation, advances in information and communication technology, and economic globalization. For example, if competition between domestic goods and imported goods from emerging market economies intensifies, upward pressure on prices may be contained even when the domestic output gap turns positive. Likewise, if intensifying global competition is pushing firms to raise corporate value, upward pressure on prices may be contained as firms try to increase wage restraint despite tight labor market conditions and to raise productivity.

The sensitivity of prices to changes in the output gap, however, may be subject to substantial variation as it differs depending on how it is influenced by deregulation, advances in information and communication technology, and economic globalization. If sensitivity to the output gap is not as weak as assumed, prices may rise by more than expected. Similarly, even if prices are less sensitive to changes in the output gap in the short term, the rate of wage and price increases might accelerate at some point accompanied

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<sup>12</sup> Looking at private consumption by category, spending on services, nondurable and semi-durable goods, and durable goods all increased during the bubble period. In the current recovery phase, however, spending on nondurable and semi-durable goods has been weak, reflecting the decline in purchases of foodstuffs and daily commodities due to the aging of population, but spending on services and durable goods has been increasing.

by an increase in inflation expectations. On the other hand, if the sensitivity of prices to the output gap is weaker than assumed, prices will not respond even if economic activity is stronger than expected. In this latter case, at the point when prices finally respond and start to increase, the economy may already have overheated, which would be evidenced in a wide positive output gap. If this were to happen, swings in economic activity could eventually be larger, reflecting an excessive build-up of capital stock and its subsequent adjustment.

Changes in prices of international commodities, such as crude oil, also affect price developments. Crude oil prices posted a record high in this summer, but have declined recently. They may either surge or plunge in the future depending on, for example, developments in geopolitical risks. If crude oil prices rise in a situation where supply and demand conditions have tightened further and upward pressure on wages has increased, prices may rise by more than expected. With the prolonged rise in crude oil prices, Japanese firms have been reducing the amount of imported materials used to make each unit of product (i.e., improvement in the use of imported materials per unit of output) (Chart 25).<sup>13</sup> In spite of the surge in crude oil prices, higher costs have only been passed on to prices of final goods to a limited extent, and one explanation for this may be these efforts by Japanese firms to reduce input per unit of output. It should be noted that while a possible future decline in crude oil prices may act to contain upward pressure on prices, it may also support corporate profits and households' real income by improving the terms of trade and in turn contribute to tightening supply and demand conditions.

### **(Developments in Financial Markets)**

Turning to developments in financial markets since the publication of the April 2006 Outlook Report, the uncollateralized overnight call rate remained at effectively zero percent until the change in the guideline for money market operations in July, and since then it has been at around 0.25 percent. Interest rates on term instruments have increased somewhat

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<sup>13</sup> Input per unit of output, or the basic unit, shows the relation between the amount of input and that of output on a value-added basis. Improvement in the basic unit involves reducing the amount of materials needed to make one unit of product and/or making higher-value-added products from the same materials.

(Chart 26). Euroyen futures rates and implied forward rates embodied in rates on treasury bills (TBs) and financing bills (FBs) have strengthened (Chart 27). Long-term interest rates have been more or less unchanged (Chart 28). The stimulative effects stemming from the current level of short-term interest rates on economic activity appear to have strengthened, in a situation where corporate profitability has been high and prices remain on an uptrend (Chart 29).

Credit spreads between CP and short-term government securities have remained low, and spreads between corporate bonds and long-term government bonds have also remained low, although recently they have widened slightly (Chart 30). Lending rates have generally been at extremely low levels, although recently they have strengthened slightly (Chart 20[3]).

Stock prices fell from the middle of May through June. The fall in stock prices was seen worldwide and is said to have been caused by investors' reassessment of their portfolio risks in view of uncertainty concerning the global economy. However, Japanese stock prices have been recovering since July, amid the continuing expansion of the global economy and the strength of Japanese corporate profits (Chart 31).

The exchange rate of the yen has declined against both the U.S. dollar and the euro, mainly reflecting persistent pressure to sell the yen in the face of interest rate differentials between Japanese and overseas markets. The nominal effective exchange rate of the yen continues to decline (Chart 32).<sup>14</sup>

Land prices on the whole have been on a downward trend, but those particularly within central city districts of the three major metropolitan areas (Tokyo, Osaka, and Nagoya) are evidently on a recovery trend (Chart 33). According to the *Prefectural Land Price Survey* in 2006, which indicates land prices at representative locations surveyed as of July 1, 2006, although residential and commercial land prices have been falling on a nationwide average,

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<sup>14</sup> The real effective exchange rate is a weighted average of the yen's real exchange rates versus major currencies. Real exchange rates are calculated from the nominal exchange rates and price indexes of the relevant countries. The real effective exchange rate is currently as low as that recorded in the period immediately after the conclusion of the Plaza Accord in 1985, and this is considered to be supporting growth in Japan's net exports.

residential land prices in central areas, for example, of the 23 wards of Tokyo, Osaka city, and Nagoya city, have been increasing at a faster pace, and commercial land prices in the three major metropolitan areas have quite evidently started to increase against the backdrop of firm demand for office space.

**(BOX) Rebasing of the Consumer Price Index (CPI)**

In August 2006, CPI data was changed from 2000 base to 2005 base. The resultant retroactive revisions caused the year-on-year rate of change for the CPI figures since January 2006 to decline by around 0.5 percentage point on average. The April 2006 *Outlook for Economic Activity and Prices* estimated that the effects of the change to the 2005 base would be as follows: the rate of change in the CPI would be likely to decline by approximately the same amount as in the previous rebasing, i.e., the average of 0.26 percentage point observed during 2000. It noted the following three factors.

- (1) "Re-indexing": price indices for durable goods-related items, such as personal computers, were at very low levels due to substantial price declines, but with the re-indexing their levels would return to close to 100 and equivalent subsequent price falls would generate a correspondingly larger negative impact on the overall index.
- (2) "Newly included items": the new CPI basket would include items, such as flat-panel televisions, subject to substantial price declines.
- (3) "Basic statistics": item weights, determined according to consumer spending per item, would be reviewed and the weights on items subject to large price declines may increase.

With the information available in April 2006, it was, to some extent, possible to calculate the divergence from the old 2000-base CPI caused by the above factors. In fact, the combined impact of these three factors was calculated at slightly less than 0.3 percentage point, which was approximately the same as the April estimate. What made the actual decline caused by the rebasing to exceed the April estimate was the existence of the following unexpected factor.

- (4) "Changes in the method of calculating indices for some existing items": the method of calculating the indices for some existing items in the CPI basket, such as mobile telephone charges, was changed.<sup>15</sup>

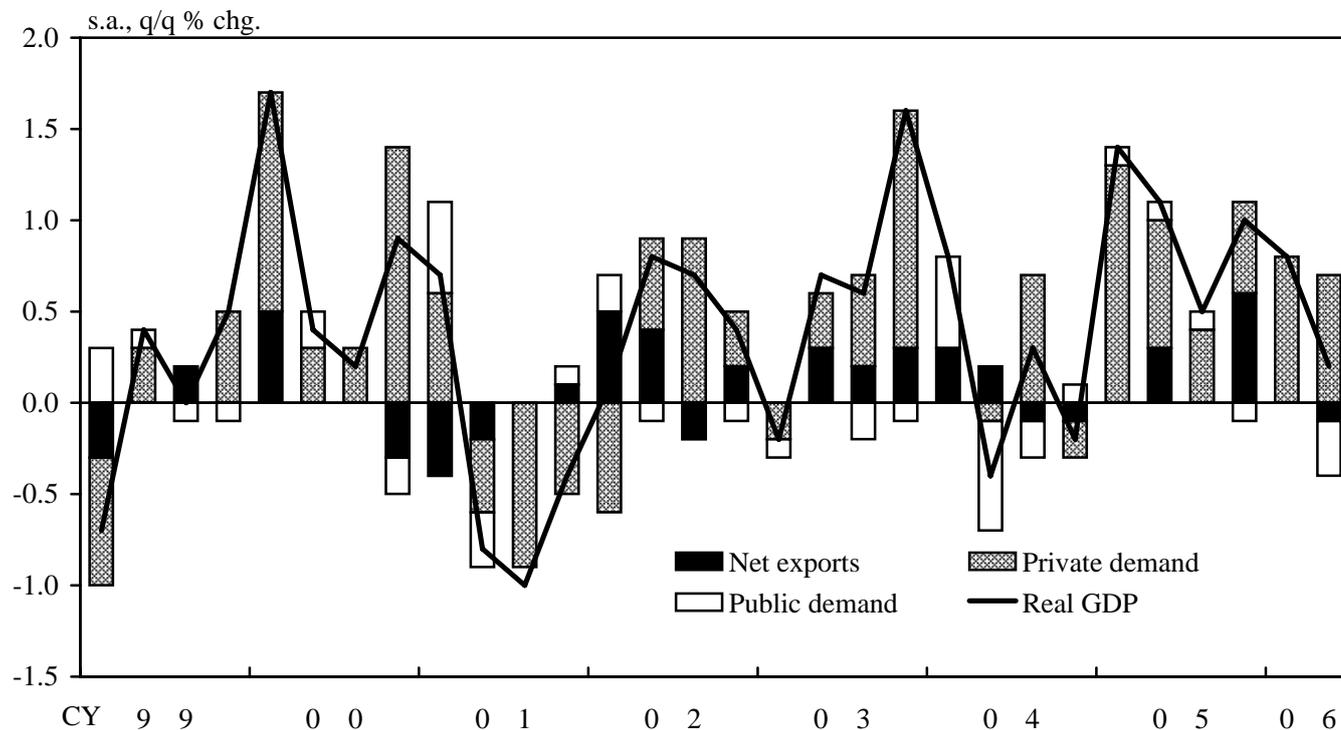
The negative divergence of the year-on-year rate of change of the 2005-base CPI from the equivalent figure for the 2000-base CPI is not a permanent feature of the rebased index; it will diminish the further we move from the base year. In other words, assuming that prices of durable goods, such as personal computers and flat-panel televisions, continue to fall, the negative impact on the overall index arising from the first and second factors will gradually become smaller as the levels of their indices become lower. As for the fourth factor, most of the effects on the year-on-year rate of change are likely to cease one year after the changes in the calculation have been reflected.

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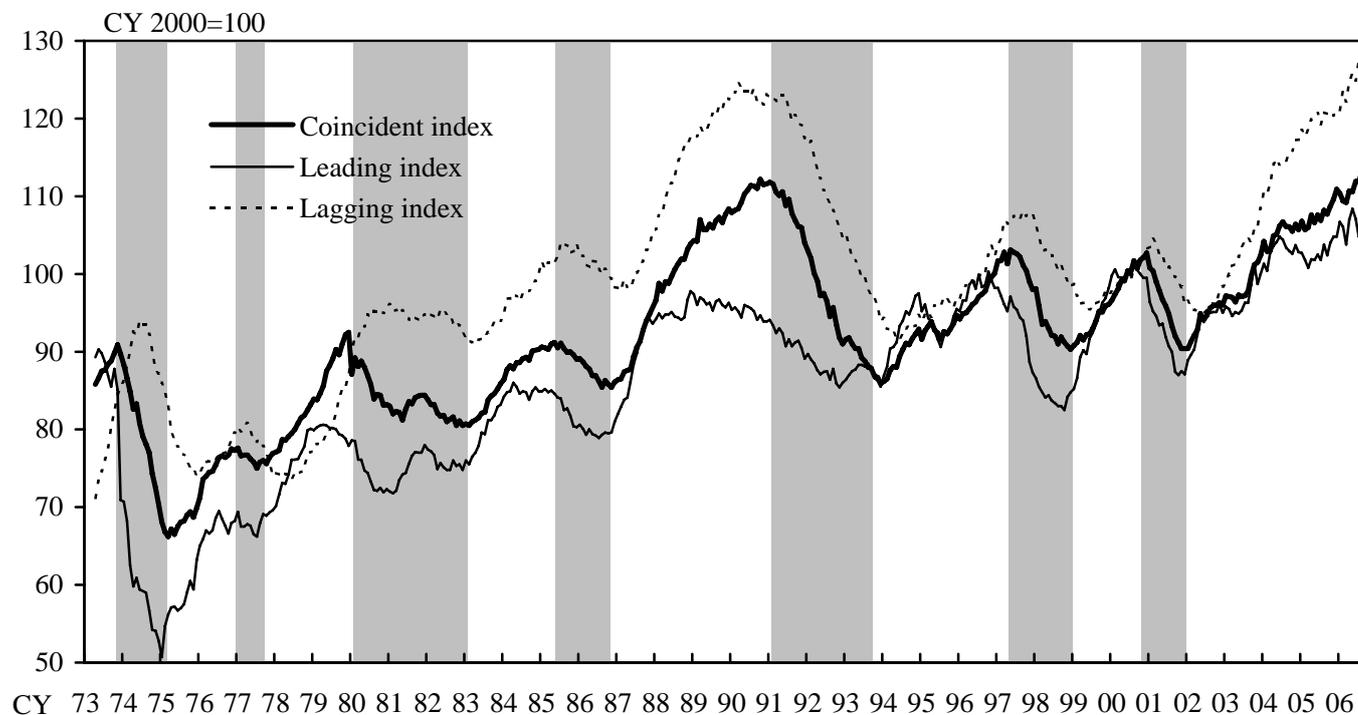
<sup>15</sup> As a result of this change in the method of calculating the index for mobile telephone charges, the measured year-on-year rate of decline in the index increased considerably and this item alone caused a negative divergence of about 0.15 percentage point in the overall CPI.

## Real GDP and Indexes of Business Conditions

(1) Real GDP



(2) Indexes of Business Conditions (Composite Indexes)

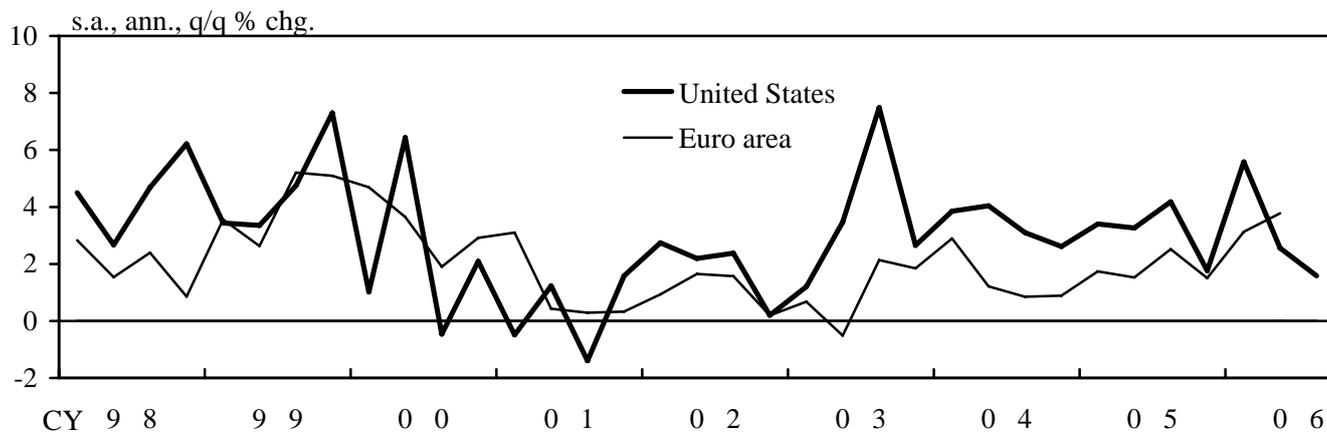


Note: Shaded areas indicate recession periods.

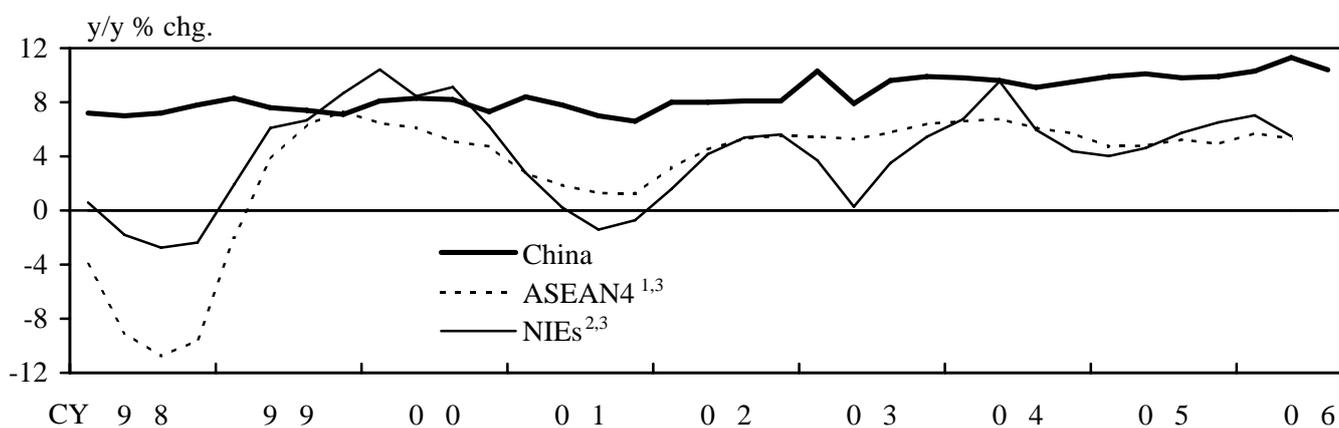
Source: Cabinet Office, "National Accounts," "Indexes of Business Conditions."

## Real GDP Growth Rates in Overseas Economies

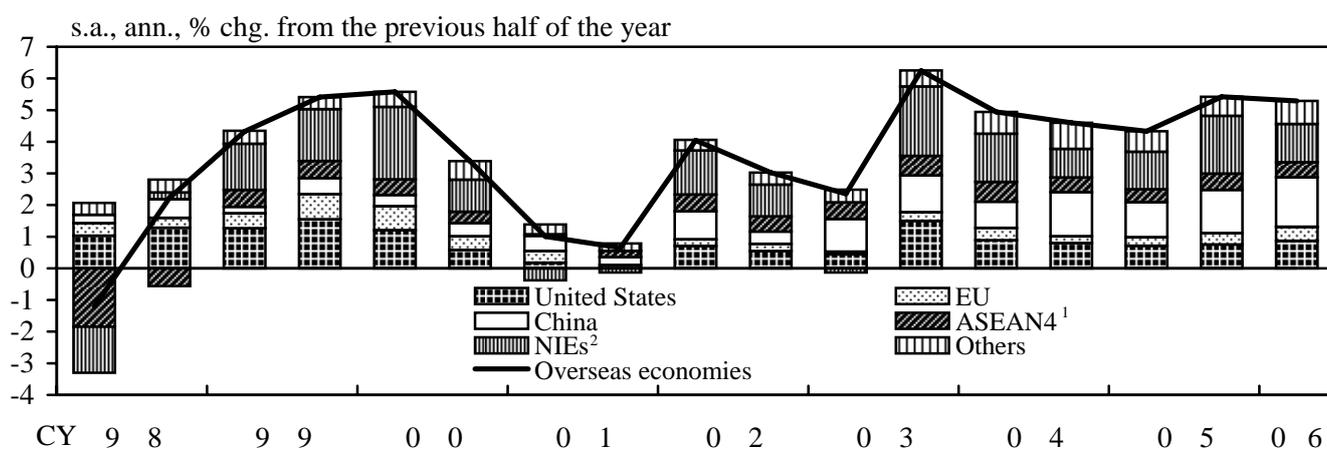
### (1) Real GDP Growth Rates in Advanced Economies



### (2) Real GDP Growth Rates in East Asian Economies



### (3) Real GDP Growth Rates in Overseas Economies<sup>3</sup>



Notes: 1. Data for ASEAN4: Thailand, Malaysia, the Philippines, and Indonesia.

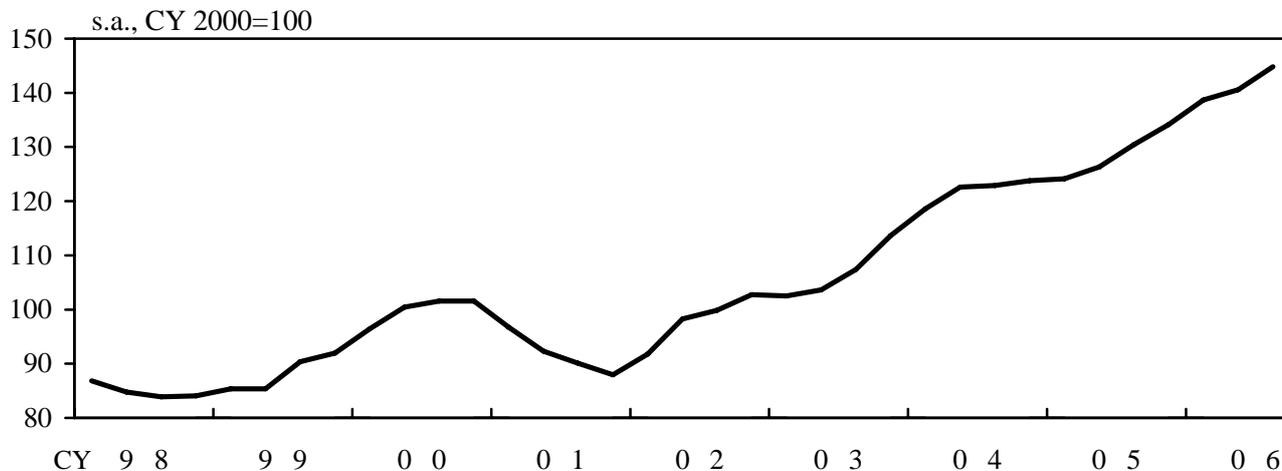
2. Data for NIEs: South Korea, Taiwan, Hong Kong, and Singapore.

3. Calculated by the Bank of Japan, as the average of real GDP weighted by value of exports from Japan to each economy.

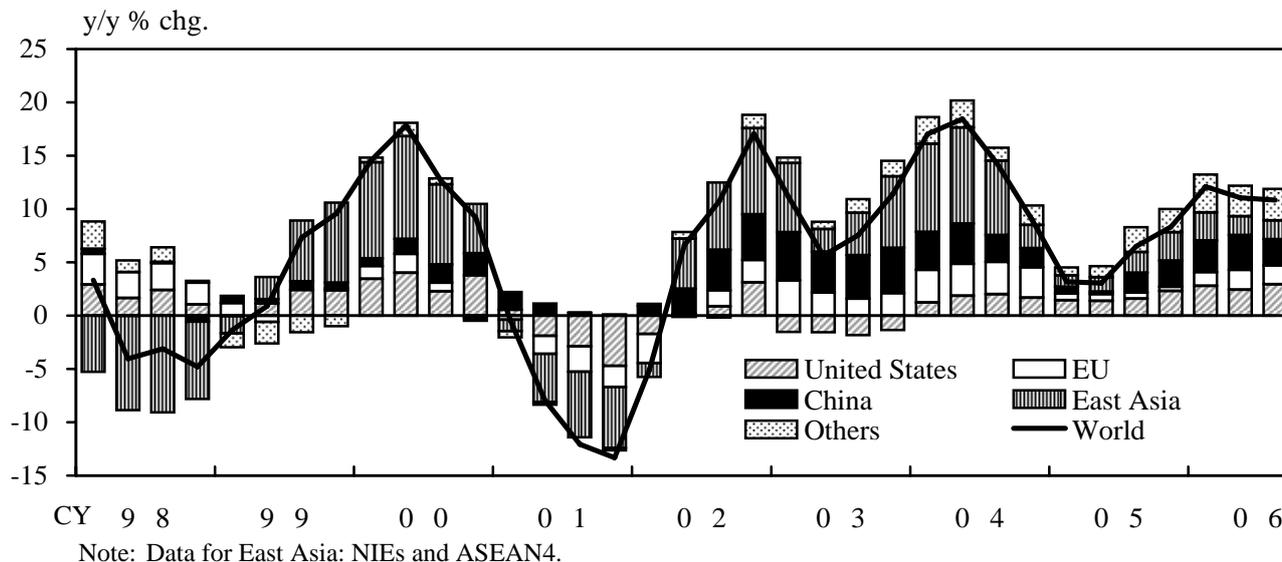
Sources: National governments; central banks; European Commission.

