The Bank of Japan decided to improve the content of the “Outlook and Risk Assessment of the Economy and Prices,” by adding new sections describing the monetary policy developments and financial environment as well as by disclosing the median figures of the forecasts of Policy Board members, in addition to the ranges of forecasts of the majority members and all members.

These measures were taken to enhance the transparency of monetary policy, by providing further information about the economic outlook and the monetary policy conduct of the Bank of Japan.
1. Japan’s Economic Developments during Fiscal 2002

In fiscal 2002, Japan’s economy stopped deteriorating in the first half reflecting increases in both exports and production. In the second half, the economy more or less leveled off against the background of increased uncertainty with respect to overseas economies as well as Japan’s financial system (charts 1–3).

“Outlook and Risk Assessment of the Economy and Prices” (hereafter the Outlook Report) in October 2002 illustrated the standard scenario in which the economy was not expected to demonstrate clear signs of recovery and prices would probably continue to decline gradually in the second half of fiscal 2002. Actual economic and price developments as a whole have followed this scenario. However, the real GDP growth rate was somewhat higher than envisaged because of the following factors. First, the GDP deflator was revised reflecting the introduction of the Corporate Goods Price Index (CGPI). Second, exports to Asian countries, especially those to China, remained strong. And third, private consumption was relatively steady despite declining income.


(Standard Scenario for the Economy)

As for economic developments in fiscal 2003, based on the assumption of a gradual recovery in overseas economies, exports and production will regain momentum and a virtuous circle will start working on the economy.

Against such a background, corporate profits are likely to remain on a recovery trend,

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1 As determined by the Policy Board at the Monetary Policy Meeting held on April 30, 2003.
due partly to restructuring efforts, capital spending will probably gradually recover, and private consumption will remain flat. Reflecting such developments in final demand, Japan’s economy is anticipated to gradually recover.

However, taking into account that Japan’s economy shoulders persistent structural adjustment pressure stemming from excess debt and labor (charts 4 and 5), the pace of recovery is most likely to be quite moderate.

The above assumed pace of recovery in demand suggests that the output gap will not be reduced significantly during fiscal 2003, and thus prices will presumably continue to decline moderately.

(Outlook for Respective Demand Components)

Currently available information indicates that public investment will continue to decline in fiscal 2003.

Based on the assumption that a gradual recovery will continue to be seen in overseas economies, exports are expected to regain upward momentum in fiscal 2003, especially to Asian countries where demand is firm, and in IT-related consumer products in which Japan’s manufacturers maintain comparative advantages.

With respect to the corporate sector, if exports follow the developments described above, production is also expected to accelerate the pace of increase, since the level of inventory is already very low. Capital spending has remained at a relatively low level, while corporate profits and cash flows have been on an upward trend, due partly to restructuring efforts (Chart 6). As a consequence, capital spending is expected to recover gradually.

With regard to the household sector, due to the continuous recovery in corporate profits and the reduction in labor costs having progressed considerably during the course of fiscal 2002, the pace of year-on-year decline in nominal income is expected to slow and, consequently, real income adjusted for price changes will stop declining by degrees. Given such a situation, private consumption will remain flat. However, private consumption has been brisk compared with income developments, and, given that the propensity to spend is not likely to further increase and the increasing burden associated with social security reform will reduce disposable income, there will probably be no
decisive increase in private consumption during fiscal 2003.

**Price Developments**

Price developments are affected by various factors. As for prospects for supply-demand conditions, a basic factor in looking at price developments, with the short-term growth rate of supply capacity of Japan’s economy considered to be between 1 to 2 percent on a year-on-year basis, growth in demand is expected to be only moderate in fiscal 2003. Therefore, the output gap will not narrow conspicuously and downward pressure on prices from the demand side is likely to persist.

In addition, wages will continue to be on a declining trend, and supply-side factors such as technological advances, deregulation, and the effects of low-priced imports from emerging economies will also keep pushing down prices.

