BOJ Reports & Research Papers

May 2011

Money Market Operations in Fiscal 2010

Financial Markets Department
Bank of Japan

Table of Contents

I. Summary

This paper explains the money market operations in fiscal 2010.

During fiscal 2010, as the conduct of monetary policy, the Bank of Japan continued to consistently make contributions as the central bank through the three-pronged approach of (1) pursuing powerful monetary easing, (2) ensuring financial market stability, and (3) providing support to strengthen the foundations for economic growth.

Looking at the money market operations conducted under this approach, the Bank first provided ample funds to pursue powerful monetary easing, thereby ensuring financial market stability. Throughout fiscal 2010, the uncollateralized overnight call rate remained in line with the guideline for money market operations, and current account balances at the Bank followed an uptrend. Given the comprehensive monetary easing policy introduced on October 5, 2010, the Bank changed the target for the uncollateralized overnight call rate from "around 0.1 percent" to "around 0 to 0.1 percent." This resulted in a faster pace of increase in current account balances at the Bank. After the Great East Japan Earthquake occurred on March 11, 2011, the Bank provided, on successive days, an unprecedentedly large amount of funds to forestall instability in the money market. As a result, current account balances at the Bank set a new record high of 42.6 trillion yen on March 24, 2011.

Second, when there was a risk that financial market stability would deteriorate, the Bank made determined efforts to ensure financial market stability by appropriately responding to the situation while utilizing various operation tools. In May 2010, as tensions mounted in European money markets, the Bank acted to forestall instability in Japanese money markets by conducting three same-day funds-supplying operations. In light of the instability in international financial markets and the possible impact on liquidity in the yen market, the Bank reestablished the U.S. dollar funds-supplying operation. Following the Great East Japan Earthquake, to prevent destabilizing developments in the money markets, the Bank offered funds greatly exceeding the demand in the financial markets by conducting twelve same-day funds-supplying operations in total on six consecutive business days, while at the same time actively implementing forward-dated operations. In addition, to cope with the

situation where arbitrage between individual markets did not work well, the Bank resumed purchases of Japanese government bonds (JGBs) and CP with repurchase agreements.

Third, the Bank made efforts to smoothly conduct the operations introduced to pursue powerful monetary easing. These operations include the fixed-rate funds-supplying operation against pooled collateral and purchases of various financial assets such as JGBs, treasury discount bills (T-Bills), CP, corporate bonds, beneficiary interest in index-linked exchange-traded funds (ETFs) and investment equity issued by real estate investment corporations (J-REITs). Following the Great East Japan Earthquake, with a view to preventing any deterioration in business sentiment and any increase in risk aversion in financial markets from adversely affecting economic activity, the Bank increased the amount of asset purchases, mainly of risk assets such as CP and corporate bonds.

This paper first explains developments in financial markets and the conduct of money market operations. It then discusses money market operations and the Bank's balance sheet. Finally, the paper describes developments in money market operations and revisions in operation tools and procedures.

II. Developments in Financial Markets and Conduct of Money Market Operations

Developments in financial markets and the conduct of money market operations in fiscal 2010 are reviewed below for three distinct periods of time.

A. Period through the End of September

The international financial markets were marked by growing uncertainty and greater investor caution as Europe's fiscal problems, beginning with Greece, became increasingly serious. Greece's fiscal problems were aggravated by growing skepticism about the possibility of its fiscal consolidation, and concerns about fiscal soundness spread to other peripheral European countries (Chart 1). The declining price of government bonds in peripheral European countries triggered concerns regarding the business conditions of European financial institutions holding large amounts of such bonds. Beginning in late April, when anxiety over Europe's fiscal problems mounted, U.S. dollar funding costs rose sharply in the dollar funding markets as lenders adopted a more cautious stance on supplying funds and borrowers stepped up their demand for dollars for contingency purposes (Chart 2).

Chart 1: Peripheral European Countries' Yield Spreads Relative to Germany

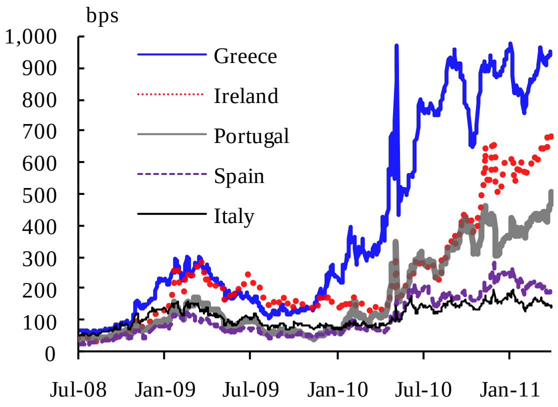
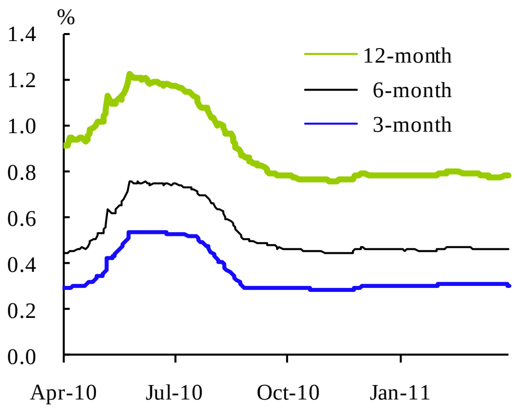


Chart 2: U.S. Dollar LIBOR



The turmoil in international financial markets had a major impact on Japanese financial markets. Directly affected by the risk aversion among foreign investors, Japanese stock prices declined steadily during this period (Chart 3). Toward the end of August, the yen appreciated against the U.S. dollar with growing anticipation of further monetary easing by the Federal Reserve. Against this background, the Nikkei 225 Stock Average fell below 9,000 yen (Chart 4). Given the continued instability in foreign exchange markets, yen selling/dollar purchasing intervention was undertaken on September 15. This marked the first market intervention to be conducted in six and a half years and involved a total amount of 2,124.9 billion yen, the largest intervention amount on record for a single day. Reflecting expectations for additional monetary easing in both Japan and overseas, Japanese long-term interest rates continued to decline through the end of August (Chart 5). Euroyen interest rate futures during this period also reflected the expectation of market participants that interest rates would decline steadily (Chart 6).

