

Money Market Operations in Fiscal 2004

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Financial Markets Department

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Summary

In fiscal 2004, the Bank of Japan did not change the target level for current account balances held at the Bank from the “30–35 trillion yen range” decided at the Monetary Policy Meeting (MPM) on January 19 and 20, 2004 (Chart 1). This target level significantly exceeds the required reserves to be held by financial institutions at the Bank (approximately 6 trillion yen).

Liquidity demand gradually decreased in fiscal 2004, as concerns over the financial system receded. Interest rates in the money market generally remained at low levels. Interest rates on term instruments declined further and stayed at nearly zero during the second half of the fiscal year. In this situation, frequent “undersubscription” (aggregate bids falling short of offers) was observed in funds-supplying operations during the second half of the fiscal year (Chart 2). To respond to the frequent occurrence of undersubscription, the Bank adopted various measures to achieve the target level for current account balances. These included the extension and diversification of the maturity of funds-supplying operations, and flexible use of operational tools for which higher levels of bidding could be expected.

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

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

“Sources of changes in current account balances” or “autonomous factors” affecting the balances in fiscal 2004 registered a net shortage of 27.2 trillion yen in total, after registering a net surplus of 7.7 trillion yen in total in the previous year. This reflected the following developments. First, issuance of Japanese government bonds (JGBs) increased significantly in fiscal 2004. Second, some financing bills (FBs) to raise yen funds for the large-scale foreign exchange intervention toward the end of the fiscal 2003 were issued in fiscal 2004. Third, net issuance of banknotes increased due to the issuance of the new series of Bank of Japan notes and the precautionary demand related to the full removal of blanket deposit insurance (Chart 3).²

A. Banknotes

Net issuance of banknotes for fiscal 2004 totaled 3.3 trillion yen, an increase from that of 0.3 trillion yen in the previous fiscal year. The main contributing factors were the following. First, net issuance of banknotes exceeding 2 trillion yen was recorded on the first day of the issuance of the new series of Bank of Japan notes (November 1, 2004). On the other hand, return of old series of banknotes proceeded slowly because the opportunity cost of holding banknotes was low given that interest rates were nearly zero. (See Box 1 for a comparison with the previous issuance of newly designed

banknotes from the Bank constitute sources of decrease. In the case of treasury funds, the issuance of Japanese government securities (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 purchases/sales of treasury bills (TBs) and financing bills (FBs), 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. (The opposite occurs when TBs/FBs held by the Bank are sold to financial institutions.)

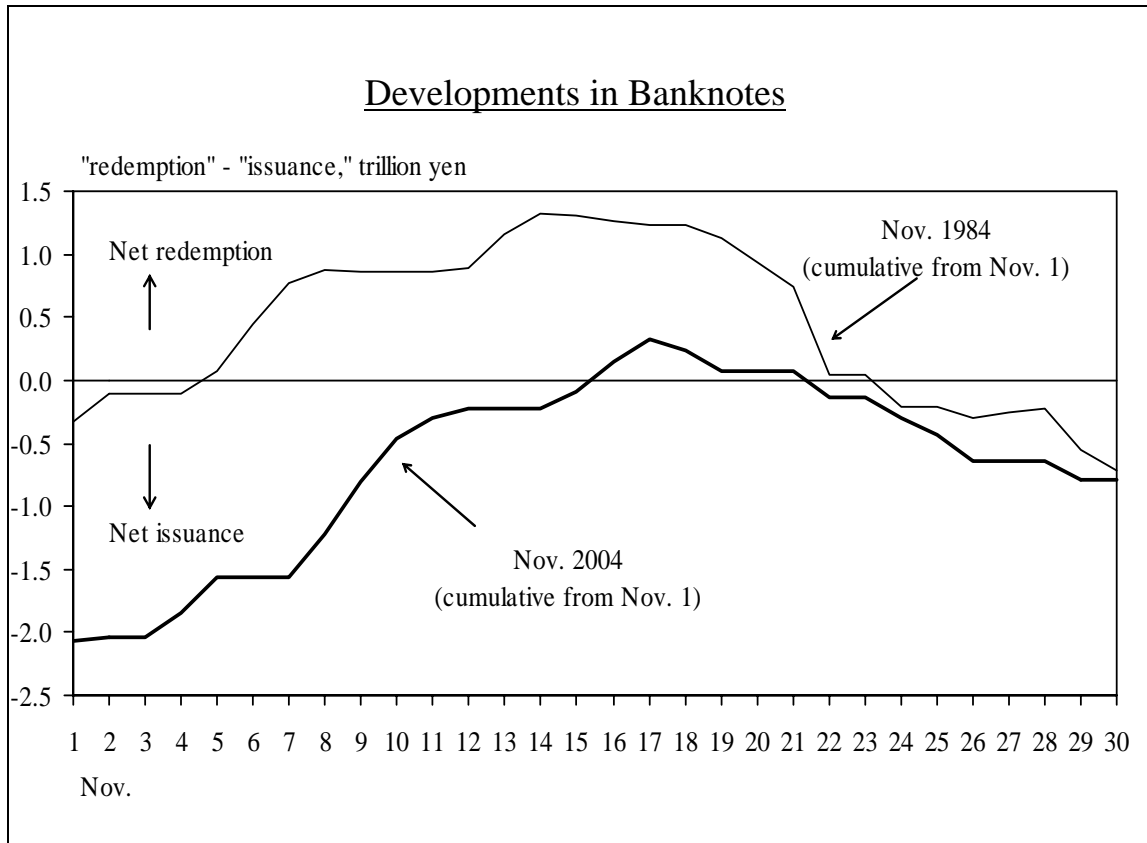
In order to remove the effect of such TB/FB purchasing or selling operations and grasp the movement of treasury funds accurately, for autonomous factors used in this paper it is assumed that funds paid for the redemption of TBs/FBs purchased or sold through money market operations are paid to the financial institutions involved or the Bank.

banknotes in 1984.) Second, with the approach of the full removal of blanket deposit insurance (April 2005), financial institutions increased the volume of banknotes on hand toward the end of the fiscal year on March 31 for precautionary demand.

Box 1: Impact of the Issuance of the New Series of Bank of Japan Notes

The issuance of the new series of Bank of Japan notes began on November 1, 2004, 20 years after the previous issuance of newly designed banknotes on November 1, 1984. On the first day of issuance, net issuance of 2,067.7 billion yen of banknotes was registered, marking the largest net issuance ever (source of a significant decrease in current account balances). In response to this, money market operations were undertaken to achieve the current account target level, including the same-day-start funds-supplying operation (outright bill purchasing operation conducted at all offices of the Bank).

Developments before and after the issuance of newly designed banknotes in 2004 and 1984 can be compared as follows: (1) in 2004, net issuance marked a new historical high on the first day of issuance (net issuance amounted to 326.9 billion yen in 1984); and (2) in 2004, return of old series of banknotes proceeded slowly before and after the date of issuance during October and November. The high volume of net issuance on the first day of the issuance in 2004 reflected the fact that the Bank began the distribution of the new banknotes at 6 a.m. on the first day of issuance, which was much earlier than 9 a.m. on usual business days. The slow return of old series of banknotes was attributable to the fact that since short-term interest rates stood at nearly zero in 2004, as opposed to about 5 percent in 1984, the opportunity cost of holding banknotes was low in 2004 and financial institutions did not have an incentive to speed up the return of old series of banknotes.



B. Fiscal Payments and Revenues

“Fiscal payments and revenues” includes payments for public works and social security expenditures (such as pension payments), and tax revenues. It excludes payments and revenues related to transactions of JGBs, foreign exchange (payments and receipts related to foreign exchange intervention), and FBs. Fiscal payments and revenues marked a net surplus of 59.7 trillion yen, up from 54.4 trillion yen in the previous year. This increase primarily reflected the fact that the increase of tax revenues was more than offset mainly by the increase in payments of the Fiscal Loan Fund (refund of deposits).

C. JGBs

“JGBs” includes the issuance and redemption of long-term JGBs and treasury bills (TBs).³ Reflecting the front-loaded issuance of refunding bonds,⁴ net receipts

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

amounted to 82.0 trillion yen (issuance exceeded redemption), rising sharply from 63.9 trillion yen in the previous year.

D. Foreign Exchange and FBs

“Foreign exchange” transactions amounted to almost zero, as no foreign exchange intervention was undertaken. This represented a sharp decrease from a net payment of 32.7 trillion yen registered in the previous year when the amount of yen-selling/foreign currency purchasing interventions marked a historical high. On the other hand, FBs registered a net receipt of 2.6 trillion yen (issuance exceeded redemption), marking a sharp decrease from a net receipt of 15.6 trillion yen registered in the previous year. This reflected the gradual decrease in the issuance of FBs in the market to raise yen funds used in yen-selling intervention in the previous year.

The balance of foreign exchange transactions and FBs turned to a net receipt of 2.6 trillion yen from a net payment of 17.1 trillion yen in the previous year. The net receipt is attributed to the fact that the amount of yen-selling intervention increased particularly around the end of fiscal 2003 so that some FBs to raise the necessary yen funds were issued later in the beginning of fiscal 2004.

During fiscal 2004, the above autonomous factors generally worked to reduce current account balances. As a result, the balance of short-term funds-supplying operations needed to achieve the target continued to increase (Chart 4). Daily fluctuations in autonomous factors also expanded mainly due to the increase in JGB issuance and tax revenues (Chart 5). The tendency of these developments was particularly strong during the second half of fiscal 2004. Consequently, it became necessary to accumulate very large balances in short-term funds-supplying operations over short periods of time when JGB issuance coincided with a large amount of corporate tax collection once every quarter (early December and March).

⁴ In fiscal 2004, front-loaded issuance of refunding bonds amounted to 20.3 trillion yen, up sharply from 8.9 trillion yen in fiscal 2003.

II. Developments in the Money Market

A. Short-Term Interest Rates

1. Uncollateralized call rate

The weighted average of the uncollateralized overnight call rate in fiscal 2004 generally remained in the extremely low range of 0.001–0.002 percent, although the rate temporarily rose on the last business day of September 2004 and March 2005, the day of semiannual and annual book closings, respectively (Chart 6 [1]). This was due to an abundant supply of funds that exceeded the amount of required reserves while it was gradually becoming clear that concern over the financial system was receding.

Movements in the uncollateralized overnight call rate on book closing days were as follows. The rate rose marginally to 0.005 percent on September 30, 2004, the day of semiannual book closing for fiscal 2004. The rate climbed to 0.022 percent on March 31, 2005, the last business day of fiscal 2004. This reflected precautionary demand among Japanese financial institutions to increase funds on hand in view of the full removal of blanket deposit insurance. However, the rise in the rate was limited. Under the quantitative easing policy, until fiscal 2003 the so-called “contingency clause” was used on book closing days to ensure a more abundant supply of current account balances exceeding the target range.⁵ In fiscal 2004, current account balances remained within the target range at semiannual and annual book closings.

In the call market, transactions at negative interest rates, which were observed intermittently throughout fiscal 2003, declined toward the second half of fiscal 2004. As a result, the weighted average of the uncollateralized overnight call rate fell below zero percent on only one day during the second half of the fiscal year.

This change can be attributed to the improved creditworthiness of Japanese banks and the resulting difficulty of foreign banks in procuring yen funds at negative cost through

⁵ Under the guidelines 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.”

currency swap transactions (Chart 7). 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 (the U.S. dollar lender, e.g., a foreign bank) is higher than the creditworthiness of the yen lender (the U.S. dollar borrower, e.g., a Japanese bank), the yen borrower (foreign bank) will be able to raise yen funds at favorable conditions. When Japanese banks are able to procure yen funds at a zero interest rate, the yen funding cost of foreign banks will tend toward becoming negative. However, during fiscal 2004, the creditworthiness of Japanese banks improved and their ratings were raised, particularly after the fall of 2004. As a result, opportunities for foreign banks to raise yen funds at negative cost gradually declined.

2. Interest rates on term instruments

Interest rates on term instruments in the money market (such as TB/FB rates) showed some upward movements during the first half of fiscal 2004 (Chart 6 [2]), with growing expectation of economic recovery and resulting speculation concerning monetary policy. However, during the second half, short-term rates of up to one-year maturity fell to nearly zero percent.⁶ This can be attributed to the following factors.

First, financial institutions invested their surplus funds into TBs/FBs due to a stronger sense of abundant funds in line with the stability of the Japanese financial system.

Second, economic indicators showed some weakness during the second half of fiscal 2004, including an increase in the year-on-year rate of decline in the consumer price index. This supported the reemergence of the view that the quantitative easing policy would continue for a relatively long time to come.

And third, as autonomous factors fell sharply, the Bank actively offered funds-supplying operations to achieve the current account target level. This acted to

⁶ For the first time since the start of public auctioning for issuance in April 1999, the entire lot of FB (three-month maturity) offered in the auction of December 15, 2004 was sold at a zero interest rate. Furthermore, during February and March 2005, successful bid rates on issues for loans to the Government's Special Account for the Allotment of the Local Allocation Tax fell as low as 0.001 percent. Because of their six-month maturity and lower market liquidity, rates for these issues tend to be higher than rates for three-month FBs and six-month TBs.

reduce the risk premium on term instruments. An analysis of the relation between outstanding amounts of short-term funds-supplying operations and TB/FB rates indicates that TB/FB rates decline to near their lower limits when outstanding amounts of short-term funds-supplying operations exceed the mid-50 trillion yen level (Chart 8).

B. Amounts Outstanding in the Call Market

The amounts outstanding in the uncollateralized call market⁷ recovered slightly in fiscal 2004, although they remained at lower levels compared to the period before the introduction of the quantitative easing policy (Chart 9). From the perspective of borrowers, borrowing by securities companies continued to increase from the previous year. After the fall of 2004, increased borrowing was seen among foreign banks, and regional banks and regional banks II.

Developments contributing to increased borrowing by type of business were as follows. For securities companies, the increase in stock market transactions had the following effects: (1) demand for funds by securities companies increased; and (2) as a result of the improved business performance of securities companies, credit lines offered by lenders were expanded. In the case of foreign banks, procurement of yen funds shifted to the call market when yen funding at negative cost in currency swap markets became more difficult as the ratings of Japanese banks improved after the fall of 2004 as previously noted. Regional banks and regional banks II increased their use of the call market for the following reasons: (1) an increasing number of banks accessed the call market on a trial basis in light of changes in their environment such as the full removal of blanket deposit insurance; and (2) as a result of the improved creditworthiness of regional banks and regional banks II, credit lines offered by lenders were expanded.

The improved creditworthiness of financial institutions can be cited as a common factor in all of the above developments contributing to an increase of transactions in the uncollateralized call market. On the other hand, borrowing in the call market by city

⁷ In the call market, transactions are divided into uncollateralized and collateralized types. Both are intermediated by *tanshi* (money market brokers). Uncollateralized transactions consist mostly of transactions that are not recorded on *tanshi*'s accounts (so-called broking), while

banks, which had been major borrowers, declined somewhat in fiscal 2004. This was due to the abundant supply of funds by the Bank and the improvement in the liquidity position of city banks reflecting increased deposits and sluggish growth of lending.

The amounts outstanding in the collateralized call market remained flat during fiscal 2004. *Tanshi* (money market brokers) were the major borrowers, and most of their transactions were the acceptance of excess funds in the trust accounts of trust banks.

III. Features of Money Market Operations

A. Bidding in Funds-Supplying Operations

As mentioned earlier, the occurrence of undersubscription in funds-supplying operations increased substantially during the second half of fiscal 2004 (Chart 2). Specifically, undersubscription was observed in all operational tools of so-called “short-term funds-supplying operations”⁸ other than outright purchase of JGBs. Undersubscription occurred 56 times in fiscal 2004, up sharply from eight times in fiscal 2003, with the 37 cases of undersubscription in January–March 2005 accounting for roughly 40 percent of all funds-supplying offers (94 offers) during this period. Undersubscription was particularly conspicuous for operational tools with relatively short maturity of supplying funds, such as bill purchases at the Head Office of the Bank (primarily with 3–6 month maturity) and JGS purchases with repurchase agreements (primarily with 1–3 month maturity). However, on a few occasions, undersubscription occurred for operational tools with relatively long maturity, such as bill purchases at all offices of the Bank (primarily with 6–8 month maturity) and outright purchases of TBs/FBs with residual maturity of one year or less.

collateralized transactions consist mostly of underwriting and offer of funds that are recorded on the own accounts of *tanshi* (so-called dealing).

