Money Market Operations in Fiscal 2003

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In fiscal 2003, the Bank of Japan changed the target level for current account balances held at the Bank five times, raising it by 15 trillion yen in total. To achieve the target and maintain stability in the money market, the Bank conducted money market operations appropriately by carefully monitoring money market conditions and market participants' bidding in response to the Bank's operations. Autonomous factors such as the flow of treasury funds and banknotes contributed to the increase in current account balances. In such a situation, the target level for current account balances, which had been raised significantly, was steadily achieved and the money market remained generally stable throughout the fiscal year.

Regarding operational tools and facilities, the Bank implemented several modifications from a broad perspective, taking views and requests of market participants into consideration. The Bank reviewed some of the existing operational tools to further facilitate money market operations. In addition, the Bank introduced a scheme for outright purchases of asset-backed securities (ABSs) to encourage the development of the ABS market and strengthen the transmission mechanism of monetary easing. The Bank also introduced a securities lending facility to provide the markets with a secondary source of Japanese government securities (JGSs), which was decided after the start of fiscal 2004, to enhance liquidity and maintain the smooth functioning of the JGS markets.

I. Sources of Changes in Current Account Balances at the Bank (Autonomous Factors)

Since March 19, 2001, the Bank has set the current account balances at the Bank as the main operating target for its money market operations (the so-called "quantitative easing policy"). Under this framework, money market operations are undertaken to achieve the target level for current account balances determined at Monetary Policy Meetings (MPMs) by the Policy Board of the Bank. Specifically, in response to changes in current account balances resulting from, for example, the issuance and redemption of banknotes and the receipts and payments of treasury funds,[1] money

[1] Developments in banknotes and treasury funds, which are preconditions for the central bank's money market operations, are referred to as "sources of changes in current account balances" or "autonomous factors." In the case of banknotes, financial institutions' deposits of banknotes at the Bank constitute sources of increase in current account balances, while their withdrawals of banknotes from the Bank constitute sources of decrease. In the case of treasury funds, the

market operations are undertaken to supply or to absorb funds to maintain current account balances at the target level.

"Sources of changes in current account balances" or "autonomous factors" affecting the balances in fiscal 2003 registered a net surplus of 7.7 trillion yen in total, after registering a net shortage of 3.5 trillion yen in total in the previous fiscal year. This reflected technical factors associated with the establishment of Japan Post, which started to hold a current account at the Bank (see II. A), and other factors such as the slowdown in the issuance of banknotes and the increase in foreign exchange intervention toward the end of the fiscal year. Details are as follows (see Chart 1).[2]

A. Banknotes

Net surplus in the issuance of banknotes for fiscal 2003 totaled 0.3 trillion yen, a substantial drop from that of 3.2 trillion yen in the previous fiscal year. The main factors were the following. First, in a situation where interest rates remained at extremely low levels, marginal demand for banknotes gradually diminished, because the opportunity cost, which was represented by short-term interest rates, had declined. Second, as anxiety about the financial system subsided, growth in demand for banknotes, which were considered a safe asset, diminished.

The slowdown in the issuance of banknotes was particularly noticeable in months when demand for banknotes for settlement purposes became strong, such as the year-end and the fiscal year-end. This suggested that financial institutions and other private

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issuance of JGSs and payment of taxes constitute sources of decrease in current account balances, while the redemption of JGSs, pension payments, and other fiscal expenditures constitute sources of increase.

Money market operations by the U.S. Federal Reserve System and the European Central Bank are the same as those by the Bank of Japan in which operations are conducted in response to developments in banknotes and treasury funds.

[2] Footnote 1 refers to "sources of changes in current account balances" or "autonomous factors" as preconditions for the central banks' money market operations. However, among these factors, "treasury funds and others" may fluctuate in accordance with purchasing operations of treasury bills (TBs) and financing bills (FBs), one of the tools for money market operations. The reason is as follows. When the Bank purchases TBs/FBs from financial institutions and holds them to maturity, redemption funds that should have been deposited to current accounts of the financial institutions involved are paid to the Bank. This results in a decline in treasury payments to current accounts.

In order to remove the effect of such TBs/FBs purchasing operations and grasp the movement of treasury funds accurately, autonomous factors used in this paper assumed that funds paid for the redemption of TBs/FBs purchased through operations are paid to the financial institutions involved.

economic entities had already possessed sufficient and large volumes of banknotes as "inventory" to cope with transactional demand.

B. Net Fiscal Payments

"Net fiscal payments" consists of fiscal payments and revenues, such as payments for public works and social security expenditures, and tax revenues. It excludes payments and revenues related to transactions of Japanese government bonds (JGBs), foreign exchange, and financing bills (FBs). Net fiscal payments marked a net surplus of 54.4 trillion yen, up from 52.1 trillion in the previous fiscal year. This increase primarily reflected technical factors associated with the establishment on April 1, 2003 of Japan Post, which started to hold current account deposits at the Bank. The deposits were formerly held by the Postal Service Agency, Japan Post's predecessor, in the form of a government account, and they were transferred to the current account. At the end of fiscal 2003, the current account balances of Japan Post totaled 3.4 trillion yen.

C. JGBs

"JGBs" includes the issuance and redemption of long-term JGBs and treasury bills (TBs).[3] Reflecting the increased issuance of JGBs, net receipts amounted to 63.9 trillion yen (issuance exceeded the sum of redemption and interest payments), up from 60.9 trillion yen in the previous fiscal year.

D. Foreign Exchange and FBs

"Foreign exchange" transactions registered a net payment of 32.7 trillion yen, marking a significant increase from the previous fiscal year. This was mainly due to yen selling/foreign currency purchasing intervention in foreign exchange markets, whose value of transactions marked a historical high in fiscal 2003. On the other hand, FBs registered a net receipt of 15.6 trillion yen (issuance exceeded redemption), marking a significant increase from the previous fiscal year. This reflected the increase in the issuance of FBs in the market to raise yen funds to be used in yen selling intervention.

The balance of foreign exchange transactions and FBs resulted in a substantial net payment of 17.1 trillion yen. Yen funds needed for yen selling intervention were ultimately raised through the issuance of FBs in the market. Therefore, in total, the

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[3] The issuance and redemption of FBs are not included in "JGBs," and are shown under "FBs" (see Section I. D).

effects of a series of transactions involved in the intervention on current account balances at the Bank offset one another. However, when there was a time lag between foreign exchange intervention and the issuance of FBs in the market, the intervention had the effect of temporarily increasing current account balances. The reason for the substantial net payment in fiscal 2003 was that the value of the intervention increased particularly around the end of fiscal 2003 and therefore some FBs had to be issued in fiscal 2004 to raise the necessary yen funds (see Box 1).

Box 1: Impact of Foreign Exchange Intervention on Current Account Balances at the Bank

Foreign exchange intervention (yen selling/foreign currency purchasing intervention) was undertaken intermittently in fiscal 2003. In total, intervention amounted to a record high level of 32.9 trillion yen. Foreign exchange transactions for the purpose of intervention were settled through current account balances at the Bank.

The following is a brief explanation of the impact of yen selling/foreign currency purchasing intervention by Japanese monetary authorities on current account balances and the subsequent money market operations.

1. Overall Impact of the Series of Transactions

Yen selling/foreign currency purchasing intervention is settled on the second business day after the intervention, and yen funds are paid to private financial institutions from the government. These payments are made through the current accounts at the Bank, and thus cause current account balances to increase. On the other hand, the government (Foreign Exchange Fund Special Account) raises yen funds needed for the settlement of intervention by issuing FBs in the market. Payments for FBs issued in the market are made to the government through current accounts at the Bank, and at this juncture, cause current account balances to decrease. Consequently, in total, the effects of this series of transactions related to yen selling intervention on current account balances offset one another. For money market operations, this means that over a given period of time, the intervention basically does not affect funds-supplying and funds-absorbing operations.

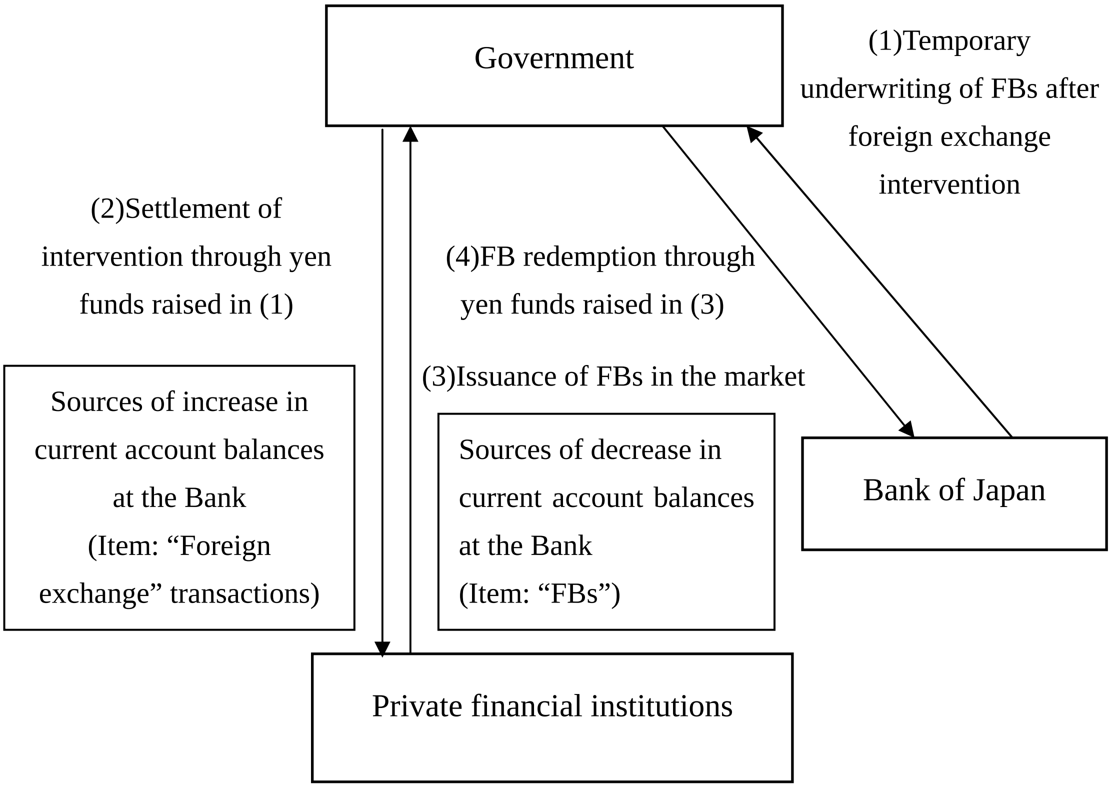
2. Short-Term Impact

However, a certain time lag might occur between the settlement of intervention and the issuance of FBs in the market. In such an instance, necessary yen funds might be raised using temporary "bridging" methods pending the issuance of FBs in the market. Available methods include the use of surplus funds in the government account and the underwriting of FBs by the Bank.[4,5] These methods to raise yen

[4] The Bank's "Basic Outline of Transactions with the Government" (adopted by the Policy Board on March 26, 1999) states: "In case of unanticipated demand for funds by the Treasury, as an exceptional measure, the Bank may underwrite FBs." At the same time, the following provision is made for such FBs underwritten: "Such FBs shall be redeemed as soon as possible

funds are not market transactions and do not affect current account balances. Therefore, during the time between the settlement of intervention and the issuance of FBs, this transaction temporarily causes current account balances to increase. By contrast, when FBs are increasingly issued in the market, current account balances decline. In fiscal 2003, foreign exchange transactions and FBs had a net positive impact on current account balances at the Bank. This was because foreign exchange intervention increased around the end of the fiscal year, and some FBs had to be issued in fiscal 2004 to raise the necessary yen funds.

Flow of Yen Funds in Yen-Selling Exchange Market Intervention



Note: The above describes a case in which the Bank temporarily underwrites FBs.

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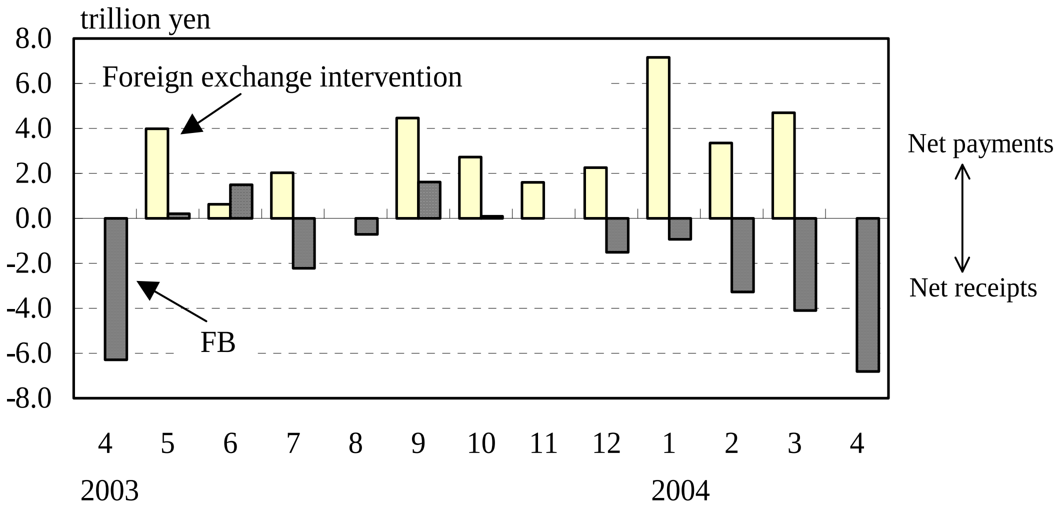
by using funds raised from the next public placement of FBs and after." The temporary underwriting of FBs for foreign exchange intervention is based on this provision.

