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# Monthly Report of Recent Economic and Financial Developments

January 2009

(English translation prepared by the Bank's staff based on the Japanese original released on January 23, 2009)

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## Monthly Report of Recent Economic and Financial Developments<sup>1</sup> January 2009

### Summary

Japan's economic conditions have been deteriorating significantly.

Exports have decreased substantially. Corporate profits have continued to deteriorate, and business fixed investment has declined substantially. Private consumption has weakened, as the employment and income situation has become increasingly severe. As for housing investment, the number of housing starts has started to decrease again. Public investment, meanwhile, has been sluggish. Reflecting these developments in demand both at home and abroad, production has decreased at a much faster pace.

Japan's economic conditions are likely to continue deteriorating for the time being.

Exports are expected to continue to decrease due to the slowdown in overseas economies and the appreciation of the yen. Domestic private demand is also likely to weaken further as corporate profits and firms' funding conditions deteriorate and the employment and income situation becomes increasingly severe. Public investment, meanwhile, is projected to be sluggish. Reflecting these developments in demand and growing adjustment pressures on inventories, production is expected to continue to decrease.

On the price front, the three-month rate of decrease in domestic corporate goods prices has been large, mainly due to the drop in international commodity prices. The year-on-year rate of increase in consumer prices (excluding fresh food) has moderated, mainly reflecting the declines in the prices of petroleum products and the stabilization of food prices.

<sup>&</sup>lt;sup>1</sup> This report is based on data and information available at the time of the Bank of Japan Monetary Policy Meeting held on January 21 and 22, 2009.

Domestic corporate goods prices are likely to continue decreasing for the time being, mainly due to the drop in international commodity prices and the easing of supply-demand conditions for products. The year-on-year rate of increase in consumer prices is expected to moderate further and become negative, mainly due to the declines in the prices of petroleum products and the stabilization of food prices and also to increasing slackness in supply and demand conditions in the overall economy.

In money markets, the weighted average of the overnight call rate has been at around 0.1 percent since the Bank of Japan changed the guideline for money market operations. JGB repo market rates have declined, due partly to the reduction in the policy interest rate and a drop in seasonal demand for funds over the year-end. Against the background of these factors and various policy measures, CP rates, which rose sharply in the previous few months, have also declined somewhat since the end of last year. Interbank rates on term instruments, however, have remained at high levels. Meanwhile, stock prices have fallen compared with last month, whereas the yen's exchange rate against the U.S. dollar and yields on long-term government bonds have been around the same level as last month.

Financial conditions in Japan have become tighter.

The overnight call rate has been at an extremely low level, but the stimulative effects from this have become increasingly limited given the significant deterioration in economic activity. Despite a slight decline in bank lending rates following the reduction in the policy interest rate, funding costs for firms have been more or less flat as a whole, as credit spreads on CP and corporate bonds have remained wide. The amount outstanding of CP and corporate bonds issued has been below the previous year's level, as investors have continued to be selective in their purchases of CP and corporate bonds. The amount outstanding of bank lending, especially to large firms, has increased at a faster pace, reflecting firms' demand for securing more liquidity and compensating for the decline in the issuance of CP and corporate bonds. Despite the increase in bank lending, an increasing number of firms have reported that their financial positions are weak and lending attitudes of financial institutions are severe.

Meanwhile, the year-on-year rate of change in the money stock has been around 2 percent.

### **1. Economic Developments**

<u>Public investment</u> has been sluggish (Chart 5). Looking at monthly indicators, both the amount of public construction completed—which reflects the progress of public works—and the value of public works contracted—a measure that reflects public orders—have been sluggish on average.

Public investment is projected to be sluggish due to tight national and local fiscal conditions.

<u>Real exports</u> have decreased substantially (Charts 6[1] and 7). They deceased sharply, by 10.7 percent, in October-November compared with the third quarter.<sup>2</sup>

By destination (Chart 7[1]), exports to most countries and regions decreased sharply. Exports to the United States dropped substantially in the second and third quarters on a quarter-on-quarter basis, mainly due to the drop in automobiles; they also decreased significantly in October-November compared with the third quarter. Exports to the EU and NIEs plunged in the second quarter followed by a temporary increase in the third quarter and then marked a double-digit decline in October-November. Exports to the ASEAN economies were almost level in the second and third quarters, but dropped sharply in October-November. Exports to China and other regions (such as the Middle East, Latin America, and Russia)—which had been steady—also plunged in October-November.

By goods (Chart 7[2]), exports of automobile-related goods have decreased substantially since exports to other regions—which had been firm—have started to fall, in addition to those to the United States and the EU. Exports of IT-related goods registered a double-digit decline in October-November, mainly to NIEs and China, after having increased in the second and third quarters. Exports of consumer goods also recorded a double-digit decrease in October-November following the marginal decline in the third quarter. Exports of capital goods and parts and of intermediate goods have declined substantially.

 $<sup>^2</sup>$  Since the statistics were first compiled in 1975, the largest rate of decline in the quarterly figures was 6.0 percent, recorded in the third quarter of 1995.

<u>Real imports</u> have been more or less flat (Charts 6[1] and 9). On a quarter-on-quarter basis, they dropped considerably, by 3.2 percent, in the second quarter, but rose, by 2.9 percent, in the third quarter, followed by an increase of 2.0 percent in October-November compared with the third quarter. However, movements mainly in raw materials and foodstuffs—which seem to be a temporary phenomenon—contributed to this recent increase.

By goods (Chart 9[2]), imports of IT-related goods and consumer goods declined in the second quarter and then increased temporarily in the third quarter, but fell back again in October-November compared with the third quarter. Imports of capital goods and parts (excluding aircraft) declined in the third quarter and then remained flat in October-November. Imports of raw materials, intermediate goods, and foodstuffs seem to have been more or less flat as a trend, despite the upsurge in October-November compared with the third quarter.

<u>Net exports</u> in terms of the real trade balance have decreased substantially, reflecting the aforementioned movements in imports and exports (Chart 6[2]). A deficit in the nominal balance on goods and services was recorded in the third quarter mainly due to the sharp deterioration in the terms of trade caused mainly by the rise in crude oil prices; it then expanded in October-November in response to the rapid deterioration in the real trade balance.

Exports are expected to continue decreasing for the time being, due to the slowdown in overseas economies and to the appreciation of the yen.

As for the environment surrounding exports, overseas economies overall have slowed down further. In the United States, economic conditions have deteriorated substantially, with ongoing adjustments in the housing market. With tighter financial conditions having exerted downward pressure on the U.S. economy and the increasingly severe employment situation, sales of automobiles—which have a large impact on Japan's exports—have declined substantially. In the EU, economic conditions have also deteriorated substantially; they have been affected mainly by tighter lending stances of financial institutions. In emerging economies and countries that export natural resources, economic activity has been on a slower trend,

due to the decrease in exports in response to the deteriorating U.S. and European economic conditions and to the deterioration in the financial environment caused mainly by the outflow of funds (Chart 8[2]). While fiscal and monetary policies are expected to have effects on the economies in the future, there is great uncertainty about how much these policies will mitigate the strong negative synergy between the financial markets and the real economies. Regarding the environment surrounding exports of IT-related goods, global demand for finished products have been leveling off as a whole, as shown in the rapid deceleration in digital cameras and also in the further slowdown in flat-panel TVs. Meanwhile, in the foreign exchange market, the yen has appreciated by about 30 percent compared to the middle of 2007, mainly against European and NIEs currencies in terms of the real effective exchange rate, which incorporates differentials in the inflation rates between home and abroad (Chart 8[1]).

Imports are expected to decline for the time being, mainly because the domestic economy is likely to continue to deteriorate, despite the positive contribution from the yen's appreciation.

<u>Business fixed investment</u> has declined substantially. Looking at monthly indicators, the aggregate supply of capital goods (both including and excluding transport equipment)—a coincident indicator of machinery investment—decreased sharply in October-November following the third quarter (Chart 10[1]). Machinery orders (private demand, excluding orders of shipbuilding and orders from electric power companies)—a leading indicator of machinery investment—dropped significantly in the third quarter and declined at a much faster pace in October-November compared with the third quarter (Chart 11[1]). Construction starts (floor area, private, nondwelling use)—a leading indicator of construction investment—remained flat in the third quarter, partly because large construction starts were included, and then dropped sharply in October-November compared with the third quarter (Chart 11[2]).

Business fixed investment is likely to continue declining significantly for the time being, given the slowdown in overseas economies and the ongoing decrease in corporate profits as well as the deterioration in firms' funding conditions.

Private consumption has weakened, as the employment and income situation has become increasingly severe. Looking at individual indicators of consumption (Charts 12 and 13), sales at department stores and supermarkets have continued to be relatively weak, since consumers have further curtailed their purchases; sales at department stores in particular—in which the shares of apparel and high-end products are large—have softened further. Meanwhile, sales at convenience stores have continued to be relatively strong, assisted mainly by the special factor of cigarettes (the so-called "Taspo" effect). As for durable consumer goods, sales of household electrical appliances seem to have been losing steam compared to a while ago, although they have remained firm. The drop in the number of new passenger-car registrations has become even larger. As for services consumption, outlays for travel have continued to be weak, mainly in overseas travel, partly affected by the deterioration in the employment and income situation with persistently high fuel surcharges added to airfares. Sales in the food service industry have been sluggish, albeit with fluctuations.

The *Indices of Aggregated Sales* (in real terms)—which are comprised of major sales indicators of goods and services mentioned above<sup>3</sup>—have started to become noticeably weak lately (Chart 14[1]). The aggregate supply of consumer goods—which comprehensively captures producers' supply of goods—has recently been decreasing markedly due to the drop in durable goods (Chart 14[2]). Looking at statistics on the demand side, as for the index of consumption expenditure level (in real terms) in the *Family Income and Expenditure Survey*, the index on an "excluding housing, automobiles, money gifts and remittance" basis—which is mostly limited to items used for estimating the GDP—decreased in the second and third quarters and was almost flat in October-November compared with the third quarter. Meanwhile, total expenditure in the *Survey of Household Economy* (in real terms) also decreased in October-November compared with the third quarter following the second and third quarters (Chart 12[1]).<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> The *Indices of Aggregated Sales* are the weighted average of individual sales indicators. Outlays for travel in November were not released at the time these indices were compiled, and hence were incorporated into the indices under the assumption that the seasonally adjusted figures for November were at the same level as those for October.

<sup>&</sup>lt;sup>4</sup> In the *Family Income and Expenditure Survey*, the number of samples is about 8,000 households, while that of the *Survey of Household Economy* is about 30,000.

Consumer sentiment has deteriorated further, mainly due to the drop in stock prices and to growing employment uncertainty; related indicators have been around their previous bottoms or below these levels (Chart 15).

Private consumption is likely to continue weakening for the time being, as the employment and income situation becomes increasingly severe.

<u>Housing investment</u> has been more or less flat, but the number of housing starts has recently started to decrease again. The number of housing starts (Chart 16[1])—a leading indicator of housing investment—had been more or less flat since the beginning of 2008, when the effects of the revised Building Standard Law waned, but dropped again in October-November.

Looking ahead, housing investment is expected to weaken somewhat for the time being, considering the number of housing starts.

<u>Industrial production</u> has decreased at a much faster pace. Production registered a decline of around 1 percent on a quarter-on-quarter basis for three consecutive quarters through the third quarter, and then dropped sharply, by 7.6 percent, in October-November compared with the third quarter (Chart 17).<sup>5</sup> As for developments in October-November compared with the third quarter by industry, production of many industries continued to decrease following the third quarter; the drop was especially large in industries such as transportation equipment (excluding ships and rolling stocks), and electronic parts and devices.

Shipments also decreased substantially, by 8.1 percent, in October-November compared with the third quarter, after having declined for three quarters in a row. By goods (Chart 18), shipments of capital goods have fallen sharply in many items such as semiconductor products machinery, and also engineering and construction machinery, and metal cutting machinery. The decline in shipments of durable consumer goods has recently become significant, notably in automobiles. Those of

<sup>&</sup>lt;sup>5</sup> According to calculations using the production forecast index of December, production in the fourth quarter is expected to decline by 11.4 percent. On a quarterly basis, currently released connected indexes—which have been available since 1953—show that the largest rate of decline was 6.7 percent, recorded in the first quarter of 1975.

nondurable consumer goods have been more or less flat. Shipments of construction goods stopped declining temporarily as the effects of the revised Building Standard Law waned, but they have started to decrease again lately. Meanwhile, as for shipments of producer goods, along with the plunge in electronic parts and devices, the drop in iron and steel, chemicals, nonferrous metals, and fabricated metals has become evident.

Inventories have risen noticeably, while shipments have decreased substantially; the shipment-inventory balance has deteriorated rapidly (Chart 19). By goods, as for capital goods (excluding transport equipment) and durable consumer goods, inventory adjustment pressures have been building up further, as shipments have declined at an accelerated pace. As for construction goods, the shipment-inventory balance has started to deteriorate again due to the faster pace of decline in shipments. As for producer goods, shipments of electronic parts and devices as well as those of other goods (such as chemicals, nonferrous metals, and iron and steel) have fallen sharply, and inventories of these goods have further piled up. This shows that the shipment-inventory balance has deteriorated rapidly across a wide range of industries, and this will contribute to pressing production downward for the time being.

As for the outlook, production is expected to continue decreasing for the time being, since the weakness in domestic and external demand has become evident and also since inventory adjustment pressures have mounted. According to anecdotes from firms and other information, production in the first quarter is expected to register a significantly large decline.<sup>6</sup>

The <u>employment and income situation</u> has become increasingly severe, with the easing of the labor market and relatively weak employee income (Chart 20[3]).

In the labor market, overtime hours worked have decreased at an accelerated pace on a year-on-year basis, notably in the manufacturing sector (Chart 22[3]). The

<sup>&</sup>lt;sup>6</sup> According to calculations assuming that the production levels in February and March are the same as the production forecast index of January, production in the first quarter is expected to decrease by 10.3 percent on a quarter-on-quarter basis. If the forecast index turns out to be true, the index level of production in January will record the lowest level since September 1987.

ratio of job offers to applicants has continued to decrease (Chart 21[1]). The unemployment rate appears to be on a moderate uptrend, but it has recently remained almost level. Along with statistical fluctuations, this seems to be affected by the passive attitudes toward job-searching in line with the decrease in job opportunities.

In terms of employment (Chart 22[1]), the growth rate of the number of employees in the *Labour Force Survey* has been around zero percent on a year-on-year basis; it exhibited a marginal decrease in November. As for the number of regular employees in the *Monthly Labour Survey*, the year-on-year growth rate has continued to fall after having peaked near the end of 2007. The ratio of part-time employees has been essentially level (Chart 22[2]).

The year-on-year growth rate of nominal wages per employee has been on a downtrend; it registered a decrease in November (Chart 20[1]). Looking at the recent trend in detail, regular payments have maintained a slight increase, whereas overtime payments have declined at an accelerated pace and special payments have started to decrease markedly.<sup>7</sup>

Looking ahead, employee income is likely to continue declining for the time being, in response to the decrease in corporate profits and production.