⁸ Funds-supplying operations can be divided into two categories: long-term operations undertaken primarily for the purpose of responding to increases in the Bank’s medium- to long-term liabilities (banknotes); and short-term operations undertaken in response to short-term changes in autonomous factors. The Bank considers outright purchases of JGBs to be long-term operations. The U.S. Federal Reserve System uses outright purchases of treasuries for a similar

To review responses of counterparties to funds-supplying operations, bidding in bill purchasing operations is examined in detail as follows (Chart 10). Beginning in November 2004, successful bid rates on bill purchases both at the Head Office and at all offices were stuck at the lower limit (0.001 percent). Thereafter, bid-cover ratios dropped precipitously. During this period, the number of bidders per operation also declined. The number of bidders in bill purchases at the Head Office with relatively short durations (40 eligible counterparties) declined from more than 20 counterparties during the summer of 2004 to less than 10 counterparties during January–March 2005. This reflected a decline in the number of financial institutions that felt they needed to use funds-supplying operations.

B. Factors for Lower Bid-Cover Ratios in Funds-Supplying Operations

The reasons for the decline in the performance of funds-supplying operations were as follows. As mentioned in Section I, primarily because of the increase in receipts of treasury funds, the amounts of funds-supplying operations needed to achieve the target level for current account balances increased. Financial institutions' demand for funds-supplying operations declined as concerns over the financial system receded.

The 30–35 trillion yen target range for the current account balances significantly exceeds the approximately 6 trillion yen of required reserves to be held by financial institutions at the Bank. Financial institutions would not feel the need to hold excess reserves of such an amount under normal circumstances. However, financial institutions continue to participate in bidding in funds-supplying operations not only for the purpose of securing their current account balances in the immediate future but also because they regard these operations as a means to fulfill various purposes.

Demand for the Bank's funds-supplying operations can be categorized according to two purposes: (1) to secure liquidity in the form of current account balances; and (2) for purposes other than securing liquidity, such as to secure profits or prevent further

purpose. (For details, see Bank of Japan, Financial Markets Department, "Money Market Operations in Fiscal 2003.")

losses. In fiscal 2004, both of the above incentives for participating in bidding declined during the second half of the fiscal year, leading to a drop in bid-cover ratios.

1. Bidding to secure liquidity

In fiscal 2004, demand for funds-supplying operations to secure liquidity gradually declined as the creditworthiness of Japanese banks improved. The trend became more conspicuous after the fall of 2004 when credit ratings of Japanese banks improved and concerns over the financial system receded.

Some of the bidding in such operations to secure liquidity is based on the need to meet reserve requirements and for settlement in the immediate future. However, financial institutions frequently prioritize securing future liquidity in advance, which is subject to relatively greater uncertainty. This type of demand for funds-supplying operations depends on the following: (1) the approximate target level of current account balances of individual financial institutions; (2) the extent of difficulty in raising funds in the money market; and (3) the projection of changes in current account balances of individual financial institutions.

As the creditworthiness of Japanese banks improved and concerns over the financial system receded, the need to hold current account balances in preparation for an outflow of deposits declined. This made it easier for financial institutions to reduce their target levels of current account balances. Moreover, the recovery in call market transactions generated confidence that funds could be easily procured from the market when needed. This reduced demand for funds-supplying operations as an alternative way to raise funds. Demand for funds-supplying operations also declined as the current account balances held by Japanese banks were apt to increase. This was because foreign banks reduced their current account balances as yen funding costs through currency swap transactions became less negative and as investment in the money market became more difficult under lower short-term interest rates.

With regard to projection of changes in current account balances of individual financial institutions, a review of the account balances held by type of financial institution indicates the following (Chart 11). While the total amount of current account balances

remained almost at the same level in fiscal 2004, current account balances held by foreign banks decreased. On the other hand, current account balances held by city banks increased. City banks account for a relatively high share of bidding in operations. For this reason, it is very likely that the increase in the current account balances held by city banks led to an overall decline in bidding in funds-supplying operations. During the period in which the target level of current account balances was set at 30–35 trillion yen, a moderate correlation can be observed between the accumulation of current account balances by city banks and others and declining bid-cover ratios in funds-supplying operations (Chart 12).

2. Bidding for other purposes, such as to secure profits or prevent further losses

The securing of liquidity is not the only reason for financial institutions to bid in funds-supplying operations. However, demand for operations for purposes other than procurement of liquidity also declined in fiscal 2004.

For instance, by selling securities in the Bank's TB/FB and JGB purchasing operations, financial institutions can secure profits, prevent further losses, or adjust their TB/FB and JGB inventory positions. In the case of outright purchases of bills and purchases of JGSs with repurchase agreements, a successful bid allows a financial institution to make a fixed-rate payment and thereby prevent further losses or reduce interest rate risk. In addition, financial institutions can earn margins if funds raised through these operations are invested in assets of similar maturities with higher yields. Because successful bidding in the Bank's operations has a smaller impact on market prices, financial institutions may prefer to bid in operations in certain instances. This tendency becomes stronger when a financial institution sells a large amount of specific issues with low market liquidity or when a financial institution is raising large amounts of funds for investment in bonds and other financial instruments.

Financial institutions may continue to bid in operations to secure profits or prevent further losses even when there is no need for liquidity procurement. This kind of bidding can be considered as demand for unique "financial products." The existence of this form of demand for operations has largely contributed to the achievement of the

high target level of current account balances even while concerns over the financial system were receding. However, the performance of operations depends on the availability of profit-making opportunities for financial institutions. From this perspective, much depends on the positive level of interest rates for the maturity of the operation.

In fiscal 2004, interest rates on term instruments, primarily TBs and FBs, fell to nearly zero percent, as discussed in Section II. Since funds procured in short-term funds-supplying operations were mainly invested in TBs and FBs, it became increasingly difficult for financial institutions to generate profits from bidding in short-term funds-supplying operations during fiscal 2004. Among the factors contributing to the decline in rates on term instruments, the first factor, a “stronger sense of abundant funds in line with the stability of the Japanese financial system,” also have contributed to the decline in demand for operations for the purpose of procuring liquidity.

As explained in the above paragraphs, incentives for bidding in funds-supplying operations were divided into two categories. However, it is not apparent which of these two incentives plays the principal role in determining bidding behavior. If it is assumed that demand for operations to secure profits or prevent further losses plays the principal role, then if the economic outlook improves and rates on term instruments rise, bidding in operations would increase even with the retreat of financial system instability and declining liquidity demand. However, a significant number of financial institutions bid in funds-supplying operations primarily for the purpose of securing liquidity. Moreover, some financial institutions are beginning to consider the advantages and disadvantages of holding large amounts of current account balances at the Bank which do not generate any interest income. Greater attention is being paid to this point from the perspective of return on assets (ROA), to which financial institutions have recently assigned greater importance. The share of current account balances in the total financial assets of Japanese private banks currently stands at around 3 percent (Chart 13). As this shows a significant increase from a share of approximately 0.5 percent prior to the introduction of the quantitative easing policy, some financial institutions may start to

review the approximate target levels that they have set for their holdings of current account balances.

Box 2: Previous Periods of Frequent Occurrence of Undersubscription (2002)

In 2002, bidding in operations recovered after a period of frequent occurrence of undersubscription. This recovery was primarily due to greater incentives to secure liquidity resulting from growing concerns over liquidity.

After the quantitative easing policy was introduced in March 2001, the target level for current account balances was initially set at “around 5 trillion yen.” The target was gradually raised to “around 6 trillion yen” in August and to “more than 6 trillion yen” in September. Subsequently, the target range was sharply increased to “around 10–15 trillion yen” in December 2001. Following this series of increases, there were two periods of frequent occurrence of undersubscription during 2002.⁹

January–March 2002

The decision was made at the MPM of December 18 and 19, 2001 to raise the target level of current account balances from “more than 6 trillion yen” to “around 10–15 trillion yen.” Subsequent to this action, bid-cover ratios in funds-supplying operations declined for the following reasons: funds-supplying operations were actively undertaken; and TB/FB rates dropped sharply because financial institutions preferred to invest in highly liquid TBs and FBs in view of the partial removal of blanket deposit insurance. Undersubscription first occurred after mid-January in JGB borrowing operations, which have the shortest funds-supplying maturities (about 1–2 months). After the end of February, undersubscription frequently occurred in bill purchasing operations at all offices with the

⁹ During 2002, target levels for current account balances (“around 10–15 trillion yen” and “around 15–20 trillion yen” after October) were significantly lower than the current level. However, the outstanding balance of JGB purchases was considerably lower in 2002 (around 50 trillion yen) than in fiscal 2004 (around 65 trillion yen). Therefore, the outstanding balance of short-term funds-supplying operations needed to achieve the target level of current account balances was roughly the same for both fiscal years.

longest funds-supplying maturities (about 5–6 months) and in TB/FB purchasing operations.

However, bid-cover ratios in funds-supplying operations recovered after the beginning of April 2002. This reflected a movement in the financial markets to hold larger current account balances against the background of a computer system failure of a major bank group.

Summer–Fall 2002

Cautiousness in the financial markets about the effects of a system failure of a major bank group was dissipated by the end of the Golden Week holidays in early May. This restored a sense of abundant supply of funds, leading to frequent occurrence of undersubscription in various types of operations during the summer of 2002. Bidding in operations later began to gradually recover as liquidity demand increased. This reflected the weakness in the stock price developments and a growing sense of uncertainty concerning the future of the Japanese financial system.

C. Measures Taken in Money Market Operations

To achieve the target level of current account balances under these conditions, it became even more necessary than in the past to take various measures in money market operations. Specifically, in early December 2004 and March 2005 when autonomous factors fell largely due to JGB issuance coinciding with collection of large amounts of corporate taxes, the Bank implemented a number of measures to achieve the target level. (See Box 4 for details of money market operations around early March 2005.)

The following measures were implemented in short-term funds-supplying operations: (1) maturities of funds-supplying operations were extended as a whole; (2) funds-supplying operations of various maturities were offered; and (3) greater flexibility was exercised in the choice of operational tools for which relatively higher

levels of bidding could be expected. A more detailed review of these measures is as follows.

Regarding the maturity of funds-supplying operations, financial institutions tend to have a higher incentive to bid for instruments with longer maturities. This is because uncertainty concerning liquidity is higher over longer periods of time and because instruments of longer maturity yield higher interest rates. A review of the average maturity of short-term funds-supplying operations shows that maturities have gradually lengthened (Chart 14). In the second half of fiscal 2004, average maturity rose gradually to above five months from approximately two months immediately after the introduction of the quantitative easing policy. Among various operational tools, the maturity of outright purchase of bills reached 10–11 months in early March 2005. This was close to the one-year upper limit placed on maturity by the MPM. It is notable that under the quantitative easing policy, the maturity of the Bank's operations has become significantly longer compared with the maturity of operations conducted by the central banks of other major economies (1–2 weeks) (see Box 3). The increase in funds-supplying operations with longer maturities can lead to lock-in of the Bank's assets, thereby reducing the flexibility of future money market operations.

Box 3: Short-Term Funds-Supplying Operations by Central Banks of Major Economies

Short-term funds-supplying operations by the central banks of major economies are centered on maturities of about two weeks or less. This is intended to maintain flexibility in money market operations. Moreover, in recent years, there has been a trend toward the shortening of maturity.

The U.S. Federal Reserve System primarily uses the following two types of instruments in its temporary (short-term) funds-supplying operations: short-term repo transactions with maturity of less than 13 days; and long-term repo transactions with maturity of 13 days or more. Short-term repo transactions are centered on overnight

transactions, while long-term repo transactions consist mostly of transactions with 14-day maturity. Previously, the Federal Reserve employed long-term repo transactions with 28-day maturity. However, since September 2003, the maturity of these instruments has been shortened to 14 days in order to respond to fluctuations in autonomous factors affecting changes in reserves and to maintain flexibility in money market operations.

In the case of the European Central Bank (ECB), the weekly “main refinancing operation” constitutes the principal funds-supplying tool, with a maturity of about one week. Previously, the maturity of this instrument was about two weeks. This was shortened after March 2004 as part of the review of the framework of money market operations with other modifications made at that time including a change in the reserve maintenance period.

In the case of the Bank of England, the principal operational tool consists of a regular daily funds-supplying repo operation with a maturity of about two weeks. The revisions currently being considered in the framework of money market operations propose the shortening of the maturity to about one week.

Money market operations with longer maturity have thus been used to secure higher levels of bidding. On the other hand, some financial institutions require funds-supplying operations of shorter maturity to match the maturity of their assets and to adjust funding positions. The Bank took these various needs into account when determining the maturity of its operations. To further raise bidding incentives, efforts were made to diversify the conduct of money market operations, such as by setting different maturities for the same operational tools.

Previously when bidding in operations was generally favorable, operational tools that have a tendency to influence supply and demand conditions in specific markets, such as outright purchase of TBs/FBs and purchase of CP with repurchase agreements, had been utilized only periodically with a fixed volume of offers. However, this practice

was temporarily suspended when bidding in operations generally slackened during the second half of fiscal 2004. Instead, the frequency and volume of offerings were increased when higher levels of bidding were expected, and timings of offerings were carefully chosen to attain higher levels of bidding.

Box 4: Money Market Operations toward Early March 2005

After the beginning of 2005, there was a marked decline in bidding as concerns about the financial system receded. As a result, undersubscription became a regular occurrence in short-term funds-supplying operations. In this environment, achieving the target level of current account balances was expected to become considerably difficult in early March. This was because a significant decline in autonomous factors was anticipated around early March when JGB issuance coincided with large payments of corporate taxes.

In order to achieve the target level, the Bank responded to this situation by engaging in even more careful monitoring of the market in preparation for operations. The information thus gathered was used in designing various measures. Specifically, the Bank gradually extended the maturity of outright purchase of bills conducted at all its offices. As for outright purchase of bills conducted at the Head Office, which usually had shorter maturities than those conducted at all offices and were offered under a fixed maturity, the Bank started to offer the operations with two different maturities alternately in order to respond more effectively to diverse demand. In the case of purchases of JGSs with repurchase agreements and purchases of CP with repurchase agreements, the general practice previously was to offer a single maturity about once every week, but this was changed to alternating offers of two different maturities made about twice every week. Regarding TB/FB purchasing operations, which were registering relatively good bidding performances, the frequency and amount of offers were increased, while paying due attention to the impact of these operations on the balance of supply and demand in the market.

While undersubscription continued, by adopting these measures, the Bank increased the outstanding balance of short-term funds-supplying operations to achieve the target level of current account balances. However, in early March 2005, autonomous factors shifted further downward than initially anticipated. This was primarily due to developments related to banknotes. To maintain the target level of current account balances, the Bank undertook same-day-start outright purchases of bills (at its Head Office) on March 3.¹⁰ Considering the fact that bidding in operations remained at low levels with undersubscription occurring even for bill purchasing operations with maturity of about nine months, the maturity of bill purchasing operations was extended to about eleven months, the longest on record. (By decision of the MPM, the maximum allowable maturity on such operations is set at one year.)

D. Money Market Operations in Fiscal 2004 by Type of Operational Tool

The following are the Bank's money market operations conducted in fiscal 2004 by type of operational tool (Chart 15).

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 benchmark yields determined by the Bank.¹¹ The amount of purchases is decided at MPMs, and has been set at 1.2 trillion yen per month since the

¹⁰ This was the first same-day-start operation to be undertaken since November 1, 2004, mentioned in Box 1 (purchases of bills at all offices of the Bank on the first day of issuance of newly designed banknotes).

¹¹ Benchmark yields are derived from "Reference Price (Yields) Table for OTC Bond Transactions" of the Japan Securities Dealers Association (aggregated on the previous trading day).

MPM of October 30, 2002. Operations are offered four times per month. In each operation, the Bank purchases 0.3 trillion yen of JGBs.

The amount of JGB purchases per month is determined so that the Bank's holding of long-term JGBs is kept below the outstanding amounts of banknotes issued. The rule has been adopted to avoid lock-in of the assets held by the Bank and to ensure sufficient flexibility in money market operations. Furthermore, this rule clearly indicates that the Bank's purpose in purchasing JGBs is neither to support prices of JGBs nor to finance government expenditures. As of the end of fiscal 2004, the Bank's holding of long-term JGBs was 65.3 trillion yen. This was roughly 9 trillion yen less than the 74.7 trillion yen in amounts outstanding of banknotes issued.

b. Outright purchases of TBs and FBs

Outright purchases of TBs and FBs are operations to purchase TBs and FBs with residual maturity of about two months to one year. These operations are characterized as funds-supplying tools with relatively longer maturity.