On the other hand, downward pressures will be mitigated to some extent because of such factors as more business firms abandoning the once-prevailing low-price strategy, a rise in medical fees associated with medical reform, an increase in some indirect taxes, a rise in electricity prices reflecting high crude oil prices during the last year, and an upturn in prices of raw materials.

Reflecting these factors, the year-on-year rate of change in both the domestic CGPI and the Consumer price index (CPI) will likely continue to be slightly negative while the extent might narrow somewhat (Chart 7).

**Financial Developments**

Regarding financial developments, under continuing ample liquidity provision by the Bank of Japan, extremely easy monetary conditions are likely to be maintained in financial markets.

However, it is difficult to expect an increase in credit demand from the corporate sector during fiscal 2003, since the recovery of final demand including capital spending will only be moderate and corporate efforts to reduce excess debt continue. On the other hand, financial institutions are expected to continue efforts to reprice lending rates to more accurately reflect the risks associated with each borrower. Consequently, commercial bank lending is likely to continue shrinking. In addition, reflecting low credit demand
from the corporate sector, fund-raising through capital markets, such as the corporate bond and CP markets, will also remain basically stagnant.

Since there is a continuing trend for economic agents to hold highly liquid risk-free assets such as cash and demand deposits against the background of extremely low interest rates (Chart 8), both the monetary base and money stocks will maintain a high level of growth in relation to economic activity.

3. Risk Assessment

While the Bank assumes the above outlook as a standard scenario in its conduct of monetary policy, at the same time, the possibility of both upside and downside divergence, namely risk factors, from the standard scenario should be borne in mind.

(Developments in Overseas Economies)

The first risk factor stems from developments in overseas economies.

The standard scenario described above continues to rely heavily on the moderate recovery of overseas economies and resulting increase in external demand. However, significant uncertainties still surround overseas economies. Geopolitical risks remain, although they have decreased somewhat recently. Moreover, a concern has arisen with respect to the adverse impact of the severe acute respiratory syndrome (SARS).

In the U.S. economy, some adjustment pressures seem to remain with respect to capital stock and balance sheets stemming from buoyant investment during the 1990s and a stock price decline in recent years. European economies generally lack momentum especially in domestic demand, while financial sector fragility exists in some areas. In East Asian economies, which have been performing well to date and whose economic linkage with Japan's economy has become more intense in various aspects, the adverse impact of the SARS has become a concern recently. In such circumstances, we need to be vigilant as to whether overseas economies can remain on a recovery path.

In addition, given considerable uncertainties regarding the global economy, careful monitoring is warranted with respect to international capital flows and their effects including those on foreign exchange rates.
(Financial Market Developments)

The second risk factor is financial market developments including stock prices.

Stock prices in Japan have been volatile reflecting uncertainty over economic prospects and the financial system, as well as market concern over the unwinding movements of cross-shareholdings as well as selling pressures stemming from corporate pension funds. A stock price decline could adversely impact consumer and business sentiment as well as corporate profits and balance sheets, thereby affecting their spending, and could also hold back lending by financial institutions by reducing the value of their shareholdings. On the other hand, if uncertainty over economic prospects and the financial system recedes, some positive effects on economic activities could be anticipated through a rise in stock prices.

With regard to bond markets, the level of government bonds outstanding in Japan has reached the highest level among industrialized countries, with financial institutions holding the bulk of such bonds. Long-term interest rates are already at extremely low levels. It should be noted that financial institutions are vulnerable to interest rate volatility risk if long-term interest rates surge in a manner inconsistent with the state of the economy.

(Domestic Private Demand Developments)

The third risk factor is developments in domestic private demand such as private consumption and capital spending.

The standard scenario assumes a moderate recovery in capital spending and private consumption leveling off.

Despite a decline in household income, private consumption has been practically flat reflecting a rise in propensity to consume. However, due attention should be given to the downside risk associated with private consumption where uncertainty about the future could adversely affect consumer sentiment.