### 2. Prices

<u>Import prices</u> (on a yen basis; the three-month rate of change) have dropped significantly in response to the declines in international commodity prices (Chart 24). As for international commodity prices, prices of crude oil, nonferrous metals, and crops have recently been essentially flat, at low levels, after having dropped substantially since last summer. Meanwhile, domestic commodity prices have been

<sup>&</sup>lt;sup>7</sup> According to surveys on winter bonuses released by the Japan Business Federation (final results as of December 17) and the *Nihon Keizai Shimbun*, Inc. (final results as of December 1), winter bonuses are projected to decrease for the first time in six years. On a year-on-year basis, the former survey showed an increase of 0.93 percent for 2007 and shows a decrease of 0.36 percent for 2008, and the latter showed an increase of 0.71 percent for 2007 and shows a decrease of 0.80 percent for 2008.

essentially level, after having dropped sharply in response to movements in international commodity prices and to the yen's appreciation.

The three-month rate of decrease in domestic corporate goods prices (adjusted to exclude the effects of seasonal changes in electricity rates, same hereafter)<sup>8</sup> has been large, mainly due to the drop in international commodity prices (Chart 25). In detail, prices of "goods sensitive to exchange rates and overseas commodity prices" have declined at a faster pace due to the drop in prices of petroleum and coal products and of nonferrous metals; and prices of "other materials" have also declined at an accelerated pace caused by the drop in prices of chemical products. Prices of "iron and steel and construction goods" overall have decreased at around the same pace as the previous month, since prices of scrap and waste have slowed their pace of decrease while prices of iron and steel declined at a faster pace. Prices of "others" have slowed their pace of increase compared to a while ago reflecting the stabilization of prices of processed foodstuffs and the drop in prices of agriculture, forestry and fishery products. On the other hand, prices of "electric power, gas and water" have continued to climb, due to high fuel costs thus far. Prices of "machinery" have risen lately, since past cost increases have been passed on, notably in transportation equipment. Looking at domestic demand products as a whole, including imports, prices of raw materials have decreased at a faster pace in response to the declines in international commodity prices and the yen's appreciation. Prices of intermediate goods and final goods have also declined at an accelerated pace, mainly reflecting developments in prices of petroleum products.

The year-on-year rate of change in <u>corporate services prices</u> (excluding external factors)<sup>9</sup> has been around zero percent (Chart 26).<sup>10</sup> Looking at recent

<sup>&</sup>lt;sup>8</sup> The figures are adjusted to exclude large seasonal fluctuations in electric power charges to observe the underlying changes in domestic corporate goods prices. Industrial and commercial electric power charges are set relatively high during July-September, when electric power consumption increases substantially.

<sup>&</sup>lt;sup>9</sup> "Excluding external factors" means that international air passenger transportation, ocean liner, ocean tramper, ocean tanker, oceangoing ship chartering services, and international air freight transportation are excluded from all items.

<sup>&</sup>lt;sup>10</sup> "All items including external factors" had continued to register a noticeable year-on-year rise due to the increase in transportation since early 2007, but has continued to decrease substantially

developments by category, the year-on-year rate of change in prices of real estate services has been positive, assisted by the rise in office space rentals in the Tokyo metropolitan area. Prices of leasing and rental have decreased at a slower pace, affected mainly by the rise in prices of some machinery equipment; they have recently been around the previous year's level. On the other hand, the year-on-year rate of increase in prices of "other services" has been diminishing mildly as a trend in response to firms' cost-cutting. Prices of information services have been relatively weak as a trend, since firms have tightened the reins on their software investment. Prices of advertising services have marked a relatively large decrease, albeit with fluctuations, since firms have been more cautious about increasing advertisement placements. Meanwhile, prices of finance and insurance have recently declined, partly due to the accelerated pace of decrease in marine and other transportation insurance services, as property and casualty insurance services continue to fall due to the reduction in the premiums of compulsory motor vehicle insurance.

The year-on-year rate of increase in <u>consumer prices</u> (excluding fresh food, same hereafter) has moderated, mainly reflecting the declines in the prices of petroleum products and the stabilization of food prices (Chart 27). Looking at recent developments in more detail on a year-on-year basis, prices of goods have increased, notably in prices of food products; services prices have risen, chiefly in prices of "eating out"; and public utility charges have increased, mainly in electricity charges and city gas charges. However, consumer prices reduced their year-on-year rate of increase for the third straight month, mainly because petroleum products have started to decrease and also because contributions from food products and "eating out" have been leveling off. Meanwhile, the year-on-year rate of change in consumer prices, excluding food and energy, has continued to be around zero percent.

Domestic corporate goods prices are likely to continue decreasing for the time being, mainly due to the drop in international commodity prices and the easing of supply-demand conditions for products. The year-on-year rate of increase in consumer prices is expected to moderate further and become negative, mainly due to the declines in the prices of petroleum products and the stabilization of food prices

on a year-on-year basis since October 2008, mainly because oceangoing ship chartering services have decreased at a faster pace.

and also to increasing slackness in supply and demand conditions in the overall economy.

### **3. Financial Developments**

### (1) Financial Markets

<u>Japan's money markets</u> have continued to be nervous, mainly in interbank trading of term instruments, reflecting the cautious stance of financial institutions on investment and funding. The overnight call rate (uncollateralized) has been at around 0.1 percent since it was lowered by 20 basis points on December 19. Interest rates on term instruments, such as the Euroyen interest rate (3-month) and FB rate (3-month), have decreased, and interest rates on Euroyen futures have fallen as a whole (Chart 28). However, the Euroyen interest rate (LIBOR) has remained at a high level relative to OIS rates—which mainly reflect expectations about future policy interest rates—and it has continued to be in a very tense situation with risk premiums added (Chart 29). In <u>U.S. dollar funding</u>, liquidity conditions have remained tight, although they have been on an improving trend.

<u>Yields on 10-year government bonds</u> (newly issued 10-year JGB) have shown a slight increase since the turn of the year, but they have continued to trend downward with the worsening global business sentiment; they have recently been moving in the range of 1.2-1.3 percent (Chart 30).

<u>Yield spreads between corporate bonds and government bonds</u> have widened as a trend in some of those with high credit ratings, in addition to those with low credit ratings, since investors have become even more selective about bond issues for investment (Chart 31).

<u>Stock prices</u> have continued to show unstable movements in response to U.S. and European stock prices. The Nikkei 225 Stock Average temporarily rose to the 9,000-10,000 yen level, but has recently eased back to around 8,000 yen reflecting the sharp deterioration in firms' profit forecasts given the yen's appreciation (Chart 32).

In the <u>foreign exchange market</u>, the yen temporarily dropped to the 94-95 yen level, but it has continued to appreciate against the U.S. dollar, albeit with fluctuations, in light of stronger concern for a prolonged recession in the U.S. economy. The yen has recently been traded near the range of 89-90 yen (Chart 33).

### (2) Corporate Finance and Monetary Aggregates

<u>Funding costs</u> for firms have been more or less flat. The average contracted interest rates on new loans and discounts declined somewhat in November, partly because the base rate was lowered after the reduction in the policy interest rate (Chart 35). However, the decline in the average rates was also likely amplified by the increased share of lending to large firms, for which lending interest rates are relatively low. The issuance spread on CP has remained at a high level, mainly for firms with low credit ratings, even though it has been narrowed somewhat in response to various policy measures and to a drop in seasonal demand for funds over the year-end. The issuance spread on corporate bonds has continued to widen.

<u>The funding of the private sector</u> has risen in response to firms' demands to cover the decline in operating cash inflow and to secure additional liquidity. The amount outstanding of <u>CP and corporate bonds</u> issued has been below the previous year's level, since funding conditions in the markets have been tightened by increased risk aversion among investors (Chart 37). In contrast, <u>lending by private banks</u> has increased at a faster pace, especially to large firms, which have covered the decline in the issuance of CP and corporate bonds (Chart 36). Meanwhile, lending to small firms remained below the previous year's level up to November.

Despite the increase in funding of the private sector, an increasing number of firms, including large firms, have reported that their financial positions are weak, and the lending attitudes of financial institutions are severe (Chart 34).

The <u>money stock</u> (M2) has increased by around 2 percent, year-on-year, at a somewhat slower pace than last summer. Its December reading was 1.8 percent on a year-on-year basis, following 1.8 percent in November (Chart 38).<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> On an M3 basis, which includes the Japan Post Bank, the year-on-year growth rate has been around 1 percent—it increased by 0.8 percent in December following 0.7 percent in November.

The <u>number of corporate bankruptcies</u> was up by 24.2 percent in December compared to the year-ago level, to 1,362 cases (Chart 39).

Broadly defined liquidity declined by 0.3%, year-on-year, in December, which is the same rate as in the previous month.

### **BOX: Longer-Term Inflation Expectations**

Inflation expectations of households and businesses—particularly over the longer term—are an important source of information for assessing inflation dynamics. For instance, if people expect inflation to remain stable over the longer term, price changes associated with a shock to materials prices—even momentous changes in material prices such as oil prices seen in recent years—will tend not to be built into people's plans for setting wages and prices. Hence the change is likely to be only temporary.

The expected inflation rate over the next year, estimated from a household survey,<sup>12</sup> slowed to <sup>1</sup>/<sub>2</sub> percent on a year-on-year basis in December from around 1 percent last summer, as prices of frequently purchased items such as petroleum products and food fell or stopped increasing (Box Chart, upper-left panel). In contrast, for the past few years, the expected inflation rate over the next five years has remained stable at around 1 percent. Similarly, in the United States, household expectations for inflation over the longer term have remained stable, while those over the shorter term have decelerated (Box Chart, upper-right panel).

These developments in longer-term inflation expectations of households are in stark contrast to those in market-based measures of longer-term inflation expectations both in Japan and the United States. Break-even inflation rates for the next ten years—defined as the differences between yields on nominal government bonds and those on inflation-indexed government bonds—have fallen substantially since last autumn in both countries (Box Chart, lower panels). This drop is likely to have been amplified by a large shift in investor preference for liquidity amid the global financial turmoil. With such a shift in investor preference, and because the amount outstanding and the turnover of indexed bonds are smaller than those of nominal bonds, prices of the former tend to be heavily discounted compared to those of the latter. This results in the decline in the break-even inflation rates since the yields on indexed bonds become relatively high compared to those on nominal bonds.

<sup>&</sup>lt;sup>12</sup> The expected inflation rate is estimated from the results of *The Opinion Survey on the General Public's Views and Behavior*. For details, see Sekine, T., K. Yoshimura and C. Wada (2008), "On Inflation Expectations," Bank of Japan Review Series, 2008-J-15 (in Japanese).

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Box Chart Inflation Expectations

## Main Economic Indicators (1)

						5.u., q, q (m	n/m) % cng.	
	2008/Q2	Q3	Q4	2008/Sep.	Oct.	Nov.	Dec.	
Index of consumption expenditure level (two-or-more-person households)	-2.0	-0.5	n.a.	1.7	-0.6	2.5	n.a.	
Sales at department stores	-3.0	0.7	n.a.	0.8	-3.6	-0.8	n.a.	
Sales at supermarkets	-1.7	0.3	n.a.	1.1	-2.2	2.2	n.a.	
New passenger-car registrations <sup>3</sup> <s.a., 10,000="" ann.="" units=""></s.a.,>	< 295>	< 285>	< 239>	< 271>	< 258>	< 233>	< 226>	
Sales of household electrical appliances (real, Current Survey of Commerce)	1.8	7.2	n.a.	-4.3	-3.0	6.7	n.a.	
Outlays for travel	-2.9	-1.6	n.a.	-3.2	3.5	-1.6	n.a.	
Housing starts <s.a., 10,000="" ann.="" units=""></s.a.,>	< 112>	< 113>	<n.a.></n.a.>	< 113>	< 103>	< 95>	<n.a.></n.a.>	
Machinery orders (from private sector <sup>4</sup> )	0.6	-10.4	n.a.	5.5	-4.4	-16.2	n.a.	
Manufacturing	2.7	-10.9	n.a.	9.7	-2.2	-33.2	n.a.	
Nonmanufacturing <sup>4</sup>	1.0	-12.0	n.a.	-1.3	-2.3	0.5	n.a.	
Construction Starts (private, nondwelling use)	-2.8	0.2	n.a.	-10.9	-1.1	-3.9	n.a.	
Mining & manufacturing	7.6	10.0	n.a.	-24.8	23.6	-4.8	n.a.	
Nonmanufacturing <sup>5</sup>	-5.4	-1.2	n.a.	-1.9	-10.5	-2.2	n.a.	
Value of public works contracted	-8.3	11.3	-4.3	-2.7	-0.6	9.0	-15.1	
Real exports	-3.3	1.7	n.a.	-0.3	-3.0	-14.5	n.a.	
Real imports	-3.2	2.9	n.a.	3.6	0.3	-2.3	n.a.	
Industrial production	-0.8	-1.3	n.a.	1.1	-3.1	-8.5	n.a.	
Shipments	-0.9	-1.8	n.a.	0.4	-3.0	-8.4	n.a.	
Inventories	0.4	1.6	n.a.	2.0	1.8	0.8	n.a.	
Inventory Ratio <s.a., 2005="100" cy=""></s.a.,>	< 105.0>	< 108.3>	<n.a.></n.a.>	< 108.3>	< 112.5>	< 127.0>	<n.a.></n.a.>	
Real GDP	-1.0	-0.5	n.a.	n.a.	n.a.	n.a.	n.a.	
Index of all industry activity	0.5	-0.8	n.a.	0.0	-0.5	n.a.	n.a.	

s.a., q/q (m/m) % chg.<sup>1</sup>

#### Chart 2

### Main Economic Indicators (2)

							y/y % chg.1
	2008/Q2	Q3	Q4	2008/Sep.	Oct.	Nov.	Dec.
Ratio of job offers to applicants <s.a., times=""></s.a.,>	< 0.92>	< 0.86>	<n.a.></n.a.>	< 0.84>	< 0.80>	< 0.76>	<n.a.></n.a.>
Unemployment rate <s.a., %=""></s.a.,>	< 4.0>	< 4.1>	<n.a.></n.a.>	< 4.0>	< 3.7>	< 3.9>	<n.a.></n.a.>
Overtime working hours <sup>6</sup>	-1.2	-2.3	n.a.	-2.7	-4.5	-7.0	n.a.
Number of employees	-0.0	0.1	n.a.	0.4	0.3	-0.2	n.a.
Number of regular employees <sup>6</sup>	1.7	1.5	n.a.	1.4	1.3	1.0	n.a.
Nominal wages per person <sup>6</sup>	0.7	0.2	n.a.	0.2	0.1	-0.7	n.a.
Domestic corporate goods price index	4.9	7.1	p 2.9	6.8	5.0	2.8	p 1.1
$ % chg., 3-month rate of change>^7$	< 2.4>	< 2.8>		< 1.4>	<-1.8>	<-3.7>	
Consumer price index <sup>8</sup>	1.5	2.3	n.a.	2.3	1.9	1.0	n.a.
Corporate services price index	1.0	1.0	n.a.	0.1	-1.4	p -1.9	n.a.
Money Stock (M2) <average %="" chg.="" outstanding,="" y=""></average>	2.1	2.2	p 1.8	2.2	1.8	1.8	p 1.8
Number of corporate bankruptcies <cases month="" per=""></cases>	<1,276>	<1,345>	<1,356>	<1,408>	<1,429>	<1,277>	<1,362>

Notes: 1. All figures in Chart 1 except figures in angle brackets are quarter-on-quarter (month-on-month) changes of seasonal adjusted data. All figures in Chart 2 except figures in angle brackets are year-on-year changes. For details on seasonal adjustments and data processing/compilation conducted by the Bank of Japan, see notes of the respective charts.

