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**Recent Trends in the Japanese Economy:
Impact of Rising International Commodity Prices
on Corporate Input/Output Behavior**

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Recent Trends in the Japanese Economy: Impact of Rising International Commodity Prices on Corporate Input/Output Behavior

Summary

I. The major economies, particularly the U.S. and Asia, continue to recover.

In the U.S., personal consumption is increasing thanks to rising wages as well as substantial tax cuts and the low interest rate policy by the Bush administration. Business investment in information technology is also increasing as corporate profits rise. Employment has improved mainly in services. The prices of intermediate and final goods are now reflecting the rapid rise in raw material prices. Although the Federal Fund rate and long-term interest rates have stayed low, the timing of a rate increase is now attracting attention as employment and prices continue to improve.

The major European economies (Germany, France and the U.K.) are recovering. The German and French economies are continuing to recover gradually led by exports. In Germany, however, slumping personal consumption is raising concern about further economic recovery. Against the backdrop of an historically low unemployment rate, the U.K. economy remains strong led by brisk domestic demand including personal consumption.

Led by booming exports, the recovery looks stronger in the major Asian economies (Korea, Taiwan and Singapore) with the exception of Korea, where consumption continues to stagnate due to curbs on personal lending.

In China, strong growth continues led by fixed asset investment and private consumption, raising concerns about overheating. The rapid rise in raw material prices is aggravating the inflationary trend, as the materials market has tightened due to the expansion of industrial production. Although the government has implemented a series of tight money policies such as raising the deposit reserve requirement ratio, the money stock continues to increase substantially and the inter-bank rate has not kept its high level.

II. The Japanese economy continues to recover gradually, particularly in the corporate sector. Thanks to the global recovery led by the U.S. and Asia, business investment continues to increase as exports and production grow. Looking ahead, the Japanese economy is expected to continue to recover in line with the global recovery; the recovery in the corporate sector will gradually spill over to the household sector through improved income and employment conditions.

On the supply side, production has been increasing since the latter half of last year particularly in electronic devices and transport equipment as the world economy has recovered, led by the U.S. and Asia. Inventories remain low; in early 2003, the inventory cycle moved toward an adjustment phase as shipments slowed, but started to build up again as shipments rose in the latter half of the year. Tertiary industry activity is growing as a whole. Increased employment in large companies has contributed to a slight decline in unemployment, although it remains high. The number of people out of work for one year or more is increasing.

On the demand side, consumption is showing some positive movements with improvements in consumer confidence as income and employment prospects have brightened in some industries. As corporate profits recover, business investment is increasing in manufacturing, led by spending related to digital household electronic appliances. Housing investment remains flat. Public investment has declined almost consistently in both central and local governments due to financial difficulties. Exports continue to grow mainly to China and the rest of Asia, while imports are rising gradually.

Looking at the financial side, the Bank of Japan is maintaining the quantitative easing policy, raising the target for the current account balance in January 2004 to ¥30-35 trillion. Nonetheless, the money stock continues to grow steadily.

III. International commodity prices have been rising, reflecting increased demand for materials in line with the global recovery and rapid growth in China. Chapter III presents an analysis of (1) the effect of rising international commodity prices on domestic prices, (2) the trend of shifting prices as observed in corporate input/output prices and its economic interpretation, and (3) the impact of rising input prices on corporate profits, by classifying corporate production activities into upstream, midstream and downstream sectors. The results are summarized as follows.

- (1) Domestic prices are still showing a slight deflationary trend. Despite the decline in consumer prices, corporate goods price are falling less sharply as the higher yen curbs the rise in import prices and due to a mild recovery in final demand. By type of goods and by industry, the price of final goods continues to decline but those of raw materials and intermediate goods are increasing in a wide range of industries including iron/steel, chemicals and non-ferrous metals. Thus, the impact of rising international commodity prices has spread from the upstream to midstream industries.
- (2) The extent to which the rise in raw material prices has been passed on to the midstream industries, i.e. the materials industries in the manufacturing sector, may be deduced from the movement of corporate input/output prices by observing the rise in output prices in relation to the rise in input prices. Significant rises in input prices have occurred three times since 1990. Price shifting is most remarkable in the present period for iron/steel and paper/pulp, but this is not the case for chemicals and non-ferrous metals, where price shifting is scarcely progressing. In this connection, the rate of price shifting is comparable with the over-capacity/under-capacity index, calculated from the corporate capacity index and capacity utilization index to reflect the size of the supply-demand gap. According to this relationship, price shifting is progressing in under-capacity industries (iron/steel and paper/pulp), but is delayed in over-capacity industries (chemicals and

non-ferrous metals). This relationship can be seen in the movement of the supply and demand curves. In the under-capacity industries (iron/steel and paper/pulp), demand is expanding largely due to increased demand in China (upward movement of the demand curve); capital have consolidated alongside business and industrial restructuring (leftward movement of the supply curve); and raw material prices are rising (upward movement of the supply curve). This has resulted in excess demand (= under-capacity), leading to a substantial increase in prices (high price shifting rate). In over-capacity industries (chemicals and non-ferrous metals), on the other hand, demand is increasing (upward movement of the demand curve) but the pressure on costs due to rising raw material prices (upward movement of the supply curve) is offset by the pressure to increase supply (rightward movement of the supply curve), thus resulting in an oversupply (= over-capacity). This explains the minimal increase in prices (low price shifting rate) in those industries.

- (3) As regards the impact of rising input prices on corporate profits, a 1% increase in input prices for materials industries is estimated to result in a decrease of 7.1% in corporate profits in the materials industries and of 5.1% in the processing and assembly industries through the negative effect of rising input prices and the positive effect of price shifting. Thus, the rise in input prices has a negative impact on corporate profits. Looking ahead, however, the recovery of the world economy will facilitate price shifting, and sales volume is also expected to increase. Taking into account those favorable factors, there is little risk that the rising input prices will substantially damage corporate profits for the current business year.

(As of May 27, 2004)

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I World Economy Led by U.S. and Asia

1. U.S. (1): Business Investment Rising with Personal Consumption (see p. 21 for Figures)

The U.S. economy remains strong. With the contribution of the two key domestic demand items of personal consumption and business investment, real GDP growth in the U.S. (Figure 1-1) was up by 4.4% (primary revision data) from the previous quarter in January-March 2004, the tenth consecutive quarter-on-quarter increase.

Personal consumption (Figure 1-2) has increased thanks to rising wages as well as substantial tax cuts and the low interest rate policy. Consumers have regained confidence due to rising share prices and economic expansion, but concern regarding employment is suppressing personal consumption. Attention is focused on the extent to which the rise in crude oil prices and interest rates will affect consumption.

Following a mild recovery, corporate profits picked up and substantially increased for two consecutive quarters in July-September and October-December 2003 (Figure 1-3). Business investment has been increasing since April-June 2003, mainly for information processing equipment.

2. U.S. (2): Recovery in Production and Employment, Attention Focused on the Timing of Rate Increase (see p. 22 for Figures)

Industrial production started growing in July-September 2003, and has increased for both consumer goods and business equipment (Figure 1-4). In parallel with the increase in production, capacity utilization in the manufacturing sector has increased slightly, although its level remains low.

As regards employment, the long-term decrease in the number of employees, mainly in manufacturing, halted as employment increased in the service sector, recording two consecutive quarters of increase since October-December 2003 (Figure 1-5). Unemployment has declined gradually to the mid-5% range.

In trade, imports have grown strongly reflecting the buoyant domestic economy as com-

pared with other countries, and so the trade deficit has risen. Since the service balance surplus has remained flat, the current account deficit has also increased (Figure 1-6). By trading partner, China surpassed Japan in 2000 and now has the largest trade surplus with the U.S.

Prices for primary commodities including crude oil are rising sharply. The producer price index shows that the prices of raw materials rose by more than 20% from the previous year. The prices of intermediate goods also continue to rise by about 2%, and are starting to affect the prices of final goods. The year-on-year increase in final goods prices has thus been rising, although it is still low. The year-on-year increase in the consumer price index (CPI) has also started to accelerate.

In finance (Figures 1-7 and 1-8), share prices picked up as the Iraq war started and the U.S. economy grew. Recently, however, the movement has been mixed due to negative factors such as the threat of terrorist attacks and positive factors including the recovery of the domestic economy. The Dow Jones Industrial Average has been hovering around 10,000, while the Federal Fund target rate was lowered by 0.25% on June 25, 2003 to 1.00%, the lowest level in 45 years. As employment recovers and upward pressure on prices strengthens, the authorities and market players are now focusing on the timing of raising the rate.

3. Economies of Major European Countries (Germany, France, U.K.): Further Recovery (see p. 23 for Figures)

The economies of major European countries are recovering well, led by exports in Germany and France and by domestic demand in the U.K.

The German economy continues to recover, with real GDP growth positive for three consecutive quarters, rising by an annual rate of 1.0% from the previous quarter in October-December 2003, and by 1.8% in January-March 2004. The recovery is led by exports, which remain strong as the euro has stopped rising. Private consumption is the key concern to the sustainability of the recovery, as it continues its quarter-on-quarter decline due to persistently high unemployment (Figure 1-10 (1)).

The French economy is also gathering strength. The annualized quarter-on-quarter growth of real GDP rose from 2.5% in October-December 2003 to 3.1% in January-March 2004, the highest in two years. Exports remain strong. Private consumption is recovering well, with an annualized quarter-on-quarter growth of 1.1% in October-December 2003 and 2.4% in January-March 2004 although unemployment remains high (Figure 1-10 (2)).

The U.K. economy remains strong. Real GDP grew 3.7% in October-December 2003 and 3.0% in January-March 2004, both on an annualized quarterly basis. Backed by the stable, low unemployment rate, private consumption rose by an annual 2.3% from the previous quarter in October-December 2003, indicating that domestic demand is driving economic growth in the U.K. (Figure 1-10 (3)).

Industrial production is growing in Germany and France on the back of strong exports. In the U.K., however, industrial production is falling as the manufacturing sector shows weakness due to slumping exports (Figure 1-11).

Employment has not improved in Germany and France, staying over 9% (according to the ILO standard), and has become a major issue particularly in Germany. In the U.K., on the other hand, employment has been supporting domestic demand, with the unemployment rate steady at around 4% (Figure 1-12).

Prices in the euro area are relatively stable despite the rise in primary commodity prices as the currency remains strong, staying below the reference value (up 2% from the previous year) of the European Central Bank. In the U.K., however, the Bank of England raised the official interest rate by 0.25% both in February and May 2004, as concerns mounted about possible inflation due to rising housing prices and wages.

4. Economies of Major Asian Countries (Korea, Taiwan and Singapore): Export-led Recovery, Slumping Consumption in Korea (see p. 24 for Figures)

In the major Asian economies (Korea, Taiwan and Singapore), production has recovered since the second half of 2003, driven mainly by external demand. The economic recovery has been

strengthening except in Korea.

In Korea, fixed capital formation improved in October-December 2003, but consumption slumped. Export-led growth has not spread across the economy (Figure 1-13). IT-related exports including semiconductors remain strong. By regions, exports to the U.S. and China have been strong. The positive impact of exports on economic growth increased into the year 2003, thus making the Korean economy more dependent on exports. The growth of fixed capital formation is largely due to investment in construction, while capital spending on machinery and equipment has made a negative contribution. Consumption has been falling since April-June 2003, underlined by the high unemployment rate and the surge in credit-card defaults. As competition intensified, credit card companies issued many cards under loose criteria, leading to an explosion of defaulting debtors during the recession in early 2003 (Figure 1-16). In response, the government introduced a policy to limit credit card issuance and place a ceiling on credit card spending per person, triggering sluggish consumption. However, the number of credit card defaulters is currently still high, which raises concern that it may further adversely affect the consumption trend.

The Taiwanese economy appears to be recovering strongly. In October-December 2003, electronics-related exports including semiconductors boomed as worldwide IT demand recovered. Consumption also contributed to the economic growth as the employment situation improved and unemployment rate fell (Figure 1-13).

Singapore's economy is recovering. Pharmaceuticals, electronic products and petrochemicals were the core industry exports in October-December 2003, and consumption is picking up and making a positive contribution.

Price inflation currently stands at 3.3% in Korea, which is within the target range set by the central bank for 2004 (2.5-3.5% (core)). The deflationary trend in Taiwan was reversed in January-March 2004. In Singapore, the central bank (MAS) has introduced a tight money policy as prices continue to rise, shifting the target for the exchange rate from "neutral" to "acceptance of moderate appreciation of the Singaporean dollar"

(Figure 1-15).

5. China (1): Increased Concern of Overheating – Difficulty of Controlling Fixed Asset Investment (see p. 25 for Figures)

There is growing concern about the overheating of the Chinese economy. In January-March 2004, real GDP grew 9.8%, far exceeding the annual target of 7% published in the National People's Congress in March (Figure 1-17). This overrun on the target growth rate is largely due to overheated fixed asset investment.

Total investment in social fixed assets has been accelerating on an annual basis, rising 26.7% from the previous year in 2003, and even faster by a year-on-year growth of 43.0% in January-March 2004 (Figure 1-18). By industry, fixed asset investment in the January-March period is led by iron/steel and chemicals. Spending related to real estate and infrastructure also accounts for a large share of fixed asset investment. By geographical area, investment is rising inland as well as in the coastal areas (Figure 1-19). Although such investment is increasingly led by local governments, simultaneous implementation of similar investment projects nationwide might lead to oversupply (Figure 1-20).

With brisk personal spending on automobiles and home electronics in particular, private consumption has been accelerating since July-September 2003, when the SARS epidemic subsided (Figure 1-21).

As regards external trade, the strong growth of exports has eased, as the rate of payback in the value added tax refunding scheme, introduced to encourage exports, was reduced in January 2004. On the other hand, the imports of primary products including crude oil and iron/steel sand have been increasing as industrial production expands. As a result, the trade balance turned negative in January-March 2004 (Figure 1-22).

6. China (2): Growing Inflationary Trend and Limitations of Credit Controls (see p. 26 for Figures)

Inflation showed signs of abating toward mid-2003 as the economy slowed temporarily in April-June due to the SARS epidemic. Later in

the year, however, food prices increased as agricultural production stagnated due to bad weather and the reduction in cultivated area. The inflationary trend is strengthening with raw material prices rising in October-December 2003 and a tight market for steel products caused by rising industrial production (Figure 1-23).

The growth of money stock has slowed since September 2003, when the People's Bank of China raised the reserve requirements, but is still high. Capital is flowing in from overseas in anticipation of the yuan rate being raised, while the increase in investment projects led by local governments is putting pressure on the banking sector to lend more actively. Under these circumstances, the People's Bank of China again raised the reserve requirements in April 2004 (Figures 1-24 and 1-25).

Inter-bank rates rose temporarily following the increase in the reserve requirements in September 2003, then fell in early 2004 and remains in the lower 2% range. The tight money policy introduced by the finance authorities has not been effective in keeping up interest rates, apparently because of the rigidity in the Chinese interest rate system¹ (Figure 1-26).

Options for cooling the overheated investment include drastic financial policies such as raising statutory standard rates. Such measures, however, would widen the interest rate gap with the U.S. dollar and encourage the inflow of overseas capital by increasing the pressure to raise the yuan rate. Any intervention by the People's Bank of China to support the dollar would amplify the excess liquidity and fuel the overheated economy by releasing new investment funds. The inadequate design of the financial system, which contains rigid interest rates and inflexible exchange rates, along with the authority of the investment-leading local governments over financial institutions, limits the effectiveness of controls on investment through monetary policy (Figure 1-27).

¹ The deposit and lending rates of financial institutions are in principle the flat statutory standard rates set by the RMB. Interest rates are partially deregulated but still have to stay within the range determined by the RMB.

II Japanese Economy: Gradual Recovery Continues

1. Overview: Recovery Continuing as World Economy Bounces Back (see p. 27 for Figures)

The Japanese economy continues to recover gradually particularly in the corporate sector. As the world economy recovers, led by the U.S. and Asia, business investment is increasing on the back of growing exports and production. Looking ahead, the improvement in the corporate sector, supported by the recovery of the world economy, is expected to gradually spill over to the household sector by ameliorating the income and employment conditions. Thus, the Japanese economy is likely to continue to recover steadily for some time to come.

Since starting to rise in April-June 2002, real GDP has recorded eight consecutive quarters of year-on-year growth to January-March 2004 (Figure 2-1). Looking more closely at the growth rates during this period (referring to seasonally adjusted, quarterly annualized rate for the purpose of this section unless specified otherwise), real GDP growth recovered quickly in the first half of FY2002 backed by a temporary surge in exports and consumption, but then fell in the second half to below 1%, as demand stagnated due to falling share prices and sluggishness in overseas economies caused by tensions over Iraq and the SARS epidemic. In FY2003, however, as the Iraq war ended, the SARS epidemic started to recede in June and July, and share prices rose, business investment picked up, mainly in digital household electronic appliances. The growth rate stayed above 3% for two quarters: 3.6% in April-June and 3.0% in July-September 2003. In the second half of the fiscal year, exports picked up again as the global economic recovery gained strength, led by the U.S. and Asia. Business investment increased further, resulting in a real GDP growth of 6.9% in October-December, the highest figure in the current recovery phase. The uptrend of exports and business investment continued in January-March 2004 in line with the recovery of the world economy, and consumption also remained firm as consumer confidence improved. As a result, the economy showed a healthy growth of 5.6% (first preliminary esti-

mates).

Looking at the trend of each GDP component, consumption shows signs of recovery with improvements in income and employment conditions. Real private consumption recorded two consecutive quarters of decline in the second half of FY2002 because consumer confidence weakened due to growing uncertainties about the future of the economy and the fall in share prices. In FY2004, however, consumption increased for four quarters in a row, as improving income and employment conditions and rising share prices boosted consumer confidence. It is worth monitoring the extent to which the improvement in the corporate sector will spill over to the household sector through income and employment.

Business investment is rising. Real private non-residential investment has increased for seven straight quarters since July-September 2002 due to the recovery in production as corporate profits remain healthy. Since the beginning of FY2003 in particular, the economy has been led by active business investment in the manufacturing sector, particularly in digital household electronic appliances.

Residential investment remains almost flat. Real private residential investment declined mildly from FY2001 but was almost flat in FY2003, as construction starts continued to accelerate for owner-occupied houses even after the last-minute demand to benefit from the current housing loan tax break in July-September 2003.

Public investment has been falling constantly, reflecting the financial difficulties faced by both central and local governments. Real public investment has declined for eight consecutive quarters to April-June 2002 and now accounts for only 5% of GDP (nominal, seasonally adjusted basis). Further declines are expected as structural reforms and financial difficulties are set to continue.

Exports are still rising. Real exports have recovered rapidly to lead the Japanese economy since early 2002 with the progress of IT-related inventory adjustment in Asia and the success of the monetary easing policy in the U.S. Following a respite in rapid growth that started in the second half of 2002, due to the disappearance of the IT-related inventory factor and the slowdown in

the global economy induced by the Iraq war and SARS, real exports rose in July-September 2003 as the world economy recovered, and have since posted a double-digit quarter-on-quarter increase for three straight periods. By region, exports are booming to Asia, especially to China.

Imports are rising gently. As production leveled off, real imports began to slow in the second half of 2002, recording the first decline in six quarters in April-June 2003. Since July-September, however, real imports have increased for three quarters in a row due to the gradual recovery of the domestic economy.

To confirm from the supply side the trend of GDP identified thus far, the following section looks at the trends of key components for the index of all-industry activity: the industrial production index (2000 as base year, 22.4% weighting in 1995), the tertiary industry activity index (1995 as base year, 59.5% weighting in 1995) and the construction activity index (1995 as base year, 8.1% weighting in 1995) (Figure 2-2, seasonally adjusted).

With the progress of inventory adjustment in IT-related products, the industrial production index rose in January-March 2002, and recovered strongly until July-September led by the electronic device industry and the transport equipment industry (particularly standard-sized cars for export and small cars for the domestic market). In October-December, however, the index leveled off in electronic devices as inventories increased slightly. Production stopped rising for the whole industrial and mining sector, due to a slowdown in transport equipment caused by stagnating overseas economies and as the effect of new car sales vanished. Although the situation in the two industries improved in April-June, production weakened in almost all other industries as final demand. It was feared that inventories might enter an adjustment phase while at a low level, as the index fell for the first time in six quarters for the whole sector. However, production turned up in July-September 2003 as the world economy recovered, led by the U.S. and East Asia. The index has since risen for three quarters in a row, with major contributions from the electronic device and transport equipment industries. The Manufacturing Production Forecast Survey projects large production in-

creases in April and May 2004, particularly in general machinery and electronic devices. If such growth materializes, the average industrial production index for April and May will exceed that for January-March by 6.8%, pointing to the consolidation of the current uptrend.

The tertiary industry activity index bottomed out in April-June 2002, rising for the first time in five quarters, followed by a very slight uptrend as a whole. Looking ahead, it is worth monitoring the extent to which the recovery in the corporate sector assists the consumption sector including services and wholesale/retail/restaurants.

The construction activity index fell further in FY2003, after holding steady throughout FY2002. Some related statistics suggest that this is due to further reduction in public works, although private construction activity is bottoming out.

The inventory cycle (Figure 2-3) entered a recovery phase in April-June 2002 and an intentional buildup phase in July-September. Subsequently, production was swiftly adjusted to match shipments (= demand), which continued to show little improvement until July-September 2003. As a result, the inventory cycle approached the 45-degree line while inventories remained below the previous year's level (crossing the 45-degree line from upper left to lower right would be a sign of recession). In October-December 2003, inventories were still lower than in the previous year but shipments rose with the global economic recovery. Thus, the inventory cycle was renewed, receding again from the 45-degree line. The cycle returned to a buildup phase in January-March 2004, with increased shipments and low inventories.

2. Harsh but Partially Improving Employment Situation (see p. 28 for Figures)

The ratio of active job openings to applicants has been rising since the bottom of 0.51 in January-March 2002 (Figure 2-4). This is because the numerator (i.e. the number of job offers) continues to increase while the denominator (i.e. the number of job seekers) declines.

The unemployment rate stayed high from the latter half of 2001 but has declined gently since July-September 2003. One positive factor

has been the reduction in the number of unemployed, from a record high of 3.85 million in April 2003 (raw data). However, this figure must be interpreted cautiously because the labor force has shrunk as many people have left the labor market.² By period of unemployment (Figure 2-5), the share of those unemployed for one year or longer has been increasing, which indicates that long-term unemployment has scarcely improved.

The number of workers increased from a low in April-June 2002, but the improvement slowed after recording a year-on-year increase in April-June 2003, then leveled off (Figure 2-6(1)). By industrial sector,³ the number of workers has been decreasing in manufacturing and construction, and the increase is led by the service sector, particularly in industries related to medical care and welfare. Looking at the different employee classification, the rise in temporary and daily employees⁴ has been slowing, while the number of regular employees rose after a long period of decline (Figure 2-6(2)). By size of corporation, the number of employees in large corporations (employing 500 or more workers), which had declined substantially since the second half of 2001, rose in 2003 and boosted the total number of employees (Figure 2-6(3)). Meanwhile, smaller companies (employing less than 500 workers) are still shedding workers, particularly the smallest corporations employing less than 30 workers.

Overtime hours have been increasing steadily after reaching a low in October-December 2001, thanks to the recovery in corporate production (Figure 2-7). The increase is most significant in the manufacturing sector, where overtime hours surpassed the values reached during the recent two peaks.⁵ The rise in overtime hours

suggests further recovery in employment,⁶ but the actual increase in employment has been rather slow, as mentioned above. It is worth monitoring the extent to which the surge in corporate production affects employment.

3. Little Improvement in Wages, Retail Sales Showing Slight Recovery (see pp. 29-30 for Figures)

The year-on-year change in total cash earnings per person based on the Monthly Labor Survey indicates continued sub-par performance (Figure 2-8). In more detail, overtime pay continues to rise on the previous year with the increase in overtime hours, but regular wages and salaries as well as bonus and special earnings show no improvement, partly due to the downward pressure from the rising share of part-time workers in the workforce.⁷

Figure 2-9 shows the trend of bonuses. Summer bonuses for 2003 were strong, increasing for the first time in three years thanks to improved corporate profits mainly in the manufacturing sector. However, the recovery has not lasted as year-end bonuses fell again. In the midst of wage cutbacks, the spring wage negotiations for this fiscal year will again lead to poor results.

Against this backdrop, real private final consumption according to the GDP estimate has shown little quarter-to-quarter movement but has been rising slightly recently (Figure 2-10). Consumption based on the GDP estimate necessarily diverges from consumption based on the Family Income and Expenditure Survey due to such factors as the rise resulting from the increase in population and number of households as well as the inclusion of imputed rent. Nonetheless, the nominal consumption expenditure of all house-

² Average labor force for FY2003 stands at 66.62 million workers, down 0.15 million from the average for the previous fiscal year.

³ Based on the new industrial classification (revised in March 2002).

⁴ Temporary and daily employees refer to those hired for a period of one year or less, and regular employees refer to executives and those hired for a period of over one year or for an undetermined period.

⁵ April-June 1997 and October-December 2000 (provisional) on a quarterly basis. The amount of overtime hours also peaked in those periods.

⁶ In recent years, it takes longer for an increase in overtime hours to result in an increase in employment. See Ministry of Health, Labour and Welfare, "White Paper on Labour 2003," Section 1-3.

⁷ Part-time workers receive just over 20% of the wages earned by full-time workers, in part due to the difference in hours worked. Therefore, any increase in the share of part-time workers in the workforce exerts downward pressure on wages per person.

Indeed, this downward pressure is considerable. For details, see DBJ, "Bottoming out of wages and regular wages and salaries," *Monthly Economic Notes*, November 2003.

holds in the Family Income and Expenditure Survey has been recovering recently as consumer confidence has improved, as will be mentioned later (Figure 2-11). Particularly in January-March 2004, it recorded a substantial year-on-year increase of 2.0%, due in part to the leap-year effect.⁸ By type of items, the increase is led by expenditures related to car purchases, housing (including reform) and reading/recreation.

Likewise, on the supply side, the retail sales index (Figure 2-12) continued to decline but has recently recovered somewhat. Sales of clothing, food and beverages have been improving, particularly for seasonal clothes, owing to the effect of discount sales and relatively high temperature. Although sales of home appliances continue to decline as a whole, sales of DVD players and TV sets with liquid crystal, plasma and other flat-panel displays have been firm.⁹

Figure 2-13 shows the number of passenger car sales. Sales of small cars, which led the market in FY2002, continue to decline as demand has peaked, whereas sales of standard-sized cars and light vehicles have increased. On balance, car sales have been recovering slowly.

Looking at the year-on-year trend of tourism sales (Figure 2-14), overseas travel plunged in the first half of 2003 due to the Iraq war and the SARS epidemic mainly in Asia, recording a steeper decline in April-June 2003 than in October-December 2001, when the impact of the 9/11 terrorist attacks was felt. Subsequently, however, sales of overseas travel have been recovering gradually since the end of the Iraq war (April 2003) and the SARS epidemic, and have now resumed the level of the previous year. Meanwhile, sales of domestic tours have remained almost flat, and so tourism sales as a whole are recovering.

Finally, individual indicators confirm the recovery of consumer sentiment. The Consumer Confidence Index for the coming six months¹⁰

(Figure 2-15(1)) reflects expectations for economic recovery, and indicates improvement in almost all items including employment and overall livelihood. The Living Insecurity Index (Figure 2-15(2)) is starting to improve although with some fluctuation. The Nikkei Consumption Forecast Index has improved for two consecutive quarters after experiencing anabasis and slump. Thus, consumer sentiment indicators have strengthened, propping up the recovery in consumption recently. However, consumption is not ready to recover fully, as incomes are falling and employment is hardly improving. Indeed, consumption could fall if uncertainties about income and employment conditions persist.

4. Business Investment Increasing, with Good Prospects in Manufacturing (see p. 31 for Figures)

Business investment is increasing. According to the Statistical Survey of Incorporated Enterprises (Figure 2-16), business investment in all industries has increased on the previous year for three consecutive quarters since April-June 2003. The increase is particularly significant in the manufacturing sector, where corporate profits recovered and return on investment improved.

Figure 2-17 shows the year-on-year change in capital stock in the manufacturing sector according to the "Gross Capital Stock of Private Enterprises." Although the investment in new plant and equipment (flow) has increased on the previous year for four consecutive quarters since January-March 2003, the stock amount on a progress basis has fallen since April-June 2003. The growth of capital stock normally turns up following a recovery in business investment, but capital stock is currently continuing to decline even as business investment increases. One reason may be that the active corporate business investment has been accompanied by the consolidation of existing plant and equipment through business restructuring, including the disposal of excess capacity and withdrawal from unprofitable businesses. If this is true, the above-mentioned improvement in return on investment in the manufacturing sector is not only

⁸ Nominal consumption rose 5.2% on the previous year in the month of February. The value stays positive even if the leap-year effect is removed.

⁹ According to data provided by the Nippon Electric Big-Stores Association.

¹⁰ In April 2004, the Cabinet Office consolidated the former Consumer Confidence Survey, Monthly Consumer Confidence Survey and One-person Households Consumer Con-

fidence Survey into the new Consumer Confidence Survey.

due to cyclical factors such as rising corporate profits but also due to the improvement in return on investment in tangible fixed assets made possible by such capacity consolidation.