With respect to capital spending, it should be borne in mind that investment incentives on the part of business firms might be restrained due to increasing awareness of downside risks attaching to overseas economies, or through financial market developments such
as stock prices. On the other hand, capital spending has so far been restrained while corporate profits have recovered. Thus, if business firms become more optimistic about the future of the economy capital spending might recover more vigorously than expected, since cash flows are ample and monetary conditions are easy as a whole.

*(Progress in Disposal of Nonperforming Loans and Financial System Developments)*

The fourth risk factor focuses on progress in the disposal of nonperforming loans (NPLs) and financial system developments.

The standard scenario assumes that the funding environment for business firms will remain as easy as it is now while financial institutions will make efforts to dispose of NPLs and strengthen their profitability and management capabilities.

However, the recent trend in bank stock prices suggests that the market still holds a cautious view with respect to the future earning power of financial institutions. It should be noted that the disposal of NPLs under such circumstances could work either way on the economy, depending on how the public and markets react.

If acceleration of the disposal of NPLs induces tightness in corporate finance as a whole through more stringent lending policy on the part of financial institutions and increased vigilance on the part of markets, there will be downward pressure on the economy. On the other hand, if the disposal of NPLs is perceived as a positive move to strengthen the earning power of financial institutions and the financial system as well as to facilitate efficient resource reallocation from a longer-term perspective, it might have positive effects on the economy through various mechanisms such as the positive reaction of financial markets.

4. Monetary Policy Developments and Financial Environment

*(Developments in the Bank of Japan’s Current Account Balance)*

In March 2001, the Bank adopted the so-called “quantitative easing” policy, in which the main operating target was changed from the overnight call rate to the outstanding balance of the current accounts at the Bank, and the Bank provided ample liquidity to financial markets. The Bank decided to implement this unprecedented monetary easing policy with a view to fighting against continuous price decline as well as preparing a basis
for sustainable economic growth. Moreover, the Bank announced the continuation of this easing framework until the CPI (excluding fresh food, on a nationwide statistics) registers stably a zero percent or an increase year on year.

Since the adoption of this “quantitative easing” policy, the target balance of current accounts held at the Bank has been raised gradually taking into account prevailing economic and financial conditions. Reflecting such ample liquidity provision, the outstanding balance of current accounts at the Bank has drastically expanded (Chart 9(1)).

(Developments in Short-Term Interest Rates)

Since the adoption of the “quantitative easing” policy, short-term interest rates, including term rates, have been moving around zero reflecting ample liquidity provision by the Bank (Chart 9(2)). Unlike in 1997–98, a situation in which the stringent lending policy of financial institutions leads to rapid credit contraction has been successfully avoided even when various shocks impacted the economy (charts 13 and 16).

Recently, when the military action against Iraq began on March 20 (Japan time) and the prices of bank stocks plunged, short-term interest rates remained stable at an extremely low level and the liquidity concern of financial institutions was thus dispelled.

(Market View on the Future Developments in Short-Term Interest Rates)

Developments in interest rate futures since the adoption of the “quantitative easing” policy suggest that a view that short-term interest rates will not rise substantially at least in the near future has been entrenched in financial markets (Chart 10(1)). As background to this, one can point out that, under the Bank’s commitment to maintain the quantitative easing framework, market participants formed an anticipation that short-term interest rates will not be raised as long as the year-on-year rate of change in the CPI stably records above zero, resulting in a decline in the risk premium stemming from unexpected fluctuation of interest rates.

(Developments in Long-Term Interest Rates)

Despite some swings, long-term interest rates have generally been on a declining trend since March 2001 when the “quantitative easing” policy was adopted, and are now at a
historically low level with yields on 10-year government bonds at around 0.6 to 0.7 percent and those on 20-year government bonds at around 0.9 to 1.0 percent (chart 11 and 12). As reasons for such declines, one can point out market participants’ cautious views on economic prospects and increasing uncertainty about the future environment surrounding both domestic and overseas economies.

Based on the fact that the yield curve up to three to four years declined immediately after the adoption of the “quantitative easing” policy and interest rate volatility has been on a diminishing trend (Chart 11), the Bank’s commitment to continue the framework of the “quantitative easing” policy until the actual inflation rate registers stably zero percent or above seems to have also induced a decline in longer-term interest rates through a decline in the risk premium stemming from unexpected interest rate rise.