## Exports

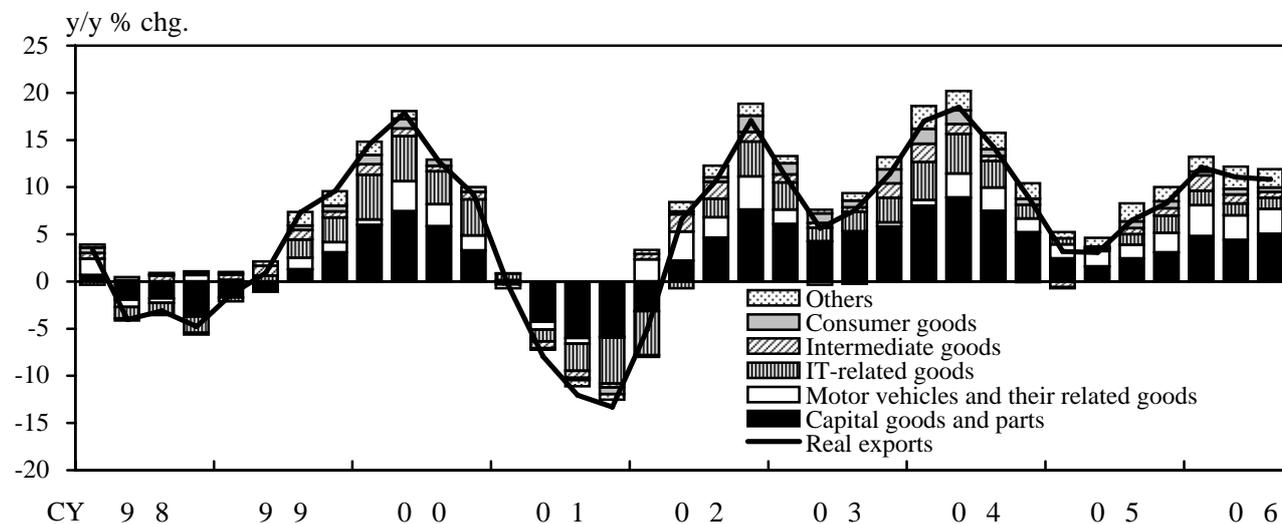
(1) Real Exports



(2) Real Exports (Breakdown by Region)



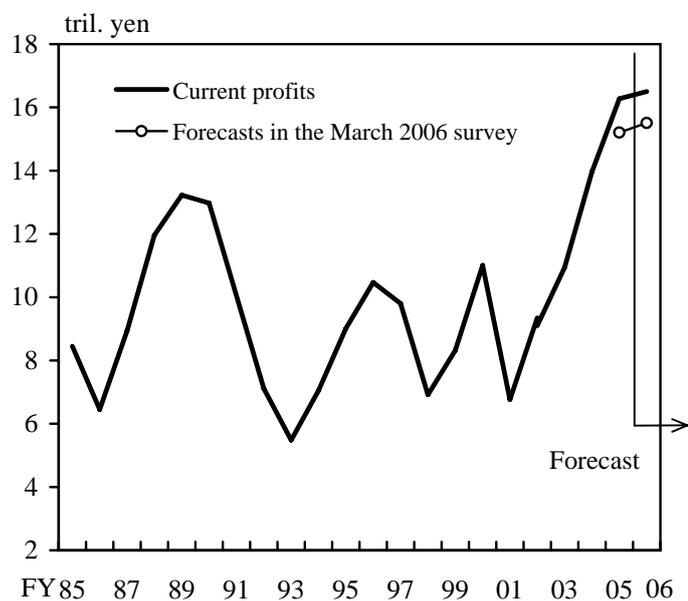
(3) Real Exports (Breakdown by Goods)



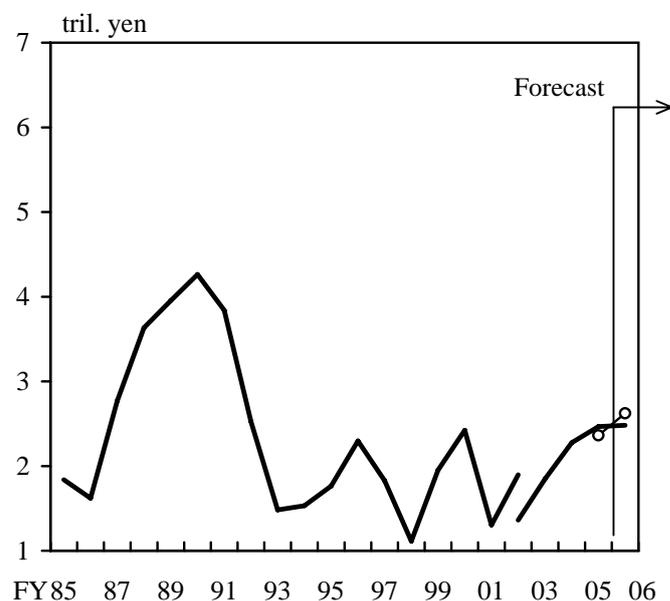
Sources: Ministry of Finance, "The Summary Report on Trade of Japan";  
Bank of Japan, "Corporate Goods Price Index."

## Current Profits

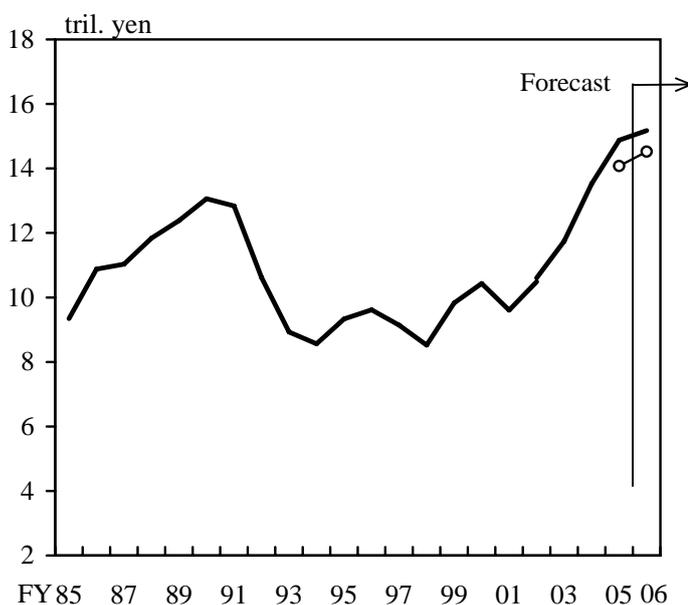
(1) Large Manufacturing Enterprises



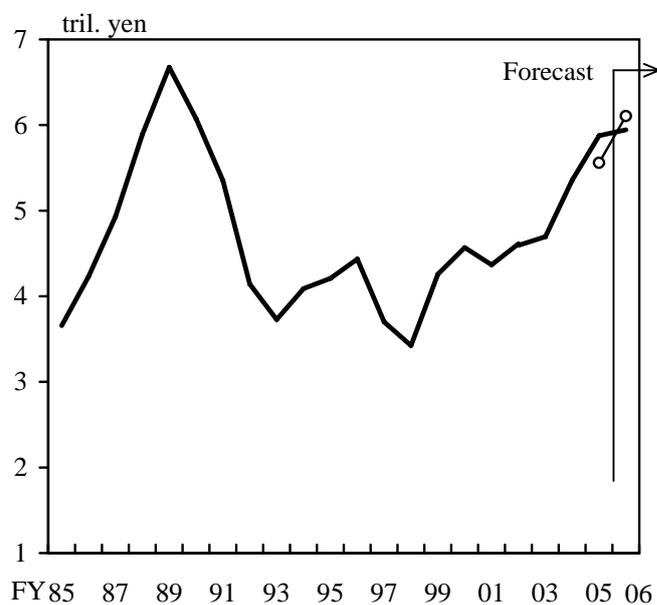
(2) Small Manufacturing Enterprises



(3) Large Nonmanufacturing Enterprises



(4) Small Nonmanufacturing Enterprises



Notes: 1. Large enterprises (pre-revision): 1,000 employees or more.

Small enterprises (pre-revision): 50-299 employees (for manufacturing), 20-99 employees (for wholesaling),  
20-49 employees (for retailing, services, and leasing),  
50-299 employees (for other nonmanufacturing).

Large enterprises (post-revision): capital of 1 billion yen or more.

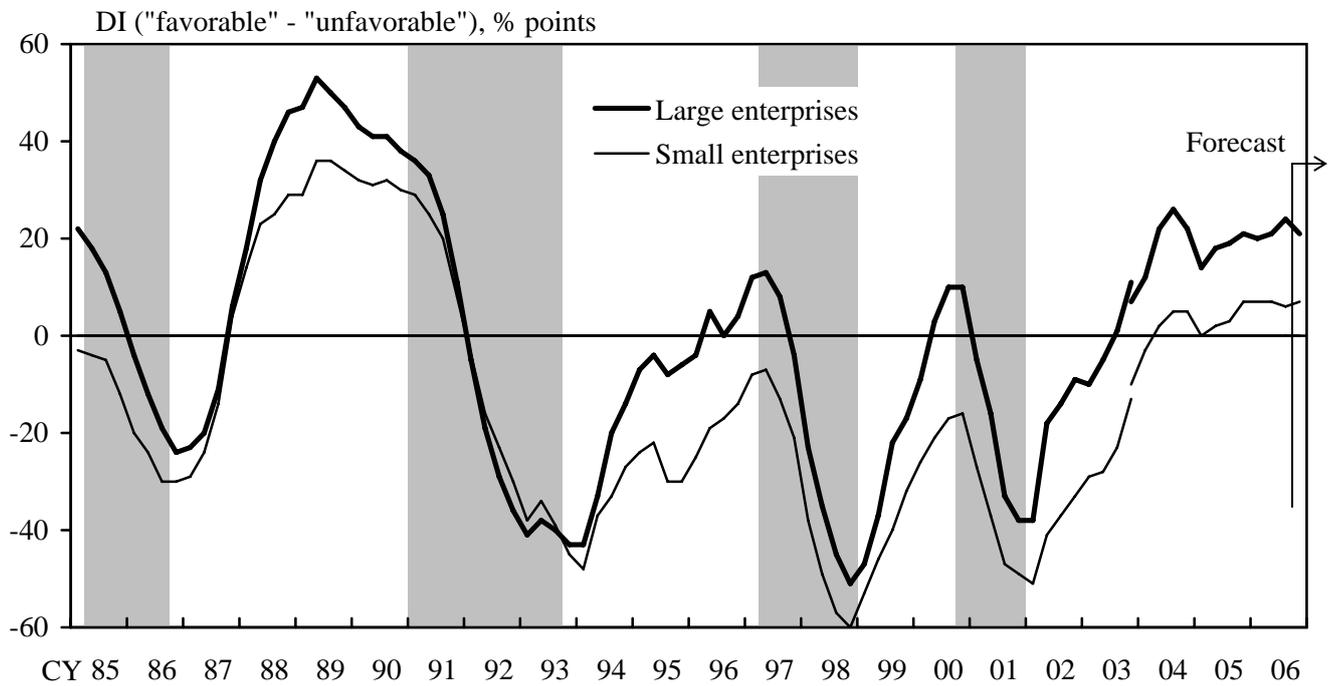
Small enterprises (post-revision): capital of from 20 million yen to less than 100 million yen.

2. The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to FY 2002. Figures on a new basis are from FY 2002.

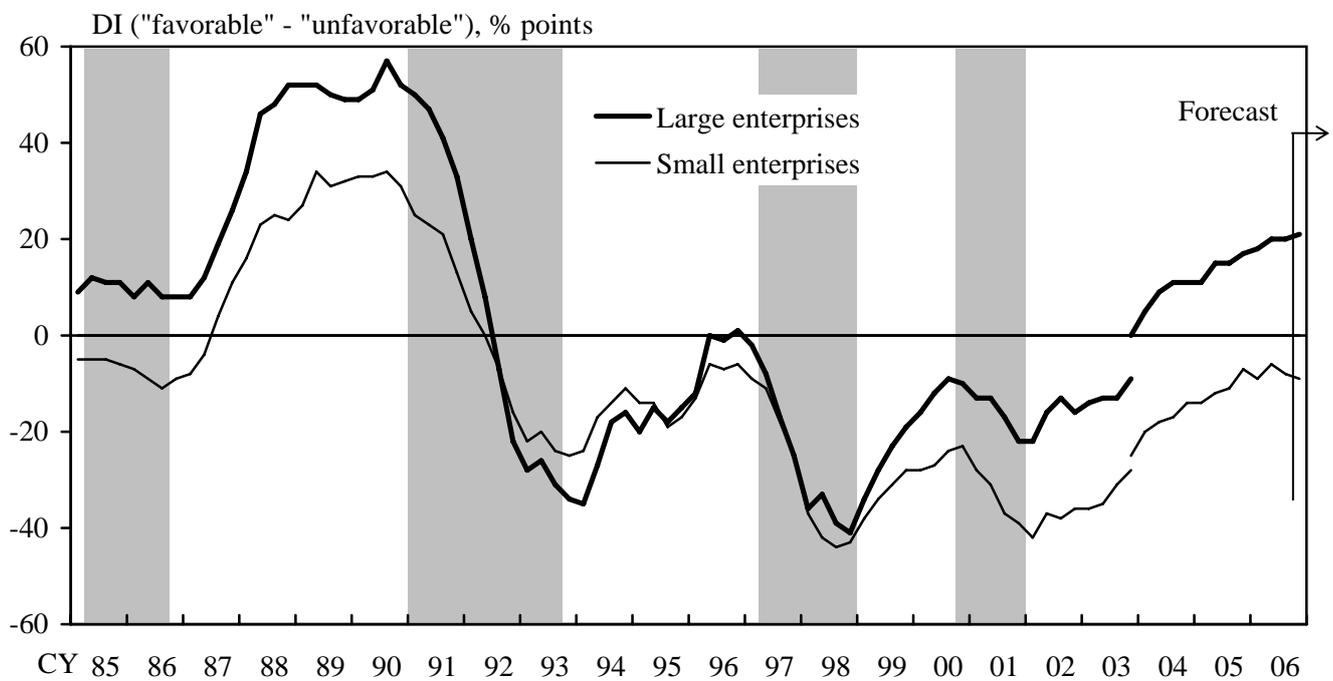
Source: Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

## Business Conditions

### (1) Manufacturing



### (2) Nonmanufacturing



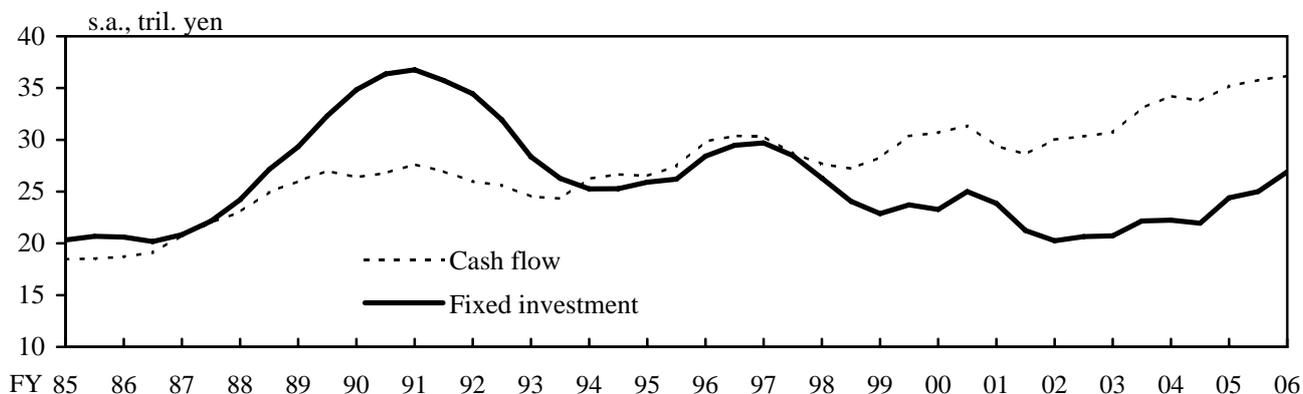
Notes: 1. The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to the December 2003 survey. Figures on a new basis are from the December 2003 survey.  
 2. Shaded areas indicate recession periods.

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

## Fixed Investment

### (1) Fixed Investment and Cash Flow

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

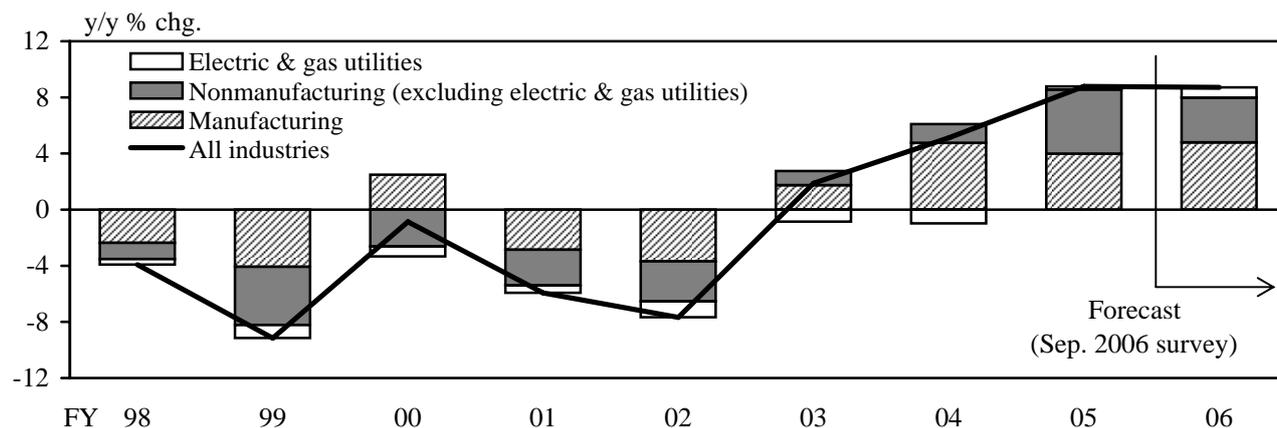


Notes: 1. Figures are adjusted for sample changes.

Cash flow = current profits/2 + depreciation expense

2. Figures for the first half of FY 2006 are calculated on the assumption that the year-on-year growth rates of 2006/Q3 are the same as those of 2006/Q2.

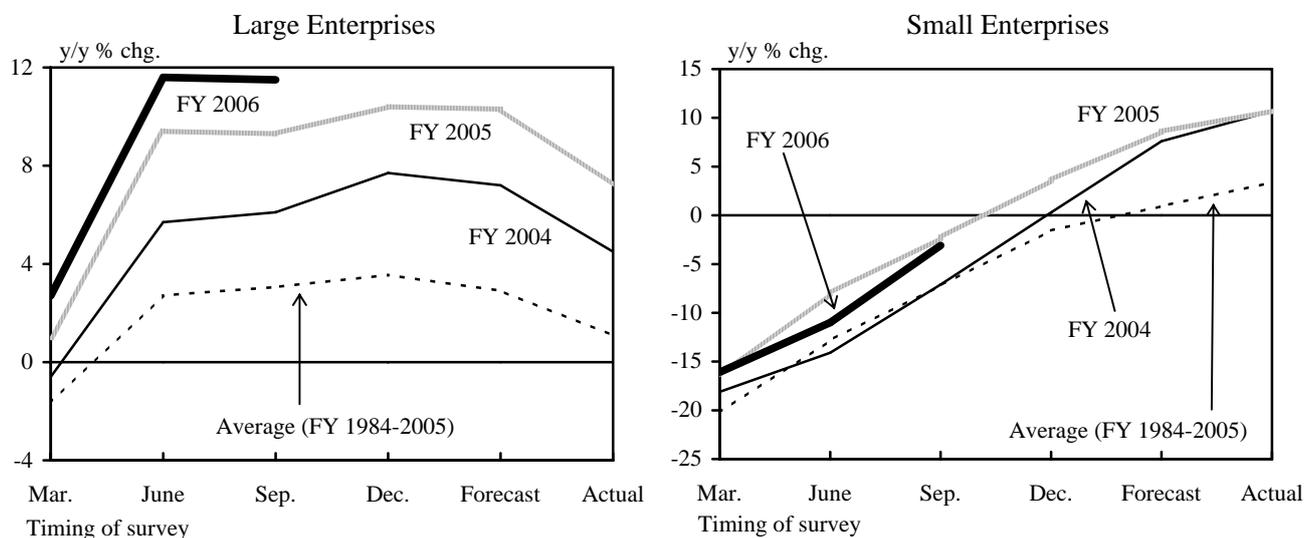
### (2) Fixed Investment Plans as Surveyed (*Tankan*, All Enterprises)



Note: Figures up to FY 2002 include land purchasing expenses and exclude software investment.

Figures from FY 2003 exclude land purchasing expenses and include software investment.

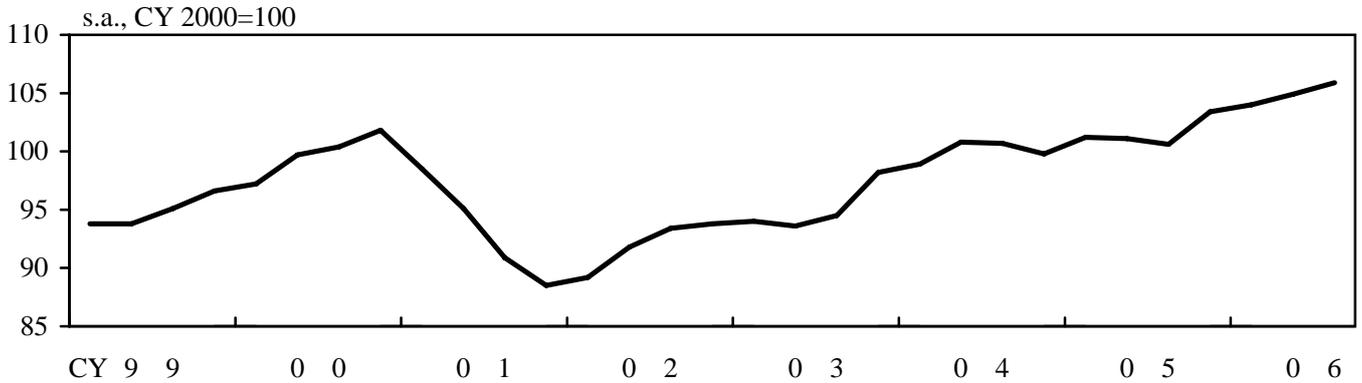
### (3) Developments of Fixed Investment Plans (*Tankan*, All Industries)



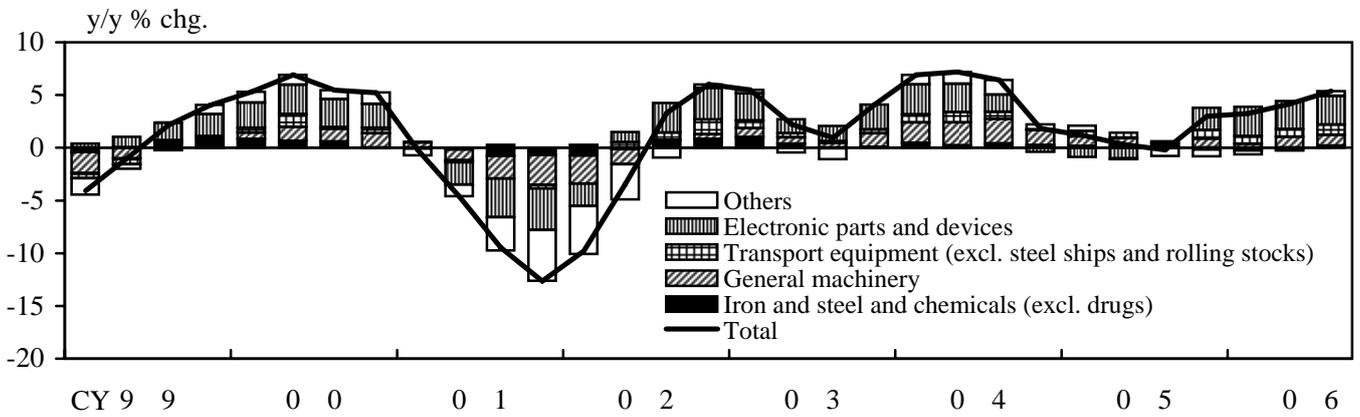
Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly";  
Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

# Production

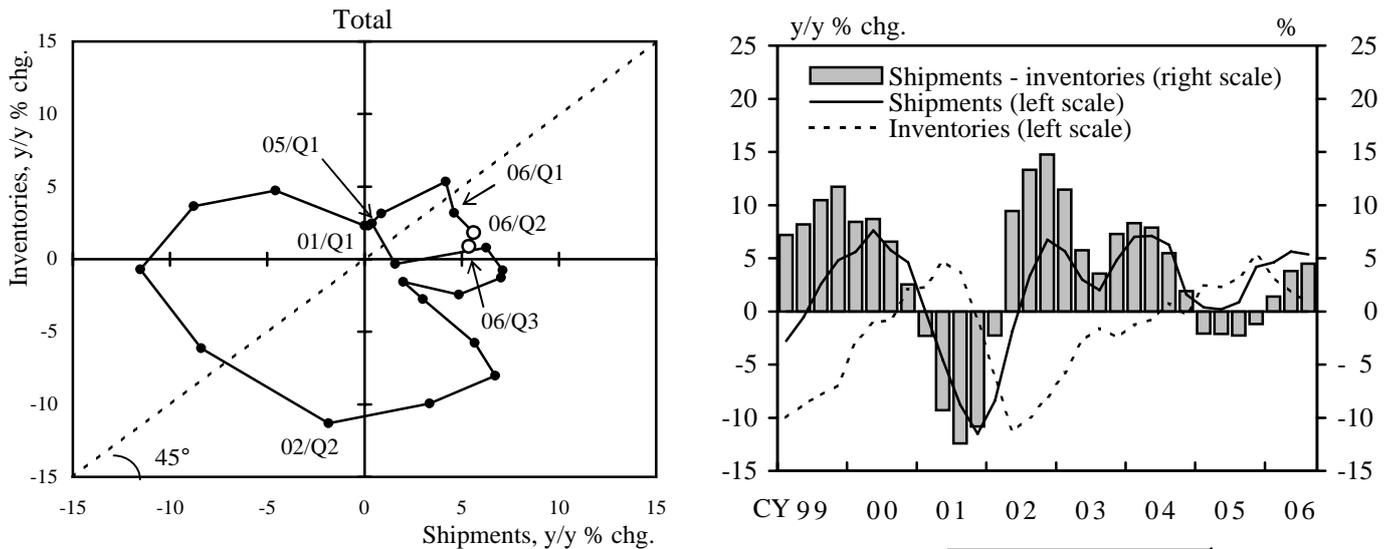
(1) Production



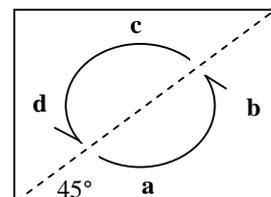
(2) Production (Breakdown by Industry)



(3) Inventory Cycle

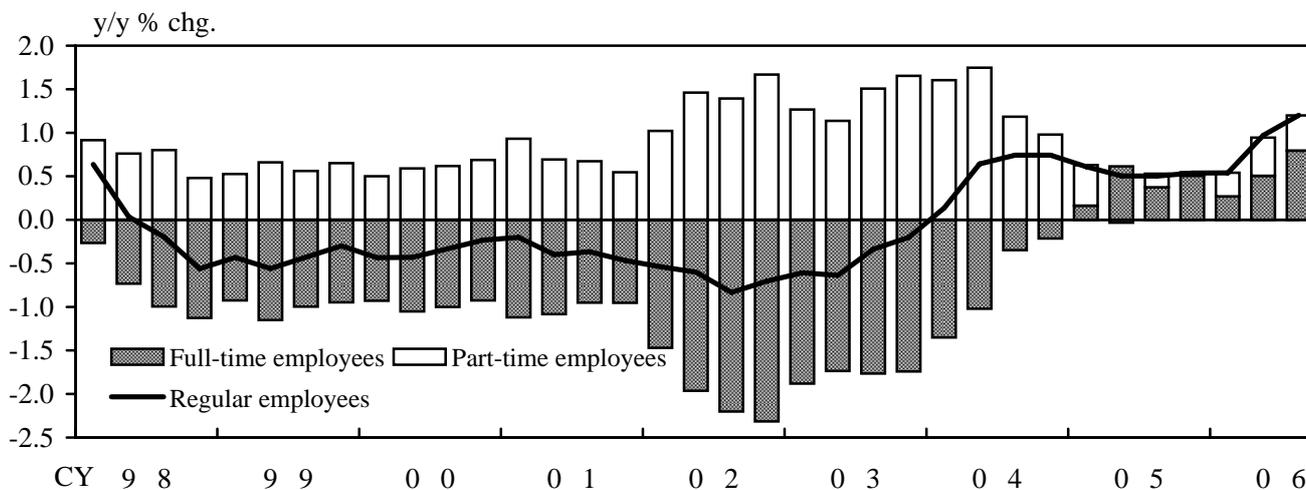


- a Shipment recovery phase
- b Intended inventory accumulation phase
- c Unintended inventory accumulation phase
- d Inventory adjustment phase