[5] Pursuant to the Policy Board decision on December 26, 2003, the following temporary measure was implemented, valid through March 31, 2004. When the Ministry of Finance requests the Bank of Japan to purchase foreign currency securities held by Foreign Exchange Fund Special Account, the Bank may purchase the foreign currency securities held by the Special Account under repurchase agreement (for details, see "Guidelines for Bank of Japan Purchase of Foreign Securities from Foreign Exchange Fund Special Account with Resale Clause"). This operation is also characterized as a measure to temporarily raise funds needed for foreign exchange market intervention.

Foreign Exchange Intervention and the Amounts Outstanding of FBs



Note: "FBs" is the total of the FBs appearing under "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations" (adjusted for the effect of TB/FB purchasing operations).

Sources: Ministry of Finance, "Status of Implementation of Foreign Exchange Balancing Operations";
Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations."

II. Money Market Operations in Fiscal 2003

Responding to autonomous factors outlined above, the Bank's money market operations were focused on achieving the target range for current account balances, taking into consideration the developments in the money market.

In fiscal 2003, the Bank changed the target range for current account balances five times (see chart below). The Bank's money market operations and the surrounding environment during the period with different target ranges can be summarized as follows (see Chart 2).

Target Range for Current Account Balances in Fiscal 2003

Period	Target range for current account balances
Apr. 1, 2003 –	17 – 22 trillion yen
Apr. 30 –	22 – 27 trillion yen
May 20 –	27 – 30 trillion yen
Oct. 10, 2003 –	27 – 32 trillion yen
Jan. 20, 2004 –	30 – 35 trillion yen

A. Target Range of 17–22 Trillion Yen for Current Account Balances

The Policy Board decided at the MPM on March 4 and 5, 2003 to raise the target range from "around 15–20 trillion yen" to "around 17–22 trillion yen" effective from April 1, considering necessary adjustment due to the establishment of Japan Post on April 1.

As previously noted, with the establishment, Japan Post started to hold a current account at the Bank. Consequently, an agreement was made between the Bank and Japan Post whereby the latter was required to maintain a certain level or more of current account balances at the Bank for a particular period of time, similar to reserve maintenance period (Japan Post is not designated by law as an institution subject to reserve requirements). The intent of this agreement was to maintain a fair and competitive environment with other private financial institutions, and to secure the smooth implementation of money market operations by making the overall demand for current accounts at the Bank stable and predictable.

The decision at the MPM on March 4 and 5 was to raise the target by 2 trillion yen, an amount roughly equivalent to balances required for Japan Post. The target level was raised by simply adding this amount to the previous target level.

In the money market after the beginning of April, while demand for liquidity over the fiscal year-end subsided, overall demand for liquidity nevertheless remained at a high level due to the continued tension in Iraq and a further decline in stock prices (see Chart 3). Also, current account balances of Japan Post averaged 6.4 trillion yen for April, significantly exceeding the raise in the target of current account balances by the Bank. The uncollateralized overnight (O/N) call rate, an indicator of supply and demand conditions for O/N liquidity, remained stable at an extremely low level. But upward pressure was exerted on repo rates for future date settlement transactions, spot next (S/N) transactions,[6] and rates for short-term funds-absorbing operations.

Against this backdrop, the Bank decided to continue to use the so-called contingency clause[7] in the guideline for money market operations that the Bank had adopted since mid-March responding to the heightened tension in Iraq, and undertook money market operations to maintain current account balances above the target range of "17–22 trillion yen." As a result, current account balances moved in the range of 25–34 trillion yen in April.

B. Target Range of 22–27 Trillion Yen and 27–30 Trillion Yen for Current Account Balances

To ensure stability in the money market, the Bank decided to raise the target range for current account balances at MPMs on April 30 and again on May 20. The target range was first raised to "around 22–27 trillion yen," then to "around 27–30 trillion yen." At a meeting of the Financial System Management Council of the government on May 17, injection of capital into Resona Bank was decided. Subsequent to this decision, on Monday morning of May 19, the Bank provided additional liquidity by undertaking 1 trillion yen worth of same-day-start outright purchases of bills (at the Head Office of the Bank) to secure stability in financial markets. The operation was conducted before the usual time of 9:20 a.m. to begin offers in same-day-start operations.

The money market gradually became stable as seen in the decline in the repo rate, which had increased slightly in April, while supply of short-term liquidity increased further reflecting the Bank's raising of the target range for current account balances and the build-up of the balances by Japan Post eased.[8] Thereafter, as stock prices subsequently rebounded and anxiety about the financial system subsided, maintaining a high level of current account balances had gradually increased a sense of abundant funds in the market. Thus, in the process of building up funds supplied through from late July to early August when autonomous factors caused a shortage of funds, bidding rates in funds-supplying operations gradually declined. By the end of July, the rate on

[6] Overnight transactions that are settled two business days after the day of the transaction.
[7] Under the guideline for money market operations, in addition to achieving the target for the current account balances held at the Bank, the Bank can provide more liquidity irrespective of the target to counter the risk of instability in financial markets such as a surge in liquidity demand. This is referred to as the "contingency clause."
[8] The average balance of current accounts of Japan Post declined continuously to about 4.2 trillion yen in May and to about 3.4 trillion yen in June.

JGSs purchases with repurchase agreements in operations reached the floor level of 0.001 percent.

In August, the money market remained generally calm. However, in the wake of the rise in long-term interest rates in the second half of August, interest rates on TBs and FBs with a longer maturity moved slightly upward. In this environment, some financial institutions tried to reduce interest rate risk by responding to the Bank's outright purchases of bills and thus they as a whole adopted a positive stance to bid in funds-supplying operations over the end of September, with the semiannual book closing approaching.[9] Anticipating a change in autonomous factors causing a shortage in the current account balances in early September, the Bank had increased short-term funds-supplying operations, mainly outright purchases of bills with a relatively longer maturity. Nevertheless, the rate generally moved upward. Even during this period, the uncollateralized O/N call rate, repo rate (S/N transactions), and the rates of funds-absorbing operations with instruments maturing before the semiannual book closing at the end of September remained stable at extremely low levels. Moreover, no increase in demand was observed for extremely short-term liquidity.

After the beginning of September, long-term interest rates gradually regained calmness. In the money market, rates on term instruments remained at relatively high levels. This reflected continued uncertainty over the liquidity at the end of September and a growing expectation that funds-supplying operations would temporarily decrease due to the fact that foreign exchange intervention temporarily caused current account balances to increase. In this environment, the Bank continued to conduct funds-supplying operations actively to meet heightened liquidity demand at the end of September and undertook money market operations giving consideration to the permeation of funds throughout the market. On September 30 and October 1, the contingency clause was used in anticipation of an increase in demand for liquidity at the end of September, and money market operations were undertaken to raise current account balances above the target range of 27–30 trillion yen. As a result, on September 30, current account balances stood at 34.6 trillion yen, reaching a historical high. Under these conditions, the weighted average of the uncollateralized O/N call

[9] For an instance, assume a financial institution holding 1 trillion yen of JGBs with two-year maturity. Successful bidding in the Bank's operation to purchase bills with six-month maturity for 1 trillion yen generates a six-month fixed interest rate payment position on the liability side. Even if interest rates rise afterward, an interest payment covered by this operation will not be

rate was 0.013 percent on the last day of September, which was lower than the 0.067 percent registered on the day of semiannual book closing in fiscal 2002, indicating that the market was relatively stable at the time of the semiannual book closing for fiscal 2003.

C. Target Range of 27–32 Trillion Yen for Current Account Balances

At the MPM on October 9 and 10, the Bank decided to increase the upper limit of the target range for current account balances and to set the new target range at "around 27–32 trillion yen" to make room for conducting market operations and supplying funds in a more flexible manner. Subsequent to this decision, daily fluctuations in current account balances became slightly larger than before (see Box 2).

Box 2: Daily Fluctuations in Current Account Balances at the Bank and Money Market Operations

At the MPM held on October 9 and 10, 2003, the upper limit of the target range for current account balances at the Bank was raised by 2 trillion yen. As a result, the target range of current account balances expanded from 3 trillion yen to 5 trillion yen.

An examination of daily fluctuations (average of daily changes) of current account balances shows that the average of changes in the balances after October 10 was larger than before.

Bil. yen

April 1, 2003–October 10, 2003	October 14, 2003–March 31, 2004
508.2	663.9

Note: Average of changes in current account balances from the previous business day.

In the context of money market operations, a wider range of fluctuation in current account balances allows greater room for the conduct of money market operations. This is because even wide daily fluctuations of autonomous factors can be directly reflected in current account balances.

After October 10, an even stronger sense of abundant funds emerged in the money

subject to interest rate risk. This somewhat reduces the financial institution's overall exposure to interest rate risk.

market, partly because demand for liquidity maturing over the end of September had subsided and the upper limit of the target range for current account balances was raised. As a result, after the semiannual book closing, the rate for funds-absorbing operations remained around the floor level of 0.001 percent, while those for funds-supplying operations generally followed a downward trend. Anticipating a change in autonomous factors causing a significant shortage in current account balances in early December due to collection of taxes and issuance of banknotes, the Bank engaged in building up the amounts outstanding of short-term funds-supplying operations. In this process, purchases of JGSs with repurchase agreements resulted in "undersubscription" (aggregate bids falling short of offers) on two consecutive occasions.

Responding to the decision on November 29 to temporarily nationalize Ashikaga Bank, on Monday morning of December 1 the Bank provided additional liquidity by undertaking 1 trillion yen worth of same-day-start outright purchases of bills (at all offices of the Bank) to secure stability in financial markets. The operation was conducted before the usual time of 9:20 a.m. to begin offers in same-day-start operations. This represented the first same-day-start purchases of bills conducted at all offices of the Bank.

D. Target Range of 30–35 Trillion Yen for Current Account Balances

At the MPM on January 19 and 20, 2004, the Bank decided to increase the target range for current account balances to "around 30–35 trillion yen." The decision was made to reaffirm its policy stance to overcome deflation and ensure a continued recovery of the economy.

The financing environment in the market improved as anxiety about the financial system subsided. This, together with the further raising of the target range, made it possible for many financial institutions to meet their plans for raising sufficient funds maturing beyond the end of March, the fiscal year-end, well in advance. As a result, no rush was seen in raising funds in the market. At the same time the issuance of FBs in the market increased, and there were expectations about a temporary decline in funds-supplying operations corresponding to foreign exchange intervention. While these developments were considered to invite speculation about a rise in interest rates, rates on term instruments maturing beyond the fiscal year-end rose only to a limited extent. Funds-supplying operations were undertaken to ensure an adequate supply of funds throughout the market similar to operations at the end of September, the time of the semiannual book closing. As a result, the rise in rates for funds-supplying and funds-absorbing operations beyond the fiscal year-end was minimal. On the last business day of fiscal 2003, in order to secure stability in financial markets, the contingency clause was used in money market operations to raise current account balances to a historical high of 36.4 trillion yen. As a result, the weighted average of the uncollateralized O/N call rate stood at 0.005 percent on the last business day of fiscal 2003. This was considerably lower than the 0.021 percent marked on the last business day of fiscal 2002, as well as the 0.013 percent registered on September 30, 2003, the day of semiannual book closing for fiscal 2003. This indicated that the money market was extremely calm for a fiscal year-end.

III. Developments in Money Markets

A. Short-Term Interest Rates

1. Uncollateralized call rate

Movements in the weighted average of the uncollateralized O/N call rate in fiscal 2003 were as follows. The rate generally remained in the extremely low range of 0.001–0.002 percent, with a strong sense of abundant funds in the market due to the raise in the target level for current account balances at the Bank. Although the rate temporarily increased on the last business day of September 2003 and March 2004, the day of semiannual and annual book closings, respectively, the increase in March 2004 was considerably smaller than that on the last business day of March 2003 as previously mentioned.

2. Negative interest rates in the call market

In the call market, trading at negative interest rates was first observed in January 2003 and was seen intermittently throughout fiscal 2003. As a result, the weighted average of the uncollateralized call rate fell below zero percent for the first time to minus 0.001 percent on June 25, 2003, and the rate became negative on a total of nine occasions in fiscal 2003.[10]

Trading at negative interest rates in the call market reflects negative “yen funding cost” (the cost of raising yen funds by exchanging the U.S. dollar for the yen for a certain

[10] The uncollateralized call rate marked the lowest level of minus 0.012 percent on January 14, 2004.

period of time) in the currency swap market (see Chart 4).[11] Even if the "yen funding cost" is negative, funds raised at a negative cost do not have to be released to the call market at a negative interest rate because the funds can be kept in current accounts at the Bank at the zero interest rate without a loss. However, some foreign banks are setting an upper limit on credit extended to sovereign borrowers (governments, central banks, and others). Yen funds raised at a negative cost through currency swap transactions by such foreign banks are extended to other financial institutions through the call market with a certain interest margin, within the limit of individual credit lines.

The cost of raising yen funds through currency swap transactions is considered to reflect the following two factors: the difference in the creditworthiness of the counterparties (e.g., Japanese banks and foreign banks), and supply and demand conditions of yen and U.S. dollar funds.[12]

With regard to the first factor, for instance, when a Japanese bank raises U.S. dollar funds from a foreign bank through a currency swap transaction, the difference in the creditworthiness of these institutions can generate a negative cost of raising yen funds. In fiscal 2003, the gap in the creditworthiness between Japanese and foreign banks was not believed to have expanded, because anxiety about the financial system had receded. Furthermore, as shown in Chart 4, it was difficult to attribute temporary fluctuations in the yen funding cost to the difference in the creditworthiness of the counterparties. Therefore, it was natural to think that the fluctuations in the cost of raising yen funds in fiscal 2003 were mainly due to temporary changes in supply and demand conditions of yen and U.S. dollar funds.

An examination of supply and demand conditions of yen and U.S. dollar funds in fiscal 2003, the second factor, showed that, with regard to the yen, excess liquidity expanded in financial markets due to the successive increases in the target for current account balances. As for U.S. dollar funds, tightness in supply and demand conditions was temporarily seen in the currency swap market due to tightening liquidity conditions for

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[11] The cost of raising yen funds can be approximately expressed as the sum of the "spot-forward spread in exchanging the U.S. dollar for the yen and vice versa" (currently negative) and the "U.S. dollar interest rate."