Outright purchases of TBs and FBs were used to steadily supply necessary funds corresponding to medium-term fluctuations in autonomous factors, rather than to their short-term fluctuations. Given the purpose of these operations and their propensity to have impacts on the supply and demand conditions in the TB and FB market, the Bank had basically conducted a fixed amount of these operations periodically. However, in the second half of fiscal 2004 when bidding in short-term funds-supplying operations generally slackened, outright purchases of TBs and FBs were used more frequently and more extensively in order to achieve the target level of current account balances. This was because they are relatively less likely to become undersubscribed. Also, the timing of the operations was set more flexibly so that high levels of bidding could be expected.

c. Outright purchases of bills

In this operation, the Bank purchases bills issued by counterparties with eligible assets submitted to it as pooled collateral.¹² Pooled collateral includes JGSs and other public debt, as well as corporate bonds, CP, and other private debt. Outright purchases of bills function as collateralized funds transactions whose rate and price are determined by auction.

Compared to outright purchases of TBs/FBs and purchases of CP with repurchase agreements, outright bill purchases are less strongly tied to any specific market. Also, the maturity of these operations can be set freely. Therefore, the Bank does not have to make offers regularly and can conduct operations counteracting short-term fluctuations in autonomous factors. On the other hand, for counterparties, this operation is very convenient, as they are able to use pooled collateral. Given these characteristics, the Bank uses outright bill purchases, together with outright purchases of TBs and FBs, as its main short-term funds-supplying 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 conducted for the purpose of steadily supplying funds with relatively longer maturity. On the other hand, outright bill purchasing operations conducted at the Head Office (outright bill purchases limited to counterparties under the jurisdiction of the Head Office of the Bank) were primarily used as operations with relatively shorter maturity. After the beginning of 2005, the maturity of bill purchasing operations conducted at all offices of the Bank was extended to about 8–10 months in order to ensure steady bidding. For outright bill purchasing operations conducted at the Head Office, offers were generally made for two types of maturities; about four months and

¹² Pooled collateral refers to the collateral that counterparties must submit to the Bank based on the provisions of agreements pertaining to transactions with the Bank such as bill purchasing and the complementary lending facility as well as treasury agent contracts. Previously, collateral needed to be specified for each individual agreement or contract, with financial institutions submitting collateral equal to or exceeding the minimum required amount. Since January 2001, financial institutions have been permitted to meet the collateral requirement by submitting pooled collateral equal to or exceeding the total amount of collateral required by outstanding agreements and contracts.

about six months. This aimed to respond to financial institutions' diverse demand for operations.

d. Purchases of JGSs with repurchase agreements

In this operation, the Bank purchases JGSs for a determined period of time, followed by reselling them at a later date. It is frequently used by securities companies to finance their JGS positions. It has usually been used to provide relatively short-term funds. Compared to the bidding in the outright purchase of bills discussed earlier, bidding in this operation has been sluggish from time to time because JGSs are the only acceptable collateral in this operation. During fiscal 2004, undersubscription occurred more frequently for this operation than any other type of operation.

Against this background, measures were taken to more clearly differentiate the maturity of purchases of JGSs with repurchase agreements from that of outright bill purchasing operations. Specifically, maturity was shortened to about 1–2 months (compared to about three months in the past). This was aimed at promoting diverse operational demand and contributing to an increase in the total outstanding balance of short-term funds-supplying operations. Furthermore, offers were made flexibly when relatively higher levels of bidding were expected, for example, when market repo rates showed slight rises.

e. Purchases of CP with repurchase agreements

In this operation, the Bank purchases CP for a determined period of time, followed by reselling at a later date. The amount 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. As in fiscal 2003, purchases of CP with repurchase agreements in fiscal 2004 were primarily undertaken to maintain the amount outstanding at a steady level. This was mainly done by offering new operations to coincide with the maturity date of operations conducted in the past. However, bidding was generally sluggish as demand for CP in the market was strong, reflecting the growing sense of abundant funds.

Toward the end of fiscal 2004, bidding in short-term funds-supplying operations generally declined. Against this backdrop, efforts were made to attract as much bidding as possible by financial institutions. With regard to purchases of CP with repurchase agreements, in addition to the usual operations of about two-month maturity, operations of about one-month maturity were offered. This reflected the fact that CP issuance in the market increased for both longer and shorter maturities toward the end of fiscal 2004.¹³

f. Outright purchases of asset-backed securities (ABSs)

The introduction of outright purchases of ABSs was decided at the MPM on April 7 and 8, 2003. The decision was aimed at supporting various efforts of market participants to improve the infrastructure of the ABS market, based on the awareness that the proper function of financial markets was indispensable to encouraging the permeation of monetary easing effects through the economy. The Bank set an upper limit of 1 trillion yen on the amount outstanding of these purchases.

The purchasing criteria for outright purchases of ABSs were modified in January 2004. Thereafter, the number of asset-backed CP (ABCP) issues eligible for purchase by the Bank gradually increased, as did bidding amounts in ABCP purchasing operations. Subsequent to these developments, the Bank raised the upper limit on purchases per offer from 50 billion yen to 100 billion yen beginning with the offer of May 27, 2004. Offers were made at a pace of about twice per month. As a result, as of March 2005, the cumulative amount of purchases made since the first offer in August 2003 amounted to 2,380.8 billion yen.

¹³ The special reduction measure for revenue stamps on CP bills expired as of the end of fiscal 2004. (Under the provisions of the Special Taxation Measures Law, stamp taxes applicable to CP bills were reduced to 5,000 yen per bill, regardless of the specific provisions of the Stamp Tax Law.) As a result, the issuance cost of CP bills was to increase after April 2005. On the other hand, because due progress had not been made on the side of investors in installing systems for dematerialized CP, many issuers felt considerable concern that the transition to dematerialized CP might not proceed smoothly. Consequently, after the start of 2005, an increase was seen in the issuance of longer-term CP bills as well as that of shorter-term CP bills maturing immediately before the end of the fiscal year on the premise that they would be rolled over using CP bills.

Unlike outright purchases of ABCP, which the Bank conducts by auction, outright ABS purchases are based on applications submitted by counterparties. For the latter operation, no applications had been submitted since December 19, 2003 and therefore no operations were undertaken during fiscal 2004.

2. Funds-absorbing operations

In funds-absorbing operations, funds are absorbed at the time of implementation and conversely supplied at maturity. As such, funds-absorbing operations are used as a tool to adjust short-term fluctuations in current account balances and to ensure the supply of abundant funds. In fiscal 2004, funds-absorbing operations were centered on JGS sales with repurchase agreements and outright sales of bills, because maturity of these operations can be set freely to correspond with the required duration of absorption. Outright sales of TBs and FBs were also used¹⁴ for absorption of funds with longer maturity to ensure smooth funds absorption. The Bank conducted funds-absorbing operations mainly with one- to four-week maturity.

Given the high level of current account balances, the successful bid rate at almost all times remained at the floor level of 0.001 percent during fiscal 2004. Exceptions were when operations involved funds maturing beyond the end of fiscal 2004, as financial institutions took a cautious stance on the release of funds with the approach of the full removal of blanket deposit insurance.

E. Complementary Lending Facility

In fiscal 2004, use of the complementary lending facility increased toward the end of the fiscal year (Chart 16). Through the complementary lending facility, introduced by the decision of the MPM on February 9, 2001, the Bank lends funds to counterparties upon request. Lending is limited to the borrower's outstanding amount of the pooled

¹⁴ In outright sales of TBs and FBs, funds are absorbed on the date of sale. Conversely, the operation serves as funds supply at maturity when redemption funds are paid to financial institutions. Hence, from the perspective of money market operations, between the date of sale and maturity, this operation has the same effect as those of JGS sales with repurchase agreements and outright sales of bills. In fiscal 2004, outright sales of TBs and FBs were offered on December 14, 2004, for the first time since February 1, 2000, and were conducted several times. These offers were made in light of the need to absorb funds of relatively longer maturity and were intended to increase the diversity of funds-absorbing operations.

collateral that has been submitted. The loan rate is in general equal to the official discount rate (currently 0.1 percent). The facility is expected to function as a safety valve in funds procurement.

Use of the complementary lending facility in fiscal 2004 is considered to have reflected trial use by financial institutions seeking to confirm administrative procedures in advance of the full removal of blanket deposit insurance.

F. Points Requiring Attention in Money Market Operations

As seen above, bidding in funds-supplying operations declined in fiscal 2004 due to the stabilization of the financial system and the subsequent decrease in liquidity demand. In this environment, various measures were taken in money market operations to achieve the target range of about 30–35 trillion yen in current account balances. These measures included the extension and diversification of funds-supplying maturities and the flexible use of operational tools that were expected to attract greater bidding.

During the period of strong concerns about financial system stability, the Bank provided ample liquidity to meet financial institutions' liquidity demand. This contributed greatly to stabilizing financial markets and maintaining an accommodative financial environment, thereby averting the risk of a contraction in economic activity caused by falling prices and decreases in corporate profits.¹⁵

Currently, concerns about the financial system are receding, and the liquidity demand of financial institutions is also decreasing. Among financial institutions, the framework of the quantitative easing policy has created a sense of confidence in raising funds and contributed to maintaining an accommodative financial environment. On the other hand, the implementation of the money market operations described above has given rise to the following phenomena, which require due attention.

The first point concerns the functioning of the money market. To achieve high levels of current account balances, it was necessary to extend the maturity of funds-supplying

¹⁵ See Bank of Japan, "Outlook for Economic Activity and Prices," April 2005.

operations and to rely on the flexible use of operational tools for which higher levels of demand could be expected. These measures have directly reduced the risk premium in related markets by affecting supply and demand conditions. Efficient allocation of funds is achieved when market interest rates properly reflect liquidity premiums and credit premiums, which fluctuate in accordance with future expectation by individual economic entities. By actively conducting money market operations, the Bank is in effect substituting itself for the functioning of the market. This has the effect of reducing market transactions. An example of this can be seen in call market transactions. While call market transactions have recovered somewhat due to improved creditworthiness of financial institutions, transaction levels remain significantly lower than levels prior to the introduction of the quantitative easing policy. As the financial system becomes more stable, it will become more important to take into consideration the functions of the market, such as fluctuations of various types of risk premiums based on future expectation and discovery of market price and counterparties in transactions.

The second point concerns the liquidity of the Bank's assets. Since the introduction of the quantitative easing policy, the Bank has gradually increased its purchases of long-term JGBs to achieve high target levels of current account balances. At the same time, it has extended the maturity of short-term funds-supplying operations. A comparison of the Bank's assets as of the end of fiscal 2004 and the end of fiscal 2000, when the quantitative easing policy was introduced (Chart 17), shows that total assets have increased from about 115 trillion yen to about 150 trillion yen, an increase of roughly 35 trillion yen. An increase in the holdings of long-term JGBs accounts for more than half of the total increase.¹⁶ Regarding short-term funds-supplying operations, at the end of fiscal 2000, the entire balance of the outstanding operations was due to mature within three months. However, at the end of fiscal 2004, nearly one-half of the balance of the outstanding operations had a residual maturity of three months or more, and about 20 percent had a residual maturity of six months or more, reflecting the

¹⁶ The increase in holdings of long-term JGBs has resulted in an increase in JGBs rolled over at maturity and TBs underwritten to roll over these JGBs by the Bank. This is by decision of the MPM based on the provisions of the Bank's "Basic Outline of Transactions with the Government." (See Bank of Japan, Monetary Affairs Department, "The Bank of Japan's Transactions with the Government in Fiscal 2004.")

significant prolongation of the maturity of operations. It is notable that the central banks of other major economies are seeking to ensure the liquidity of their assets by shortening the maturity of their operations (see Box 3). Thus, one important challenge facing the Bank will be how it can maintain the liquidity of assets in order to ensure markets' confidence in its ability to implement monetary policy.

IV. Measures to Revise Operational Tools and Facilities

In fiscal 2004, the Bank implemented the following measures to revise money market operational tools.

A. Introduction and Implementation of the Securities Lending Facility to Provide the Markets with a Secondary Source of JGSs

The MPM on April 8 and 9, 2004 decided to establish 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. This facility provides the markets with a temporary and secondary source of JGSs, for the purpose of enhancing liquidity of the JGS market and maintaining the smooth functioning of the market. At the MPM on February 26, 2004, the Bank's staff was instructed to examine the practical issues related to the introduction of such a facility. Following the study by the Bank's staff in response to this instruction, the introduction of the facility was decided in April 2004 (to be implemented from May 10, 2004). The facility was first used on September 28, 2004. (The facility was used only once in fiscal 2004.)

B. Accepting Cash as Collateral for the Purchase/Sale of JGSs with Repurchase Agreements

In the past, JGSs were the only eligible collateral in response to the margin calls for the Bank's JGS operations with repurchase agreement.¹⁷ However, in view of the fact that

¹⁷ 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

cash collateral is being used in market transactions of JGSs with repurchase agreements, the decision was made at the MPM on February 4 and 5, 2004 to accept cash as collateral. This became effective from April 12, 2004 and has been used thereafter.

C. Acceptance of Dematerialized CP Issued by Foreign Corporations with Guarantees as Eligible Collateral and as Eligible Assets for CP Purchase Operations

The decision was made at the MPM on March 15 and 16, 2005 to accept yen-denominated dematerialized CP issued by foreign corporations with domestic corporation guarantees as eligible collateral for the Bank's provision of credit and as eligible assets for CP purchase operations. This decision reflected the fact that more market participants are likely to shift from using CP bills to dematerialized CP to participate in the Bank's operations, with the expiration of the special reduction measure for revenue-stamp tax on CP bills at the end of March 2005, and that the Bank has already accepted CP bills issued by foreign corporations with guarantees.

Regarding dematerialized CP issued by domestic corporations, formerly, the creditworthiness of the issuer had been the criterion for the acceptance of the dematerialized CP as eligible collateral and eligible assets for CP purchase operations. However, in parallel with the adoption of the above measures, the Bank started to accept dematerialized CP based on the assessment of creditworthiness of the guarantor, the same procedure as for CP bills.

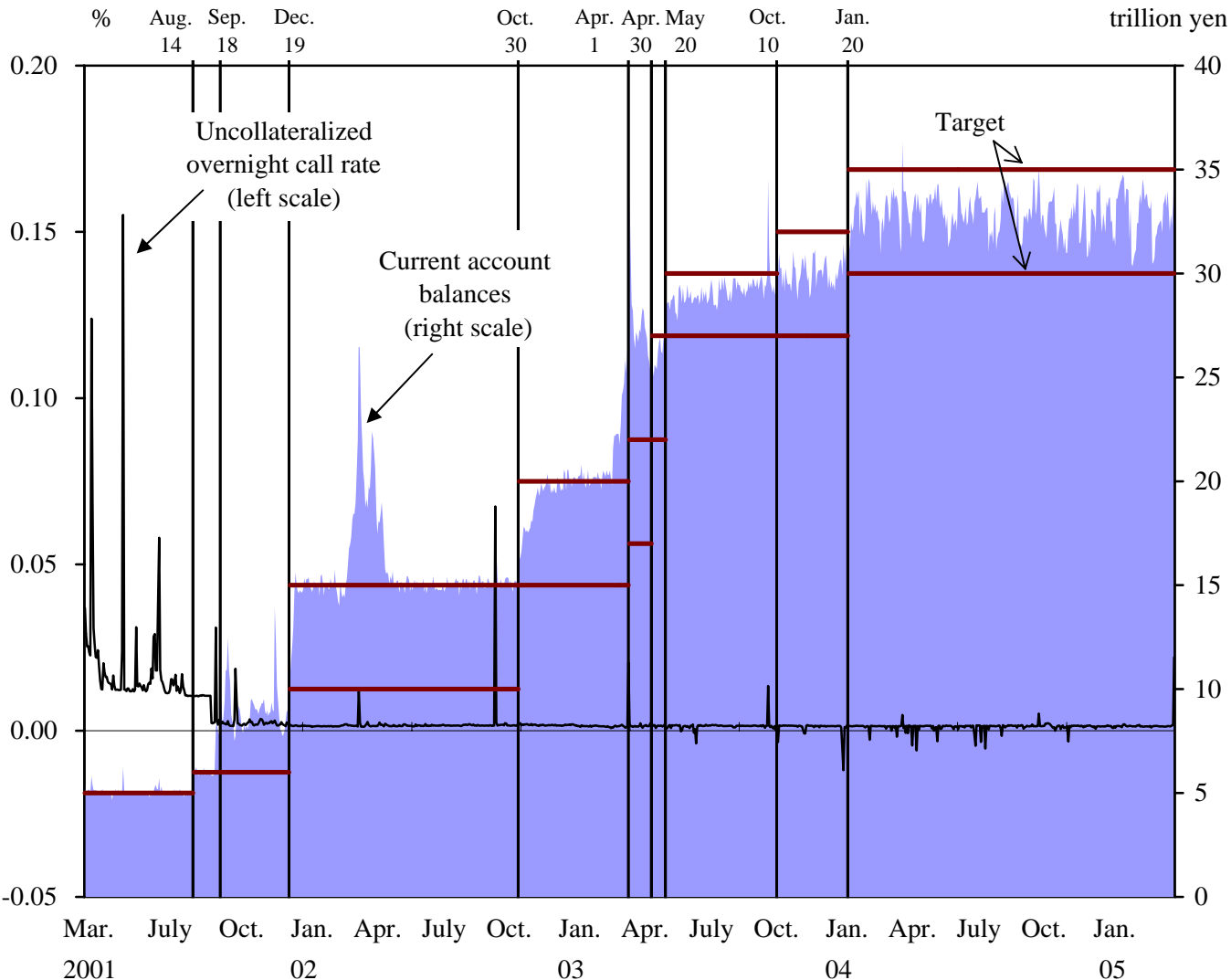
gensaki price of JGSs (initial purchasing price plus yield), this results in the "net exposure" to the Bank's counterparties. To make the necessary adjustment, the Bank requests counterparties in operations to submit additional collateral, and this is referred to as a "margin call."