Chart 3: Stock Indices

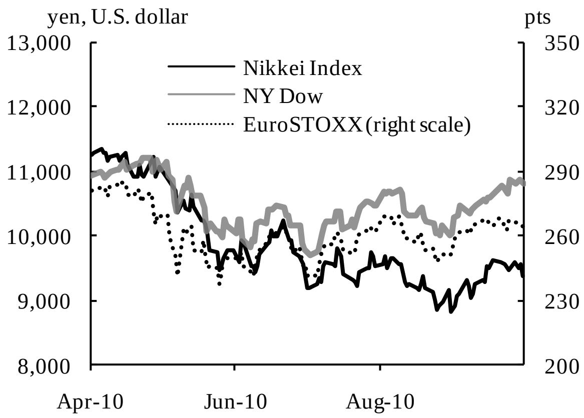


Chart 4: Stock Index and Foreign Exchange Rate

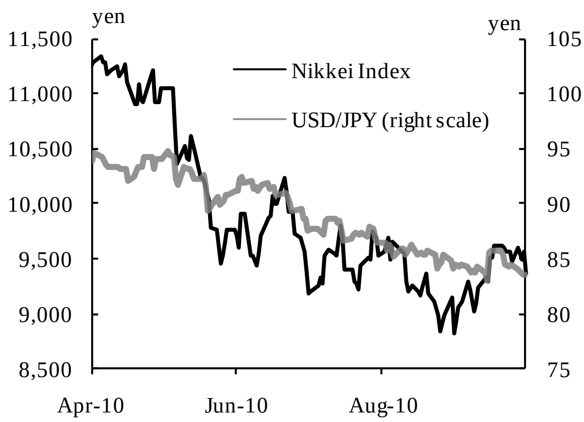


Chart 5: 10-Year Government Bond Yields in Developed Economies

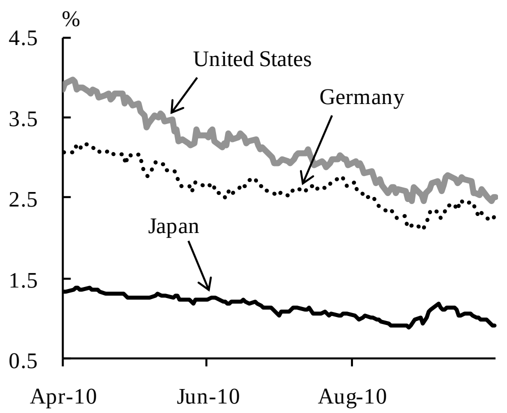
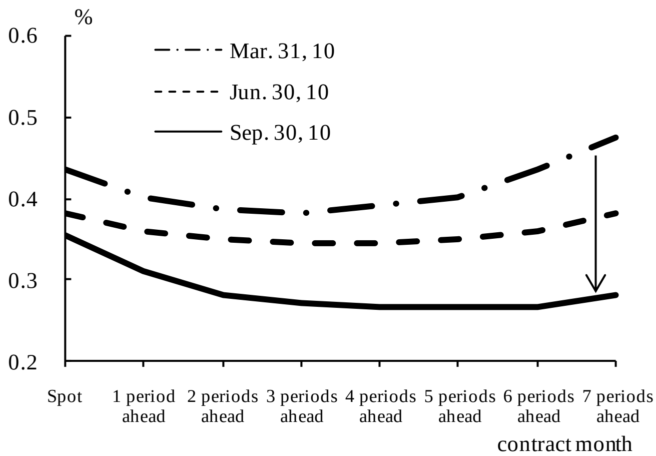


Chart 6: Euroyen Interest Rate Futures



Against this backdrop, the Bank conducted the following money market operations.

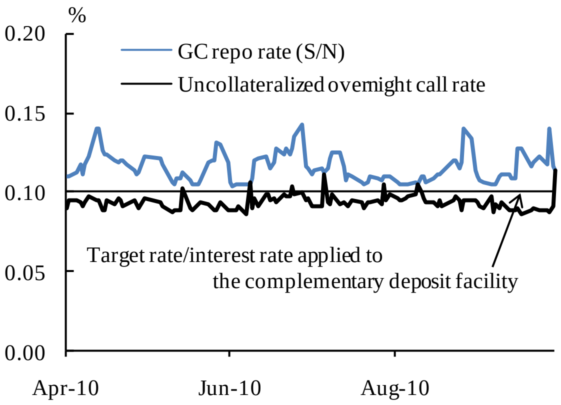
The Bank used the fixed-rate funds-supplying operation against pooled collateral to supply longer-term funds at a low rate of 0.1 percent. For the three-month operation, the Bank continued to conduct twice a week with 800 billion yen offered per operation, and the first auction for the six-month operation was offered on September 1 (800 billion yen). As a result, the amount outstanding of the fixed-rate funds-supplying operation against pooled collateral, which stood at 10.4 trillion yen at the end of March, increased to 20.0 trillion yen at the end of June. Thereafter, the amount outstanding remained flat until once again moving up to 20.8 trillion yen at the end of September. While supplying these longer-term funds, having confirmed the stability of conditions in the money markets, the Bank suspended purchases of CP with repurchase agreements throughout this period and purchases of Japanese government securities (JGSs) with repurchase agreements after July 15. In addition, the Bank did not conduct overnight funds-supplying operations starting at the quarter-end and ending at the next quarter-start (so-called quarter-end/quarter-start operations) at the end of June and end of September.

During this period, the Bank utilized various operation tools to fully ensure stability in the financial markets. Specifically, the following actions were taken. As U.S. dollar liquidity declined and tensions mounted in European money markets, the Bank acted to forestall instability in Japanese money markets by conducting same-day funds-supplying operations on May 7, May 10, and May 21. The amount offered on these days ranged between 1 and 2 trillion yen. As the amount offered greatly exceeded the demand for funds in the financial markets, all of these offers were undersubscribed: the bids fell short of the Bank's offer. In light of the instability in international financial markets and the possible impact on liquidity in the yen market, the Bank reestablished the U.S. dollar funds-supplying operation on May 18. The Bank conducted the 84-day operations once every four weeks. The bidding amount in the first auction after the reestablishment of the operation was 210 million dollars (offered on May 18), with 3 million dollars and 1 million dollars in the second and third auctions (offered on June 15 and July 13), respectively. No bids had been submitted since the fourth auction (offered on August 10), as tight conditions in the dollar funding markets receded.

Given the above-mentioned conduct of money market operations, in the money market the uncollateralized overnight call rate remained in line with the guideline for money market operations ("encourage the uncollateralized overnight call rate to remain at around 0.1 percent") (Chart 7). As the provision of ample funds continued, the uncollateralized overnight call rate remained at around 0.1 percent even at quarter-ends, standing at 0.096 percent at the end of June and at 0.113 percent at the end of September. Meanwhile, the rate did not fall significantly below 0.1 percent during this period as the interest rate applied to the complementary deposit facility continued to function as a floor. General collateral (GC) repo rates (overnight operations with T+2 start [S/N]) generally remained in the range of 0.105-0.130 percent. Although upward pressure on the rates was observed from time to time due to a decline in the amount of GC repo transactions conducted by city banks and increased inventory burden of certain securities companies, notable increases in the rates were avoided. During this period, interest rates on various types of term instruments followed a downward trend. Yields on T-Bills with maturities of up to one year declined further given the Bank's provision of ample funds and expectations for additional monetary easing (Chart 8). Euroyen TIBOR also moved down moderately (Chart 9).

On September 10, the Financial Services Agency ordered a partial suspension of the operations of the Incubator Bank of Japan pursuant to the provisions of the Banking Act, and ordered that its operations and assets be placed under the management of a financial administrator (Deposit Insurance Corporation of Japan) pursuant to the provisions of the Deposit Insurance Act. These developments did not have a notable effect on the money markets, because the Incubator Bank of Japan provided neither deposits for payment and settlement nor ordinary deposits for its customers and did not raise funds in interbank markets.

Chart 7: Money Market Rates



Note: Contract-date basis.