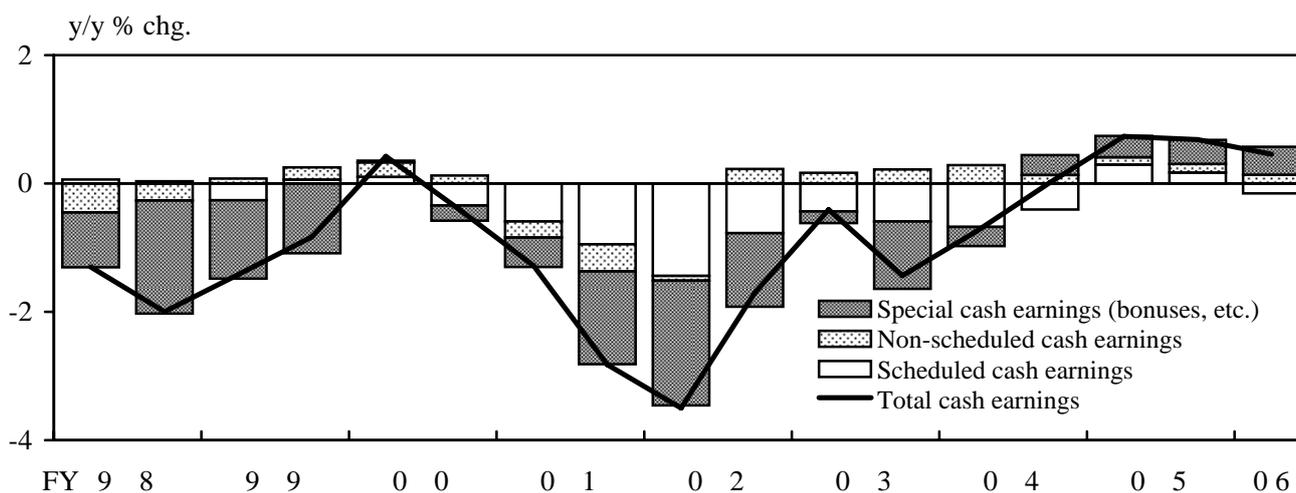


## Labor Market Conditions

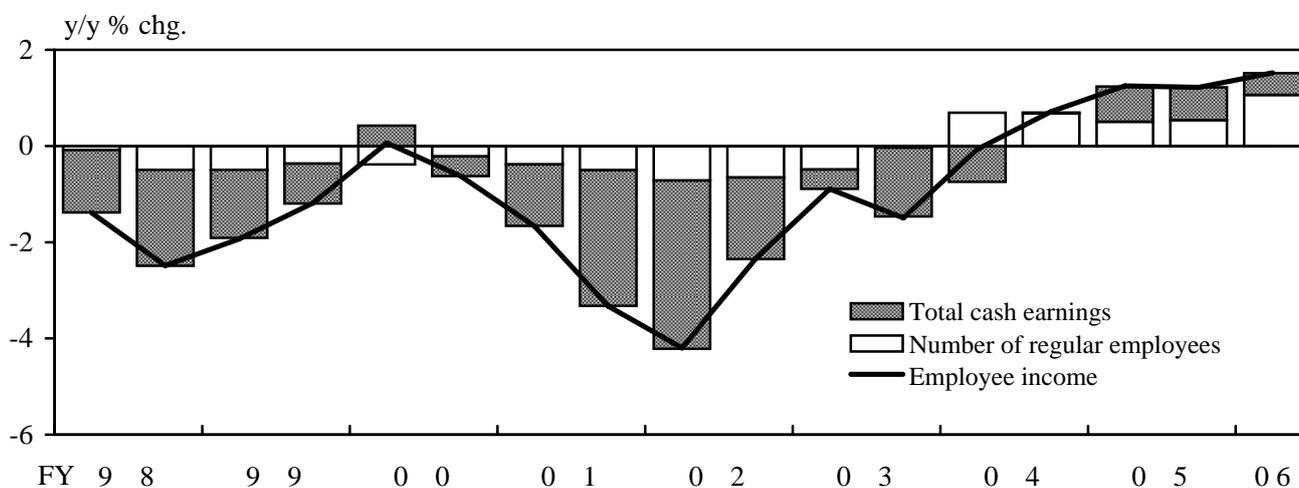
(1) Number of Regular Employees<sup>1,2</sup>



(2) Total Cash Earnings<sup>1,3</sup>



(3) Employee Income<sup>1,3</sup>

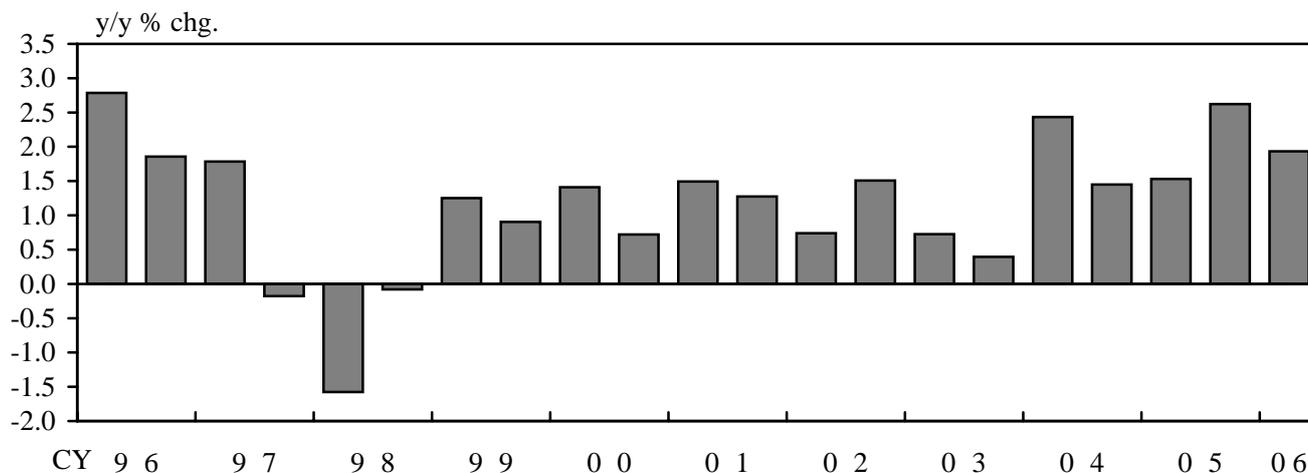


Notes: 1. Data are for establishments with at least 5 employees.  
 2. Figures for 2006/Q3 are those of July-August averages.  
 3. Figures for the first half of FY 2006 are those of April-August averages.

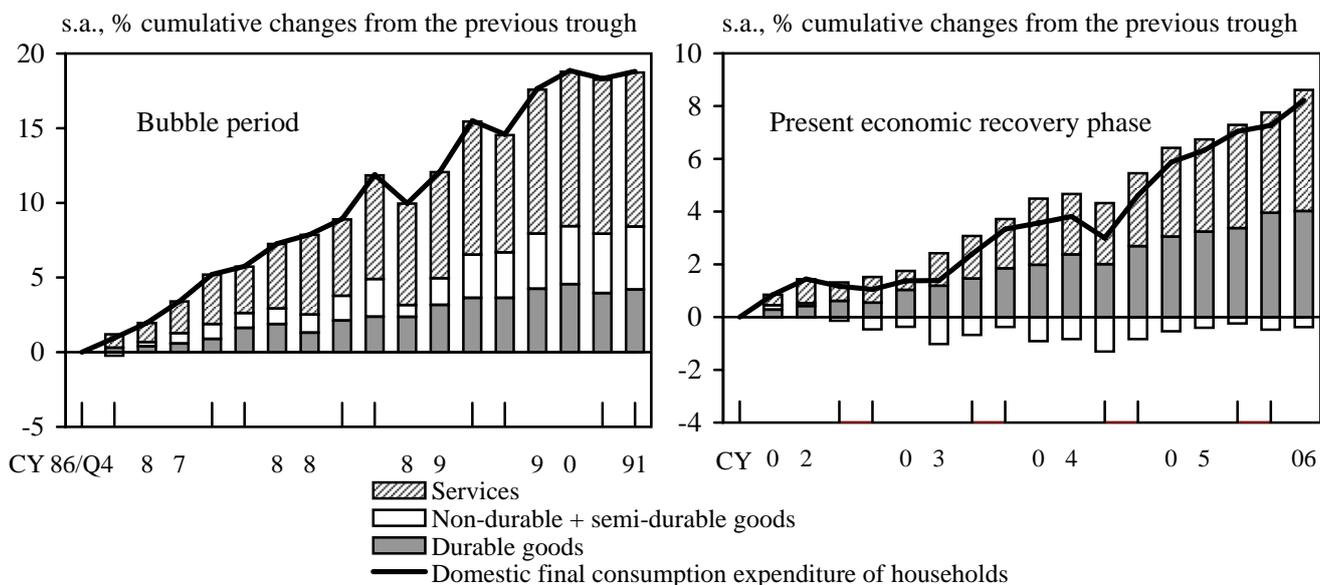
Source: Ministry of Health, Labour and Welfare, "Monthly Labour Survey."

# Private Consumption

## (1) GDP Private Consumption

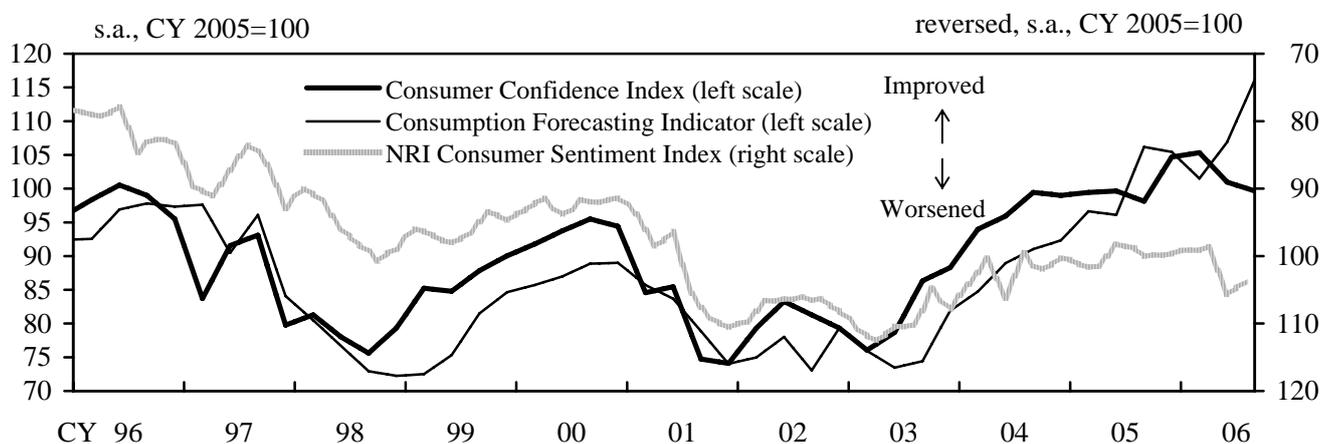


## (2) Breakdown of Domestic Final Consumption Expenditure of Households



Note: Figures are provisional estimates by the Cabinet Office.

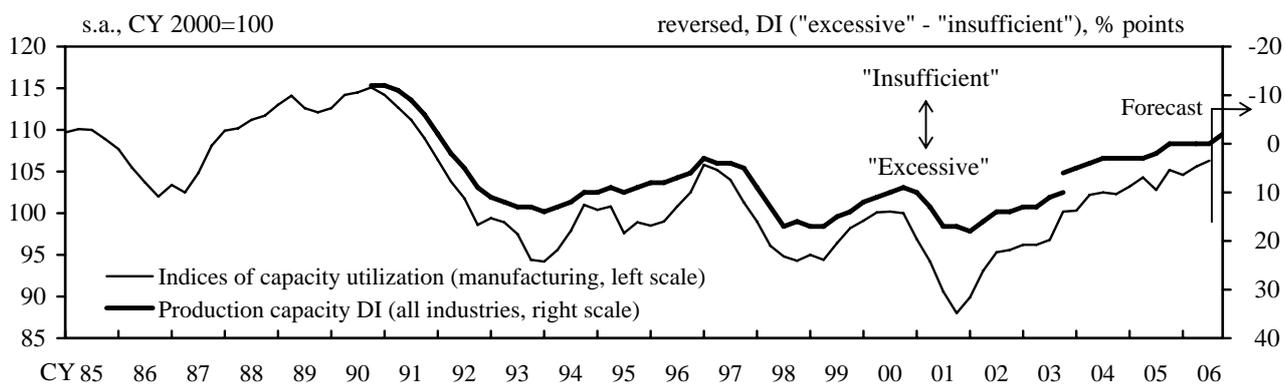
## (3) Consumer Confidence



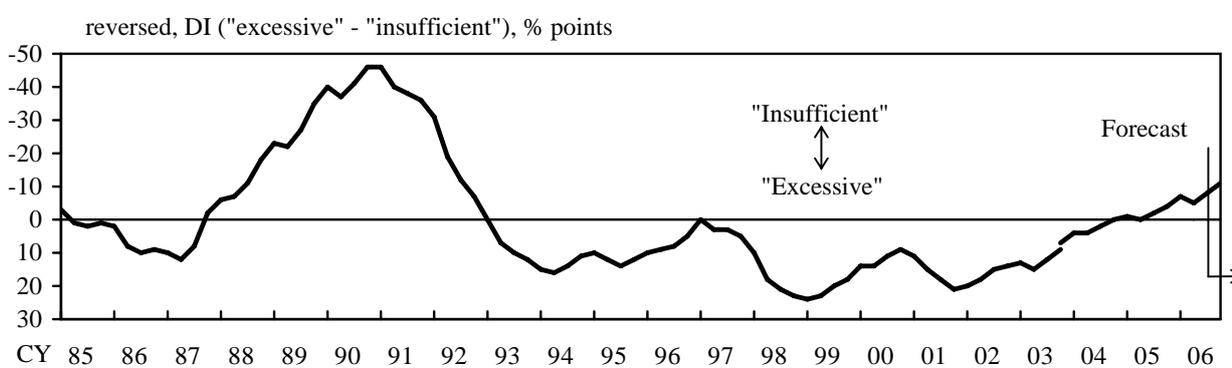
Sources: Cabinet Office, "National Accounts," "Consumer Confidence Survey";  
 Nikkei Research Institute of Industry and Markets, "Consumption Forecasting Indicator";  
 Nippon Research Institute (NRI), "Consumer Sentiment Survey."

## Output Gap

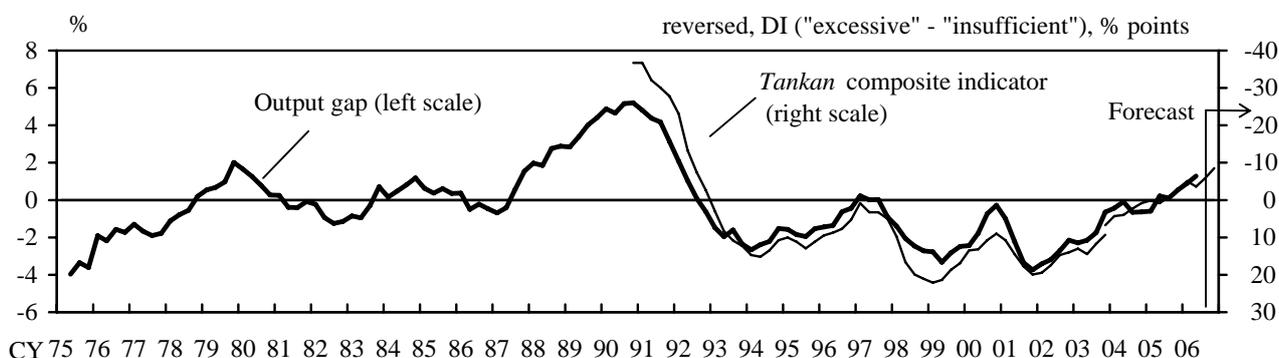
### (1) Production Capacity DI (*Tankan*) and Indices of Capacity Utilization<sup>1,2,3</sup>



### (2) Employment Conditions DI (*Tankan*)<sup>1,2</sup>



### (3) *Tankan* Composite Indicator and Output Gap<sup>2,4</sup>



Notes: 1. Production capacity DI and employment conditions DI are based on all enterprises.

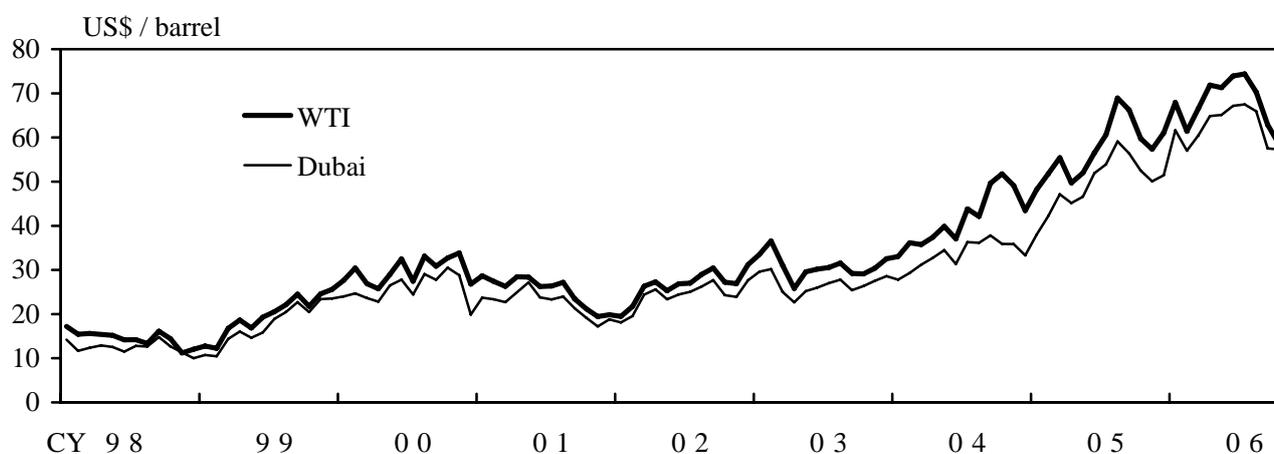
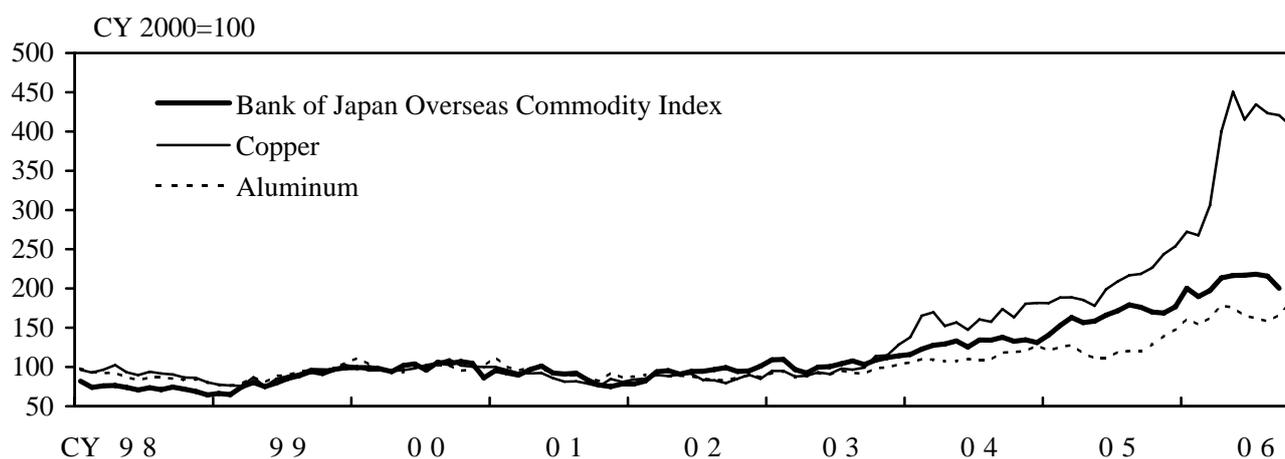
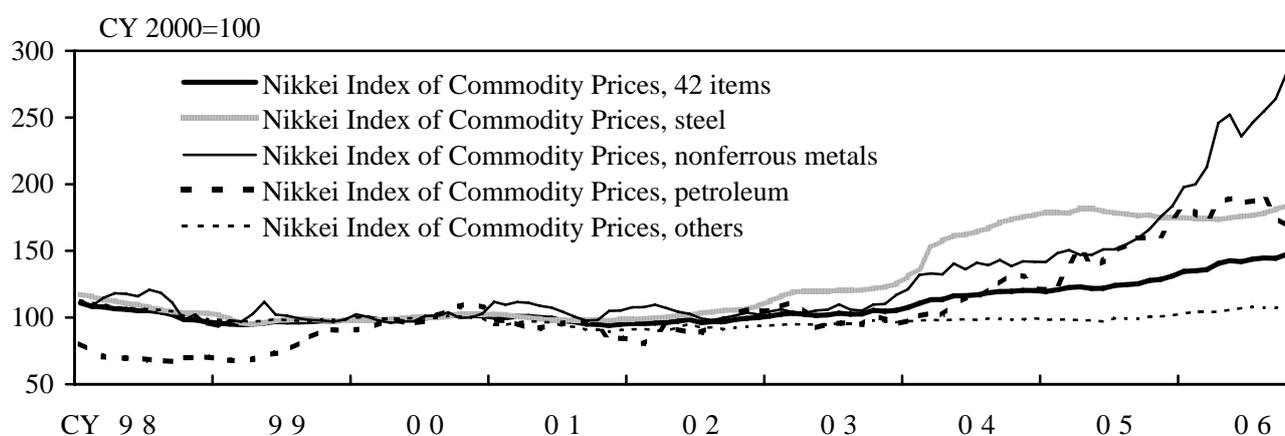
2. The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to the December 2003 survey. Figures on a new basis are from the December 2003 survey.

3. Figure of indices of capacity utilization for 2006/Q3 is the July-August average.

4. The *Tankan* composite indicator aims at constructing a series similar to the output gap directly from the *Tankan* survey data that show firms' judgment of excessiveness as to the number of employees and the production capacity. It is calculated as the average of the diffusion indices of production capacity and employment conditions, weighted by capital and labor shares in the national accounts (FY 1990-2004 average). The survey coverage for the production capacity DI was limited to the manufacturing industry before 1990/Q3. For this reason, the figures are calculated for the period from 1990/Q4, when the survey was extended to include the nonmanufacturing industry.