References¹⁸

- Bank for International Settlements, “Comparing Monetary Policy Operating Procedures across the United States, Japan and the Euro Area,” BIS Paper No. 9, December 2001.
- Bank of Japan, “What Have We Learned from ‘Unconventional’ Market Operations?” speech given by Deputy Governor Toshiro Muto, July 2003.
- , “Outlook for Economic Activity and Prices,” April 2005.
- , Financial Markets Department, “Money Market Operations in Fiscal 2002,” *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin), August 2003.
- , Financial Markets Department, “Money Market Operations in Fiscal 2003,” *Nippon Ginko Chousa Geppo* (Bank of Japan Monthly Bulletin), June 2004.
- , Financial Markets Department, “Transactions at Negative Interest Rates in Money Markets,” *Nippon Ginko Chousa Kiho* (Bank of Japan Research Bulletin), January 2005 (only in Japanese).
- , Monetary Affairs Department, “The Bank of Japan’s Transactions with the Government in Fiscal 2004,” *Nippon Ginko Chousa Kiho* (Bank of Japan Research Bulletin), July 2005 (only in Japanese).
- Federal Reserve Bank of New York, “Domestic Open Market Operations during 2003,” January 2004.
- , “Domestic Open Market Operations during 2004,” January 2005.
- Maeda, Eiji, Bunya Fujiwara, Aiko Mineshima, and Ken Taniguchi, “Japan’s Open Market Operations under the Quantitative Easing Policy,” Bank of Japan Working Paper Series, No. 05-E-3, April 2005.

¹⁸ Useful references 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.” In addition, papers of the Bank for International Settlements and the Federal Reserve Bank of New York can be accessed at their respective web sites (<http://www.bis.org/publ/bispapers.htm> and http://www.ny.frb.org/markets/annual_reports.html).

[Chart 1] Current Account Balances and the Uncollateralized Overnight Call Rate



[Chart 2] Undersubscription in Funds-Supplying Operations

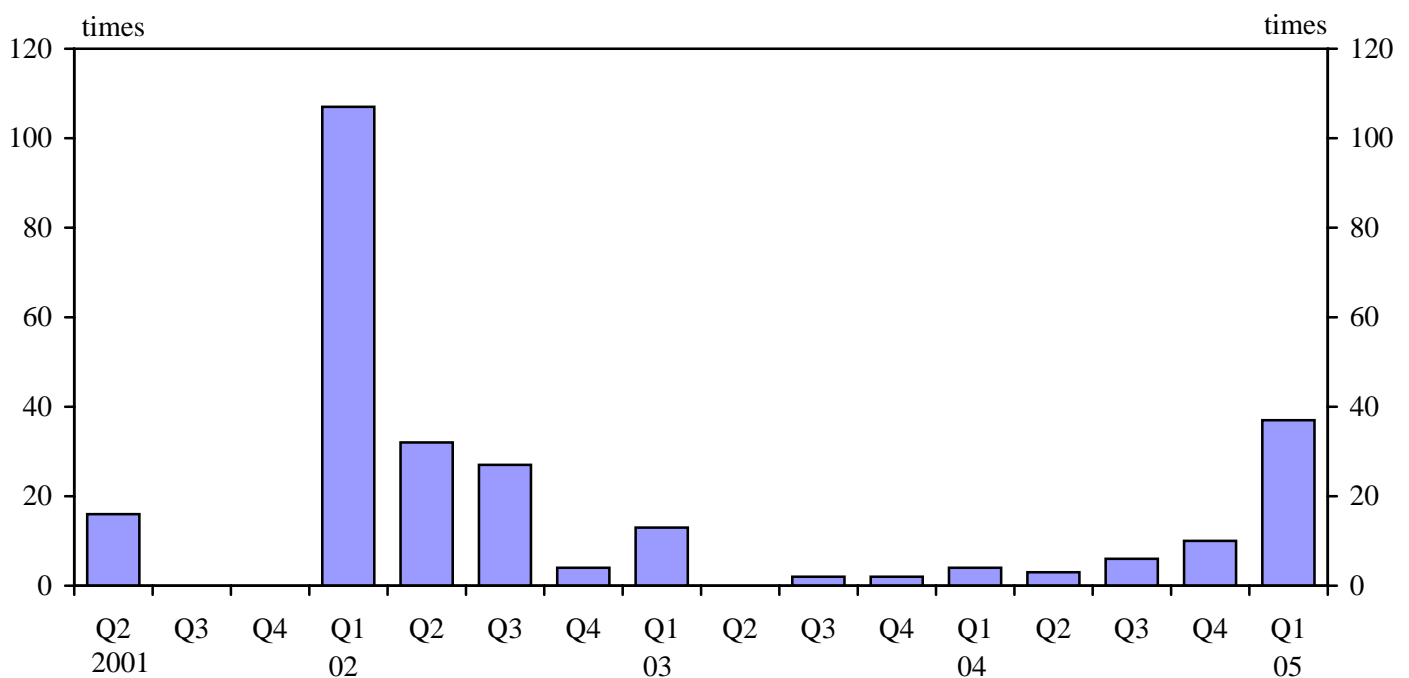
(1) Undersubscription in Funds-Supplying Operations in Fiscal 2003 and Fiscal 2004

	FY2003	FY2004				
		2004/Q2	2004/Q3	2004/Q4	2005/Q1	
Bill purchases (all offices)	0 (39)	4 (56)	0 (12)	0 (13)	0 (16)	4 (15)
Bill purchases (Head Office)	0 (42)	15 (56)	2 (13)	0 (13)	3 (16)	10 (14)
CP purchases with repurchase agreements	5 (50)	15 (53)	0 (13)	3 (12)	2 (11)	10 (17)
JGS repos	3 (43)	18 (54)	1 (11)	3 (15)	4 (11)	10 (17)
TB/FB outright purchases	0 (64)	4 (69)	0 (15)	0 (18)	1 (17)	3 (19)
JGB outright purchases	0 (48)	0 (48)	0 (12)	0 (12)	0 (12)	0 (12)
Total	8 (286)	56 (336)	3 (76)	6 (83)	10 (83)	37 (94)

Notes: 1. Numbers in parentheses are the number of offers.

2. "JGS repos" is the sum of JGS purchases with repurchase agreements, JGB borrowings, and TB/FB purchases with repurchase agreements.

(2) Frequency of Undersubscription in Funds-Supplying Operations



[Chart 3] Sources of Changes in Current Account Balances (CABs)

(1) Developments during Fiscal 2004

	trillion yen	
	FY2003	FY2004
Banknotes	-0.3	-3.3
Treasury funds and others	8.0	-23.9
Fiscal payments and revenues	54.4	59.7
JGBs	-63.9	-82.0
FBs	-15.6	-2.6
Foreign exchange	32.7	-0.0
Others	0.4	1.1
Sources of changes in CABs	7.7	-27.2

(Reference)

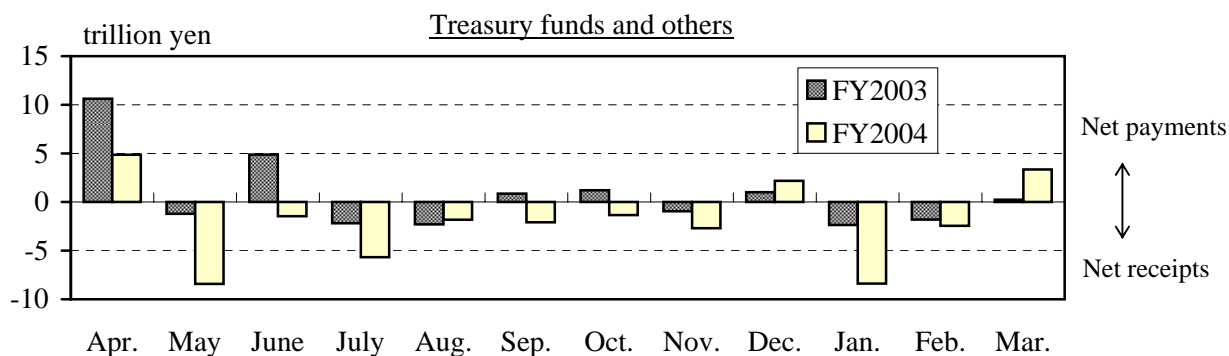
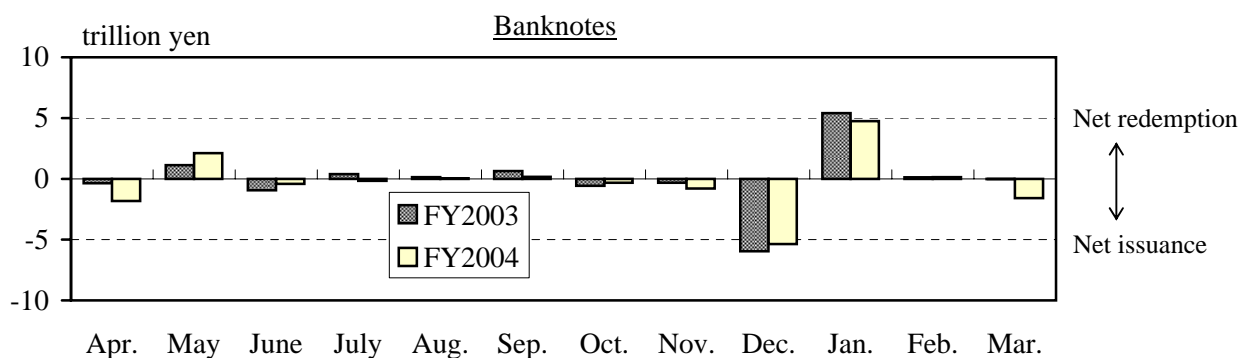
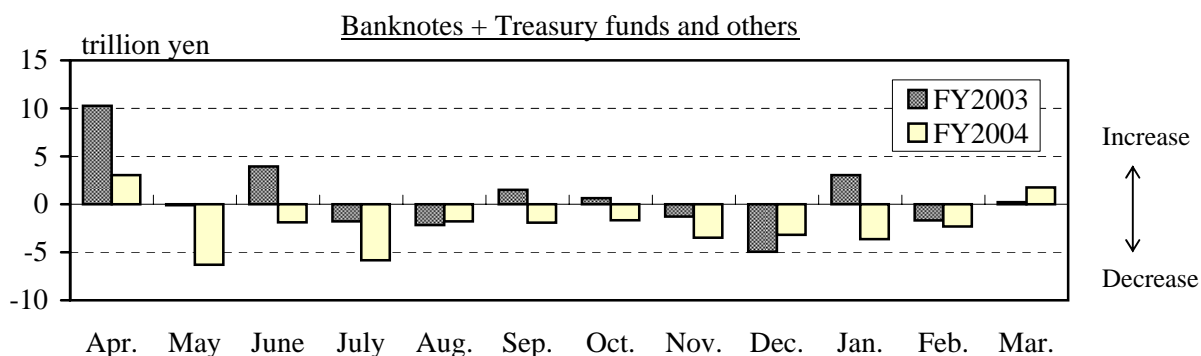
Outstanding balance of banknotes	71.4	74.7
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Notes: Banknotes: A negative number shows net issuance.

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 decrease, while a positive number shows increase.

(2) Monthly Developments during Fiscal 2003 and Fiscal 2004

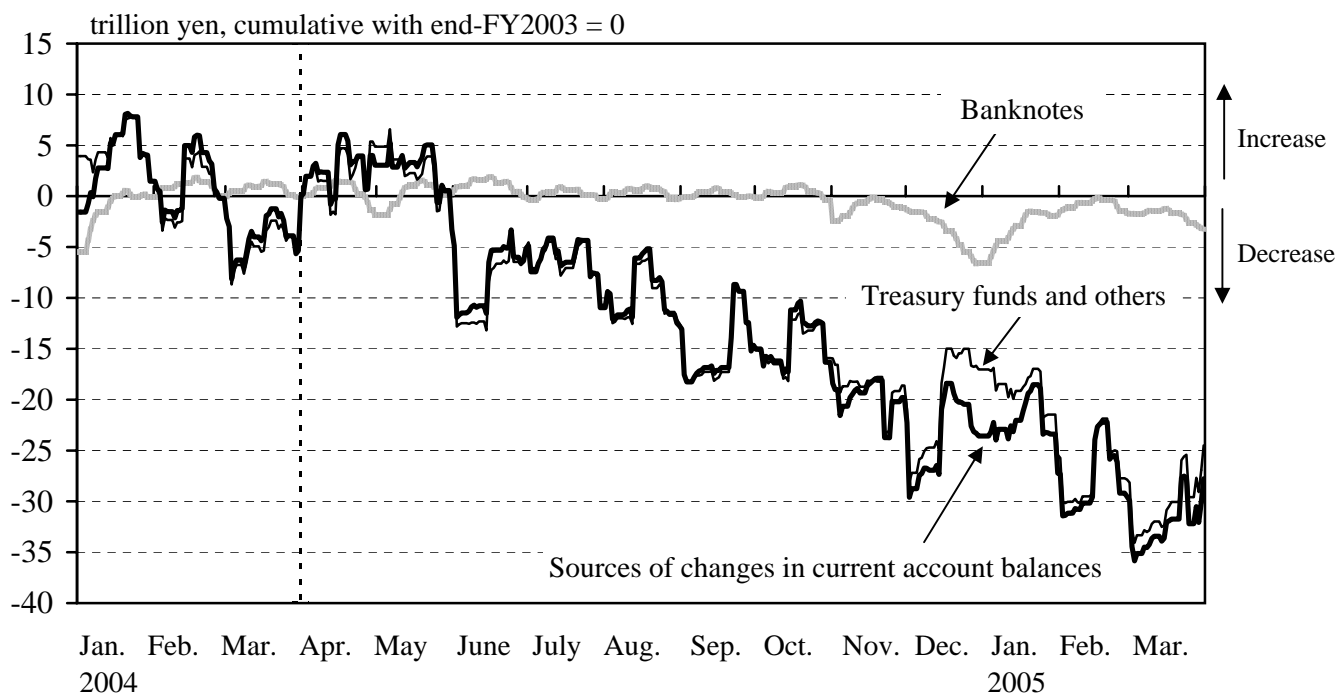


Note: Adjusted for the effect of TB/FB purchasing/selling operations.