2. Figures with "p" indicate preliminary data.

3. Excludes small cars with engine sizes of 660 cc or less.

4. Excludes orders of shipbuilding and orders from electric power companies.

5. Nonmanufacturing is mainly composed of commerce, services, agriculture & fisheries and public utilities industries.

6. Data for establishments with at least five regular employees.

7. Adjusted to exclude a hike in electric power charges during the summer season.

8. Excludes fresh food.

Sources: Ministry of Internal Affairs and Communications, "Labour Force Survey,"

"Monthly Report on the Family Income and Expenditure Survey," "Consumer Price Index";

Ministry of Economy, Trade and Industry, "Current Survey of Commerce," "Indices of Industrial Production," "Indices of All Industry Activity";

Japan Automobile Dealers Association, "Domestic Sales of Automobiles";

Japan Tourism Agency, "Major Travel Agents' Revenue";

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

Ministry of Finance, "The Summary Report on Trade of Japan";

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

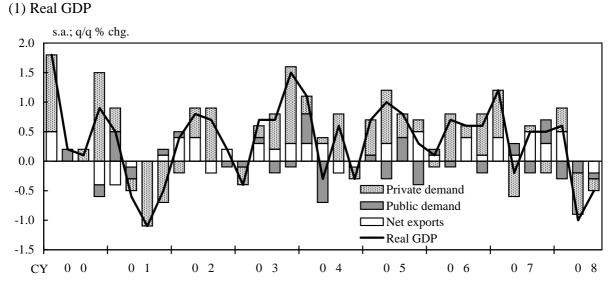
East Japan Construction Surety etc., "Public Works Prepayment Surety Statistics";

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

Bank of Japan, "Corporate Goods Price Index," "Corporate Services Price Index," "Money Stock" ;

Tokyo Shoko Research Ltd., "Tosan Geppo (Monthly Review of Corporate Bankruptcies)."

## Real GDP and Indexes of Business Conditions

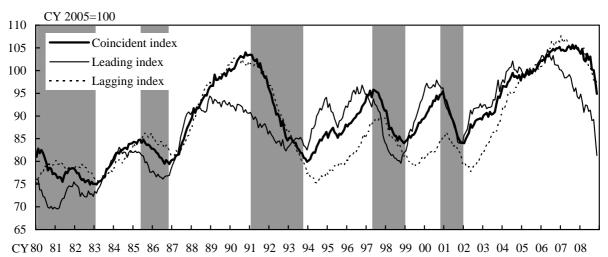


(2) Components

onenes					s.a.; c	ı/q % chg.
		200	07		2008	
		Q3	Q4	Q1	Q2	Q3
Real C	GDP	0.5	0.5	0.6	-1.0	-0.5
Domes	stic demand	-0.0	0.2	0.1	-0.9	-0.3
	Private demand	0.1	-0.2	0.4	-0.7	-0.2
	Private consumption	0.0	0.0	0.5	-0.4	0.2
	Non-Resi. investment	0.4	0.0	0.1	-0.3	-0.3
	Residential investment	-0.3	-0.3	0.1	-0.1	0.1
	Private inventory	0.0	0.1	-0.3	0.0	-0.2
	Public demand	-0.2	0.4	-0.3	-0.2	-0.1
	Public investment	-0.1	0.0	-0.2	-0.0	0.0
Net ex	ports of goods and services	0.5	0.3	0.5	-0.0	-0.2
[	Exports	0.4	0.5	0.6	-0.5	0.2
	Imports	0.1	-0.1	-0.2	0.5	-0.4
Nomir	nal GDP	0.3	-0.2	0.4	-1.4	-0.7

Note: Figures of components in real GDP indicate contributions to changes in GDP.

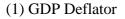
(3) Indexes of Business Conditions (Composite Indexes)

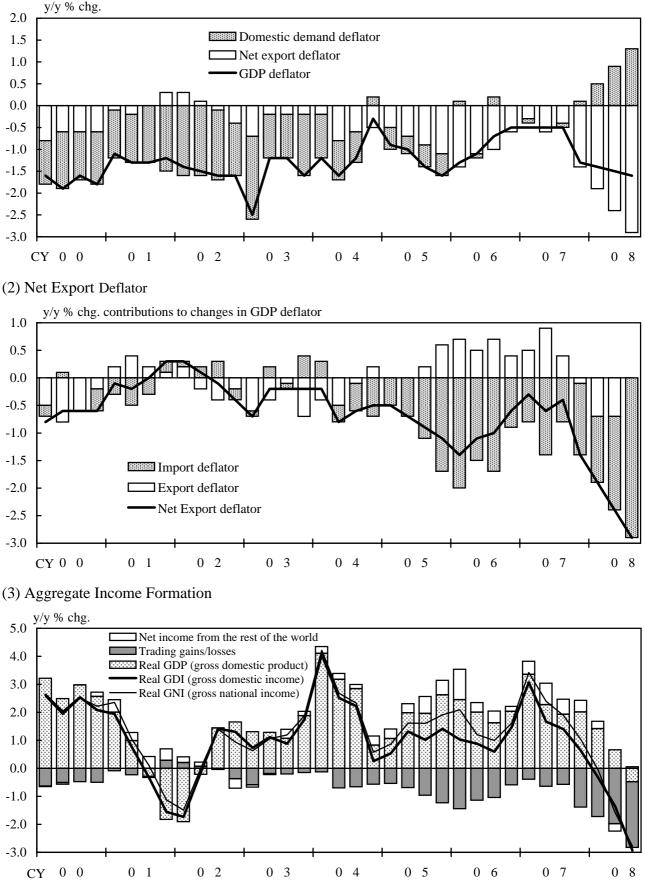


Note: Shaded areas indicate recession periods.

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

## GDP Deflator and Income Formation

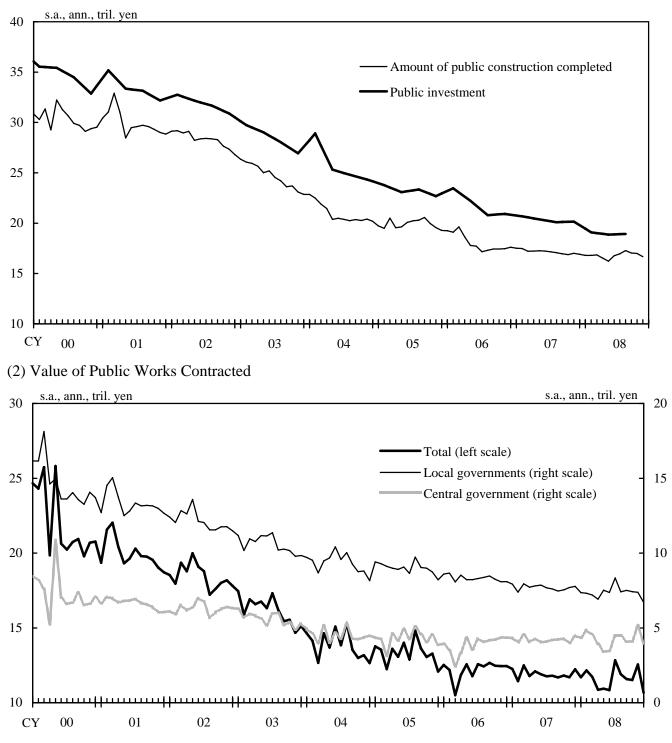




Note: Figures of components indicate contributions to changes in real GNI. Trading gains/losses = nominal net exports / weighted average of export and import deflators - real net exports

Source: Cabinet Office, "National Accounts."

## Public Investment



### (1) Amount of Public Construction Completed and Public Investment

Notes: 1. Quarterly figures of public investment are plotted at the middle month of each quarter.

2. Amount of public construction completed is based on the general tables in the "Integrated Statistics on Construction

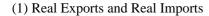
Works." The figures until March 2000 are retroactively calculated with year-to-year growth rates on the former basis.

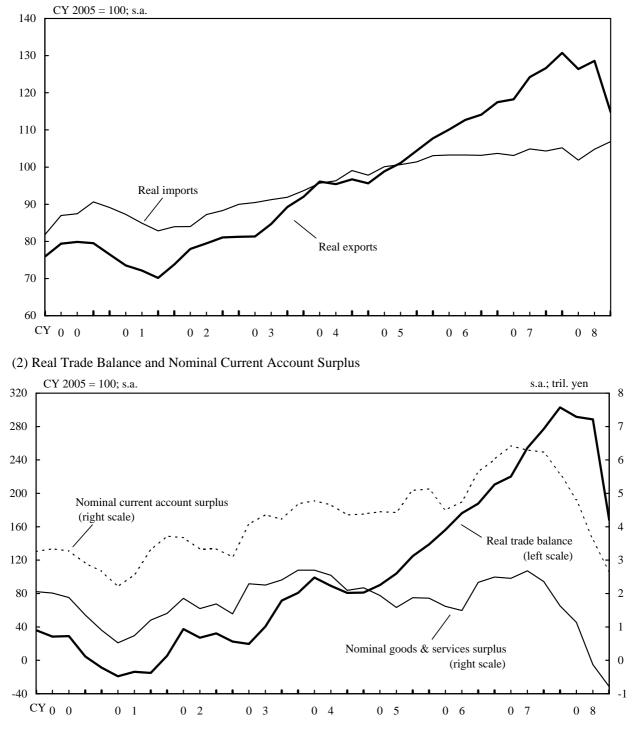
3. The figures of value of public works contracted and amount of public construction completed are seasonally adjusted by X-12-ARIMA.

Sources: Cabinet Office, "National Accounts";

East Japan Construction Surety etc., "Public Works Prepayment Surety Statistics"; Ministry of Land, Infrastructure and Transport, "Integrated Statistics on Construction Works."

### **External Balance**





- Notes: 1. Real trade balance is defined as real exports minus real imports, indexed with base year of 2005. Real exports/imports are "The Value of Exports and Imports in Trade Statistics" deflated by the "Export and Import Price Index."
  - 2. Figures are seasonally adjusted by X-12-ARIMA.
  - 3. 2008/Q4 figures are October-November averages converted into quarterly amount.
- Sources: Ministry of Finance, "The Summary Report on Trade of Japan"; Ministry of Finance and Bank of Japan, "Balance of Payments"; Bank of Japan, "Corporate Goods Price Index."

# Real Exports<sup>1</sup>

### (1) Breakdown by Region

	-	y/y	% chg.			s.a.; q/q % chg.			s.a.; m/m % chg.			
		CY		2007	2008				2008			
		2006	2007	Q4	Q1	Q2	Q3	Q4	Sep.	Oct.	Nov.	
United States	<20.1>	11.7	-1.2	-1.3	-0.2	-6.9	-4.0	-7.4	6.6	-4.3	-12.2	
EU	<14.8>	11.1	13.0	2.6	4.2	-7.4	2.1	-12.9	-2.8	-4.3	-13.4	
East Asia	<46.0>	8.9	10.3	2.9	4.9	-2.4	1.8	-11.6	-6.5	-0.5	-15.4	
China	<15.3>	18.8	16.8	2.0	5.1	1.7	0.9	-9.7	-8.6	5.1	-18.0	
NIEs	<22.4>	6.3	5.2	2.0	5.3	-5.9	3.1	-15.8	-5.5	-5.9	-15.4	
Korea	<7.6>	9.6	5.3	4.7	3.6	-4.9	6.0	-19.6	1.5	-15.1	-15.0	
Taiwan	<6.3>	2.7	0.0	-3.8	8.7	-8.9	0.5	-18.7	-11.6	-7.0	-15.1	
ASEAN4 <sup>3</sup>	<8.3>	1.8	13.2	6.4	3.6	-0.7	0.2	-4.8	-5.3	2.5	-10.8	
Thailand	<3.6>	4.1	9.8	2.1	5.1	-6.9	4.8	-0.8	-7.5	5.2	-7.4	
Others	<19.1>	20.2	19.9	9.2	4.8	-0.1	4.1	-5.3	7.2	-1.1	-12.8	
Real export	s	11.2	9.1	1.9	3.2	-3.3	1.7	-10.7	-0.3	-3.0	-14.5	

(2) Breakdown by Goods

	y/y % chg.							s.a.; q/q % chg. s.a.; m/m %				
		CY		2007	2008				2008			
		2006	2007	Q4	Q1	Q2	Q3	Q4	Sep.	Oct.	Nov.	
Intermediate goods <	18.4>	6.9	5.3	1.6	2.1	-6.0	2.1	-6.4	-1.0	-1.8	-9.8	
Motor vehicles and their related goods	24.1>	14.2	13.2	6.6	3.1	-4.8	0.0	-11.0	2.1	-3.9	-13.5	
Consumer goods <sup>4</sup>	<4.5>	9.8	6.4	-0.2	4.3	3.1	-1.1	-12.4	0.6	-8.8	-12.2	
IT-related goods <sup>5</sup> <	11.0>	7.5	12.2	2.5	-1.3	4.4	2.4	-16.0	-1.3	-9.3	-14.3	
Capital goods and parts $^{6}$	28.4>	13.3	8.0	2.8	4.3	-2.0	1.7	-6.7	3.0	-0.3	-14.8	
Real exports		11.2	9.1	1.9	3.2	-3.3	1.7	-10.7	-0.3	-3.0	-14.5	

Notes: 1. Seasonally adjusted by X-12-ARIMA. 2008/Q4 figures are October-November averages converted into quarterly amount.

2. Shares of each region and goods in 2007 are shown in angle brackets.

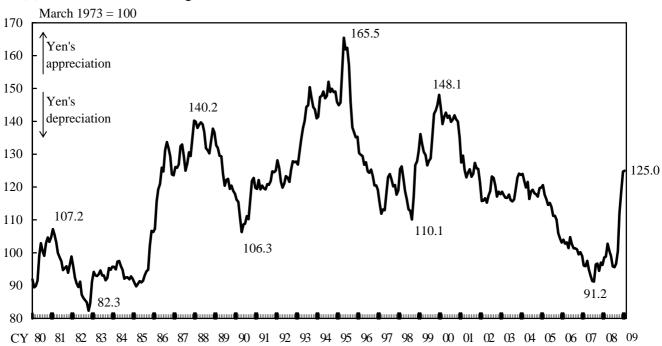
3. Data of four members: Thailand, Malaysia, the Philippines, and Indonesia.