What impact has the decline in capital stock through capacity consolidation had on the improvement of corporate capacity utilization ratio? Since the capacity utilization ratio index can be defined as the ratio of actual production volume to capacity (actual production/capacity), a change in the capacity utilization ratio may be explained by two factors: change in capacity (denominator) and change in production (numerator). Figure 2-18 breaks down the year-on-year growth of the capacity utilization ratio index into the production factor (year-on-year change in the capacity utilization ratio index – year-on-year change in the capacity index) and the capacity factor (year-on-year change in the capacity index). It is observed that since the latter half of 1998, the capacity factor, through capacity reduction, has constantly contributed to the improvement in the capacity utilization ratio. Since the latter half of 2002, the production factor also contributed to the rise in the capacity utilization ratio through demand expansion. These facts indicate that the current recovery in business investment has occurred due to not only the cyclical movement of demand recovery but also the elimination of excess capacity and capacity reduction through business restructuring. Indeed, the capacity utilization ratio index has been moving in parallel with the diffusion index on production capacity in the manufacturing sector (Figure 2-20), attesting to the close relationship between the improvement in capacity utilization ratio and capacity reduction.

Figure 2-19 shows the movement of machinery orders (domestic private demand excluding ships and electric power), a good leading indicator of business investment. After recording a substantial growth of 18.2% on the previous year in October-December 2003, machinery orders slowed abruptly to 1.8% in the following period of January-March 2004. The Forecast of Machinery Orders for April-June 2004 indicates that machinery orders will decline 2.2% on the previous year, the first fall since October-December 2002. Since machinery orders are

usually supposed to lead business investment by two to three quarters, the forecast means that business investment will weaken temporarily in the second half of FY2004. Nonetheless, for several reasons, business investment is expected to remain firm for some time to come, mainly in the manufacturing sector. Machinery orders from the manufacturing sector are expected to record another double-digit increase on the previous year in April-June 2004. Corporate profits, key fundamentals in determining the prospects of business investment, are slated to increase again in FY2004 for both manufacturing and non-manufacturing.

5. Residential Investment Slumping but Bottoming Out (see p. 32 for Figures)

Housing starts (seasonally adjusted annual rate) have been weak since 2001, staying around the 1.2 million mark (Figure 2-21).

The year-on-year change by component (Figure 2-22) indicates that the construction of owner-occupied houses rose substantially in the first half of FY2003 due to the last-minute demand before the termination of the housing loan tax break,¹¹ followed by a drop in reaction since the latter half of the year. On the other hand, the construction of housing for rent and for sale has been rising since the second half of 2003, due to the acceleration of construction starts in anticipation of rising interest rates, as long-term interest rates started to rise in the summer. As a result, housing starts as a whole have increased on the previous year for two consecutive quarters. Housing starts appear to be bottoming out although they are still low. Even so, housing starts are unlikely to fully recover quickly, due to the very slow pace of improvement in employment and income conditions. Thus, housing starts are expected to remain flat in the months ahead.

The floor area of housing starts shows a similar trend to the units of housing starts, currently higher than in the previous year (Figure

¹¹ Since purchasers had to move into the houses before the end of 2003 to benefit from the tax reduction scheme, the stepped-up demand appeared in the first half of 2003 as increased housing starts. It was decided that the deadline of the scheme would be extended to the end of 2004 (progressive reduction in the tax break expected for 2005 and onward).

2-23).

As can be deduced from the movement of housing starts, real private housing investment (seasonally adjusted annual rate) is at a low level (Figure 2-24), although there has been a slight improvement recently.

In the condominium¹² market, stocks which had accumulated by 2002 both in the Tokyo metropolitan area and Kinki area have been reduced¹³ (Figures 2-25 and 2-26). Although the cutbacks on stocks might suggest an increase in condominium starts in the months ahead, some argue that the decline actually reflects fewer units marketed due to the postponement of sales.¹⁴ Therefore, the decrease in stock may not result in an increase in housing starts for some time to come.

6. Public Investment Falling due to Difficult Financial Situation (see p. 33 for Figures)

Public investment (public fixed capital formation) has declined almost continuously since 1999, due to cuts in expenditures forced by financial difficulties (Figure 2-27). Consequently, public investment now accounts for only 5.1% of GDP (seasonally adjusted nominal values), down four percentage points from its peak.

Value of public works contracted, a leading indicator, fell 13.7% in FY2003, the fifth straight year of decline (Figure 2-28). The public works implemented by the central government continue to decline due to spending cuts in line with the budget reform policy of the Koizumi Cabinet. The decline is all the more significant for Janu-

ary-March 2003 because no major public investment items were included in the supplementary budget. Likewise, the public works implemented by local governments, which account for 70% of public investment, have been curtailed in the face of the dire financial situation.

The reduction of public investment is expected to continue, as the initial budget for FY2004 proposes reductions from the previous year of 3.3% in central government expenditures on public works projects and 8.4% in investment expenses under local finance plans. Public investment will continue to shrink, with the Ministry of Finance already envisaging a further 3% cut on central government expenditures on public works projects in the FY 2005 budget.¹⁵

Although public investment is declining, government final consumption leveled off in 2002 but still accounted for over 17% of GDP, propped up by the increase in medical cost in particular.

Budget revenue has been slumping due to the sluggish economy and income and other tax reductions, resulting in major budget deficits for both central and local governments. Since the deficits have been largely financed by government bond issues and by borrowings in the special account for local allocation tax, outstanding government debts have ballooned. Indeed, the outstanding long-term debts of central and local governments will total ¥719 trillion at the end of FY2004, accounting for some 144% of GDP (Figure 2-29). Although the Koizumi Cabinet had committed to capping new central government bond issues at ¥30 trillion per annum, it has been unable to hold back bond issues, which amounted to ¥35 trillion in FY2002 (after supplementary budget), ¥36 trillion in FY2003 (after supplementary budget) and ¥37 trillion in FY2004 (initial budget).

In comparison with the U.S. and 15 EU member states, it is clear that Japan's public finances are in dire straits, both in terms of stock (outstanding general government debts as a percentage of GDP) and in terms of flow (primary balance, i.e. budgetary balance excluding bond issues, interest payments and bond redemptions) (Figure 2-30). Although the government aims to

¹² For the purpose of this report, the term "condominium" refers to a subdivided housing lot made of reinforced steel frames, ferro-concrete or steel frames.

¹³ The statistics of Building Construction Started include condominiums in housing for sale. Condominium housing starts in the Tokyo metropolitan area (Saitama Prefecture, Chiba Prefecture, Metropolis of Tokyo, and Kanagawa Prefecture) and Kinki area (Shiga Prefecture, Kyoto Prefecture, Osaka Prefecture, Hyogo Prefecture, Nara Prefecture, Wakayama Prefecture) account for 77.8% of the national total (FY2003). The share has been rising in recent years due to increased condominium starts in those areas, particularly in inner-city districts.

¹⁴ The Real Estate Economic Institute calculates the units of stock at the end of the current month as the units of stock at the end of the previous month + the units marketed in the current month - the units sold in the current month. Hence, the units not marketed are not statistically counted as stock.

¹⁵ *Nihon Keizai Shimbun*, April 22, 2004.

reverse the deficit of primary balance by the early 2010s,¹⁶ concerns about the sustainability of public finances have not dissipated.

7. Yen Strengthening in PPP, Euro's Presence Felt (see p. 34 for Figures)

Figure 2-31 shows the trend of real effective exchange rates of major currencies. The Japanese yen has been almost flat since 2002, as the U.S. dollar weakened and the euro strengthened against other currencies. As the purchasing power parity tends to shift in favor of the yen, reflecting the inflation gap between Japan and the U.S., the yen/dollar rate is on the decline (i.e. the yen is rising) due to various factors including geopolitical risk, concern about terrorism and the inflow of stock investment (Figure 2-32).

To control the pressure for yen appreciation, the Japanese monetary authorities in FY2003 made a record-scale market intervention of ¥30 trillion, leading to foreign exchange reserves exceeding \$800 million (U.S. dollar equivalent) as at the end of FY2003 (Figures 2-33 and 2-34).

The composition of currencies used in the Japanese merchandise trade points to a decline in the share of the U.S. dollar for both exports and imports, as the share of trade with Asia increases and the dollar has been replaced with the euro in trade with Europe (Figure 2-35).

The composition of currencies in foreign exchange reserves shows that the U.S. dollar still accounts for over 60%. However, the share of the euro has been rising as it gains importance as an international currency, as well as mounting concerns about the "twin deficits" of the U.S. (Figure 2-36). The Euro's stronger presence corresponds to a gradual move away from the U.S. dollar.

8. Exports and Imports Increasing, Current Surplus Rising (see p. 35 for Figures)

Japanese exports are increasing in line with economic expansion in the U.S. and Asia, and imports are rising as the domestic economy recov-

ers (Figure 2-37). One of the structural factors behind the simultaneous increase in exports and imports is the international division of labor within the Asian region.

Looking at a breakdown of exports by country (Figure 2-38), booming exports to the fast-growing China have been leading the overall growth in the current economic recovery phase since April-June 2002. In contrast, exports to the U.S. continued to decline throughout 2003 as local auto production facilities became operational and plants producing office equipment for the U.S. were transferred to other Asian countries.

Figure 2-39 shows the trend of exports for each type of goods based on the "Analysis of All Industrial Activities" published by the Ministry of Economy, Trade and Industry. The substantial contribution of producer goods in the first half of 2002, at the initial stage of the current recovery phase, has expanded gradually to consumer durables and capital goods. Producer goods have also made a substantial contribution to the growth of imports (Figure 2-39), reflecting the progress in the international division of labor.

The trade surplus is expanding as the difference in the pace of recovery between domestic and overseas markets has led to a difference in growth between exports and imports. The current account surplus is also expanding as the increase in external net assets widened the balance of income surplus while the wars in Afghanistan and Iraq and the SARS epidemic reduced the service deficit by curtailing the number of travelers (Figure 2-40).

The current account surplus has traditionally contributed to the equilibrium of the balance of payments by generating a comparable deficit in the capital account mainly through external investment. Since April-June 2003, however, the balance of the capital account has also been in black, largely due to rising inflows of funds into stock markets from foreign investors. To combat the disruption in the balance of payments, foreign exchange reserves were increased through powerful market intervention.

¹⁶ Paper presented to the Council on Economic and Fiscal Policy, "Structural Reform and Medium-Term Economic and Fiscal Perspectives – FY2003 Revision," (January 16, 2004).

9. Easy Money Policy Remains (see p. 36 for Figures)

In the financial markets, the quantitative monetary easing policy has been in place since March 2001, with a direct guidance target set in terms of current account balance. This has had a substantial impact on short-term interest rates. Indeed, the overnight-unsecured call rate and yields on three-month CDs (bid) have remained at low levels, near 0% and 0.1% respectively (Figure 2-42).

The commitment to continue the quantitative monetary easing policy was announced in October 2003, setting clearer criteria for terminating the policy. After this announcement, yields on 10-year government bonds—a good indicator of long-term interest rates and volatile temporarily last year, remain relatively stable (Figure 2-42).

Further quantitative easing measures were taken in January 2004, raising the target for the Bank of Japan's current account balance to approximately ¥30-35 trillion. As a result, the monetary base has been recording double-digit increases on the previous year (Figure 2-44). Money stock continues to grow only slightly on

the previous year, but is still high as a percentage of nominal GDP.

As a means of monetary control, the monthly amount of long-term government bond buys has stayed around ¥1.2 trillion (Figure 2-43). As regards the government bond repurchasing operation, its duration was extended and cash was newly accepted as eligible collateral. In addition, the principal terms and conditions for the outright purchases of asset backed securities, which started in 2003, were amended in January 2004 to expand the eligibility of underlying assets.

The attitude of private banks toward lending to SMEs is still strict but has softened somewhat, as the diffusion index on the lending attitude of financial institutions continues to improve (Figure 2-46). The decline in lending by private banks has become less steep. The trend is clearer after adjustments for special factors (e.g. fluctuation due to the mobilization or amortization of credited loans) (Figure 2-45). Contracted interest rates on new bank loans are stable at a low level. CP/corporate bond issues are in good condition, with spreads stable at a low level. Outstanding issues also continue to exceed the level of the previous year.

III Impact of Rising International Commodity Prices on Corporate Input/Output Behavior

1. Input/Output Behavior by Industrial Sector and Price Transmission Process (see p. 37 for Figures)

International commodity prices have been rising, spurred by increased demand for materials largely due to the recovery of the world economy and the rapid growth in China. While the Japanese economy still needs more time to escape from deflation, the rise in corporate material input costs will negatively affect corporate profits through the deterioration of the terms of trade (output prices/input prices). Thus, rising commodity prices might undermine the Japanese economy, which continues to recover gradually led by the corporate sector.

The framework of analysis in this chapter is shown in Figure 3-1. First, industrial activities are classified into the three sectors of upstream, midstream and downstream to clarify the impact of rising international commodity prices on industrial activities. The upstream sector includes suppliers to the midstream sectors of raw materials such as iron ore, coal and limestone (e.g. resource-developing countries, regions and corporations). The midstream sector comprises industries that have production facilities to process the raw material inputs from the upstream sector and supply intermediate products to the downstream sector (e.g. materials industries in the manufacturing sector). The downstream sector is composed of industries that supply final products in response to final demand in the world and domestic markets (e.g. processing and assembly industries in the manufacturing sector). The output prices and output volume in each of the three sectors are considered to be determined by the shape of the demand curve in the downstream sector that reflects final demand, and that of the supply curve in each sector. However, the impact of rising international commodity prices on corporate output prices and output volume tends to be more apparent in the midstream sector than in the downstream sector for the following reasons.

- (1) In the downstream sector, natural resources have a minimal weight in input cost. Hence, the pressure on costs from such factors as rising international commodity prices (upward shift of the supply curve) is smaller than in the midstream sector.
- (2) Input/output prices in the downstream sector are on a long-term downtrend (independent of the rising international commodity prices), largely reflecting technological and process innovations.

The following sections examine the impact of rising international commodity prices on domestic prices in the upstream, midstream and downstream sectors (import prices, corporate goods price, consumer prices, corporate service prices) and on corporate input/output prices, as well as the impact of the worsening terms of trade on corporate profits.

2. Uptrend Continues in International Commodity Markets (see p. 38 for Figures)

This section outlines the trend of international commodity prices.

The price of crude oil (Figure 3-2) rose in the latter half of 2002 as tensions mounted in the Middle East. Although the price stabilized when the Iraq war ended, it rose again and reached \$40/barrel in May 2004, the highest level since 1990 when the Gulf War broke out. The rise in crude oil price is attributable to several factors including:

- (1) Increased demand due to the global economic recovery;
- (2) Mounting uncertainties about supply stability due to the surge in terrorist attacks particularly in the Middle East even after the end of the Iraq war, and the delay in rebuilding Iraq;
- (3) Production adjustment by OPEC countries; and
- (4) Dwindling oil stocks in the U.S.

Looking at the trend of international commodity markets (Figure 2-3)¹⁷, commodity prices

¹⁷ IMF's international commodity index is used in this section. The IMF index does not cover precious metals such as gold and silver. Other representative commodity market indicators include the futures price index of the CRB (Commodity Research Bureau), which typically covers

show a similar trend to crude oil price, continuing to rise even after the end of the Iraq war. The year-on-year change (Figure 3-4) indicates that commodity prices have risen for seven consecutive quarters since July-September 2002, and even now are rising by about 10% on the previous year. By product, the largest contribution comes from energy-related products including crude oil.¹⁸ Even excluding energy-related products (Figure 3-5), however, there have been significant price increases for many commodities including metals (aluminum, nickel, copper, etc.), foods (soybeans, maize, etc.) and other agricultural products (rubber, etc.). Thus, the current hike in market prices is not limited to crude oil but also applies to international commodities as a whole.

The steep rise in international commodity prices has two dimensions. First, it has a financial dimension. Monetary easing on an international scale has increased liquidity, while the current trend of dollar depreciation¹⁹ has reduced the attraction of dollar-denominated assets. Thus, speculative funds are flowing into commodity markets. The second dimension relates to the real economy. The recovery in the world economy and the rapid development of the Chinese economy have increased the demand for primary commodities, thus tightening the markets.

The steep rise in commodity prices seems to be a result of the interaction between those financial and physical dimensions.

3. China's Rising Share in World Imports (see p. 39 for Figures)

The share of China in world steel imports reached 8.9% in 2002, rapidly closing the gap with the first-ranked U.S. On a monthly basis, steel imports have been increasing substantially since 2003. China's steel production and steel imports are supported by active demand for construction in anticipation of future growth. The

many cereal-related products. No significant difference is observed between various commodity indices as regards the overall trend.

¹⁸ Crude oil is given a weighting of approximately 40% in the IMF index.

¹⁹ See Figure 2-31 in Chapter II.

price of scrap iron (price for Asia), which is used for electric furnace steel production, has been rising in line with growing Chinese imports.

China's share in plastic (a primary commodity) imports has recorded a similar increase. In 2002, the share was about 2.5 times as large as in 1990. Plastic imports have been increasing on a monthly basis on the back of active domestic demand for infrastructure improvement including sewage pipes. The price of polystyrene resin²⁰ in East Asia declined in the first half of 2003 but has recovered since the second half of the year. This reflects increased demand in China and rising production cost (steep rise in the price of naphtha, which is required for resin production, as well as the price of crude oil, which is required for naphtha production).

China's soybean imports increased substantially in 2003, for two main reasons:

- (1) Production in China has declined due to the reduction in planted area as farmland has been converted to industrial use, as well as to the impact of natural disasters including the drought in the previous year.
- (2) More soybeans are being used as fodder due to the improvement of dietary standard that accompanies economic growth.

As supply capacity declines due to bad weather in major producer countries including the U.S. and Brazil, the soybean price (Chicago market price) has been surging since the latter half of 2003 due mainly to increased demand in China and the inflow of speculative funds.

4. Strong Yen Suppressing Import Prices (see p. 40 for Figures)

Figure 3-7 shows the trend of price indices in Japan. Although the corporate price index and the consumer price index (general excluding fresh foods) are both recovering, the movement is still weak compared with the corresponding U.S. price indices (Figure 3-8). However, the import price index is rising on a contract currency basis.

²⁰ Although polyvinyl chloride resin is used for sewage pipes, polyethylene price is used here due to data limitations.

The trend of the import price index on a contract currency basis²¹ (Figure 3-9(1)) indicates an increase on the previous year for each of the six quarters since October-December 2002. A comparison with Figure 3-3 reveals that the contract currency-based import price index has been moving almost in parallel with the international commodity price index. Thus, rising international commodity prices underlie the recent rise in the index.

By product, there has been a steep rise for “petroleum/coal/natural gas,” reflecting the high crude oil price, as well as positive contributions from “metals/related products” (including iron/steel, copper ore and nickel) and “foodstuffs/feedstuffs” (including soybeans and maize). Thus, the data represent a faithful projection of the trend of each commodity’s international market price (Figures 3-4 and 3-5). Incidentally, although the price of “machinery and equipment” including PCs and other IT-related products has continued to decline on a year-on-year basis, the decline has been slowing.

The yen-based import price index (Figure 3-9(2)) is falling, recording back-to-back declines on the previous year in the last two quarters and in stark contrast to the contract currency-based index. The yen appreciation is behind this movement. Thus, rising prices on a contract currency basis have not yet impacted yen-based prices.

Looking at the year-on-year change by component, “metals/related products” and “foodstuffs/feedstuffs” continue to make positive contributions even on yen-based prices, but the contribution of “petroleum/coal/natural gas” has been negative for two consecutive quarters on a yen basis, while it remains positive on a contract currency basis.²² Also, the decline in the price of

“machinery and equipment” has become steeper, exerting downward pressure on yen-based prices. Thus, the rise in the import price index on a contract currency basis has not resulted in an increase in yen-based prices, which are currently falling. In fact, yen-based prices have been stable due to the impact of the yen appreciation, which protects the import price index against the upward pressure of rising international commodity prices.

5. Slowed Decline in Corporate Goods Price, Consumer Prices in Mild Deflation (see p. 41 for Figures)

The decline in corporate goods price (domestic demand goods²³) has been slowing as a whole. The price of raw materials (import prices) rose from October-December 2002 to July-September 2003 due to the increase in crude oil price. Also, the prices of intermediate materials (domestic products) rose in July-September 2003. By industry, minerals (crude petroleum, etc.) in raw materials industries, energy-related industries (petroleum/coal products in particular), chemicals and iron/steel are all making positive contributions. Currently, the positive contributions of iron/steel, food and non-ferrous metals in particular are growing. The contribution of minerals has been negative since October-December 2003, largely for the following reasons²⁴ (Figure 3-10):

- (1) The rise in crude petroleum price has been offset by the yen appreciation.
- (2) The price of coal has been declining, particularly for general coal, which is procured under long-term contracts.

²¹ Looking at the composition of contract currencies, the U.S. dollar has the largest share with 70.5%, followed by the yen with 23.9% and then by the euro with 3.5% (as of December 2003).

²² Difference in the composition of contract currencies may be one of the reasons why the contribution of “metals/related products” and “foodstuffs/feedstuffs” stays positive while that of “petroleum/coal/natural gas” has turned negative. Indeed, the share of the yen in total contracts stands at 14.7% for “metals/related products” and 17.0% for “foodstuffs/feedstuffs,” but 0.0% for “petroleum/coal/natural gas” (data as of December 2003), which means that all transactions in those products are denominated in a foreign currency

(U.S. dollar). Thus, the impact of foreign exchange rate fluctuations is greater on the price of “oil/coal/natural gas,” when expressed in yen.

²³ Domestic demand goods refer to the weighted average of domestic products and imports.

²⁴ Judged from the Bank of Japan’s import price statistics, which are used for calculating the prices of domestic demand goods. The prices of domestic demand goods can be broken down to the level of the types of goods and industries. Data on individual products are not published.

As regards consumer prices (excluding fresh foods), public service prices turned up in FY2003, largely due to the increase in the medical copayment rate. Agricultural and livestock products also made positive contributions as the price of rice increased due to the unusually cool summer. Aside from such extraordinary factors, consumer prices are tending to fall slightly, making a negative contribution to overall prices (Figure 3-11).

As for corporate service prices, transportation (an overseas factor) has been making a positive contribution since October-December 2002. However, they continue to decline by about 1% on the previous year on a domestic factor basis, particularly in leasing/rental and real estate (Figure 3-12).

The above observations may be summarized as follows. Corporate goods price (domestic demand goods) show signs of bottoming out as:

- (1) The prices of raw materials and intermediate materials are rising;
- (2) The prices of final goods are declining further; and
- (3) Corporate goods price (domestic demand goods) rose in April.

However, consumer prices are still following a mild deflationary trend, continuing to decline when the factors related to agricultural and livestock products are excluded.²⁵

6. Upward Trends in Input/Output Prices Uneven in Materials Sub-sector (see p. 42 for Figures)

Based on the Bank of Japan's "Input-Output Price Index of Manufacturing Industry by Sector," this section examines the rise in raw material and intermediate material prices, confirmed by the trend of corporate prices presented in the previous chapter, from the perspective of production activities in the manufacturing sector. For this purpose, the manufacturing sector is classified into two sub-sectors: the materials in-

dustries²⁶ and the processing and assembly industries.²⁷ Focusing on the materials sub-sector, this section examines:

- (1) The trend of input prices (prices of goods used for production) and output prices (prices of products), and
- (2) The extent to which rising input prices have been passed on to output prices since the 1990s.

The input prices of the materials industries rose as a whole in July-September 2002, and have continued to do so. By industry, chemicals (including petrochemicals), iron/steel, pulp/paper/wooden products and textiles have made positive contributions. Currently, the positive contribution of chemicals is shrinking but that of iron/steel and non-ferrous metals is increasing (Figure 3-13). Looking at the input prices of the iron/steel industry in detail, scrap iron has made a significant positive contribution, showing the impact of rising international commodity prices due to increased demand in China.

The output prices for the materials sub-sector turned up as a whole in October-December 2002, and have continued to rise. By industry, the negative contribution of textiles is more than offset by the positive contribution of chemicals and iron/steel. Currently, the positive contribution of chemicals is shrinking, while those of iron/steel, non-ferrous metals and pulp/paper/wooden products remain substantial (Figure 3-14).

Thus, the input prices and output prices of the materials sub-sector increased as a whole with some time lag, but both have been moving upward recently. Individual industries are considered to have different impacts on the rise in the input and output prices in the materials sub-sector as a whole, with different degrees of price shifting.

²⁵ According to the Bank of Japan's "Outlook for Economic Activities and Prices (April 2004)," the majority of the Policy Board members forecast a decline of 0.1-0.2% (median: 0.2%) in consumer prices (excluding fresh foods) for FY2004.

²⁶ The materials sub-sector includes textiles, pulp/paper/wood products, chemicals, ceramics/stone/clay, iron/steel and non-ferrous metals.

²⁷ The processing and assembly sub-sector includes food, general machinery, electrical machinery, precision machinery and transportation equipment.

To verify this, the extent to which the rise in input prices was shifted from each materials industry (price shifting rate)²⁸ was calculated for three cases since the 1990 (Period I, Period II and Period III).²⁹ The following results were obtained.

- (1) The price shifting rate has been declining in chemicals. Also, the rate is lower for Period III than for Period I in non-ferrous metals.
- (2) The price shifting rate is highest for Period III in iron/steel and paper/pulp.

In summary, the progress of price shifting differs in individual industries. In the current period, price shifting progressed in iron/steel and paper/pulp, but declined in chemicals and non-ferrous metals (Figure 3-15).

7. Shifting Prices in Under-capacity Industries (see p. 43 for Figures)

The different price shifting rates among the materials industries may be explained by the difference in (1) production capacity and (2) the state of competition. Since corporate production capacity determines the amount of supply, any under-capacity in relation to actual demand would raise prices through excess demand, thus increasing the price shifting rate. Conversely, any over-capacity in relation to actual demand would reduce prices through oversupply, thus curbing the price shifting rate. Any difference in the state of competition for individual corporations would impact on corporate supply by reflecting differences in the progress of business restructuring and industrial reorganization or in the degree of pressure for increasing supply in individual industries. This would in turn influence the price shifting rate through differences in equilibrium

²⁸ The price shifting rate is calculated as follows:
Price shifting rate (%) = rise in output price index from bottom to peak (%) / rise in input price index from bottom to peak (%) × 100.

²⁹ The timing of the three periods differs in individual industries. For information, the bottom and peak in each industry concerning input prices are as follows.

Industry	Bottom	Peak	Industry	Bottom	Peak
Paper/pulp	I	Q2/1996⇒Q2/1997	Iron/steel	I	Q3/1996⇒Q3/1997
	II	Q4/1999⇒Q1/2001		II	Q4/1999⇒Q3/2000
	III	Q4/2001⇒Q1/2004		III	Q4/2001⇒Q1/2004
Chemicals	I	Q1/1996⇒Q2/1997	Non-ferrous metals	I	Q3/1996⇒Q3/1997
	II	Q1/1999⇒Q2/2001		II	Q1/1999⇒Q1/2001
	III	Q1/2002⇒Q1/2004		III	Q4/2001⇒Q1/2004

price.

In order to identify the relationship between corporate production capacity and supply-demand gap, it is useful to observe the trend of the gap between potential corporate production capacity and the capacity actually utilized, which is indexed after adjustment with the diffusion index on production capacity (hereinafter referred to as the over-capacity/under-capacity index). Here, the over-capacity/under-capacity index is assumed to reflect the gap (supply-demand gap) between corporate production capacity (supply) and the amount of production that corresponds to actual demand. Thus, a positive value of the index indicates over-capacity (= oversupply), whereas a negative value indicates under-capacity (= excess demand).

Figure 3-16 shows the trend of the over-capacity/under-capacity index by industry. Oversupply persists for the whole materials sub-sector, as the index has remained positive since October-December 1991, directly after the bubble burst. However, individual industries have different levels of over-capacity or under-capacity. The index is still positive in chemicals and non-ferrous metals, but has turned negative in iron/steel and paper/pulp.

In order to identify the relationship between the price shifting rate and the over-capacity/under-capacity index, a comparison was made between the two indicators for the present case (Period III) and past two cases in the 1990s (Period I and Period II) of rising input prices, as regards the following four materials industries: iron/steel, paper/pulp, chemicals and non-ferrous metals. In iron/steel and paper/pulp, the price shifting rate rose, as over-capacity turned into under-capacity between Period I and Period III, or under-capacity continued throughout the three periods. In chemicals and non-ferrous metals, on the other hand, the price shifting rate declined, as over-capacity increased or under-capacity turned into over-capacity. In short, price shifting has progressed in the under-capacity industries (iron/steel and paper/pulp), which is not the case for the over-capacity industries (chemicals and non-ferrous metals).