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

[Chart 4] Sources of Changes in Current Account Balances and Amounts Outstanding of Short-Term Funds-Supplying Operations

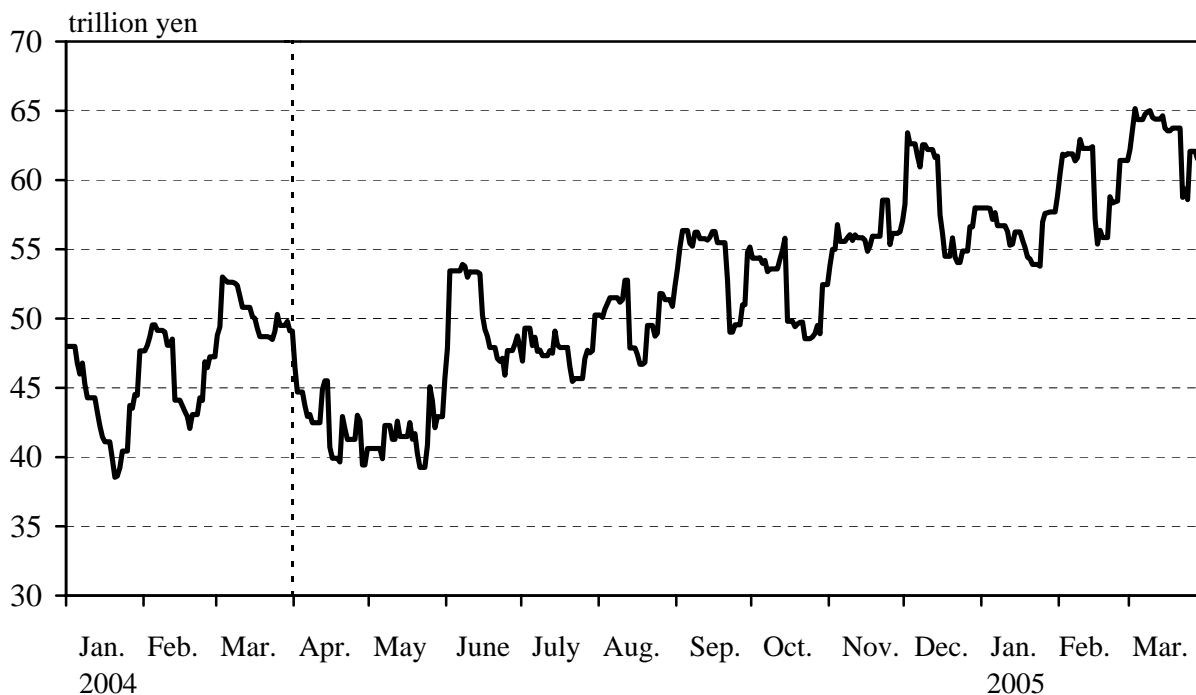
(1) Sources of Changes in Current Account Balances



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

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

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



Source: Bank of Japan

[Chart 5] Fluctuations in Sources of Changes in Current Account Balances

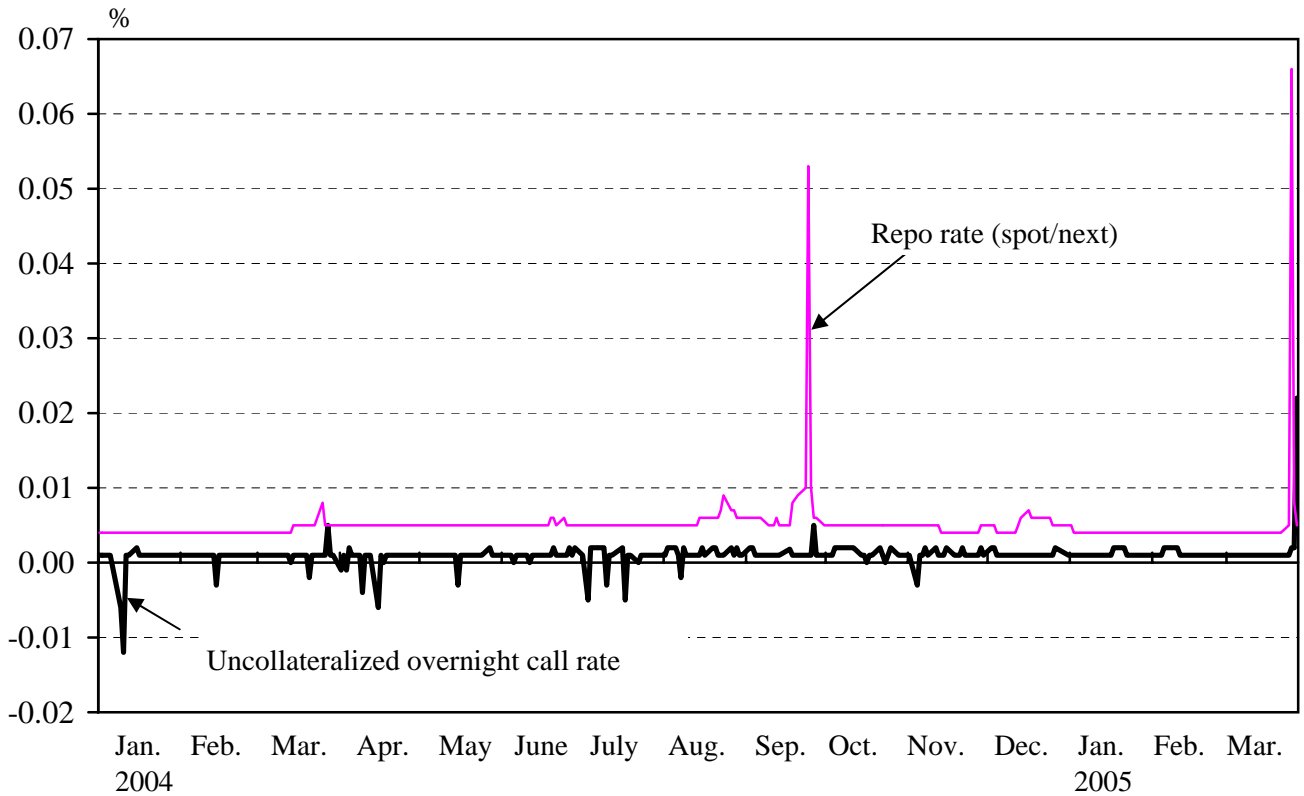
(100 million yen)

	Sources of changes in current account balances					
			Treasury funds and others		Banknotes	
	Average	Standard deviation	Average	Standard deviation	Average	Standard deviation
FY2000	8,970	11,526	8,471	11,878	3,027	2,406
FY2001	10,634	13,398	10,959	13,508	2,938	2,575
FY2002	10,183	13,033	10,513	13,266	2,584	2,301
FY2003	11,086	13,964	10,958	13,900	2,167	1,866
FY2004	11,655	15,389	11,557	15,545	2,027	1,914

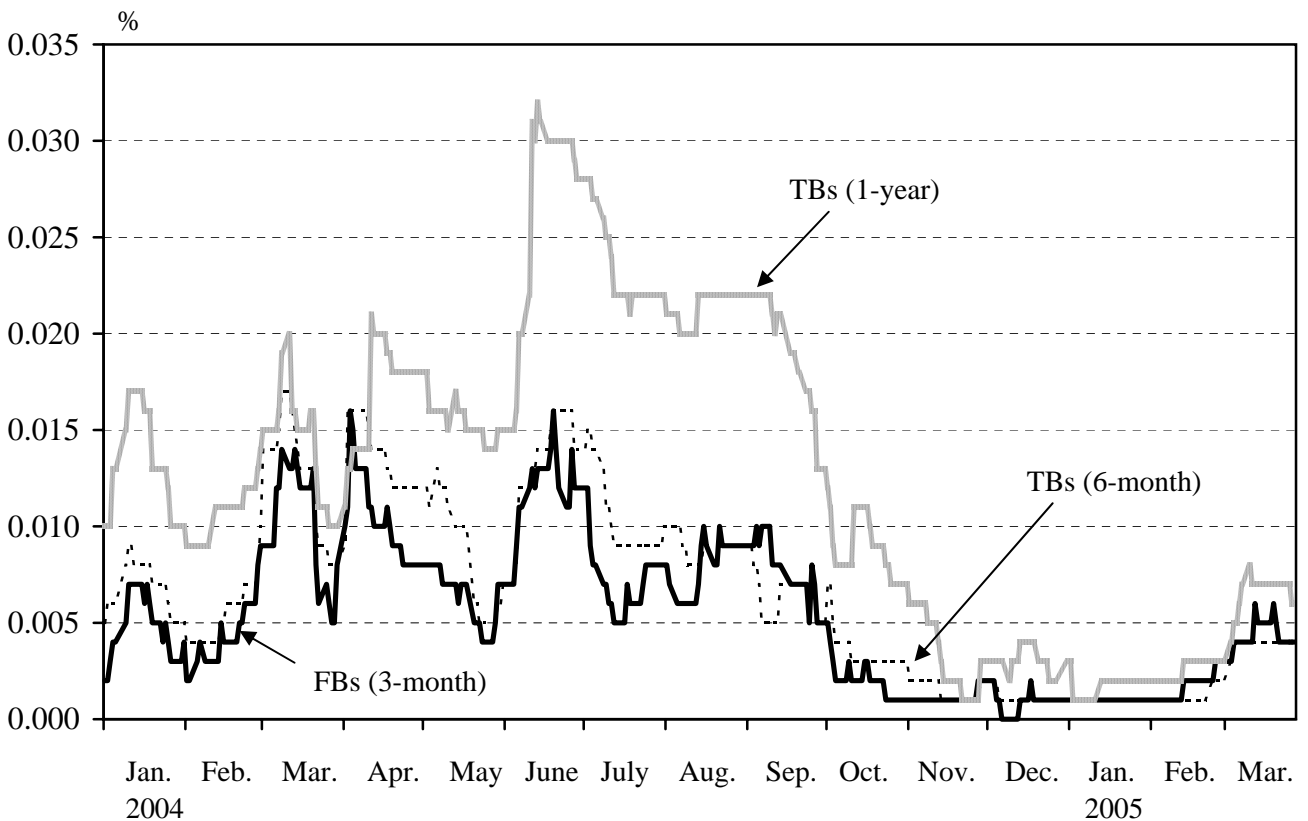
Note: Figures are the day-on-day change.

[Chart 6] Short-Term Interest Rates

(1) Call Rate and Repo Rate

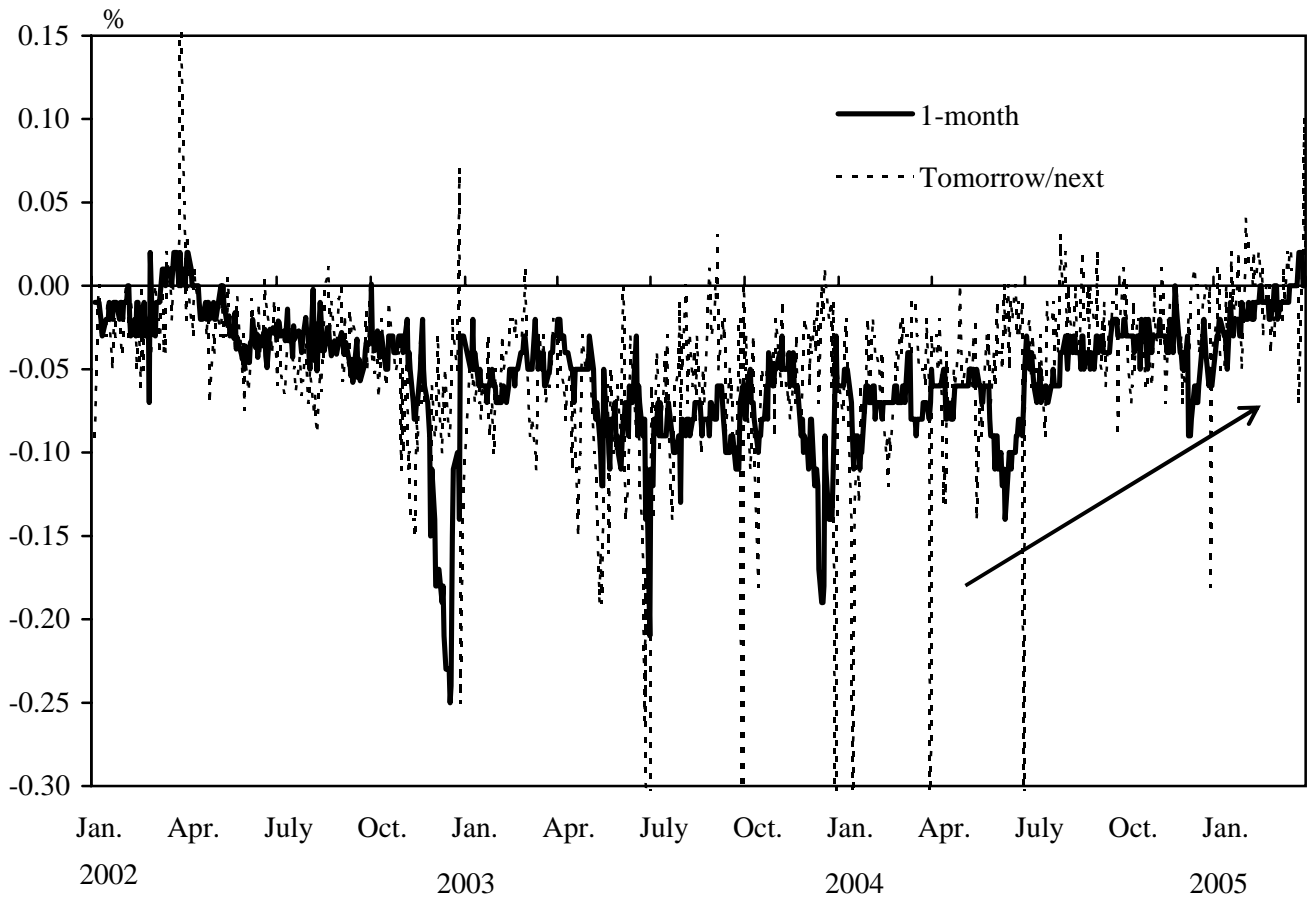


(2) Rates on TBs and FBs



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

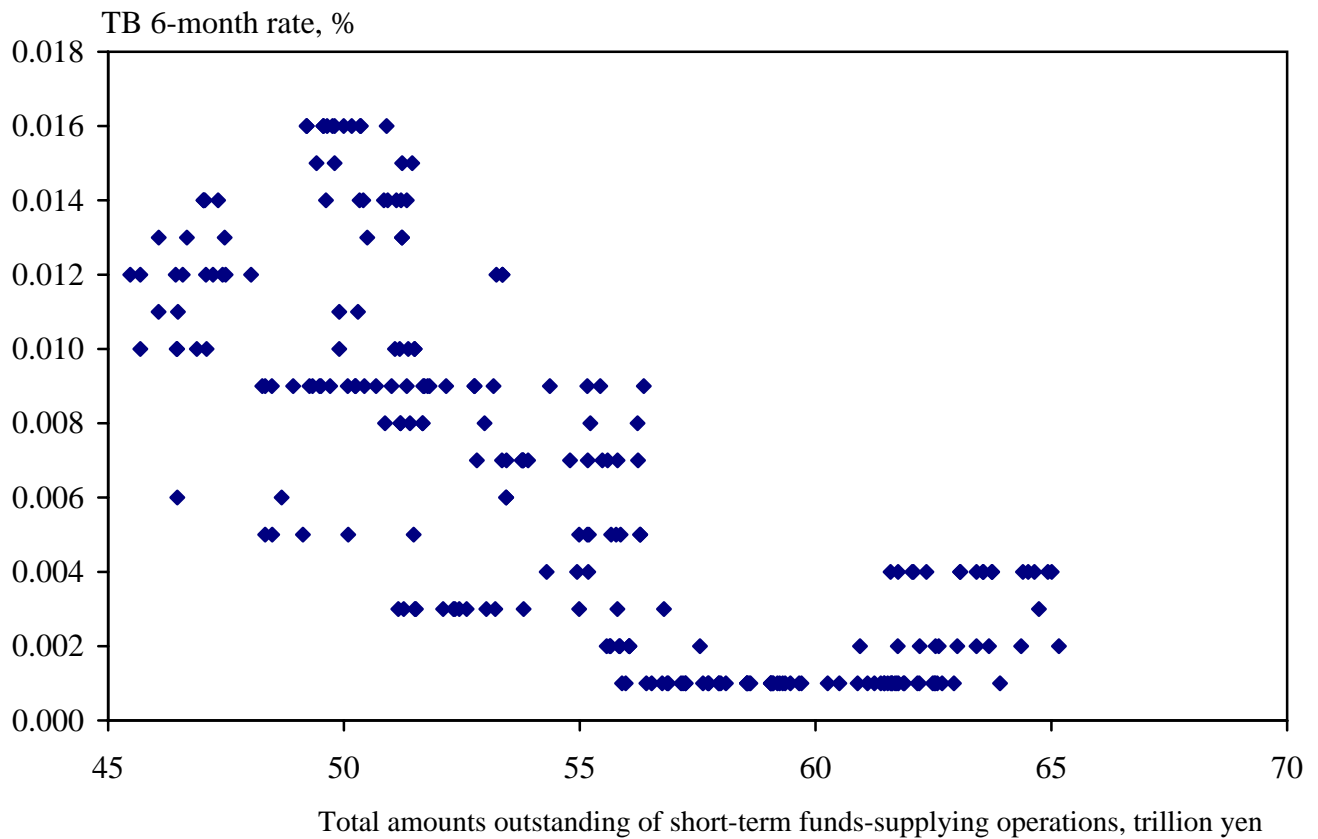
[Chart 7] Yen Funding Costs



Note: Yen funding cost is computed based on the interest rate for raising U.S. dollar funds and the price in currency swap transactions.