Chart 8: Yields on T-Bills

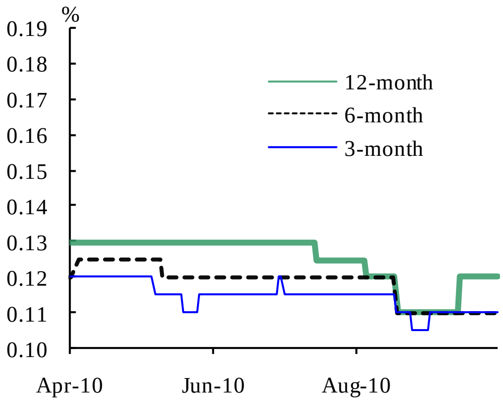
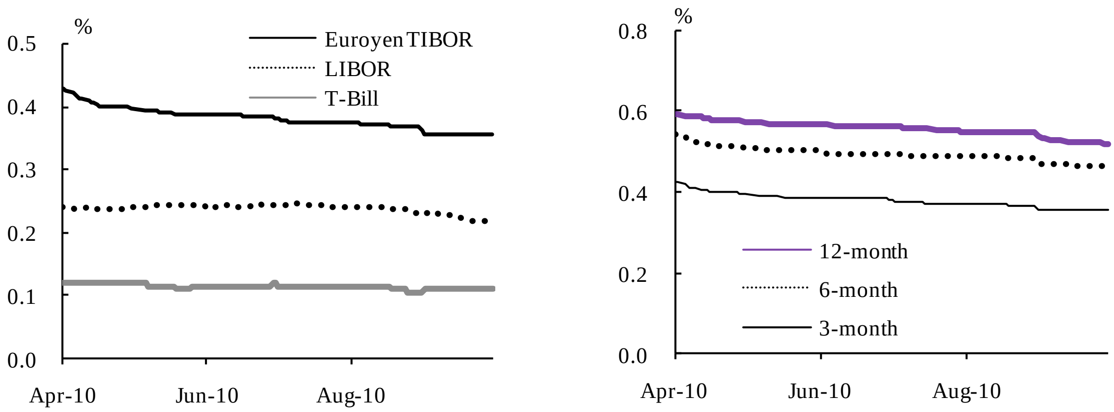


Chart 9: Yen Term Rates

(1) Euroyen TIBOR, LIBOR, Yields on T-Bills (3-Month)

(2) Euroyen TIBOR



B. Period through March 10, 2011

The international financial markets were impacted by the resurgence of Europe's fiscal problems related to Ireland, and the markets grew increasingly concerned over the feasibility of reducing fiscal deficits in related countries. Additionally, revisions in the outlook for the U.S. economy and U.S. monetary policy acted as major sources of change in the international financial markets. Specifically, the flight to quality following the resurgence of Europe's fiscal problems, fears of a slowdown in the U.S. economy, and expectations of further monetary easing by the Federal Reserve combined to push U.S.

long-term interest rates to unprecedentedly low levels around October (Chart 10). Under these conditions, the relation between the U.S. dollar-yen exchange rate and the Japan-U.S. interest rate differential attracted widespread attention (Chart 11). As the yen continued to appreciate against the dollar, the pace of Japan's economic recovery slowed partly due to the slowdown in overseas economies and the effects of the yen's appreciation on business sentiment.

Chart 10: U.S. Treasury Yields

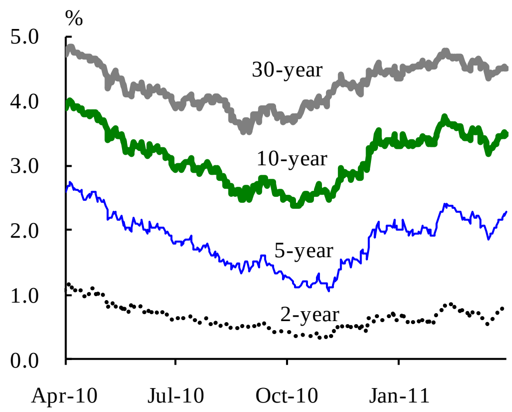
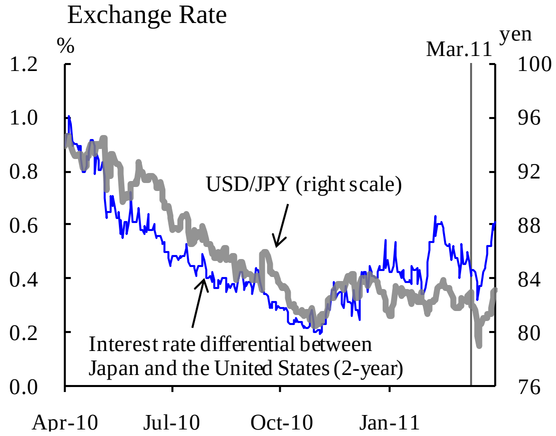


Chart 11: Interest Rate Differential between Japan and the United States and U.S. Dollar/Yen Exchange Rate



In this environment, the Bank judged that the possibility had increased of a delay in the timing for the Japanese economy to overcome deflation and return to the sustainable growth path with price stability. From the perspective of further enhancing monetary easing, the Bank decided to implement a comprehensive monetary easing policy at the Monetary Policy Meeting (MPM) held on October 4 and 5. The comprehensive monetary easing policy comprises the following three measures.

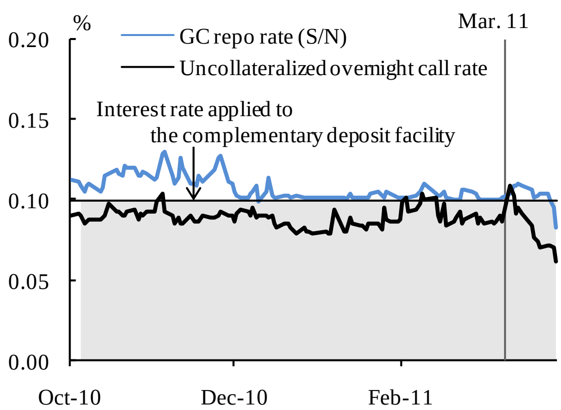
As the first measure, the Bank's target for the uncollateralized overnight call rate was changed from "around 0.1 percent" to "around 0 to 0.1 percent," more explicitly indicating that the Bank was pursuing a virtually zero interest rate policy. In the future, if further ample liquidity is provided through the implementation of the Asset Purchase Program (discussed later), there might be days when the uncollateralized overnight call rate falls considerably below 0.1 percent. It was determined that to achieve the goals of the comprehensive monetary easing policy, it would be effective for the Bank to clearly present its stance that it would allow such deviations in the overnight rate. On the other hand, the decline in the overnight rate to an excessive degree can be counterproductive. This is because the lower returns of financial institutions and investors can weaken the incentive to conduct transactions in the markets, which in turn would impair the financial intermediation function and have a negative impact on the effectiveness of monetary easing. For this reason, while lowering the target level for the overnight call rate to "around 0 to 0.1 percent," the interest rate applied to the complementary deposit facility was maintained at 0.1 percent. This combination of short-term interest rate target levels and interest rates on central banks' current accounts has been used in various countries. For example, in the United States the Federal Reserve has adopted a combination of the target range at 0 to 0.25 percent and 0.25 percent of the interest rate paid on the current account balances (required reserves plus excess reserves).