[12] Currency swap transactions consist of the exchange of two currencies (e.g., the yen and U.S. dollar) for a certain period of time. If the creditworthiness of the yen borrower (e.g., a foreign bank) is higher than the creditworthiness of the yen lender (e.g., a Japanese bank), the yen borrower (foreign bank) will be able to raise yen funds with favorable terms and the yen funding cost can become negative. A counterparty seeking to obtain dollar funds under conditions of tight dollar supply will offer a larger value of yen, and the yen borrower can raise yen funds under favorable terms. In this case, the yen funding cost can also become negative.

funds in the U.S. money market, and the increase in demand for dollar payments arising from large-scale intervention in foreign exchange markets. As excess liquidity of yen funds grew, a temporary tightness in supply and demand conditions of dollar funds tended to make the cost of raising yen funds more negative and to appear in Japan's money market in the form of negative call rates. As shown in Chart 4, the time during which the cost of raising yen funds became considerably negative was when demand for dollar funds rose with the approach of the end of each quarter (end-of-settlement period). Moreover, the negative cost became relatively large in mid-October 2003, when tax payment day coincided with the issuance of Treasury securities and the final day of the reserve maintenance period in the United States, and again in mid-January 2004, when a series of large-scale interventions in foreign exchange markets coincided with tax payment day and the issuance of Treasury securities in the United States.

3. Rates on term instruments

As there are hardly any long-term transactions in the call market, representative rates on term instruments in the money market are FB and TB rates and the Bank's market operation rates. Regarding the market operation rates in fiscal 2003, the maturity of most outright sales of bills was within one month and that of outright purchases of bills was around three to six months. The rates for these operations can be taken as representing market interest rates on instrument with same maturity.

These representative rates generally remained stable, because the Bank provided ample funds to the market with a high target level for current account balances, and liquidity demand receded as a result of diminished concern about the financial system. However, interest rates on term instruments rose, albeit marginally, in the following situation.

• In April and May 2003, rates on relatively short-term instruments, such as those in funds-absorbing operations, and on relatively long-term instruments, such as those in funds-supplying operations and rates on FBs, rose somewhat. This was against the background of the fact that financial institutions increased their current account balances at the Bank given the heightened uncertainty about liquidity arising from the fall in stock prices.

• In August and September 2003, under the influence of the rise in long-term interest rates, rates on relatively long-term instruments, such as those in funds-supplying operations, and rates on TBs and FBs, rose distinctly.

• From January to March 2004, rates on FBs rose slightly in anticipation of the easing in the supply and demand balance due to a series of increases in the issuance of FBs in the market.

B. Amounts Outstanding in the Call Market

The amounts outstanding in the uncollateralized call market remained at around 5 trillion yen throughout fiscal 2003, which was equivalent to roughly one-third of the level marked before the Bank introduced the quantitative easing policy (see Chart 5). Since fiscal 2002, transactions in the uncollateralized call market had remained extremely low in volume due to the following factors. From the perspective of lenders, their incentive for transaction declined given that the call rate remained very close to zero, and it was difficult to cover transaction costs with interest margins. Furthermore, they reduced credit lines in line with growing concern about the financial system. From the perspective of borrowers, the need to raise funds in the call market declined because the liquidity position of city banks, which were major borrowers, improved as a result of reduced lending and increased deposits, and because funds-supplying operations of the Bank became the primary means of financing.

The amounts outstanding in the uncollateralized call market, however, did increase slightly from the summer of 2003. The basic reason was that it had become easier for lenders to engage in uncollateralized transactions in the market because anxiety about the financial system had gradually subsided and credit ratings of financial institutions were generally upgraded.

The amounts outstanding in the collateralized call market traced a trend opposite to that in the uncollateralized call market. After hitting bottom in early 2001, the amounts outstanding in the collateralized call market began to increase slowly. However, this rise was mainly caused by an increase in funds underwritten by *tanshi* (money market brokers) from their customers, reflecting the rise in excess liquidity in the money market resulting from the raising of the target for current account balances at the Bank.

IV. Features of Money Market Operations

A. Steady Achievement of the Target Level for Current Account Balances

Under the quantitative easing policy, the target level for current account balances has exceeded the required reserves to be held by financial institutions at the Bank. Many financial institutions were able to meet their reserve requirements at an early stage in the reserve maintenance period, because the target level was raised further in fiscal 2003. The average of financial institutions' "excess reserves," defined as the amount exceeding the required reserves of around 6 trillion yen, was more than 20 trillion yen for the reserve maintenance period. Under these conditions, there were some concerns that there would be greater uncertainty in achieving the target level. However, in fiscal 2003, undersubscription (aggregate bids falling short of offers) in funds-supplying operations occurred far less frequently than in the previous fiscal year (see Chart 6), and thus the target level was achieved relatively smoothly.

This means that, although current account balances greatly exceeded required reserves and there was a greater sense of abundant liquidity, there was a fair amount of demand among counterparties for the Bank's funds-supplying operations. This reflects the following features of the environment for funds-supplying operations.

1. Demand-side factors

Demand for the Bank's funds-supplying operations is based on several motivations, and financial institutions bid in funds-supplying operations not only for the purpose of increasing their current account balances. Funds-supplying operations are undertaken for various maturities using diverse instruments. Financial institutions regard these operations as financial transactions meeting a wide variety of objectives and participate in bidding for various purposes. Consequently, current account balances at the Bank increase. Demand for funds-supplying operations can be categorized by the following two purposes.

The first is to secure liquidity. Individual financial institutions hold current account balances to meet reserve requirements and for settlement. In this regard, financial institutions generally tend to be cautious about liquidity management in the following situation: (1) when greater difficulty is anticipated in securing liquidity in the market due to growing concern about the financial system; and (2) when there is greater uncertainty regarding raising the necessary amount of liquidity when needed due to sluggish trading in financial markets. In this framework of liquidity management, a financial institution that has already satisfied its immediate liquidity needs may bid in funds-supplying operations with a longer maturity in order to secure its future liquidity in advance. As a result, the financial institution holds excess current account balances. Because current account deposits at the Bank do not bear interest, financial institutions make every effort to avoid holding excess reserves at the Bank when money market rates (the opportunity cost) are clearly positive. However, with the quantitative easing policy, the opportunity cost is very close to zero and the holding of excess reserves does not appear to be a problem for financial institutions.

The second purpose is to secure profits or prevent further losses, and to reduce interest rate risk. In the Bank's TB/FB and JGB purchasing operations, financial institutions can secure profits or prevent further losses by selling these instruments to the Bank. In the case of outright purchases of bills and purchases of JGSs with repurchase agreements, financial institutions can earn margins if funds raised through these operations are invested in assets of similar maturities with higher yields. A successful bid also allows a financial institution to make a fixed-rate payment and thereby prevent further losses or reduce interest rate risk. The same effects can be obtained from market transactions such as sales of JGSs in the spot or future market, payment of interest rate swaps, and raising of funds through transactions using term instruments. However, because successful bidding in the Bank's operations has a smaller impact on market prices and interest rates, financial institutions may prefer to bid in the operations in certain instances. This tendency becomes strong in the following cases: (1) when the maturity of operations is long or interest rates are significantly above zero; (2) when a large amount of securities is to be sold or funds are to be raised; or (3) when market interest rates are rising and volatility is increasing.

In fiscal 2003, demand for operations to secure liquidity seemed to have declined somewhat. This was due to the easing of concern about the financial system and the improvement in liquidity positions resulting from reduced lending and increased deposits. Second, demand for operations to secure profits or prevent further losses and reduce interest rate risk had increased somewhat as a result of occasional and slight increases in rates on term instruments such as FB/TB rates and long-term interest rates. These phenomena were particularly noticeable in the following instances. When there were some upward movements in FB rates in the January-March quarter of 2004, bidding increased in operations for outright purchases of bills to secure slight margins. When long-term interest rates rose in the summer of 2003, bidding increased in operations for outright purchases of bills with relatively longer maturity to reduce interest rate risk. Overall demand for funds-supplying operations did not decline significantly because of these developments.

2. Supply-side factors

On the supply side of operations, the following factors contributed to assure a fair amount of volume of bidding in fiscal 2003.

First, the overall necessary amounts outstanding of funds-supplying operations declined and the scarcity of operations increased somewhat, reflecting the developments in autonomous factors such as treasury funds and banknotes. As noted in Section I, as a result of net payments of treasury funds and the slowdown in the issuance of banknotes in fiscal 2003, there was a large net surplus of 7.7 trillion yen overall in autonomous factors. This worked to increase current account balances at the Bank, and to reduce the overall necessary amounts outstanding of funds-supplying operations, because these amounts exceeded the increase of 5.4 trillion yen in current account balances for the fiscal year. Needless to say, the payment of treasury funds is equivalent to funds-supplying operations in which it results in an increase in current account balances. However, as noted above, demand for funds-supplying operations is based on a variety of purposes, and increases in current account balances resulting from the payment of treasury funds cannot completely satisfy such demand for all purposes. Consequently, the decrease in funds-supplying operations caused by treasury funds payments had increased the scarcity of operations and worked to assure bidding in operations.

Second, among various funds-supplying operations, outright purchases of long-term JGBs played a particularly important role in order to stably increase current account balances. When short-term interest rates are at zero, relatively steady demand can be expected for long-term JGB purchasing operations as compared to other operations. This is because the maturity of operations is long and it is unlikely that such operations face a zero interest rate constraint. Additionally, financial institutions seeking to sell a large amount of securities tend to prefer JGB purchasing operations of the Bank rather than market transactions, as market liquidity of some issues is low. After the Bank introduced the quantitative easing policy, the amount of long-term JGB purchases was raised several times, reaching 1.2 trillion yen per month in November 2002 and thereafter. As a result, these operations supplied nearly 15 trillion yen in fiscal 2003, as compared to 13 trillion in the previous fiscal year, in current account balances.[13]

And third, among short-term funds-supplying operations, the Bank increased

[13] At the outset of the introduction of the quantitative easing policy in March 2001, monthly purchases of long-term JGBs amounted to 0.4 trillion yen. This had risen to 0.6 trillion yen in August and to 0.8 trillion in December 2001. In 2002, monthly purchases were raised to 1 trillion yen in February and to 1.2 trillion yen following the decision at the MPM on October 30.

operations of instruments with comparatively longer maturity in fiscal 2003. In operations with longer maturity, a relatively higher amount of bidding is expected, because financial institutions can use these operations to secure their future liquidity and profits or prevent further losses as described earlier. In fiscal 2003, such funds-supplying operations were conducted, and the maturity had gradually become longer with some fluctuations after the quantitative easing policy was introduced in March 2001, although some adverse movements were observed (see Chart 7).

The first and second factors above are reflected in the Bank's balance sheet (see Chart 8). As of the end of fiscal 2003, the principal components of the Bank's balance sheet showed the following features.

• On the liabilities side, the amounts outstanding of banknotes issued stood at 71.4 trillion yen, an increase of only 0.3 trillion yen compared to the end of fiscal 2002. The amounts outstanding of government deposits and related transactions stood at 31.4 trillion yen, a decline of 0.7 trillion yen from a year earlier. As a result, these two components did not contribute to expanding the balance sheet. On the other hand, current account balances were 36.4 trillion yen, an increase of 5.4 trillion compared to a year earlier.

• On the assets side, the amounts outstanding of JGBs grew by 7.2 trillion yen to reach 65.2 trillion yen, while that of TBs/FBs underwritten by the Bank was 15.2 trillion yen, an increase of 9.8 trillion yen from a year earlier. These developments reflected the following. Redeemed long-term JGBs held by the Bank were refunded with one-year TBs, and the amounts outstanding of temporarily underwritten FBs grew as a result of the government's raising of yen funds for foreign exchange intervention.[14] On the other hand, the amounts outstanding of short-term funds-supplying operations was 51.6 trillion yen, a decrease of 14.4 trillion yen from a year earlier.

B. Money Market Operations in Fiscal 2003 by Type of Operational Tool

To ensure the achievement of the target level for current account balances in fiscal 2003, the Bank continued to use a wide variety of tools in its money market operations for the following reasons. First, in Japan, autonomous factors such as banknotes and treasury funds fluctuate considerably during the short term. The use of a broad range

[14] Additionally, the amounts outstanding of "purchases of foreign currency securities under repurchase agreement from the Foreign Exchange Fund Special Account" (see footnote 5 to Box 1) was 6.1 trillion yen as of the end of fiscal 2003.

of operational tools, including funds-absorbing operations, can smooth these fluctuations away. And second, a high target level for current account balances can be achieved more smoothly with the use of diverse funds-supplying measures. Regarding operations that may affect price formation in specific markets, the Bank has paid due consideration to maintaining market neutrality by undertaking regular offers. The following are the Bank's money market operations conducted in fiscal 2003 by type of operational tool (see Chart 9 for developments in the amounts outstanding of operations).

1. Funds-supplying operations

a. Outright purchases of JGBs

Outright purchases of long-term interest-bearing JGBs are undertaken through conventional auction where bids are made based on spreads between yields offered by counterparties and reference yields determined by the Bank.[15] The amount of purchases is determined at MPMs, and it was changed from 1 trillion yen to 1.2 trillion yen per month following the MPM on October 30, 2002. Actual operations consist of four offers per month and the purchase of 0.3 trillion yen per offer.[16]

The amount of JGB purchases is determined so that the Bank's holding of long-term JGBs does not exceed the amounts outstanding of banknotes. This rule clearly indicates that the Bank's purpose in purchasing JGBs is neither to support prices of JGBs nor to finance government expenditures. Furthermore, this rule has been adopted to avoid lock-in of the assets held by the Bank and ensure sufficient flexibility in money market operations (see Box 3).

As of the end of fiscal 2003, the Bank's holding of long-term JGBs was 65.2 trillion yen. This was roughly 6 trillion yen less than the 71.4 trillion yen in amounts outstanding of banknotes issued.

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[15] Reference yields are derived from "Reference Price (Yields) Table for OTC Bond Transactions" of the Japan Securities Dealers Association (aggregated on the previous trading day).