4. Excludes motor vehicles.

- 5. IT-related goods are composed of computers and units, telecommunication machinery, ICs, and medical and optical instruments.
- 6. Excludes IT-related goods, power generating machinery and parts of motor vehicles.

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

## Real Effective Exchange Rate and Overseas Economies



(1) Real Effective Exchange Rate

Note: Calculated by the Bank of Japan. Monthly average. Figure for January 2009 is the average up to January 21. Figures are the index of weighted average of the yen's real exchange rates versus 15 major currencies (29 countries) which are calculated from nominal exchange rates and price indexes of the respective countries.

			CY2006	2007	2008	2008			
						Q1	Q2	Q3	Q4
United	United States <sup>1</sup>		2.8	2.0	n.a.	0.9	2.8	-0.5	n.a.
Europ	ean Unior	n <sup>1</sup>	3.2	2.9	n.a.	2.4	-0.2	-0.7	n.a.
	Germany	7	3.2	2.6	1.0	5.7	-1.7	-2.1	n.a.
	France		2.4	2.1	n.a.	1.4	-1.3	0.5	n.a.
	United Kingdom		2.8	3.0	n.a.	1.5	0.0	-2.6	n.a.
	China		11.6	13.0	n.a.	10.6	10.1	9.0	n.a.
		Korea	5.1	5.0	2.5	5.8	4.8	3.8	-3.4
	NIEs	Taiwan	4.8	5.7	n.a.	6.2	4.6	-1.0	n.a.
East		Hong Kong	7.0	6.4	n.a.	7.3	4.2	1.7	n.a.
Asia <sup>2</sup>		Singapore	8.2	7.7	1.2	6.9	2.2	-0.2	-3.7
		Thailand	5.2	4.9	n.a.	6.0	5.3	4.0	n.a.
	ASEAN4	Indonesia	5.5	6.3	n.a.	6.3	6.4	6.1	n.a.
		Malaysia	5.8	6.3	n.a.	7.4	6.7	4.7	n.a.
		Philippines	5.4	7.2	n.a.	4.7	4.4	4.6	n.a.

(2) Real GDP	Growth Rate	s in Overseas	Economies
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Notes: 1. Quarterly data of U.S. and EU are quarter-to-quarter percent changes at annual rates.

2. Quarterly data of East Asia are percent changes from a year earlier.

# Real Imports<sup>1</sup>

### (1) Breakdown by Region

 -	C	y/y	% chg.			S	.a.; q/q 9	% chg.	S	s.a.; m/m % chg.			
		CY 2006	2007	2007 Q4	2008 Q1	Q2	Q3	Q4	2008 Sep.	Oct.	Nov.		
United States	<11.4>	5.2	-1.5	3.3	-1.1	-3.9	2.3	-0.3	1.2	-2.2	-4.9		
EU	<10.5>	0.8	4.0	-3.3	-1.0	0.2	-3.0	-2.5	1.0	-3.7	-0.7		
East Asia	<40.9>	8.7	3.3	0.1	2.2	-3.0	4.2	3.0	3.8	1.8	-2.8		
China	<20.6>	10.9	5.7	-0.1	0.8	-0.9	7.2	1.3	5.0	0.3	-3.8		
NIEs	<8.9>	12.2	-3.8	0.5	3.0	-4.4	1.8	-2.7	-1.9	-0.1	-2.9		
Korea	<4.4>	10.6	-3.3	0.5	3.3	-9.2	1.3	-5.1	-4.1	-1.1	-2.5		
Taiwan	<3.2>	15.6	-3.0	-1.7	4.2	1.6	3.2	-1.7	-3.6	1.7	-3.9		
ASEAN4 <sup>3</sup>	<11.4>	2.5	4.8	0.0	4.1	-5.5	0.8	10.8	5.8	6.0	-0.9		
Thailand	<2.9>	8.7	4.4	-0.5	1.2	-3.2	5.4	1.2	11.5	-2.7	-9.4		
Others	<37.2>	2.5	-0.1	-0.4	0.9	-3.8	3.4	3.3	1.7	1.7	-0.5		
Real import	S	3.4	0.7	-0.5	0.8	-3.2	2.9	2.0	3.6	0.3	-2.3		

(2) Breakdown by Goods

	y/y % chg.						.a.; q/q 9	% chg.	s.	s.a.; m/m % chg.			
		CY		2007	2008				2008				
		2006	2007	Q4	Q1	Q2	Q3	Q4	Sep.	Oct.	Nov.		
Raw materials <sup>4</sup>	<35.4>	0.7	0.7	-0.3	1.6	-5.9	3.3	5.5	-1.0	5.3	-0.0		
Intermediate goods	<14.8>	3.1	2.0	-1.8	-1.7	2.3	1.3	6.1	5.3	1.8	0.7		
Foodstuffs	<8.3>	-4.0	-9.6	-6.2	-1.0	-0.7	2.4	13.4	4.1	9.1	-3.4		
Consumer goods <sup>5</sup>	<8.1>	4.3	-0.1	-2.8	0.6	-3.2	2.3	-2.4	1.6	-3.0	-1.3		
IT-related goods <sup>6</sup>	<11.3>	17.2	4.2	1.7	4.1	-2.3	4.7	-4.2	-1.9	-0.2	-5.3		
Capital goods and parts	7 <12.8>	16.8	8.5	4.5	1.2	-1.3	2.4	-7.0	8.2	-10.8	-3.9		
Excluding aircraft	<11.8>	17.7	7.9	1.9	0.0	2.5	-2.1	-0.0	7.7	-2.7	-3.3		
Real import	S	3.4	0.7	-0.5	0.8	-3.2	2.9	2.0	3.6	0.3	-2.3		

Notes: 1. Seasonally adjusted by X-12-ARIMA. 2008/Q4 figures are October-November averages

converted into quarterly amount.

2. Shares of each region and goods in 2007 are shown in angle brackets.

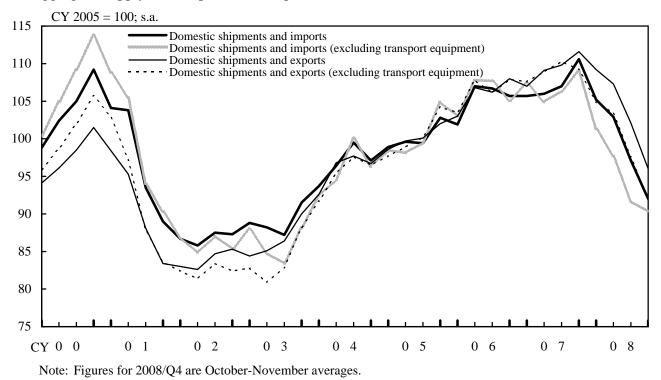
3. Data of four members: Thailand, Malaysia, the Philippines, and Indonesia.

- 4. Raw materials are mainly composed of woods, ores and mineral fuel.
- 5. Excludes foodstuffs.
- 6. IT-related goods are composed of computers and units, parts of computer, telecommunication machinery, ICs, and medical and optical instruments.
- 7. Excludes IT-related goods.

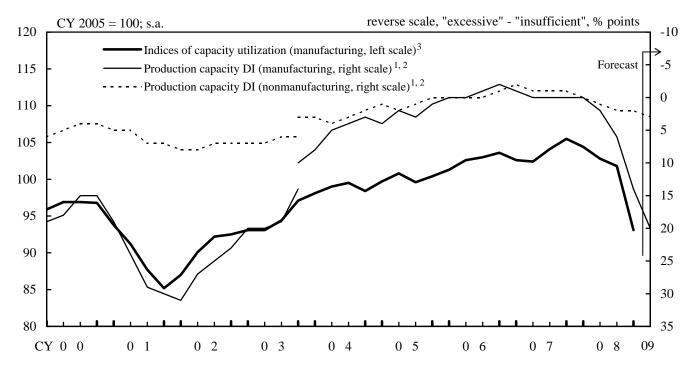
Sources: Ministry of Finance, "The Summary Report on Trade of Japan"; Bank of Japan, "Corporate Goods Price Index."

Coincident Indicators for Business Fixed Investment

(1) Aggregate Supply and Shipments of Capital Goods



(2) Indices of Capacity Utilization and Production Capacity DI



Notes: 1. Production capacity DIs are those of all enterprises.

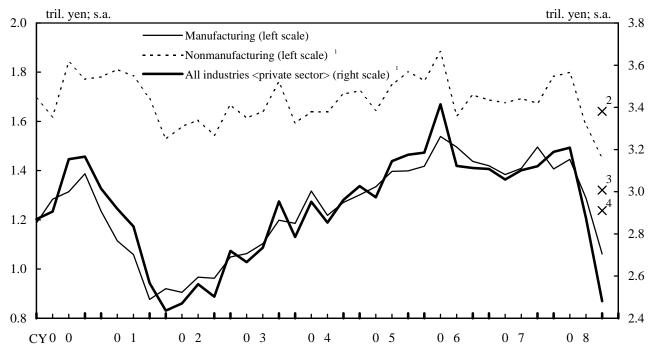
2. The *Tankan* has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on a new basis.

3. The figure for 2008/Q4 is October-November average.

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

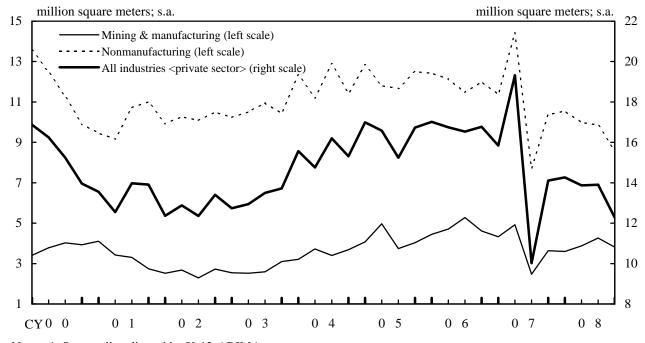
### Leading Indicators for Business Fixed Investment

#### (1) Machinery Orders



Notes: 1. Excludes orders of shipbuilding and orders from electric power companies.

- 2. Forecast of nonmanufacturing industries for 2008/Q4.
- 3. Forecast of manufacturing industries for 2008/Q4.
- 4. Forecast of all industries <private sector> for 2008/Q4.
- 5. Figures for 2008/Q4 are averages of October-November in terms of quarterly amount.
- (2) Construction Starts (Floor Area, Private, Nondwelling Use)



Notes: 1. Seasonally adjusted by X-12-ARIMA.

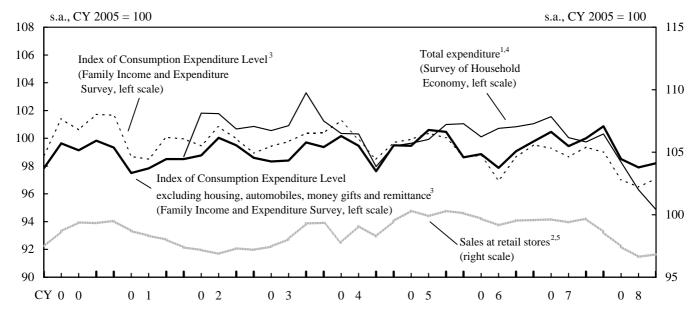
- 2. Because the Standard Industrial Classification for Japan was revised in March 2002, the industry classification for newspaper publishing and publishing business was changed from mining and manufacturing to nonmanufacturing. Accordingly, the data up to FY 2002 were adjusted by using a link coefficient.
- 3. Figures for 2008/Q4 are averages of October-November in terms of quarterly amount.

### Sources: Cabinet Office, "Orders Received for Machinery";

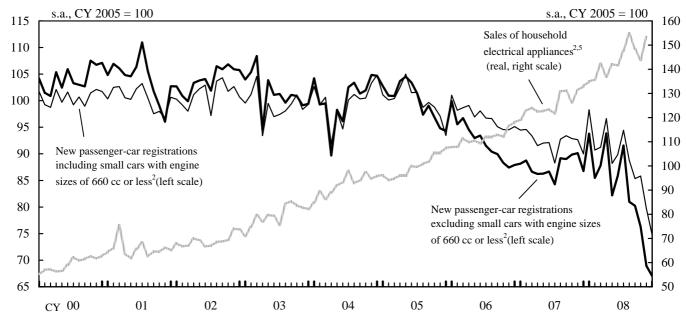
Ministry of Land, Infrastructure and Transport, "Statistics on Building Construction Starts."

## Indicators for Private Consumption (1)

### (1) Household Spending (Real)



### (2) Sales of Durable Goods



- Notes: 1. Total expenditure is seasonally adjusted by X-11.
  - 2. Seasonally adjusted by X-12-ARIMA.
  - 3. Index of consumption expenditure level is based on two-or-more-person households, and is adjusted by the distribution of household by number of household members and age group of household head.
  - 4. Total expenditure is based on two-or-more-person households, and is deflated by the consumer price index excluding imputed rent.
  - 5. Sales at retail stores are deflated by the consumer price index for goods (excluding electricity, gas & water charges). Sales of household electrical appliances are calculated as follows: indices of retail sales of machinery and equipment in the Current Survey of Commerce are deflated by the geometric means of the corresponding consumer price indexes (or by the corporate goods price index for PC printers before 2002).
  - 6. Figures for 2008/Q4 are those of October-November averages in terms of quarterly amount.

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

"Monthly Report on the Family Income and Expenditure Survey," "Survey of Household Economy";

Ministry of Economy, Trade and Industry, "Current Survey of Commerce";

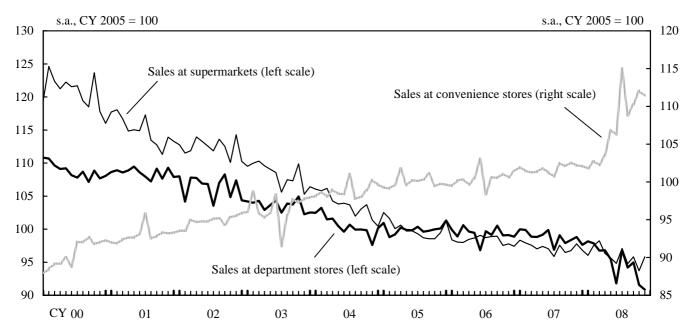
Bank of Japan, "Corporate Goods Price Index";

Japan Automobile Dealers Association, "Domestic Sales of Automobiles";

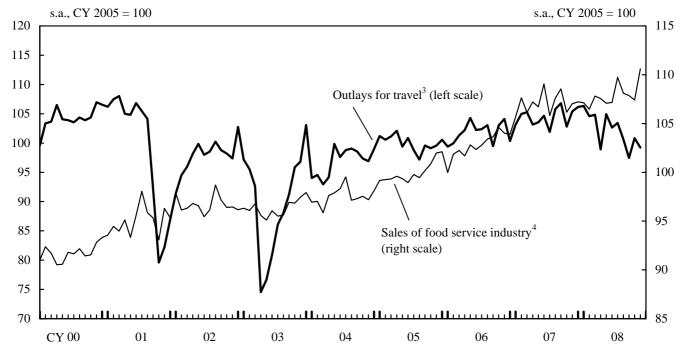
Japan Mini Vehicles Association, "Sales of Mini Vehicles."