As the second measure, the Bank clearly stated that it would maintain the virtually zero interest rate policy until it judged that price stability was in sight. The decision was also made to clearly identify the "understanding of medium- to long-term price stability" as the basis for that judgment. At the same time, the policy would be continued on condition that no problem would be indentified in examining risk factors that could threaten economic and price stability from a long-term perspective, including the accumulation of financial imbalances.

The third measure is to establish a program for carrying out asset purchases. Specifically, to encourage a decline in longer-term interest rates and various risk premiums, as a temporary measure, the Bank established a program on its balance sheet to purchase various assets such as JGBs, T-Bills, CP, corporate bonds, ETFs, and J-REITs. The sum of these assets to be purchased was set at about 5 trillion yen. The total size of the program, including the fixed-rate funds-supplying operation against pooled collateral, was set at about 35 trillion yen.

The following developments were observed in the financial markets after the introduction of the comprehensive monetary easing policy. In the money market, the uncollateralized overnight call rate remained in line with the guideline for money market operations ("encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent") (Chart 12). Reflecting the market's growing sense of the availability of ample funds, the rate weakened and slipped to the 0.07 percent level on certain days. Moreover, the rate did not come under pressure at the end of the year and remained at 0.079 percent at the end of December. The GC repo rate (S/N) was occasionally pushed up to around 0.130 percent between early and mid-November, when city banks sold JGBs, resulting in a higher inventory burden for certain securities companies. However, beginning in late November, the upward pressure gradually subsided as borrowers shifted to raising funds through term instruments, for example, the Bank's money market operations. Subsequently, during December and thereafter, the GC repo rate generally stayed within the range of 0.100-0.110 percent. Affected by movements in long-term interest rates, the yield on T-Bills moved upward, particularly for longer-term bills (Chart 13). Euroyen TIBOR moved slightly lower in early October and remained flat thereafter (Chart 14). Toward February, CP issuance rates continued to decrease moderately, while yield spreads between corporate bonds and JGBs grew smaller, particularly among issues with low ratings (charts 15 and 16). The price of J-REITs rose sharply, and the transaction volume increased (charts 17 and 18).

Chart 12: Money Market Rates



Notes: 1. Contract-date base.
2. Shaded area indicates that the Bank has set the target for the uncollateralized overnight call rate at around 0 to 0.1 percent.

Chart 13: Yields on T-Bills

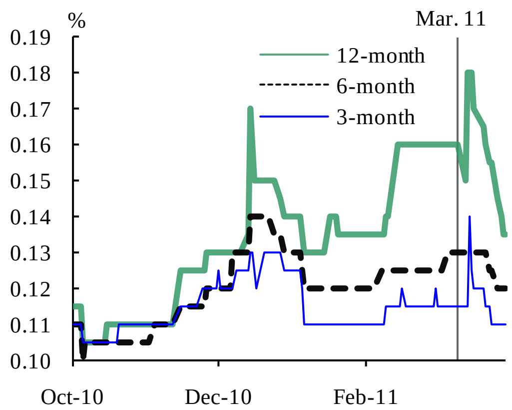
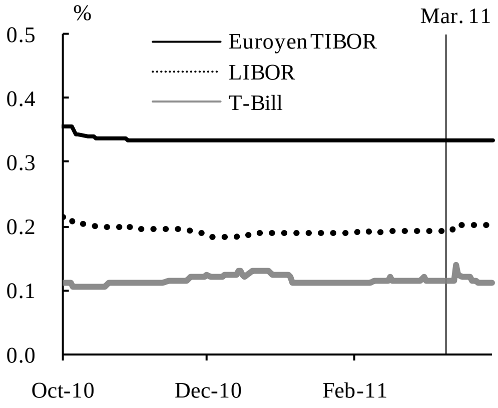


Chart 14: Yen Term Rates

(1) Euroyen TIBOR, LIBOR,
Yields on T-Bills (3-Month)



(2) Euroyen TIBOR

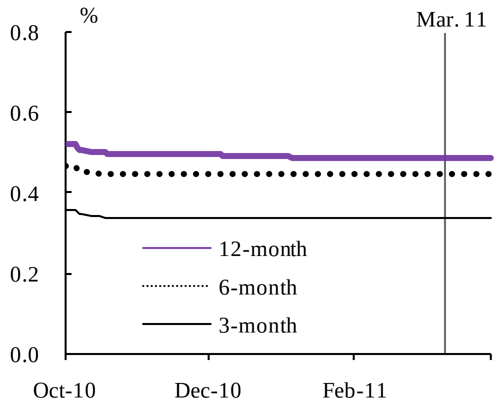
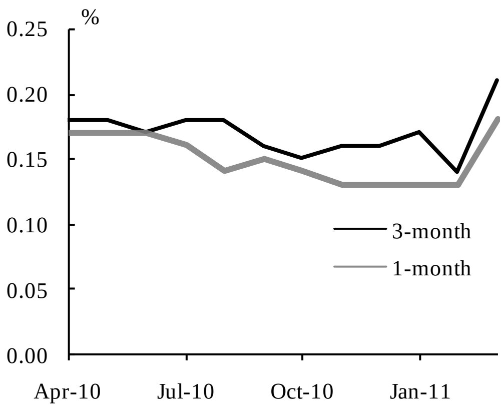
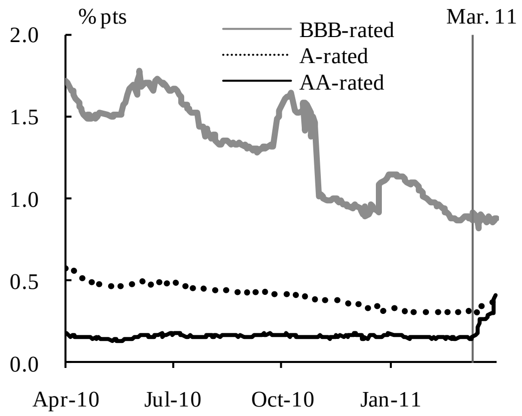


Chart 15: CP Issuance Rates



Note: 1. Those of corporate sector.
2. On a monthly basis.

Chart 16: Yield Spreads between Corporate Bonds and JGBs



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

Chart 17: Tokyo Stock Exchange REIT Index

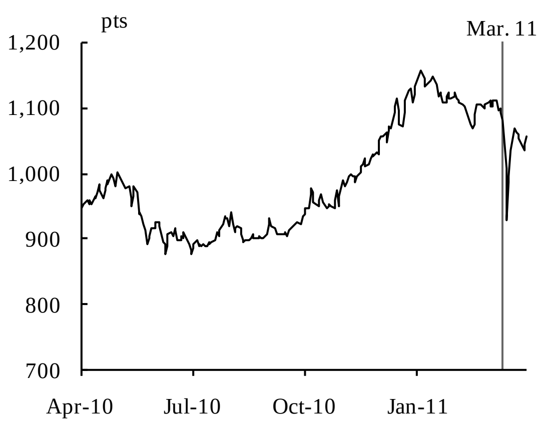
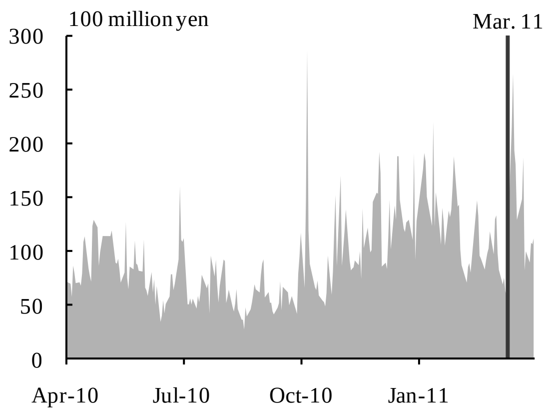