(Credit Spread)

The yield difference between treasury bills (TBs) and CP has generally been at a very low level under the “quantitative easing” framework (Chart 13 (1)).

The yield difference between government bonds and corporate bonds with high credit ratings has also generally been narrowing. The yield difference between government bonds and corporate bonds with low credit ratings, which had previously widened reflecting intensified awareness among market participants regarding credit risk, has substantially narrowed recently (Chart 13 (2)).

(The Money Stock and Commercial Bank Lending)

The monetary base (currency in circulation plus current account balance at the Bank) has been growing substantially. Meanwhile, the year-on-year growth of banknotes, which comprise most of the monetary base, has been on a downward trend reflecting the prolonged blanket guarantee of liquid bank deposits and the fading out of a shift from interest-bearing financial assets to cash caused by the interest rate decline.

Commercial bank lending continues to decline by more than 2 percent year on year (Chart 14 and Chart 16 (1)).

As a result of the high growth in the monetary base being offset by a decline in the money multiplier, the growth rate of the money stock remains at a level somewhat above
the growth of economic activity (Chart 15).

Demand-side factors, such as business firms remaining cautious about undertaking new investment despite increasing corporate profits (thus leading to weak credit demand on the part of firms), and supply-side factors such as a lack of risk-taking capacity in the banking sector (which has been burdened with NPLs), are both at work behind the decline in commercial bank lending. Banks continue to increase lending to blue-chip firms, while maintaining a cautious posture toward firms with low creditworthiness, and their lending stance viewed from the side of borrowing firms remains severe in the case of small and medium-sized firms (Chart 16 (2) and (3)).

(Asset Price Developments)

Stock prices have remained on a declining trend after the adoption of the “quantitative easing” policy (Chart 17 (1)). Land prices have also been on a downward trend as a whole, while those in some areas have stopped deteriorating (Chart 17 (2)).

In the foreign exchange market, the yen had depreciated against the U.S. dollar until the beginning of 2002, reflecting the difference in economic prospects of Japan and the U.S. outlook. Then, the yen appreciated and recently stayed at around 120 yen to the U.S. dollar. Meanwhile, the yen has generally depreciated against the euro since 2001 (Chart 18).

(Assessment of the Financial Environment)

As seen so far, the Bank’s “quantitative easing” policy and ample liquidity provision have contributed to (1) dispelling liquidity concerns, (2) reducing interest rates including those of longer-term maturities, and (3) shrinking credit spreads. Judging from such developments, the Bank’s monetary easing seems to have effectively shielded channels through which various shocks lead to liquidity concern, thereby securing financial market stability, and have contributed to preventing the economy from stumbling into a deflationary spiral.

On the other hand, the growth rate of commercial lending has been negative and banks’ financial intermediary function is still weak. Real economic activity has yet to be stimulated.
5. Japan’s Economy: Prospects for Returning to a Sustainable Growth Path and Overcoming Deflation

In fiscal 2003, which this Outlook Report takes into consideration as the main focus of the economic outlook, real GDP growth rate is expected to stay around one percent, and inflation will probably remain slightly negative.

A relationship has been maintained such that when the growth rate of the economy increases, the inflation rate increases with a certain lag through narrowing of the output gap (Chart 19). Consequently, in order to overcome deflation, it is necessary and critical to stimulate private demand and growth expectation, through continuous efforts by private economic agents, the Government, and the Bank.

In the corporate sector, through business firms’ efforts to strengthen their balance sheets, change their employment practice, and build efficient production lines through global reallocation of resources, the earning power of firms has been raised centering on the manufacturing industry (Chart 20).