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<sup>1,2</sup>(2) International Commodity Prices<sup>1,2</sup>(3) Domestic Commodity Prices<sup>1,2,3</sup>

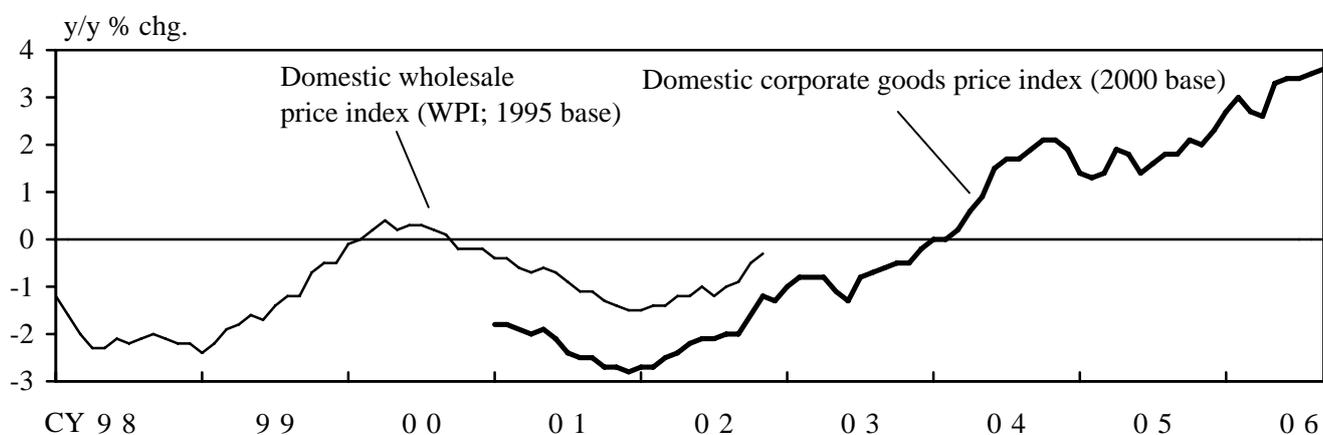
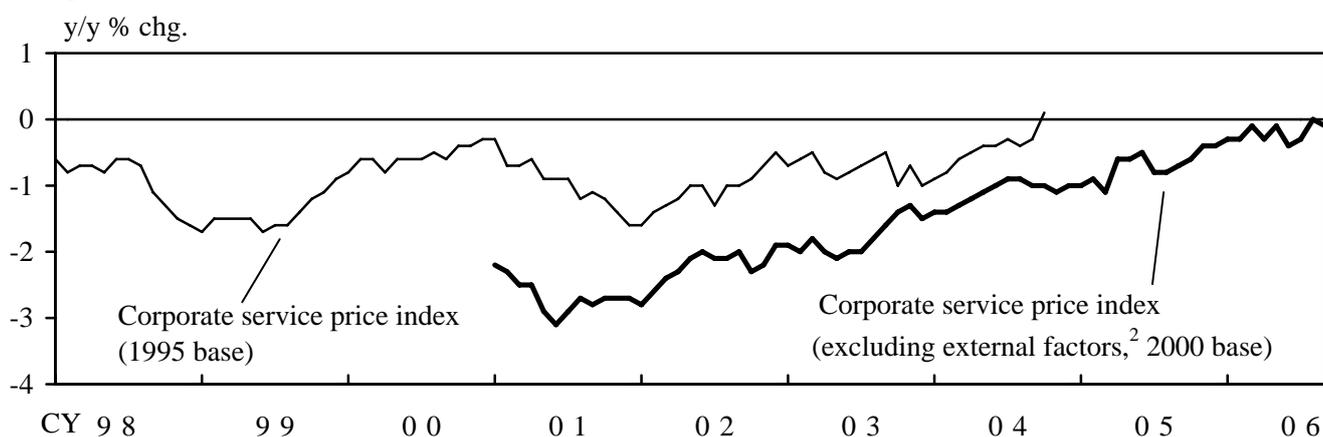
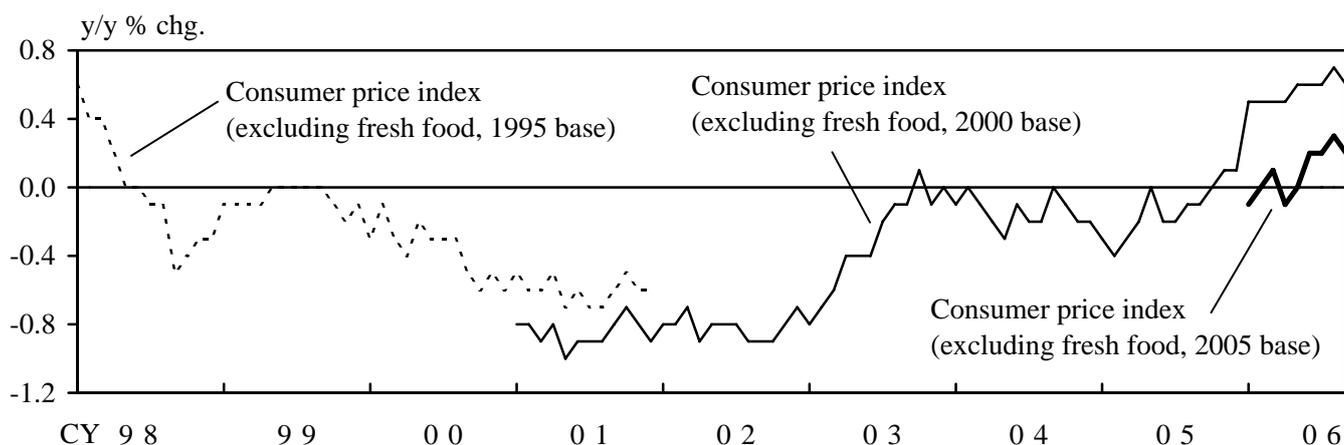
Notes: 1. Data are at end of month.

2. Figures for October 2006 are the latest available data.

3. Steel: steel bars, H sections, steel plates, etc. Nonferrous metals: unwrought copper, unwrought aluminum, etc. Petroleum: gasoline, kerosene, gas oil, fuel oil C.

Sources: Bank of Japan; *Nihon Keizai Shimbum*, etc.

## Prices

(1) Domestic Corporate Goods Price Index<sup>1</sup>(2) Corporate Service Price Index<sup>1</sup>(3) Consumer Price Index<sup>1</sup>

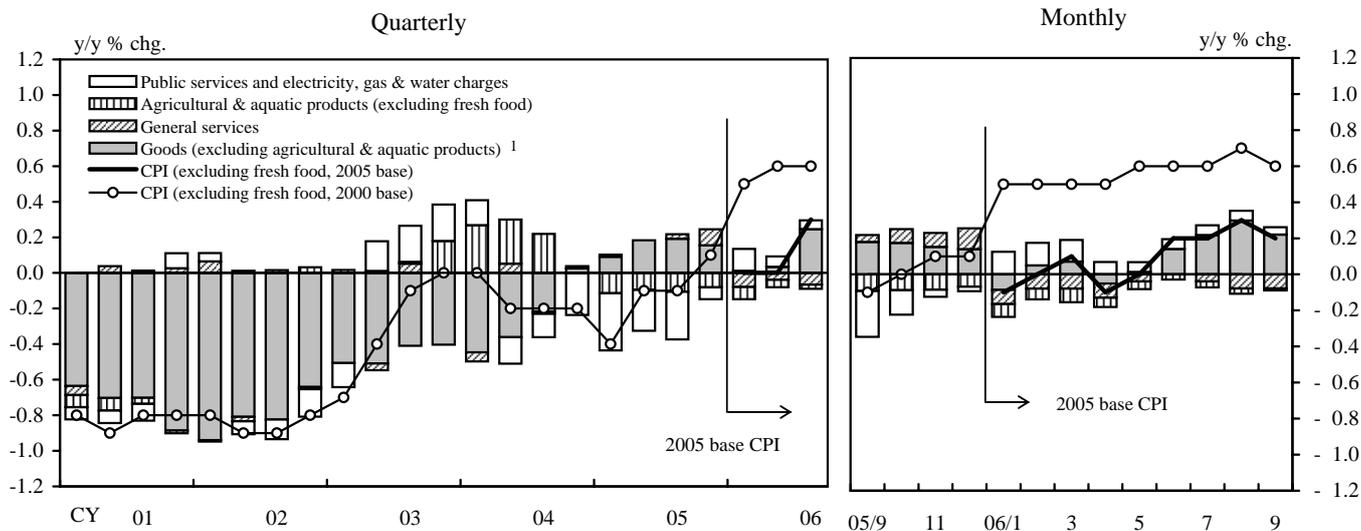
Notes: 1. Adjusted to exclude the effects of changes in consumption tax rate.

2. External factors: international air passenger transportation, ocean liner, ocean tramper, ocean tanker, oceangoing ship chartering services, and international air freight.

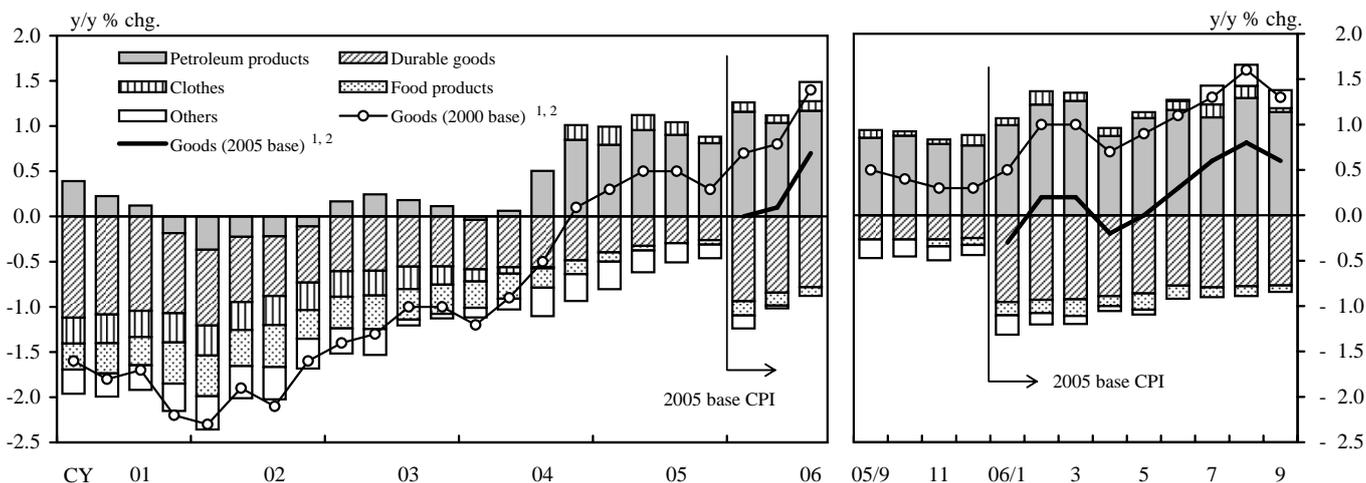
Sources: Ministry of Internal Affairs and Communications, "Consumer Price Index"; Bank of Japan, "Corporate Goods Price Index," "Wholesale Price Indexes," "Corporate Service Price Index."

# Consumer Price Index

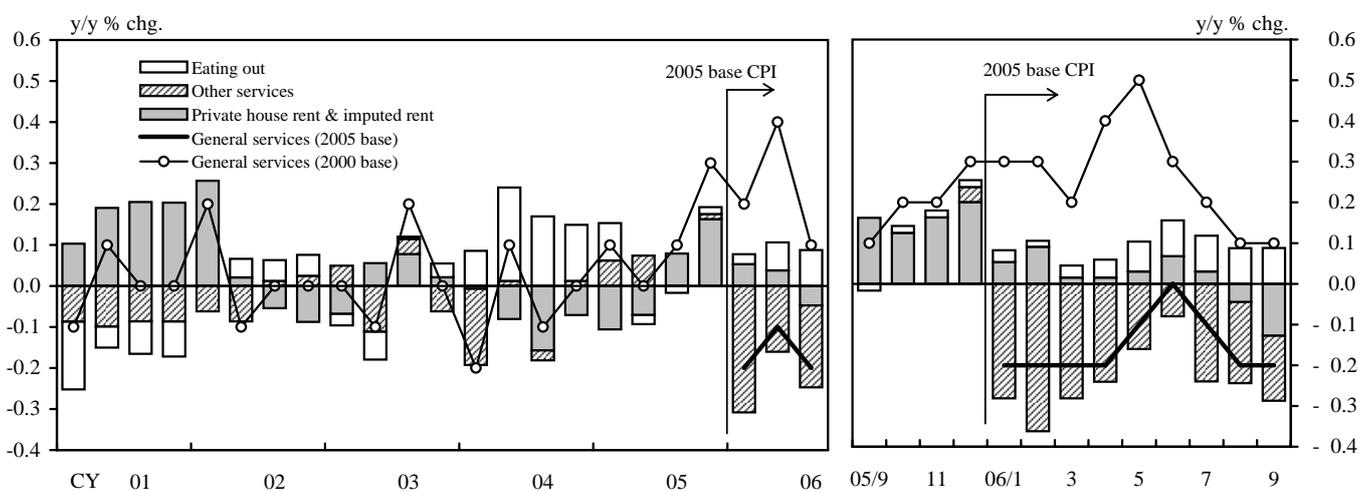
## (1) Consumer Price Index (Excluding Fresh Food)



## (2) Goods (Excluding Agricultural & Aquatic Products)<sup>1</sup>



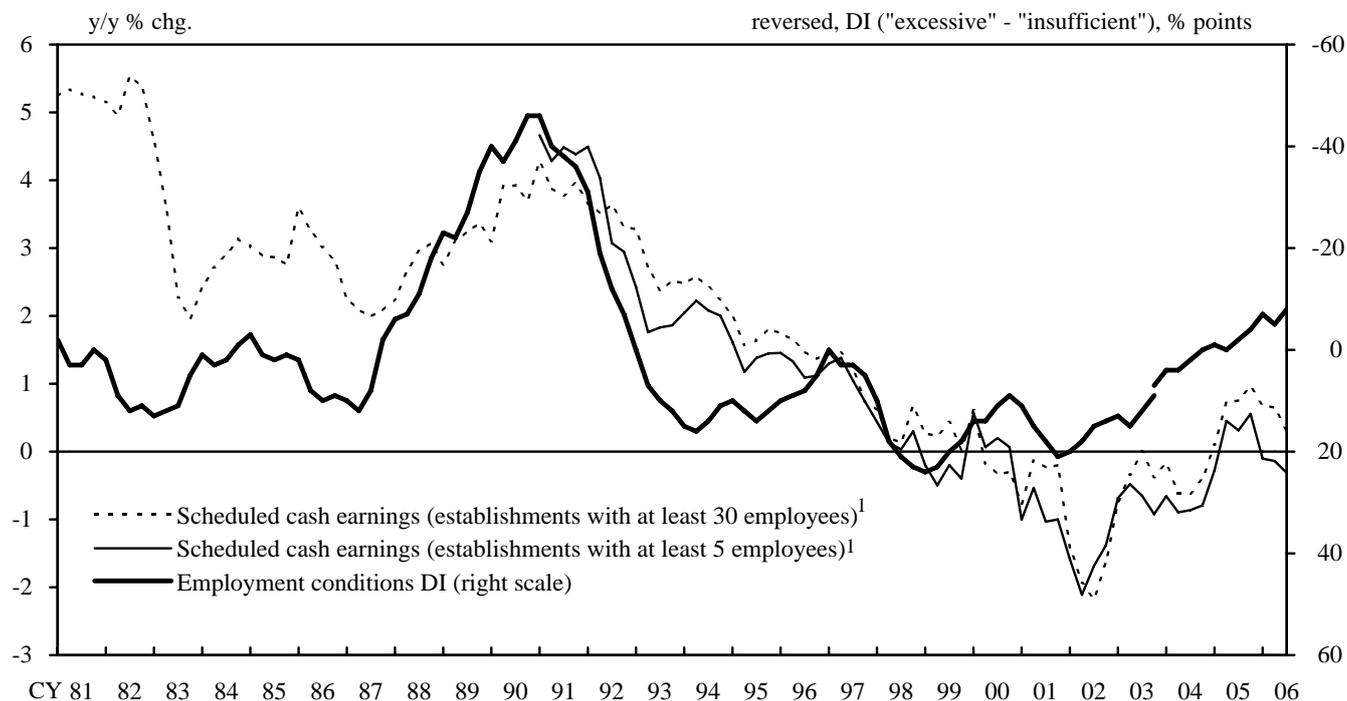
## (3) General Services



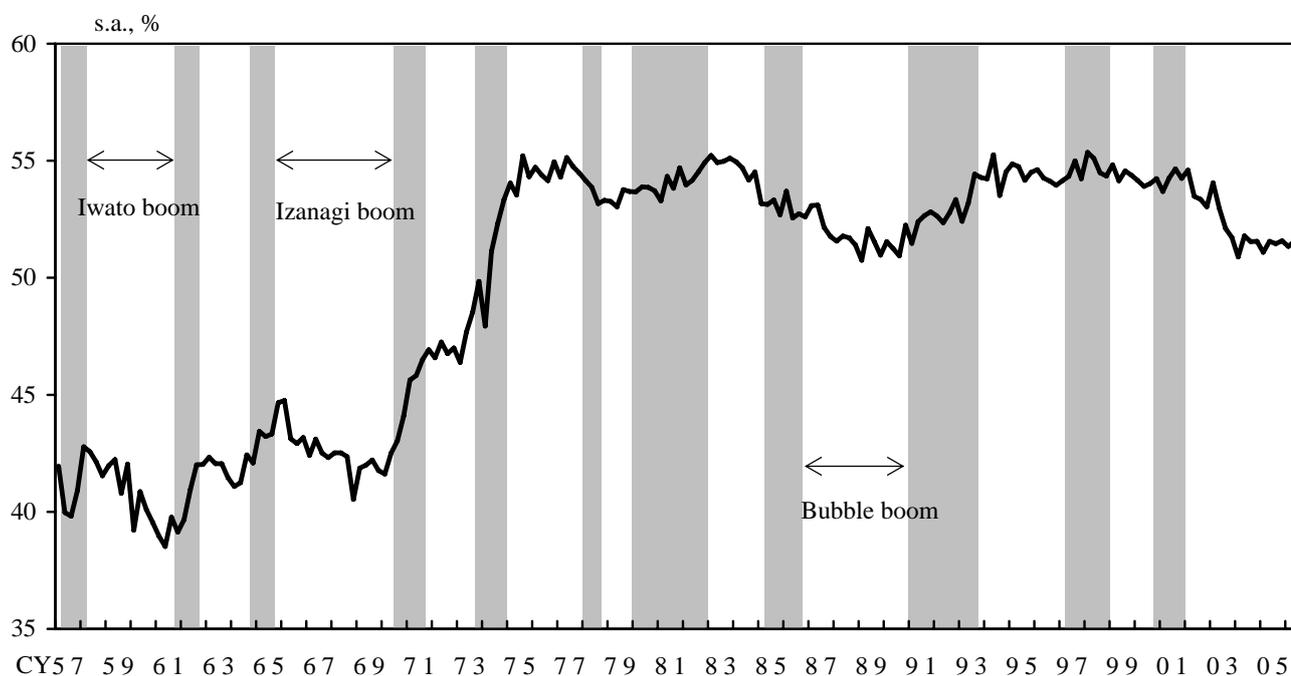
Notes: 1. The items are basically the same as the definition published by the Ministry of Internal Affairs and Communications. However, electricity, gas & water charges are excluded from goods.  
 2. Excluding agricultural & aquatic products.

## Wages and Labor Share

### (1) Scheduled Cash Earnings



### (2) Labor Share<sup>2,3</sup>



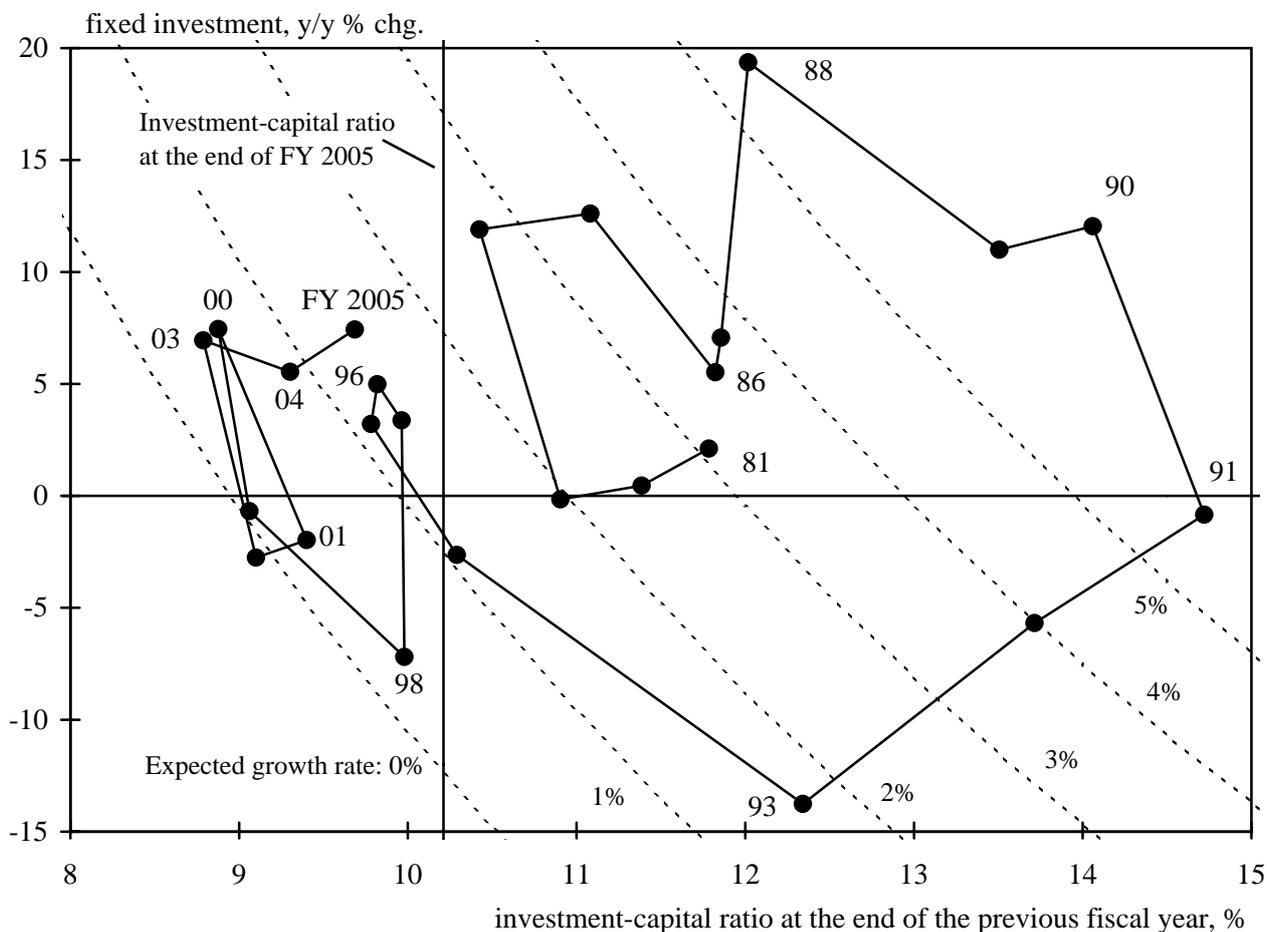
Notes: 1. Figures for 2006/Q3 are those of July-August averages.

2. Labor share = compensation of employees / nominal GDP. Figures prior to 1979/Q4 are based on 68SNA.

3. Shaded areas indicate recession periods.

Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey";  
 Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan";  
 Cabinet Office, "National Accounts."

### Capital Stock Cycle



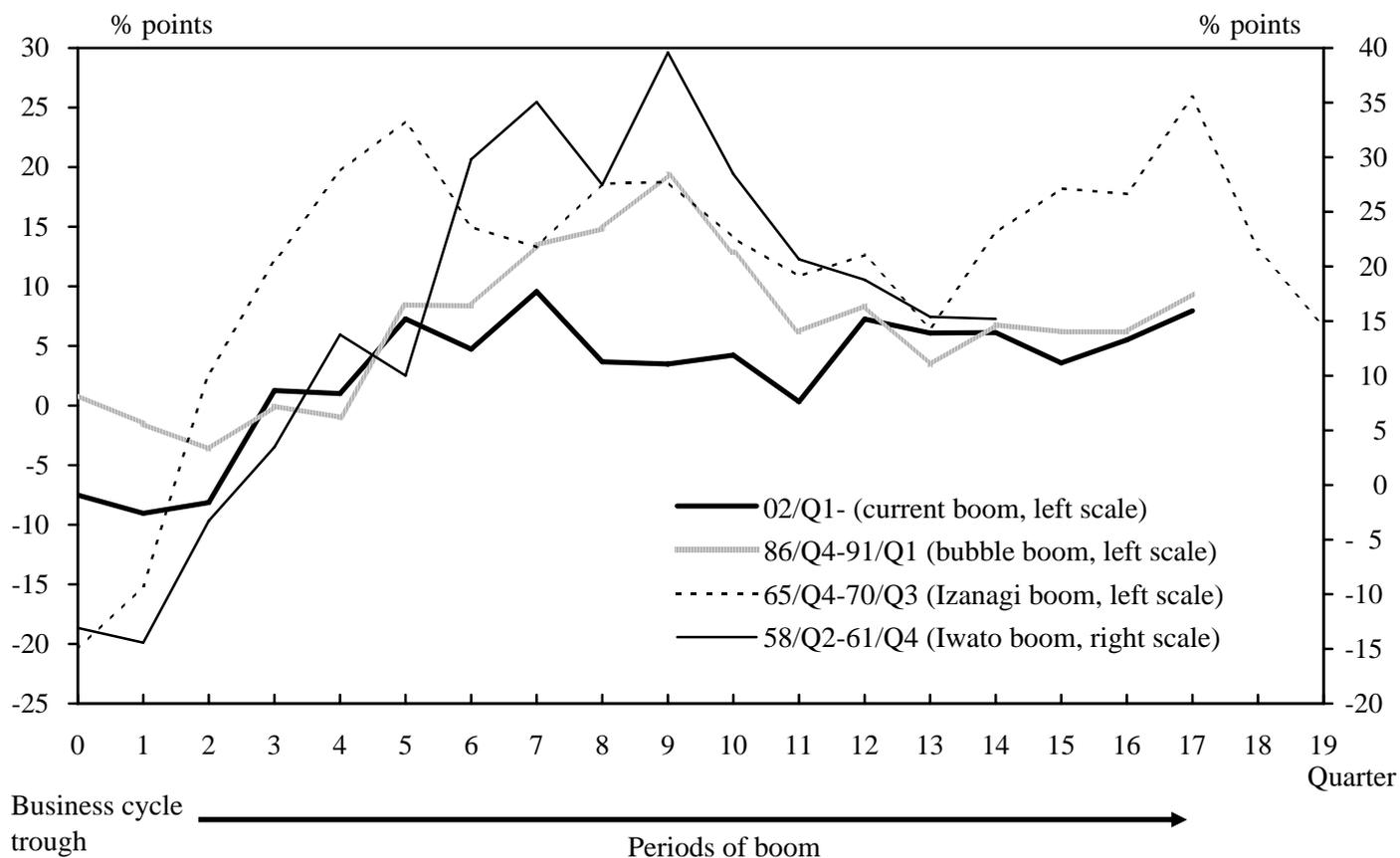
1. Capital stock cycle in the chart shows the relationship between the investment-capital ratio and the year-on-year rate of change of fixed investment.
2. As two variables have the following relation, a hyperbolic curve can be drawn for a given expected growth rate.  
  

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

Sources: Cabinet Office, "National Accounts," "Sectoral Productivity and Economic Growth: 1970-1998";  
 Ministry of Economy, Trade and Industry, "Census of Manufactures."