## Indicators for Private Consumption $^{1}(2)$

### (1) Sales at Retail Stores (Nominal)<sup>2</sup>



### (2) Consumption of Services (Nominal)

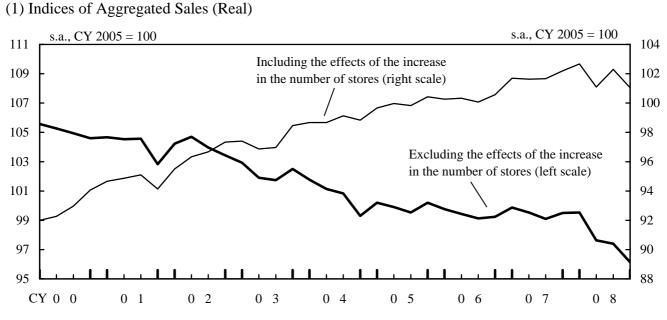


Notes: 1. Seasonally adjusted by X-12-ARIMA.

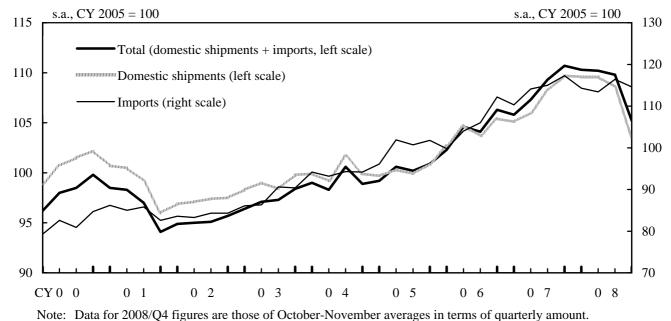
- 2. Adjusted to exclude the effects of the increase in the number of stores (except convenience stores).
- 3. As for "outlays for travel," there is a discontinuity in the underlying data as of April 2007 due to changes in the sample. Data from April 2007 and onward are calculated using the year-on-year rate of changes on the new basis.
- 4. Sales of food service industry are calculated using the year-on-year rates of change of every month released by the Japan Food Service Association based on monthly sales amounts in 1993 released by the Food Service Industry Survey & Research Center.

Sources: Ministry of Economy, Trade and Industry, "Current Survey of Commerce"; Japan Tourisum Agency, "Major Travel Agents' Revenue"; Food Service Industry Survey & Research Center, "*Getsuji Uriage Doukou Chousa* (Monthly Survey of Food Service Sales)"; Japan Food Service Association, "*Gaishoku Sangyou Shijou Doukou Chousa* (Research on the Food Service Industry)."

## Indicators for Private Consumption (3)



- Notes: 1. The Indices of Aggregated Sales are the weighted sum of "sales at department stores and supermarkets," "new passenger-car registrations," "sales of household electrical appliances," "outlays for travel," and "sales of food service industry," where the weights come from household expenditure in the Family Income and Expenditure Survey. These indices of aggregated sales consist of the series including and excluding the effects of the increase in the number of stores. Indices "including the effects of the increase in the number of stores" reflect the fluctuations in sales due to changes in the number of stores caused by the opening and closing down of businesses (indices "including the effects of the increase in the number of stores" at convenience stores). On the other hand, those "excluding the effects of the increase in the number of stores" aim to capture consumption trends only from stores for which sales data can be obtained continuously.
  - 2. Sales indicators in nominal terms are deflated by the corresponding items of the price indices.
  - 3. Seasonally adjusted by X-12-ARIMA.
  - 4. Data for 2008/Q4 figures are those of October-November averages in terms of quarterly amount.

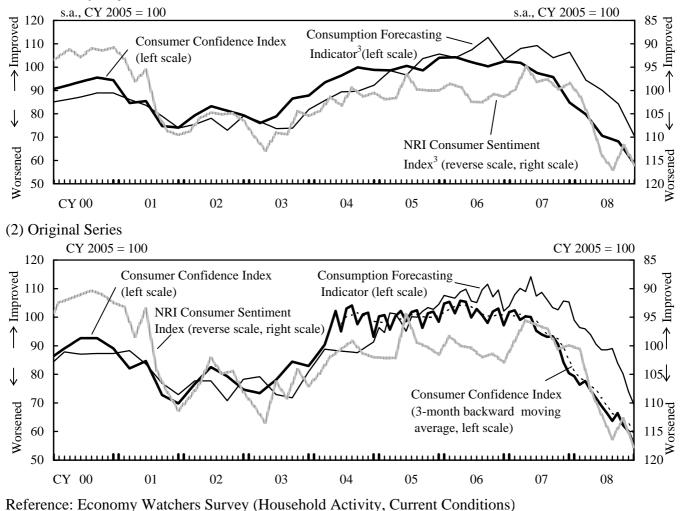


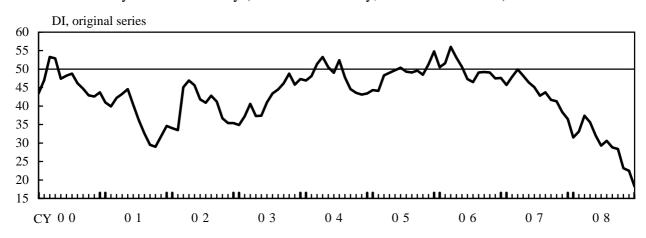
(2) Aggregate Supply of Consumer Goods

Sources: Bank of Japan, "Indices of Aggregated Sales"; Ministry of Economy, Trade and Industry, "Indices of Industrial Domestic Shipments and Imports."

# Consumer Confidence <sup>1,2</sup>

### (1) Seasonally Adjusted Series



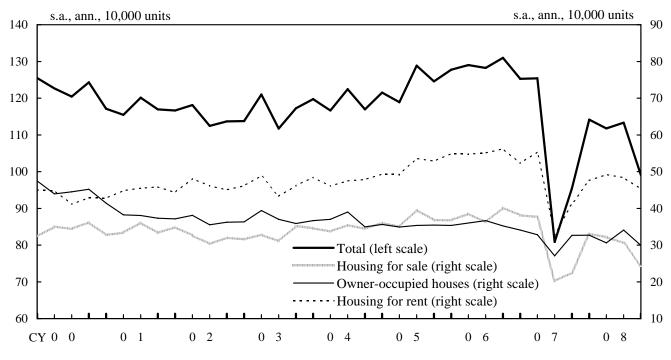


Notes: 1. The Consumer Confidence Index (with about 5,000 samples on a nationwide basis), Consumption Forecasting Indicator (with 600 samples in the metropolitan area), and NRI Consumer Sentiment Index (with 1,200 samples on a nationwide basis) are based on surveys on consumer confidence.

- 2. Figures are plotted for each surveyed months and the data for intervening months are linearly interpolated.
- 3. Figures are seasonally adjusted by X-11. The Consumption Forecasting Indicator is seasonally adjusted using quarterly figures because the survey was quarterly until 2004.
- Sources: Cabinet Office, "Consumer Confidence Survey," "Economy Watchers Survey"; Nikkei inc., "Consumption Forecasting Indicator"; Nippon Research Institute (NRI), "Consumer Sentiment Survey."

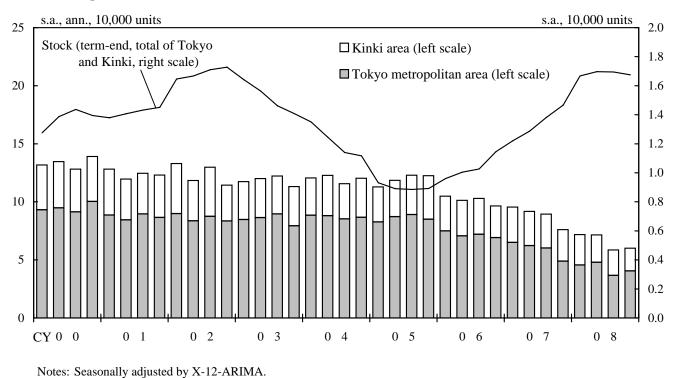
### Indicators for Housing Investment

### (1) Housing Starts



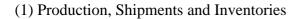
Note: Figures for 2008/Q4 are those of October-November averages.

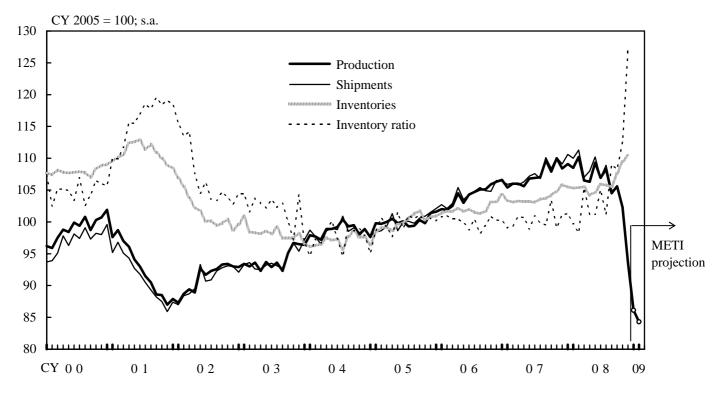
#### (2) Sales of Apartments



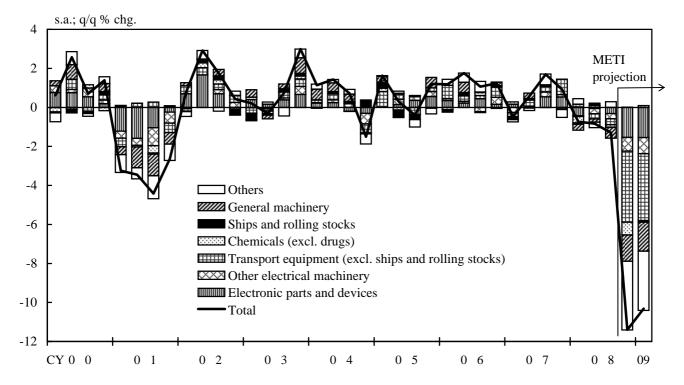
Source: Ministry of Land, Infrastructure and Transport, "Statistics on Building Construction Starts," etc.

## Production, Shipments and Inventories





(2) Production by Industry

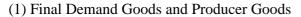


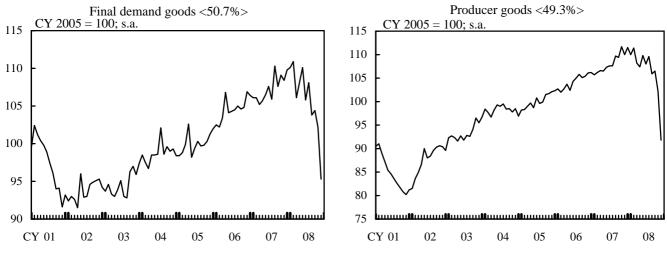
Notes: 1. "Other electrical machinery" is the weighted sum of "electrical machinery" and "information and communication electronics equipment."

- 2. Figures up to 2003/Q1 are on the 2000 base.
- 3. 2008/Q4 figures are based on the actual production levels in October and November, and the METI projection of December. 2009/Q1 figures are based on the assumption that each production level in February and March is the same as that of January.

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

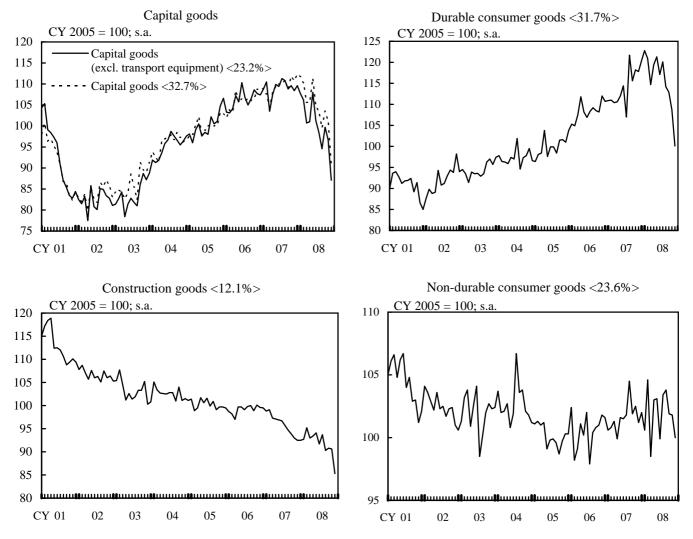
## Shipments Breakdown by Type of Goods





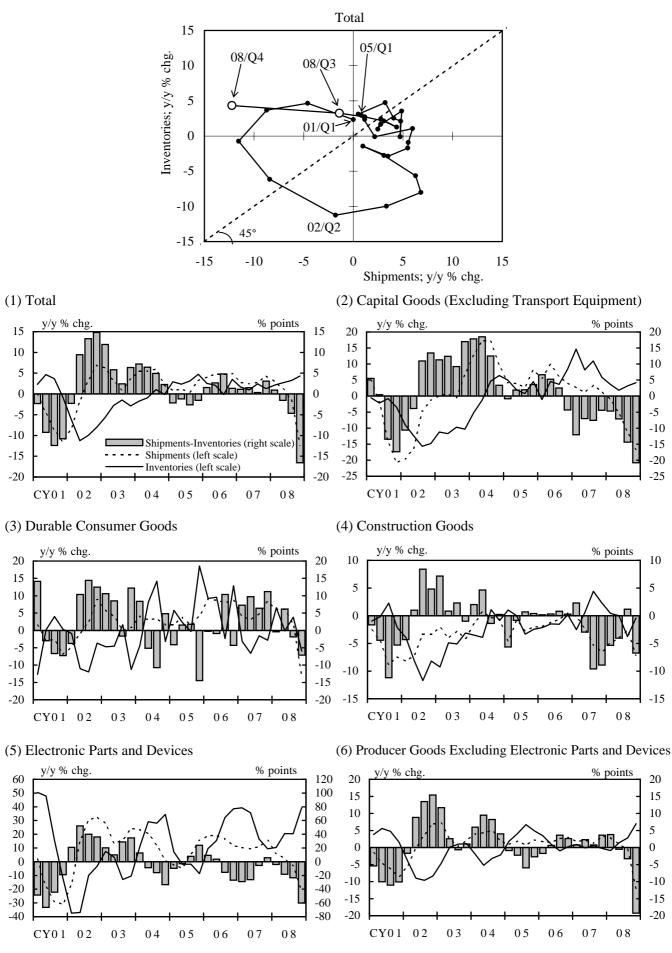
Note: Figures in angle brackets show the shares among shipments of mining and manufacturing.