Sources: *Meitan* Tradition Co., Ltd.; Bank of Japan

[Chart 8] Total Amounts Outstanding of Short-Term Funds-Supplying Operations and TB Rates



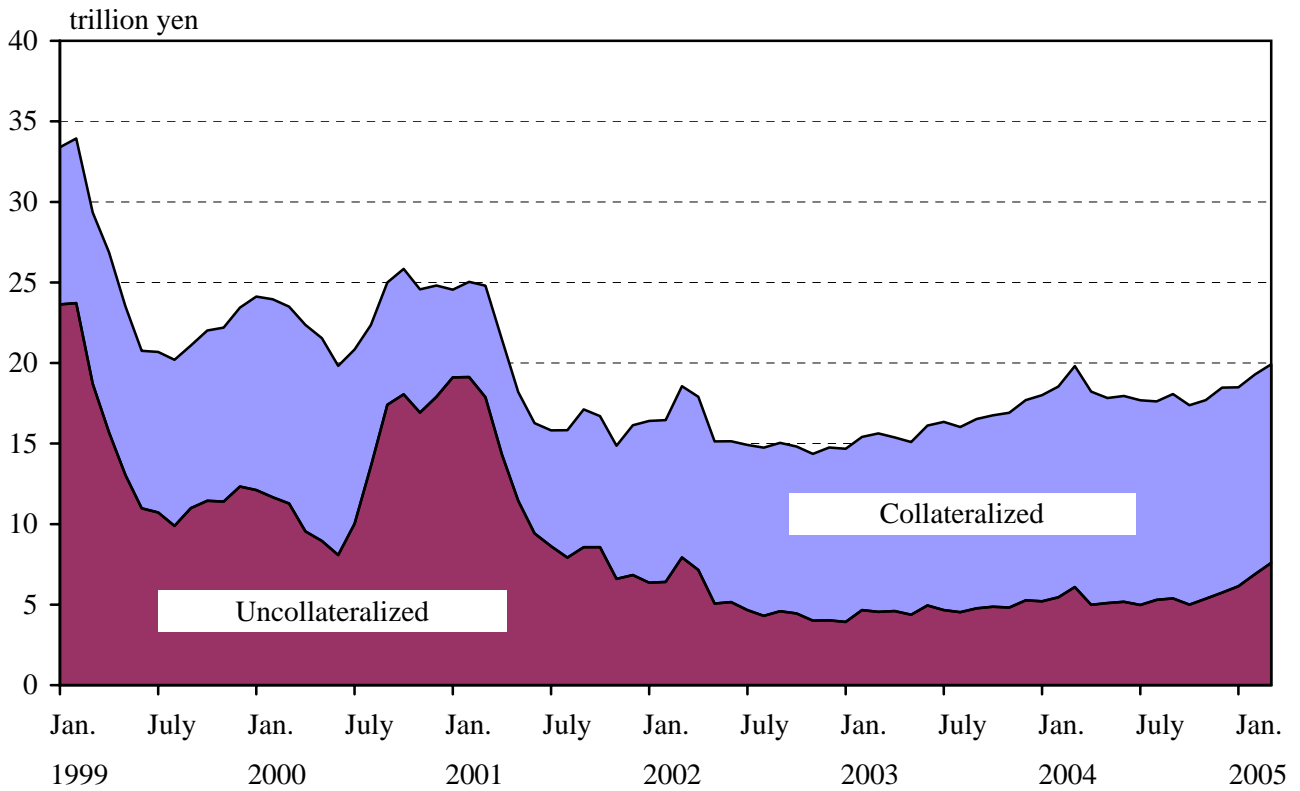
Notes: 1. During fiscal 2004.

2. Total amounts outstanding of short-term funds-supplying operations is sum of the amounts outstanding of each short-term funds-supplying operation (gross basis).

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

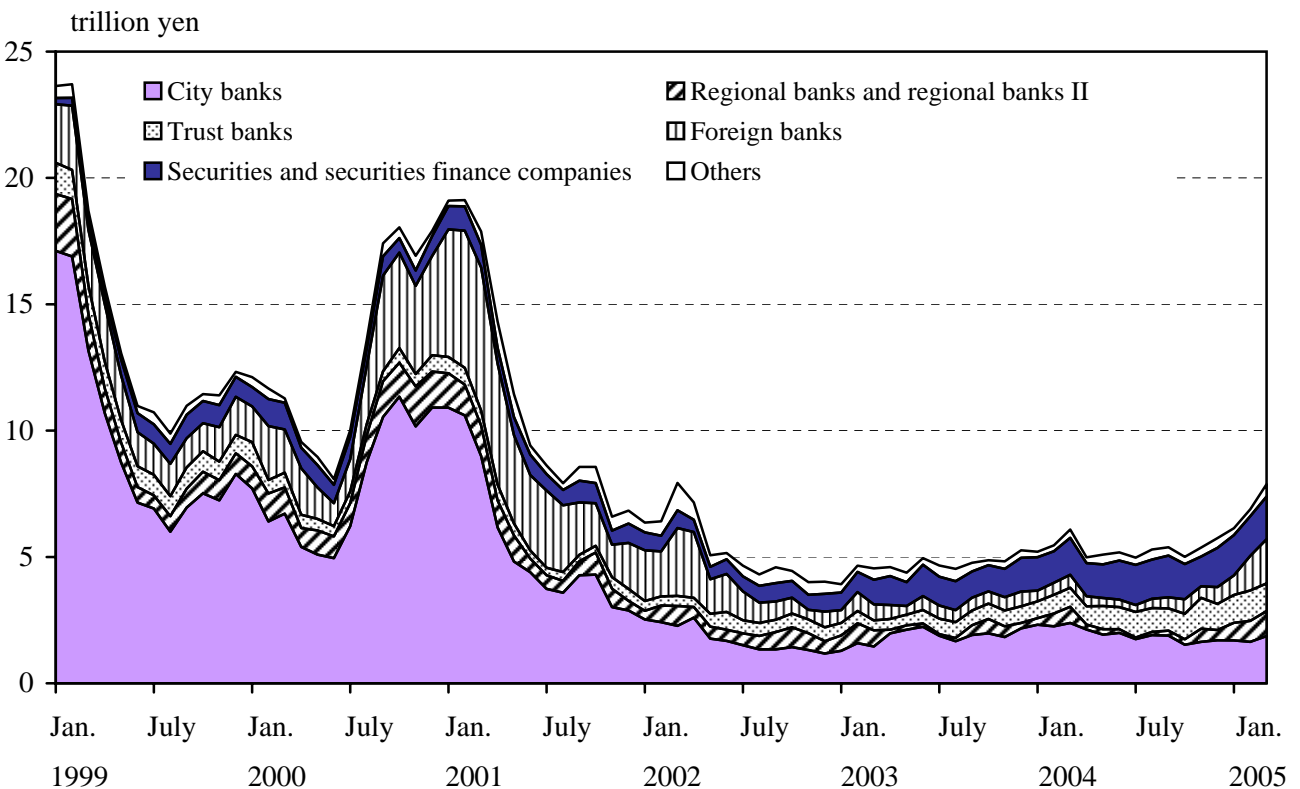
[Chart 9] Amounts Outstanding in the Call Market

(1) Total Outstanding



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

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



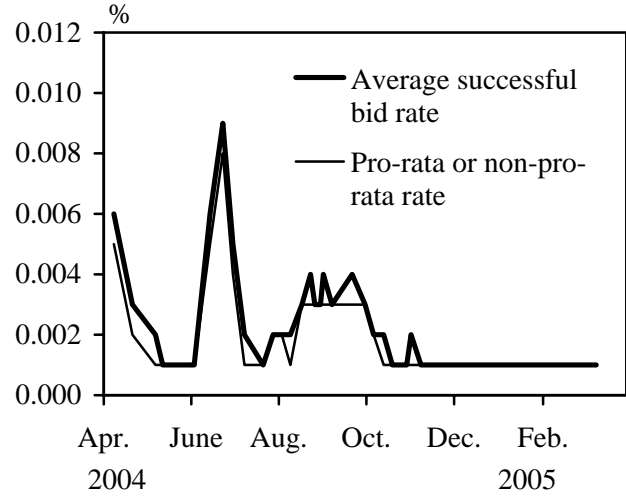
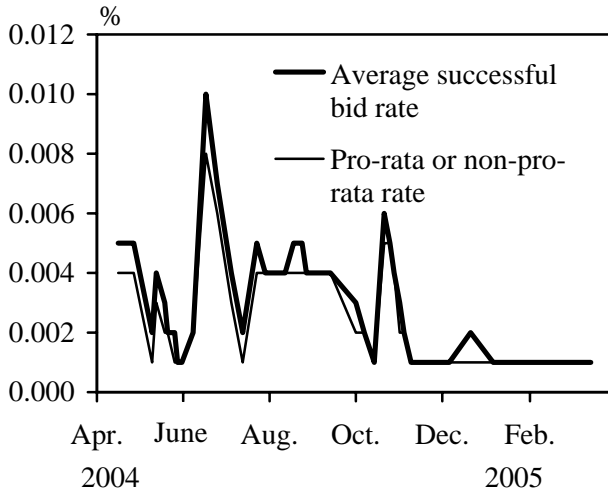
Source: Bank of Japan, "Amounts Outstanding in the Call Market."

[Chart 10] Results of Outright Purchases of Bills

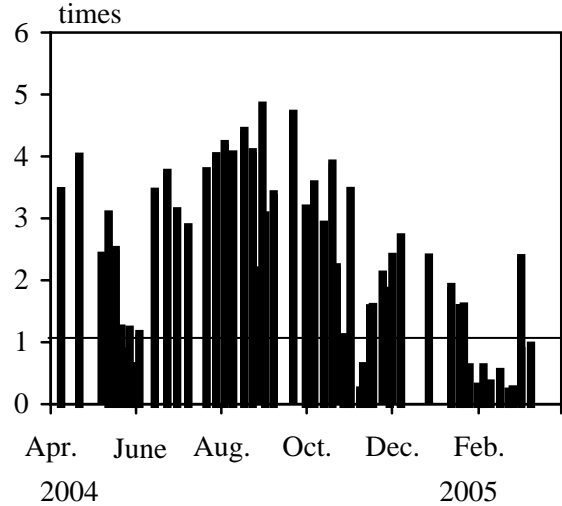
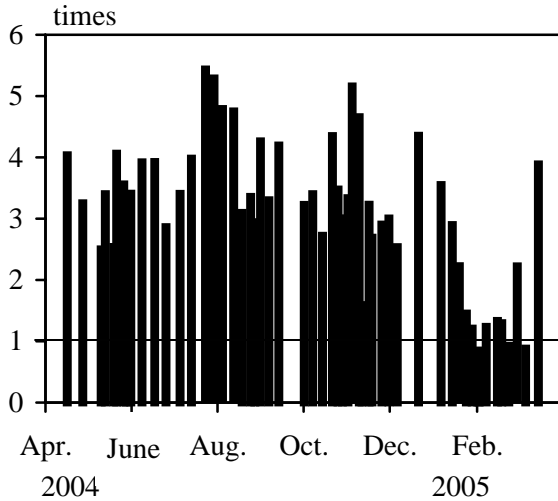
At all offices

At the Head Office

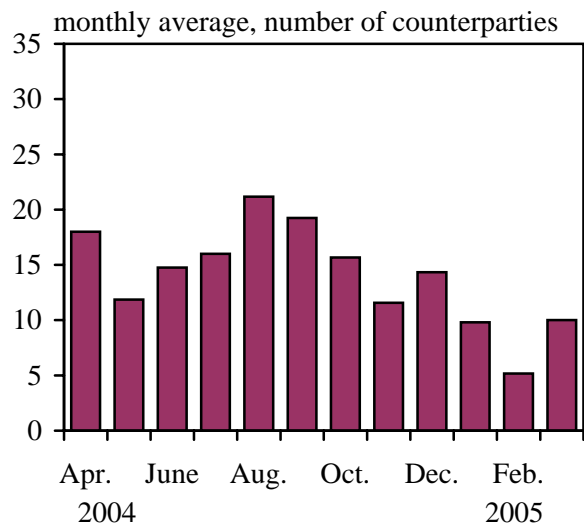
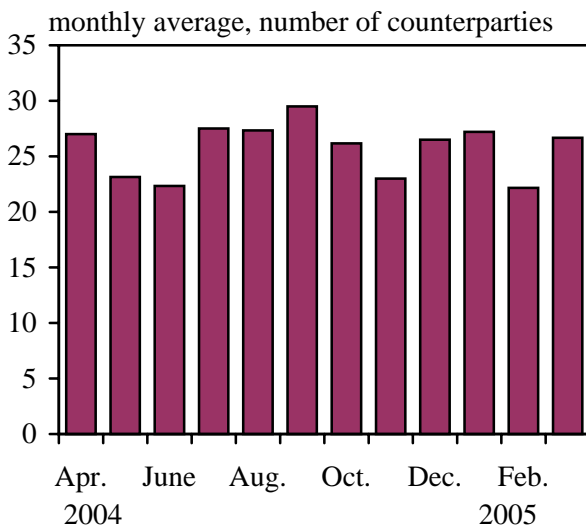
(1) Successful Bid Rate



(2) Bid-Cover Ratio



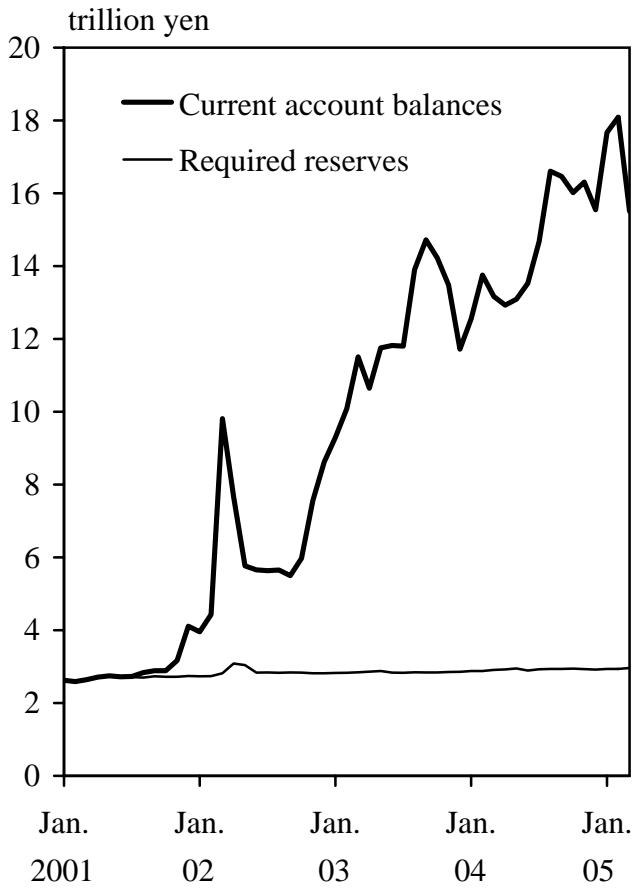
(3) Number of Counterparties Bidding in the Operations



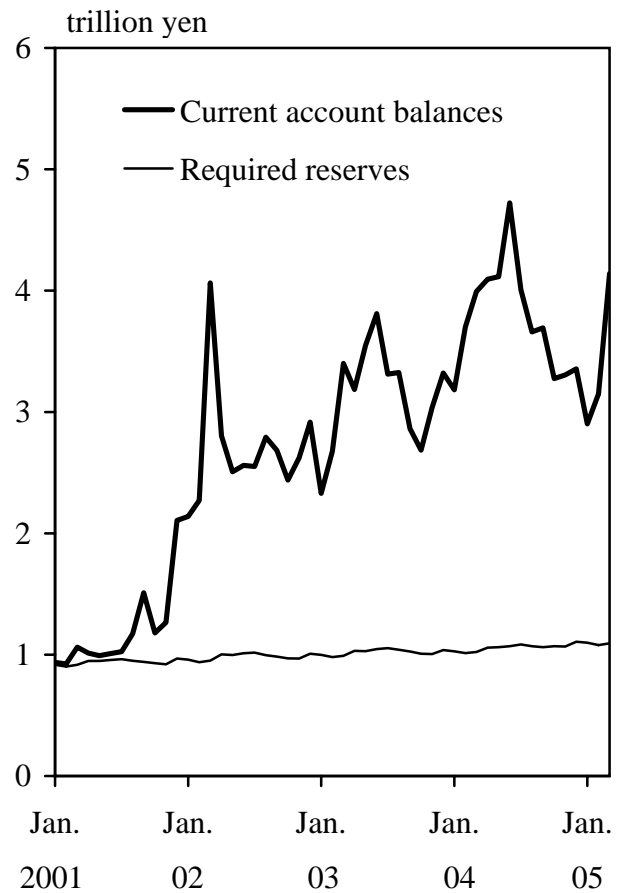
- Notes: 1. Figures exclude outright purchases at all offices offered both on September 28 and March 29, which were offered for the purpose of providing short-term funds for the end of the fiscal year.
2. Operations counterparties are comprised of 137 counterparties in outright purchases of bills at all offices and 40 counterparties in outright purchases of bills at the Head Office (at the point of the revision of the selection for the counterparties in outright purchases of bills in fiscal 2004).