Chart 18: Transaction Volume of J-REITs



Japanese long-term interest rates declined temporarily following the decision on the comprehensive monetary easing policy, but began to climb in November as long-term rates started to rise throughout the world, beginning in the United States, Germany, the United Kingdom, and other European countries, and spreading from there to the emerging economies (Chart 19). This global rise in long-term interest rates was largely induced by the rise in U.S. long-term rates, which reflected diminished concerns for a slowdown in the U.S. economy and receding expectations for additional monetary easing, amid the globalization of financial markets. At this point, stock prices began to climb in various countries (Chart 20). In this environment, the rise in Japanese long-term interest rates remained relatively small. As seen from a review of Euroyen interest rate futures, while the expectations of market participants for rising interest rates were reflected in the rate, the upward movement remained minor (Chart 21).

Chart 19: 10-Year Government Bond Yields in Developed Economies

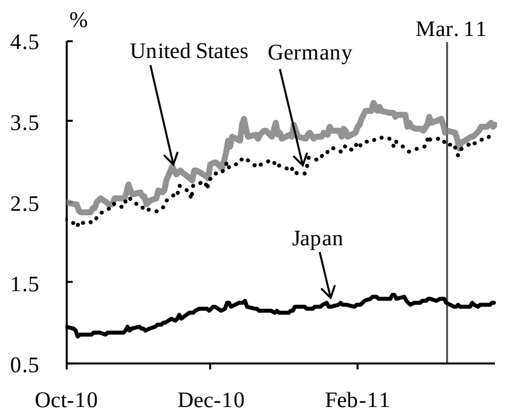


Chart 20: Stock Indices

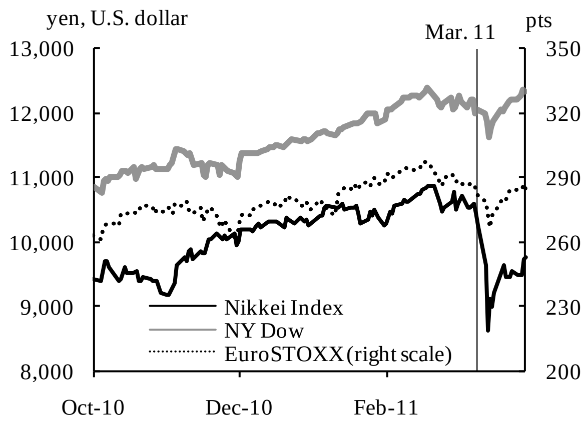
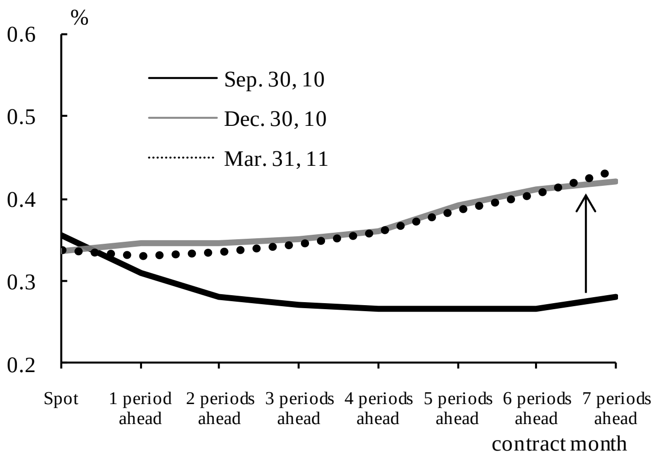


Chart 21: Euroyen Interest Rate Futures



During this period, in light of the conditions in the international financial markets and their possible impact on the liquidity in the yen markets, the Bank continued to conduct the 84-day U.S. dollar funds-supplying operation once every four weeks. However, bidding on these offers remained at zero.

C. Period from March 11, 2011 through the Fiscal Year-End

At around 2:46 p.m. on Friday, March 11, the Pacific Coast of the Tohoku area was hit by a magnitude 9.0 earthquake, the largest earthquake ever recorded in Japan. Combined with the massive tsunami that followed, the Great East Japan Earthquake caused destruction on an enormous scale over a broad area. The Bank of Japan Financial Network System (BOJ-NET) and the payment and settlement systems of private financial institutions continued to operate properly, and the settlement of funds and securities was completed as scheduled. However, some financial institutions, mainly on the Pacific coast of the Tohoku region, faced the destruction of branches and disruption of automated teller machines. Immediately after the earthquake, the Bank established a disaster management team headed by the Governor to assess the impact of the earthquake on the financial markets as well as on financial institutions' business operations and to respond as necessary. Following this, the Bank stated clearly its intent to ensure stability in the financial markets and secure smooth settlement of funds, including the provision of liquidity.

During the weekend of Saturday, March 12, and Sunday, March 13, a significant number of financial institutions conducted business operations to allow for the smooth withdrawal of deposits. While ensuring its own business continuity arrangements, the Bank responded to the weekend cash requirements of financial institutions through its Aomori, Sendai, and Fukushima branches and its Morioka local office, as well as at its Head Office. During the two-day period of March 12 and 13, the Bank supplied the quake-stricken areas with a total of 55 billion yen in cash.

When the financial markets opened on Monday, March 14, there was a very strong sense of uncertainty caused by the inability to fully gauge the effects of the disaster. To prepare for unforeseen outflows of funds, market participants sought to secure large amounts of funds.

As a result, beginning in the morning session, lenders in the money market held back their funds provisions, and it became extremely difficult to undertake transactions. In the stock and bond markets, stock prices fell and long-term interest rates declined due to investors' risk aversion affected by a growing sense of uncertainty. In the CP and corporate bond markets, liquidity declined as the execution of transactions became increasingly difficult. This created upward pressure on the CP issuance rate and the yield spreads between corporate bonds and JGBs.

Faced with these developments, the Bank determined that it was necessary to act quickly to eliminate financial concerns and to maintain stability in the financial markets, and conducted three same-day funds-supplying operations at 9:01 a.m., 10:30 a.m., and 12:50 p.m., totaling 15 trillion yen (Chart 22). By offering an amount significantly in excess of the funding demands in the financial markets, the Bank sought to keep the average accepted bid rate in the variable-rate auctions from rising significantly above 0.10 percent. In forward-dated operations, the Bank resumed purchases of JGSs with repurchase agreements, that had been suspended after July 15, and implemented funds-supplying operations totaling 6.8 trillion yen. As a result, on March 14 the Bank conducted funds-supplying operations (same-day plus forward-dated operations) totaling 21.8 trillion yen, the largest single-day amount on record.