## Maturation of Business Cycles

Difference between Y/Y Change in Firm-Sector and Households' Expenditure

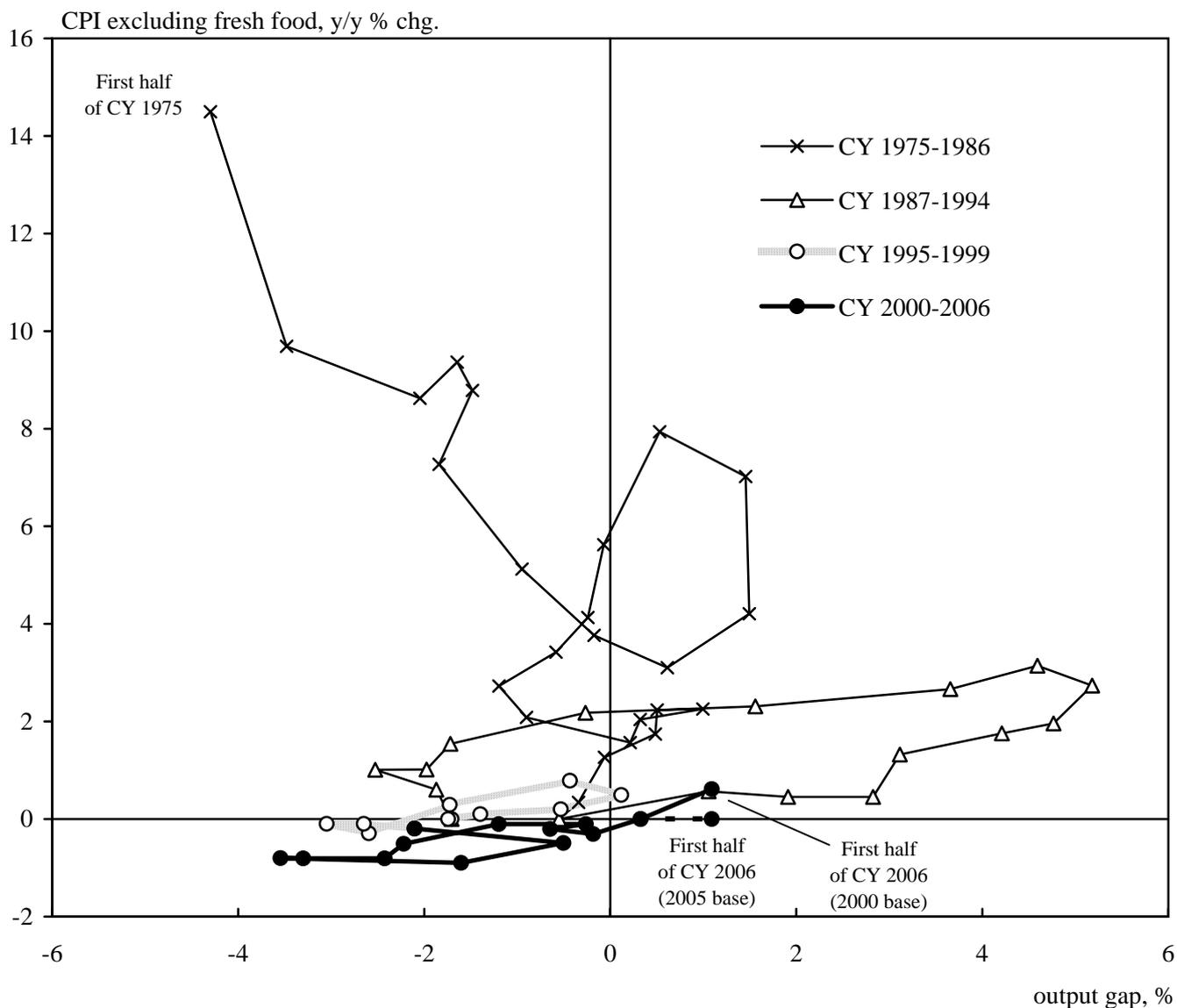


Note: Firm-sector expenditure is nonresidential investment.

Households' expenditure is defined as the sum of private consumption and residential investment.

Source: Cabinet Office, "National Accounts."

## Output Gap and Consumer Price Index



Notes: 1. Adjusted to exclude the effects of changes in consumption tax rate.

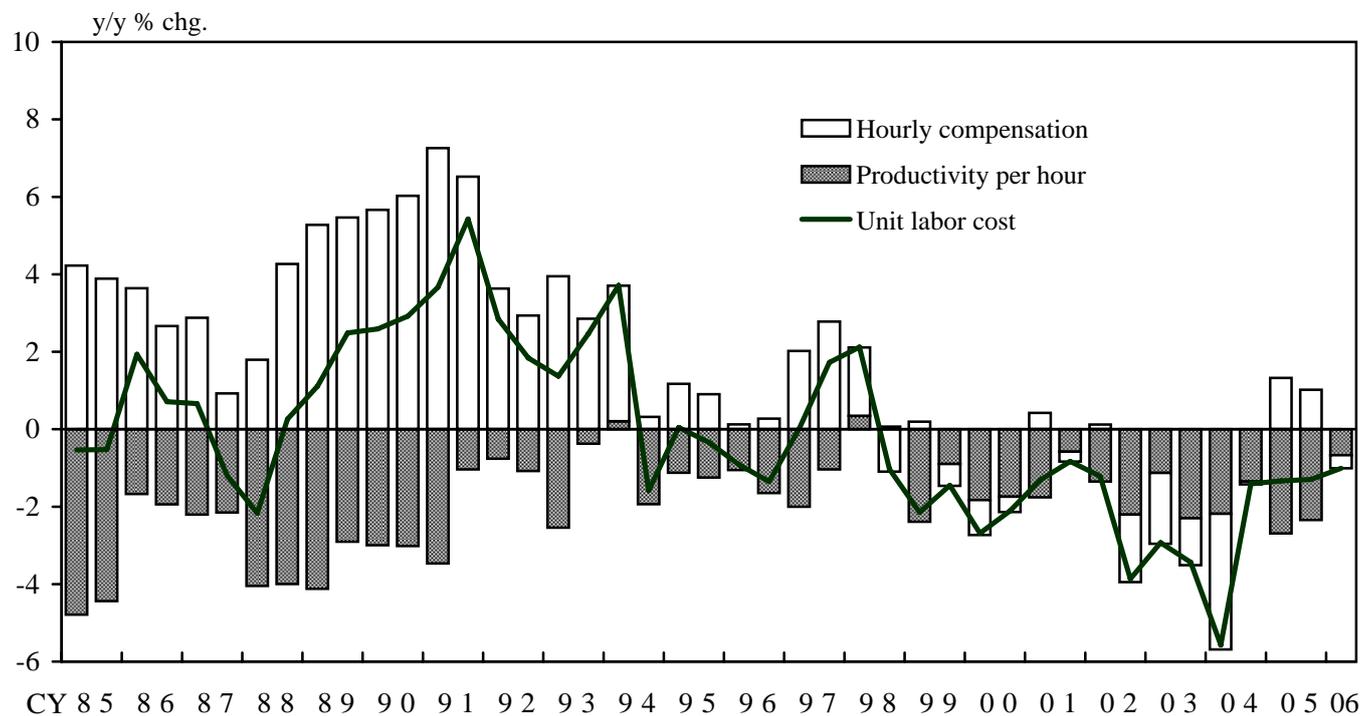
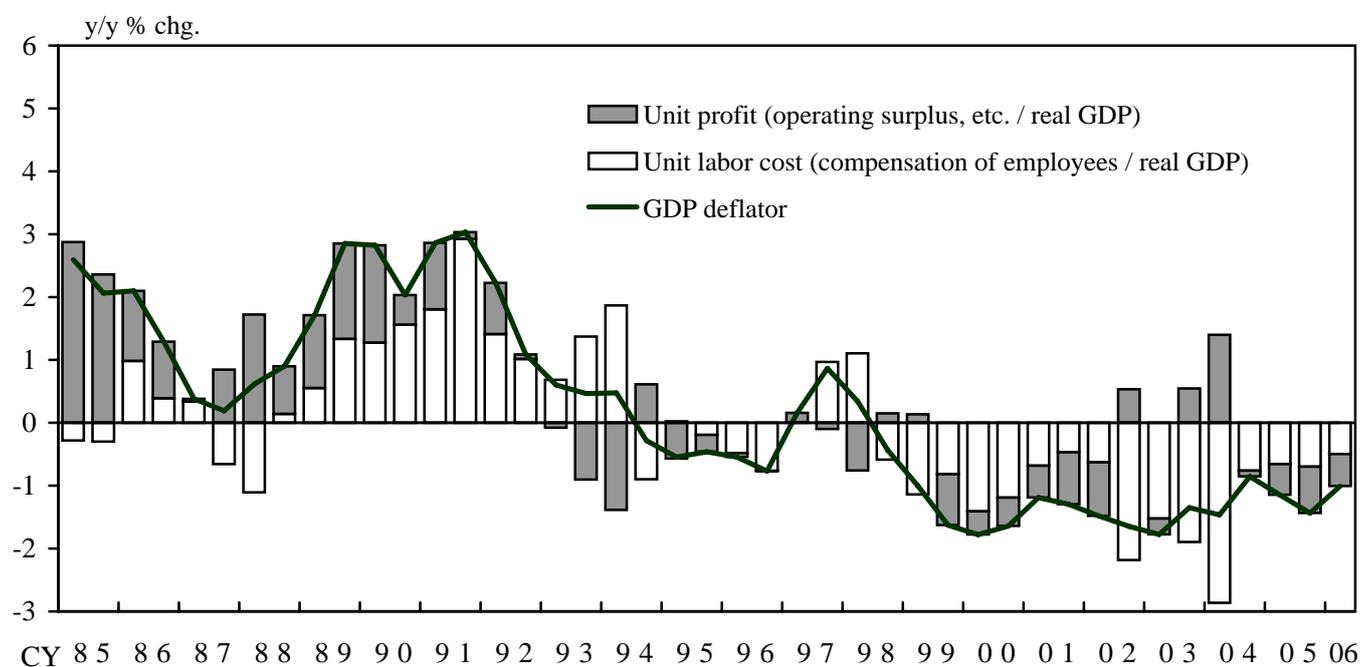
2. Figures of CPI for CY 1975-2000 are 1995 base.

Figures of CPI for CY 2001-2005 are 2000 base.

Sources: Cabinet Office, "National Accounts"; Cabinet Office and Ministry of Finance, "Business Outlook Survey"; Ministry of Internal Affairs and Communications, "Consumer Price Index," "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.

## Unit Labor Cost

## (1) Unit Labor Cost

(2) Decomposition of GDP Deflator in Terms of Distribution<sup>1,2</sup>

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

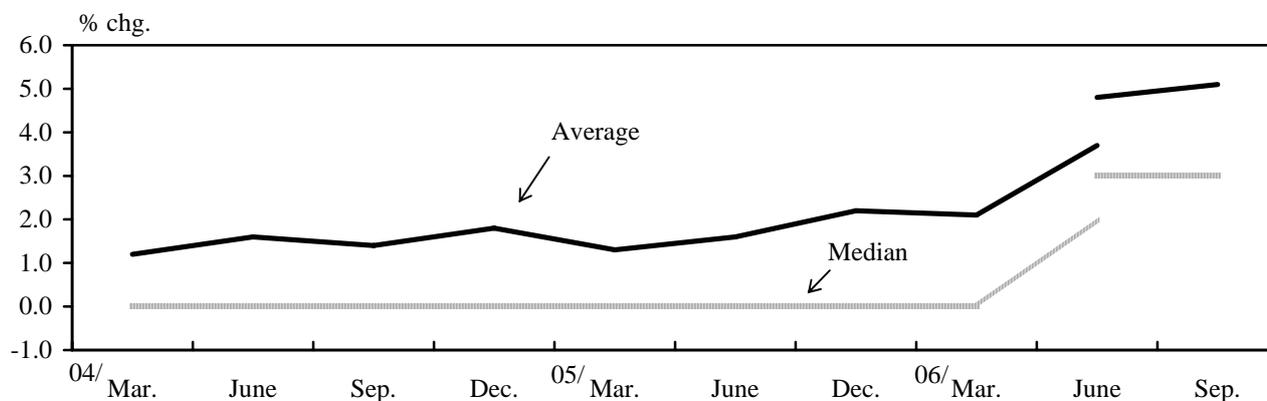
2. Operating surplus, etc., includes (i) operating surplus and mixed income, (ii) consumption of fixed capital, (iii) taxes on production and imports, (iv) subsidies, and (v) statistical discrepancy.

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

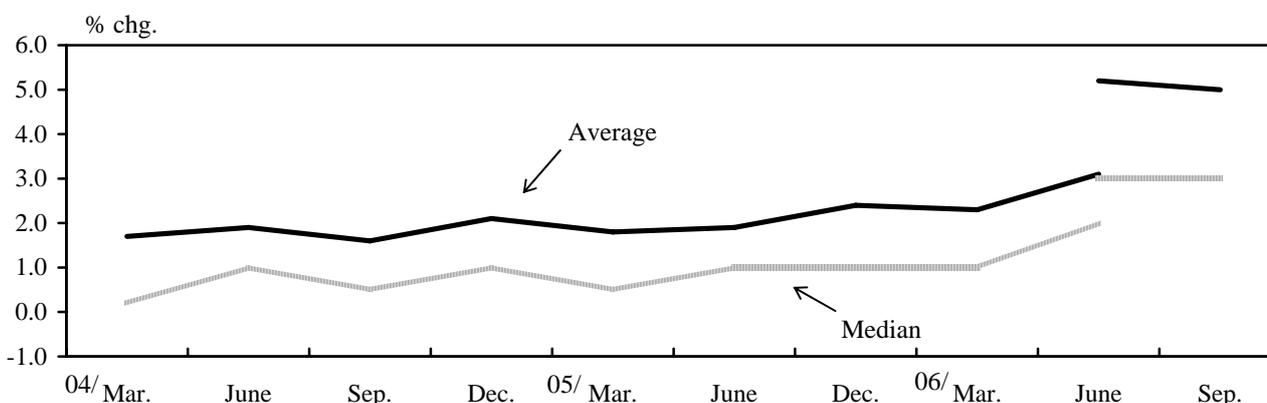
## Outlook for Prices

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

<Changes in the Price Levels One Year from Now>

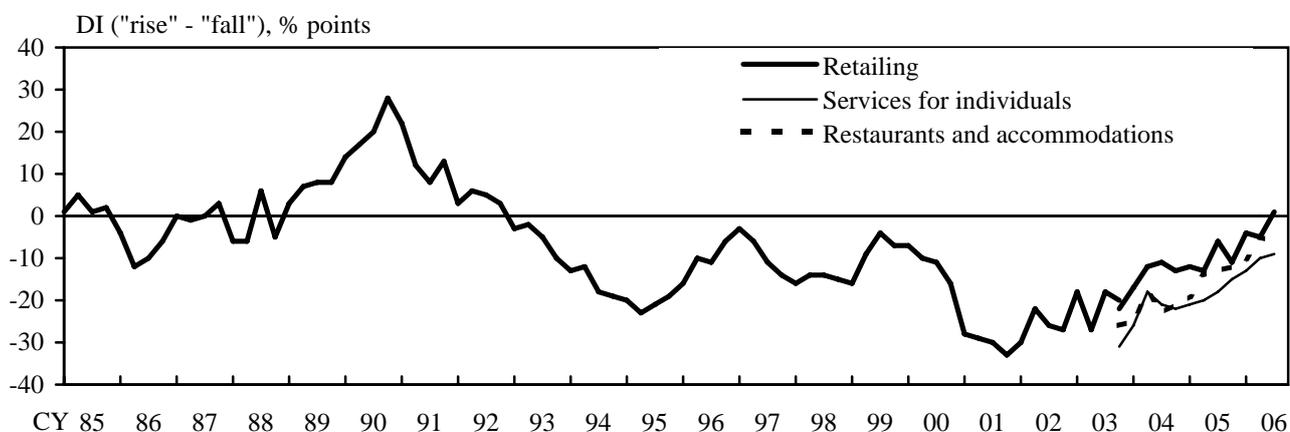


<Changes in the Price Levels per Year on Average over the Next Five Years>



- Notes: 1. Calculated by excluding 0.5 percent of the highest and the lowest figures, respectively.  
 2. The survey was not conducted in September 2005.  
 3. The survey method was changed in September 2006. A preliminary survey was conducted under the new method in June 2006

### (2) Firms (*Tankan*, Change in Output Prices [Forecast One Quarter Ahead])

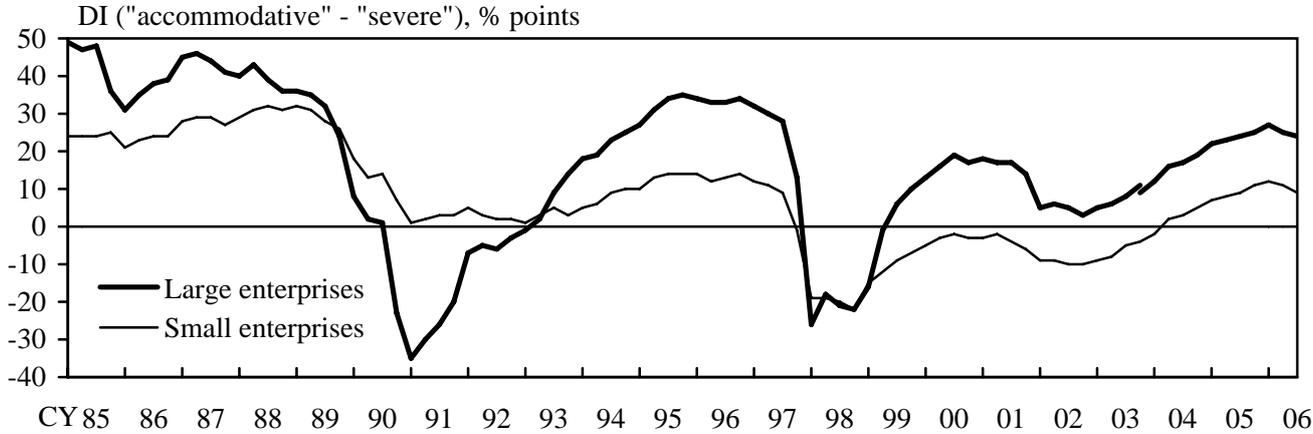


- Notes: 1. All-size enterprises.  
 2. The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to the December 2003 survey. Figures on a new basis are from the December 2003 survey.

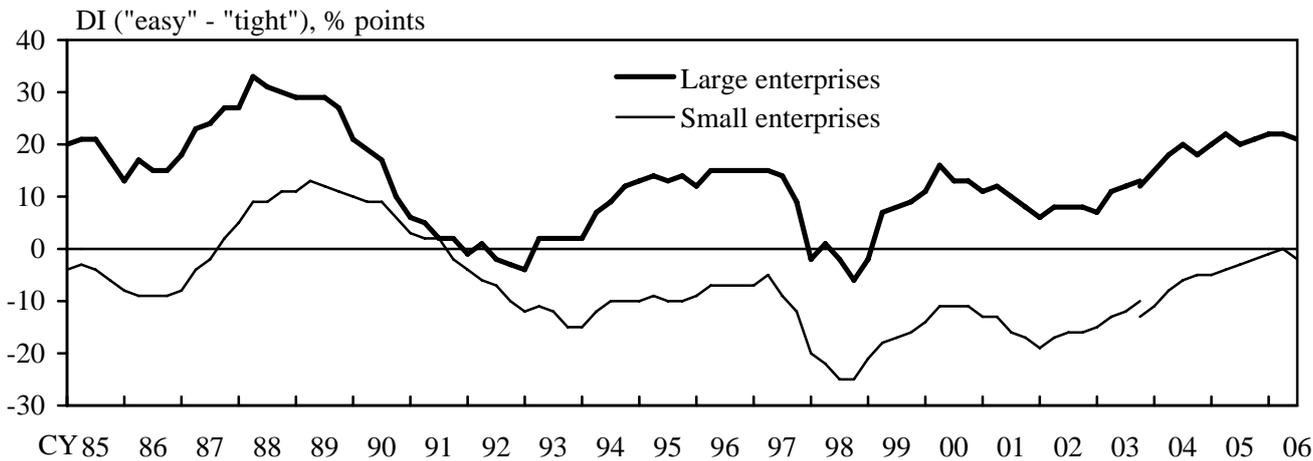
Source: Bank of Japan, "Opinion Survey on the General Public's Views and Behavior," "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

# Corporate Finance

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

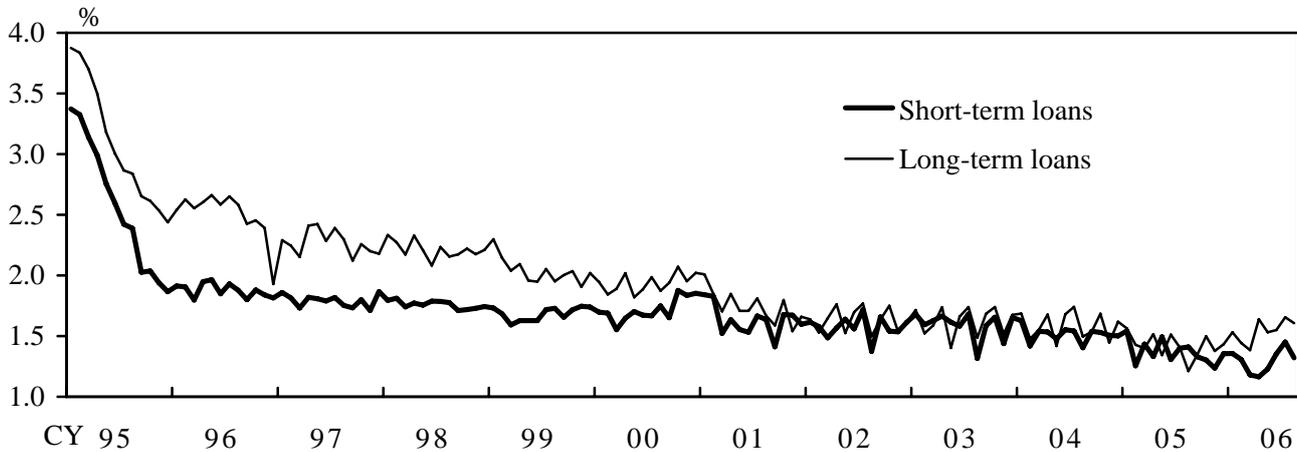


(2) Financial Position of Firms (*Tankan*)



Note: The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to the December 2003 survey. Figures on a new basis are from the December 2003 survey.

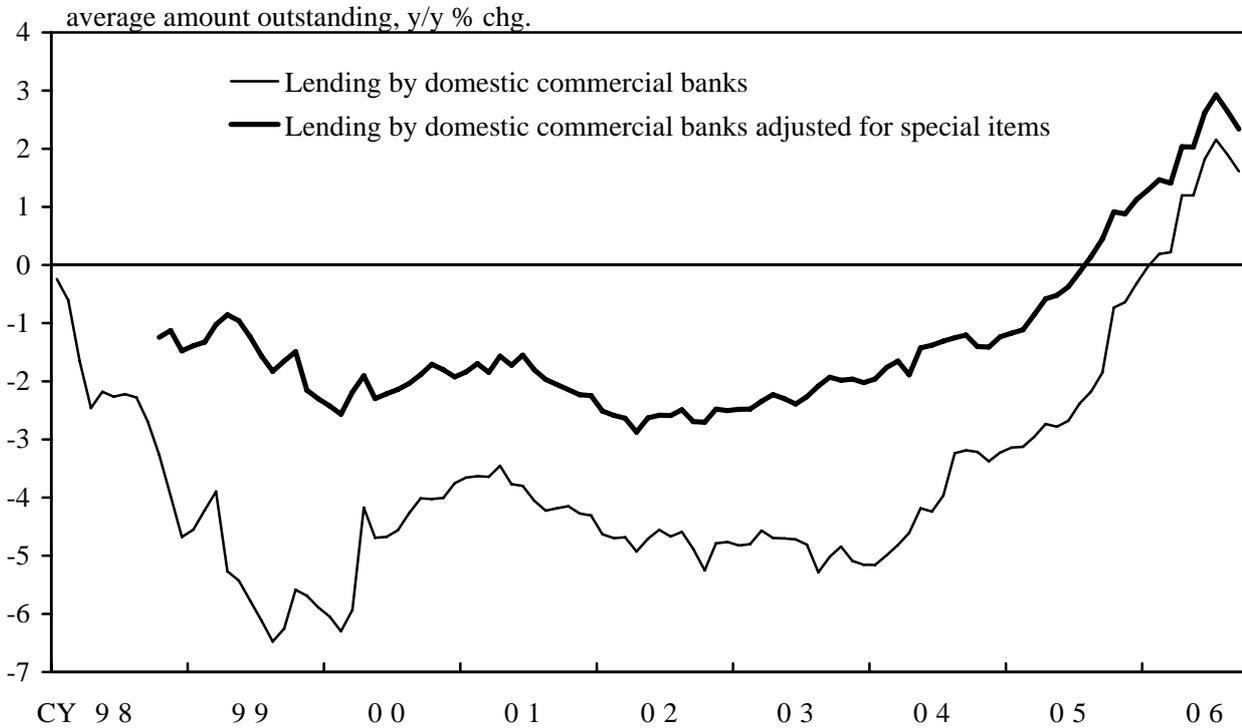
(3) Average Contracted Interest Rates on New Loans and Discounts



Source: Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan," "Average Contracted Interest Rates on Loans and Discounts."