[Chart 11] Current Account Balances by Sector

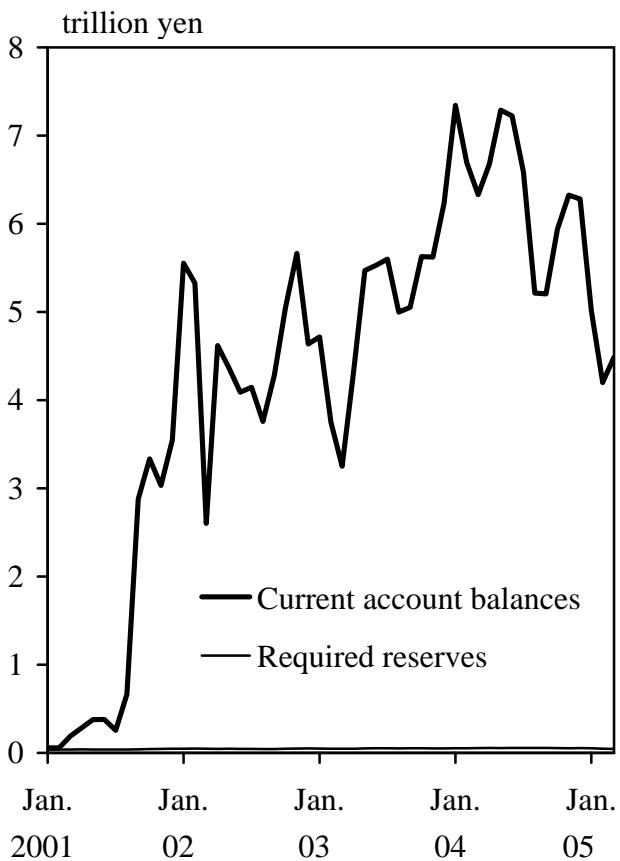
(1) City Banks



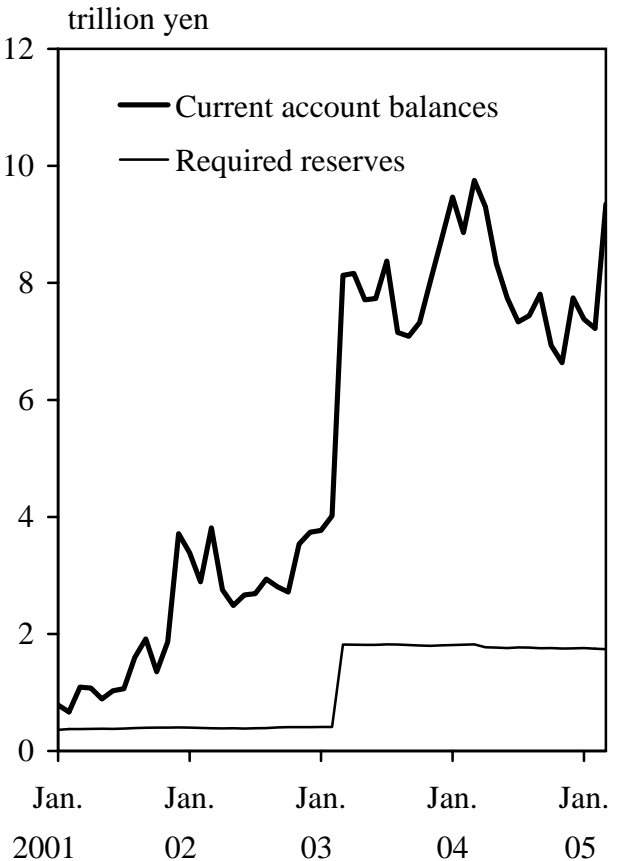
(2) Regional Banks and Regional Banks II



(3) Foreign Banks



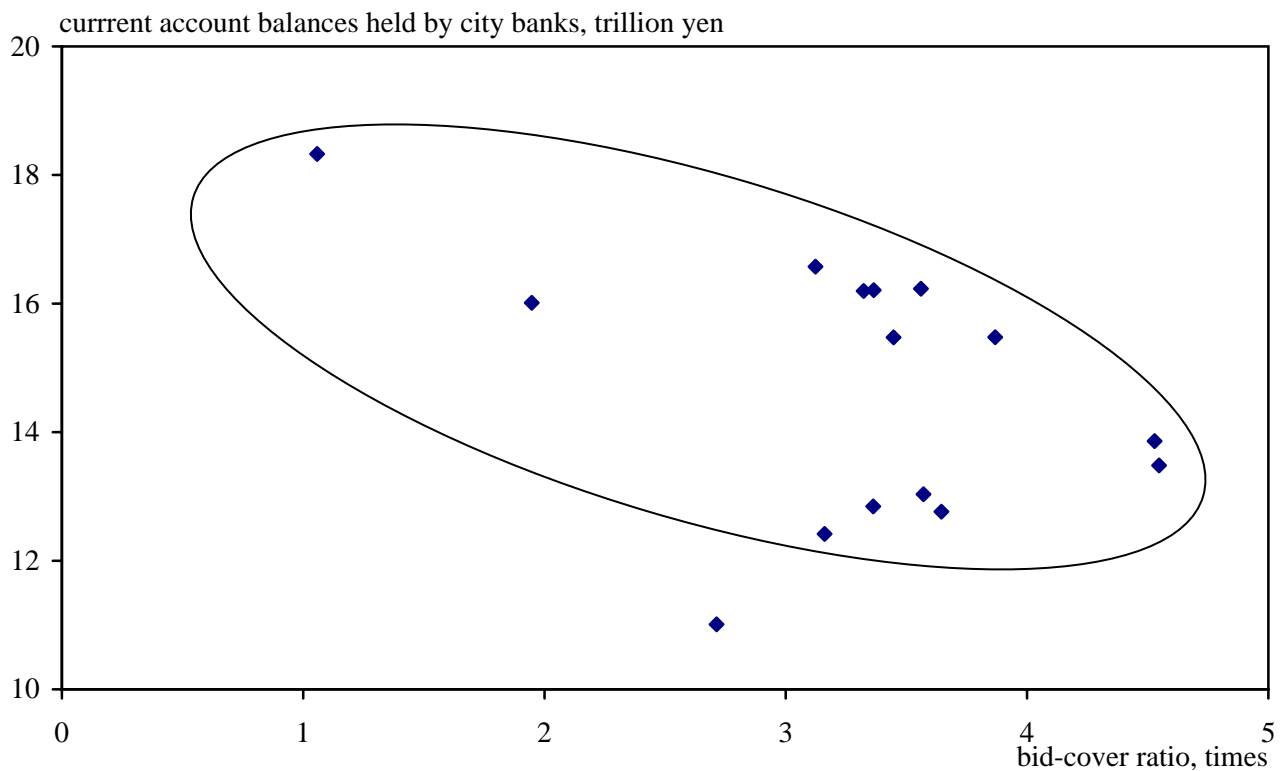
(4) Japan Post and Others



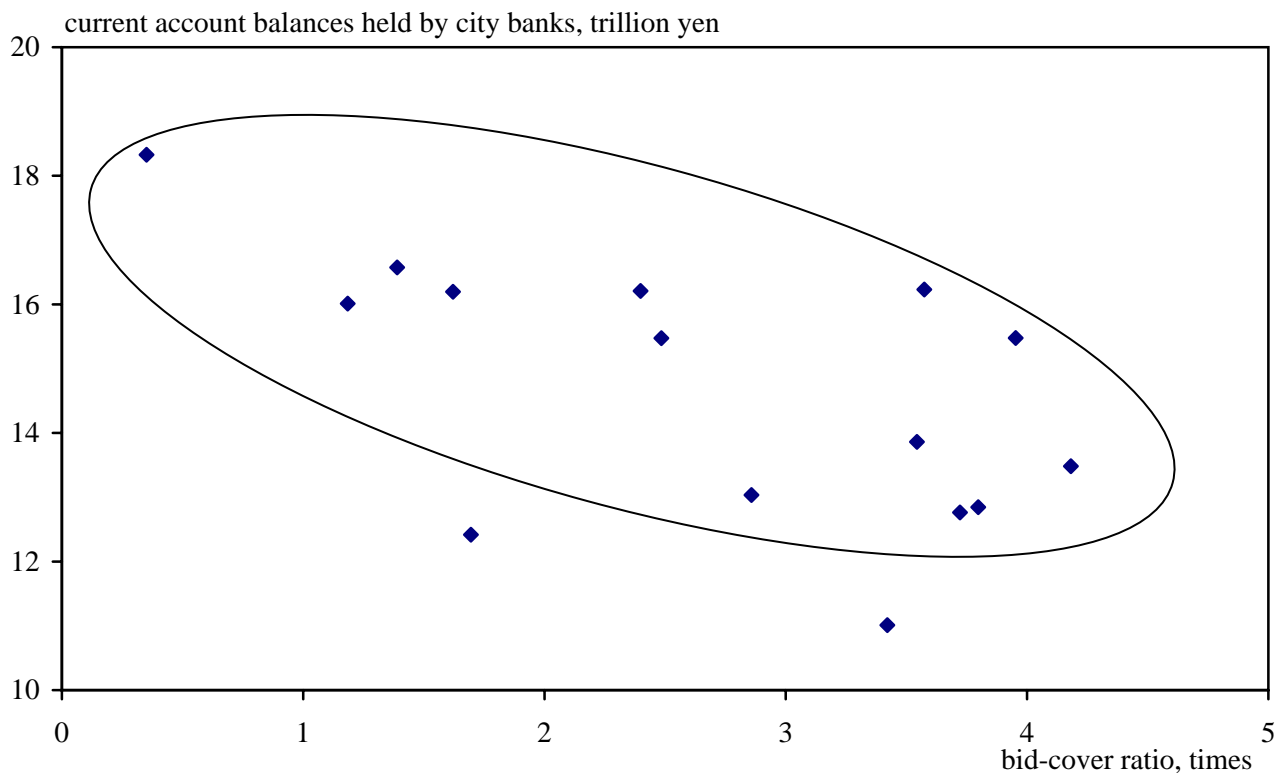
Note: Average amount outstanding in the reserve maintenance period.

[Chart 12] Current Account Balances Held by City Banks and Bid-Cover Ratio of Outright Purchases of Bills

(1) Outright Purchases of Bills at All Offices



(2) Outright Purchases of Bills at the Head Office

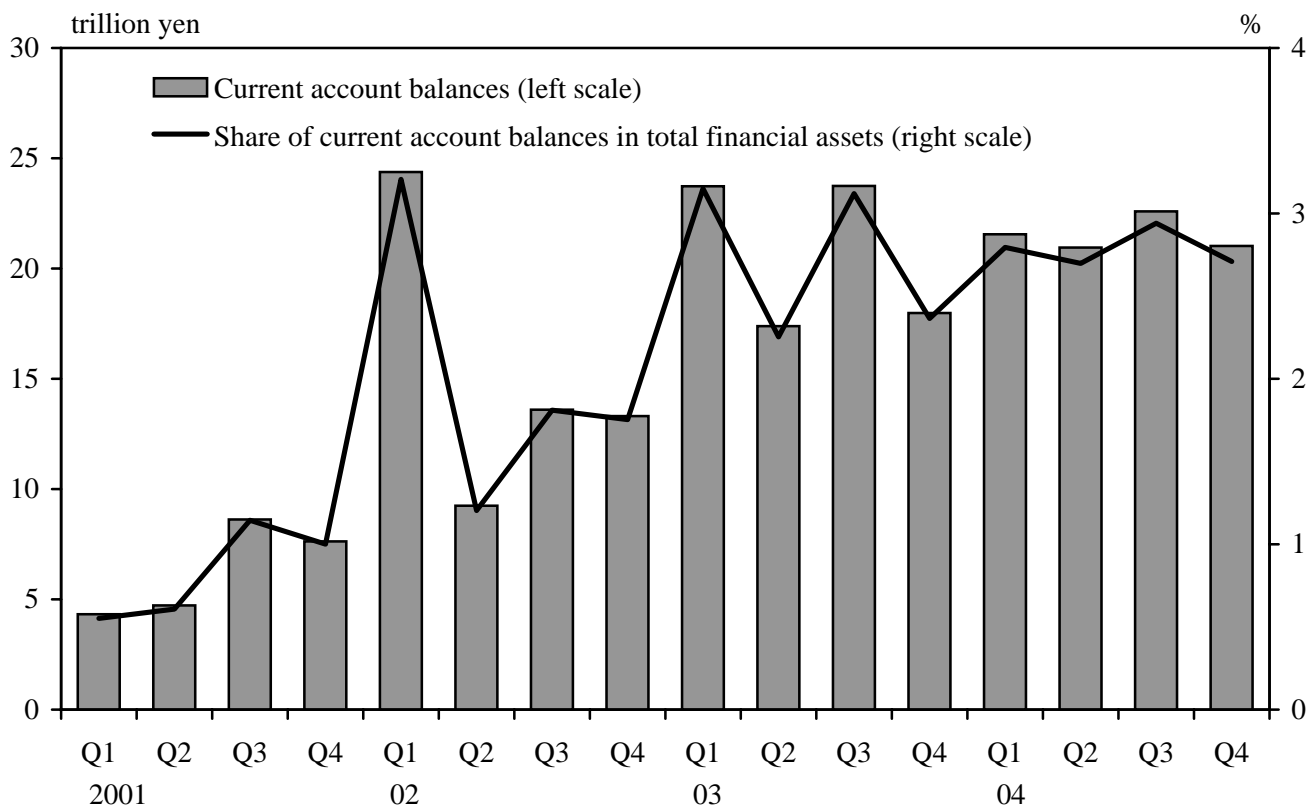


Note: Monthly average since January 2004.