Based on this result, the relationship between output prices and output volume in each of

the over-capacity (iron/steel and paper/pulp) and under-capacity (chemicals and non-ferrous metals) industries may be drawn as shown in Figure 3-18 in terms of supply and demand curves. In iron/steel and paper/pulp, demand increased mainly in China (upward movement of the demand curve from D to D'), production facilities were consolidated with the progress of business restructuring and industrial restructuring (leftward movement of the supply curve from S to S'), and raw material prices went up (upward movement of the supply curve from S' to S''). The resultant excess demand led to a substantial increase in prices. In chemicals and non-ferrous metals, on the other hand, demand increased (upward movement of the demand curve from D to D'), but the pressure on costs from rising raw material prices (upward movement of the supply curve from S to S') was offset by the pressure for supply increase (leftward movement of the supply curve from S' to S''). The resultant oversupply has curtailed the impact of rising input prices.

8. Downtrends of Input/Output Prices in Processing & Assembly Sub-sector (see p. 44 for Figures)

This section looks at the trend of input/output prices in the processing and assembly industries.

The decline in input prices in the processing and assembly sub-sector as a whole has slowed and is currently being reversed (Figure 3-19). By industry, food has made positive contributions largely due to the increase in the price of rice, which is attributable to the poor harvest last year caused by the unusually cool summer. The negative contribution of electrical machinery is shrinking, which may be explained by the slower decline in input prices in electronics/communication equipment and the positive contribution of iron/steel and non-ferrous metals.

Output prices have constantly declined since the latter half of the 1990s in the processing and assembly sub-sector. By industry, the positive contribution of food has been more than offset by the negative contribution of machinery industries in general (Figure 3-20).

Thus, the impact of rising input/output prices in the materials sub-sector shows up as the

positive contribution of iron/steel and non-ferrous metals. However, there are still negative contributions from electronics/communication equipment for electrical machinery, and from auto parts for transportation equipment. Setting aside the rise in food prices due to extraordinary factors, input prices are tending to decline in the processing and assembly industries. Output prices in the sub-sector are falling in the long term, which may be attributed to competition with imports and technological innovations.

The change in corporate profits (current profits) may be explained by four factors: (1) terms of trade (output prices/input prices), (2) sales prices, (3) sales volume, and (4) fixed cost.³⁰ The following section outlines the trend of the four factors in the materials and processing and assembly sub-sectors.³¹

In the materials sub-sector (Figure 3-21), the year-on-year growth of current profits has been decreasing, finally turning negative for the first time in six periods in the fourth quarter of 2003. By factor, fixed cost continues to make positive contribution to profits as restructuring proceeds, and sales prices have also contributed positively.

In contrast, the terms of trade and sales

³⁰ Attribution to individual factors was made in the following manner according to the Cabinet Office, "Annual Report on Japanese Economy and Public Finance (2001-2002)," Section 1-2.

$$\pi = P_o O - P_i I - F$$

$$\left(O = \frac{S}{P_o} \quad I = \frac{V}{P_i} \quad V = S - \pi - F \right)$$

(π : current profits, P_o : output prices, O : output, P_i : input prices, I : input, F : fixed cost (labor cost + financial cost + depreciation expenses, S : sales, V : variable cost)

Hence, the following relationship is obtained.

$$\Delta\pi = \frac{I(\Delta P_o - \Delta P_i)}{(1)} + \frac{\Delta P_o(O - I)}{(2)} + \frac{\Delta O(P_o - P_i) + P_i(\Delta O - \Delta I)}{(3)}$$

$$\frac{-\Delta F}{(4)} - \frac{\Delta P_o \Delta O + \Delta P_i \Delta I}{(5)}$$

((1): terms of trade factor, (2): sales price factor, (3): sales volume factor, (4): fixed cost factor, (5): confounding term)

³¹ Materials: textiles, pulp/paper/wood products, chemicals, ceramics/stone/clay, iron/steel, non-ferrous metals.

Processing and assembly: food/beverages, general machinery, electrical machinery, precision machinery and transport equipment.

Industrial classification differs between statistics. For the purpose of the analysis, relevant data were collated and aggregated into the said industrial categories.

volume have both made negative contributions. The negative contribution of the former since July-September 2002 is shrinking in the current fiscal year, while the positive contribution of the latter from July-September 2002 was reversed in April-June 2003. By industry,³² the decline in sales volume is largely attributable to falling sales in chemicals. Thus, the current downward pressure on corporate profits is the result of the decline in sales volume.

Related to prices, attention should be paid to sales prices and the terms of trade. As described in Section 6 of this chapter, input prices have been rising in the materials industries since July-September 2002, when the terms of trade also turned down. However, the negative contribution of the terms of trade bottomed out in January-March 2003, because the rise in input prices is currently passed on to sales prices. The improvement is particularly significant in the chemical and paper/pulp industries. As a result of such price shifting, sales prices contribute positively to corporate profits. It is true that the situation differs between industries as mentioned in Section 6, but price shifting has been realized more or less in the materials sub-sector as a whole. The situation becomes clearer when compared with the processing and assembly industries.

In the processing and assembly sub-sector (Figure 3-22), the year-on-year growth of corporate profits has also been slowing. By factor, sales volume has made a substantial positive contribution to profits since July-September 2002. The increase in sales volume is observed in all industries of the processing and assembly sub-sector.³³

On the other hand, there has been a negative contribution from the terms of trade and sales prices, which means that the price-related factors are exerting downward pressure on profits in the processing and assembly industries. The negative

contribution of the terms of trade was further amplified in the fourth quarter of 2003, reflecting the worsening terms of trade in electrical machinery and general machinery. As can be seen in Figure 3-19, input prices in the processing and assembly sub-sector, unlike in the materials industries, continued to decline until very recently. The worsening terms of trade should therefore indicate that output prices (i.e. sales prices) decline faster than input prices, and indeed, this hypothesis is supported by the fact that sales prices have constantly made a negative contribution to profits in the processing and assembly industries and still show no sign of improvement. This is the case for the electrical machinery industry in particular.

Thus, the worsening terms of trade are adversely affecting profits in the processing and assembly sub-sector, as well as in the materials industries. Unlike in the materials sub-sector, however, the price situation in the processing and assembly industries does not show any sign of improvement: the processing and assembly industries do not sufficiently pass on price increases as product prices are falling faster than input prices.

9. Impact of Worsening Terms of Trade on Corporate Profits (Estimate) (see p. 45 for Figures)

Finally, this section estimates the impact on corporate profits of the increase in input prices resulting from rising international commodity prices.

Rising international commodity prices affect corporate profits by increasing corporate input prices in the following manner. First, the rise in international commodity prices raises input prices for the materials industries through the increase in raw material cost, thus reducing corporate profits in the sub-sector (input price effect). At the same time, the rise in input prices in the materials sub-sector makes a positive contribution to corporate profits in the sub-sector by raising output prices to pass the input price increase on to the processing and assembly industries (output price effect). In the processing and assembly sub-sector, on the other hand, the increase in output prices in the materials industries

³² The chemical industry has the largest share in the total sales of the materials sub-sector (in 2003) with 39.0%, followed by iron/steel with 15.3% and pulp/paper/wood products with 13.7%.

³³ Electrical machinery and transport equipment has the largest share in the total sales of the processing and assembly sub-sector (in 2003) with 34.0% and 27.4% respectively, followed by food/beverages with 20.5% and general machinery with 13.2%.

raises input costs, thus adversely affecting corporate profits in the sub-sector (input price effect). At the same time, the rise in input prices for the processing and assembly sub-sector makes a positive contribution to corporate profits in the sub-sector by raising output prices to final products (output price effect). Thus, in both of the sub-sectors, rising input prices influence corporate profits both negatively (input price effect) and positively through price shifting to output (output price effect). When estimating the impact of rising input prices on corporate profits, it is necessary to consider the net impact, offsetting the two effects against each other.

On this basis, Figure 3-23 presents an estimate of the impact on corporate profits of a 1% increase in input prices for the materials industries. The estimate assumes that the price shifting rate in the materials sub-sector is equal to the actual figure at the present stage of input price increase (46.8%) and that the price shifting rate in the processing and assembly sub-sector is zero, taking into account the traditional trend of input/output prices in the sub-sector. The result

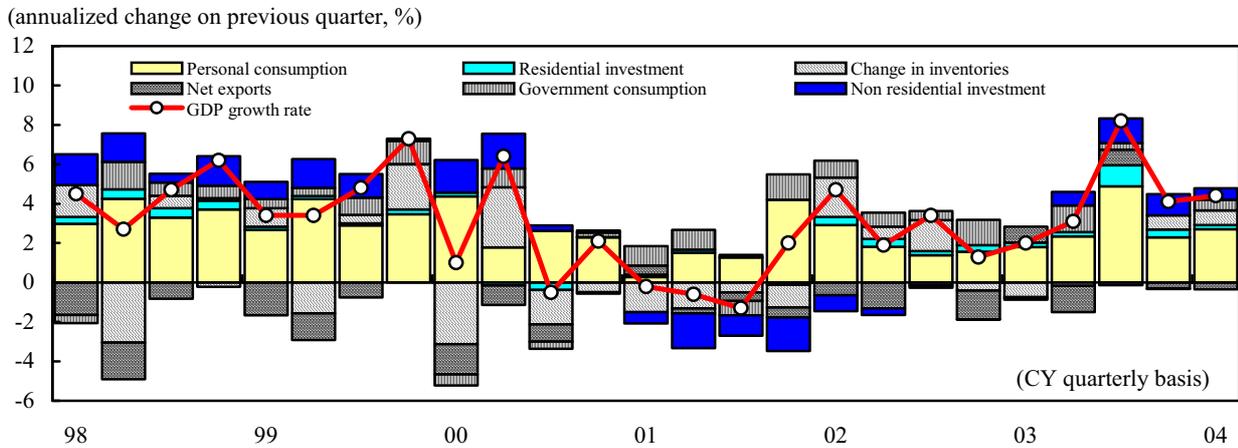
indicates that a 1% rise in input prices for the materials sub-sector would reduce corporate profits by 18.6% through the input price effect, and increase them by 11.5% through the output price effect, resulting in a net negative impact of 7.1%. As regards the processing and assembly sub-sector, corporate profits would be reduced by 5.1% through the input price effect, and raised 0% through the output price effect (the price shifting rate assumed as zero), resulting in a net negative impact of 5.1%.

Thus, it should be noted that, although rising international commodity prices have a negative impact on corporate profits as we have seen above, actual corporate profits are not determined solely by input prices, but through the interaction of various factors such as output prices, output volume and cutbacks on fixed cost. Therefore, the negative impact of rising input prices is unlikely to exert a significant influence on actual corporate profits, taking account of positive factors such as the expected rise in the price shifting rate and in sales volume as the world economy recovers.

I. World Economy Led by U.S. and Asia

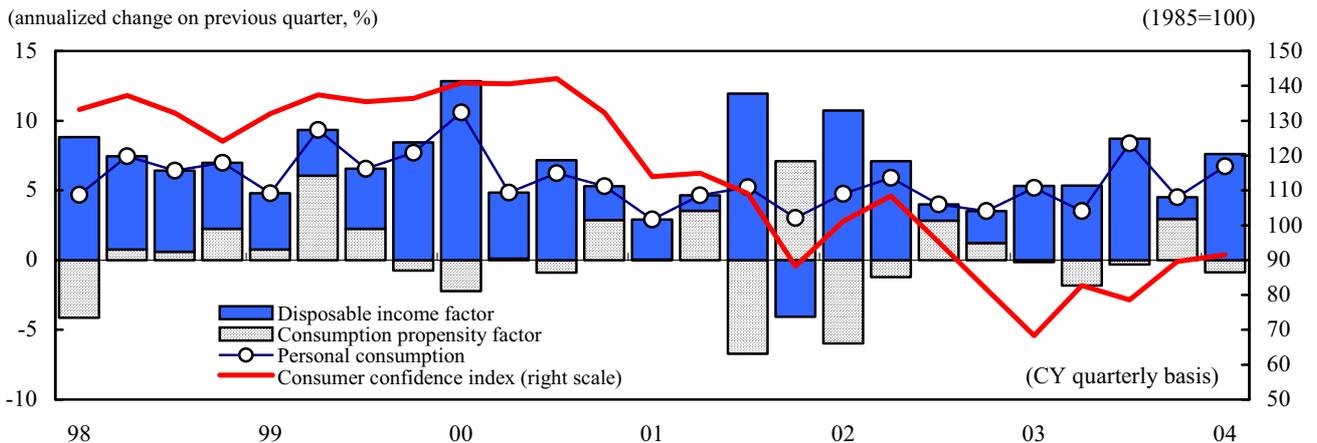
U.S. (1): Business Investment Rising with Personal Consumption

Figure 1-1. Trends in Real GDP



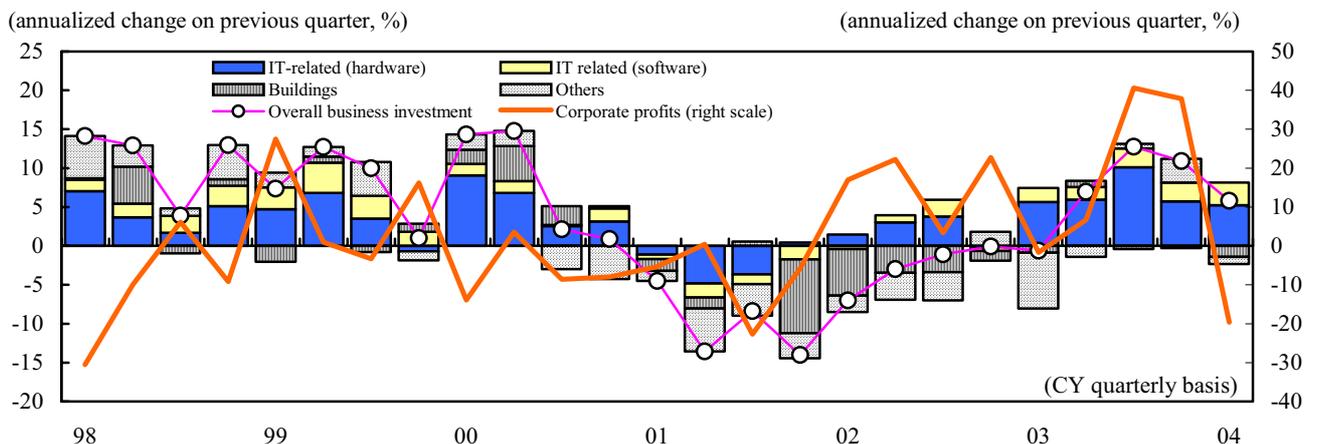
Source: U.S. Department of Commerce, "National Income and Product Account."

Figure 1-2. Personal Consumption Trends



Source: U.S. Department of Commerce, "Personal Income and Outlays."

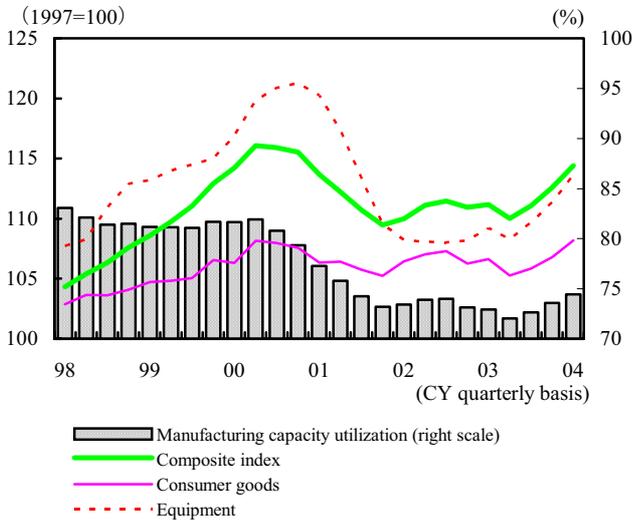
Figure 1-3. Trends in Real Business Investment and Corporate Profits



Source: U.S. Department of Commerce, "National Income and Product Account."

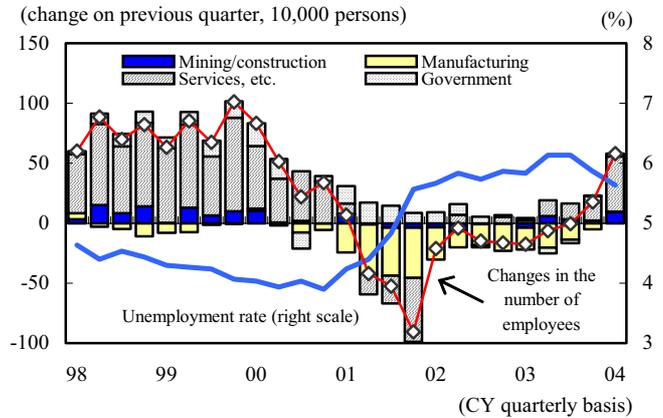
U.S. (2): Recovery in Production and Employment, Attention Focused on the Timing of Rate Increase

Figure 1-4. Industrial Production Index and Capacity Utilization in Manufacturing



Source: FRB, "Industrial Production and Capacity Utilization."

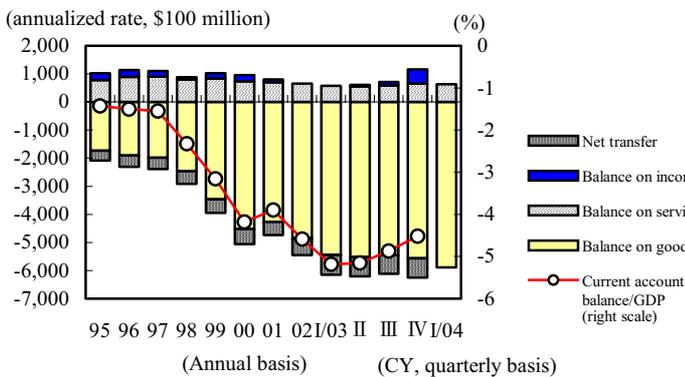
Figure 1-5. Change in Number of Employees and Unemployment Rate



Note: The number of employees represents monthly average for the non-agricultural sector.

Source: U.S. Department of Labor, "Employment Situation."

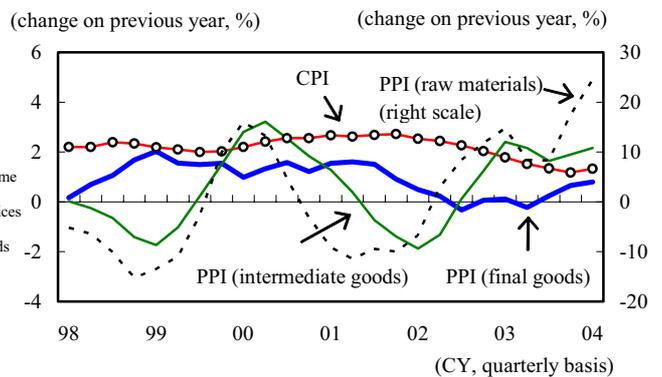
Figure 1-6. Current Account Balance



Note: Annual data to 2002. Annualized quarterly data since 2003.

Sources: U.S. Department of Commerce, "Balance of Payment" and "US International Trade in Goods and Services."

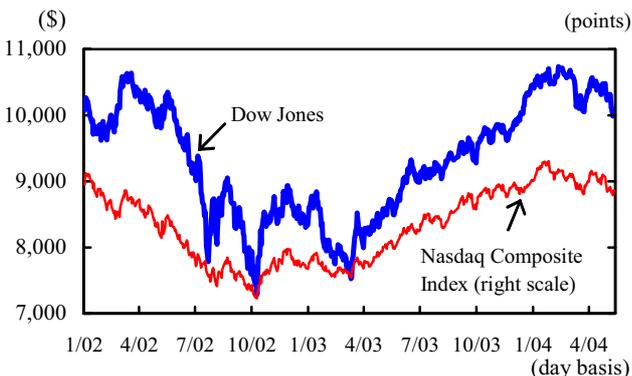
Figure 1-7. Prices



Note: Core index excluding food and energy.

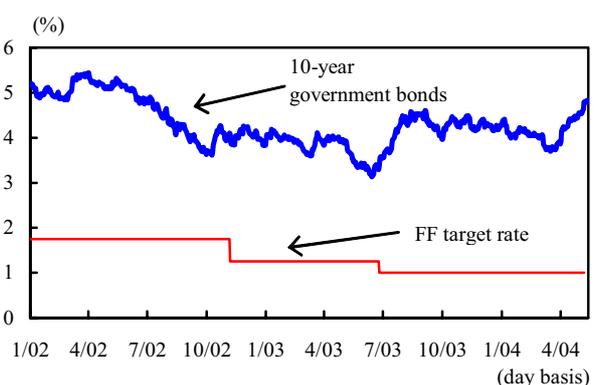
Sources: U.S. Department of Labor, "Producer Price Index" and "Consumer Price Index."

Figure 1-8. Stock Market Indexes



Sources: Dow Jones; DRI database.

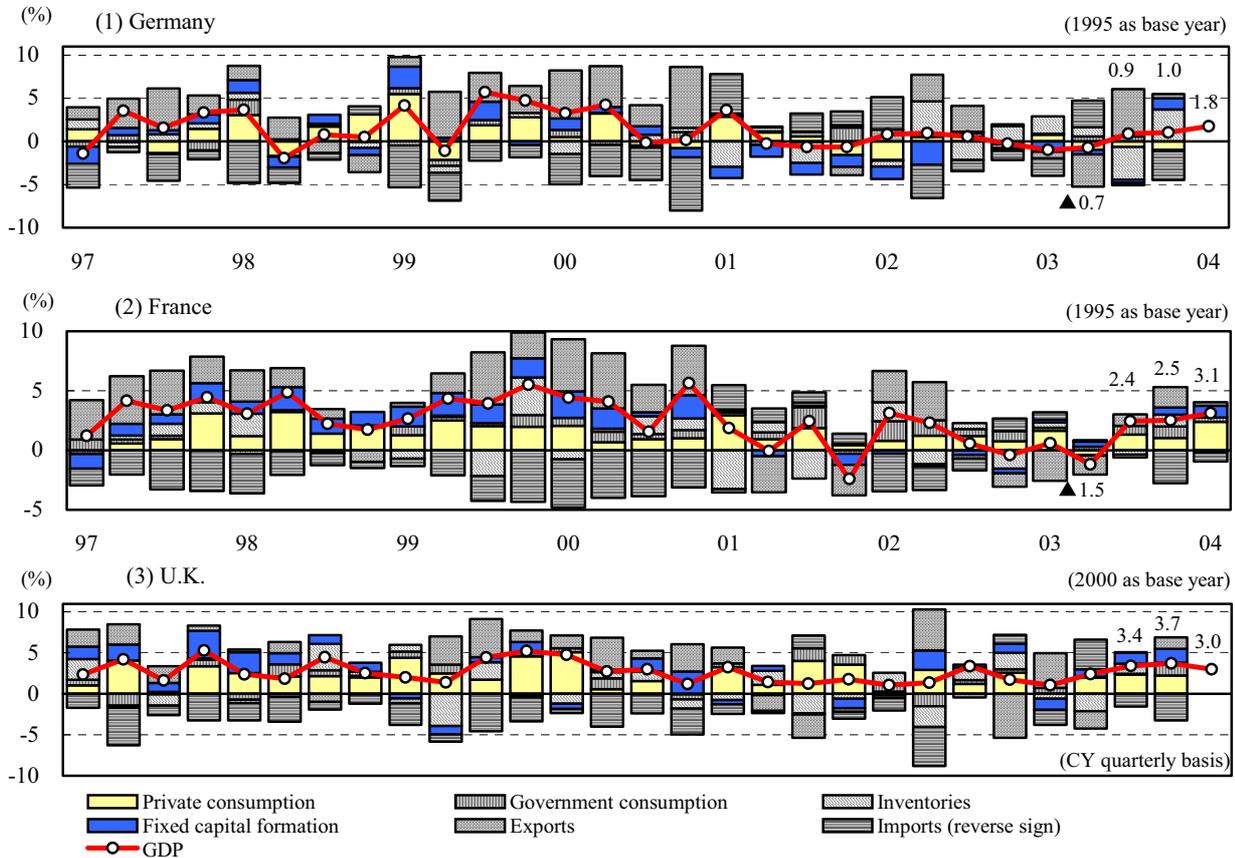
Figure 1-9. Long- and Short-term Interest Rates



Sources: FRB data; Wall Street Journal.

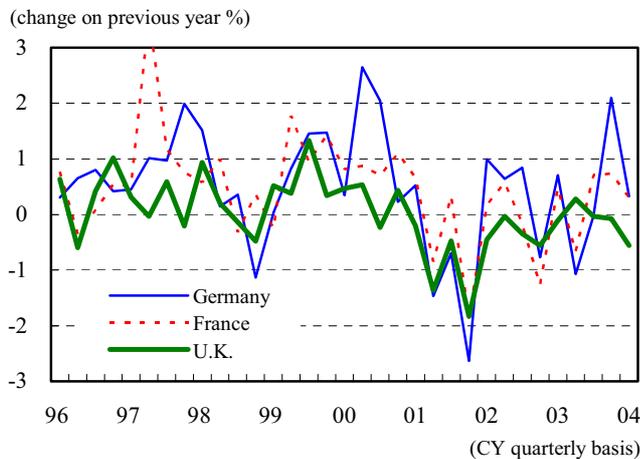
Economies of Major European Countries (Germany, France, U.K.): Further Recovery

**Figure 1-10. Real GDP of Major European Countries
(annualized change from previous quarter by component)**



Sources: Statistisches Bundesamt (StBA), Direction Générale de l'Institut National de la Statistique et des Etudes Economiques (INSEE) and U.K. Central Statistical Office data.

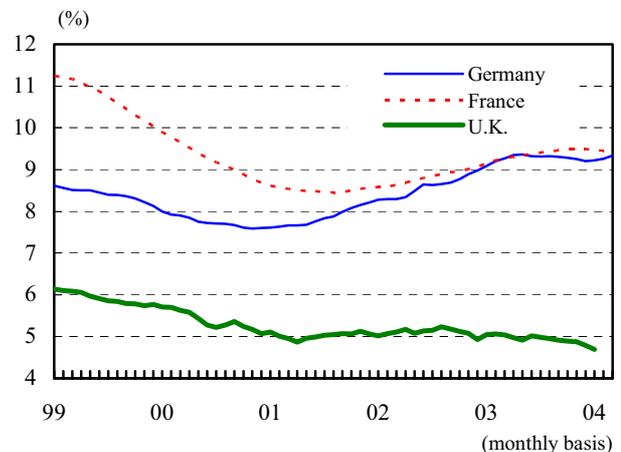
Figure 1-11. Industrial Production Index in Major European Countries



Note: Based on seasonally adjusted values.

Sources: StBA, INSEE and U.K. Central Statistical Office data.

Figure 1-12. Trend of Unemployment Rate



Notes: 1. Unemployment rate is based on ILO standard for the purpose of international comparison.