Chart 22: Money Market Operations Conducted by the Bank (March 14, 2011)

100 million yen, %

	Date of exercise	Date of repurchase or repayment	Amounts offered	Amounts of competitive bid	Average successful bid rate
Variable-rate Funds-supplying operation against pooled collateral at All Offices	Mar. 14	Mar. 15	70,000	51,460	0.101
Variable-rate Funds-supplying operation against pooled collateral at All Offices	Mar. 14	Mar. 15	50,000	25,400	0.100
Variable-rate Funds-supplying operation against pooled collateral at All Offices	Mar. 14	Mar. 15	30,000	12,402	0.100
Purchases of JGSs with repurchase agreements	Mar. 16	Mar. 17	30,000	23,546	0.103
Variable-rate Funds-supplying operation against pooled collateral at All Offices	Mar. 15	Mar. 22	30,000	49,733	0.101
Fixed-rate Funds-supplying operation against pooled collateral	Mar. 16	Jun. 10	8,000	35,480	0.100

Note: Operations in shaded area are same-day operations.

At the MPM held on March 14, the Bank decided to further enhance monetary easing. Specifically, with a view to preventing any deterioration in business sentiment and any increase in risk aversion in financial markets from adversely affecting economic activity, the amount of the Asset Purchase Program, mainly of the purchases of risk assets, was increased by about 5 trillion yen to about 40 trillion yen in total (Chart 23). The amount outstanding of this program is scheduled to reach about 40 trillion yen by the end of June 2012. The decision was also made to maintain the current guideline for money market operations ("encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent") for the intermeeting period, and under this guideline, to provide ample funds sufficient to meet demand in financial markets and to do its utmost to ensure financial market stability.

Chart 23: Increase in Maximum Amounts Outstanding of the Asset Purchase Program

	Before (a)	After (b)	Increase (b) - (a)
Fixed-rate funds-supplying operation against pooled collateral	30 trillion yen	30 trillion yen	--
JGBs	1.5 trillion yen	2.0 trillion yen	0.5 trillion yen
T-Bills	2.0 trillion yen	3.0 trillion yen	1.0 trillion yen
CP	0.5 trillion yen	2.0 trillion yen	1.5 trillion yen
Corporate bonds	0.5 trillion yen	2.0 trillion yen	1.5 trillion yen
ETFs	0.45 trillion yen	0.9 trillion yen	0.45 trillion yen
J-REITs	0.05 trillion yen	0.1 trillion yen	0.05 trillion yen
Total	35 trillion yen	40 trillion yen	5 trillion yen

Note: Figures for maximum amounts outstanding are approximate amounts.

Unstable conditions continued in the financial markets as the end of the fiscal year approached. The Nikkei 225 Stock Average declined by 633 yen on Monday, March 14, and dropped by 1,015 yen on Tuesday, March 15, due to growing concerns that the effects of the accident at the Fukushima Daiichi Nuclear Power Plant following the earthquake would extend further. Due to the flight to liquidity in the markets for JGBs as a safe asset, long-term interest rates declined, led by interest rates for 10-year JGBs with relatively high market liquidity. In the CP issuance market, the issuance rate climbed as underwriting decreased. In the foreign exchange market, the yen initially depreciated against the U.S. dollar immediately after the earthquake, but was quickly bought back and reached the range of 76.0-76.5 yen in the early morning of Thursday, March 17, registering an appreciation of more than 5 yen compared to the preceding week. On the morning of Friday, March 18, a telephone conference of the Group of Seven (G7) finance ministers and central bank governors was held, and an agreement was reached that in response to the post-earthquake movements in the exchange rate of the yen, the authorities of the United States, the United Kingdom, and Canada and the European Central Bank (ECB) would join with Japan in concerted intervention in exchange markets (Chart 24). In accordance with this agreement, market intervention was undertaken on the same day. Reacting to the first joint intervention in ten and a half years, the dollar/yen exchange rate was pushed back to around 81 yen. Toward the end of the fiscal year, the exchange rate generally remained in the range of 81-83 yen per dollar.

Chart 24: Statement of G7 Finance Ministers and Central Bank Governors (March 18, 2011)

We, the G7 Finance Ministers and central bank governors, discussed the recent dramatic events in Japan and were briefed by our Japanese colleagues on the current situation and the economic and financial response put in place by the authorities.

We express our solidarity with the Japanese people in these difficult times, our readiness to provide any needed cooperation and our confidence in the resilience of the Japanese economy and financial sector.

In response to recent movements in the exchange rate of the yen associated with the tragic events in Japan, and at the request of the Japanese authorities, the authorities of the United States, the United Kingdom, Canada, and the European Central Bank will join with Japan, on March 18, 2011, in concerted intervention in exchange markets. As we have long stated, excess volatility and disorderly movements in exchange rates have adverse implications for economic and financial stability. We will monitor exchange markets closely and will cooperate as appropriate.

In this environment, to prevent destabilizing developments in the money markets, the Bank conducted same-day funds-supplying operations on six consecutive business days between Monday, March 14, and Tuesday, March 22. Forward-dated operations were also actively implemented in an effort to provide ample funds (Chart 25). The Bank took various measures to cope with the situation where arbitrage between individual markets did not work well. Specifically, in addition to the above-mentioned purchases of JGSs with repurchase agreements, on Tuesday, March 22, the Bank resumed CP purchases with repurchase agreements for the first time since offers were suspended after March 25, 2010. On Thursday, March 24, the Bank conducted the quarter-end/quarter-start operation that began on March 31 and ended on April 1 to foster a greater sense of security for fiscal year-end funding. On Friday, March 25, the Bank conducted outright purchases of CP through the Asset Purchase Program. The amount of purchases per operation was increased from the previous amount of 100 billion yen to 300 billion yen. Also on Friday, March 25, to fully ensure market stability, the Bank announced that it would conduct auctions for the U.S. dollar funds-supplying operation for the term of one week once a week, in addition to 84 days once every four weeks. The first one-week auction was offered on Tuesday, March 29.

As a result of these measures, money market transaction volumes gradually began to recover, and short-term interest rates were generally stabilized at low levels. The uncollateralized overnight call rate remained in line with the guideline for money market operations ("encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent"). As market participants utilized the Bank's operations to frontload their procurement of term instruments, the overnight call rate reached 0.077 percent on Wednesday, March 23, the lowest level for the first time in four years and eight months since July 13, 2006 (0.058 percent). At the end of March, the uncollateralized overnight call rate declined further to 0.062 percent, reaching the 0.06 percent level. The GC repo rate (S/N) generally remained in the range of 0.100-0.110 percent. Finally, the CP repo rate fell to its pre-earthquake level toward the fiscal year-end.

Chart 25: Funds-Supplying Operations from March 14 through March 31, 2011

100 million yen

	Same-day		Forward-date	
	Amounts offered	Amounts of successful bid	Amounts offered	Amounts of successful bid
Mar. 14 (Mon.)	150,000	89,262	68,000	61,565
Mar. 15 (Tue.)	80,000	53,808	120,000	95,737
Mar. 16 (Wed.)	50,000	27,624	88,000	59,810
Mar. 17 (Thurs.)	60,000	16,220	96,600	86,760
Mar. 18 (Fri.)	40,000	19,770	71,500	67,077
Mar. 22 (Tue.)	20,000	1,300	81,000	61,332
Mar. 23 (Wed.)	--	--	80,900	30,202
Mar. 24 (Thurs.)	--	--	60,000	28,977
Mar. 25 (Fri.)	--	--	43,000	24,941
Mar. 28 (Mon.)	--	--	44,000	36,157
Mar. 29 (Tue.)	--	--	30,000	2,734
Mar. 30 (Wed.)	--	--	26,000	10,678
Mar. 31 (Thurs.)	--	--	8,000	1,877

Note: The securities lending facility and the U.S. dollar funds-supplying operation against pooled collateral are excluded.