#### (2) Breakdown of Final Demand Goods



Note: Figures in angle brackets show the shares among shipments of final demand goods. Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Production."

# Inventory Cycle

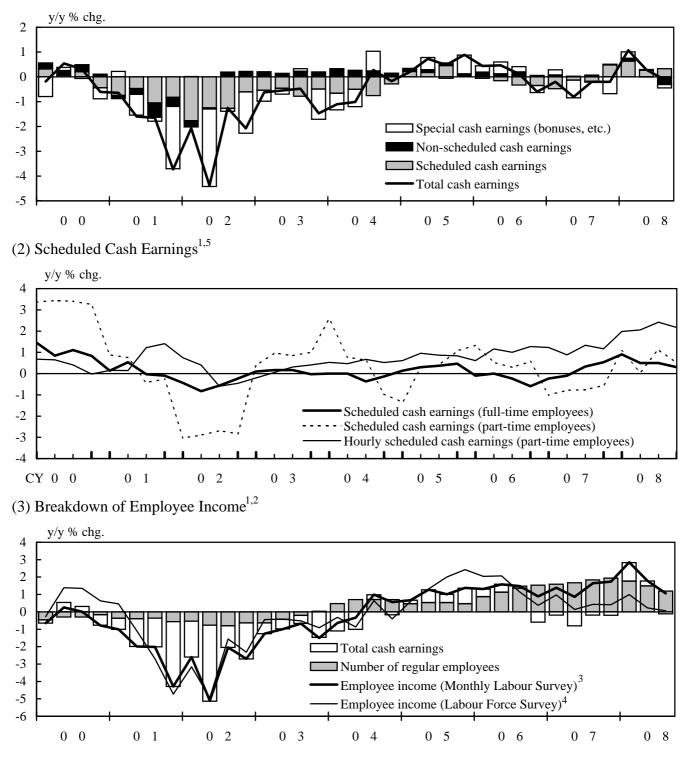


Note: Figures of Shipments for 2008/Q4 are those of October-November averages. Inventories for 2008/Q4 are those of November.

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

### **Employee Income**

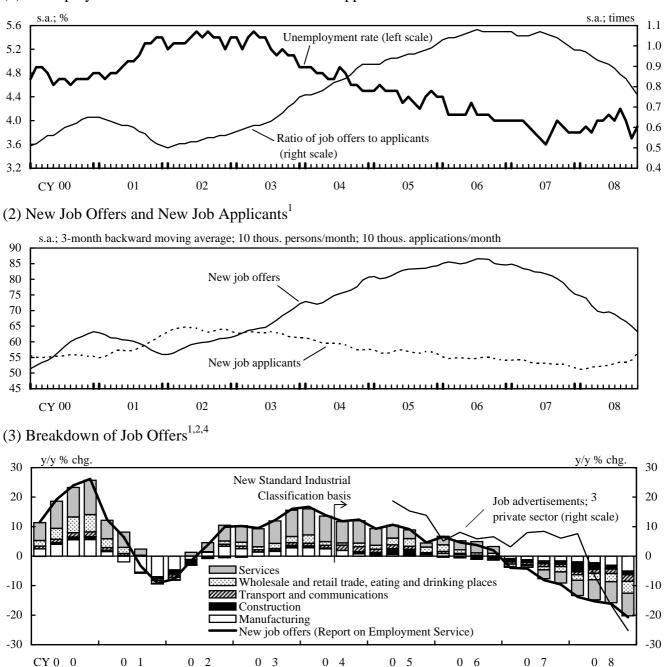
(1) Breakdown of Total Cash Earnings<sup>1,2</sup>



Notes: 1. Data are for establishments with at least five employees.

- 2. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
- 3. Calculated as the number of regular employees (Monthly Labour Survey) times
  - total cash earnings (Monthly Labour Survey).
- 4. Calculated as the number of employees (Labour Force Survey) times total cash earnings (Monthly Labour Survey).
- 5. Figures for 2008/Q4 are those of October-November averages.
- Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey."

## Labor Market (1)



(1) Unemployment Rate and Ratio of Job Offers to Applicants

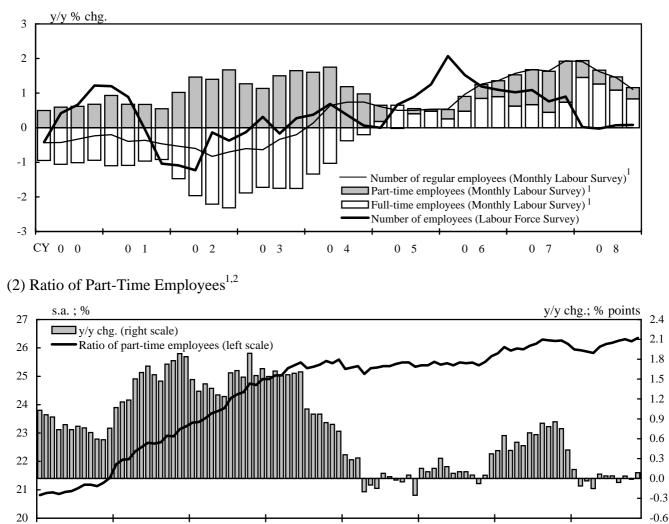
Notes: 1. Figures do not include jobs offered to new graduates, but include those offered to part-time workers.

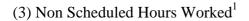
- 2. Figures up to 2004/Q2 are based on the previous Standard Industrial Classification. Figures from 2004/Q3 are based on the new Standard Industrial Classification. To keep the continuation of the data, some industries from 2004/Q3 are rearranged as follows. "Transport and communications" are the sum of "electricity and gas," "information and communications" and "transport." "Wholesale and retail trade, eating and drinking places" are the sum of "wholesale and retail trade" and "eating and drinking places, accommodations." "Services" are the sum of "medical, health care and welfare," "education, learning support," "compound services" and "services (not elsewhere classified)."
- 3. Figures are the sum of job advertisements listed in free/paid job information magazines, newspaper inserts and job information websites provided by member companies of the Association.
- 4. Figures for 2008/Q4 are those of October-November averages.

Sources: Ministry of Health, Labour and Welfare, "Report on Employment Service";
Ministry of Internal Affairs and Communications, "Labour Force Survey";
Association of Job Information of Japan, "Kyujin Koukoku Keisaikensu (Survey of Job Advertisements)."

## Labor Market (2)

(1) Number of Employees<sup>3</sup>

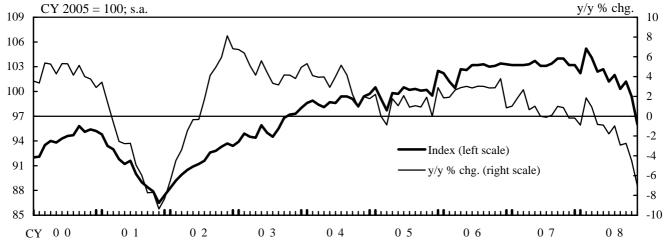




CY 0 1

0 2

0 3



0 5

0 6

0 7

0 8

0 4

Notes: 1. Data are for establishments with at least five employees.

2. The ratio of part-time employees is calculated as the number of part-time employees divided by the number of regular employees times 100.

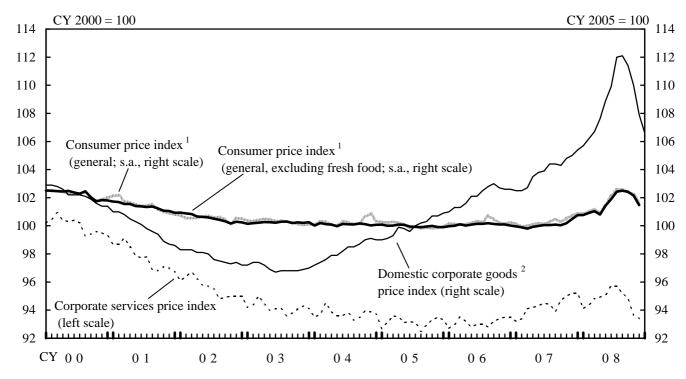
3. Figures for 2008/Q4 are those of October-November averages.

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

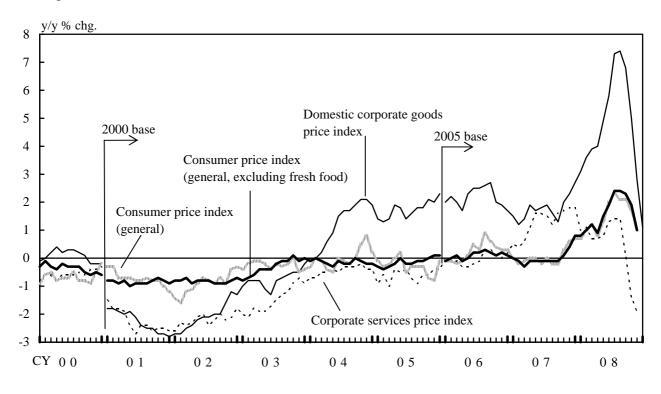
#### Chart 23

## Prices

### (1) Level



(2) Changes from a Year Earlier  $^3$ 



Notes:1. Seasonally adjusted by X-12-ARIMA.

2. Adjusted to exclude a hike in electric power charges during the summer season from July to September.

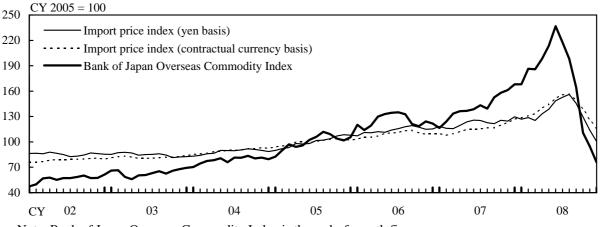
3. Figures up to CY 2000 are on the 1995 base. From CY2001 up to CY 2005, CGPI and CPI are calculated on the 2000 base.

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

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

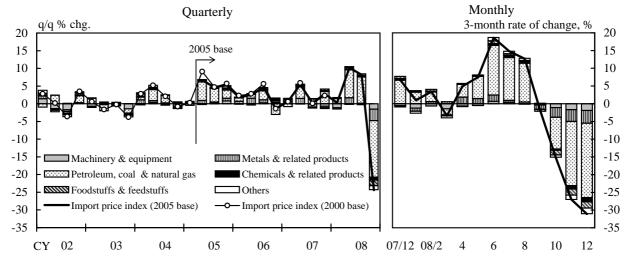
#### Import Prices and International Commodity Prices

(1) Import Price Index and Overseas Commodity Index



Note: Bank of Japan Overseas Commodity Index is the end-of-month figure.

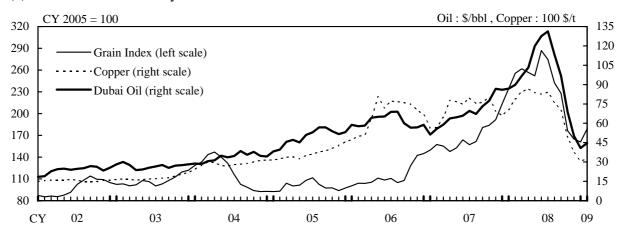
(2) Import Price Index (Yen Basis, Changes from a Quarter Earlier and 3 Months Earlier)



Notes: 1. Machinery & equipment: general machinery & equipment, electric & electronic products, transportation equipment, precision instruments.

2. Figures for 2007/Q4 on the 2000 base are those of October.

#### (3) International Commodity Prices



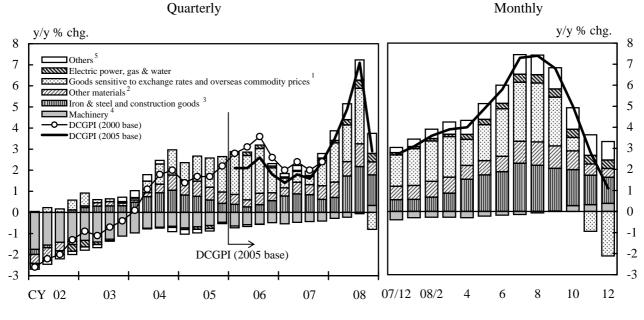
Notes: 1. The Grain Index is the weighted average of prices of three selected items (wheat, soybeans, corn) in overseas commodity markets. The weights are based on the Value of Imports in the Trade Statistics of Japan.

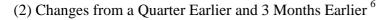
2. Monthly averages. Figures for January 2009 are the averages up to January 21.

Sources: Bank of Japan, "Corporate Goods Price Index," "Bank of Japan Overseas Commodity Index," etc.

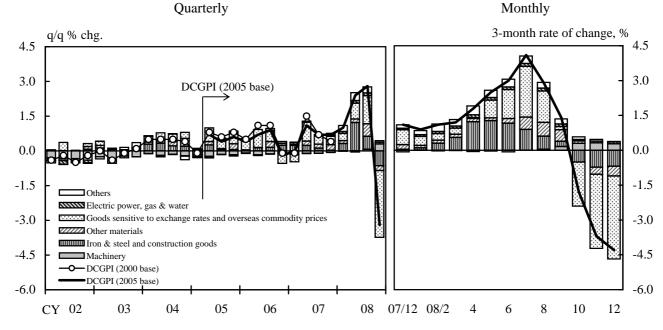
# Domestic Corporate Goods Price Index<sup>7</sup>

#### (1) Changes from a Year Earlier





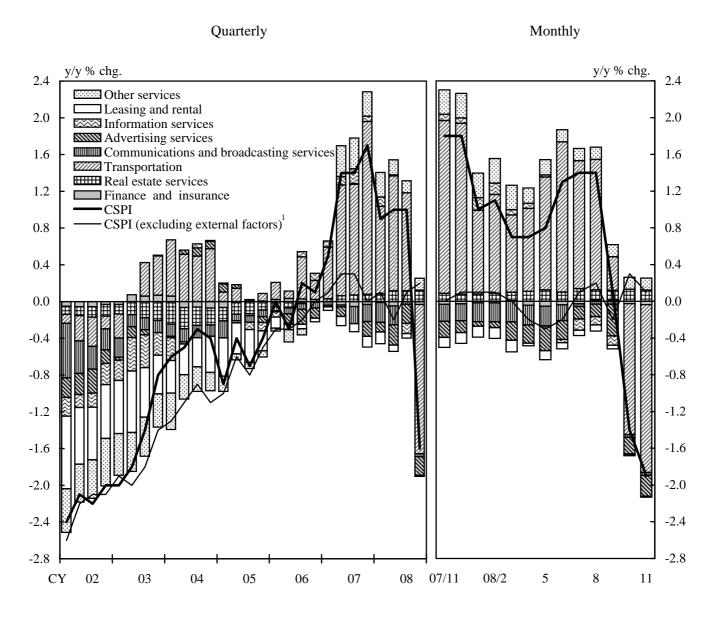




- Notes: 1. Goods sensitive to exchange rates and overseas commodity prices: petroleum & coal products, nonferrous metals.
  - 2. Other materials: chemicals & related products, plastic products, textile products, pulp, paper & related products.
  - 3. Iron & steel and construction goods: iron & steel, metal products, ceramics, stone & clay products, lumber & wood products, scrap & waste.
  - 4. Machinery: electrical machinery & equipment, information & communications equipment, electronic components & devices, general machinery & equipment, transportation equipment, precision instruments.
  - 5. Others: processed foodstuffs, other manufacturing industry products, agriculture, forestry & fishery products, minerals.
  - 6. Adjusted to exclude a hike in electric power charges during the summer season from July to September. This effect makes the Domestic Corporate Goods Price Index rise by about 0.2%.
  - 7. Figures for 2007/Q4 on the 2000 base are those of October.