2. Based on seasonally adjusted values.

Source: OECD

**Economies of Major Asian Countries (Korea, Taiwan and Singapore):
Export-led Recovery, Slumping Consumption in Korea**

Figure 1-13. Real GDP Growth Rate

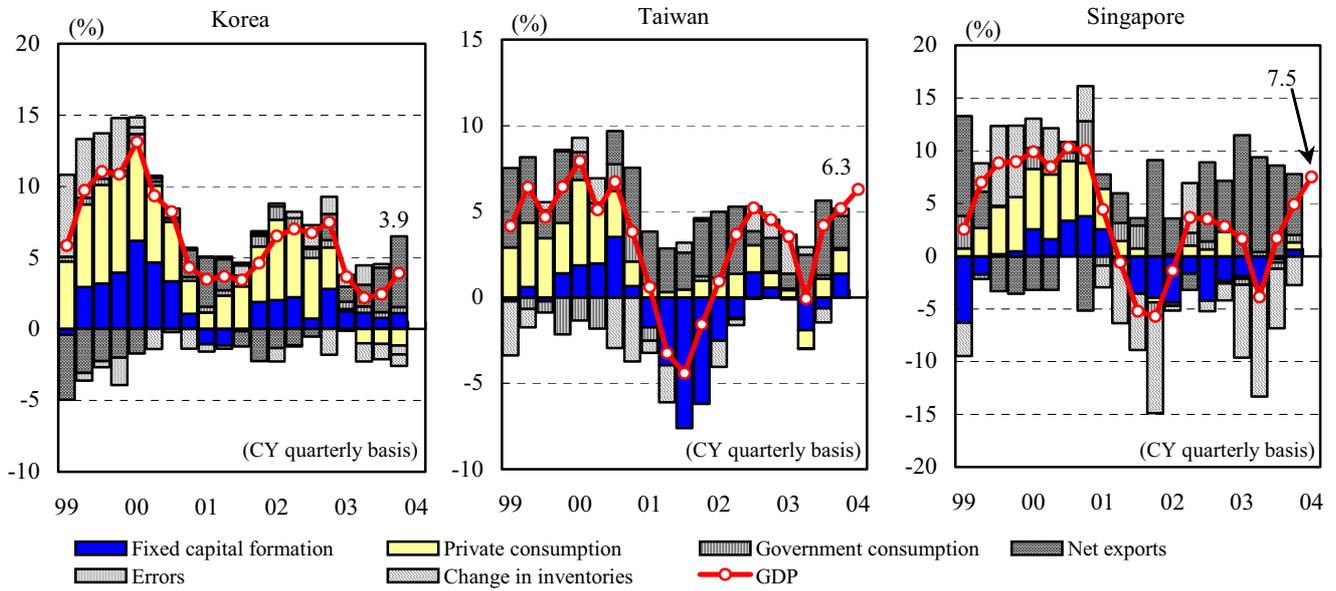


Figure 1-14. Manufacturing Sector Production Index

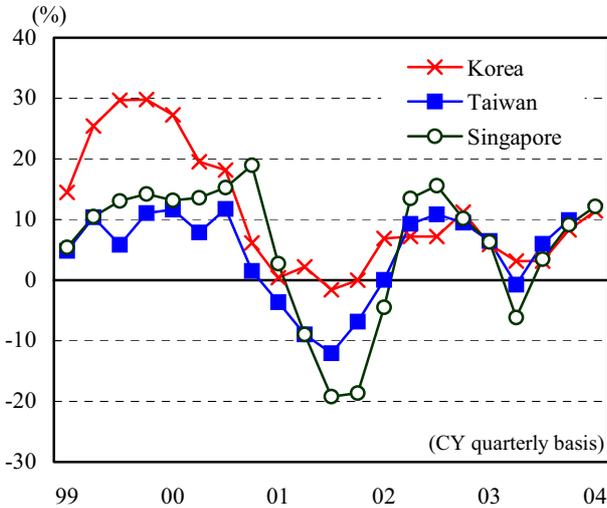


Figure 1-15. Price Inflation

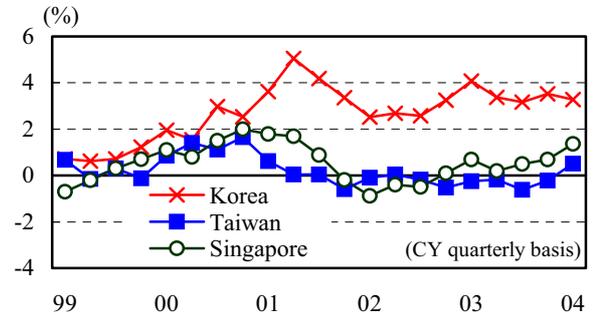
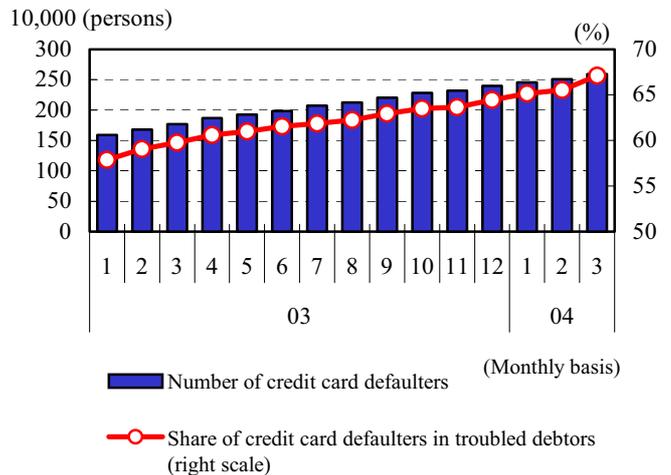


Figure 1-16. Number of Credit Card Defaulters in Korea



Notes :
 1. Growth rates represent year-on-year.
 2. Figure 1-16 is based on data published by the Korea Federation of Banks. Credit card defaulters refer to those whose arrears amount to 300,000 won or over for three months or longer.

Source : National statistics

China (1): Increased Concern of Overheating – Difficulty of Controlling Fixed Asset Investment

Figure 1-17. Real GDP Growth

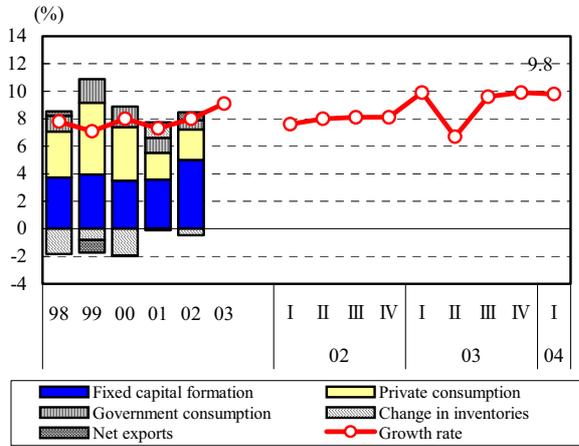


Figure 1-18. Composition of Investment Completed (1)

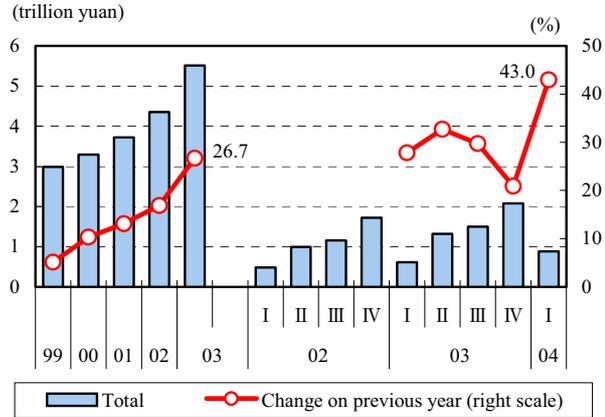


Figure 1-19. Composition of Investment Completed (2)

<Industries with largest contribution> (Jan. - Mar. 2004)			
	Change on previous year	Share	Contribution
Manufacturing	75.8%	27.2%	36.3%
1) Metals	108.4%	8.7%	14.1%
2) Chemicals	73.3%	6.0%	7.9%
Non-manufacturing	39.5%	72.8%	63.7%
1) Real estate	39.8%	29.2%	25.7%
2) Power/gas/water	53.1%	9.2%	9.8%

<Provinces with largest contribution> (Jan. - Mar. 2004)			
	Change on previous year	Share	Contribution
1) Jiangsu	66.2%	12.8%	17.7%
2) Shandong	62.2%	7.0%	9.1%
3) Zhejiang	47.3%	9.0%	8.9%

Figure 1-20. Composition of Investment Completed (3)

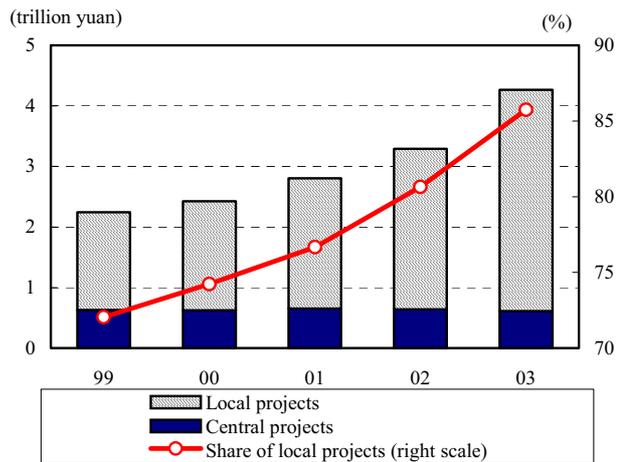


Figure 1-21. Retail Sales of Consumer Goods

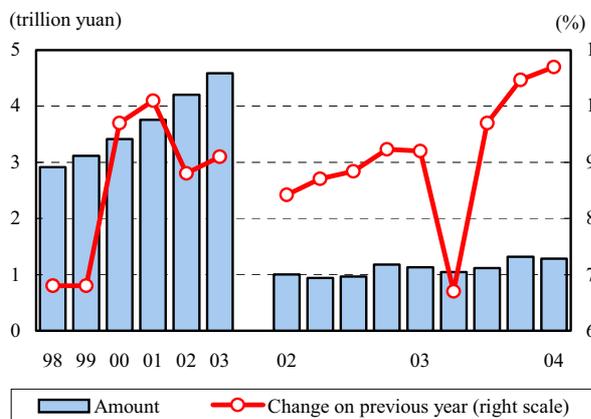
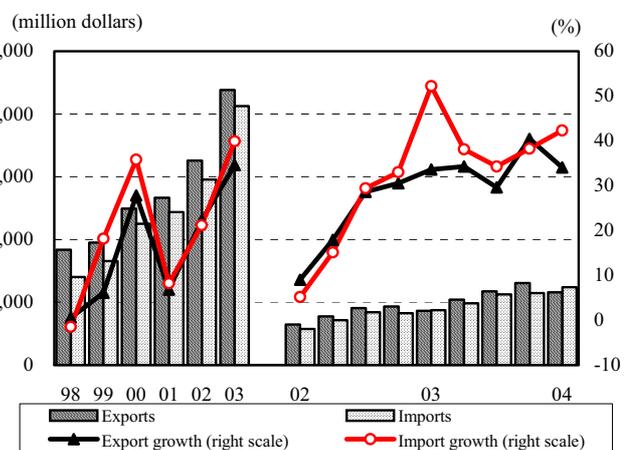


Figure 1-22. Exports and Imports



Note: The growth rate represents change on the previous year.
 Sources: IMF, "International Financial Statistics," China Statistical Yearbook, China Monthly Economic Indicators and People's Bank of China data.

China (2): Growing Inflationary Trend and Limitations of Credit Controls

Figure 1-23. Price Indexes

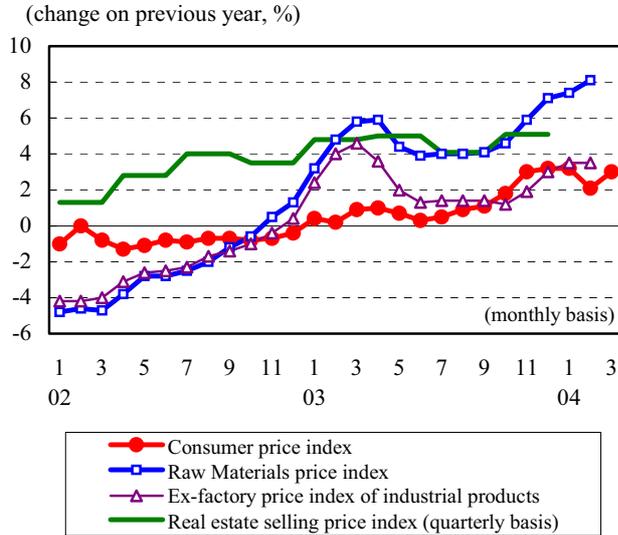


Figure 1-24. Financial Indicators

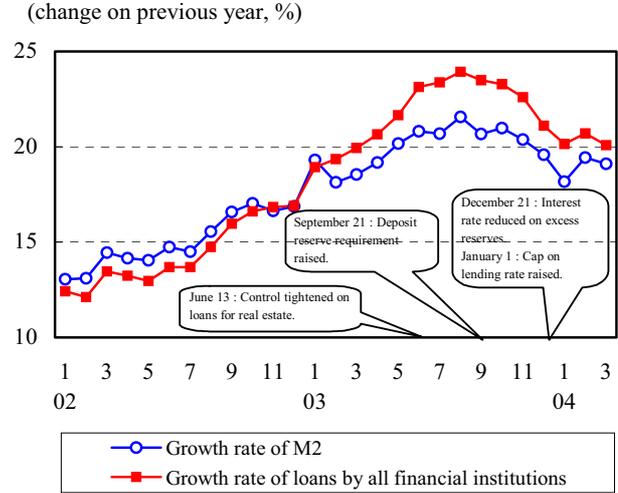


Figure 1-25. Financial Policy of Chinese Government

2003.	6.13	Circular to tighten control on loans for real estate.
	9.21	Deposit reserve requirement raised (6.0% to 7.0%).
	12.21	Interest rate reduced on excess reserves (1.89% to 1.67%)
2004.	1. 1	Cap on lending rate raised.
	3.25	Interest rate on loans for financial institutions raised by 0.63%.
	4.25	Deposit reserve requirement raised (7.0% to 7.5% for general financial institutions). Higher rate required for institutions with low capital adequacy (7.0% to 8.0%).

Figure 1-26. Trend of Inter-bank Interest Rates

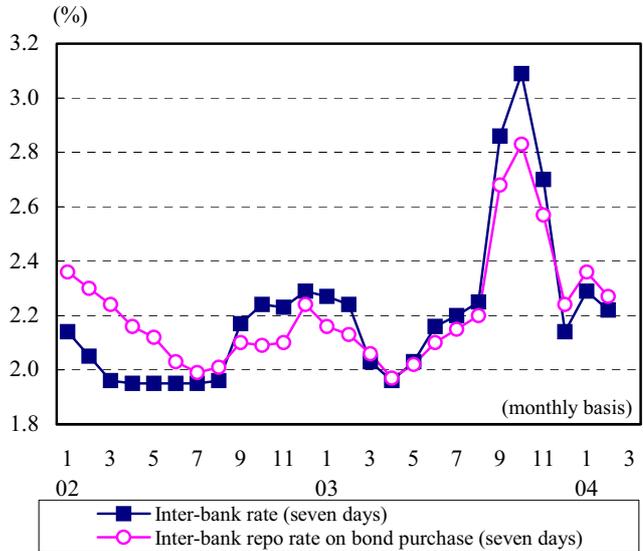
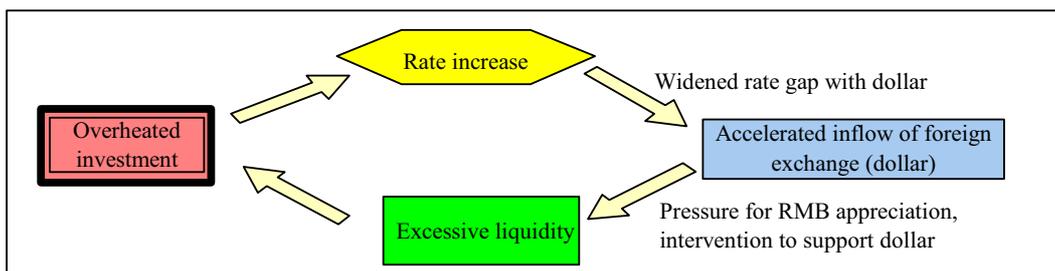


Figure 1-27. Dilemma on Rate Increase

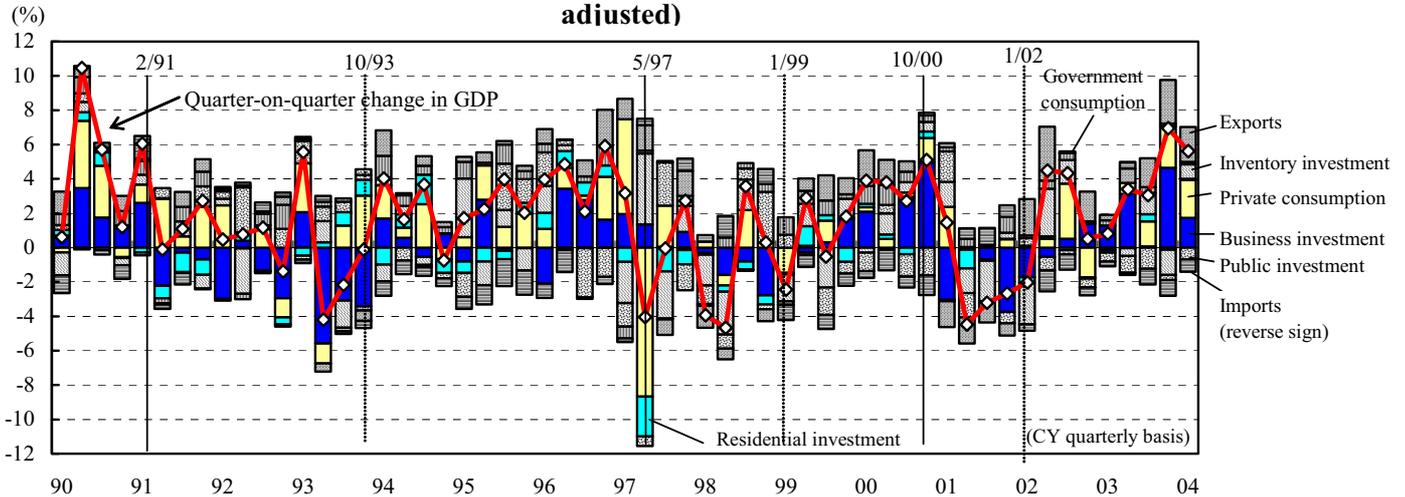


Sources : China Monthly Economic Indicators; People's Bank of China data.

II. Japanese Economy: Gradual Recovery Continues

Overview: Recovery Continuing as World Economy Bounces Back

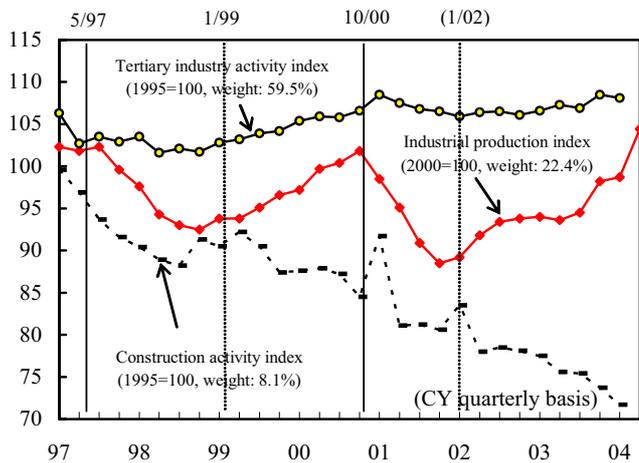
Figure 2-1. Trends in Real GDP
(annualized rate of change from the previous quarter by component, seasonally adjusted)



Notes: 1. 1995 as base year.
2. Contribution to annualized GDP is prorated to each item based on its share in contribution before annualization. Government consumption includes the contribution of public inventories.

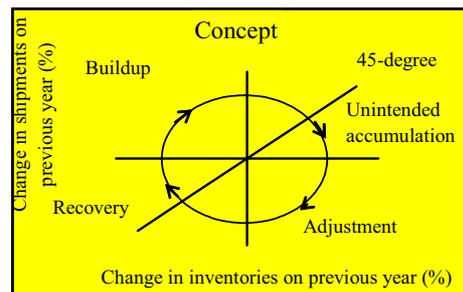
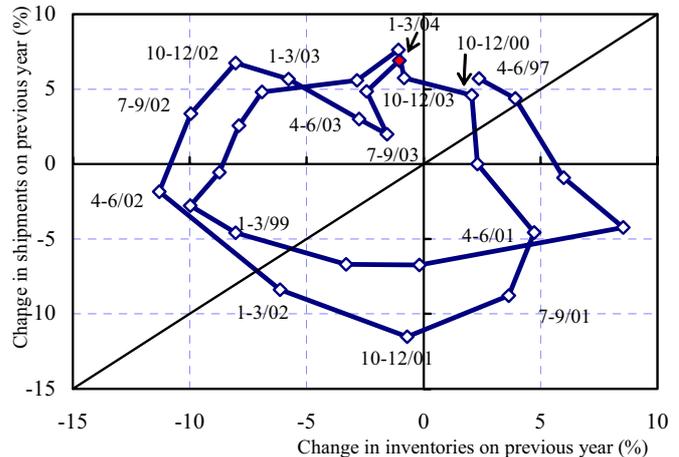
Source: Cabinet Office, "National Accounts."

Figure 2-2. Trends in Production Indicators
(seasonally adjusted)



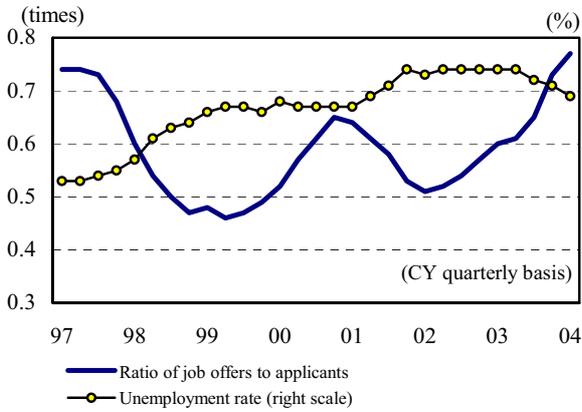
Notes: 1. Weights represent shares in all-industry activity index (GDP from the supply side) and add up to 100 in sum with the agriculture, forestry and fishery production index (weight: 1.8%) and public service activity index (8.2%).
2. The industrial production figures for April-June 2004 represent the average of estimates for April and May based on the Survey of Manufacturing Production Forecast.

Figure 2-3. Inventory Cycle (total of mining and manufacturing sector)



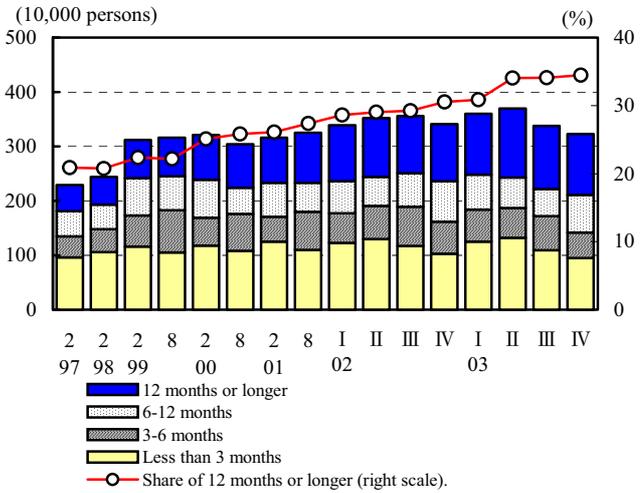
Harsh but Partially Improving Employment Situation

Figure 2-4. Trends in Ratio of Job Offers to Applicants and Unemployment Rate



Note: Seasonally adjusted.
Sources: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Labour Force Survey;" Ministry of Health, Labour and Welfare, "Statistics on Placement Activities."

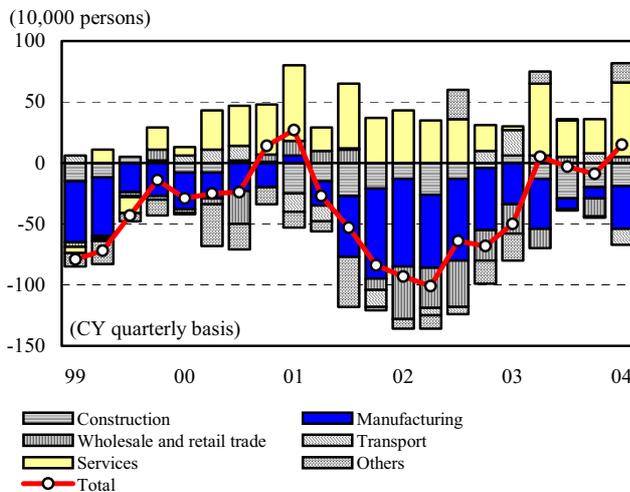
Figure 2-5. Number Unemployed by Duration of Joblessness



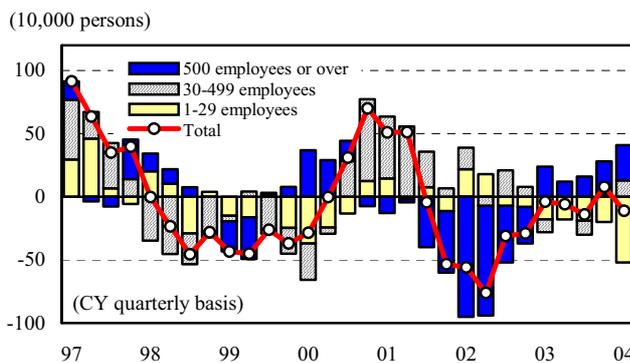
Note: Annual survey until 1998, and semiannual survey for 1999-2001. Quarterly average of monthly survey since 2002.
Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Labour Force Survey: Detailed Tabulation (former Special Survey)."

Figure 2-6. Trend of Year-on-Year Change in Number of Workers and Employees by Component

(1) By industry (new industrial classification)



(3) By size of corporation (excluding agriculture, forestry, fisheries and government)



Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Labour Force Survey."

(2) By status

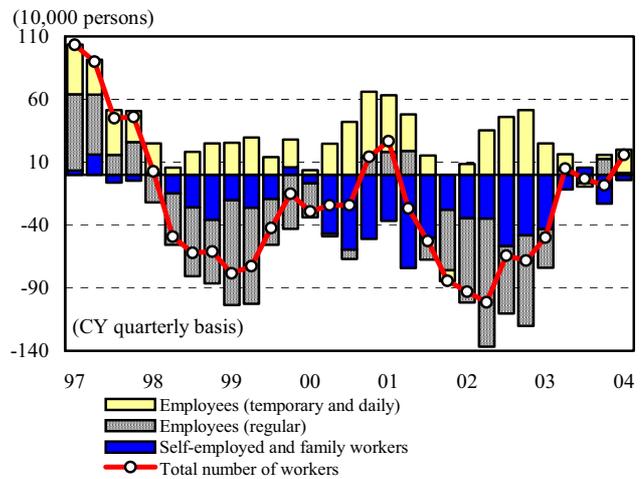
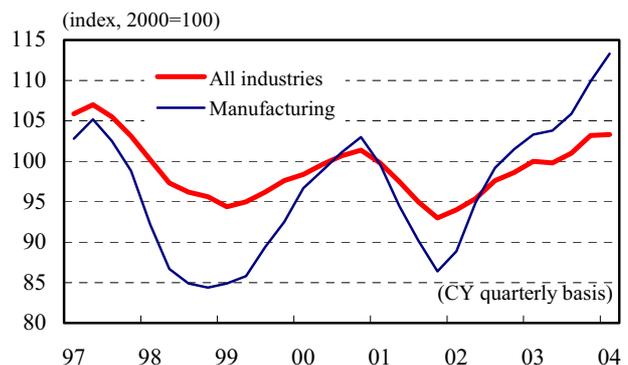


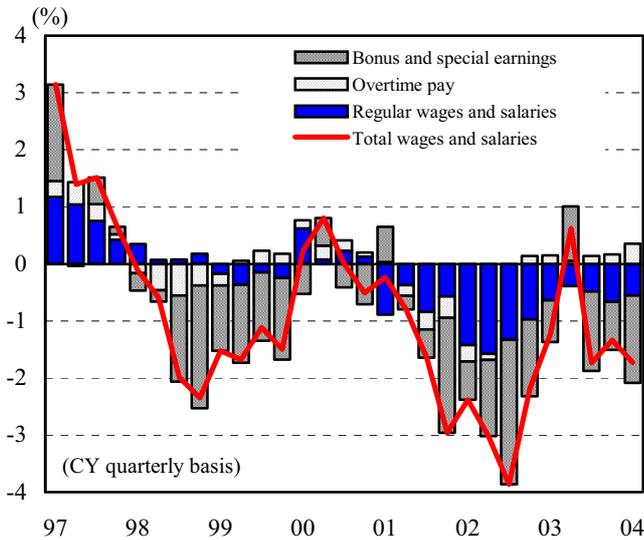
Figure 2-7. Overtime Hours (seasonally adjusted)



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

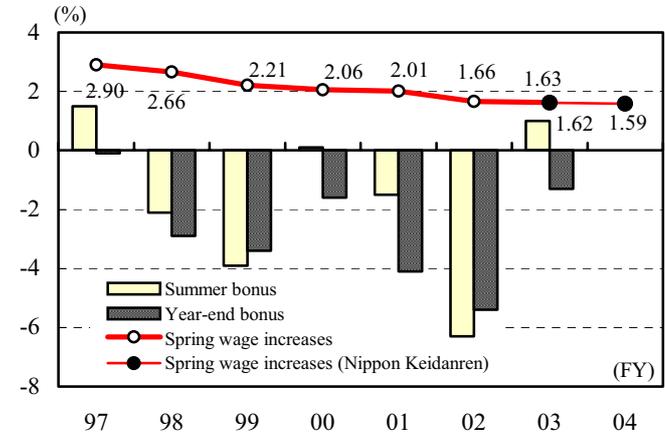
Little Improvement in Wages

Figure 2-8. Year-on-Year Change in Wages and Salaries per Person



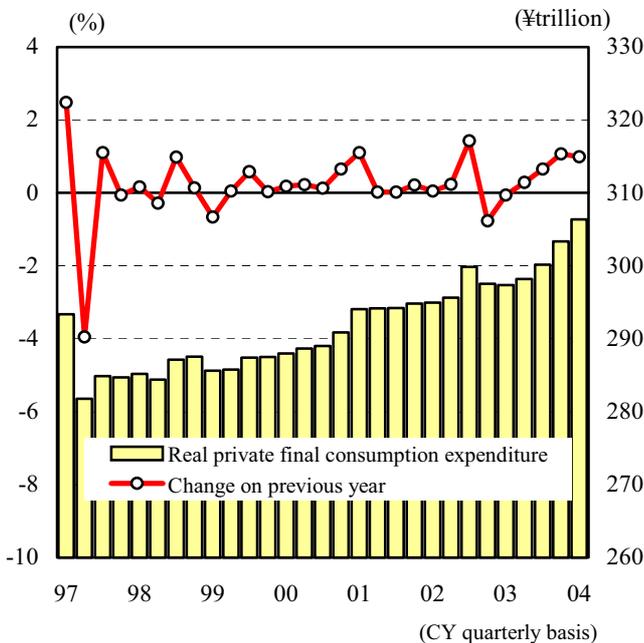
Note: Business establishments with five or more employees.
Source: Ministry of Health, Labour and Welfare, "Monthly Labour Force Survey."