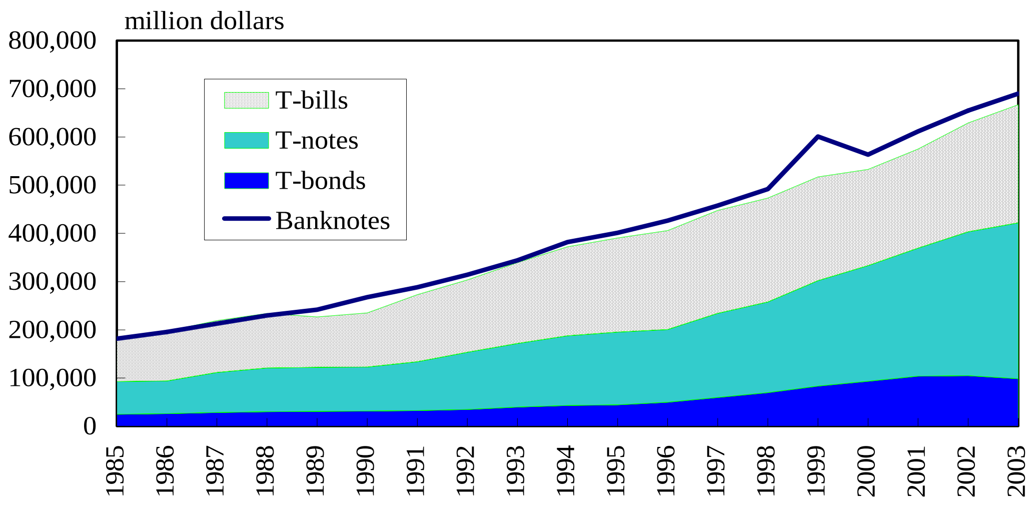
[16] See the Bank of Japan, Financial Markets Department's "The Japanese Government Security Markets and the Bank of Japan" (Bank of Japan Monthly Bulletin, May 2004, only in Japanese) for details of past and current methods of JGB purchasing operations.

Box 3: Treasury Securities Purchasing Operations of the U.S. Federal Reserve System

As does the Bank of Japan, the U.S. Federal Reserve System utilizes the purchase of Treasury securities as a tool in money market operations. The purchase of short-term discounted securities (Treasury bills) is referred to as "bill pass" (corresponding to outright TB/FB purchasing operations in Japan), while the purchase of long-term interest-bearing securities (Treasury notes and Treasury bonds) is referred to as "coupon pass" (corresponding to outright JGB purchasing operations in Japan). Actual purchasing operations are undertaken by the Federal Reserve Bank of New York.

When responding to short-term fluctuations in autonomous factors, U.S. money market operations rely on short-term repo operations to adjust reserve levels. Overnight and 14-day instruments are generally used for this purpose. On the other hand, purchases of U.S. Treasury securities are undertaken in light of long-term fluctuations in autonomous factors. Previous data indicate that the amounts outstanding of Treasury securities purchased moved at a level slightly below the amounts outstanding of banknotes issued, and that these follow similar trends (see chart below).

Amounts outstanding of Treasury Securities Purchasing Operations of the U.S. Federal Reserve System and Banknotes



Note: "T-bills" refers to Treasury bills (discounted securities with maturity of one year or less).
"T-notes" refers to Treasury notes (interest-bearing securities with maturity of more than one year up to ten years).
"T-bonds" refers to Treasury bonds (interest-bearing securities with maturity of more than ten years).

Source: Annual Report of the Board of Governors of the Federal Reserve System

As explained in the text of this section, the Bank of Japan's outright purchases of JGBs are currently governed by the rule that "it is subject to the limitation that the amounts outstanding of long-term government bonds held by the Bank be kept below the amounts outstanding of banknotes issued." In the United States, the amounts outstanding of all purchases of both long-term and short-term U.S. Treasury securities move at a level slightly below the amounts outstanding of banknotes.[17] However, in terms of basic function in the markets, Japan's outright JGB purchasing operations are similar to purchases of Treasury securities in U.S. money market operations.

b. Outright purchases of TBs and FBs

Outright purchases of TBs and FBs are operations to purchase TBs and FBs with residual maturity of two months to one year. Experience shows that these operations are relatively less likely to become undersubscribed, because they are used as a tool for funds-supplying operations with relatively long maturity. Therefore, outright purchases of TBs and FBs play an important role in the achievement of a high target level for current account balances.

Outright purchases of TBs and FBs were used to steadily supply necessary funds corresponding to medium-term fluctuations in autonomous factors, rather than to smooth out their short-term fluctuations in them (see Chart 10). The Bank undertook a given amount of these operations regularly, keeping in mind the purpose of these operations and their propensity to influence supply and demand conditions in the TB and FB markets. While the amounts outstanding of outright purchases of TBs and FBs decreased as the amounts outstanding of total short-term funds-supplying operations declined in fiscal 2003, these operations, together with outright purchases of bills described below, accounted for a major proportion of the amounts outstanding of short-term funds-supplying operations.

c. Outright purchases of bills

This operation involves the purchase of bills issued by counterparties with the collateral of pooled collateral submitted to the Bank. Pooled collateral includes JGSs and other public debts, as well as corporate bonds, CP, and other private debts.

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[17] In Japan, because purchasing operations of TBs/FBs are used as an important tool in the achievement of a high target level for current account balances, the sum of amounts outstanding of purchases of JGBs and TBs/FBs exceeds the amounts outstanding of banknotes in circulation, as shown in Chart 10.

Outright purchases of bills function as collateralized funds transactions whose rate and price are determined by auction.

Compared to TB and FB operations, outright bill purchases are less strongly tied to any specific market, their maturity can be freely set, and they have the following advantages. The Bank does not have to offer regularly and can conduct operations to correspond to short-term fluctuations in autonomous factors.[18] For counterparties, these operations are very convenient, as they are able to use pooled collateral. Given these characteristics, the Bank mainly uses outright bill purchases, together with outright purchases of TBs and FBs, as short-term funds-provision operations.

Outright bill purchasing operations conducted at all offices of the Bank (outright bill purchases with counterparties under the jurisdiction of the Head Office and branches of the Bank) were undertaken for the purpose of steadily supplying funds with relatively longer maturity to a wide range of financial institutions. On the other hand, outright bill purchasing operations conducted only at the Head Office of the Bank (outright bill purchases limited to counterparties under the jurisdiction of the Head Office of the Bank) were operations with relatively shorter maturity than operations conducted at all offices of the Bank.

d. Purchases of JGSs with repurchase agreements

This operation involves purchases of JGSs for a determined period of time, followed by reselling at a later date. Purchases of JGSs with repurchase agreements have been used as an instrument to provide relatively short-term funds while smoothing out short-term fluctuations in autonomous factors. Compared to the outright purchase of bills discussed earlier, bidding in purchases of JGSs has been sluggish from time to time because JGSs are the only acceptable collateral in this operation. In particular, undersubscription frequently occurs when a strong sense of abundant funds existed. Consequently, whereas outright purchases of TBs/FBs and bills were generally firm throughout fiscal 2003, the amounts outstanding of purchases of JGSs with repurchase agreement became relatively small.

e. Purchases of CP with repurchase agreements

This operation involves purchases of CP for a determined period of time, followed by

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[18] As for daily fluctuations in amounts outstanding of operations in fiscal 2003, greater fluctuations were observed in amounts outstanding of bills purchases and JGS purchases with repurchase agreements than in those of purchases of TBs/FBs (see Chart 9 (2)).

reselling at a later date. The amounts outstanding of purchases of CP with repurchase agreements is smaller than that of JGS-related operations and outright purchases of bills. This reflects the fact that the CP market is relatively smaller than the JGS market and other markets. Purchases of CP with repurchase agreements in fiscal 2003 were mainly offered for an extended period of time to maintain the amounts outstanding at a given level. However, bidding became generally sluggish as demand for CP in the market was firm, reflecting the growing sense of abundant funds. As the target level for current account balances was raised further, particularly in January 2004, undersubscription occurred frequently, on a total of five occasions for fiscal 2003.

f. Outright purchases of ABSs

Outright purchases of ABSs, including asset-backed commercial papers (ABCP), were introduced to encourage the development of the ABS market, thereby promoting smooth corporate financing and strengthening the transmission mechanism of monetary easing (the background to the introduction of this operation is described in Section V.C). The Bank has set an upper limit of 1 trillion yen on the amounts outstanding of these purchases. Hence, this operation plays only a minor role as a funds-supplying tool in the achievement of the target level for current account balances.

Operations involving outright purchases of ABSs started on July 28, 2003, and the first offer for purchases of ABCP was made on August 11. Thereafter, one to three offers of ABCP at 50 billion yen per offer were made per month from the Bank by carefully monitoring the amount of ABCP eligible for these operations. The Bank purchased ABSs on two occasions in response to offers made from counterparties. The ABS market is still in the process of development and remains small in scale. On the other hand, market demand for ABSs and ABCP was firm throughout fiscal 2003. As a result, amounts outstanding of ABSs the Bank purchased as of the end of March 2004 remained at 120.4 billion yen. In January 2004, the Bank modified its purchasing conditions and subsequently the number of eligible ABCP issues gradually increased.

2. Funds-absorbing operations

Funds-absorbing operations are used as a tool to adjust short-term fluctuations in current account balances and to maintain these within the target range. For the purpose of adjusting short-term fluctuations, the Bank conducts funds-absorbing operations mainly with one- to two-week maturity. While outright sales of the Bank's bills constitute the principal tool for funds-absorbing operations, JGB sales under repurchase agreement are also used to ensure smooth funds absorption. Given the high level of current account balances, the offered rate almost always remained at the floor level of 0.001 percent during fiscal 2003. Exceptions were when operations involved funds maturing beyond the end of September 2003 and March 2004 and when liquidity demand increased at the beginning of fiscal 2003 in response to the situation in Iraq and the decline in stock prices.

V. Measures to Revise Operational Tools and Facilities

In fiscal 2003, the Bank took measures to revise money market operational tools and facilities from a broad perspective. First, various reviews were undertaken of the existing operational tools from the perspective of facilitating smooth money market operations while maintaining market neutrality. Specifically, efforts were made to improve convenience to counterparties by adjusting operations to market practices and settlement methods, and to expand the scope of eligible collateral. ABS purchasing operations were introduced to encourage the development of the ABS market, thereby promoting smooth corporate financing and strengthening the transmission mechanism of monetary easing. Furthermore, the Bank began to study the introduction of a securities lending facility to provide the markets with a secondary source of JGSs (with a decision to be made in fiscal 2004) from the perspective of contributing to enhance liquidity in the JGS markets and maintain the smooth functioning of the market. Details of the measures taken are as follows.

A. Measures for JGS-Related Operations

1. JGB and TB/FB purchasing operations

a. Revision in the method of selecting eligible issues for TB/FB purchasing operations, and publication of data on the Bank's TB/FB purchases by issue

In the past, as a rule, all issues with a remaining maturity of two months or more were considered eligible issues in TB/FB purchasing operations. However, to enhance market neutrality in terms of the impact of TB/FB purchasing operations on interest rate formation in the market, the conditions of eligibility of TBs/FBs were changed starting from July 2003. Eligibility was made conditional on the total amount of the Bank's purchases for individual issues, in addition to the remaining maturity. Moreover, in order to improve the disclosure of information on operations, the Bank decided to release monthly the data on the amount of TB/FB purchases by issue and they were first released on July 2.

b. Introduction of real-time gross settlement (RTGS) in TB/FB and JGB operations

On April 24, 2001, the Bank released a schedule for the conversion to an RTGS system for those JGS settlement services not included in the first-round introduction in early 2001. According to the schedule, the Bank completed the conversion to the RTGS system for all JGS transactions in TB/FB and JGB operations on November 10. Settlement of JGS purchases by the Government Debt Consolidation Fund was shifted to the RTGS system. As a result, settlement of money market operations came under the same system as for market transactions. At the same time, the exchange of all information in money market operations, from time of agreement to settlement, was computerized via straight-through processing (STP), improving the convenience to both the Bank and counterparties. The RTGS system and STP had already been adopted for JGS operations with repurchase agreements since its introduction in November 2002.

2. JGS operations with repurchase agreements

a. Extension of the maturity of JGS purchasing operations with repurchase agreements

In the past, the maximum maturity of the Bank's purchases of JGSs with repurchase agreements was six months, as compared to one year for outright purchases of bills and TBs/FBs. In order to enhance the flexibility in money market operations, the decision was made at the MPM on October 9 and 10, 2003 to extend the maximum maturity of purchases of JGSs with repurchase agreements to one year, effective from October 10. Along with this decision, an operational measure was taken to allow counterparties to execute substitution of issues of JGSs more frequently during the period of operations to avoid counterparties' loss of incentive to bid in longer-term operations due to prolonged locking in of JGSs.

b. Acceptances of cash as collateral for JGS operations with repurchase agreements

In the past, JGSs were the only eligible collateral in response to the margin call for the Bank's JGS operations with repurchase agreements.[19] However, in view of the fact

[19] For instance, in JGS purchasing operations with repurchase agreements, JGSs purchased by the Bank are marked to market on a daily basis. When the market price of JGSs falls below the *gensaki* price of JGSs (initial purchasing price plus yield), this results in the "provision of

that cash collateral was being used in market transactions of JGSs with repurchase agreements, the decision was made at the MPM on February 5, 2004 to accept cash as collateral starting from April 12, 2004 in fiscal 2004.

B. Measures for Collateral Acceptance

Under its principles of collateral eligibility, the Bank accepts as collateral assets that are adequately creditworthy and marketable and for which due exercise of collateral and other rights remain unhampered. In light of these principles, the Bank took measures in fiscal 2003 to accept the following assets as eligible collateral.