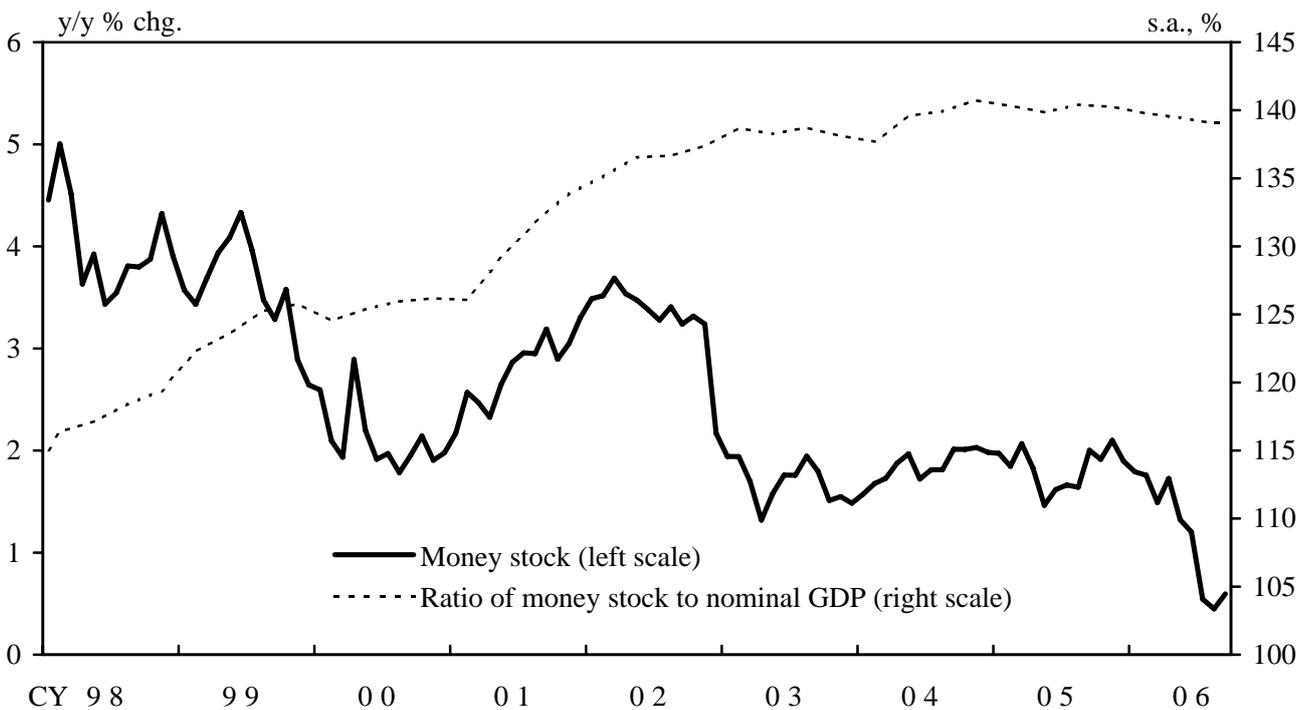
## Bank Lending and Money Stock

### (1) Lending by Domestic Commercial Banks



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

### (2) Money Stock (M<sub>2</sub>+CDs)

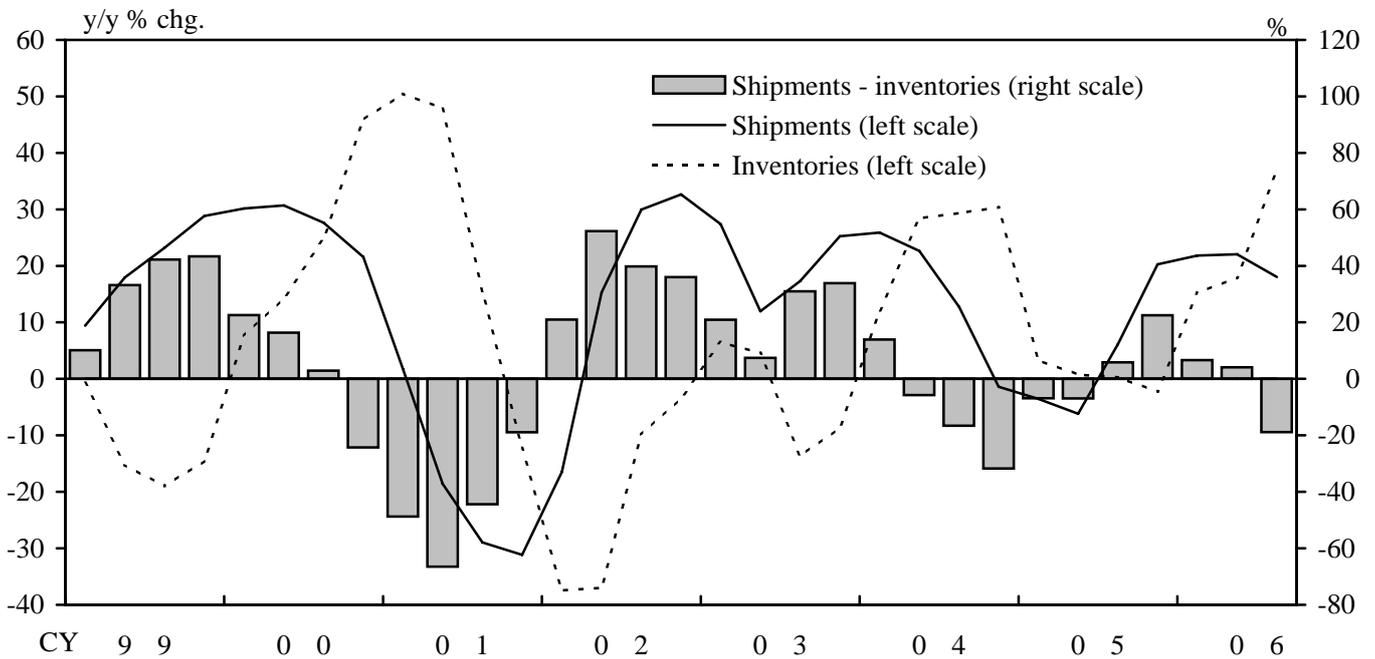


Note: Figure for nominal GDP in 2006/Q3 is assumed to be unchanged from the previous quarter.

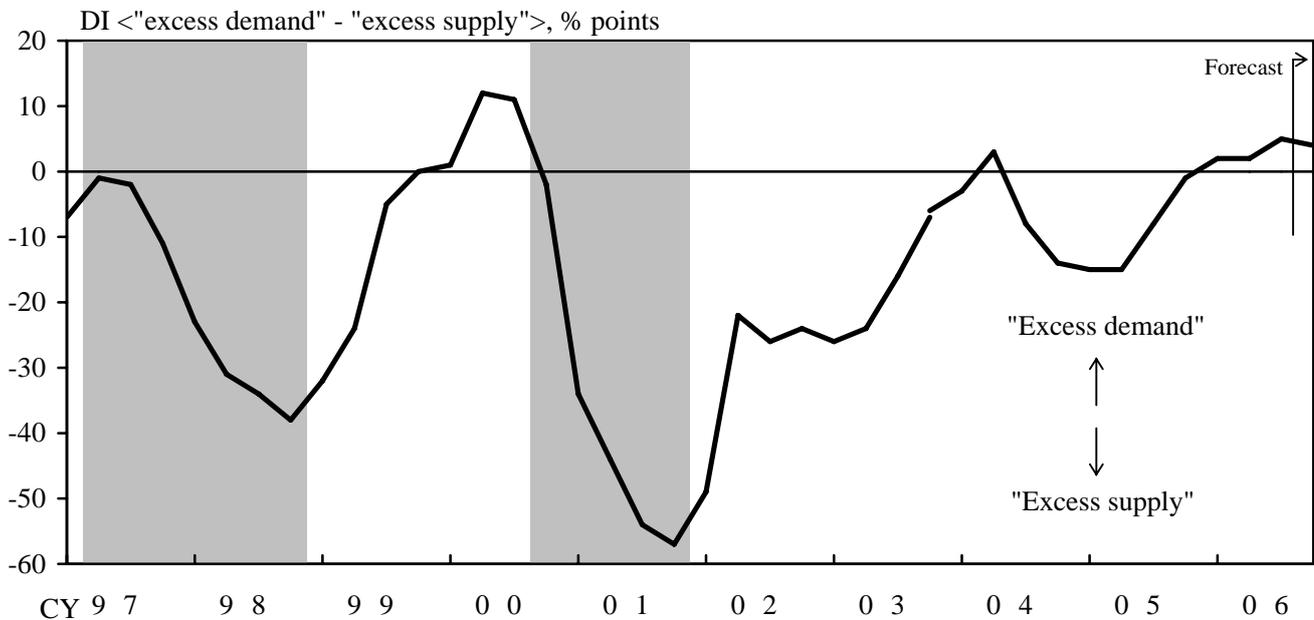
Sources: Cabinet Office, "National Accounts"; Bank of Japan, "Principal Figures of Financial Institutions," "Money Stock."

## Developments in the IT-Related Sectors

### (1) Electronic Parts and Devices



### (2) Overseas Supply and Demand Conditions for Products (Electrical Machinery)<sup>1,2</sup>



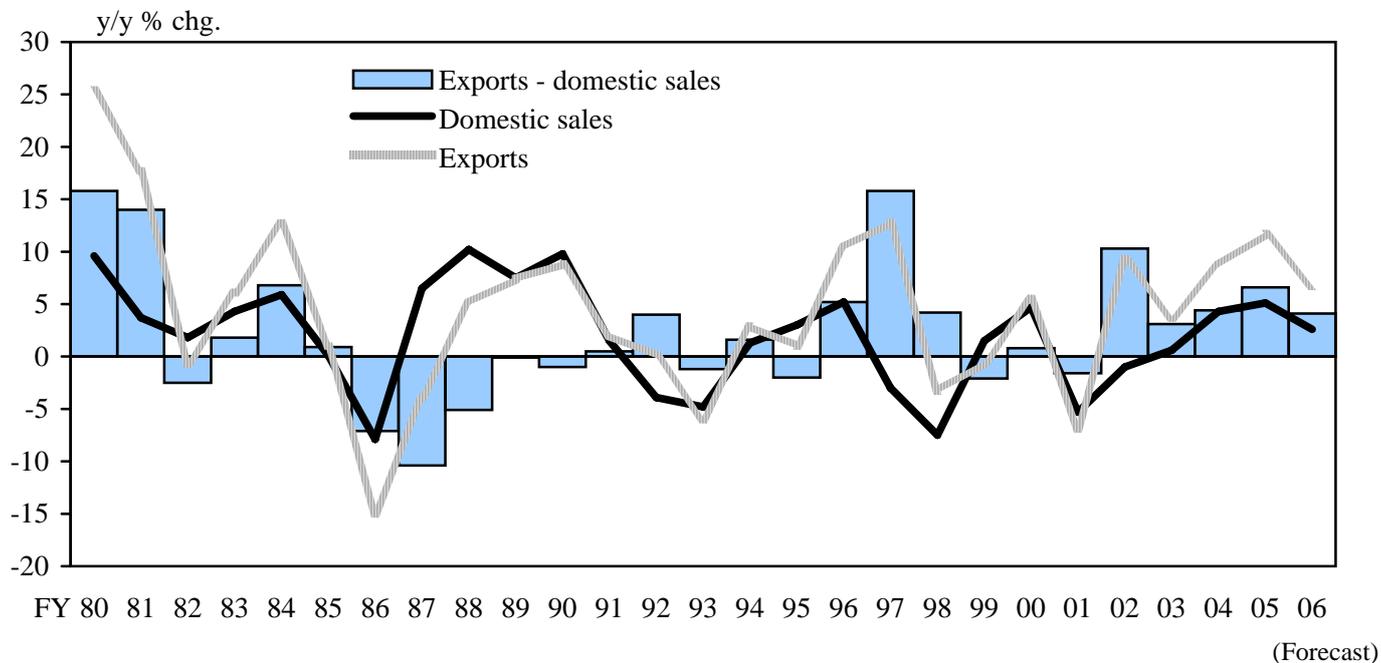
Notes: 1. The *Tankan* has been revised from the March 2004 survey. Figures based on the previous data sets are up to the December 2003 survey. Figures on a new basis are from the December 2003 survey.

2. Shaded areas indicate recession periods.

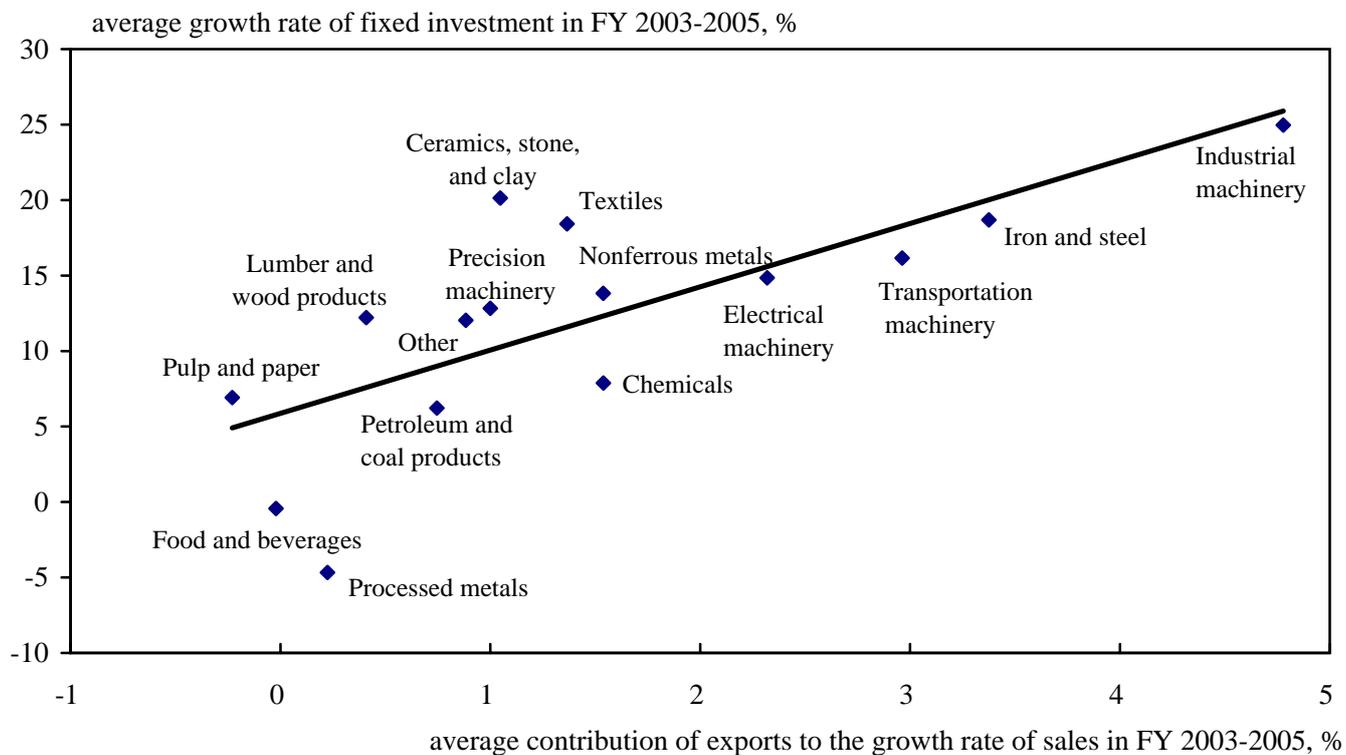
Sources: Ministry of Economy, Trade and Industry, "Indices of Industrial Production,"  
Bank of Japan, "*Tankan*, Short-Term Economic Survey of Enterprises in Japan."

## Relationship between Exports and Fixed Investment

### (1) Domestic Sales and Exports of Large Manufacturing Enterprises



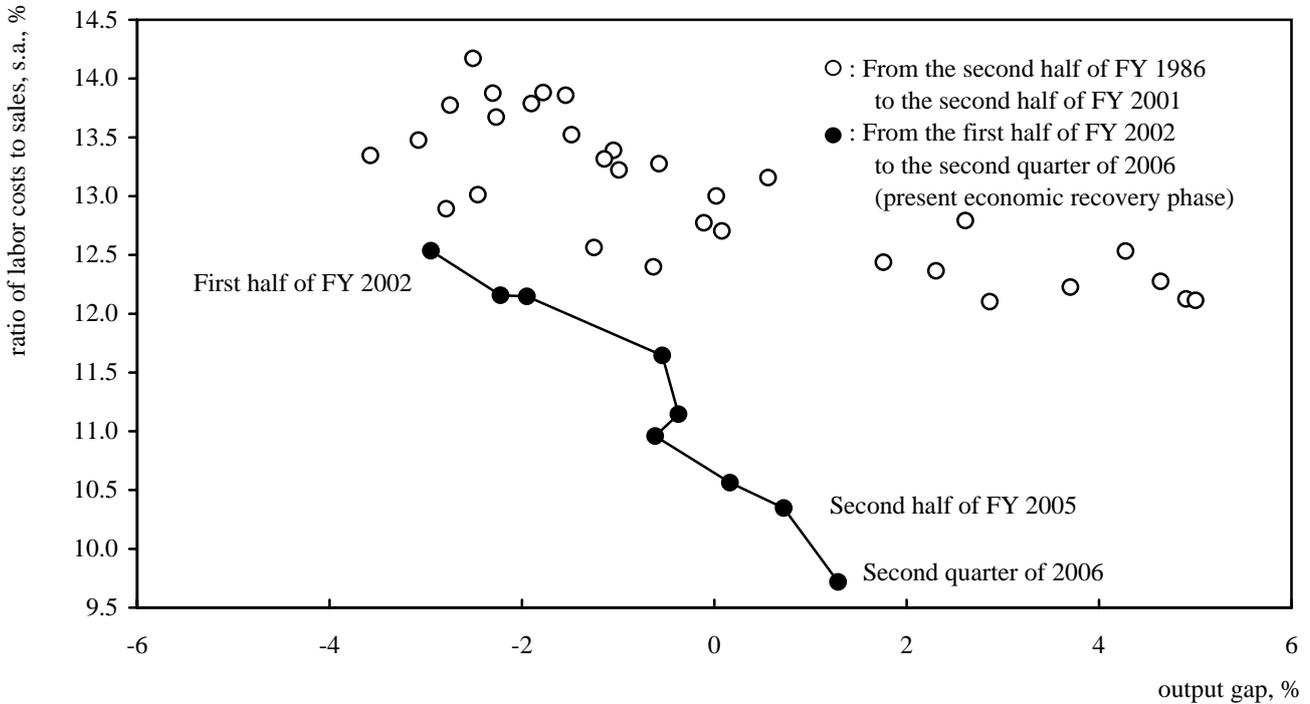
### (2) Relationship between Exports and Fixed Investment of Large Manufacturing Enterprises



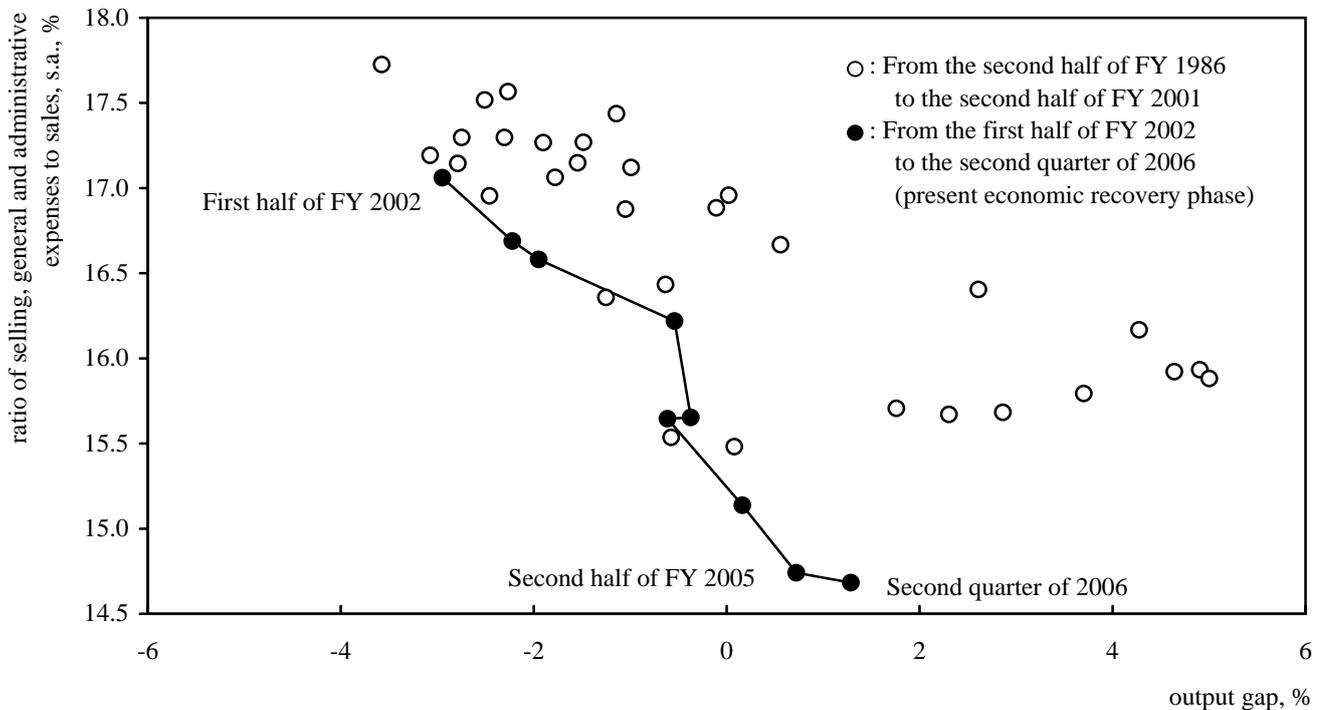
Source: Bank of Japan, "Tankan, Short-Term Economic Survey of Enterprises in Japan."

## Labor Costs and Selling, General and Administrative Expenses

(1) Ratio of Labor Costs to Sales and Output Gap (Large Manufacturing Enterprises)



(2) Ratio of Selling, General and Administrative Expenses to Sales and Output Gap (Large Manufacturing Enterprises)

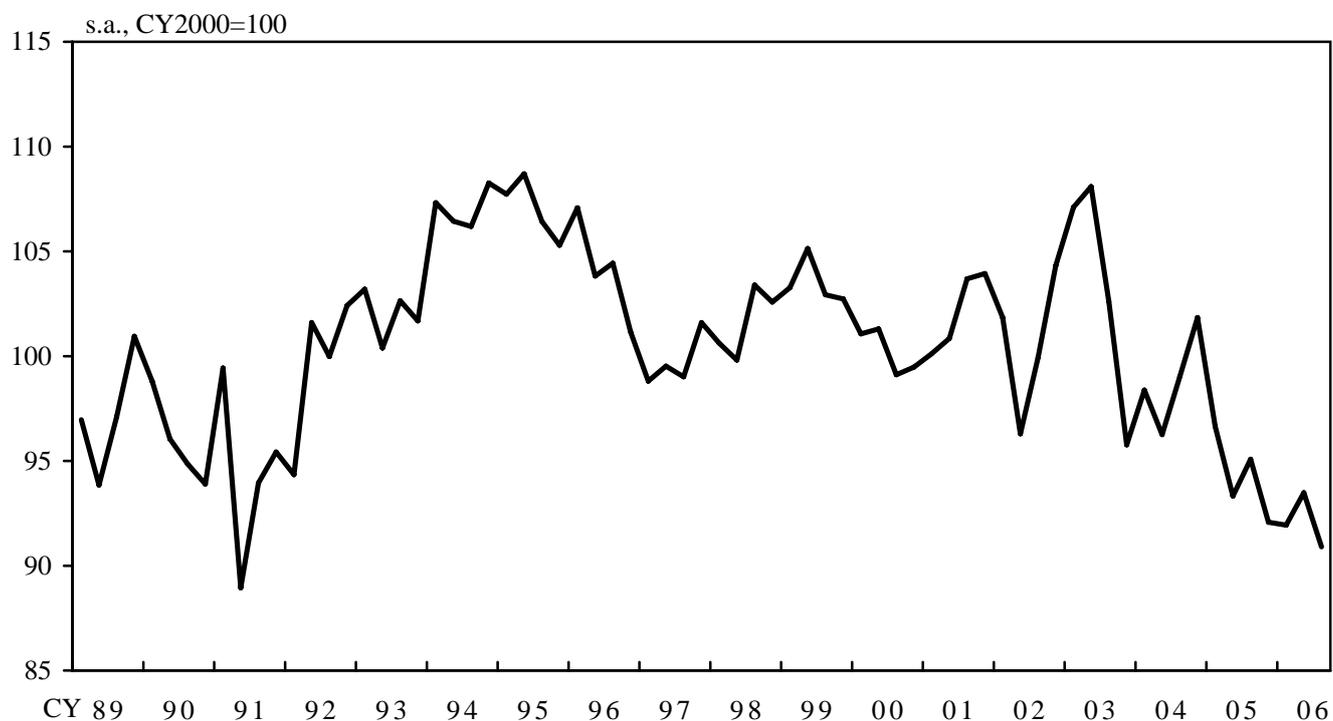


Note: Figures are semiannual except for those for the second quarter of 2006.

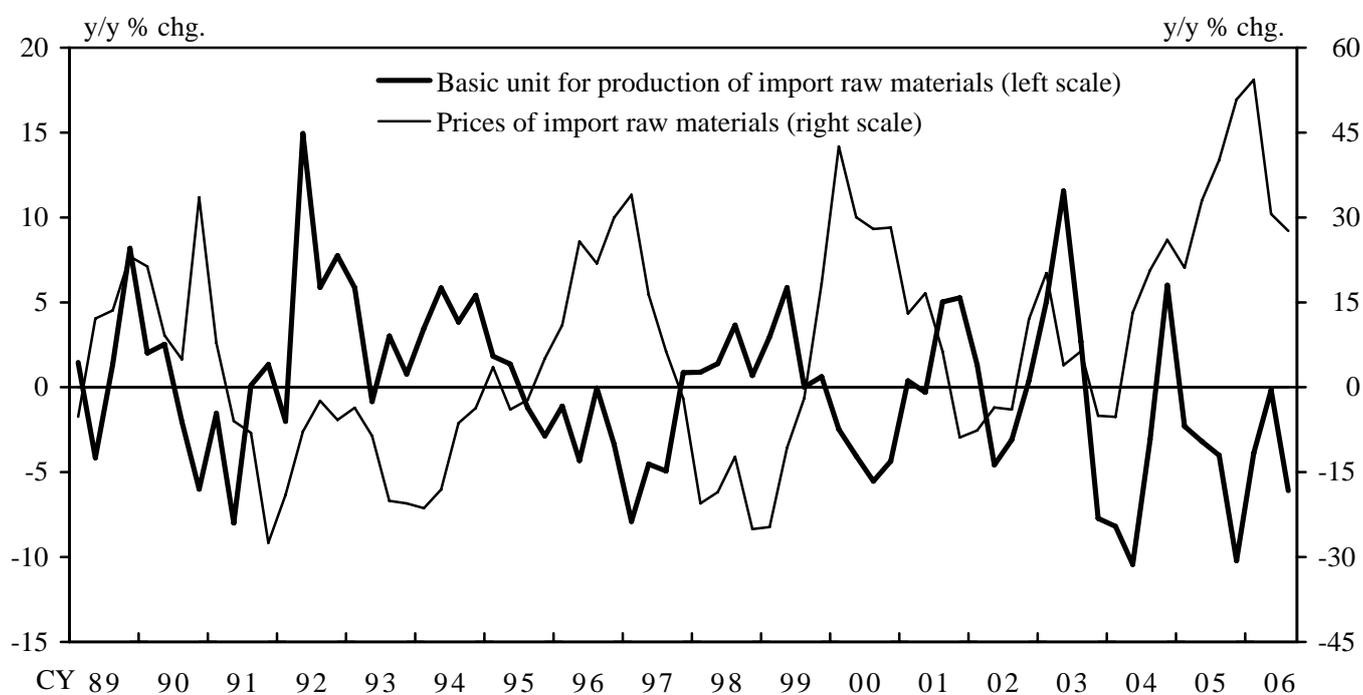
Sources: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"; Cabinet Office, "National Accounts."