Figure 2-9. Spring Wage Increases and Change in Bonuses on Previous Year



Notes: 1. Summer bonus and year-end bonus include wages and salaries paid as such in June-August and November-January respectively in business establishments with five or more employees.
2. Spring wage increases cover listed companies with trade unions employing 1,000 or more workers and capitalized at ¥2 billion or over.
3. Spring wage increases (Nippon Keidanren) represent preliminary tabulation values (112 major corporations, as of April 21).
Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Statistics," and "Spring Wage Increase Requests and Settlement Conditions for Major Private Corporations;" Nippon Keidanren, "Response in Spring Labor Negotiations."

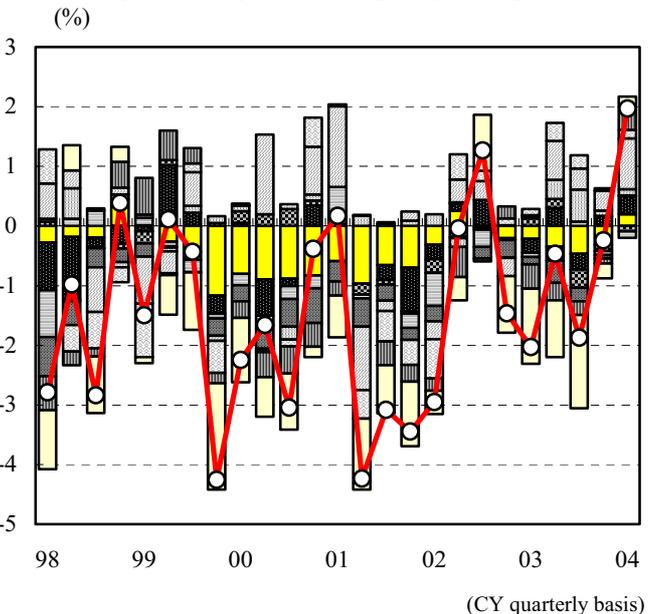
Figure 2-10. Consumption on GDP Basis



Notes: 1. Seasonally adjusted annual rate.
2. Data since January-March 2000 are calculated with the new quick estimate method. Growth rates for the periods prior to the change in calculation method are on a confirmed information basis. The levels of consumption are calculated retrogressively from the growth rates.

Source: Cabinet Office, "National Accounts."

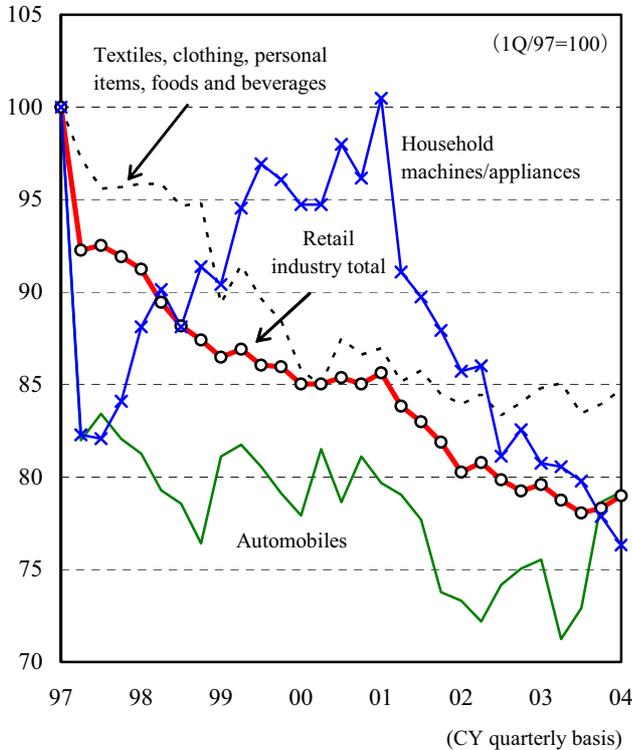
Figure 2-11. Nominal Living Expenditure of All Households (year-on-year change by component)



Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Family Income and Expenditure Survey."

Retail Sales Showing Slight Recovery as Consumer Sentiment Improves

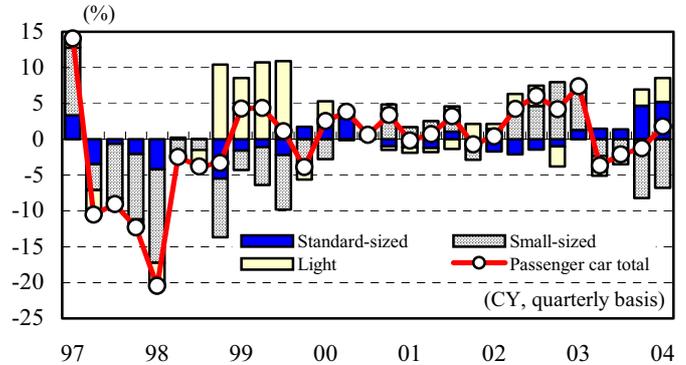
Figure 2-12. Retail Sales Index (seasonally adjusted)



Note: Retail sales index except for total represents the average of published seasonally adjusted figures weighted by the sales of each industry.

Source: Ministry of Economy, Trade and Industry, "Report of the Current Survey of Commerce."

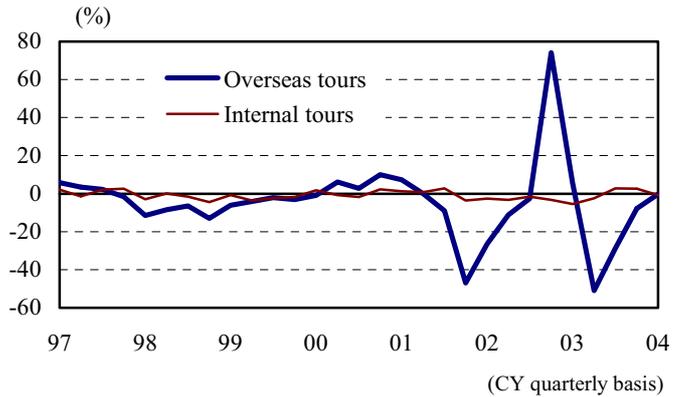
Figure 2-13. Sales of Registered New Cars (change on previous year by component)



Note: Data covers passenger cars including light vehicles.

Source: Japan Automobile Dealers Association

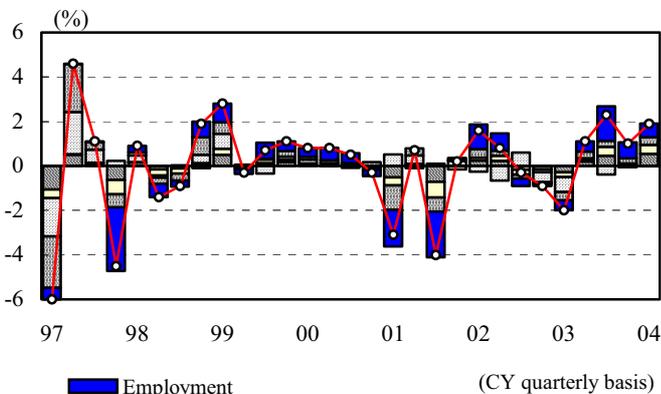
Figure 2-14. Tourism Sales (change on previous year)



Source: Ministry of Land, Infrastructure and Transport, "Tourism Sales of 50 Major Tourist Agencies."

Figure 2-15. Consumer Confidence Indicators

(1) Quarterly change in consumer confidence index



Employment

Willingness to buy durable goods

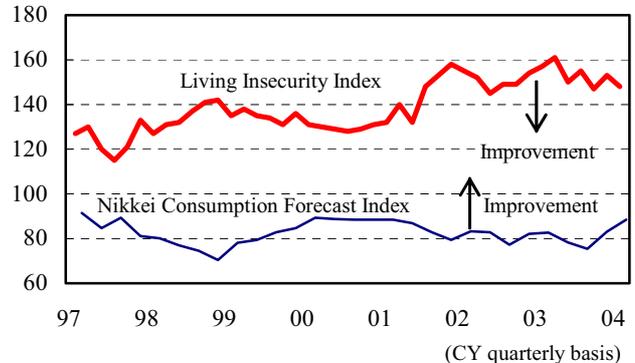
Price inflation

Income growth

Overall livelielihood

Consumer confidence index

(2) Other Confidence Indexed

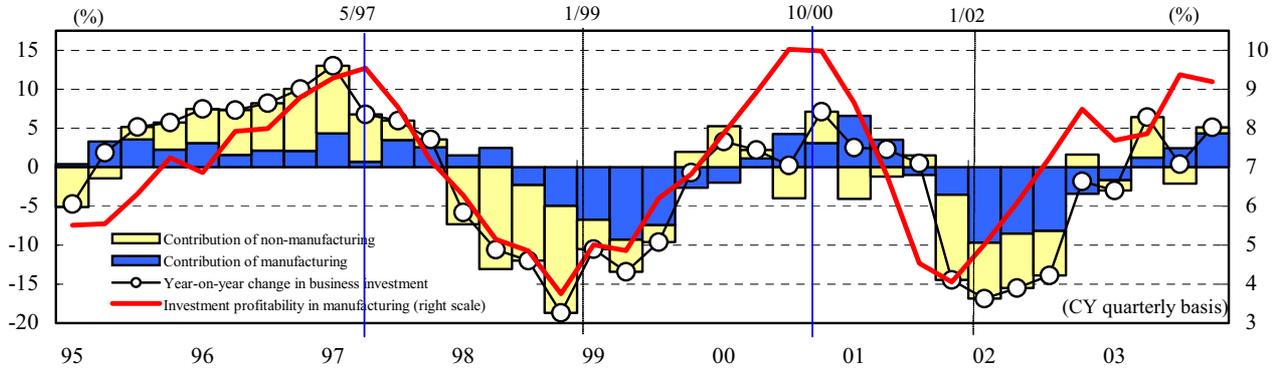


Note: Consumer confidence index is based on surveys for the coming six months. Figures for individual components were redistributed from seasonally adjusted data.

Sources: Cabinet Office, "Consumer Confidence Survey;" Japan Research Institute, "Consumer Sentiment Index;" Nikkei Industrial Consumption Research Institute data.

Business Investment Increasing, with Good Prospects in Manufacturing

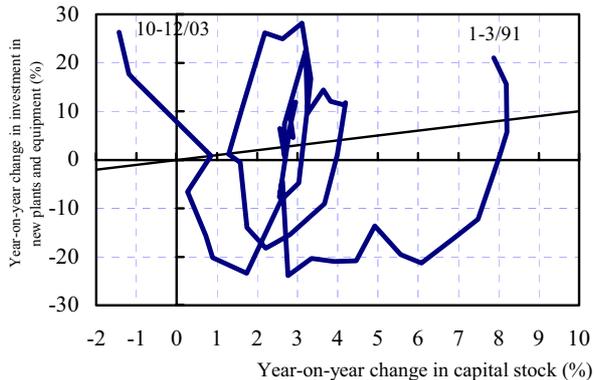
Figure 2-16. Year-on-Year Change in Nominal Business Investment and Investment Profitability in Manufacturing Sector (corporations of all sizes)



Notes: 1. Business investment excludes software.
2. Return on investment = operating asset-profit rate – average contracted interest rates of banks (new loans, total), where operating asset-profit rate = operating profit/(tangible fixed assets + inventories).

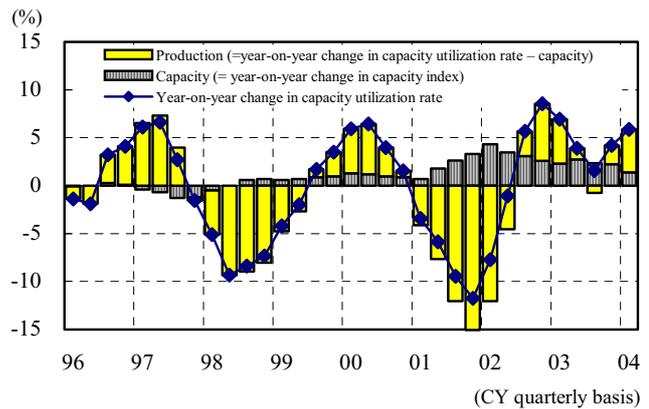
Sources: Ministry of Finance, “Quarterly Report of Statistical Survey of Incorporated Enterprises,” etc.

Figure 2-17. Capital Stock Cycle (Manufacturing)



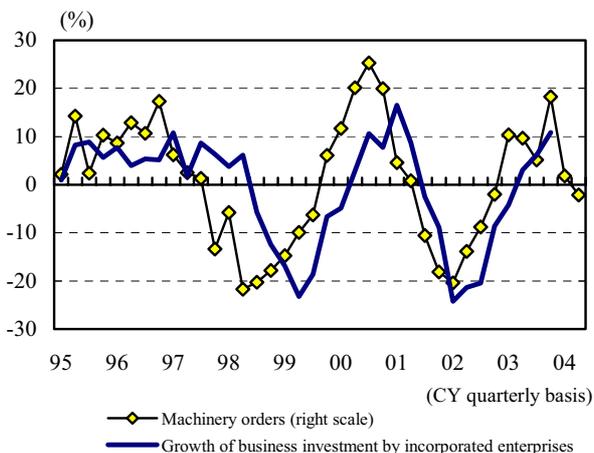
Source: Cabinet Office, “Gross Capital Stock of Private Enterprises.”

Figure 2-18. Capacity Utilization Index



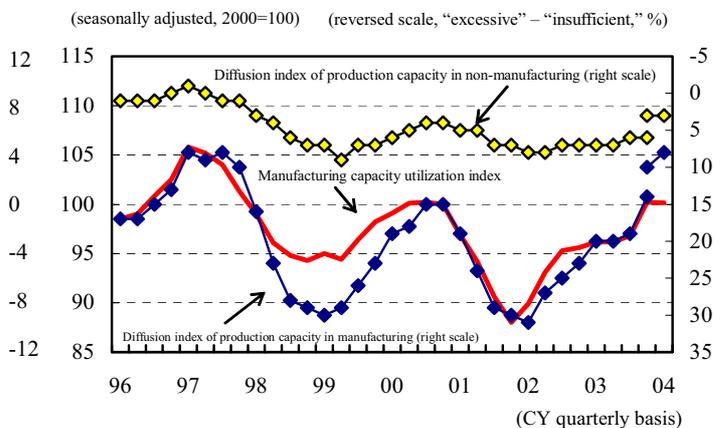
Source: Ministry of Economy, Trade and Industry, “Industrial Index.”

Figure 2-19. Trend of Leading Indicator and Actual Business Investment (change on previous year)



Note: Machinery Orders for April-June 2004 represent estimates.
Sources: Cabinet Office, “Orders Received for Machinery;” Ministry of Finance, “Quarterly Report of Statistical Survey of Incorporated Enterprises.”

Figure 2-20. Capacity Utilization Index and Diffusion Index of Production Capacity

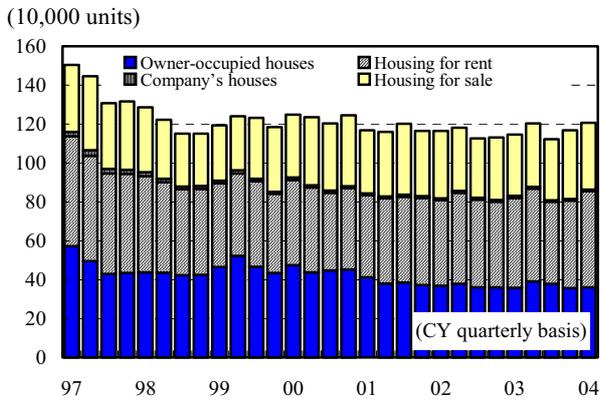


Note: The diffusion index of production capacity has a discontinuity due to a revision to its coverage in March 2004.

Sources: Ministry of Economy, Trade and Industry, “Industrial Index;” Bank of Japan “Short-term Economic Survey of Enterprises in Japan (Tankan).”

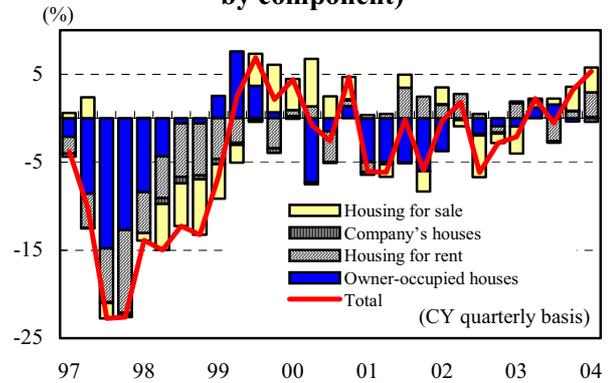
Residential Investment Slumping but Bottoming out

Figure 2-21. Trend of Housing Starts (seasonally adjusted annual rate)



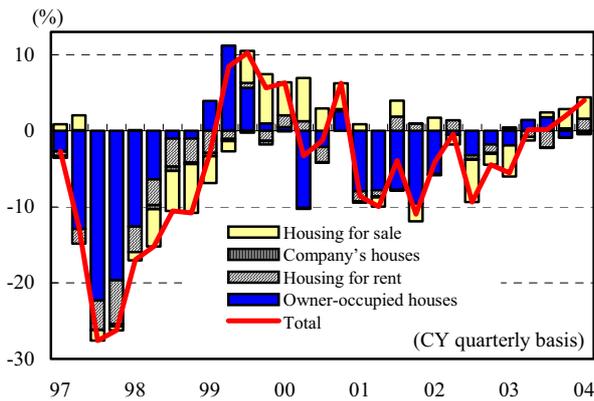
Source: Ministry of Land, Infrastructure and Transport, "Building Construction Started."

Figure 2-22. Housing Starts (trend of year-on-year change by component)



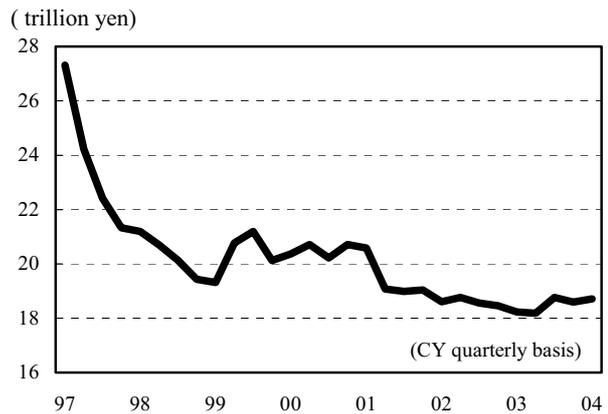
Source: Ministry of Land, Infrastructure and Transport, "Building Construction Started."

Figure 2-23. Floor Area of Housing Starts (trend of year-on-year change by component)



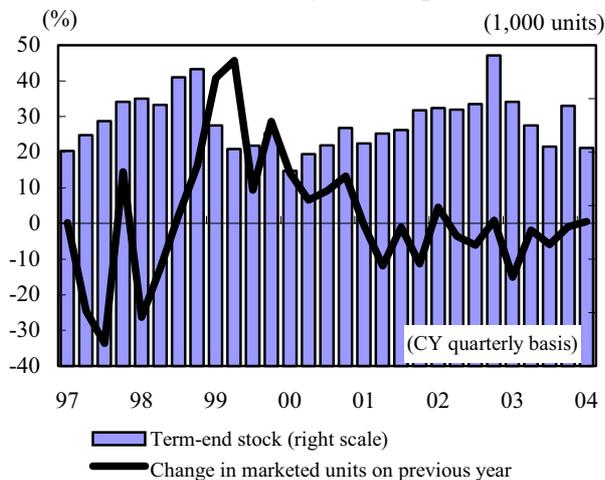
Source: Ministry of Land, Infrastructure and Transport, "Building Construction Started."

Figure 2-24. Real Residential Investment (seasonally adjusted annual rate)



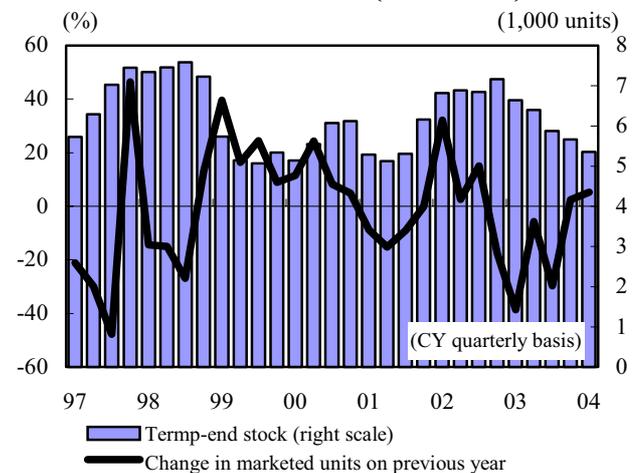
Source: Cabinet Office, "National Accounts."

Figure 2-25. Contract Rate and Stock of Condominiums (Tokyo metropolitan area)



Legend:
■ Term-end stock (right scale)
— Change in marketed units on previous year

Figure 2-26. Contract Rate and Stock of Condominiums (Kinki area)



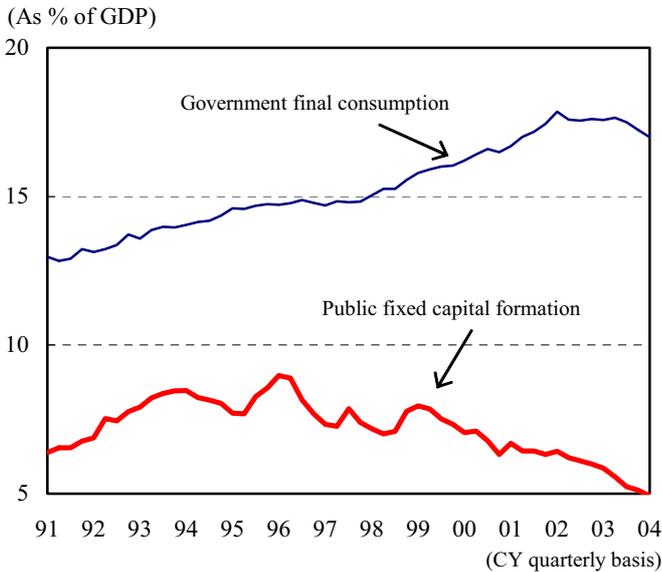
Legend:
■ Term-end stock (right scale)
— Change in marketed units on previous year

Note: Contract rate refers to the quarterly average of the percentage of housing sales contracts that were actually closed from among the total number of contracts started for any given month. Stock refers to the figure at the end of the quarter.

Source: Real Estate Economic Institute Co., Ltd.

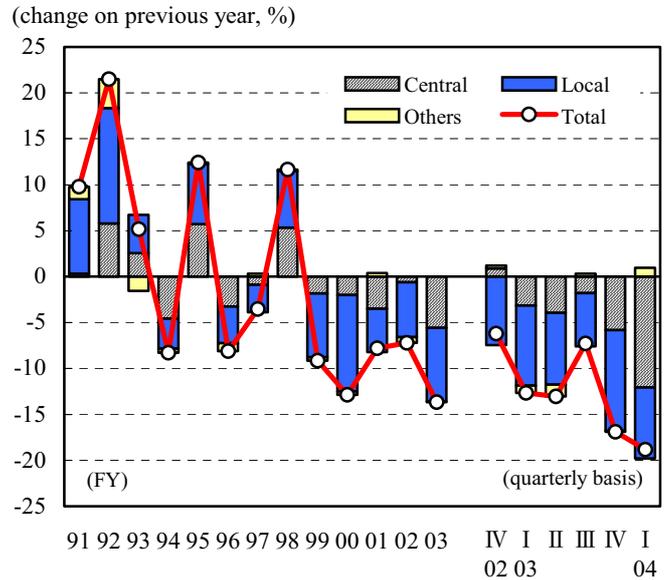
Public Investment Falling due to Difficult Financial Situation

Figure 2-27. Public Investment and Government Consumption



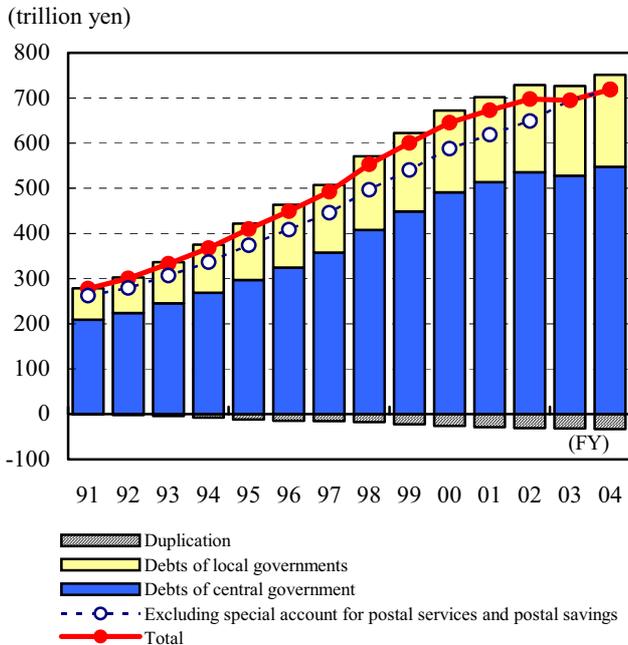
Note: Data represent seasonally adjusted annual rate.
Source: Cabinet Office, "National Accounts."

Figure 2-28. Trend of Contract Value for Public Works



Note: In the legend, "Local" represents the total of prefectures and municipalities. "Others" represent the total of central and local public business entities.
Source: East Japan Construction Surety etc., "Public Works Prepayment Surety Statistics."

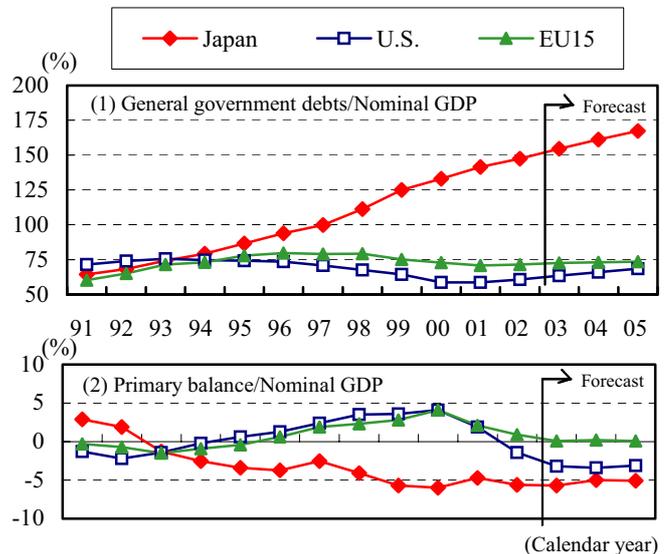
Figure 2-29. Long-term Outstanding Debts of Central and Local Governments



Notes: 1. Figures for fiscal 2004 represent estimates after supplementary budget and those for fiscal 2003 are estimates based on the initial budget.
2. The special account for postal services and postal savings (outstanding debts of some ¥49 trillion as at the end of FY2002) was abolished at the end of FY2002.

Source: Ministry of Finance, "Budgetary Data (January 2004)."

Figure 2-30. International Comparison of Financial Situations

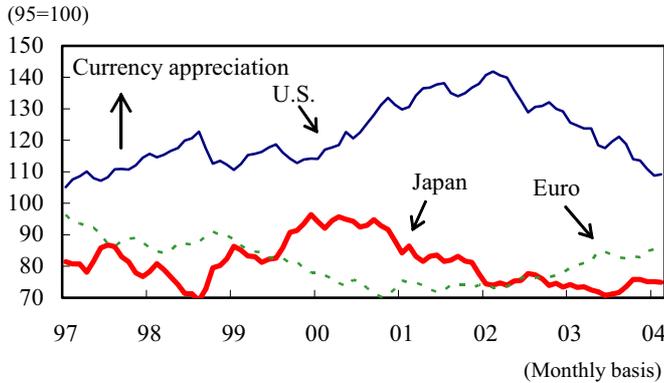


Notes: 1. Values for 2003 are estimates.
2. Figures for some European countries in 2000 include income from the selling of cellular phone licenses (around 1% of the primary balance).

Source: OECD, "Economic Outlook 74 (December 2003)."