In order to support the efforts of the private sector as mentioned above, it is critical that the government executes reforms with regard to public regulation, taxation, and public spending. These efforts are necessary to ensure the capability of Japan’s economy to adjust flexibly to various changes such as global competition, progress in information and communication technology, structural changes in the labor market, a declining birth rate, and population aging. In this respect, the Government’s “Structural Reform and Medium-Term Economic and Fiscal Perspectives” and other documents illustrate the basic framework.

With regard to Japan’s financial system, the NPL problem and the severe environment surrounding financial institutions with respect to their strength to conduct lending business hamper the transmission mechanism of monetary easing through the malfunctioning of financial intermediation. Therefore, it is important to restore the soundness of the financial system as soon as possible, through resolution of the NPL problem and strengthening of financial institutions’ earning power. In this regard, it seems that commercial banks are trying to review their lending rate so that they reflect the borrowers’ credit risks more accurately. Meanwhile, it could be noted as a positive change that new financial markets such as the asset-backed securities market are undergoing development.
Based on the above outlook, it is necessary for the Bank to secure financial market stability through ample provision of liquidity and to continue making its best effort to prevent the economy from stumbling into a deflationary spiral, in order to contribute to bringing Japan’s economy back to a sustainable growth path as soon as possible, and to overcoming deflation. At the same time, it is also deemed important to continue steady efforts to explore possible measures to strengthen the transmission mechanism of monetary easing in the areas of corporate finance and money market operations.

As the efforts described above are carried out continuously and decisively by various entities, it is expected that growth expectations and economic activities will be enhanced, as a consequence of the progress of economic adjustment.
### Real GDP and CPI in Fiscal 2002 (Forecasts in October 2002 and Actuals)

(y/y % chg.)

<table>
<thead>
<tr>
<th></th>
<th>Real GDP</th>
<th>CPI (excluding fresh food)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of forecasts of the majority of Policy Board Members in October 2002</td>
<td>+0.2 to +0.5¹</td>
<td>−0.9 to −0.7</td>
</tr>
<tr>
<td>Actual</td>
<td>+1.8²</td>
<td>−0.8</td>
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</tbody>
</table>

Notes: 1. Forecasts for real GDP made in October 2002 do not reflect the revision of the GDP deflator in December 2002 according to the introduction of the CGPI.
2. Estimation on the assumption that real GDP in the first quarter of 2003 equals that in the fourth quarter of 2002.

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### Forecasts of the Majority of Policy Board Members

(y/y % chg.)

<table>
<thead>
<tr>
<th></th>
<th>Real GDP</th>
<th>Domestic CGPI</th>
<th>CPI (excluding fresh food)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal 2003</td>
<td>+0.8 to +1.1</td>
<td>−1.0 to −0.9</td>
<td>−0.5 to −0.4</td>
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<tr>
<td></td>
<td>[+1.0]¹</td>
<td>[−1.0]</td>
<td>[−0.4]</td>
</tr>
<tr>
<td></td>
<td>(+0.4 to +1.0)²</td>
<td>(−0.7 to −0.4)³</td>
<td>(−0.6 to −0.4)</td>
</tr>
</tbody>
</table>

Notes: 1. Brackets indicate median of the forecasts made in April 2003.
2. Parentheses indicate forecasts made in October 2002.
3. Forecasts for domestic wholesale price index (WPI).
4. The forecasts of Policy Board members are based on the assumption that there will be no change in monetary policy.

Forecasts of the majority of Policy Board members are shown as a range, with the highest and lowest figures excluded. The forecasts of all Policy Board members are as follows.

<table>
<thead>
<tr>
<th></th>
<th>Real GDP</th>
<th>Domestic CGPI</th>
<th>CPI (excluding fresh food)</th>
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</thead>
<tbody>
<tr>
<td>Fiscal 2003</td>
<td>+0.8 to +1.2</td>
<td>−1.0 to −0.3</td>
<td>−0.6 to −0.2</td>
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<tr>
<td></td>
<td>(+0.4 to +1.5)²</td>
<td>(−0.8 to 0.0)³</td>
<td>(−0.7 to −0.3)</td>
</tr>
</tbody>
</table>