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

## Corporate Services Price Index



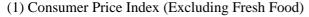
Notes: 1. External factors: international air passenger transportation, ocean liner, ocean tramper, ocean tanker, oceangoing ship chartering services, and international air freight.

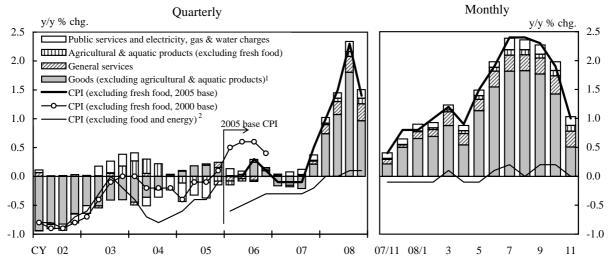
2. Figures of components indicate contributions to changes in CSPI.

3. Figures for 2008/Q4 are October-November averages.

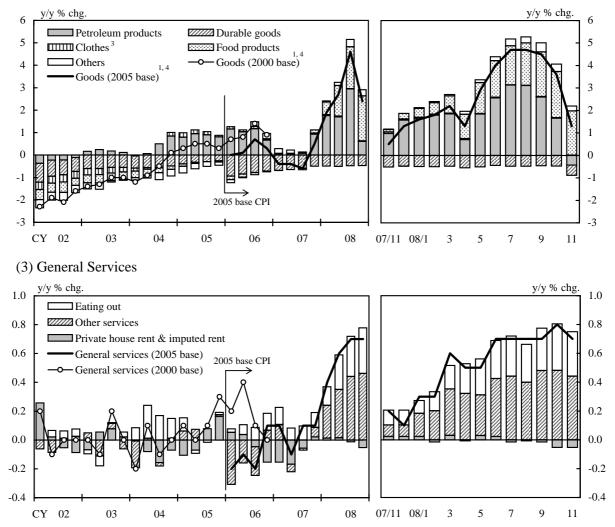
Source: Bank of Japan, "Corporate Services Price Index."

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





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

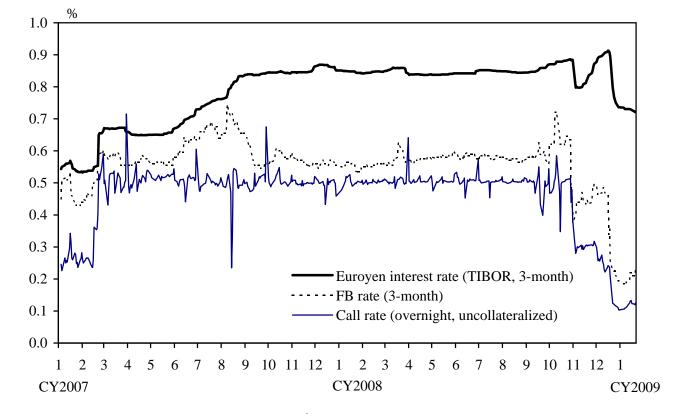


Notes: 1. The items are basically the same as the definition published by the Ministry of Internal Affairs and Communications. However, electricity, gas & water charges are excluded from goods.

- 2. Alcoholic beverages are excluded from food.
- Energy: electricity, gas manufactured & piped, liquefied propane, kerosene, and gasoline.
- 3. Including shirts, sweaters & underwear.
- 4. Excluding agricultural & aquatic products.
- 5. Figures for 2008/Q4 are October-November averages.

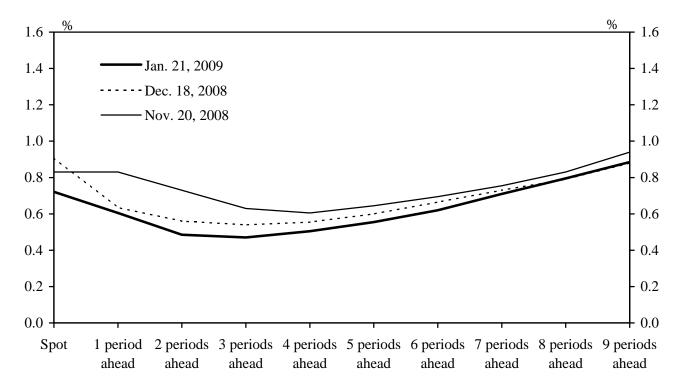
Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

## Short-Term Interest Rates



#### (1) Short-Term Interest Rates

(2) Euroyen Interest Rates Futures (3-Month)<sup>1</sup>

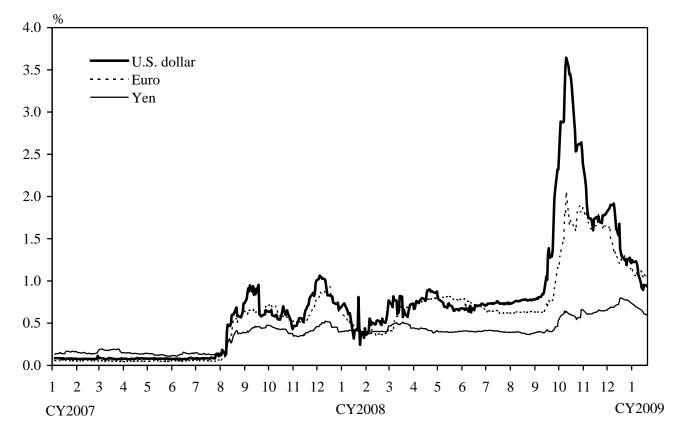


Note: 1. Contract months in the figure (2) exclude "serial months," the months other than March, June, September and December.

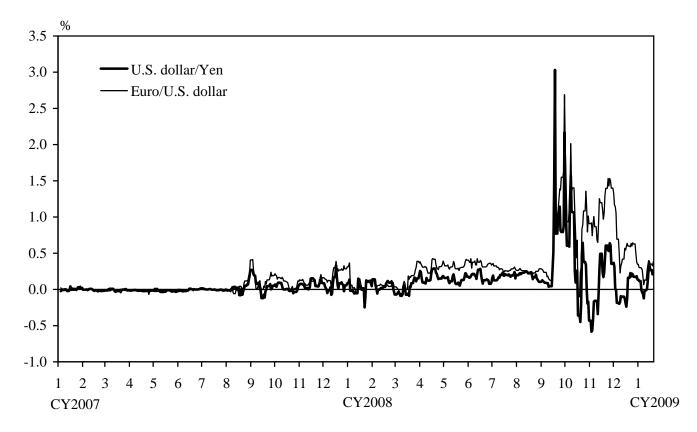
Sources: Japanese Bankers Association; Japan Bond Trading Co., Ltd.; Tokyo Financial Exchange; Bank of Japan.

## **Global Money Markets**

#### (1) LIBOR-OIS spreads (3-month)

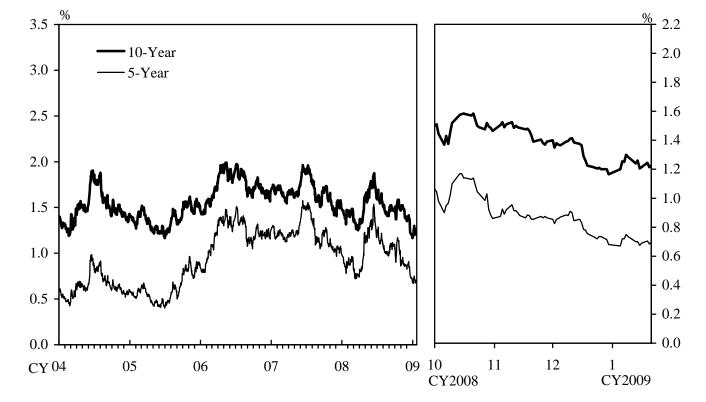


(2) FX swap implied dollar rate - LIBOR spreads (3-month)



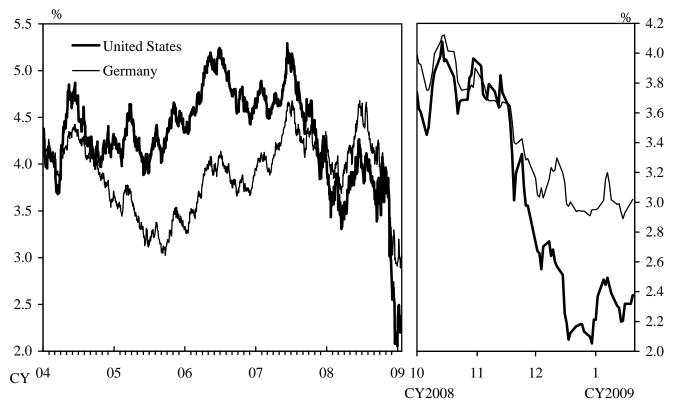
Sources: Bloomberg; Meitan Tradition.

# Long-Term Interest Rates



(1) Japanese Government Bond Yields<sup>1</sup>

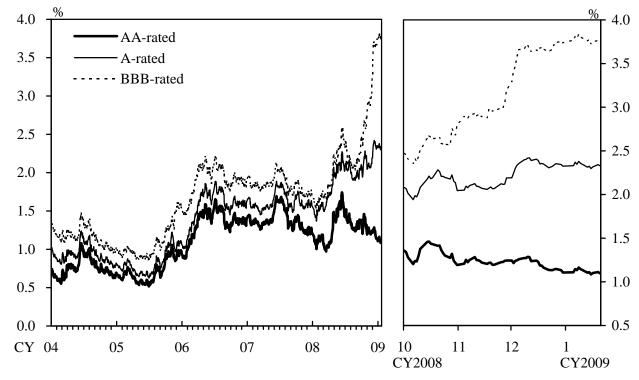
(2) Overseas Government Bond Yields (10-Year)



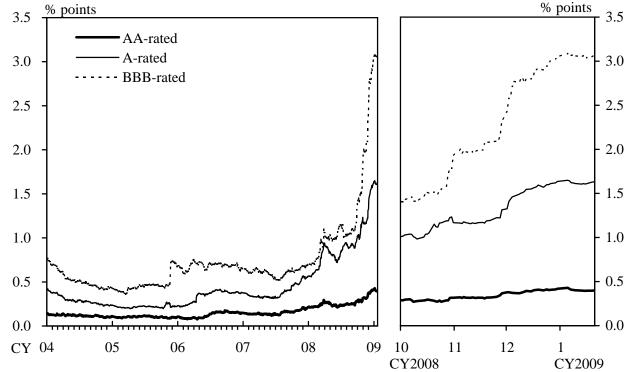
Note: 1. Yields on newly issued bonds. Sources: Japan Bond Trading Co., Ltd.; Bloomberg.

## Yields of Corporate Bonds





(2) Spreads of Corporate Bond Yields over Government Bond Yields<sup>1,2</sup>

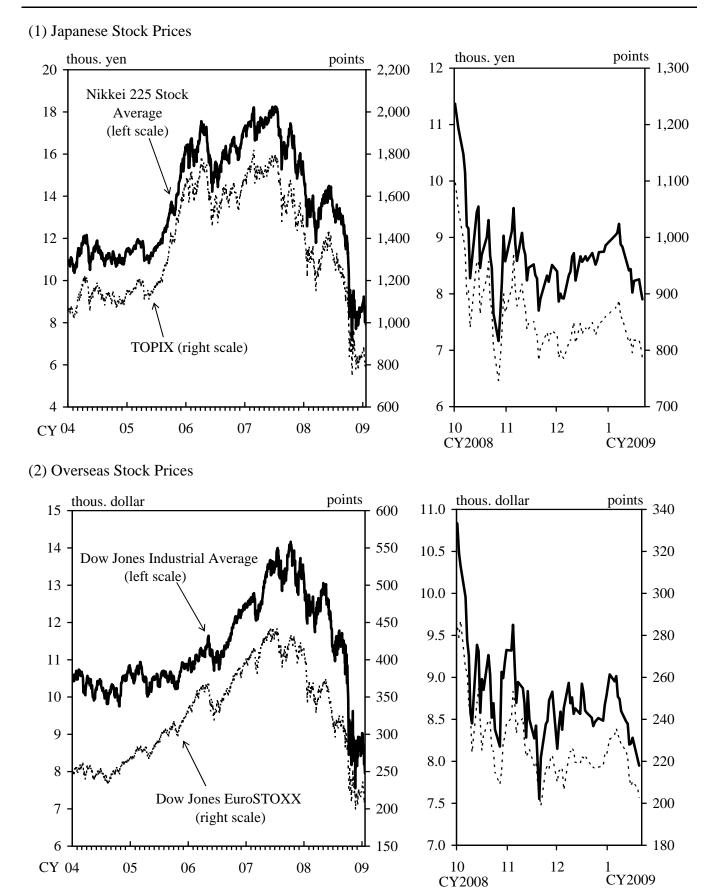


Notes: 1. Yields on bonds with 5-year maturity. Yields on corporate bonds have been calculated on the expanded pool of issues with maturity of three to seven years.

Sources: Japan Securities Dealers Association, "Reference Price (Yields) Table for OTC Bond Transactions."

<sup>2.</sup> The indicated ratings are of Rating and Investment Information, Inc.