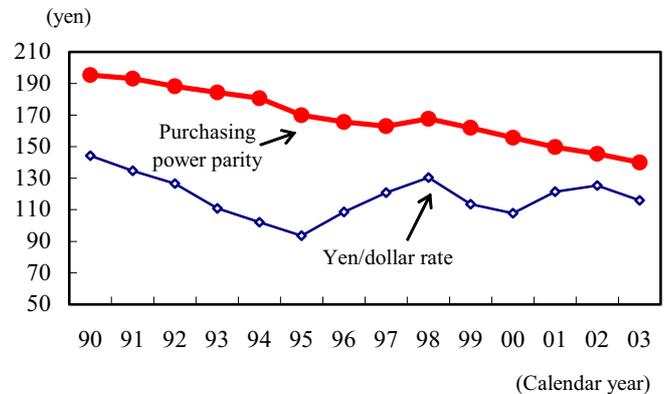
Yen Strengthening in PPP, Euro's Presence Felt

Figure 2-31. Trends of Real Effective Exchange Rate



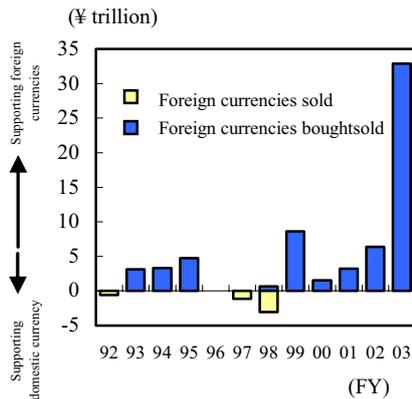
Source: IMF

Figure 2-32. Japan's Purchasing Power Parity and Yen/Dollar Rate



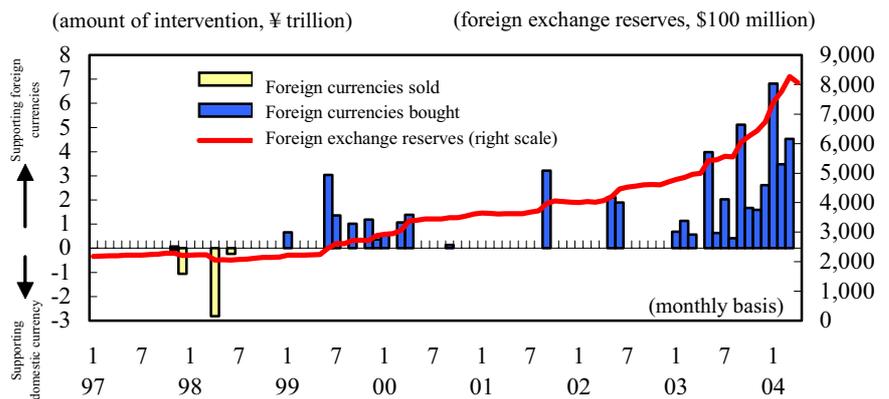
Source: OECD, "Purchasing Power Parities and Real Expenditure."

Figure 2-33. Amount of Exchange Intervention



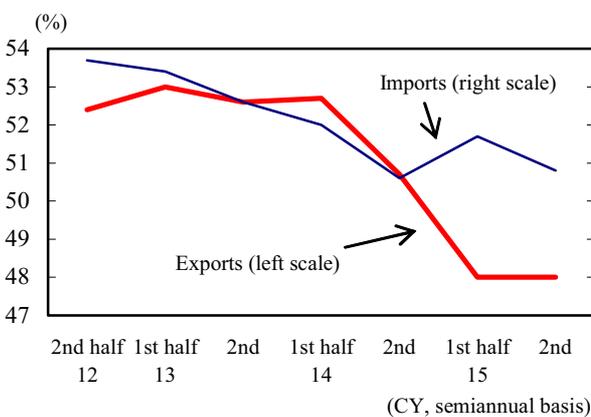
Source: Ministry of Finance

Figure 2-34. Exchange Intervention and Foreign Exchange Reserves



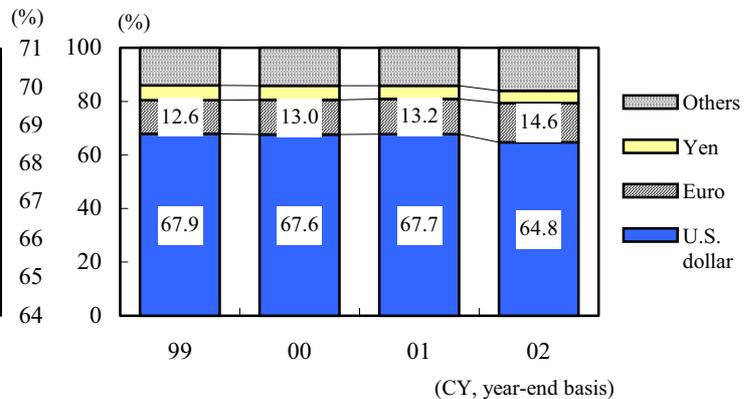
Source: Ministry of Finance

Figure 2-35. Share of U.S. Dollar in Japanese Merchandise Trade



Source: Ministry of Finance, "Composition of Merchandise Trade by Currency."

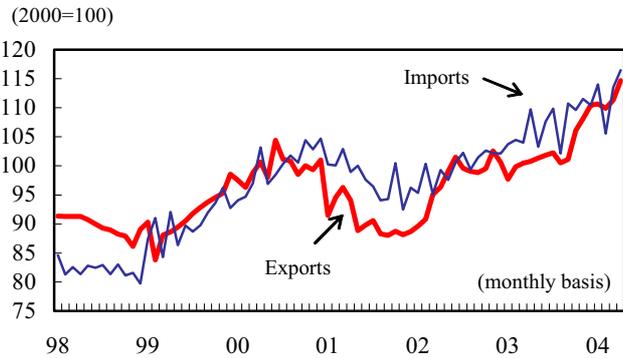
Figure 2-36. Composition of World Foreign Exchange Reserves by Currency



Source: IMF, "Annual Report 2003."

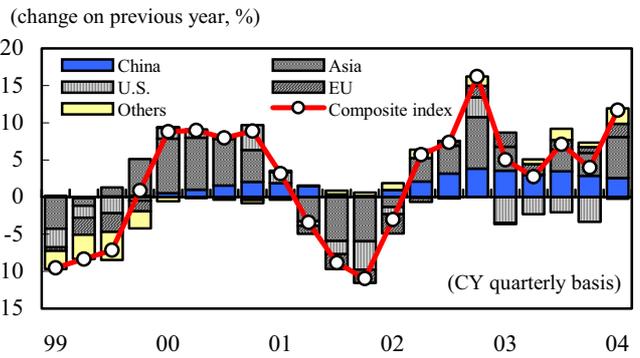
Exports and Imports Increasing, Current Surplus Rising

Figure 2-37. Export and Import Volume Indices



Source: Ministry of Finance, "Trade Statistics."

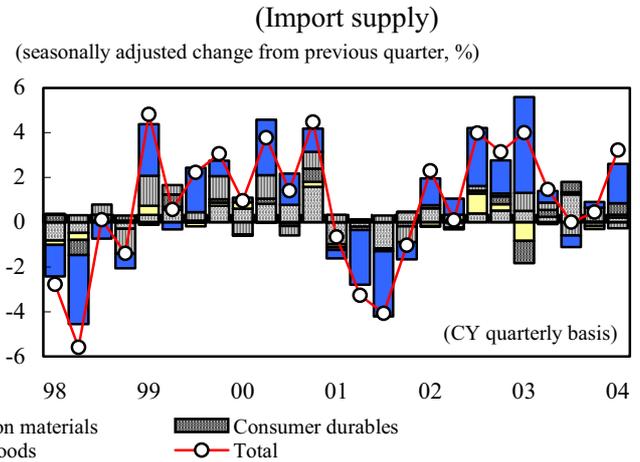
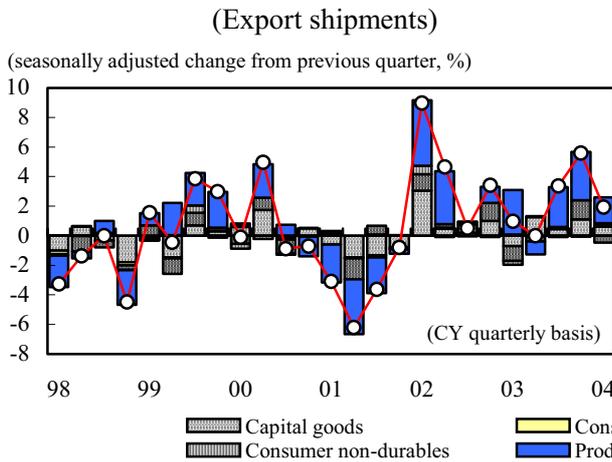
Figure 2-38. Export Value by Region



Note: Asia excludes China.

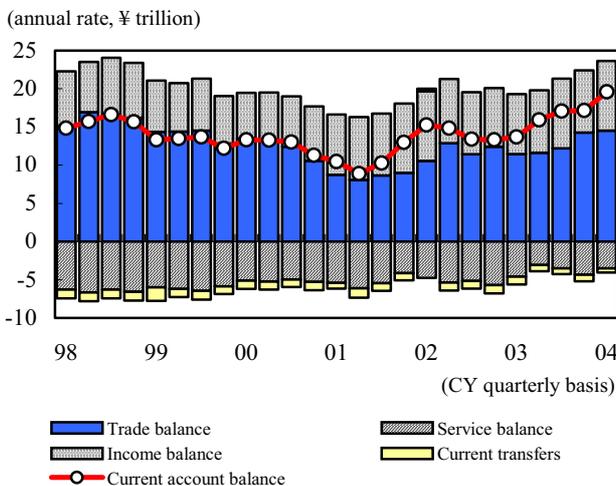
Source: Ministry of Finance, "Trade Statistics."

Figure 2-39 Exports and Imports by Type of Industrial Goods



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

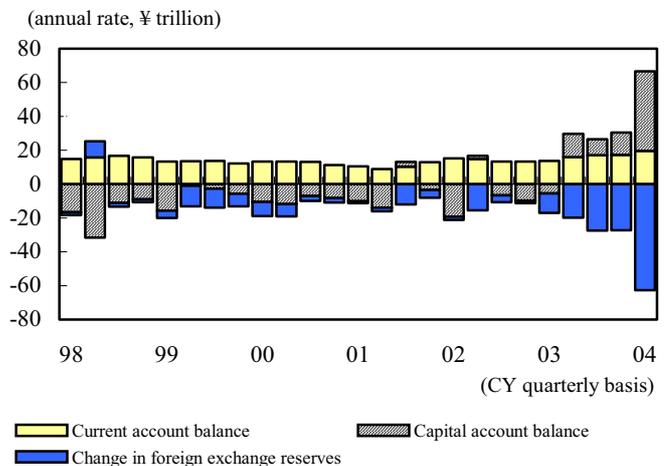
Figure 2-40. Current Account Balance



Note: Seasonally adjusted.

Sources: Ministry of Finance; Bank of Japan, "Balance of Payments."

Figure 2-41. Balance of Payments and Change in Foreign Exchange Reserves

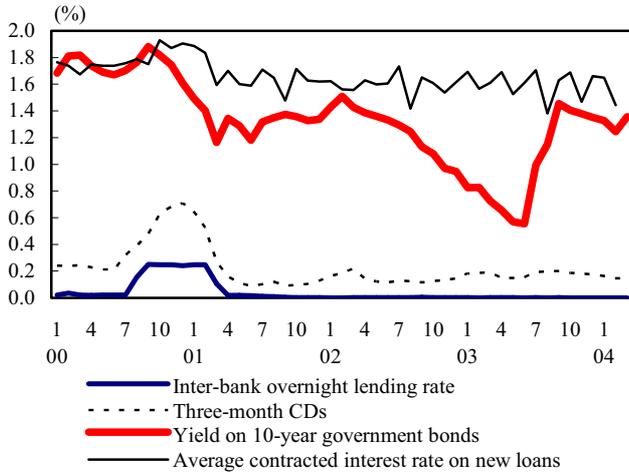


Note: Seasonally adjusted figures for current account balance. Raw data for others.

Sources: Ministry of Finance; Bank of Japan, "Balance of Payments."

Easy Money Policy Remains

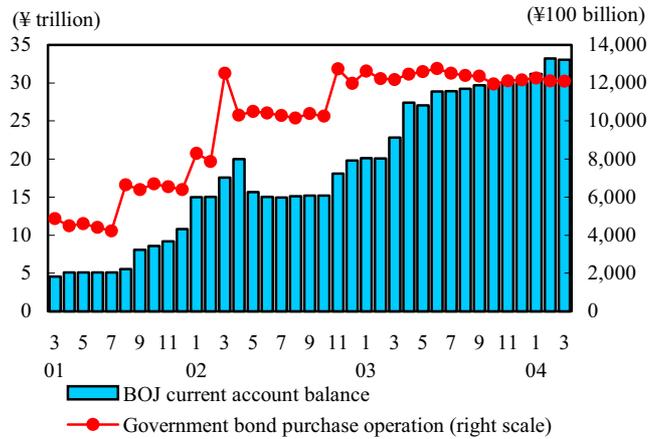
Figure 2-42. Trends in Selected Interest Rates



Note: Average contracted interest rate on new loans is based on monthly statistics. Others represent the monthly averages of daily closing prices.

Sources: Nihon Keizai Shimbun; Bank of Japan, "Financial and Economic Statistics Monthly."

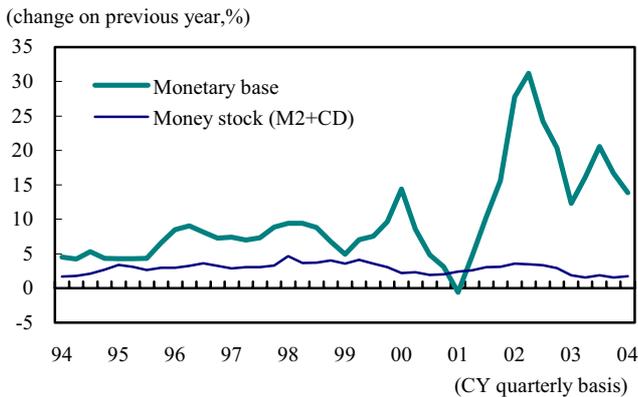
Figure 2-43. Target of Guidance by Monetary Policy



Notes: 1. BOJ current account balance represents monthly average balance.
2. Government bond purchase operation represents the amount purchased in the month.

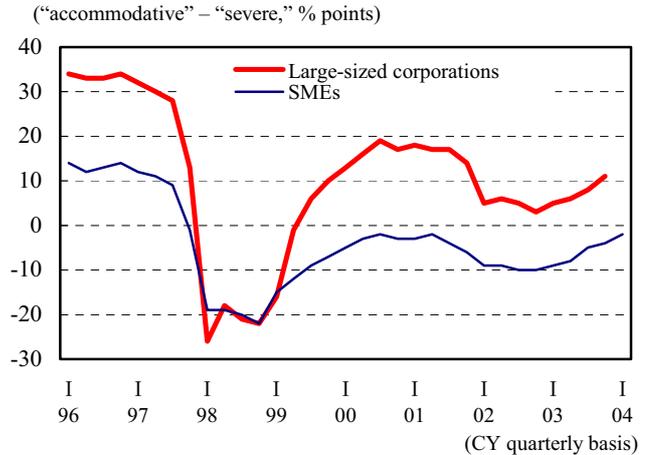
Source: Bank of Japan, "Financial and Economic Statistics Monthly."

Figure 2-44. Trends in Monetary Base and Money Stock Rates



Source: Bank of Japan, "Financial and Economic Statistics Monthly."

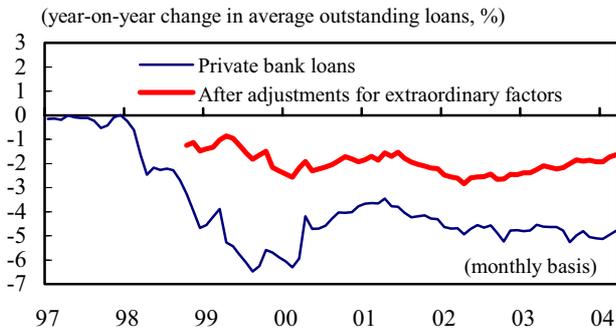
Figure 2-46. Diffusion Index of Lending Attitude of Financial Institutions



Note: The diffusion index of lending attitude of financial institutions has a discontinuity due to a revision to its coverage in March 2004.

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

Figure 2-45. Private Bank Loans



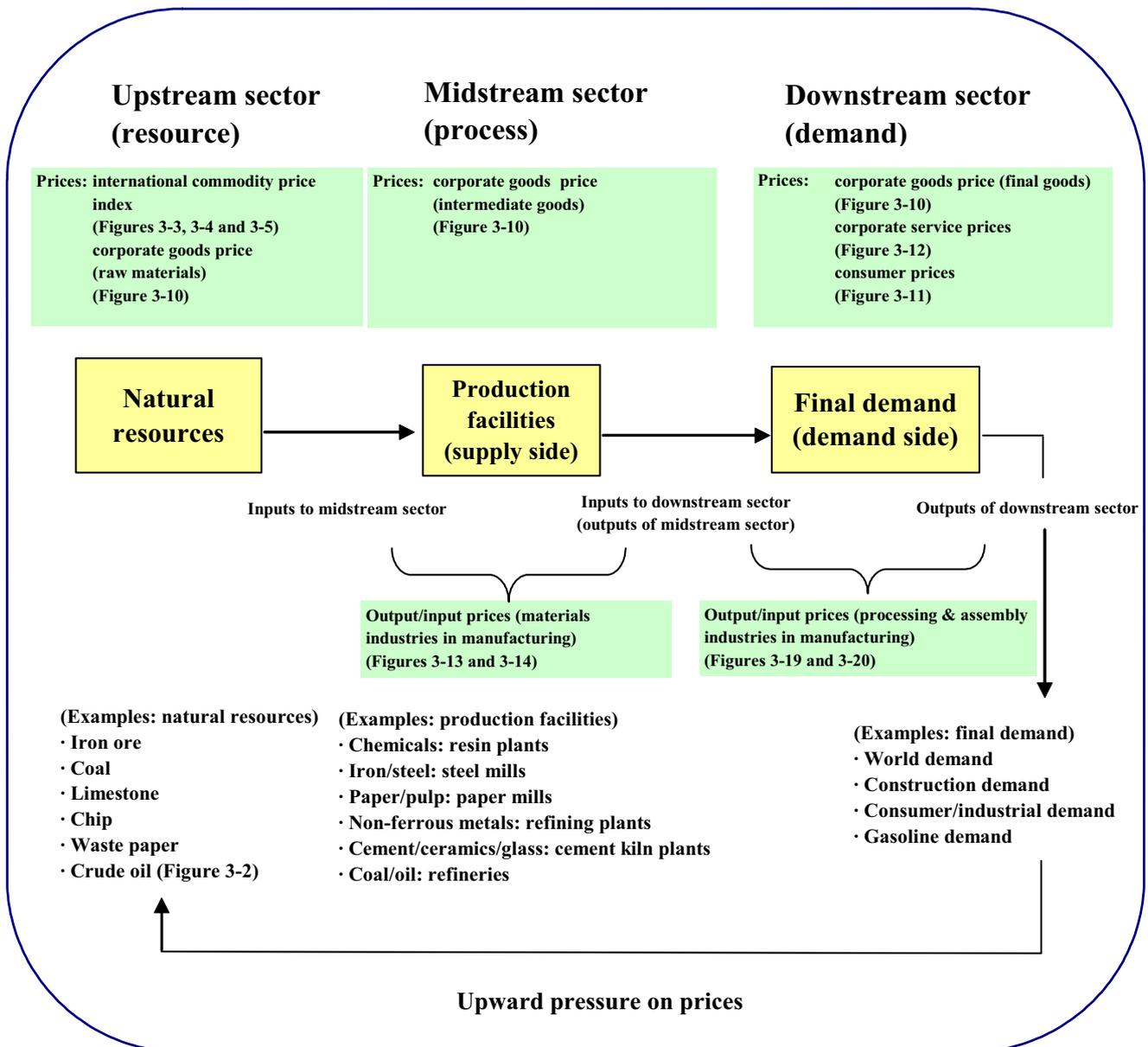
Note: Adjustments for extraordinary factors include adjustments for fluctuation caused by the mobilization or amortization of credited loans.

Source: Bank of Japan, "Financial and Economic Statistics Monthly."

III. Impact of Rising International Commodity Prices on Corporate Input/Output Behavior

Input/Output Behavior by Industrial Sector and Price Transmission Process

Figure 3-1. Framework of Analysis



Uptrend Continues in International Commodity Markets

Figure 3-2. Crude Oil Price (Dubai spot)

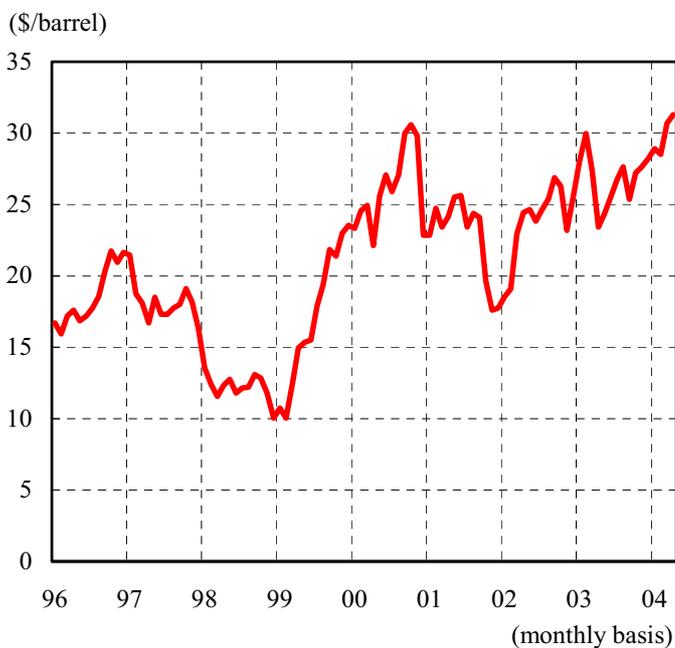


Figure 3-3. International Commodity Price Index (1995=100)

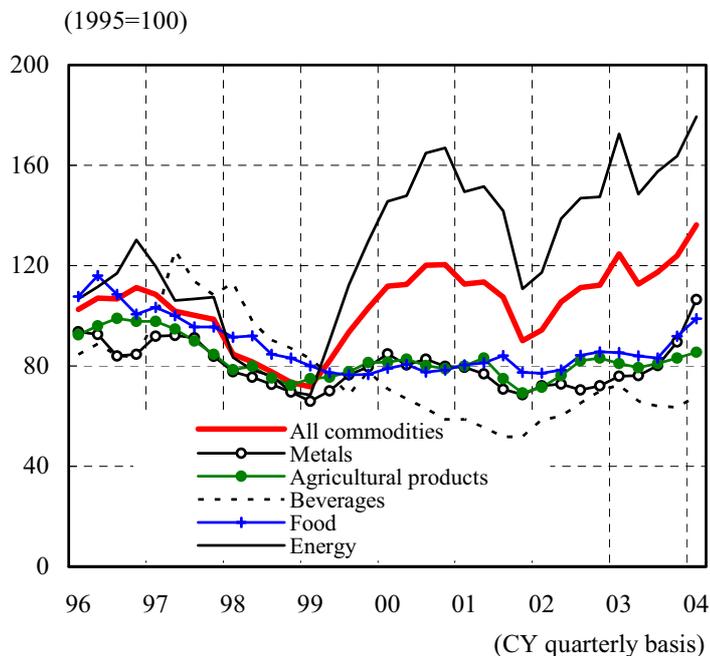


Figure 3-4. Year-on-Year Change in International Commodity Price Index (all commodities)

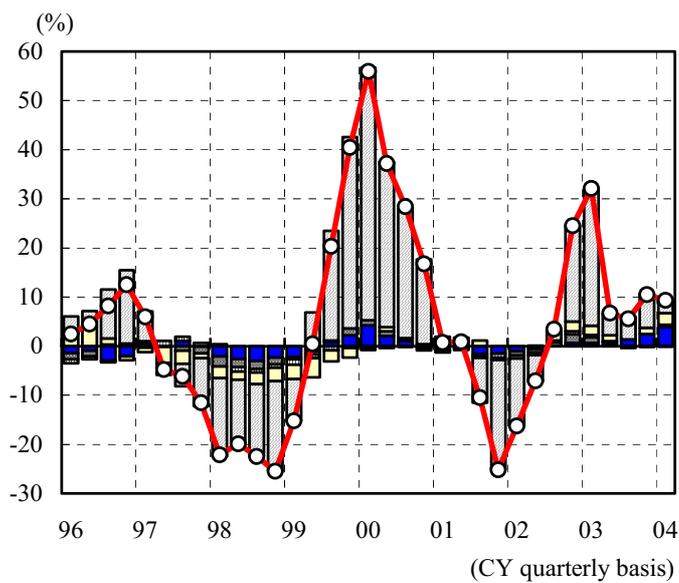
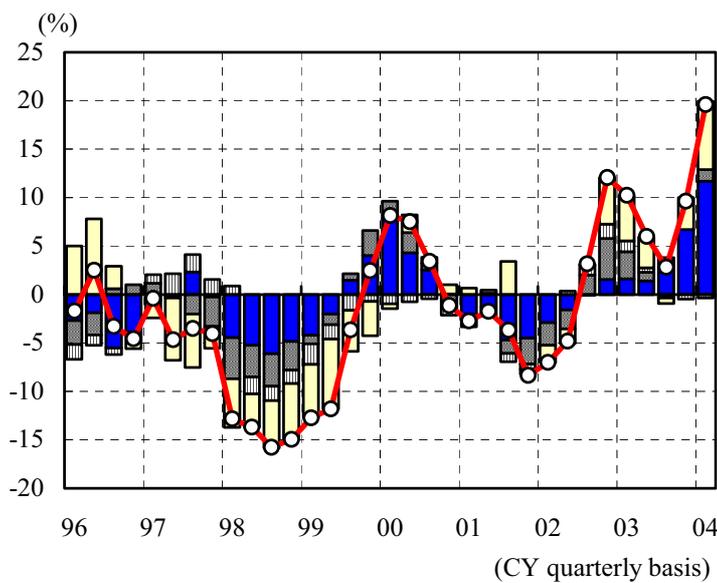


Figure 3-5. Year-on-Year Change in International Commodity Price Index (excluding energy)



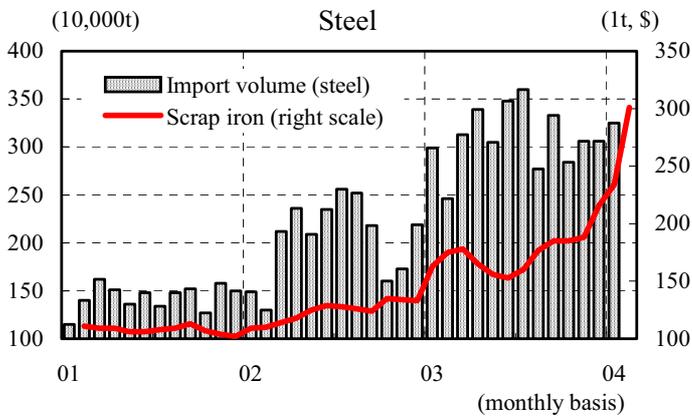
Metals
 Agricultural products
 Beverages
 Food
 Energy
 All commodities

Food
 Beverages
 Agricultural products
 Metals
 All commodities (excluding energy)

Sources: IMF, "International Financial Statistics" and other data.

China's Rising Share in World Imports

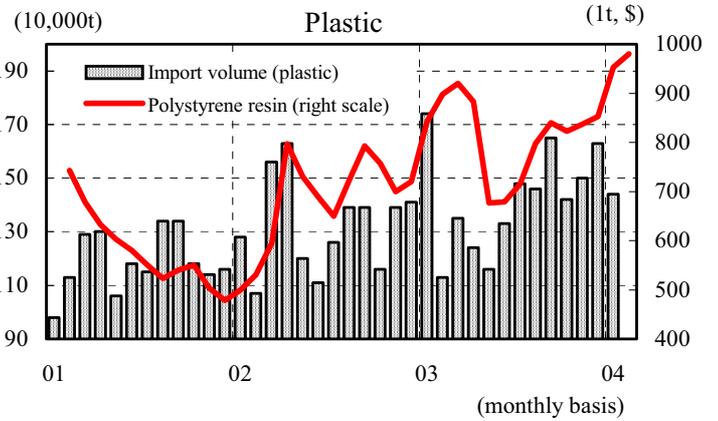
Figure 3-6. International Commodity Prices and Imports of China



Composition of world steel imports by country

	1990	2000	2002
EU (*)	45.2%	37.2%	35.7%
U.S.	9.5%	12.5%	10.2%
China	2.5%	6.3%	8.9%
Korea	2.9%	3.5%	3.6%
Canada	2.0%	3.4%	2.9%

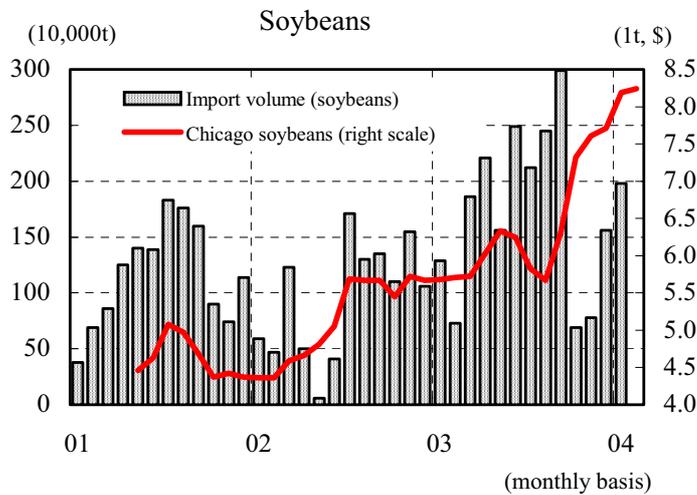
(*) Includes trade among member countries.