(a) Loans on deeds with government guarantees issued to the Industrial Revitalization Corporation of Japan (decided at the MPM on April 30, 2003 and implemented immediately)

(b) Syndicated loans in the form of loans on deeds (accepted as eligible collateral from November 21, 2003)

(c) Inflation-indexed JGBs (decided at the MPM on February 4 and 5, 2004 and implemented on March 1)

(d) Loans on deeds with government guarantees issued to the Banks' Shareholdings Purchase Corporation (decided at the MPM on March 15 and 16, 2004 and implemented immediately)

Following the acceptance of the so-called "dematerialized CP" as eligible collateral on March 31, 2003, measures were taken to use it as an asset for CP purchases with repurchase agreements (decided at the MPM on June 10 and 11, 2003).

The Bank accepted pooled collateral for the amounts outstanding of 79.8 trillion yen as of the end of fiscal 2003, an increase of about 8 trillion yen from a year earlier (see Chart 11). This far exceeds the 27.2 trillion yen in the amounts outstanding of outright purchases of bills. Given that pooled collateral is mainly used as collateral for bill purchasing operations, these figures indicate that counterparties as a whole had considerable leeway in terms of collateral. A breakdown of the figures indicates that

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net credit" to the Bank's counterparties. To make the necessary adjustment, the Bank requests counterparties in operations to submit additional collateral, and this is referred to as a "margin call."

JGSs account for the majority of both the amounts outstanding of pooled collateral and the increase in it.

C. Introduction of ABS Purchasing Operations

A decision was made at the MPM on April 7 and 8, 2003 to examine the possible purchase of ABSs, including ABCP, mainly backed by those assets related to small and medium-sized enterprises, for money market operations, as a temporary measure. Given the weak financial intermediary function of Japanese banks, this decision was made to encourage the development of the ABS market, thereby promoting smooth corporate financing and strengthening the transmission mechanism of monetary easing.

Pursuant to this decision, taking account of comments and views from a broad range of market participants, the decision was made at the MPM on June 25, 2003 to adopt the "Principal Terms and Conditions for the Outright Purchase of Asset-Backed Securities," which established the framework for ABS purchases. The decision was implemented from July 28, 2003 (see Chart 12 (1) for the outline of the framework). Following this, at the MPM on December 15 and 16, 2003, the Policy Board instructed the Bank staff to review whether or not the conditions regarding the purchase of ABSs should be modified based on the evaluation of actual purchasing operations. The MPM held on January 19 and 20, 2004 decided to modify the conditions and the decision was implemented from January 20 (see Chart 12 (2) for a description of the modifications).

D. Introduction of a Securities Lending Facility to Provide the Markets with a Secondary Source of JGSs

At the MPM on February 26, 2004, from the perspective of enhancing liquidity and maintaining the smooth functioning of JGS markets, the possibility of introducing a facility that provides JGSs held by the Bank to the markets (the so-called "securities lending") was discussed. The Bank staff was instructed to study practical issues related to the introduction of such a facility. Following a study by the Bank staff in response to this instruction, the MPM on April 8 and 9, 2004 in fiscal 2004 approved the "Principal Terms and Conditions for the Sale of Japanese Government Securities with Repurchase Agreements to Provide the Markets with a Secondary Source of Japanese Government Securities," which established the framework for a securities lending facility. The decision was to be implemented from May 10, 2004. This facility provides the markets with JGSs held by the Bank as a temporary and secondary source, for the purpose of enhancing liquidity and maintaining the smooth functioning of JGS markets. Operations will take the form of sale of JGSs with repurchase agreements, with prices to be determined under multiple-price competitive auction. The framework was devised as follows, so that JGSs were provided as a temporary and secondary source: (1) as a rule, bidding will be undertaken only when requests for sale are received from three counterparties or more for each issue, and (2) an upper limit will be set on the selling yields (equivalent to setting a lower limit on securities lending charges) (see Chart 13 for an outline of the facility).

VI. Conclusion

In fiscal 2003, the target for current account balances at the Bank was successively raised, ultimately reaching the high range of 30-35 trillion yen. Against this backdrop, the Bank had supplied funds through money market operations with longer-term maturity and had achieved the target while securing stability in the money market. Moreover, the Bank implemented various measures to revise the operational tools and facilities from a broad perspective, taking views and requests of market participants into consideration. Existing operational tools were reviewed and revised in order to further facilitate smooth money market operations, and new tools were introduced to strengthen the transmission mechanism of monetary easing.

The Bank will continue to conduct appropriate market operations and improve operational tools, in order to follow the guideline and to maintain stability in the money market.

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——, Financial Markets Department, "Money Market Operations in FY2002," Bank of Japan Monthly Bulletin, August 2003.

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[20] A useful tool for understanding the Bank of Japan's monetary policy can be accessed via the Bank's web site (http://www.boj.or.jp/en/index.htm) under "Monetary Policy," "Issue Papers on Monetary Policy." The contents of speeches and statements made by the Bank's Governor, Deputy Governors, and members of the Policy Board can be accessed via the same web site under "speeches and statements." BIS papers can be accessed at http://www.bis.org/publ/bispapers.htm.

[Chart 1] Sources of Changes in Current Account Balances (CABs)
(Adjusted for the Effect of TB/FB Purchasing Operations)

(1) Developments during FY2003

trillion yen

	FY2002	FY2003
Banknotes	-3.2	-0.3
Treasury funds and others	-0.3	8.0
Net fiscal payments	52.1	54.4
JGBs	-60.9	-63.9
FBs	-0.1	-15.6
Foreign exchange	6.1	32.7
Others	2.5	0.4
Sources of changes in CABs	-3.5	7.7

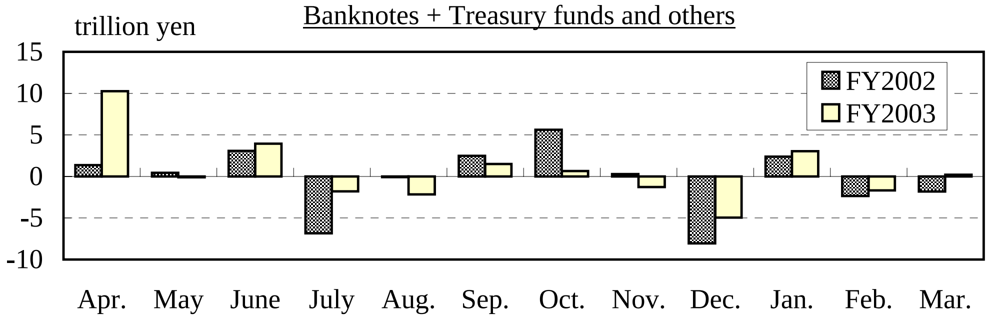
(Reference)

Outstanding balance of banknotes	71.1	71.4

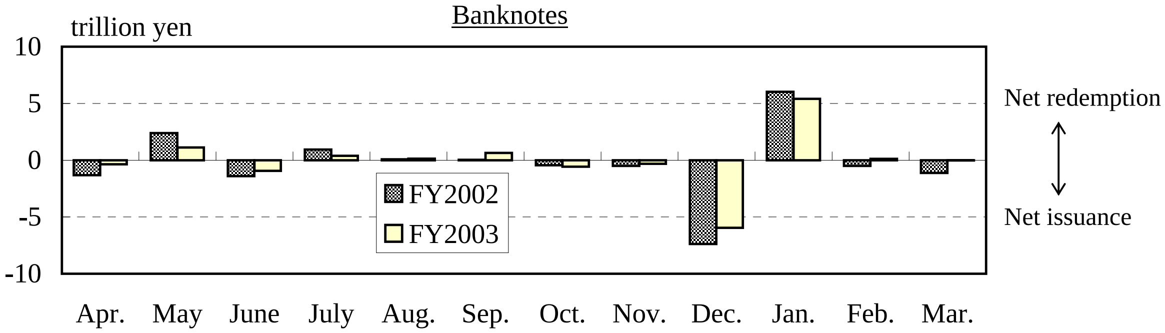
Note: Banknotes: A negative number shows net issuance.
Treasury funds and others: A negative number shows net receipts, while a positive number shows net payments.
Sources of changes in CABs: A negative number shows net shortage, while a positive number shows net excess.

(2) Monthly Developments during FY2002 and FY2003

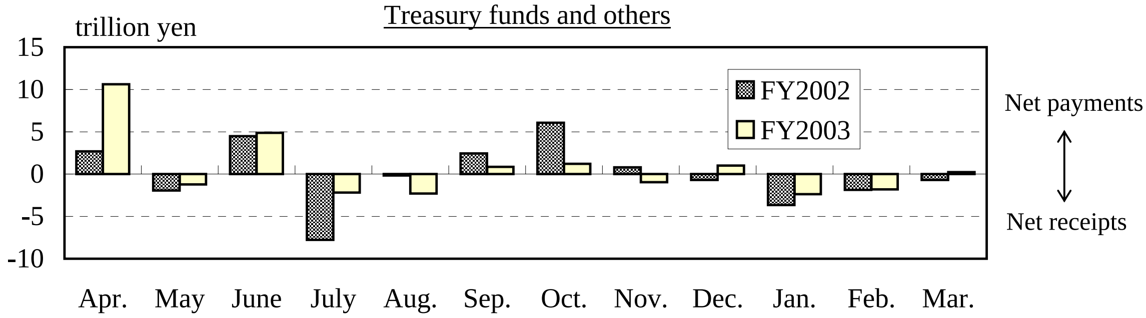
Banknotes + Treasury funds and others



Banknotes



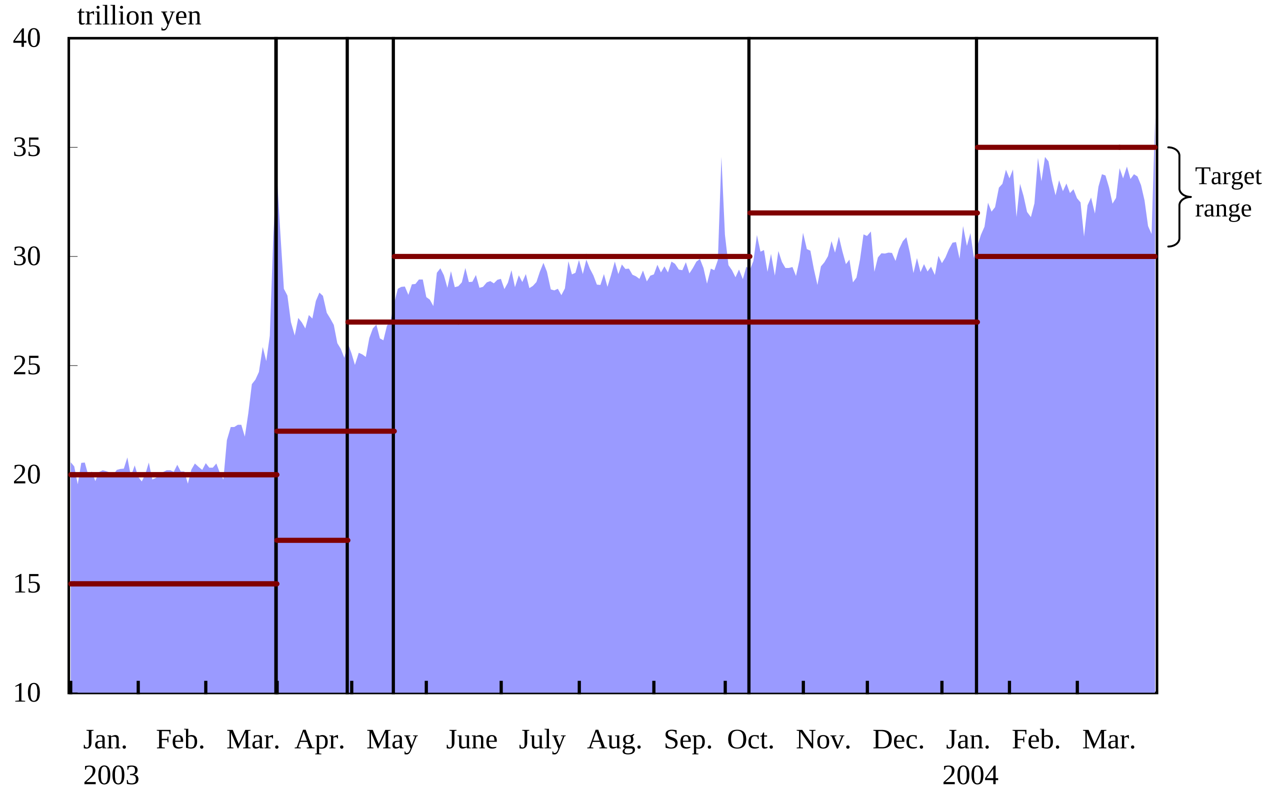
Treasury funds and others



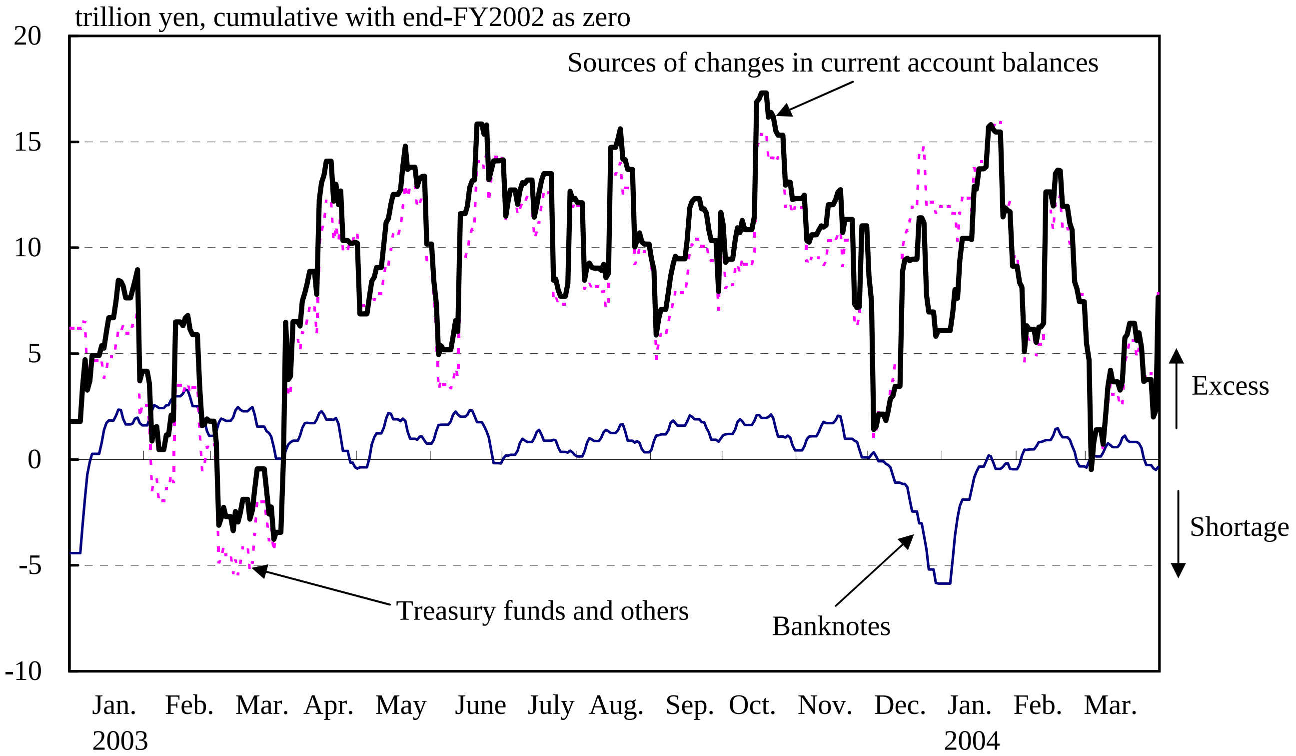
Source: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank and Money Market Operations."