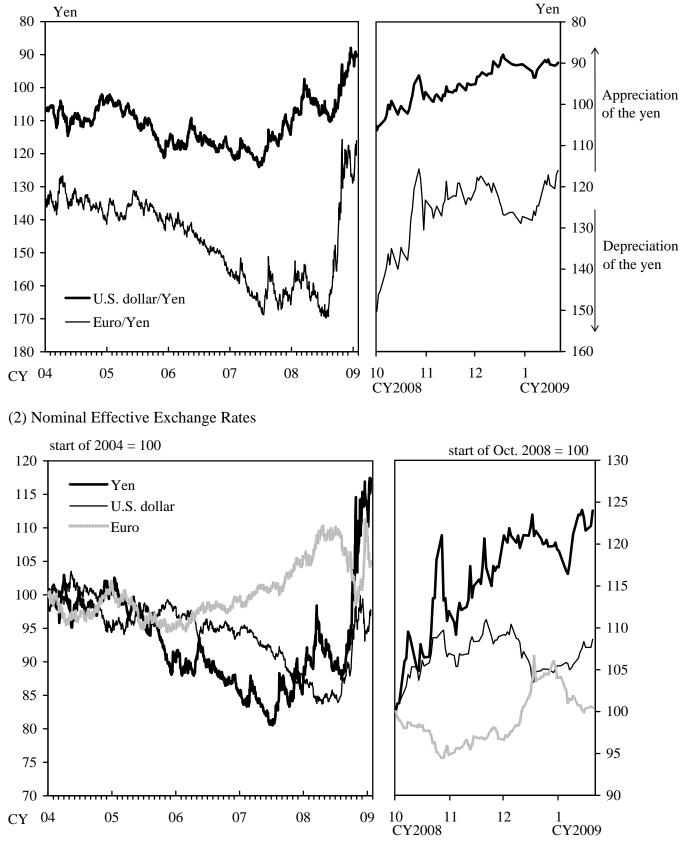
## **Stock Prices**



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

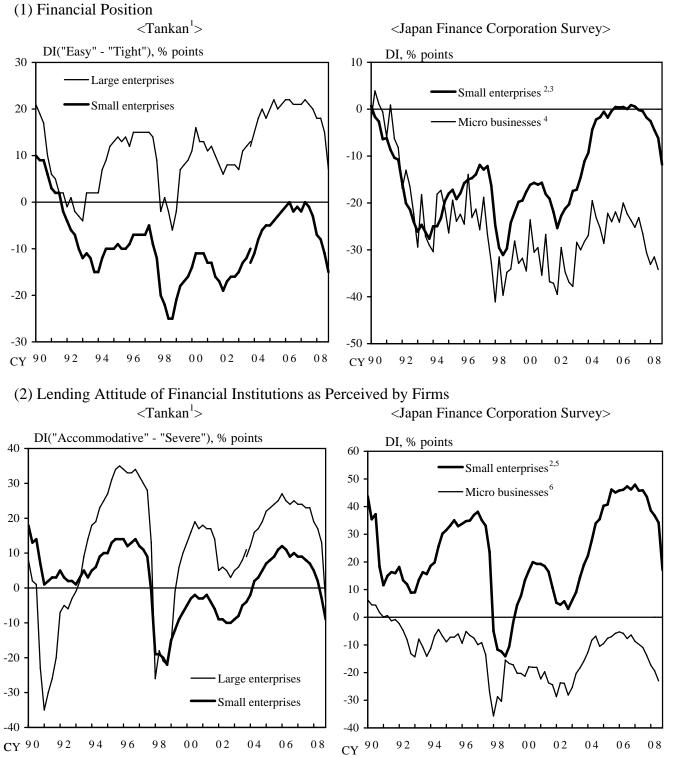
## **Exchange Rates**



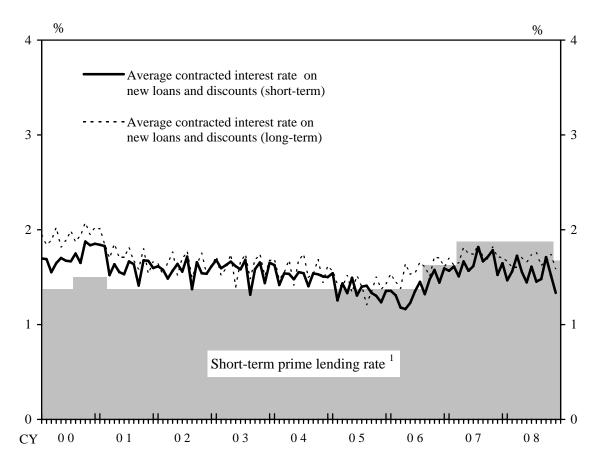


Sources: Bank of Japan; European Central Bank; Bloomberg.

#### **Corporate Finance-Related Indicators**



- Notes: 1. Data of the *Tankan* are based on all industries. The *Tankan* has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on a new basis.
  - 2. Figures are quarterly averages of monthly data.
  - 3. DI of "Easy" "Tight."
  - 4. DI of "Easier" "Tighter."
  - 5. DI of "Accommodative" "Severe."
  - 6. DI of "More accommodative" "More severe."
- Sources: Bank of Japan, "*Tankan,* Short-term Economic Survey of Enterprises in Japan"; Japan Finance Corporation, "Monthly Survey of Small Businesses in Japan," "Quarterly Survey of Small Businesses in Japan (for micro businesses)."

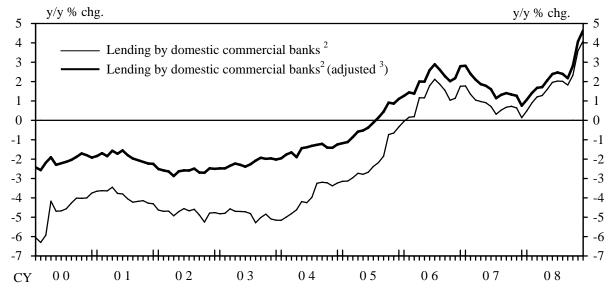


Note: 1. Data are at end of period.

Source: Bank of Japan.

#### Lending by Financial Institutions

#### (1) Lending by Domestic Commercial Banks<sup>1</sup>

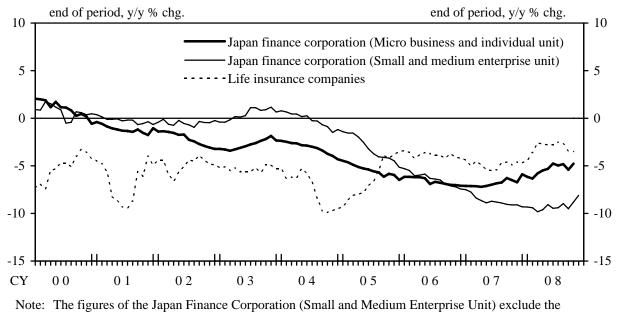


Notes: 1. Percent changes in average amounts outstanding from a year earlier.

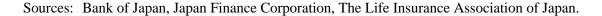
2. "Domestic commercial banks" refers to city banks, regional banks, and regional banks II.

- 3. Adjusted to exclude
  - (1) fluctuations due to the liquidation of loans,
  - (2) fluctuations in the yen value of foreign currency-denominated loans due to changes in exchange rates,
  - (3) fluctuations due to loan write-offs,
  - (4) the transfer of loans to the former Japan National Railways Settlement Corporation to the General Account, and
  - (5) the transfer of loans to the former Housing Loan Administration Corporation to the Resolution and Collection Corporation.





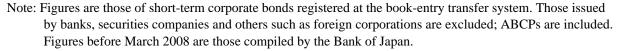
amounts outstanding of lending to the Credit Guarantee Corporations.



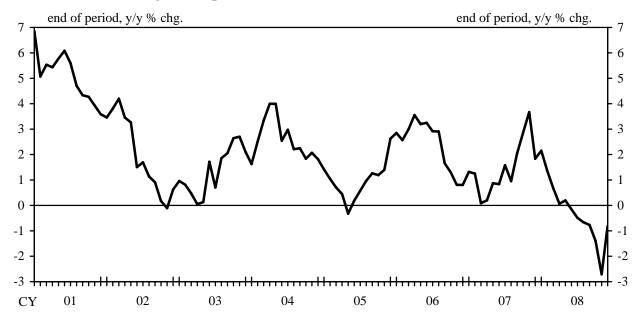
## Private-Sector Fund-Raising in the Capital Markets

#### end of period, y/y % chg end of period, y/y % chg 20 20 15 15 10 10 5 5 0 0 -5 -5 -10 -10 -15 -15 -20 -20 CY 01 02 03 04 05 06 07 08

#### (1) Amount Outstanding of Commercial Paper



#### (2) Amount Outstanding of Corporate Bonds

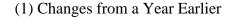


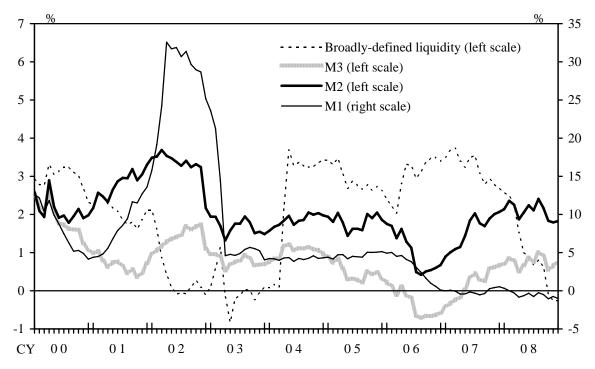
Note: The figures of percentage changes from the previous year of the amount outstanding of corporate bonds are calculated given the following:

- (1) The sum of straight bonds issued in both domestic and overseas markets is used.
- (2) Bonds issued by banks are included.
- (3) Domestic bonds are those registered at the book-entry transfer system. The series is spliced at April 2008 with the one published by the Japan Securities Dealers Association.

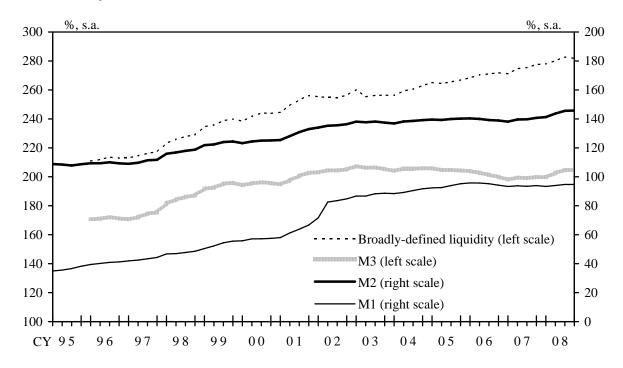
Sources: Japan Securities Depository Center, "Issue, Redemption and Outstanding" (for Corporate Bonds), "Outstanding Amounts of CP by Issuer's category"; Bank of Japan, "Principal Figures of Financial Institutions"; Japan Securities Dealers Association, "Issuing, Redemption and Outstanding Amounts of Bonds"; I-N Information Systems, "Funding Eye."

## Money Stock





(2) Ratio of Money Stock to Nominal GDP

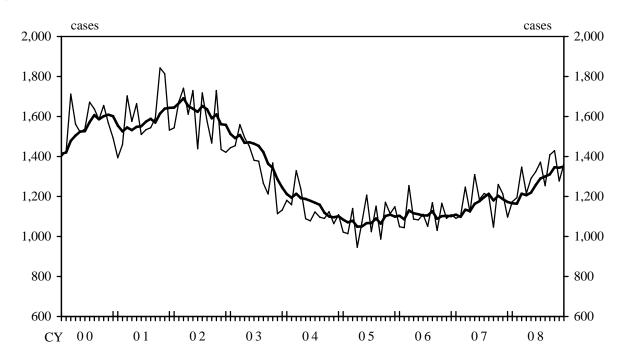


- Notes: 1. M1 consists of cash currency and demand deposits; both M2 and M3 consist of cash currency, demand deposits, time deposits and CDs.
  - 2. Financial institutions surveyed for M1 and M3 include the Japan Post Bank and OFIs (other financial institutions) in addition to those for M2.
  - 3. The current series are spliced by the former series at March 2003.
  - 4. The figure for nominal GDP in 2008/Q4 is assumed to be unchanged from the previous quarter.

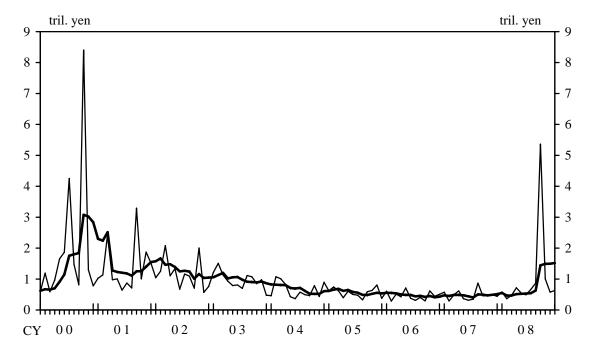
Sources: Cabinet Office, "National Accounts"; Bank of Japan.

## **Corporate Bankruptcies**

(1) Number of Cases



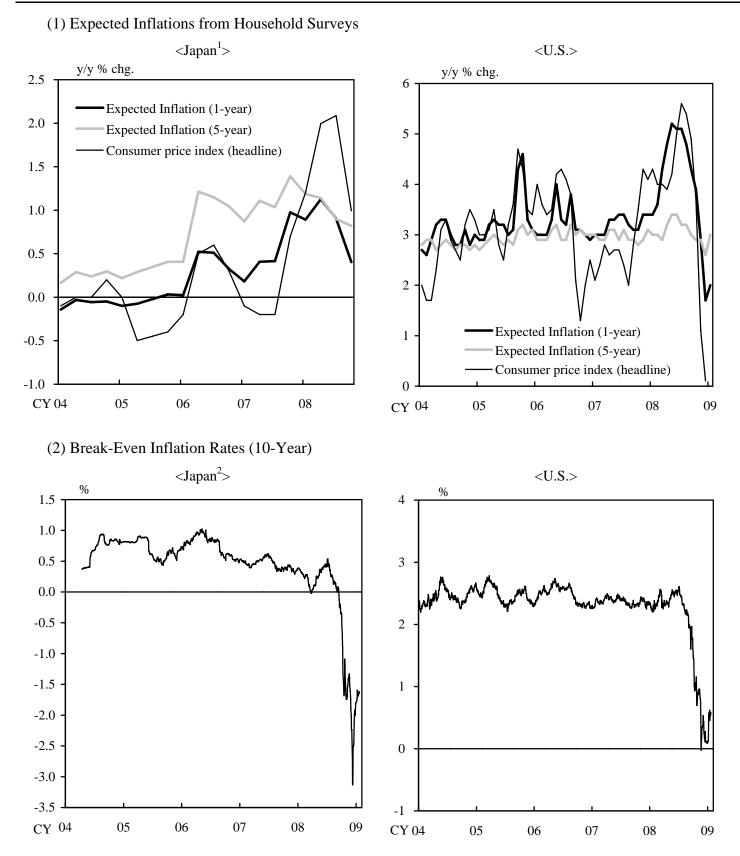
## (2) Amount of Liabilities



Note: Bold lines are the six-month moving average.

Source: Tokyo Shoko Research Ltd., "Tosan Geppo (Monthly Review of Corporate Bankruptcies)."

### Inflation Expectations



Notes: 1. Expected inflations are estimated with a modified Carlson-Parkin method. The CPI year-on-year rate in 2008/4Q is that in Nov, 2008.

2. Figures are calculated from 10-year government bond yields minus 10-year inflation-indexed bond yields with the longest maturities. For the former, those with the closest maturities to the maturities of the latter are used.

Sources: Bank of Japan; Ministry of Internal Affairs and Communications; U.S. Bureau of Labor Statistics; University of Michigan; Bloomberg.