## Basic Unit for Production and Prices of Import Raw Materials

(1) Basic Unit for Production of Import Raw Materials



(2) Basic Unit for Production and Prices of Import Raw Materials

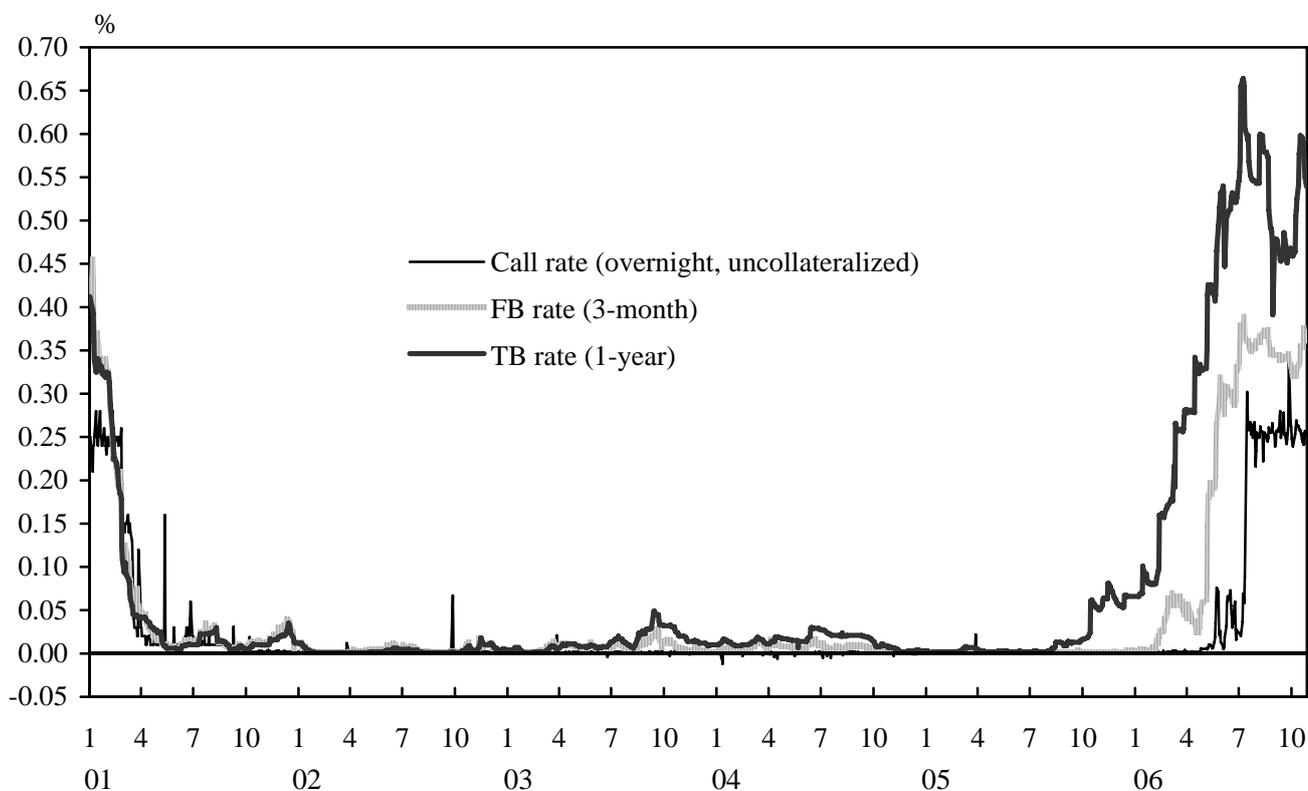


Note: Basic unit for production of import raw materials = real imports of raw materials / industrial production.

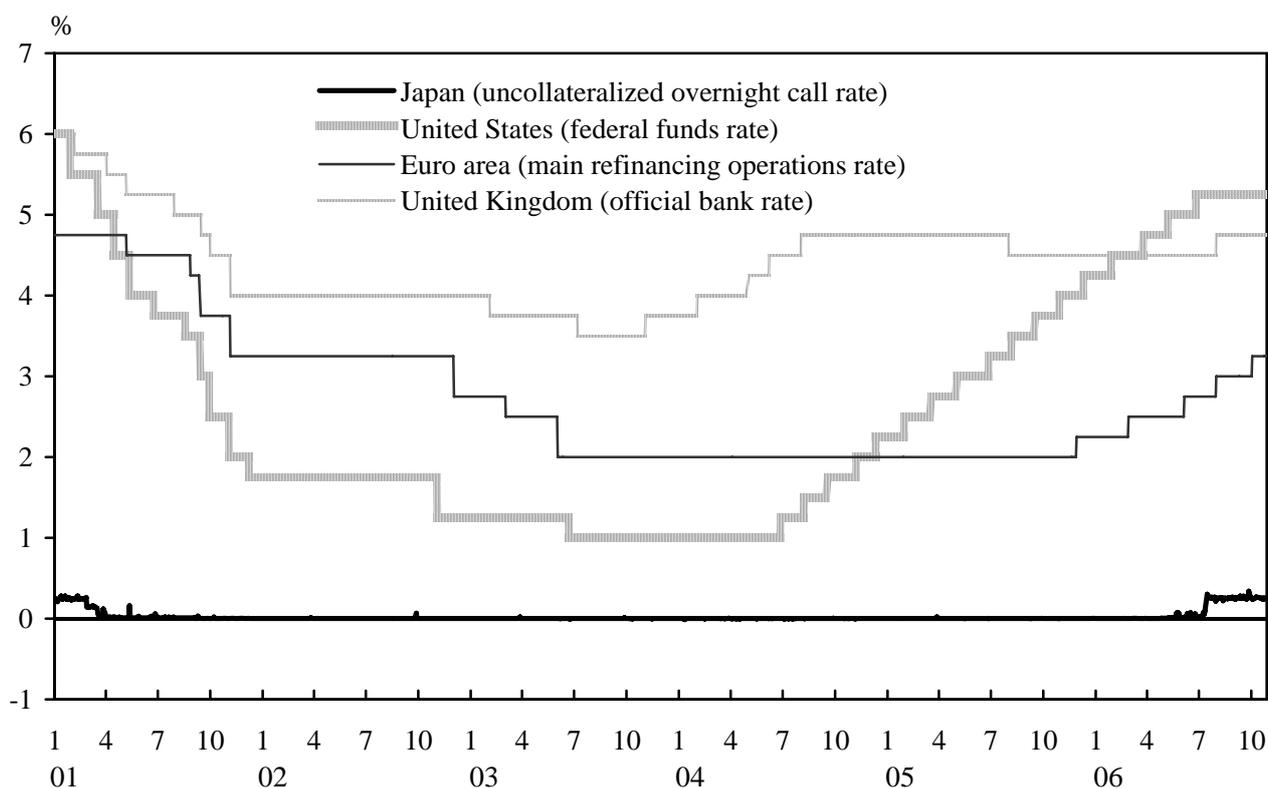
Sources: Ministry of Finance, "The Summary Report on Trade of Japan";  
 Ministry of Economy, Trade and Industry, "Indices of Industrial Production";  
 Bank of Japan, "Corporate Goods Price Index."

## Short-Term Interest Rates

### (1) Short-Term Interest Rates

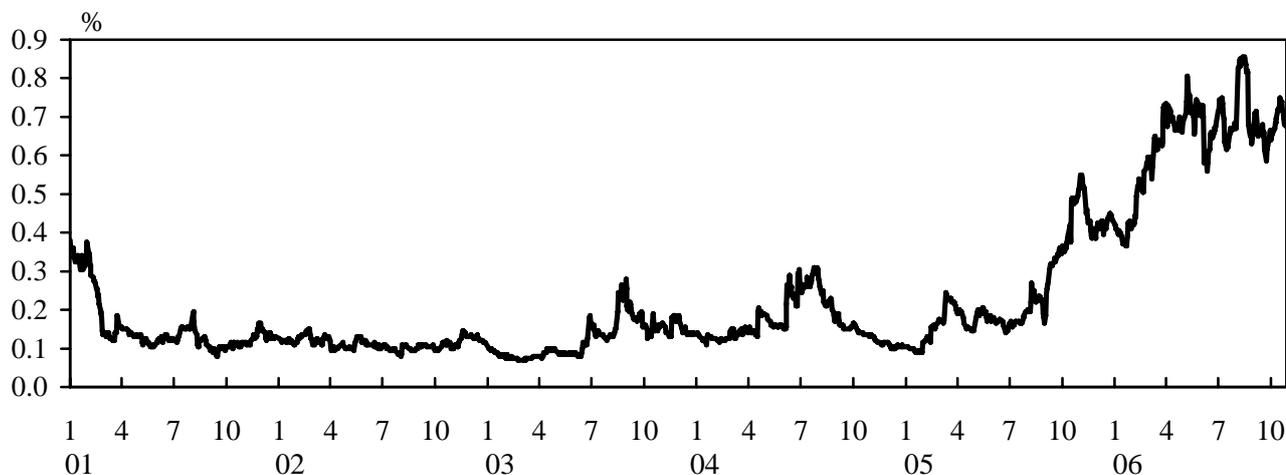


### (2) Policy Interest Rates in Major Economies

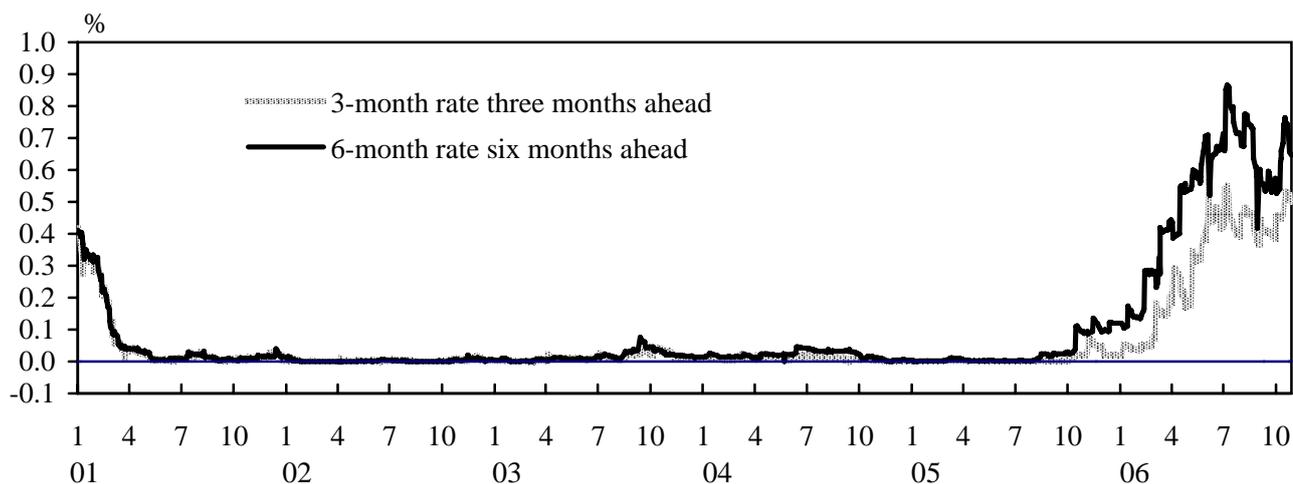


## Market Participants' Expectations on Interest Rates in the Future

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

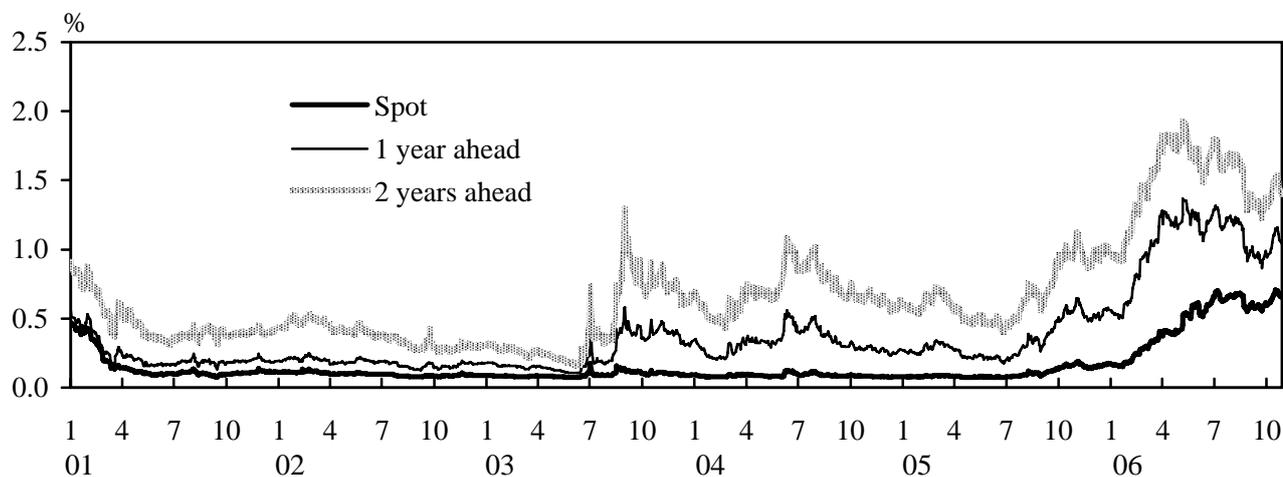


(2) Implied Forward Rates (3-Month, 6-Month)



Note: Calculated from the FB rate (3-month) and TB rates (6-month, 1-year).

(3) Implied Forward Rates (1-Year)

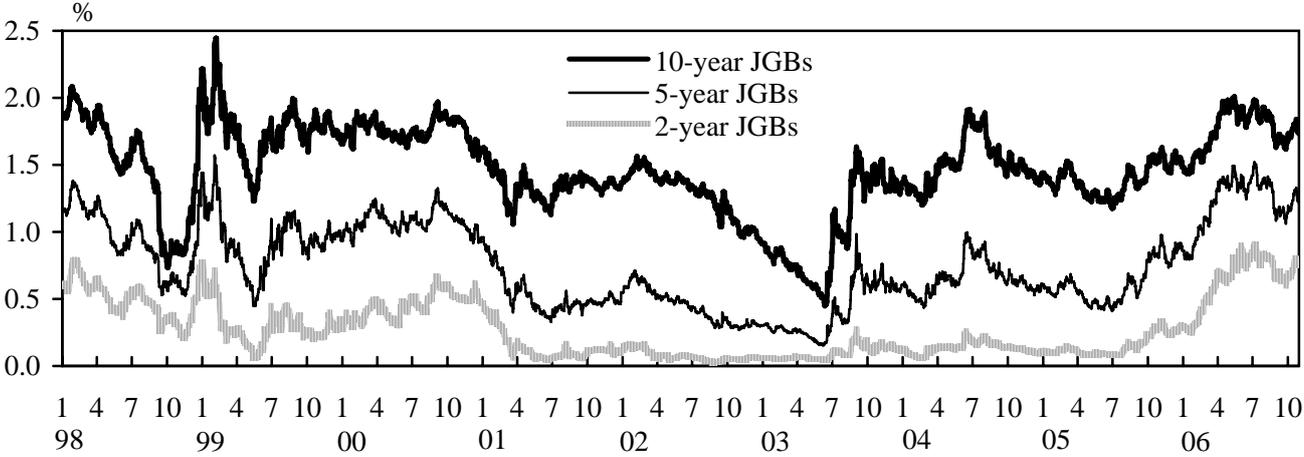


Note: Calculated from yen-yen swap rates.

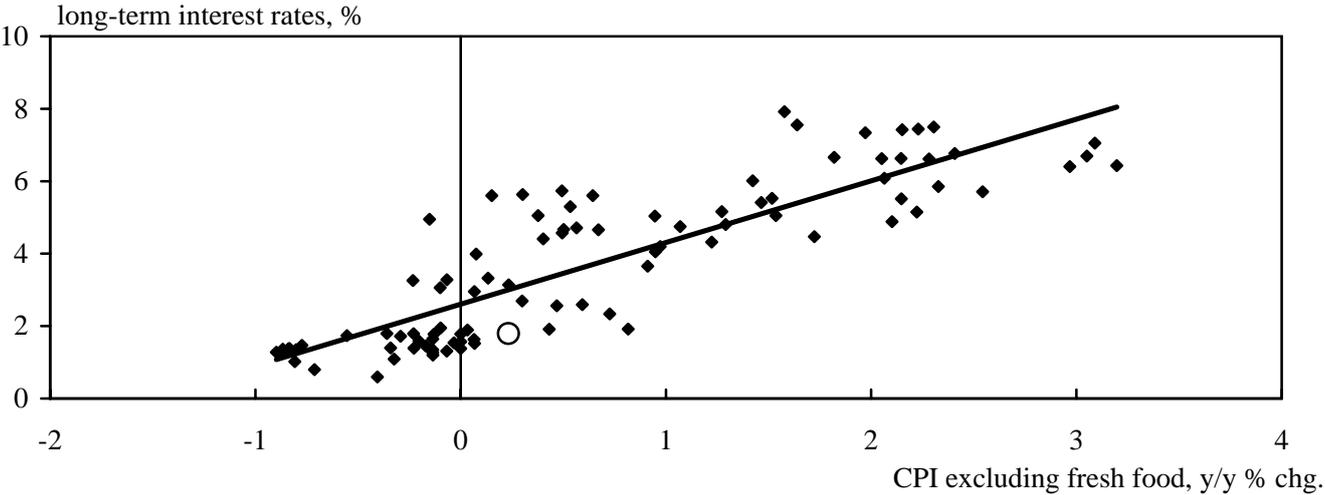
Sources: Tokyo Financial Exchange; Reuters; Bloomberg.

# Long-Term Interest Rates

(1) Government Bond Yields

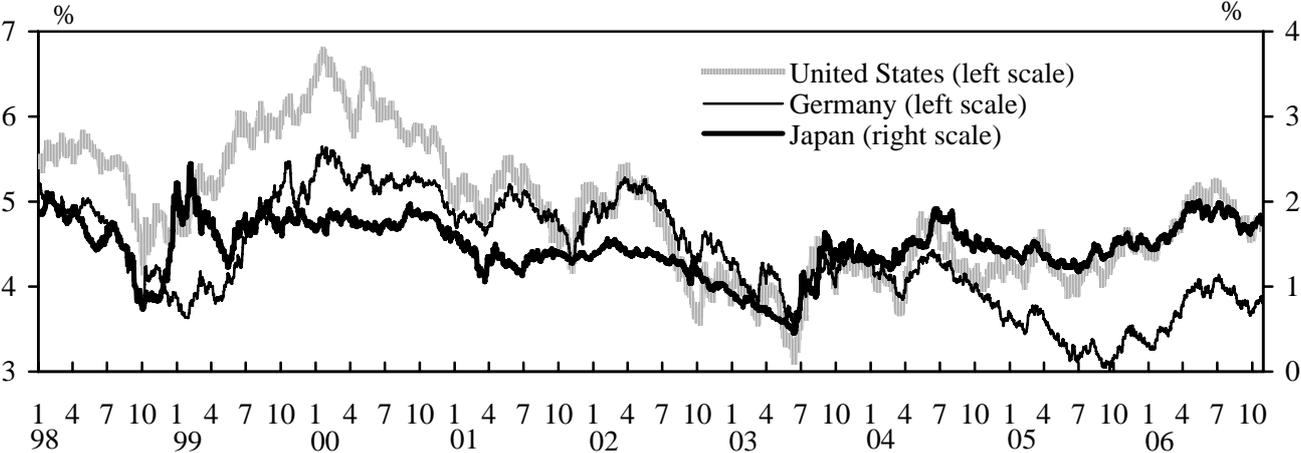


(2) Long-Term Interest Rates and Change in the Consumer Price Index



Notes: 1. Long-term interest rates are 10-year JGB yields.  
 2. CPI is adjusted to exclude the effects of the changes in consumption tax rate.  
 3. The sample period is 1983/Q3-2006/Q3. The white circle indicates the latest data.

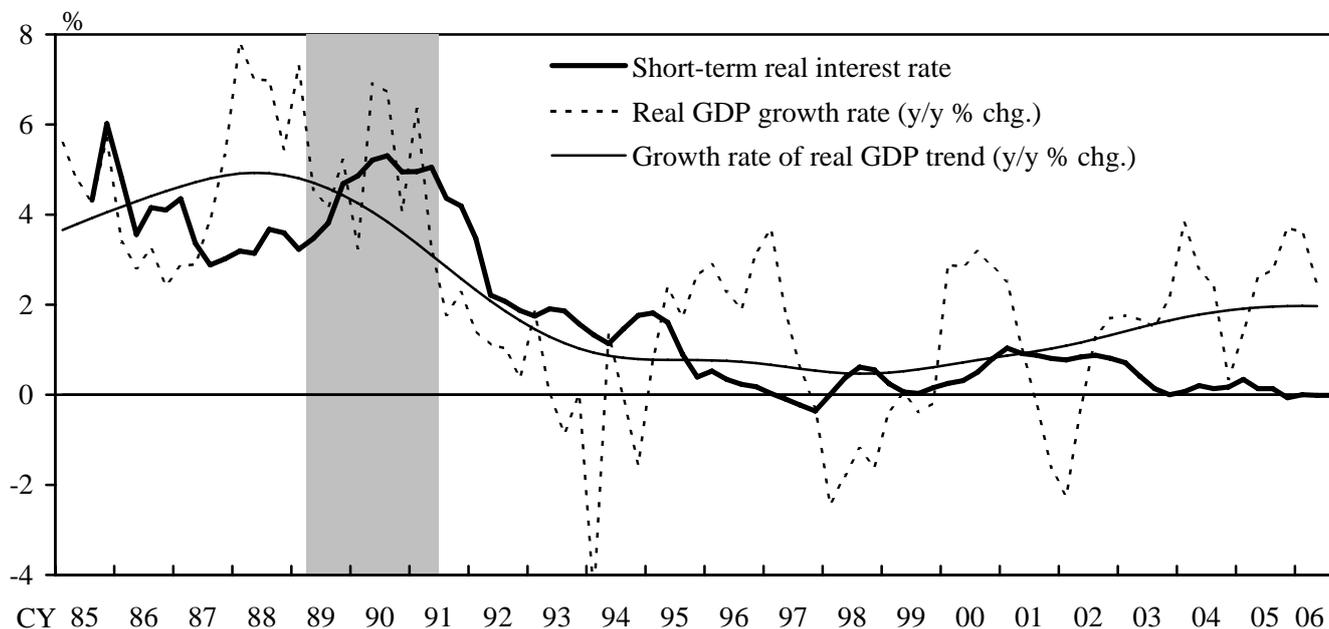
(3) Long-Term Interest Rates in Major Countries (10-Year Government Bond Yields)



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

## Interest Rates and Economic Activity

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



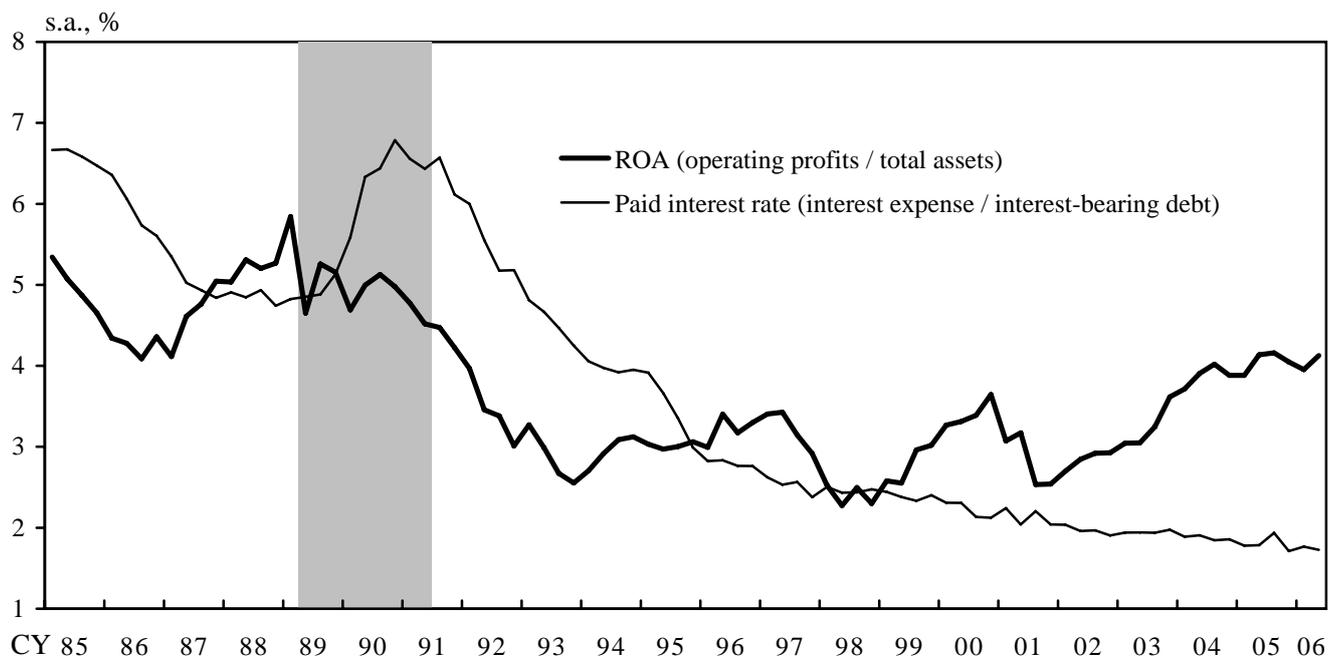
Notes: 1. Short-term real interest rate = call rate (overnight, uncollateralized) - y/y % chg. in the consumer price index (excluding fresh food)

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

3. Shaded area indicates the phase of rises in the policy interest rate (May 1989-June 1991).

### (2) ROA and Paid Interest Rate

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



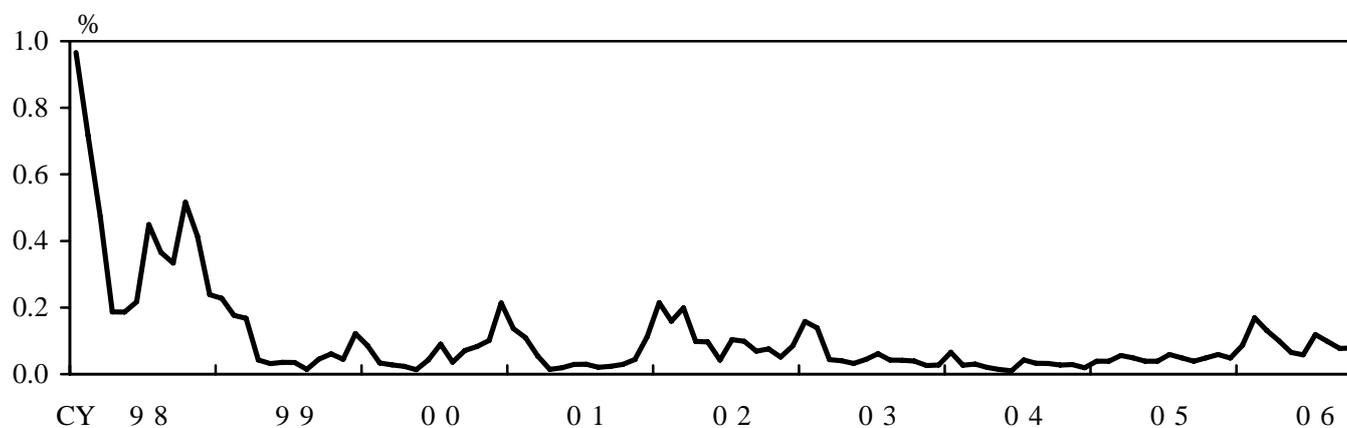
Notes: 1. Interest-bearing debt = long- and short-term borrowings + corporate bonds + bills receivable discounted outstanding

2. Shaded area indicates the phase of rises in the policy interest rate (May 1989-June 1991).

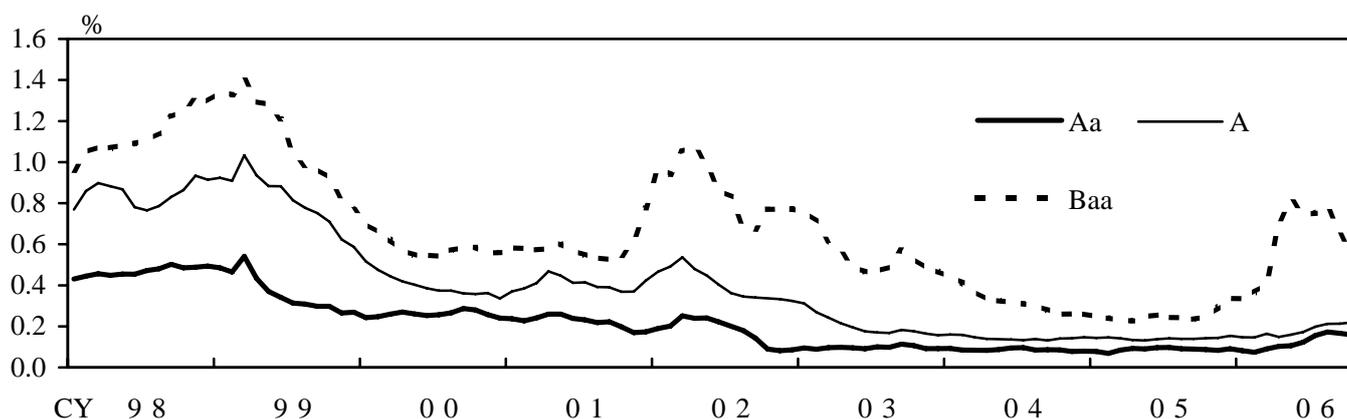
Sources: Cabinet Office, "National Accounts"; Ministry of Internal Affairs and Communications, "Consumer Price Index"; Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly"; Bank of Japan.