Composition of world chemical imports by country

	1990	2000	2002
EU (*)	50.6%	41.7%	43.5%
U.S.	7.7%	12.5%	13.0%
China	2.2%	5.0%	5.7%
Korea	5.0%	4.3%	3.8%
Canada	2.5%	3.3%	3.2%

(*) Includes trade among member countries.



Composition of world soybean imports by country

	1990	2000	2002
EU (*)	47.1%	40.5%	40.6%
U.S.	9.0%	11.7%	11.4%
China	11.4%	10.5%	8.8%
Korea	1.8%	3.3%	3.5%
Canada	2.0%	2.6%	2.6%

(*) Includes trade among member countries.

(Reference) Share of China in world crude oil imports

	2001
China	2.9%

- Notes :*
- Scrap iron is represented by U.S. No.1 heavy (CF) for Korea.
 - Polystyrene resin is represented by general-purpose GP (CIF) for East Asia.
 - Soybeans are represented by Chicago soybean market price, short term.

Sources : National Bureau of Statistics of China, "China Monthly Economic Indicators;" Nikkei Research Institute of Industry and Markets, "Nikkei Commodity Information;" WTO, "International Trade Statistics 2003;" IEA, "Key World Energy Statistics 2003."

Strong Yen Suppressing Import Prices

Figure 3-7. Trend of Price Indices

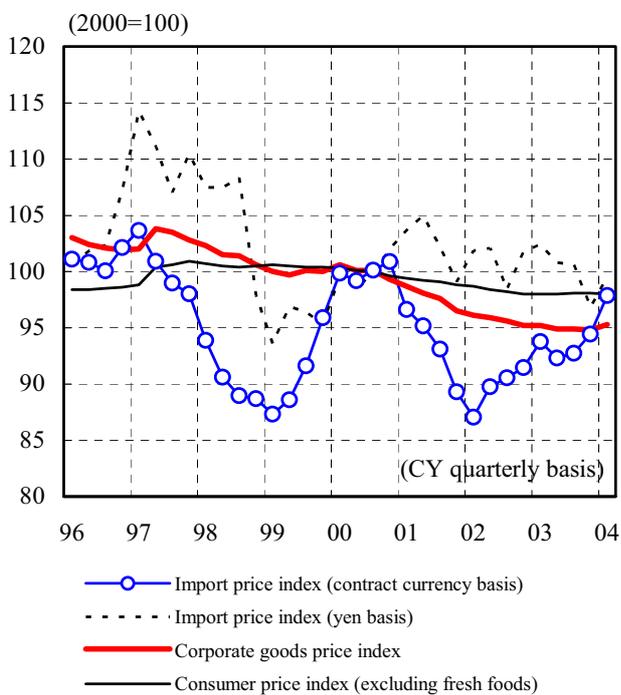


Figure 3-8. Trend of U.S. Price Indices

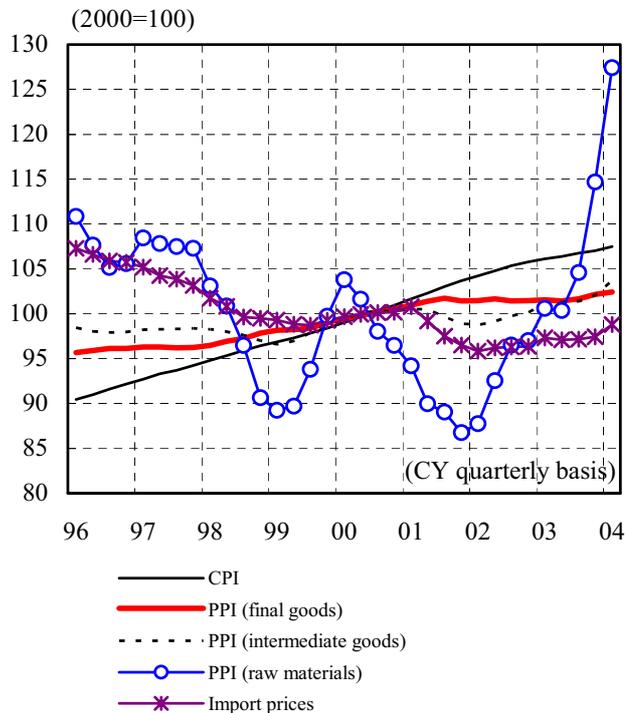
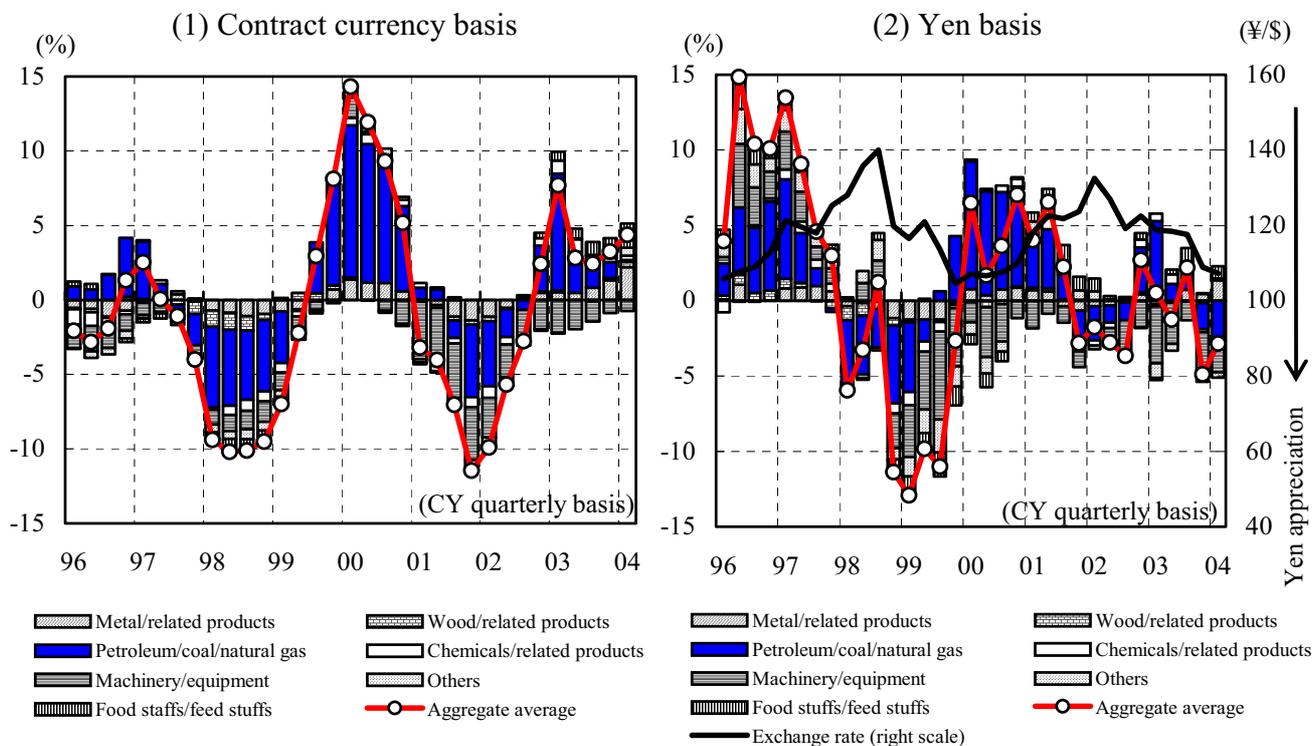


Figure 3-9. Trend of Import Price Index (year-on-year change by component)



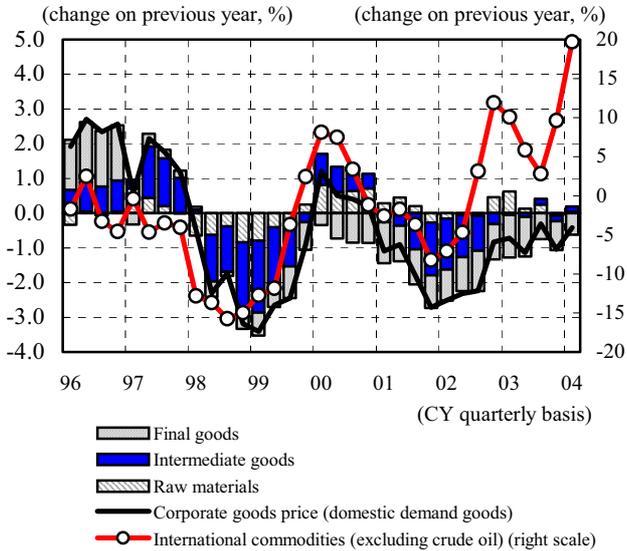
Notes : 1. CPI and PPI for U.S. are core indices excluding food and energy.
2. Exchange rate represents quarterly average.

Sources : Bank of Japan, "Price Indexes Monthly," and "Financial and Economic Statistics Monthly;" U.S. Department of Labor, "Producer Price Index" and "Consumer Price Index."

Slowed Decline in Corporate Goods Price, Consumer Prices in Mild Deflation

Figure 3-10. Trend of Corporate Goods Price (domestic demand goods)

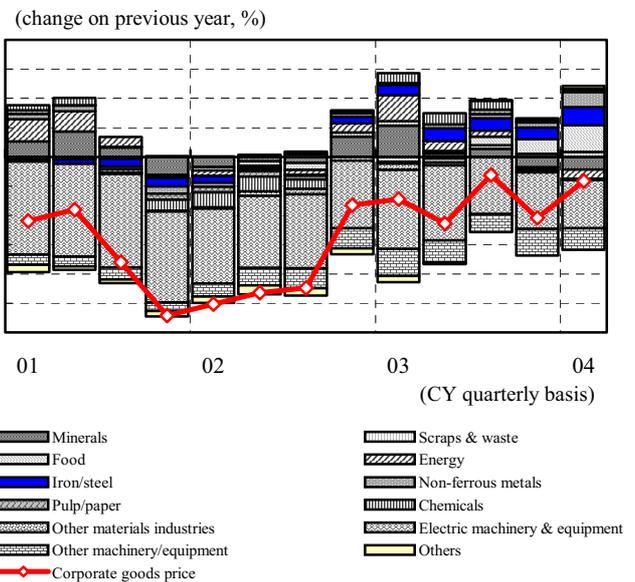
(1) By type of goods



Note: Corporate prices represent average of domestic and import prices of domestic demand goods.

Sources: Bank of Japan, "Price Indexes Monthly;" IMF, "International Financial Statistics."

(2) By industry

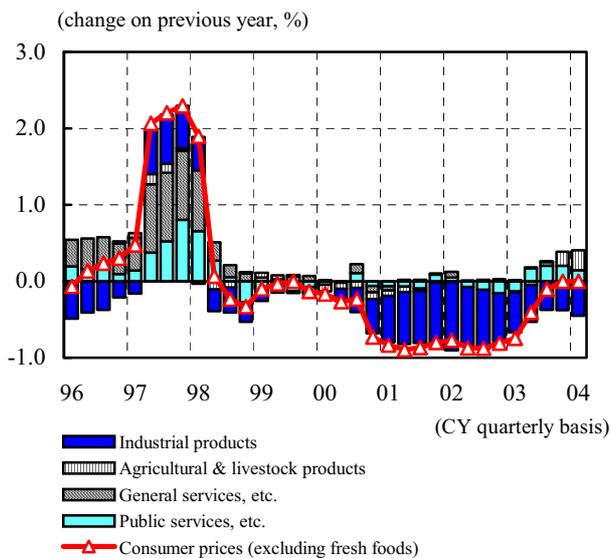


Notes:

- Other machinery/equipment include general machinery equipment, precision instruments and transportation equipment.
- Other materials industries include ceramics/stone/clay and textiles.
- Energy includes electric power, gas/water and petroleum/coal products.
- Food includes agriculture, forestry/fishery products and processed food stuffs.

Source: Bank of Japan, "Price Indexes Monthly."

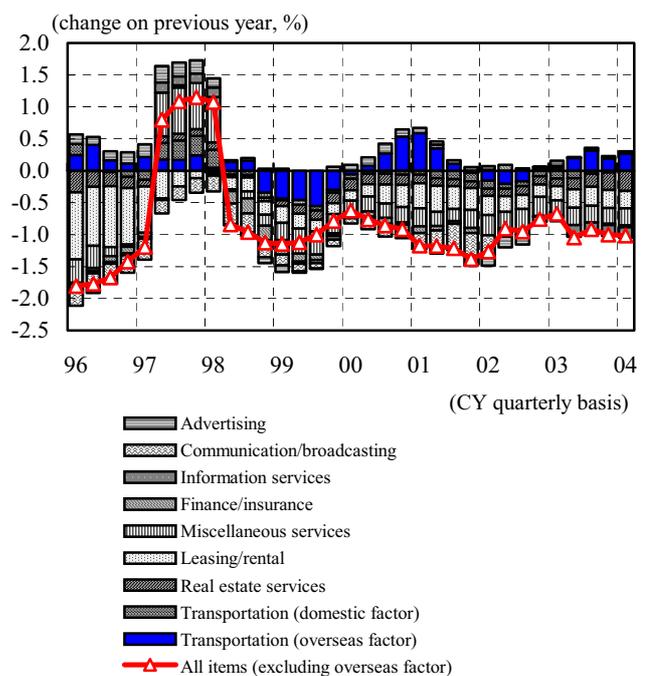
Figure 3-11. Trend of Consumer Prices (excluding fresh foods)



Note: General services, etc. include publications. Public services, etc. include electricity, gas and water changes.

Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications, "Monthly Report on Consumer Price Index."

Figure 3-12. Trend of Corporate Service Prices

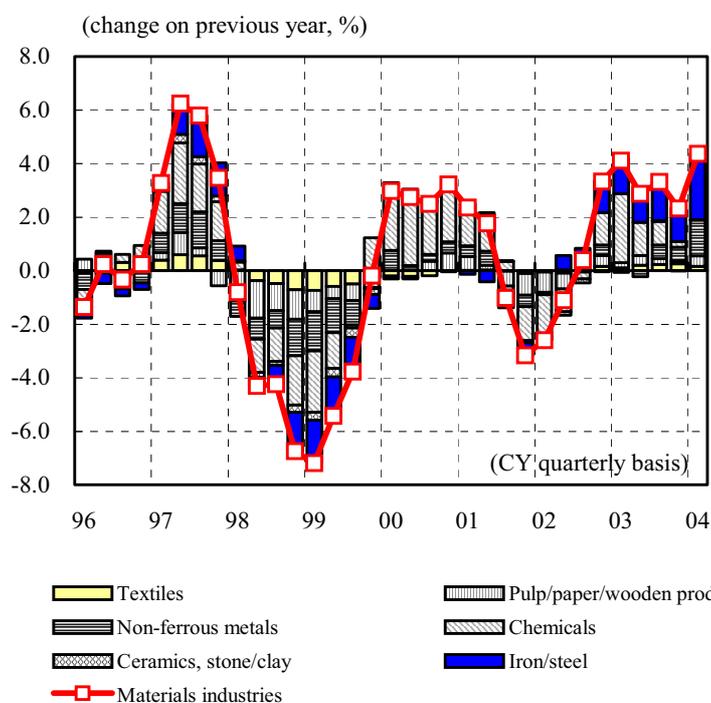


Note: Transport (overseas factor) includes maritime transport, international air freight transport and international air passenger transport.

Source: Bank of Japan, "Price Indexes Monthly."

Upward Trends in Input/Output Prices Uneven in Materials Sub-sector

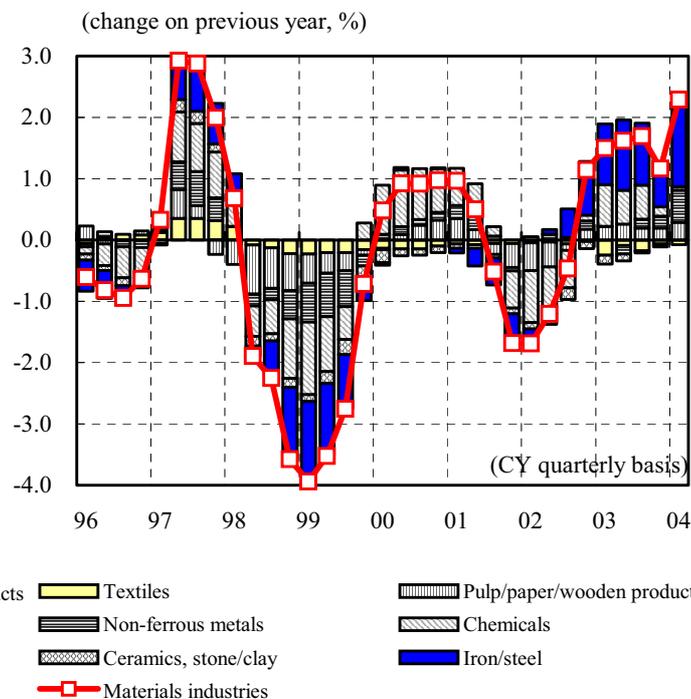
**Figure 3-13. Trend of Input Prices
(materials industries)**



Note: Materials industries: textiles, pulp/paper/wooden products, chemicals, ceramics/stone/clay, iron/steel and non-ferrous metals.

Source: Bank of Japan, "Price Indexes Monthly."

**Figure 3-14. Trend of Output Prices
(materials industries)**



Note: Materials industries: textiles, pulp/paper/wooden product, chemicals, ceramics/stone/clay, iron/steel and non-ferrous metals.

Source: Bank of Japan, "Price Indexes Monthly."

Figure 3-15. Trend of Price Shifting Rate (materials industries)

Industry	Bottom	Peak	Price shifting rate	Industry	Bottom	Peak	Price shifting rate
Paper/pulp	I	2Q/1996 ⇒ 2Q/1997	60.7 %	Iron/steel	I	3Q/1996 ⇒ 3Q/1997	57.7 %
	II	4Q/1999 ⇒ 1Q/2001	56.0 %		II	4Q/1999 ⇒ 3Q/2000	38.8 %
	III	4Q/2001 ⇒ 1Q/2004	80.3 %		III	4Q/2001 ⇒ 1Q/2004	72.7 %
Chemicals	I	1Q/1996 ⇒ 2Q/1997	34.0 %	Non-ferrous	I	3Q/1996 ⇒ 3Q/1997	52.9 %
	II	1Q/1999 ⇒ 2Q/2001	29.7 %		II	1Q/1999 ⇒ 1Q/2001	36.7 %
	III	1Q/2002 ⇒ 1Q/2004	27.2 %		III	4Q/2001 ⇒ 1Q/2004	42.7 %

- Notes:
- Price shifting rate is calculated as follows:
price shifting rate = growth rate of output price index from bottom to peak (%) / growth rate of input price index from bottom to peak (%) × 100.
 - Bottom and peak for price shifting rate are that of input prices.

Source: Bank of Japan, "Price Indexes Monthly."

Shifting Price in Under-capacity Industries

Figure 3-16. Trend of Overcapacity/Under-capacity Index (materials industries)

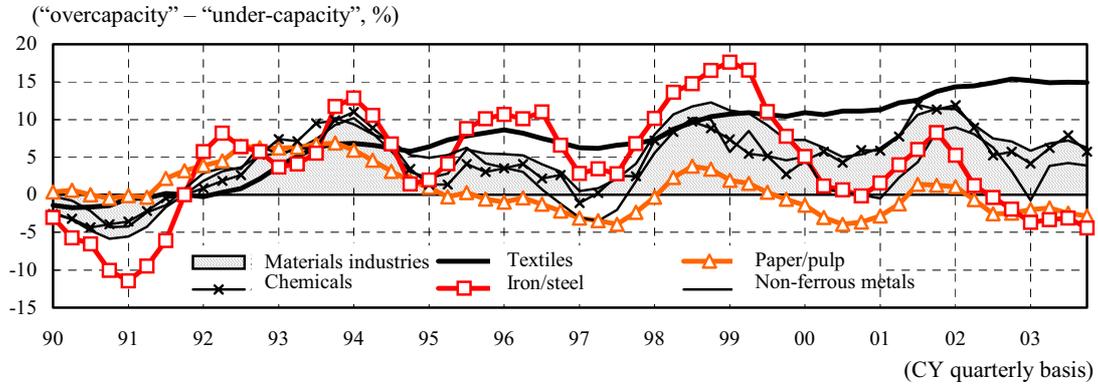
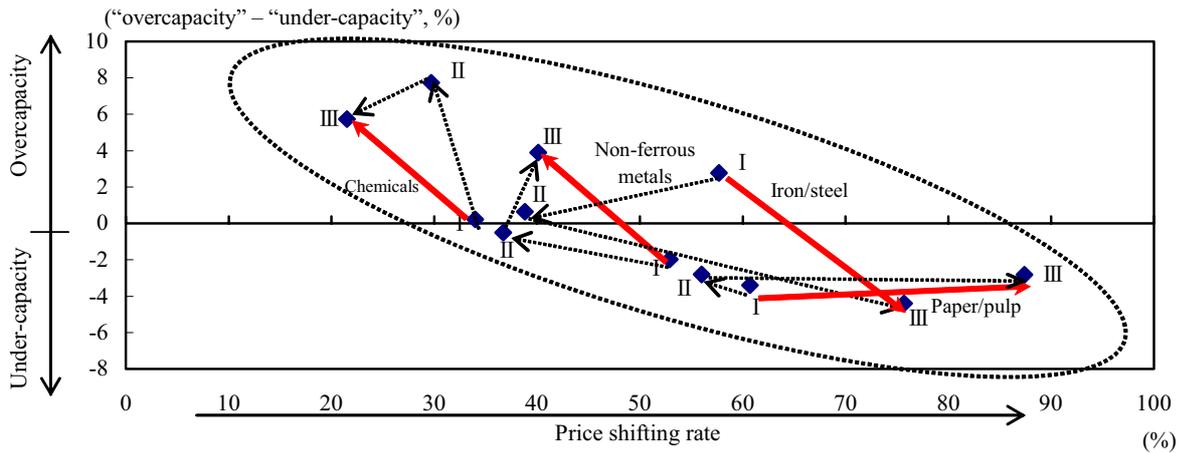


Figure 3-17. Relationship between Overcapacity/Under-capacity Index and Price Shifting Rate

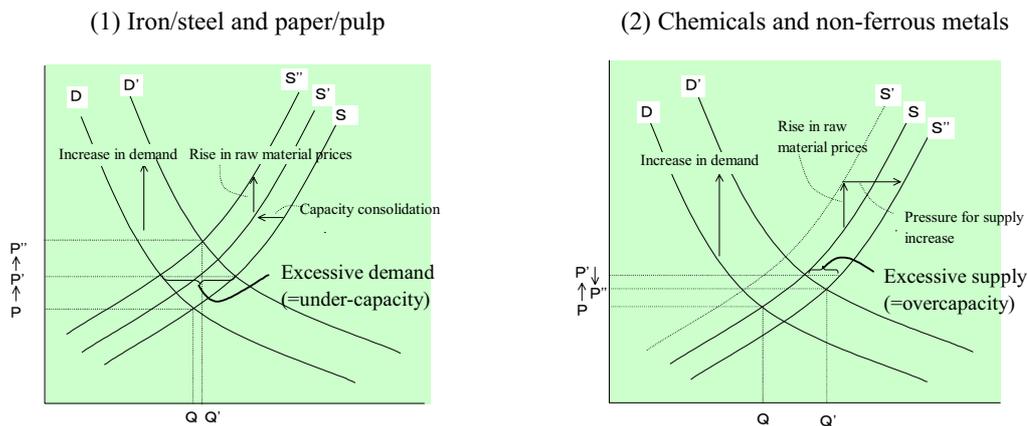


Notes: 1. Periods I, II and III for individual industries are same as in Figure 3-15.

2. Overcapacity/under-capacity index in Figure 3-17 represent peak value for each period.

Sources: Bank of Japan, "Price Indexes Monthly" and "Short-term Economic Survey of Enterprises in Japan (*Tankan*);" Ministry of Economy, Trade and Industry, "Economy, Trade and Industry Statistics."

Figure 3-18. Pattern of Determination of Output Prices and Volume in Midstream Industries



Downtrends of Input/Output Prices in Processing & Assembly Sub-sector

Figure 3-19. Trend of Input Prices (processing & assembly industries)

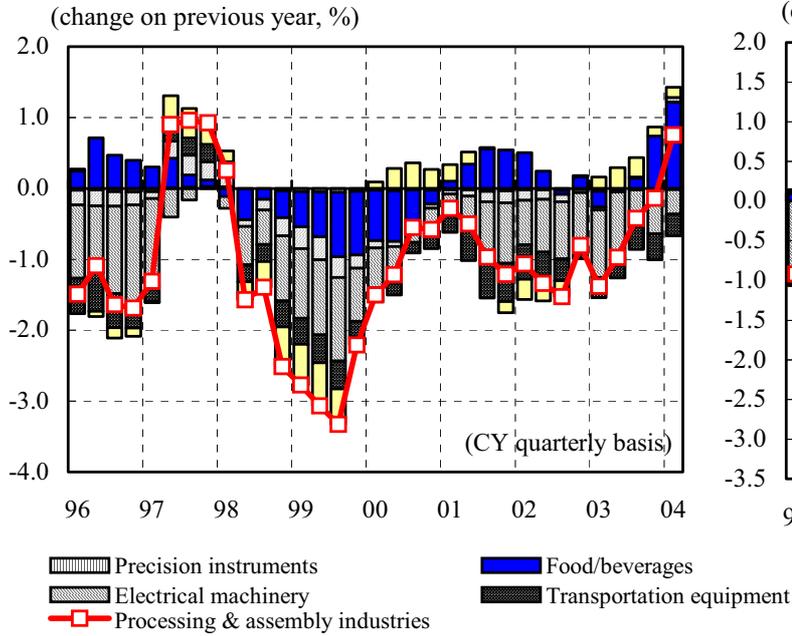


Figure 3-20. Trend of Output Prices (processing & assembly industries)

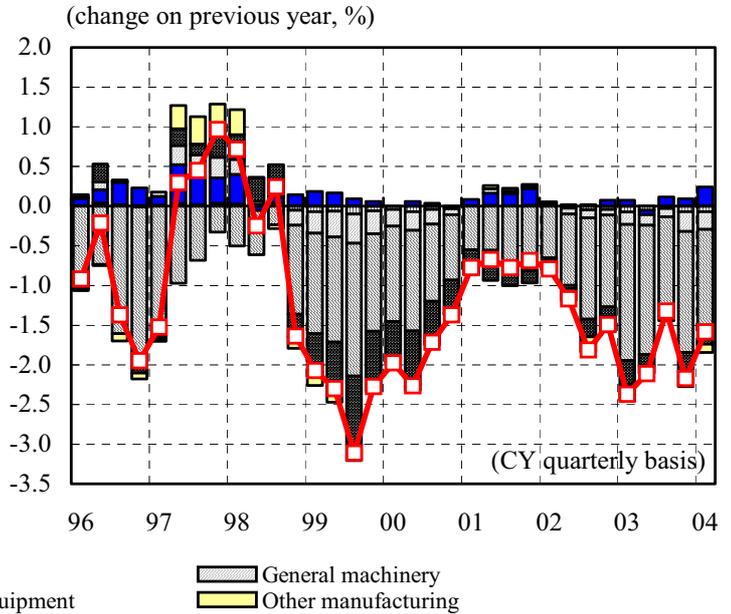


Figure 3-21. Year-on-Year Change in Current Profits by Component (materials)

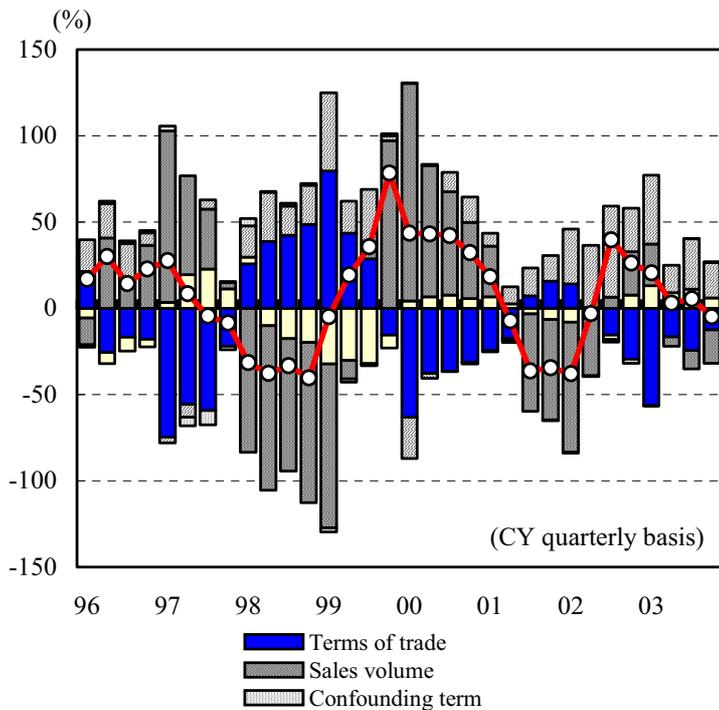
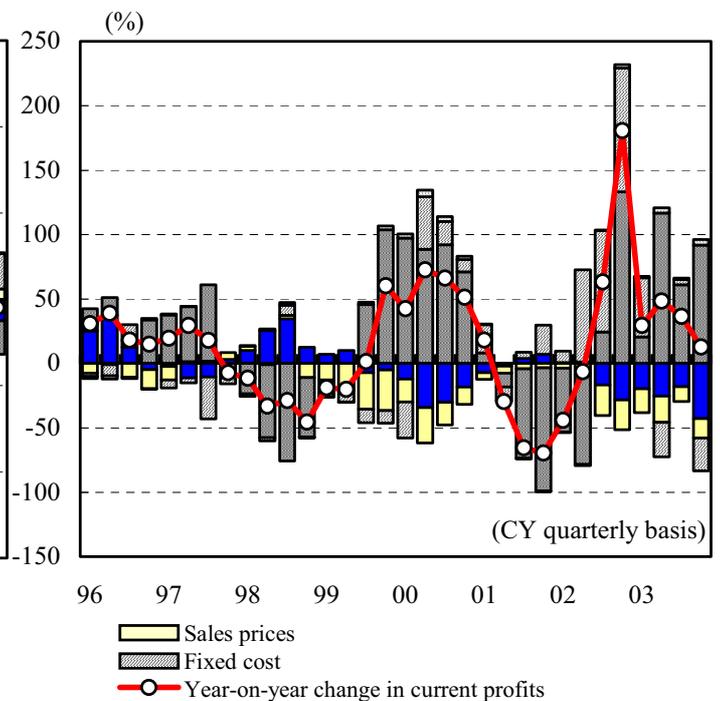


Figure 3-22. Year-on-Year Change in Current Profits by Component (processing & assembly)



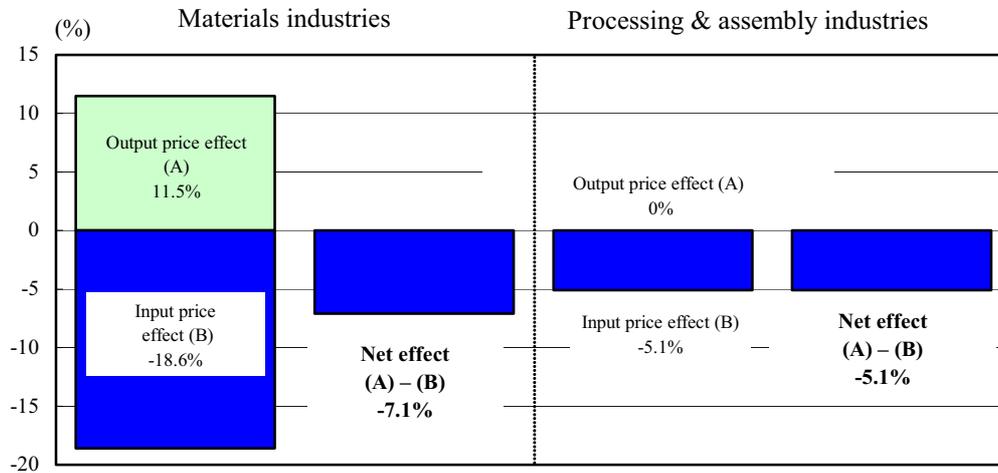
Note : Materials: textiles, pulp/paper/wood products, chemicals, ceramics/stone/clay, iron/steel and non-ferrous metals.