Box 1: Amounts Outstanding in the Call Markets

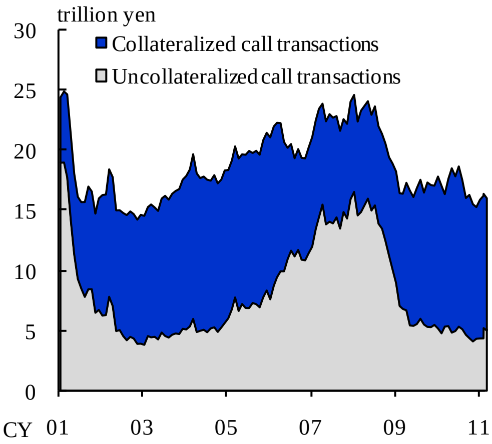
The amount outstanding in the call markets has been declining. This reflects the Bank's provision of ample funds since the failure of Lehman Brothers and the resulting continuation of extremely low interest rate levels. Parallel to the decrease in uncollateralized call rates, the share of the amount outstanding in the collateralized call market has been rising. These developments were also observed during the period of quantitative easing policy. By type of transaction, most of the decline in the amount outstanding in the call markets is accounted for by the decline in transactions through *tanshi* companies (money market brokers). At the same time, there has been no significant change in direct deals that does not go through *tanshi* companies (charts 26 and 27).

In transactions through *tanshi* companies, the amount outstanding in the uncollateralized call market generally remained at around 5 trillion yen throughout fiscal 2010 (Chart 28). Beginning in August 2010, the amount outstanding decreased to below 5 trillion yen and temporarily approached the lowest level marked during the period of quantitative easing policy (around 4 trillion yen recorded in January 2003), but recovered somewhat from February 2011. The fact that the amount outstanding in the uncollateralized call market did not fall any further, notwithstanding the implementation of powerful monetary easing, can be attributed in part to the Bank's increased use of longer-term funds-supplying operations while leaving adjustments of the daily funds imbalance among market participants to the market.

By sector, no significant changes were observed in the amount outstanding in the uncollateralized call market between fiscal 2009 and fiscal 2010. In overnight transactions, borrowers were made up mainly of city banks and regional banks, while the bulk of lenders were accounted for by lending by trust banks (primarily investment trust accounts) and life insurance companies at rates below the interest rate applied to the complementary deposit facility (0.1 percent). In term transactions, borrowers were centered on securities companies, while lenders consisted mainly of regional banks and trust banks.

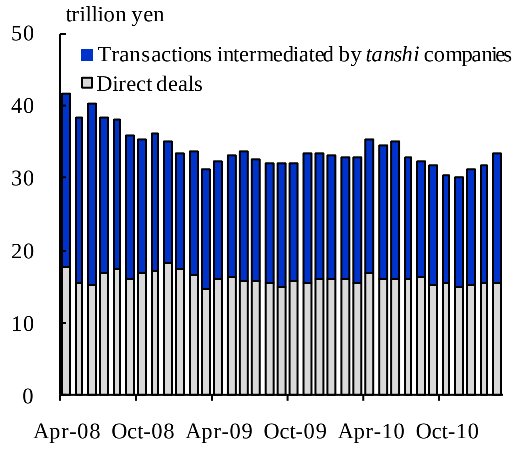
The amount outstanding in the collateralized call market was affected by seasonal factors in fiscal payments and revenues, such as payments of taxes and pensions and allotment of local allocation tax, but generally remained unchanged in the range of around 10-15 trillion yen throughout fiscal 2010 (Chart 29). As a result, the amount outstanding in the collateralized call market continued to exceed that in the uncollateralized call market by a very wide margin. This was largely attributable to the fact that regional banks and others invested their excess funds in the collateralized call market because they considered the risk-to-return ratios in the uncollateralized call market to be unattractive.

Chart 26: Amounts Outstanding in the Call Markets



Note: Transactions intermediated by *tanshi* companies (monthly average balance).

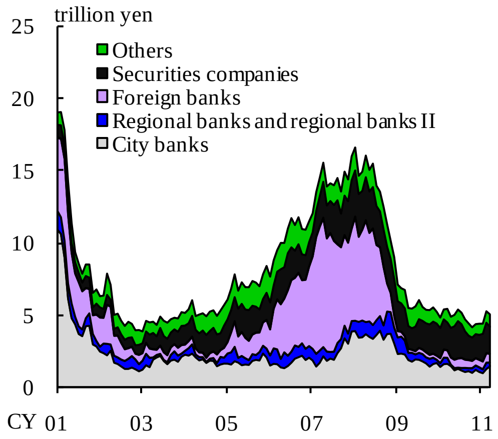
Chart 27: Total Amount Outstanding Balances of Call Transactions



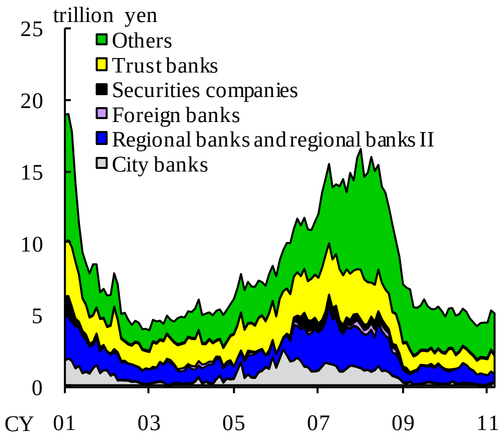
Notes: 1. Outstanding balance at the end of the month.
2. Direct deals are computed by subtracting the transactions intermediated by *tanshi* companies from the total outstanding balance of call money for domestic banks (city banks, trust banks, regional banks, and regional banks II) and branches of foreign banks in Japan.

Chart 28: Amounts Outstanding in the Uncollateralized Call Market: By Sector of Participants

By Borrower



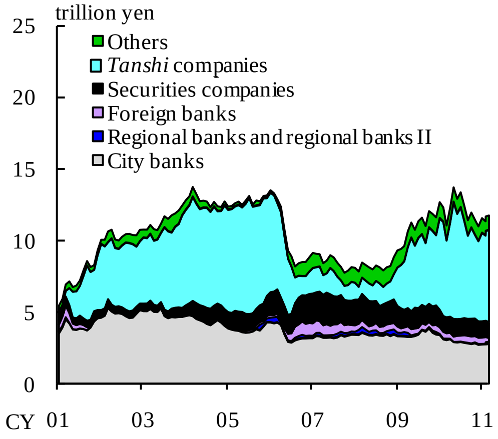
By Lender



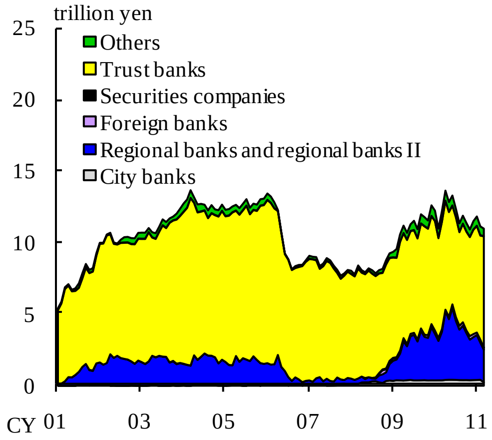
Notes: 1. Transactions intermediated by *tanshi* companies (monthly average balance).
2. "City banks" includes city banks, Shinsei Bank, and Aozora Bank. "Securities companies" refers to the financial instruments firms providing the first instruments business (limited to those providing the securities-related business) and securities finance companies as stipulated in the Financial Instruments and Exchange Act.