Notes: 1. Brackets indicate median of the forecasts made in April 2003.
2. Parentheses indicate forecasts made in October 2002.
3. Forecasts for domestic WPI.
Real GDP Growth in Overseas Economies

(1) Developed Countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>United States</th>
<th>Euro area</th>
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<td>2003</td>
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Sources: National Statistics

(2) Emerging Market Economies

<table>
<thead>
<tr>
<th>Year</th>
<th>China</th>
<th>Taiwan</th>
<th>South Korea</th>
<th>Brazil</th>
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<td>1998</td>
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<td>2003</td>
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</table>

Sources: National Statistics
Chart 2

Real GDP

(1) Changes from the Previous Quarter

![Graph showing changes from the previous quarter](chart)

(2) Each Component's Contribution to Changes in Real GDP

a. Domestic private demand

![Graph showing domestic private demand](chart)

b. Public demand

![Graph showing public demand](chart)

c. Net exports of goods and services

![Graph showing net exports](chart)

Note: Figures are estimated based on the new method published in August 2002.

Source: Cabinet Office, "National Accounts."
Chart 3

Exports and Production

(1) Real Exports

CY 2000=100; s.a.

(2) Production

CY 2000=100; s.a.

(1) Outstanding Amount of Debts

Note: Debts = long-term and short-term borrowings + corporate bonds + bills discounted

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

(2) Ratio of Debts to Sales and Nominal GDP
Pressures Arising from Excess Labor

(1) Manufacturing

Note: Figures for 2003/Q2 are forecasts made by enterprises.

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

(2) Nonmanufacturing
Chart 6

Cash Flows and Capital Spending

(1) Manufacturing

Note: 1. Large firms of other services industry are excluded from nonmanufacturing firms.
2. Cash flows = current profits / 2 + depreciation expense.

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

(2) Nonmanufacturing
Notes: 1. Adjusted to exclude the effects of the consumption tax hike in April 1997.
2. CPI before December 2000 is on the 1995 base.

Ratio of Risk-Free Assets to Total Assets

(1) Domestically Licensed Banks

(2) Life and Nonlife Insurance Companies

(3) Households

(4) Private Nonfinancial Corporations

Note: Each sector's ratio of risk-free assets to total assets is calculated as follows:
Domestically licensed banks: (cash + current account balances + government bonds)/total assets.
Life and nonlife insurance companies: (cash and deposits with others + government bonds)/total operating funds.
Households and private nonfinancial corporations: (currency + transferable deposits + central government securities)/total financial assets.

Sources: Life Insurance Association; Marine and Fire Insurance Association of Japan; Bank of Japan.
Chart 9

(1) BOJ Current Account Balances

- Current account balances (amount outstanding)
- Target:
  - Around 5 trillion yen
  - Around 6 trillion yen
  - Above 6 trillion yen
  - Around 10–15 trillion yen
  - Around 15–20 trillion yen
  - Around 17–22 trillion yen

- Required reserve (daily average)

(2) Money Market Rates

- Overnight (Uncollateralized Call rates)
- 3-month (FB/TB)

- Introduction of reserve target (Mar. 2001)
- Terrorist attacks in the United States (Sep. 2001)
- System failure of a major bank group (Apr. 2002)
- Outbreak of military action against Iraq (Mar. 2003)

Sources: Bank of Japan; Japan Bond Trading Co., Ltd.
Chart 10

Interest Rates Futures

(1) Euro-Yen Interest Rates Futures (3-Month)

- 1999/5/17 (The 10-year government bond marked the lowest yield in the period of zero-interest rate policy)
- 2002/4/30 (One year ago)
- 2003/4/28 (Latest)

(2) Total Transactions Volume of Euro-Yen Interest Rates Futures

Chart 11

Long-Term Interest Rates

(1) Rate Developments

- 10-year
- 5-year

Sources: Bloomberg; Japan Securities Dealers Association; Tokyo Stock Exchange.