Processing & assembly: food/beverages, general machinery, electric machinery, precision machinery and transport equipment.

Sources : Bank of Japan, "Price Indexes Monthly;" Ministry of Finance, "Quarterly Report of Statistical Survey of Incorporated Enterprises."

Impact of Worsening Terms of Trade on Corporate Profits (Estimate)

Figure 3-23. Impact of 1% Rise in Input Prices on Corporate Profits in Materials Industries (estimate)



Notes: 1. Definition of input price effect and output price effect in materials and processing & assembly sub-sectors is as follows:

- Output price effect in materials (A) = (change in materials output prices in case of 1% change in materials input prices (0.468%: price shifting rate in materials for current period)) × (change in current profits in materials in case of 1% change in materials output prices (24.5%)).
- Input price effect in materials (B) = change in current profits in materials in case of 1% change in materials input prices (-18.6%).
- Output price effect in processing & assembly = 0.
- Input price effect in processing & assembly = (change in processing & assembly input prices in case of 1% change in materials input prices (0.37% (change in processing & assembly input prices in case of 1% change in materials output prices) × 0.468 (price shifting rate in materials for current period)) × (change in current profits in processing & assembly in case of 1% change in processing & assembly input prices (-29.6%)).

2. Estimate result is as follows:

(1) Corporate profit function

	Materials	Processing & assembly
Constant term	-16.3 (-6.7)	-21.8 (-5.5)
Output price effect (α)	24.5 (13.6)	37.4 (16.4)
Output volume effect (β)	25.2 (25.6)	35.4 (25.8)
Input price effect (γ)	-18.6 (-12.9)	-29.6 (-14.3)
Input volume effect (ϵ)	-18.4 (-21.3)	-27.7 (-23.0)
Fixed cost effect (δ)	-5.6 (-19.3)	-6.8 (-23.2)
R ² adjusted for degrees of freedom	0.96	0.98
D.W.	2.20	2.27

(2) Price function

Constant term	-71.6 (-0.0)
Output price index in materials (ζ)	0.37 (4.1)
R ² adjusted for degrees of freedom	0.99
D.W.	1.82

(3) Estimation formula

Corporate profit function: $\ln(\text{current profits}) = \text{constant term} + \alpha \ln(\text{output price index}) + \beta \ln(\text{output volume}) + \gamma \ln(\text{input price index}) + \epsilon \ln(\text{input volume}) + \delta \ln(\text{fixed cost})$

Price function: $\ln(\text{input price index in processing \& assembly}) = \text{constant term} + \zeta \ln(\text{output price index in materials})$

(4) Estimate covers the period from Q2/1990 to Q4/2003.

(5) Figures in parentheses () are t values.

Sources: Bank of Japan, "Price Indexes Monthly," Ministry of Finance, "Quarterly Report of Statistical Survey of Incorporated Enterprises."

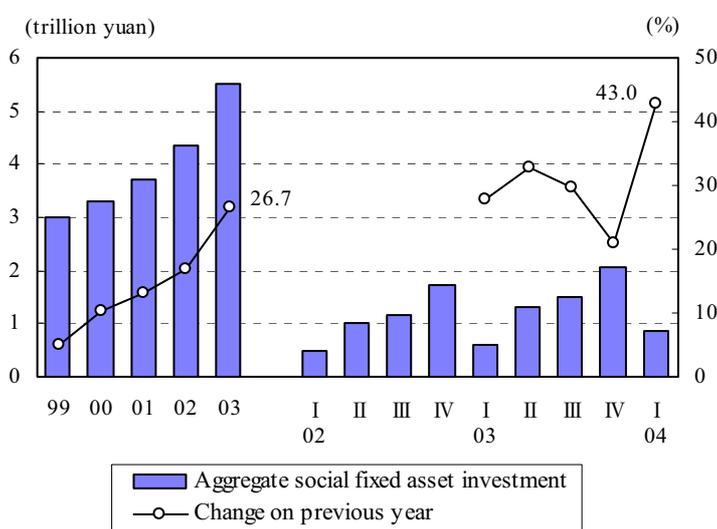
Appendix

Chinese Economy: Analysis of Factors behind Overheated Investment in Fixed Assets

1. Overrunning Real GDP Growth and Rising Fixed Asset Investment

Real GDP (actual figure) in January-March 2004 grew 9.8% on the previous year, far exceeding the annual target of 7% decided at the National People's Congress meeting in March. Concerned about economic overheating, the Chinese government has implemented a tight money policy since the middle of last year. However, the recent announcement of an "overrun" on the established target raises questions about the effectiveness of the government's policy, and there is greater vigilance on the economic situation.

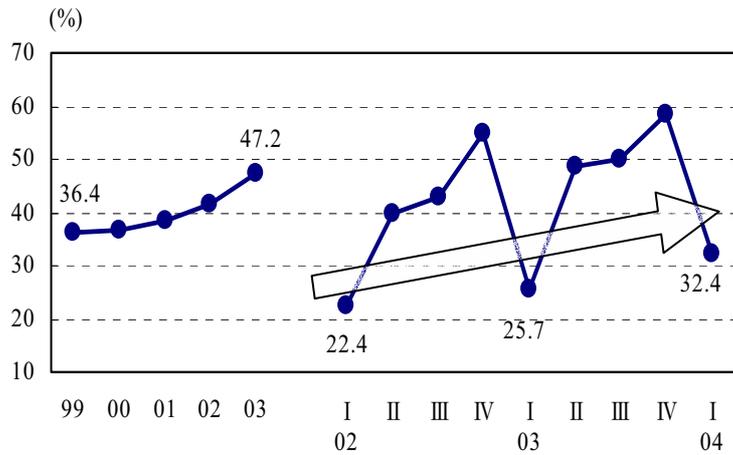
Figure 1. Aggregate Social Fixed Asset Investment



Sources: Statistical Yearbook of China; National Bureau of Statistics of China website.

One cause of the overrun is excessive investment in fixed assets. Indeed, aggregate social fixed asset investment rose a massive 43.0% on the previous year in the current period (Figure 1). On an annual basis, the growth of aggregate social fixed asset investment accelerated to 26.7% in 2003, while on a quarterly basis too it has been recording substantial increases that exceed real GDP growth. The current growth of 43.0%, however, represents a significant acceleration.

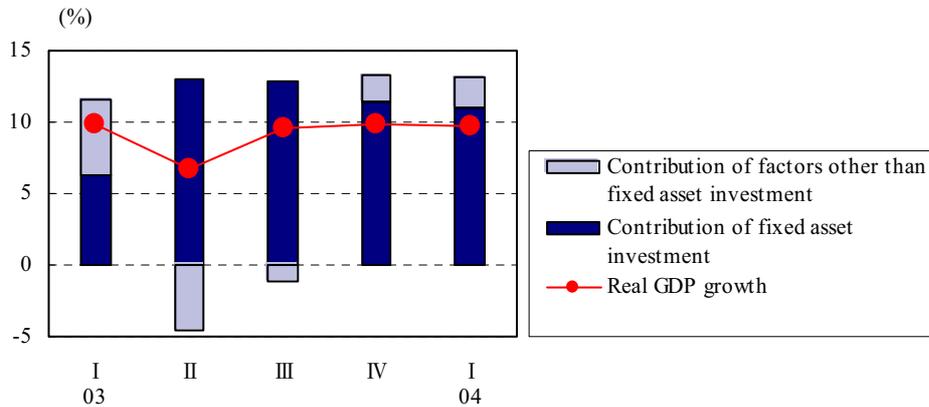
Figure 2. Aggregate Social Fixed Asset Investment as % of Nominal GDP



Sources: Statistical Yearbook of China; China Monthly Economic Indicators; National Bureau of Statistics of China website.

Aggregate social fixed asset investment is also rising as a percentage of GDP (nominal figure¹). Although it appears that the ratio declined in the current period on a quarterly basis, aggregate social fixed asset investment in China was restrained in the first quarter, and then increased significantly from the second to fourth quarter.² The ratio for the current period (32.4%) is 10 points higher than in the first quarter of 2002, indicating the growing important of fixed asset investment in the Chinese economy (Figure 2).

Figure 3. GDP Growth and Contribution of Aggregate Social Fixed Asset Investment



Sources: China Monthly Economic Indicators; National Bureau of Statistics of China website.

¹ National Bureau of Statistics of China does not publish data on real GDP.

² This restraint in the first quarter may be attributed to several factors. For example, investment tends to be restrained until March, when the National People's Congress sets economic policies and targets for the year. Also, the first quarter includes the Chinese New Year period, when economic activity slows down. The peak in the fourth quarter may be explained by the fact that most of the investment data are submitted by business units in that quarter.

Looking at the contribution of fixed asset investment to nominal GDP growth, nominal GDP grew 13.1% in the current period, of which 11.0% (a contribution of 84.0%) came from fixed asset investment (Figure 3). Thus, the growth of GDP in the current period was substantially influenced by the increase in fixed asset investment.

2. Factors by Industry: Significant Growth in Iron/Steel and Chemicals, Property Investment Still Booming

Since January-February 2004, the National Bureau of Statistics of China has been publishing the composition of aggregate social fixed asset investment by industry and region, as well as its year-on-year growth by component. The data only cover investment in urban areas.

Aggregate social fixed asset investment in the current period (January-March 2004) totaled 879.9 billion yuan (up 43.0% on the previous year), of which urban areas accounted for 705.9 billion yuan (up 47.8% on the previous year) and rural areas accounted for 174.0 billion yuan (up 26.4% on the previous year). This indicates that investment is more active in urban areas than in rural areas.

On a skyline chart,³ the composition of urban fixed asset investment in the current period by industry⁴ (Figure 4) reveals the following:

- 1) The non-manufacturing sector has a larger share and contribution than the manufacturing sector.
- 2) The real estate, metal (iron/steel) and energy-related industries make the largest contribution to the increase in investment.
- 3) In the manufacturing sector, industries such as metals, textiles and chemicals have recorded above-average increases.

Table 1. Industries with Largest Contribution to Investment Growth

	Change on previous year	Share	Contribution
Manufacturing	75.8%	27.2%	36.3%
(1) Metals	108.4%	8.7%	14.1%
(2) Chemicals	73.3%	6.0%	7.9%
(3) Machinery	70.3%	3.5%	4.5%
Non-manufacturing	39.5%	72.8%	63.7%
(1) Real estate	39.8%	29.2%	25.7%
(2) Power/gas/water	53.1%	9.2%	9.8%
(3) Hydrology/environment	54.7%	8.2%	9.0%

Source: National Bureau of Statistics of China website.

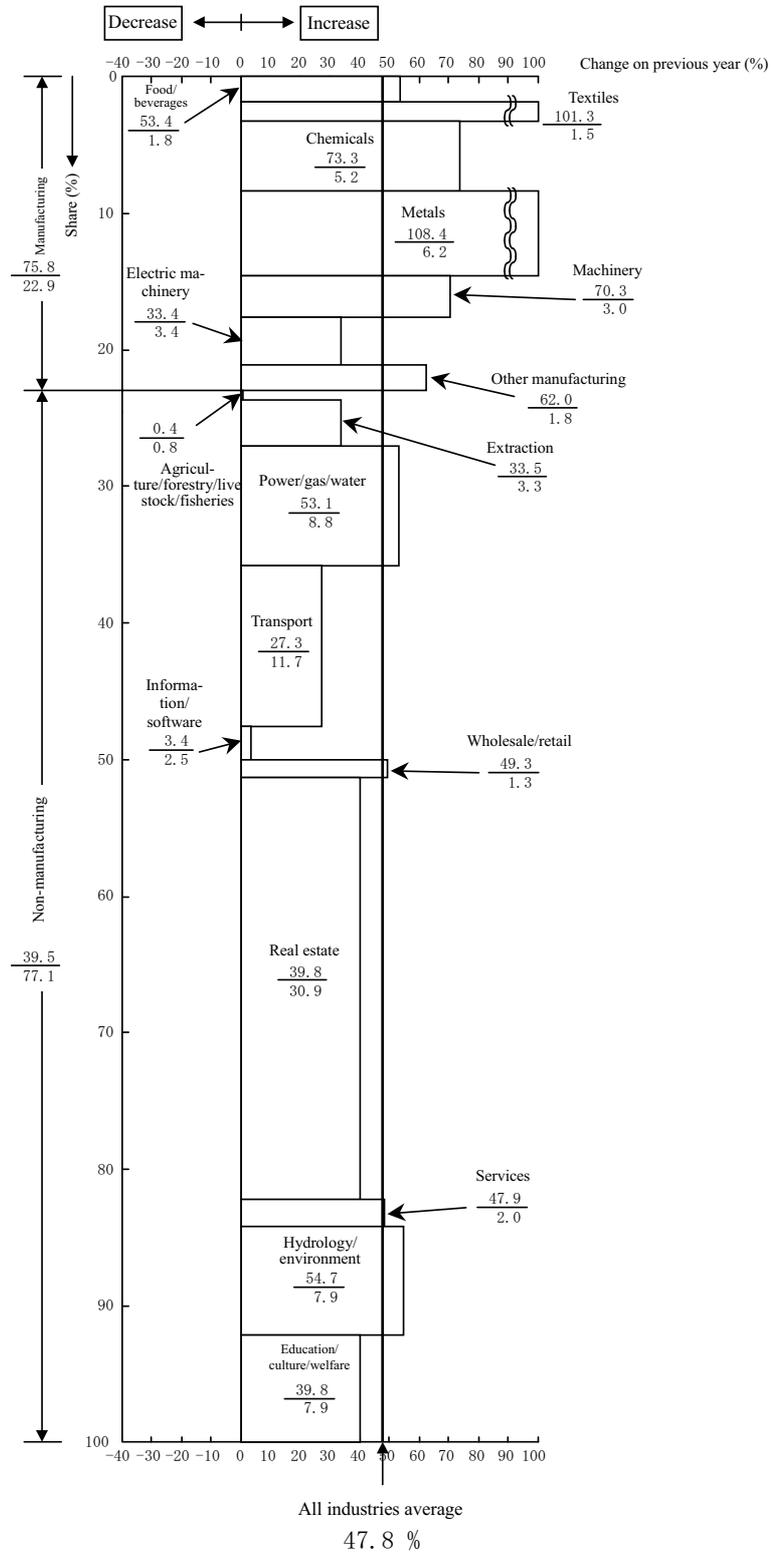
The government's stance of restricting property investment has become clear since the People's Bank of China issued a circular to strengthen control over lending for real estate. Nonetheless, property investment is still strongly inflating total fixed asset investment, indicating that the government's policy has not necessarily been effective. As press reports clearly show, total investment has been led by excessive spending in industries such as metals (iron/steel in particular) and chemicals.

³ See DBJ's semiannual Survey on Planned Capital Spending.

⁴ See below (Note) for industrial classification. The original data, collected through central and local authorities for each industry, are more often compiled on a principal business basis than on an investment specific basis. For example, investment in the construction of a property building by a national steel manufacturer will be considered as investment in the iron/steel industry, rather than as property investment.

Figure 4. Fixed Asset Investment by Industry

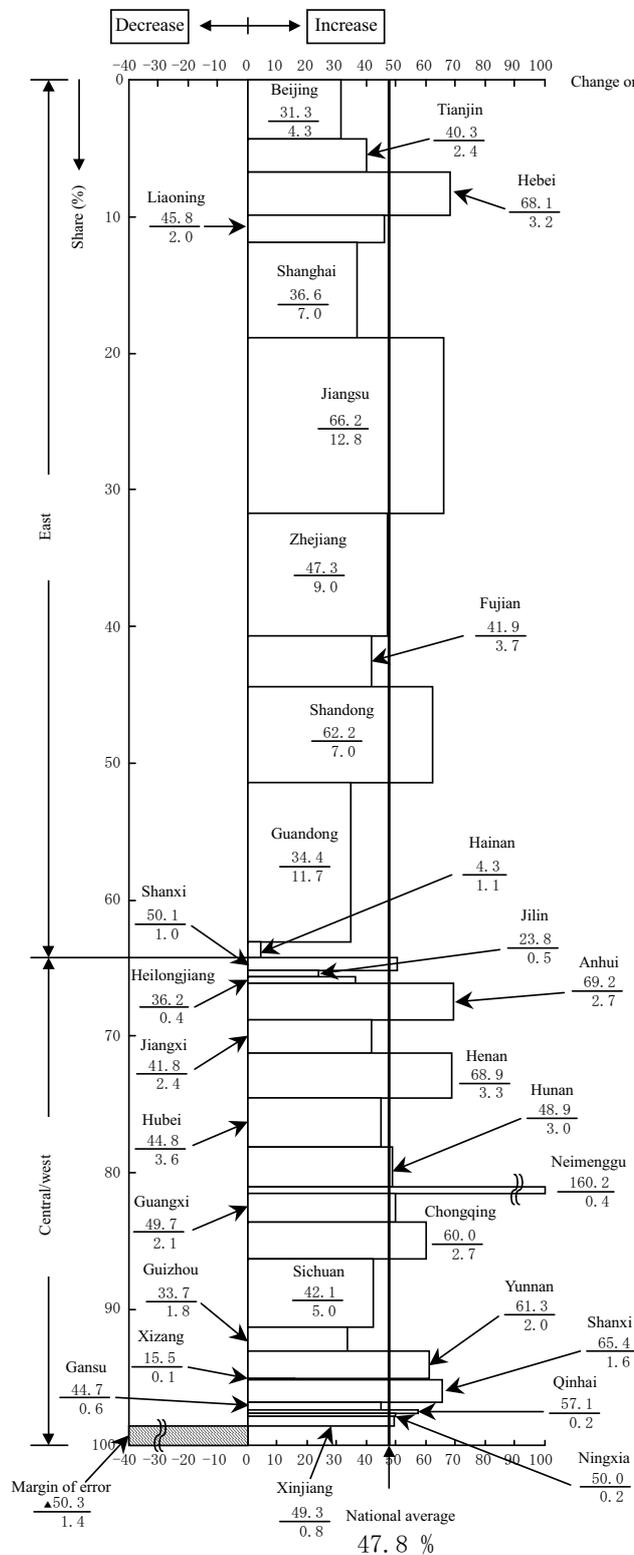
(January-March 2004) Figures indicate $\frac{\text{Change on previous year (January-March 2004)}}{\text{Share (January-March 2003)}}$



Source: National Bureau of Statistics of China website.

Figure 5. Fixed Asset Investment by Region

(January-March 2004) Figures indicate $\frac{\text{Change on previous year (January-March 2004)}}{\text{Share (January-March 2003)}}$



Source: National Bureau of Statistics of China website.

3. Factors by Region: Active Investment in Inland as well as Coastal Areas

Looking at factors behind the increase in investment by region (province), the following characteristics are observed (Figure 5):

- 1) The contribution from the eastern region, i.e. coastal area, is substantial.
- 2) Provinces with the largest contribution include Jiangsu, Shandong and Zhejiang, all located in the coastal area.
- 3) The momentum of investment has spread into the central and western regions (inland area), which still account for a small share of total investment.

Table 2. Provinces with Largest Contribution to Investment Growth

	Change on previous year	Share	Contribution
(1) Jiangsu	66.2%	12.8%	17.7%
(2) Shandong	62.2%	7.0%	9.1%
(3) Zhejiang	47.3%	9.0%	8.9%

Source: National Bureau of Statistics of China website.

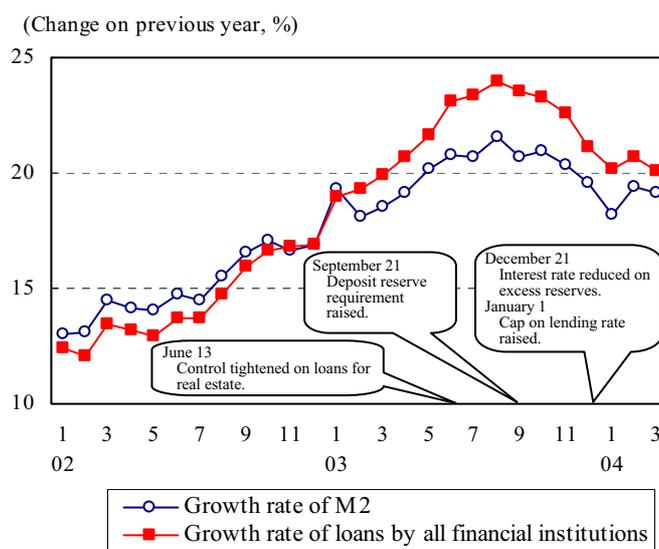
It is clear from Figure 5 that the major contribution comes from the more industrialized coastal area. It is also clear, however, that investment is now expanding into the inland area. Investment in the inland area shows a relatively even distribution, with growth in each province being near the average. The fairly even growth of fixed asset investment in individual provinces, coupled with the strong rise in investment in specific industries including metals, as shown in Figure 4, points to the “blind duplication of investment in every region,” pointed out by the State Council.⁵

4. Difficult Control on Fixed Asset Investment: Marginal Effect of Credit Control and Increase in Projects Led by Local Governments

The money stock continues to grow, although it has been slowing since the People’s Bank of China raised the deposit reserve requirement ratio in September 2003 (Figure 6). The People’s Bank of China raised the ratio again in April, but the experience of last year suggests that its effect will be short-lived. Other options may include more in-depth tight money policies such as raising the statutory basic interest rate. However, the Chinese authorities are faced with the dilemma that any such rate increase would widen the interest rate gap with the U.S. dollar, thus aggravating the current excessive liquidity. There is little room to curb fixed asset investment through credit controls.

⁵ “The highest priority is given to the control of blind investment and duplicated low value-added construction in certain regions and industries,” said Zeng Peiyang, Vice-Premier of the State Council, on April 4, 2004.

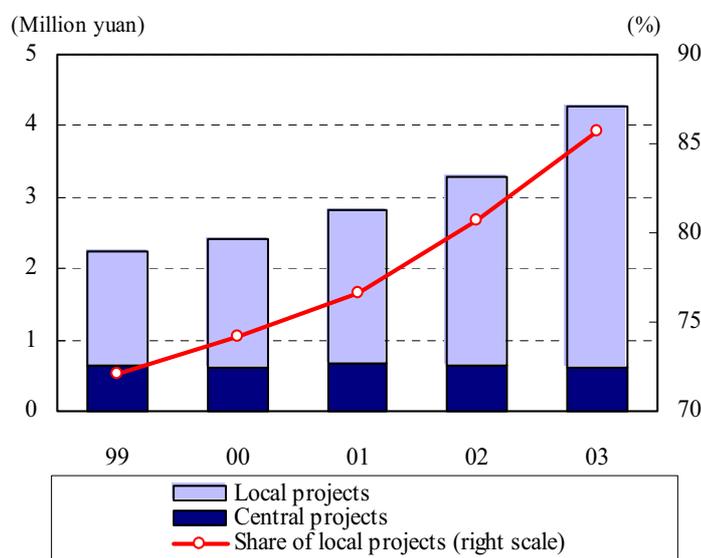
Figure 6. Growth of Money Stock and Outstanding Bank Loans



Source: China Monthly Economic Indicators.

A classification of fixed asset investment⁶ into central and local projects indicates that the share of local projects, led by local governments, has been increasing constantly (Figure 7). “Top local government officials tend to neglect market principles and make excessive investment, as their performance is measured by GDP data,” notes Li Yiping, Professor of Economics at Renmin University of China.

Figure 7. Share of Local Projects in Total Fixed Asset Investment



Source: China Monthly Economic Indicators.

⁶ Excludes investment by urban and rural community enterprises and by proprietorships (China Monthly Economic Indicators).

“Under the influence of local governments, banks are obliged to finance local projects without sufficient review and monitoring.”⁷ The increase in local government-led projects ruins the effect of tight money policies introduced by the central government and undermines its control on investment behavior. Thus, it will take longer to slow down the overheated investment in fixed assets.

⁷ Li Yiping, “Local Governments Do Not Believe in Market Principles,” China Economic Times, May 10, 2004.

(Note)

The industrial classification by the National Bureau of Statistics was modified as follows in preparing this report and the skyline charts.

(National Bureau of Statistics classification)	(Classification in this report)
Major industries	Total
National total	Agriculture/forestry/livestock/fisheries
1. Agriculture, forestry, livestock & fisheries Of which: forestry	Extraction
2. Extraction Coal mining Oil & natural gas extraction Black metal extraction Non-ferrous metal extraction Nonmetallic mineral extraction Other extraction	Food/beverages
3. Manufacturing Food processing Food production Beverages Tobacco processing Spinning and weaving Apparel Leather Woodworking Furniture Paper Printing Sporting gear Oil processing Chemicals Pharmaceuticals Synthetics Rubber Plastic Nonmetallic mineral Black metal processing Non-ferrous metal processing Metal products General machinery Leased facilities Transport equipment Electric equipment Electronic communication equipment Measuring instruments Craftwork Recycled resource processing	Textiles
	→Other manufacturing
	Chemicals
	Metals
	Machinery
	Electric machinery
	Other manufacturing
4. Power, gas & water Electric power Gas production & supply Water production & supply	Power/gas/water
5. Construction	→Real estate
6. Transport, warehousing & post Railroad transport Road Transport Urban public transportation River & marine transport Air transport	Transport
7. Information & software	Information/software
8. Wholesale & retail	Wholesale/retail
9. Hotels & restaurants	→Services
10. Finance	→Services
11. Real estate	Real estate
12. Rental & commercial services	→Services
13. Scientific research & technical services	→Services
14. Hydrology, environment & public management Hydraulic management Environmental management Public facility management	Hydrology/environment
15. Community services	→Services
16. Education	Education/culture/welfare
17. Sanitation & social security Of which: sanitation	
18. Culture, sports & entertainment	
19. Public management & social organization	
20. International organizations	→Services

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