[Chart 2] Money Market Operations

(1) Current Account Balances Held at the Bank of Japan



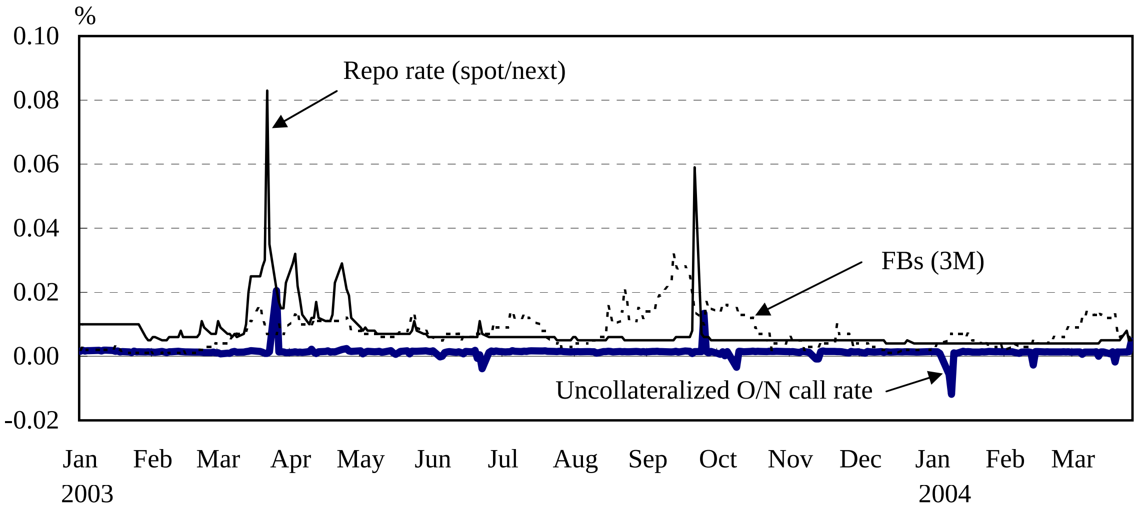
(2) Sources of Changes in Current Account Balances



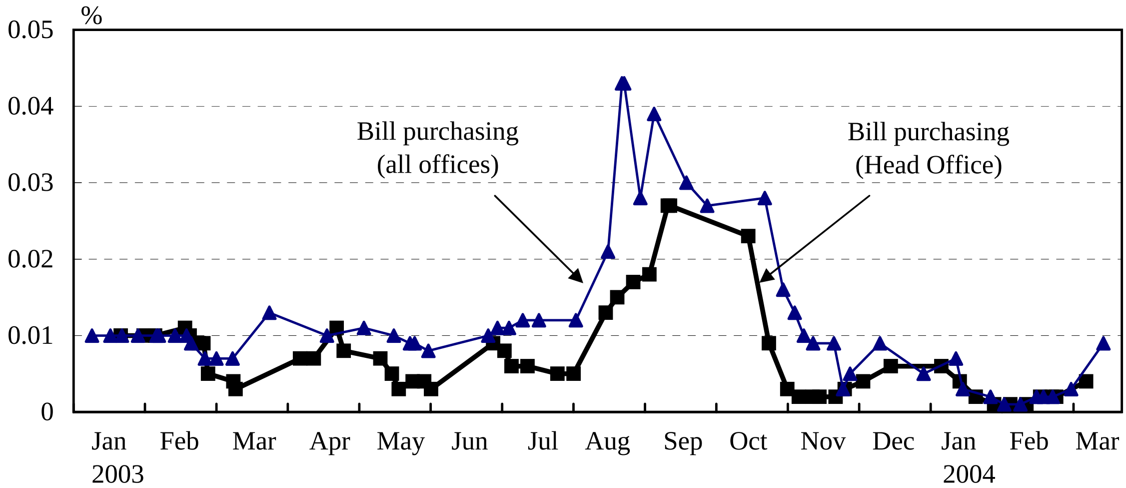
Note: Adjusted for the effect of TB/FB purchasing operations.

Source: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank and Money Market Operations."

(3) Short-Term Interest Rates

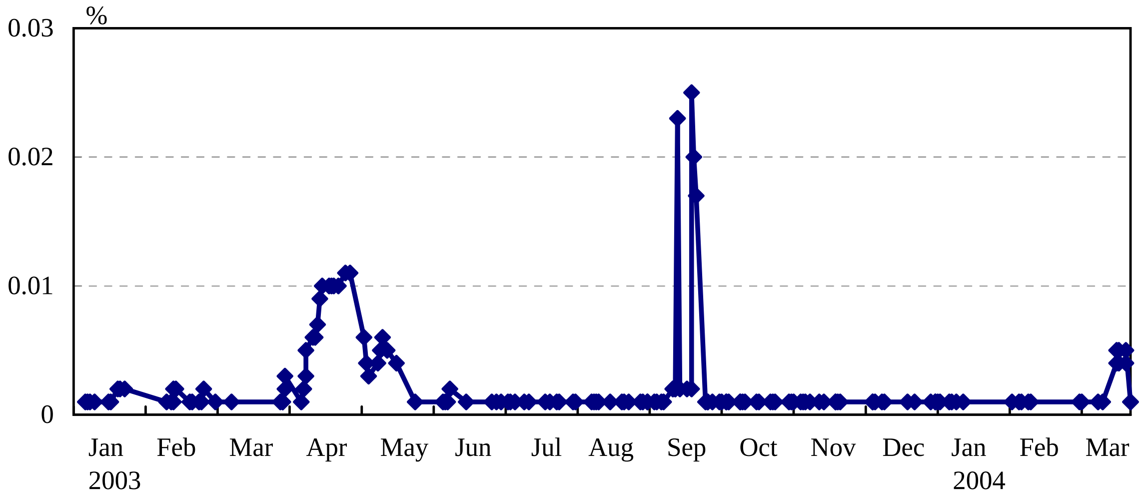


(4) Bill purchasing Operations Rates



Note: Bill purchasing operations are a principal funds-supplying means. Rates reflect the successful bid rate.

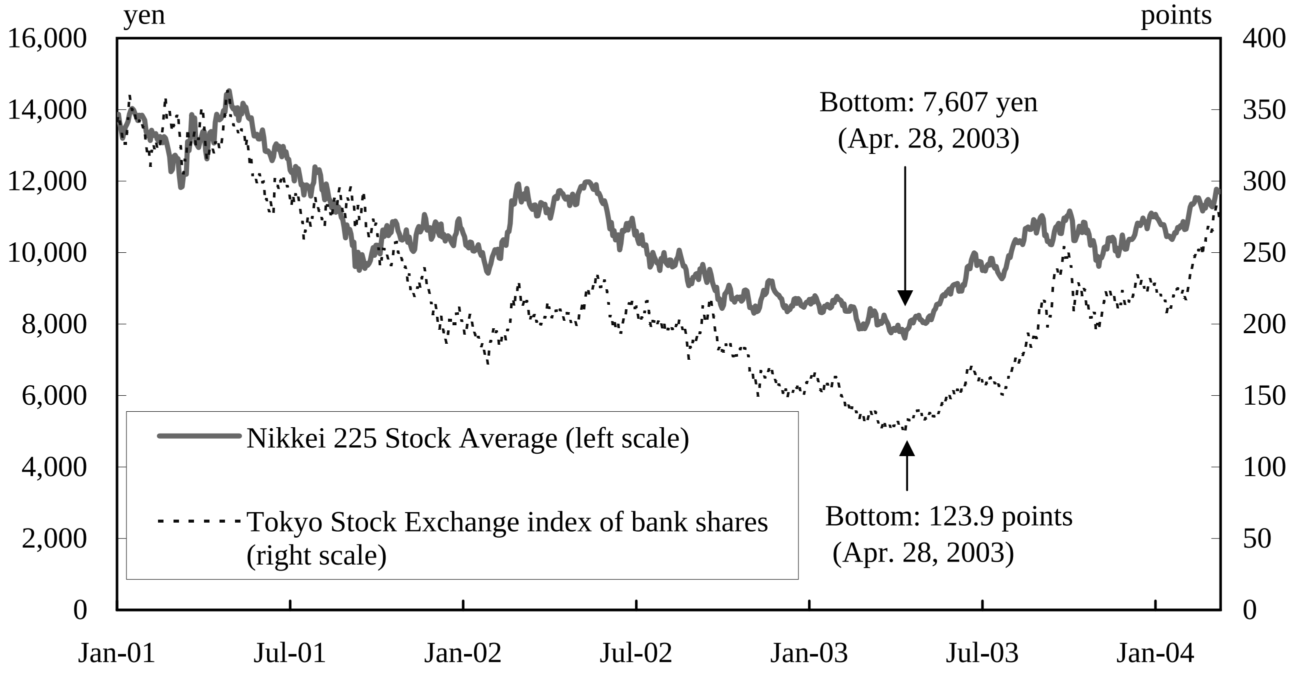
(5) Bill selling Operations Rates



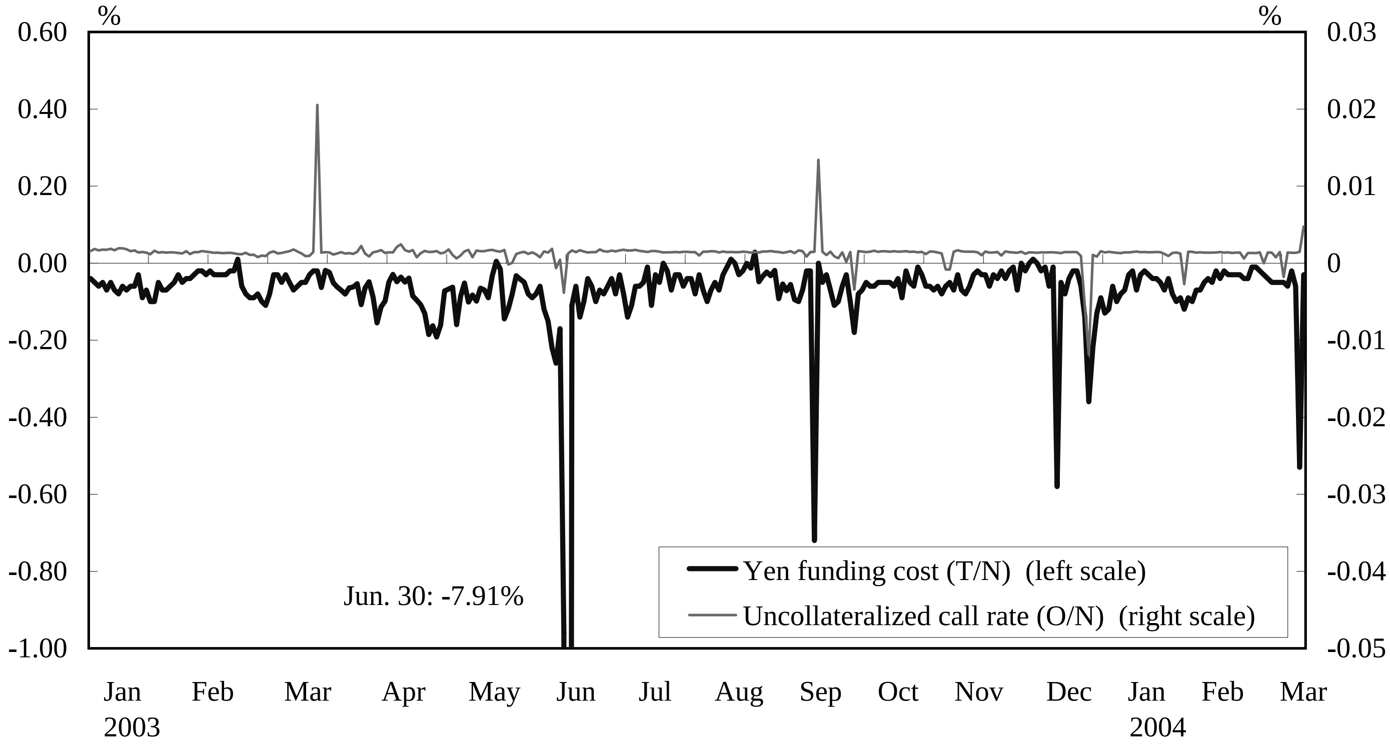
Note: Bill selling operations are a principal funds-absorbing means. Rates reflect the successful bid rate.