(2) Yield Curve

- 2001/3/16 (The day before the introduction of reserve target)
- 02/9/30 (Half-year ago)
- 03/4/28 (Latest)

(3) Volatility

Sources: Bloomberg; Japan Securities Dealers Association; Tokyo Stock Exchange.
Chart 12

International Comparison of Long-Term Interest Rates

(1) Nominal Long-Term Interest Rates (10-year government bonds rates)

(%)

(2) Real Long-Term Interest Rates

(%)

Notes: 1. Real long-term interest rate = nominal long-term interest rate - the year-on-year change of CPI.
2. Figures of CPI are those of as follows,
   Japan: CPI(excluding fresh food), adjusted to exclude the effects of the consumption tax introduction in April 1989 and its hike in April 1997; U.S.: CPI(excluding food and energy); Germany: CPI in West Germany until 1991.

Sources: Japan Bond Trading Co., Ltd; Ministry of Public Management, Home Affairs, Post and Telecommunications, "Consumer Price Index," etc.
Credit Spreads

(1) Short-Term (3-Month): Average Issuance Rate of CPs Minus FB/TB Yield

![Graph showing credit spreads for short-term maturities.]

Notes: 1. CP ratings are A-1 or better.
   2. FB/TB yields before May 1999 are on bills with a 6-month maturity.
   3. The indicated ratings of corporate bonds are of Moody's.
   4. The long-term spread in April 2003 is an average of data from April 1 to 28.

Sources: Bank of Japan; Japan Bond Trading Co., Ltd.; Japan Securities Dealers Association.

(2) Long-Term (5-Year): Corporate Bond Yield Minus Government Bond Yield

![Graph showing credit spreads for long-term maturities.]

Zero-interest rate policy period
Reserve target period

Aa
A
Baa

% points

CY 98 99 00 01 02 03

Sources: Bank of Japan; Japan Bond Trading Co., Ltd.; Japan Securities Dealers Association.
Monetary Indicators, Economic Activity and Price Development
- Changes from March 2001 -

Money Multiplier

(1) Growth Rate of Monetary Base and Money Multiplier (M2+CD/Monetary Base)

- Chart showing the growth rate of the monetary base and money multiplier from CY 98 to CY 03.
- The y-axis represents the ratio of monetary base to money multiplier, with a scale from 7.0 to 11.0.
- The x-axis represents the years from CY 98 to CY 03.

(2) Breakdown of Money Multiplier

- Chart showing the annual percentage change (y/y % chg.) of different components of the money multiplier.
- Components include ratio of reserve to deposit, ratio of cash to deposit, and money multiplier.
- The x-axis represents the years from CY 98 to CY 03.

Source: Bank of Japan
Lending by Domestic Commercial Banks and Lending Attitude of Financial Institutions

(1) Lending by Domestic Commercial Banks

(2) "Tankan—Short-Term Economic Survey of Enterprises in Japan"
   (Lending Attitude of Financial Institutions as Perceived by Small Enterprises)

(3) "Monthly Survey of Small Businesses in Japan" (Lending Attitude of Financial Institutions)

Sources: Bank of Japan, "Principal Figures of Financial Institutions,"
"Tankan—Short-Term Economic Survey of Enterprises in Japan";
Asset Prices

(1) Stock Prices (Nikkei 225 Stock Average)

Notes:
1. Data are at end of month.
2. Figure for April 2000 is that of April 28.

(2) Land Prices (Urban Land Price Index, Nationwide)

Sources: The *Nihon Keizai Shimbun*; Japan Real Estate Institute, "Urban Land Price Index."

29
Note: Figures for April 2003 are averages up to April 28.

Source: Bank of Japan.
(1) Output Gap and Prices

Note: Estimated by BOJ staff.

(2) The Relationship between GDP Growth and Inflation

Notes: 1. CPI is adjusted to exclude the effects of the consumption tax introduction in April 1989 and its hike in April 1997.
2. Data for FY1981–2001 are used for this calculation.

Chart 20

Profitability of Enterprises

(1) Ratio of Operating Profits to Sales

(2) Sales

Note: Large firms of other services industry are excluded from nonmanufacturing firms.

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