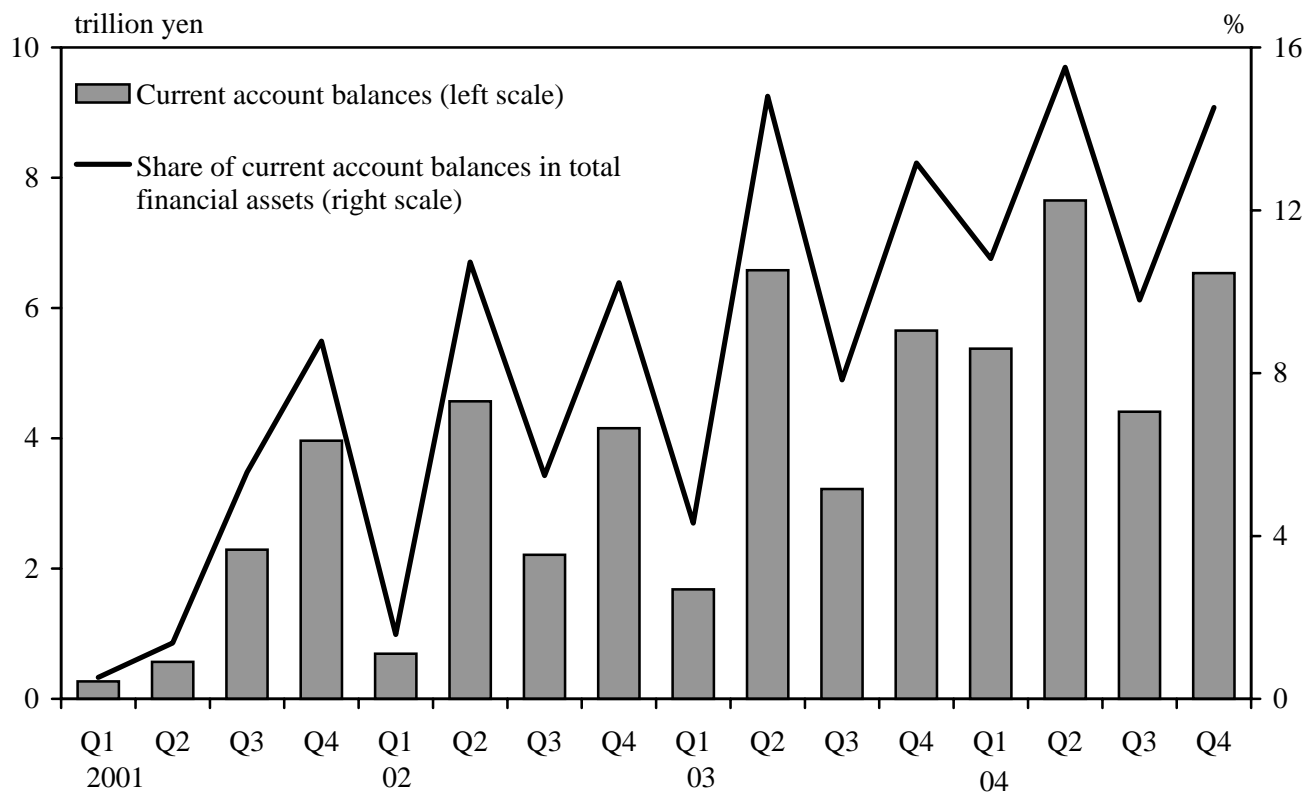
Source: Bank of Japan.

[Chart 13] Share of Current Account Balances in Total Financial Assets

(1) Japanese Private Banks



(2) Foreign Banks in Japan

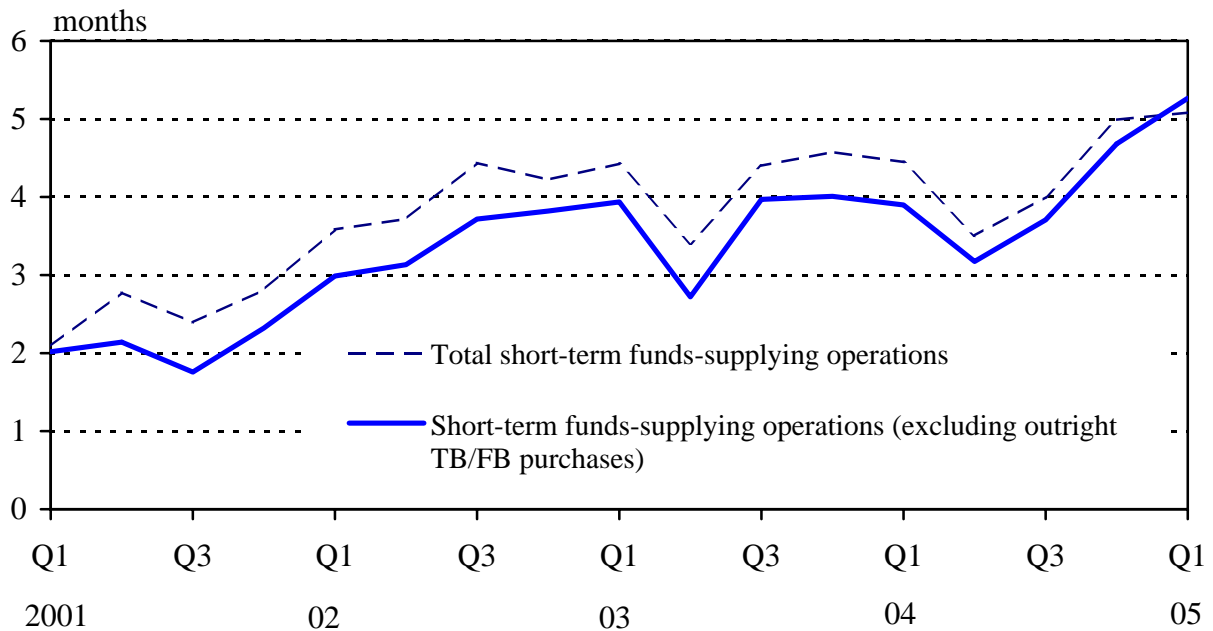


Note: End of period basis.

Source: Bank of Japan, "Flow of Funds Accounts."

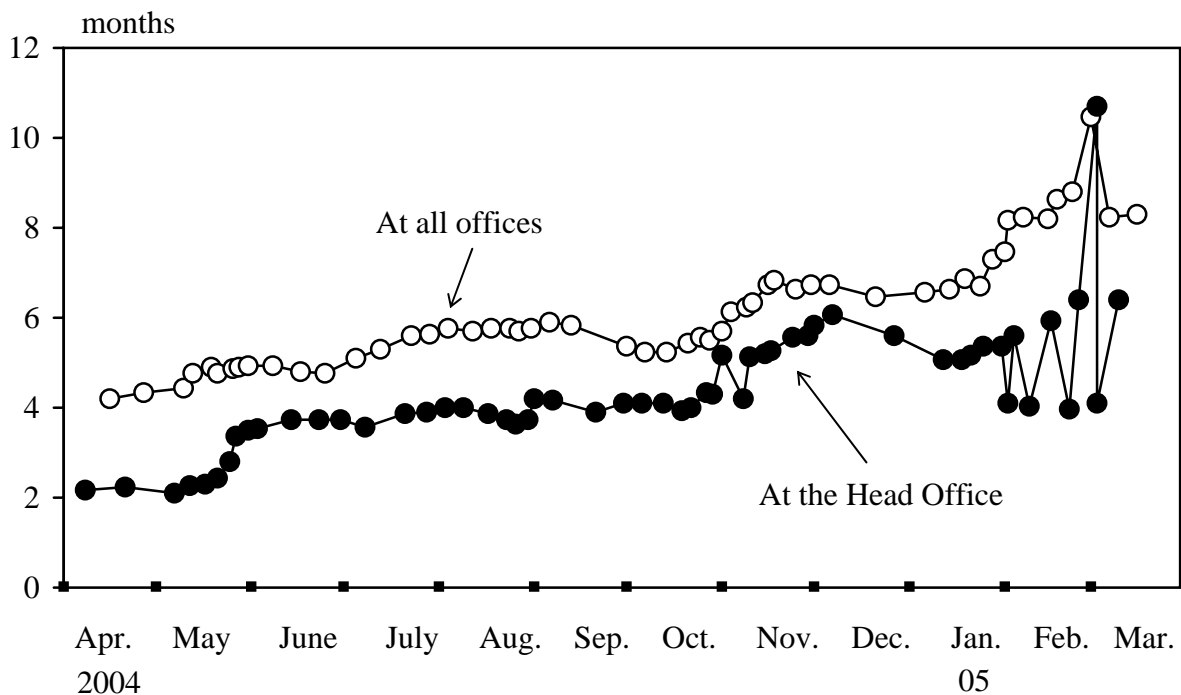
[Chart 14] Maturity of Short-Term Funds-Supplying Operations

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

(2) Bill Purchasing Operations



- Notes: 1. The x-axis shows the dates on which operations were offered.
2. Excludes the outright purchases at all offices offered both on September 28 and March 29, which were offered for the purpose of providing short-term funds for the end of the fiscal year.

[Chart 15] Amounts Outstanding of Market Operations

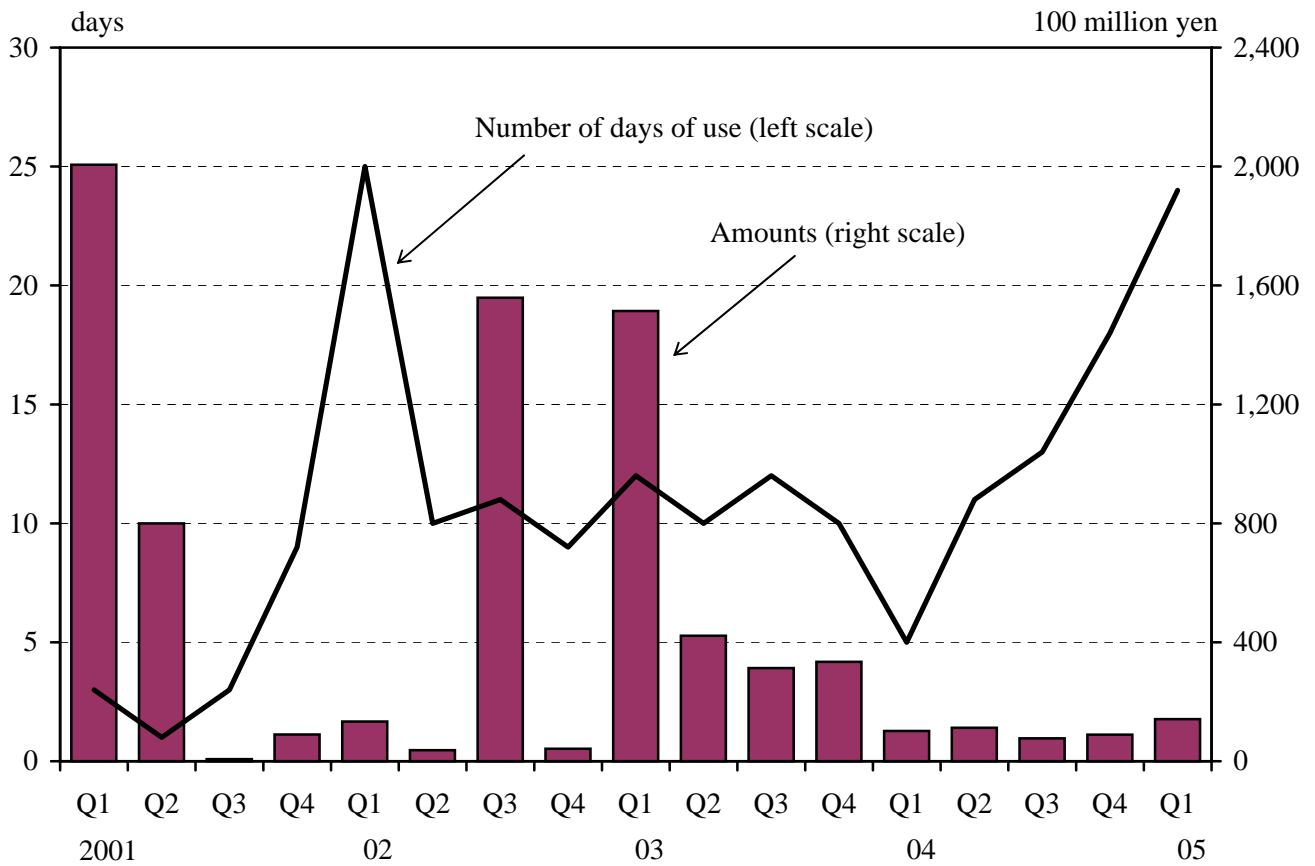
trillion yen, outstanding at end-month

	Mar. 2004	June	Sep.	Dec.	Mar. 2005
Net amounts outstanding of short-term operations	49.0	47.8	52.9	56.3	61.1
Provision of short-term funds	51.6	50.2	52.9	57.4	63.4
Purchases of JGSs with repurchase agreements	2.3	3.4	5.0	2.8	2.7
Outright purchases of bills	27.2	25.5	29.0	36.1	37.6
At the Head Office	9.8	7.4	12.0	14.7	12.9
At all offices	17.4	18.0	17.0	21.4	24.8
Purchases of CP with repurchase agreements	2.7	2.7	2.7	2.7	2.5
Outright purchases of TBs/FBs	19.3	18.5	16.0	15.8	20.5
Outright purchases of ABSs	0.1	0.1	0.1	0.1	0.1
Absorption of short-term funds	2.6	2.4	0.0	1.1	2.3
Outright sales of bills	2.6	2.4	0.0	0.0	1.8
Sales of JGSs with repurchase agreements	0.0	0.0	0.0	0.5	0.5
Outright sales of TBs/FBs	0.0	0.0	0.0	0.6	0.0
JGBs	65.2	65.4	63.6	65.1	65.3

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

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

[Chart 16] Use of the Complementary Lending Facility



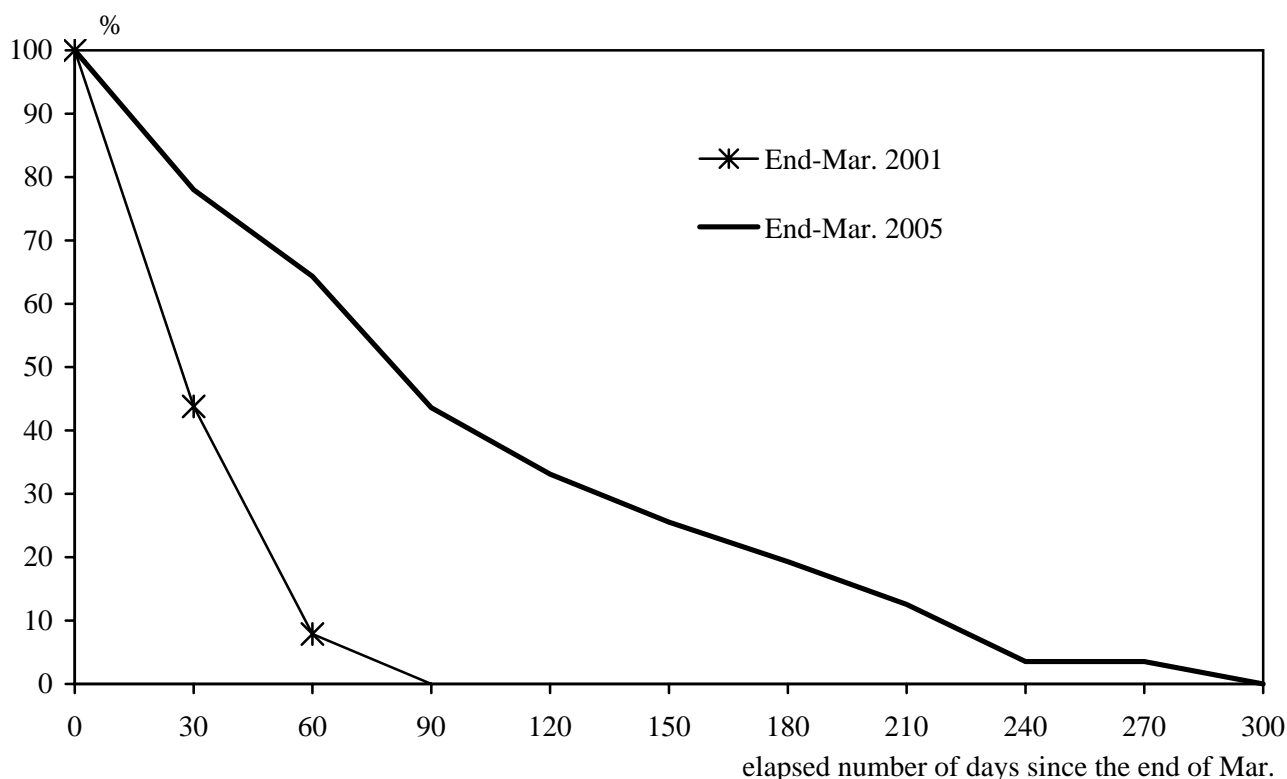
[Chart 17] Bank of Japan's Balance Sheet and Remaining Days of Short-Term Funds-Supplying Operations at Fiscal Year-Ends

(1) Bank of Japan's Balance Sheet (Assets)

	trillion yen		
	(b)-(a)		
	End-Mar. 2001 (a)	End-Mar. 2005 (b)	(b)-(a)
Short-term funds-supplying operations	57.7	63.4	5.7
JGBs	46.2	65.3	19.1
TBs/FBs underwritten by the Bank	4.6	15.6	11.0
Others	6.5	6.0	-0.5
Total	115.1	150.3	35.2

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

(2) Remaining Days of Short-Term Funds-Supplying Operations at Fiscal Year-Ends



Notes: 1. Figures are the proportions of the remaining amounts outstanding of short-term funds-supplying operations on each elapsed date since the fiscal year-end to the total amounts outstanding of short-term funds-supplying operations at the fiscal year-end.

2. "Short-term funds-supplying operations" includes bill purchases, JGS repo transactions (JGS purchases with repurchase agreements, JGS borrowings, and TB/FB purchases with repurchase agreements) and CP purchases with repurchase agreements.