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

[Chart 3] Nikkei 225 Stock Average and Index of Bank Shares



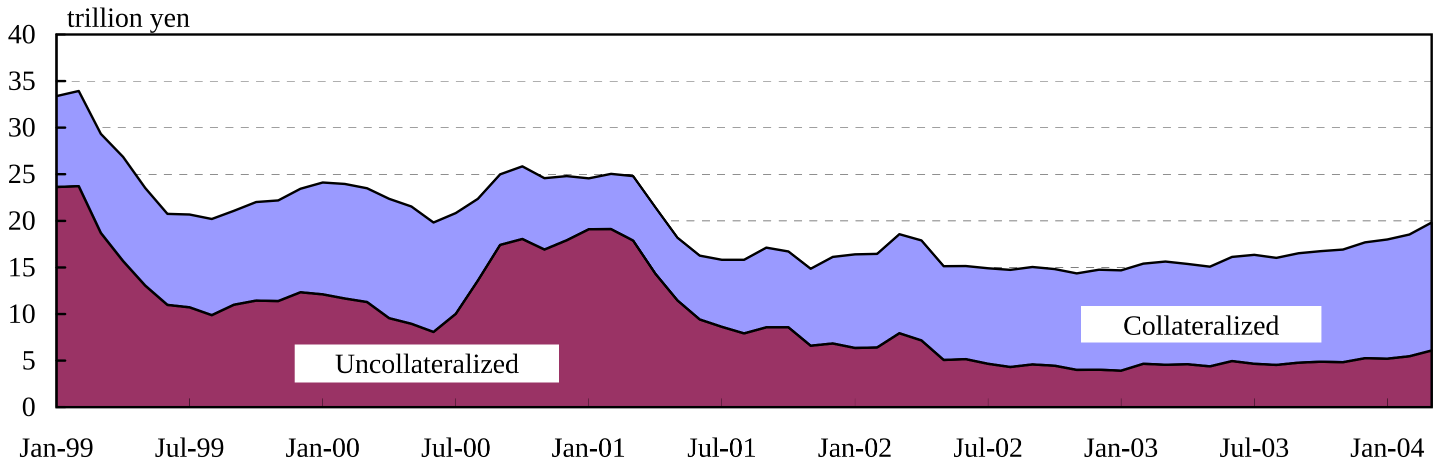
[Chart 4] Yen Funding Costs and Uncollateralized Call Rates



Note: Yen funding cost is computed based on the interest rate for raising U.S. dollar funds and the forward spread (spread between spot and forward foreign exchange rates).

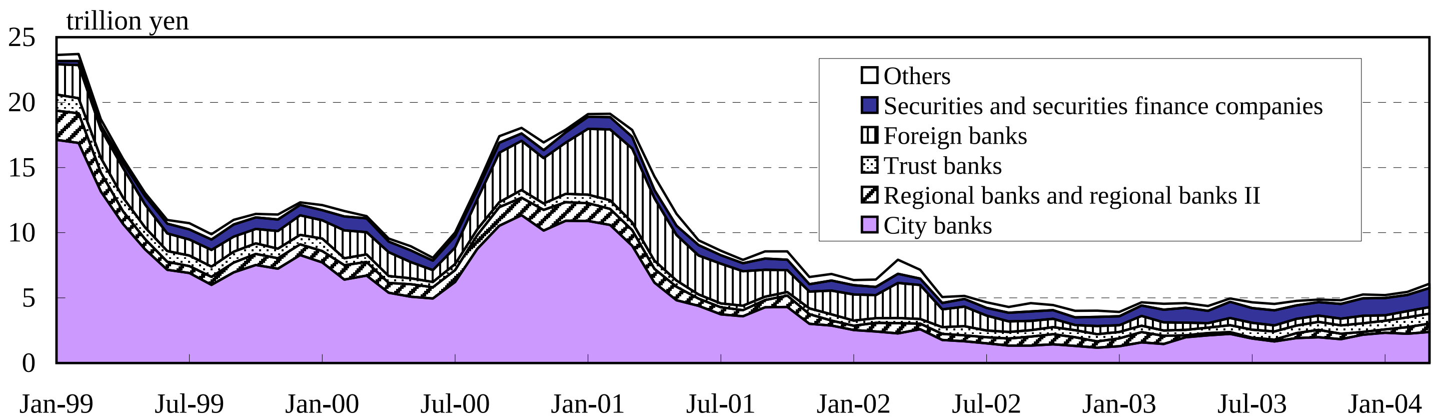
[Chart 5] Amounts Outstanding in the Call Market

(1) Total Outstanding

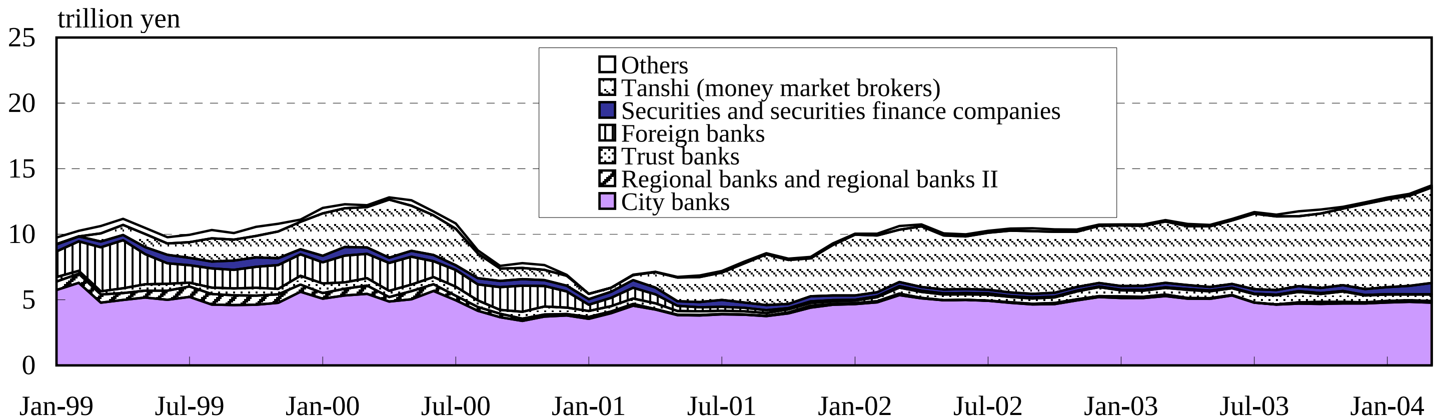


Note: "Outstanding collateralized" is the sum of the brokerage portion and the dealing portion (lender basis).

(2) Amounts Outstanding in Uncollateralized Call Market: By Borrower



(3) Amounts Outstanding in Collateralized Call Market: By Borrower



Note: For *tanshi* in the collateralized call market, the total is the amount of “funds provided minus funds procured.”

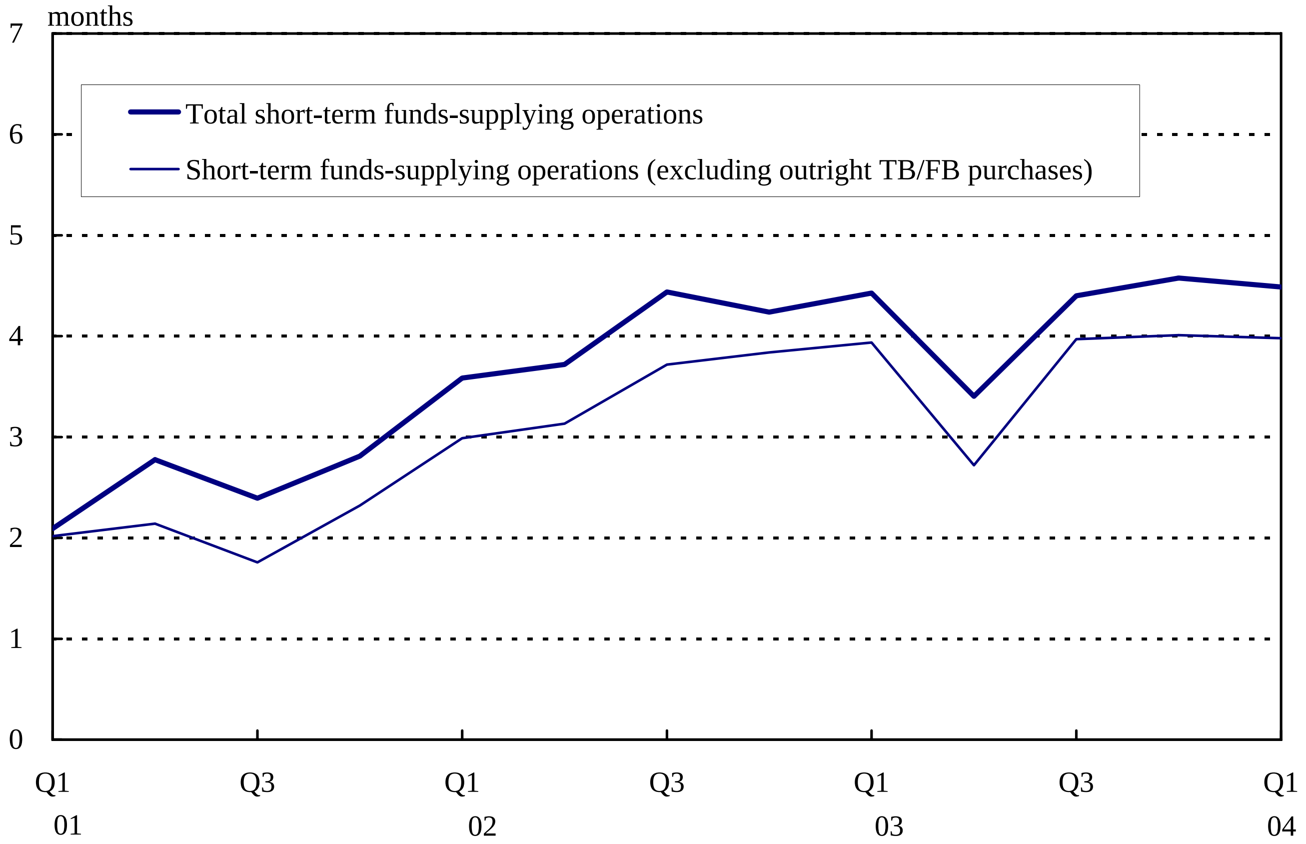
Source: Bank of Japan, "Amounts Outstanding in the Call Market."

[Chart 6] "Undersubscription" in Funds-Supplying Operations

Funds-supplying operations tool	FY2002		FY2003	
	Number of offers	Number of undersubscriptions	Number of offers	Number of undersubscriptions
Bill purchases (all offices)	53	3	39	0
Bill purchases (Head Office)	50	10	42	0
CP purchases with repurchase agreements	67	42	50	5
JGS repos	84	17	43	3
TB/FB outright purchases	87	6	64	0
JGB outright purchases	48	0	48	0

Note: “JGS repos” is the sum of JGS purchases with repurchase agreements, JGB borrowings, and TB/FB purchases with repurchase agreements.

[Chart 7] Maturity of Short-Term Funds-Supplying Operations



Notes: 1. "Total short-term funds-supplying operations" is based on the quarterly offerings of the following operations and is derived as the weighted average amount of (1) the maturity of bill purchases, JGS repo transactions (JGS purchases with repurchase agreements, JGB borrowings, and TB/FB purchases with repurchase agreements) and CP purchases with repurchase agreements, and (2) the remaining maturity of issues actually purchased in TB/FB purchase operations.

2. "Short-term funds-supplying operations (excluding outright TB/FB purchases)" is the weighted-average amount of the operations listed under (1) above.

[Chart 8] Bank of Japan's Balance Sheet (End-March 2004)

trillion yen

Short-term funds-supplying operations	51.6	(-14.4)	Banknotes	71.4	(+0.3)
JGBs	65.2	(+7.2)	Current account balances	36.4	(+5.4)
TBs/FBs underwritten by the Bank	15.2	(+9.8)	Government deposits and government surplus	31.4	(-0.7)
Stocks held as trust property	1.9	(+0.8)	Short-term funds-absorbing operations	2.6	(+2.6)
Foreign securities purchased from the Foreign Exchange Fund Special Account with resale clause	6.1	(+6.1)			

Note: Principal balance-sheet items only. Numbers in parentheses are the year-on-year change.

Sources: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions,"
"Outstanding Balance of Purchases of Foreign-Currency Securities from the Special Account for Foreign Exchange Funds."

[Chart 9] Amounts Outstanding of Market Operations

(1) Amounts Outstanding by Type of Operational Tool

trillion yen, outstanding at end-month

	Mar. 2003	June	Sep.	Dec.	Mar. 2004
Net amounts outstanding of short-term operations	66.0	45.2	50.6	48.0	49.0
Provision of short-term funds	66.0	46.6	53.0	48.0	51.6
Purchases of JGSs with repurchase agreements	8.3	3.6	5.7	3.3	2.3
Outright purchases of bills	29.1	23.5	25.4	23.8	27.2
At Head Office	9.8	6.9	9.8	7.4	9.8
At all offices	19.3	16.6	15.6	16.4	17.4
Purchases of CP with repurchase agreements	3.9	2.8	2.8	2.8	2.7
Outright purchases of TBs/FBs	24.7	16.7	19.1	18.0	19.3
Outright purchases of ABSs	--	--	0.0	0.1	0.1
Absorption of short-term funds	0.0	1.4	2.4	0.0	2.6
Outright sales of bills	0.0	0.6	2.4	0.0	2.6
Sales of JGSs with repurchase agreements	0.0	0.8	0.0	0.0	0.0
JGBs	58.0	59.9	61.9	64.0	65.2

Note: "JGBs" is the amounts outstanding of JGB outright purchases and those rolled over at maturity and underwritten by the Bank.

Source: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions."