## Credit Spread

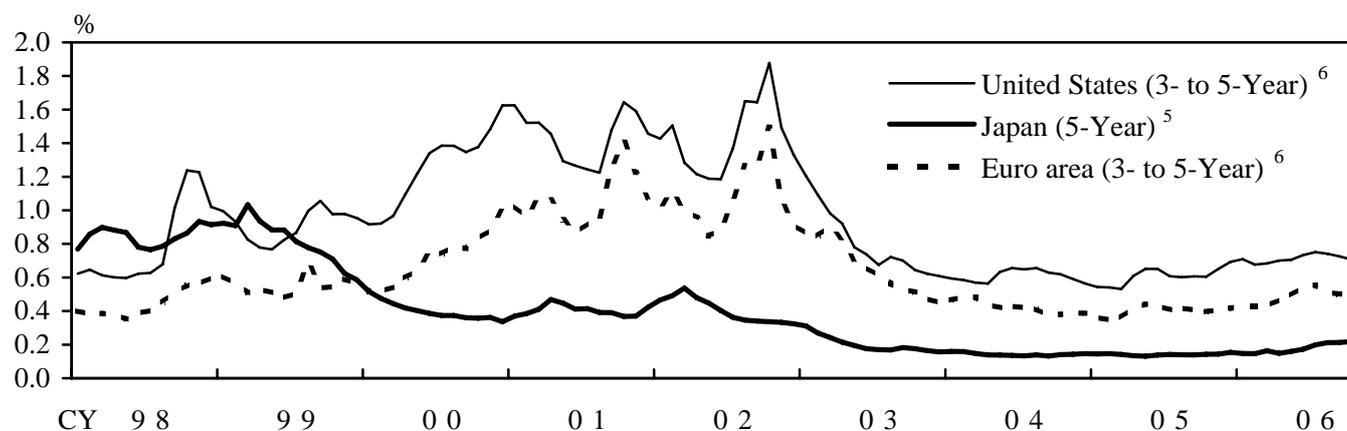
(1) Spread for Commercial Paper (3-Month)<sup>1,2,3</sup>



(2) Spread for Corporate Bonds (5-Year)<sup>3,4,5</sup>



(3) Spread for Corporate Bonds in Major Economies (A-Rated)<sup>3,4</sup>



Notes: 1. The spread for CP is the average issuance rate of CP minus the FB yield.

2. CP ratings are A-1 or above.

3. The spreads for both CP and corporate bonds in October 2006 are the averages up to the latest available data.

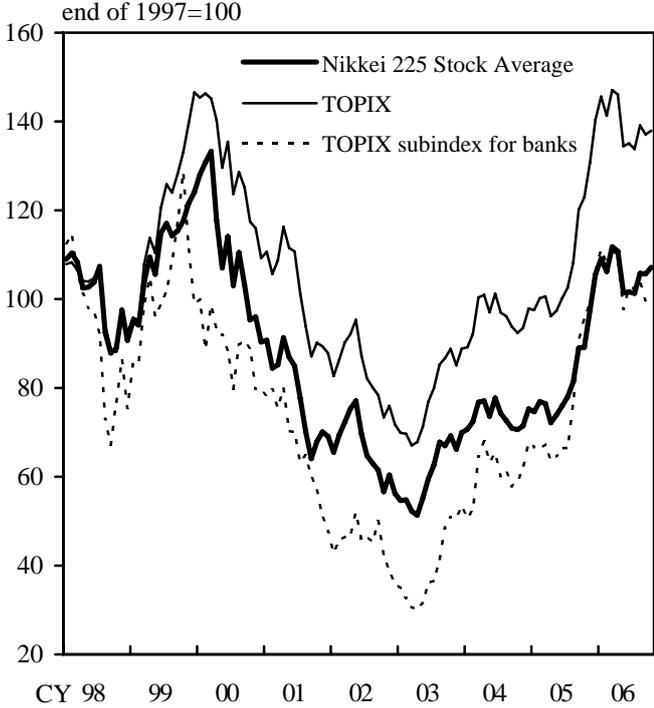
4. The spread for corporate bonds is the corporate bond yield minus the government bond yield.

5. The indicated ratings of corporate bonds are of Moody's.

6. The indicated rating of corporate bonds is of Moody's and S&P.

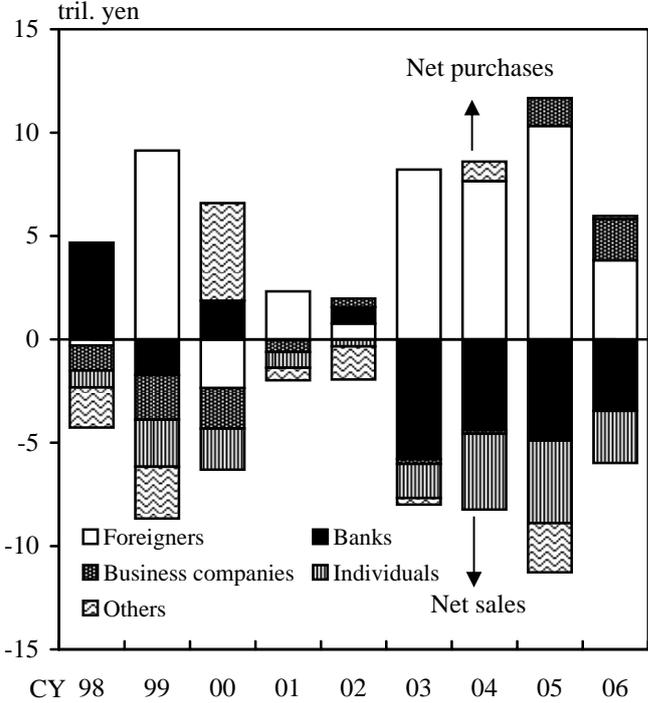
# Stock Prices

(1) Stock Prices



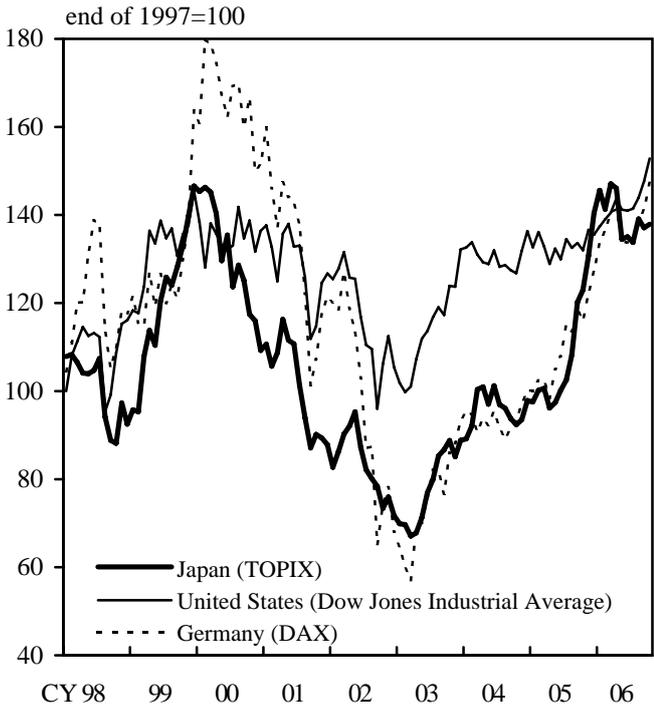
Note: Data are at end of month. Figures for October 2006 are the latest available data.

(2) Trading Volume by Investor Type



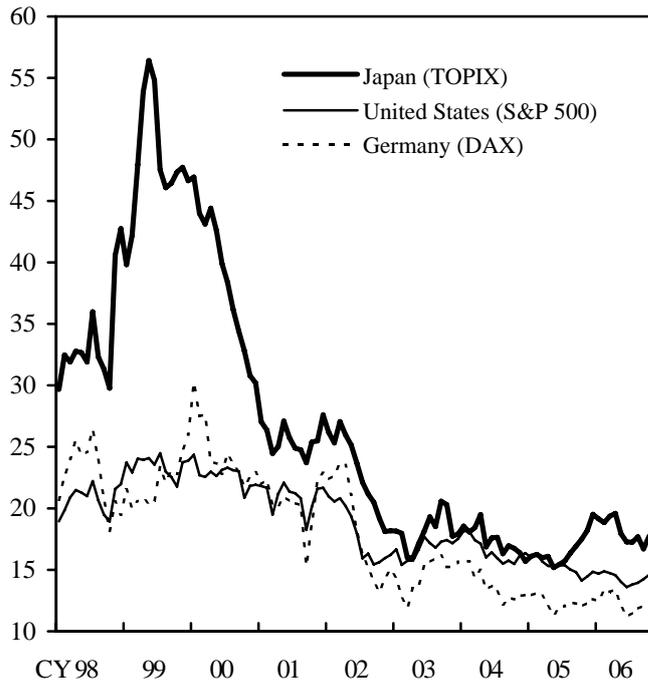
Notes: 1. Figures are the sum of the first and second sections of the Tokyo, Osaka, and Nagoya stock exchanges.  
2. Figures for 2006 are those of January-September in terms of annual amount.

(3) Stock Prices in Major Countries



Note: Data are at end of month. Figures for October 2006 are the latest available data.

(4) P/E Ratios in Major Countries

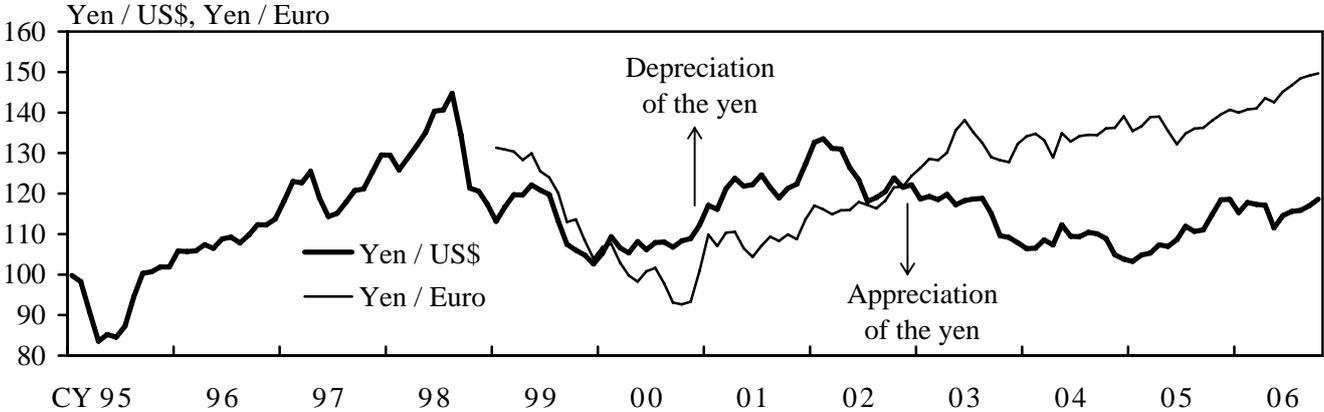


Note: 12-month forward EPS is used to calculate P/E ratio.

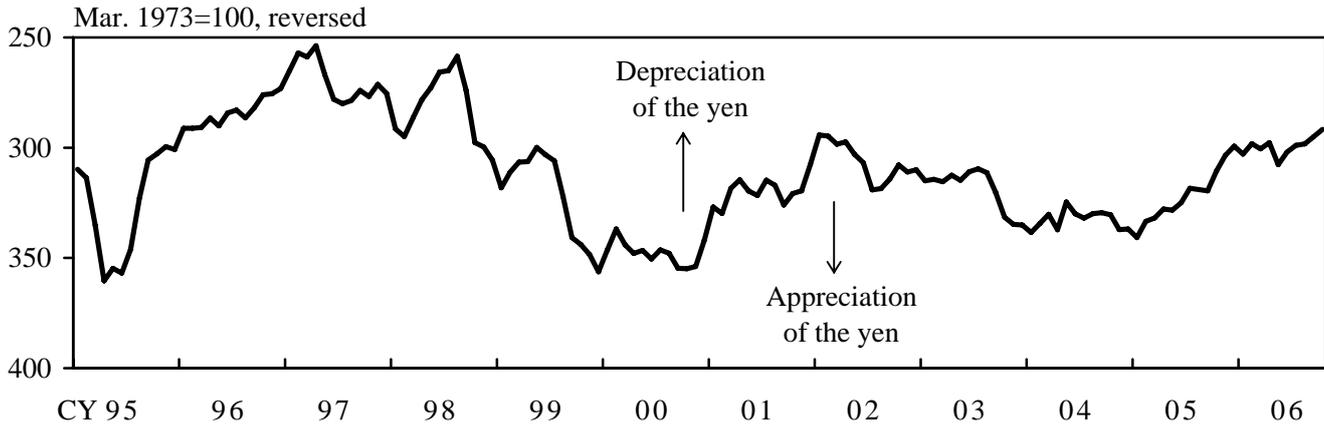
Sources: *Nihon Keizai Shimbun*; Tokyo Stock Exchange; Bloomberg; I/B/E/S.

# Exchange Rates

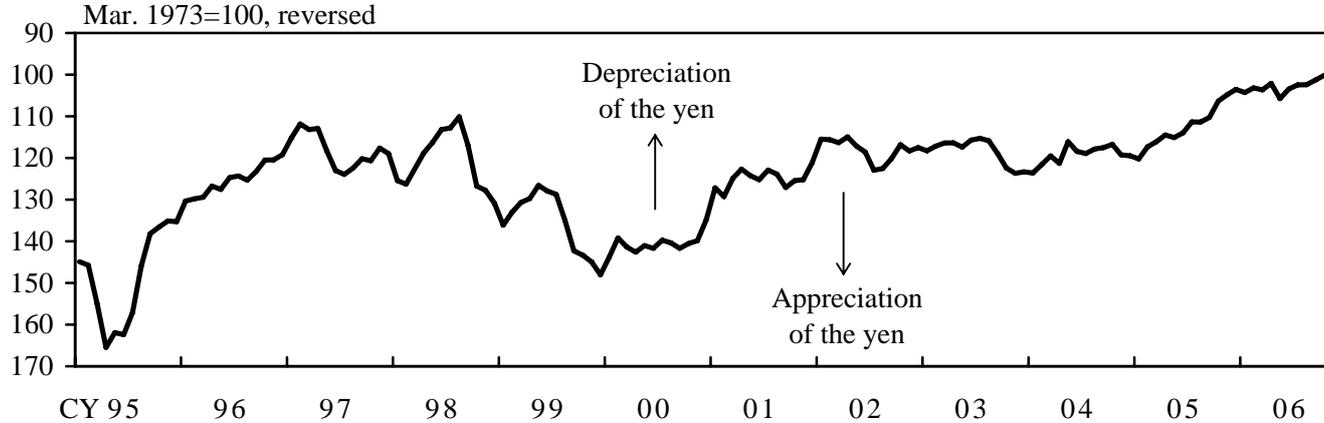
(1) Yen / US\$ and Yen / Euro<sup>1</sup>



(2) Nominal Effective Exchange Rate<sup>1,2</sup>



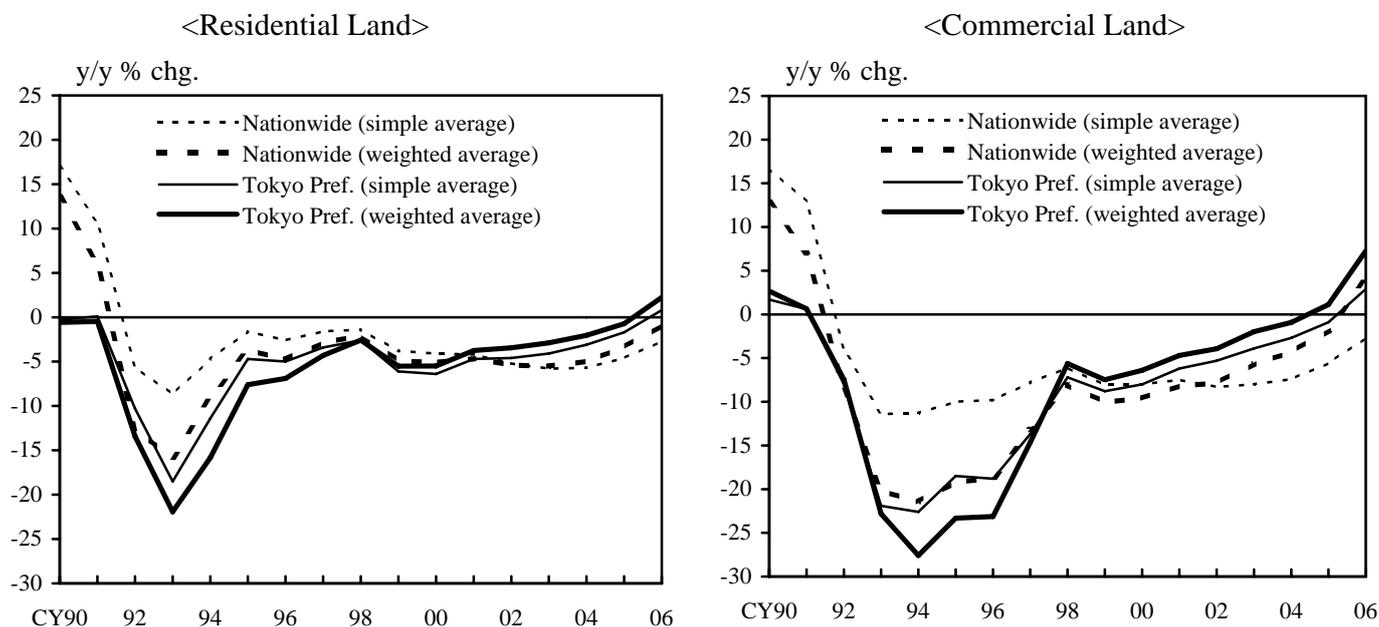
(3) Real Effective Exchange Rate<sup>1,3</sup>



Notes: 1. Monthly average. Figures for October 2006 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.

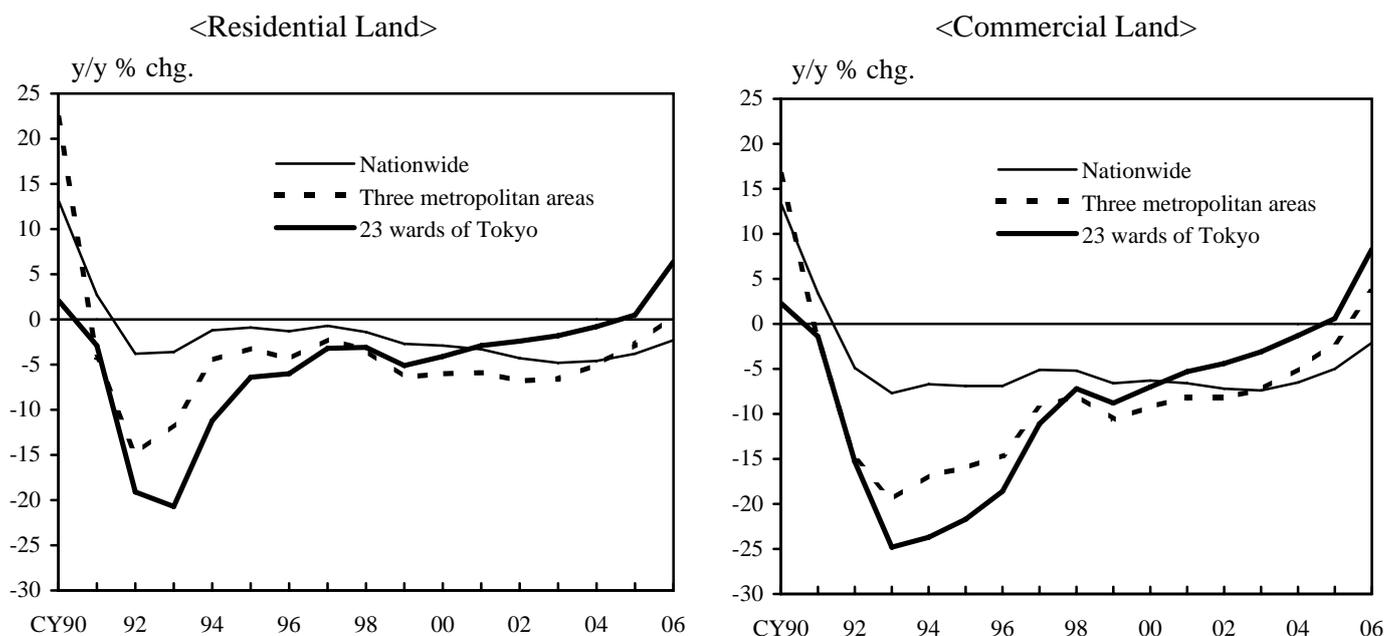
# Land Prices

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



Note: Average land prices released by the Ministry of Land, Infrastructure and Transport are simple averages of the rates of change in land prices per square meter at individual locations surveyed. Weighted averages are calculated by the Bank of Japan, averaging the rates of change in land prices weighted by the level of land prices per square meter at individual locations surveyed in the previous year. The rate of changes in the weighted average is equal to that in the sum of land prices at individual locations surveyed. However, as "Land Price Publication" is a sample survey, the rate of changes in the weighted average is not generally equal to that in the total value of land.

## (2) Prefectural Land Price Survey (As of July 1)



Note: Three metropolitan areas: simple average of 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).

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

## Economic Assessment by Region (Regional Economic Report)

Region	Assessment in October 2006	Revision of assessment from July to October	Assessment in July 2006
Hokkaido	The economy is picking up gradually.	Slightly upward	The pickup in the economy slows.
Tohoku	The economy continues to recover gradually.	Unchanged	The economy is recovering gradually.
Hokuriku	The economy is recovering steadily.	Unchanged	The economy is recovering steadily.
Kanto-Koshinetsu	The economy is expanding gradually.	Slightly upward	The economy continues to recover steadily.
Tokai	The economy is expanding.	Unchanged	The economy is expanding.
Kinki	The economy continues to expand.	Unchanged	The economy continues to expand.
Chugoku	The economy continues to recover as a whole.	Unchanged	The economy continues to recover as a whole.
Shikoku	The economy continues to pick up gradually.	Unchanged	The economy continues to show signs of gradual picking up.
Kyushu-Okinawa	The economy continues to recover.	Unchanged	The economy continues to recover.

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/chiiki0610.htm](http://www.boj.or.jp/en/type/ronbun/chiiki_rep/chiiki0610.htm)

Source: Bank of Japan, "Regional Economic Report (summary) October 2006."