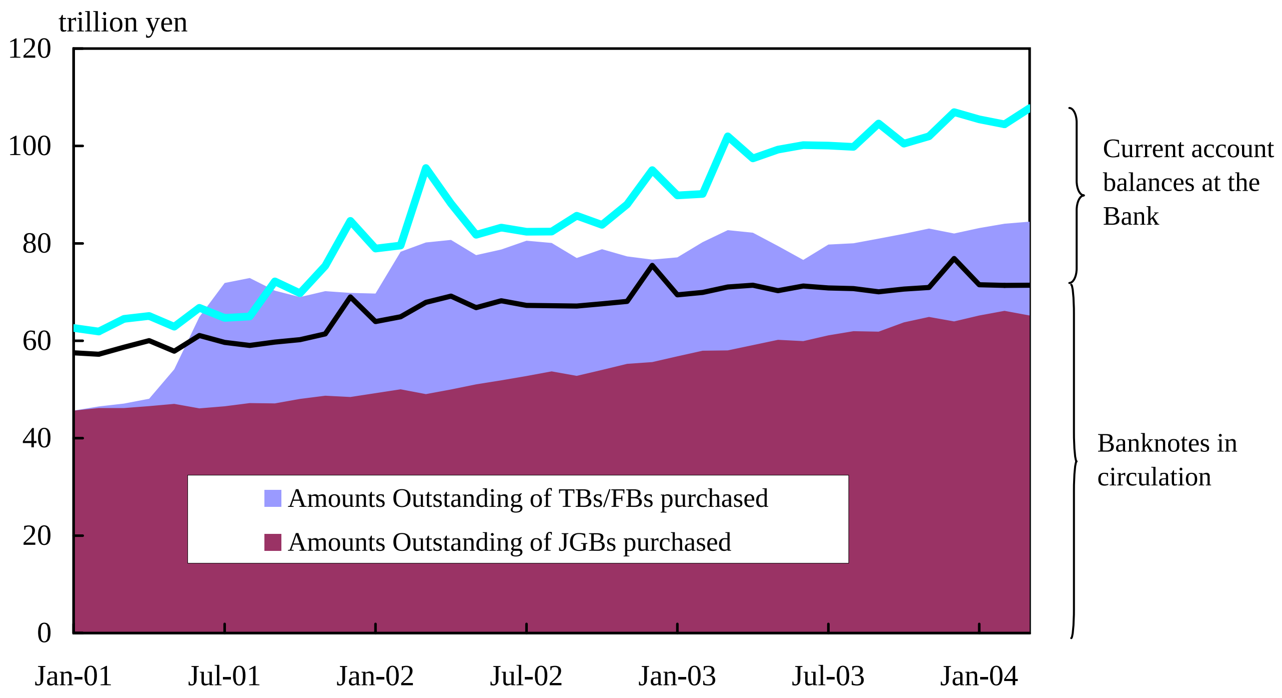
(2) Fluctuations in Amounts Outstanding of Short-Term Funds-Supplying Operations

trillion yen

	Daily fluctuations (FY2003 average)
Outstanding balance of short-term funds-supplying operations	0.55
Outright purchases of bills and JGS purchases with repurchase agreements	0.47
Outright purchases of TBs/FBs	0.30

Note: Annual average of daily fluctuations in the amounts outstanding of operations (total outstanding balance for each type of operational tool, except outright purchases of bills).

[Chart 10] Amounts Outstanding of JGBs and TBs/FBs Purchased by the Bank of Japan, Banknotes in Circulation, and Current Account Balances



Source: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions."

[Chart 11] Collateral Accepted by the Bank of Japan

	End of FY2002		End of FY2003	
	Face value[2] (100 million yen)	Share in total (%)	Face value[2] (100 million yen)	Share in total (%)
Total	718,020	100.0	798,450	100.0
Bonds	486,148	67.7	540,496	67.7
Government bonds	450,504	62.7	503,105	63.0
TBs/FBs	103,809	14.5	127,462	16.0
Government-guaranteed bonds, municipal bonds, and Fiscal Investment and Loan Program agency bonds	29,675	4.1	32,083	4.0
Corporate bonds[3]	5,969	0.8	5,308	0.7
Foreign government/international financial institution bonds	0	0.0	0	0.0
Bills	7,718	1.1	7,059	0.9
Bills (excluding CP)	5,355	0.7	4,946	0.6
CP	2,363	0.3	2,112	0.3
ABCP	1,429	0.2	512	0.1
Loans on deeds	224,154	31.2	250,895	31.4
To companies	6,021	0.8	4,758	0.6
To the Government's Special Account for Allotment of Local Allocation Tax and Local Transfer Tax	111,396	15.5	153,566	19.2
To the Deposit Insurance Corporation with government guarantees	106,737	14.9	91,086	11.4
To the Industrial Revitalization Corporation with government guarantees	--	--	335	0.0
To the Banks' Shareholdings Purchase Corporation with government guarantees	--	--	1,150	0.1

Notes: 1. Collateral to secure debt incurred as a result of use of the intraday overdraft facility and the complementary lending facility; purchase of bills; and treasury agent contracts/revenue agent contracts.
2. Outstanding principal balance for bonds, such as pass-through bonds and loans on deeds, whose principal balance may decrease due to prepayments before the final maturity date.
3. Includes corporate bonds, dematerialized commercial paper, asset-backed securities, and dematerialized asset-backed commercial paper.

[Reference] Assets Purchased with Repurchase Agreements by the Bank of Japan

100 million yen

	End of FY2002	End of FY2003
Government securities purchased by the Bank with repurchase agreements	82,975	22,828
CP purchased by the Bank with repurchase agreements	38,906	27,021
Asset-backed commercial paper	11,087	7,991
Dematerialized commercial paper	--	2,490
Dematerialized asset-backed commercial paper	--	0

Source: Bank of Japan, "Collateral Accepted by the Bank of Japan."

[Chart 12] Outline of the Outright Purchase Scheme for Asset-Backed Securities

(1) Initial Framework (Decided on June 2003)

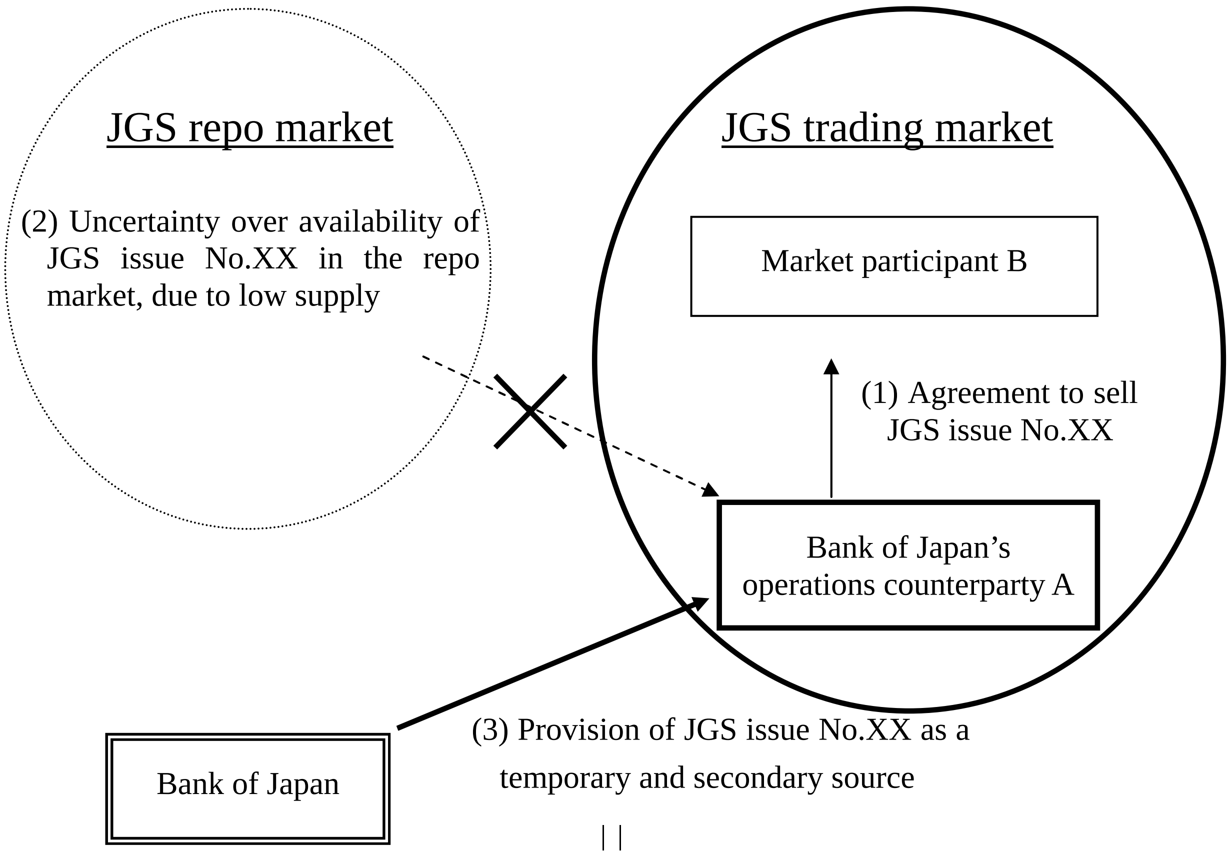
Types of eligible assets	- ABS (asset-backed securities, synthetic-type securities) - ABCP (including dematerialized CP)
Eligibility criteria	- 50 % or more of the value of underlying assets shall be composed of assets related to small and medium-sized enterprises (i.e., enterprises with capital of less than 1 billion yen). - When underlying assets are pools of bank loans, their borrowers shall be those classified as "normal" based on the FSA's examination manual through banks' self-assessment of the loan portfolio. - To be rated at a certain level by at least two eligible rating agencies.
Purchasing procedures	<ABS> To be purchased directly with prices that shall be decided based on those applied for the public offering. <ABCP> Through competitive auctions (with minimum yield)
Maximum amount of purchases	- Total amount outstanding: 1 trillion yen - For ABS, the amount purchased by the Bank shall not exceed 50% of each tranche of an issue.
Eligible counterparties	- To be selected, in principle, annually.
Purchase period	- Until end-March 2006

(2) Modified Framework (Decided on January 2004)

	Before modification		After modification
Ratio of underlying assets related to small and medium-sized enterprises	Based on the value of underlying assets	→	Based on either the total value or the total number of individual assets in underlying assets
Definition of “small and medium-sized enterprises”	Enterprises with capital of less than 1 billion yen	→	Enterprises either with capital of less than 1 billion yen or with employees of 999 or less
Creditworthiness of debtors of underlying assets	Required (see above)	→	Abolished
Rating requirement	To be rated at a certain level by at least two eligible rating agencies.	→	For ABCP, to be rated by at least one eligible rating agency.
Frequency of selection of counterparties	To be selected, in principle, annually.	→	Besides the annual selection, counterparties of this operation can be added once a month.

[Chart 13] Outline of the Securities Lending Facility

(1) Conceptualization



Sale of JGSs with repurchase agreements

- Selling yields: higher than those in the market
- In principle, to be repurchased on the following business day of the date of sale.

(2) Aims of the Facility

A. Enhancing liquidity and maintaining the smooth functioning of JGS markets

- In JGS markets, liquidity may decline and pricing may be hampered occasionally when market participants experience difficulties in securing specific issues or face uncertainties over their availability.
- This facility aims to contribute to enhancing liquidity and maintaining the smooth functioning of JGS markets. Furthermore, the facility is expected to facilitate the Bank's market operations and to promote the permeation of the effects of the operations.

B. Contributing to the smooth settlement of JGSs and funds

- This facility is intended to contribute to preventing disruption in JGS markets due to chains of fails caused by unexpected events such as system malfunctions.

(3) Outline of the Facility

(1) Type of transaction	• Sales of JGSs with repurchase agreements
(2) Eligible counterparties	• Counterparties eligible for the use of the facility shall be selected from applicants who are already counterparties to the Bank's other JGS-related market operations.
(3) Securities to be sold	• Securities to be sold shall, pursuant to the Bank's relevant rules, be selected from the Bank's holdings of Japanese government bonds with coupons, treasury bills and financing bills.
(4) Repurchase agreements	• In principle, securities sold shall be repurchased on the following business day of the date of sales. - As a practical rule, sales by auction and their settlements shall be conducted on the same day (T+0 basis).
(5) Decision on the use of the facility	• The Bank shall decide to sell specific issues when the Bank deems it appropriate based on the conditions of financial markets. - As a practical rule, the Bank shall, in principle, have auctions of those issues that more than two counterparties request the Bank to sell. The Bank shall conduct auctions at its discretion, taking into account the conditions of financial markets.
(6) Method for auctions	• A competitive auction shall be conducted for each sale where counterparties bid yields for the period during which securities are held by counterparties ("selling yields"). • The Bank shall set the upper limit to the selling yields. - The upper limit to the selling yields shall be set sufficiently high so as to prevent counterparties from becoming overly dependent on this facility. - As a practical rule, an auction shall be held in the afternoon.
(7) Amount of sales	• The Bank shall set the upper limit to the amount of sales in total per day as well as per issue/counterparty. • As practical rules, the upper limits shall be as follows. - The upper limit to the total amount of sales per day shall be about 100 billion yen. - The upper limit to the amount of sales of each issue per day shall be 50% of the amount outstanding of the Bank's holdings of the issue. - The upper limit to the amount of sales per counterparty shall be 50% of the total amount of sales per day. - The upper limit to the amount of sales of each issue per counterparty shall be 50% of the amount of sales of each issue per day.
(8) Roll-overs	• At the request of the counterparties, the Bank may roll over sales transactions. • The Bank shall set the limit to the number of roll-overs. - As a practical rule, the Bank shall limit the number of roll-overs to twenty one in line with the relevant market practice. • The selling yields for roll-over transactions shall not be higher than the selling yield applied to the initial sales. - As a practical rule, the selling yields for roll-over transactions shall be lower of either the selling yields applied to the initial sales or zero percent.
(9) Selling price	• The selling price for each issue is obtained by dividing "market price" (prevailing prices in financial markets on the date of sales) by margin ratios.