Chart 29: Amounts Outstanding in the Collateralized Call Market: By Sector of Participants

By Borrower



By Lender



Notes: 1. Transactions intermediated by *tanshi* companies (monthly average balance).
2. "City banks" includes city banks, Shinsei Bank, and Aozora Bank. "Securities companies" refers to the financial instruments firms providing the first instruments business (limited to those providing the securities-related business) and securities finance companies as stipulated in the Financial Instruments and Exchange Act.

III. Money Market Operations and the Bank's Balance Sheet

A. Changes in the Bank's Balance Sheet

As a result of the above-mentioned money market operations, the size of the Bank's balance sheet amounted to 120.3 trillion yen as of the end of September 2010, marking an increase of 4.0 trillion yen over the previous year (Chart 30).

Chart 30: The Bank's Balance Sheet (End-September 2010)

trillion yen, figures in parentheses are the differences from end-Sep. 2009

Assets		Liabilities and net assets	
Long-term JGBs	55.5 (9.3)	Banknotes	76.9 (0.9)
T-Bills underwritten by the Bank	13.4 (0.5)	Current account balances	20.2 (2.6)
Short-term funds-supplying operations	22.5 (-27.0)	Others	23.3 (0.5)
Outright purchases of T-Bills	7.7 (-1.5)		
Other short-term funds-supplying operations	14.8 (-25.5)		
Fixed-rate funds-supplying operations against pooled collateral	20.8 (20.8)		
Complementary lending facility	0.0 (0.0)		
Fund-provisioning measure to support strengthening the foundations for economic growth	0.5 (0.5)		
Others	7.5 (-0.0)		
Total assets	120.3 (4.0)	Total liabilities and net assets	120.3 (4.0)

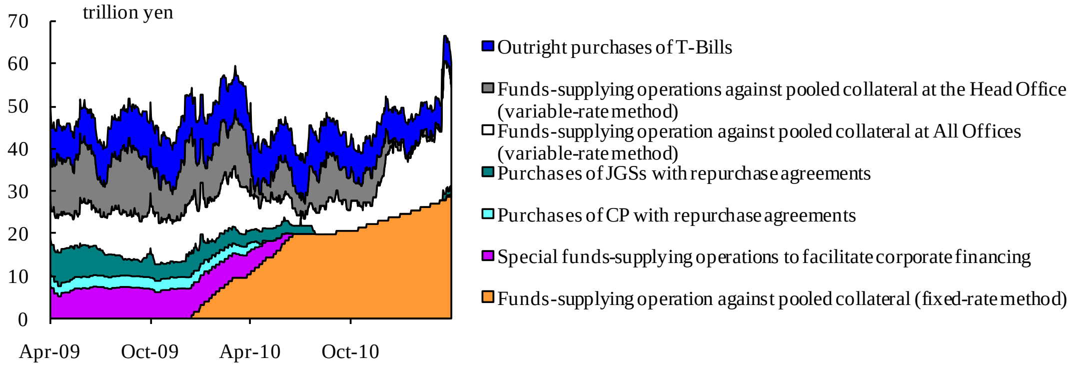
Notes: 1. "T-Bills underwritten by the Bank" includes "T-Bills underwritten by the Bank to supply yen funding to foreign central banks and other overseas account holders" and "T-Bills underwritten by the Bank to roll over JGBs and T-Bills."

2. "Other short-term funds-supplying operations" is the sum of "variable-rate funds-supplying operation against pooled collateral," "purchases of JGSs with repurchase agreements," and "purchases of CP with repurchase agreements." "Other short-term funds-supplying operations" at end-September 2009 includes "special funds-supplying operations to facilitate corporate financing," "outright purchases of CP to facilitate corporate financing," and "outright purchases of corporate bonds to facilitate corporate financing."

3. "Others" in "liabilities and net assets" includes "sales of JGBs to the government with repurchase agreements" and "deposits of the government."

A review of year-on-year changes indicates that the amount outstanding of long-term JGBs held and T-Bills underwritten increased by 9.3 trillion yen and 0.5 trillion yen, respectively. Likewise, the amount outstanding of the fixed-rate funds-supplying operation against pooled collateral increased by 20.8 trillion yen, and that of the fund-provisioning measure to facilitate strengthening of the foundations for economic growth increased by 0.5 trillion yen. On the other hand, the amount outstanding of other short-term funds-supplying operations decreased by 25.5 trillion yen (including the 6.9 trillion yen decrease in special funds-supplying operations to facilitate corporate financing, terminated at the end of March 2010). These figures indicate that while the amount outstanding of long-term JGBs held and that of the fixed-rate funds-supplying operation against pooled collateral were increasing, the Bank was reducing its purchases of JGSs with repurchase agreements and the amount of funds provided through the variable-rate funds-supplying operation against pooled collateral in order to encourage target rate formation in line with the guideline for money market operations ("encourage the uncollateralized overnight call rate to remain at around 0.1 percent") (Chart 31).

Chart 31: Amounts Outstanding of Short-Term Funds-Supplying Operations by Type



Notes: 1. Exercise-date basis.
2. "Funds-supplying operation against pooled collateral (fixed-rate method)" indicates the conventional fixed-rate funds-supplying operation against pooled collateral before the establishment of the Asset Purchase Program. After the establishment, it indicates the fixed-rate funds-supplying operation against pooled collateral conducted through the Asset Purchase Program.

As of the end of March 2011, the size of the Bank's balance sheet amounted to 142.9 trillion yen, registering an increase of 21.1 trillion yen over the previous year (Chart 32).

Chart 32: The Bank's Balance Sheet (End-March 2011)

trillion yen, figures in parentheses are the differences from end-Mar. 2010

Assets		Liabilities and net assets	
Long-term JGBs	58.2 (8.0)	Banknotes	80.9 (3.6)
T-Bills underwritten by the Bank	11.4 (-2.1)	Current account balances	40.8 (17.3)
Short-term funds-supplying operations	31.2 (-8.7)	Others	21.2 (0.2)
Outright purchases of T-Bills	5.4 (-4.0)		
Other short-term funds-supplying operations	25.7 (-4.8)		
Asset Purchase Program	31.8 (21.3)		
Fixed-rate funds-supplying operations against pooled collateral	28.8 (18.4)		
Outright purchases of JGBs	0.9 (0.9)		
Outright purchases of T-Bills	1.3 (1.3)		
Outright purchases of CP	0.3 (0.3)		
Outright purchases of corporate bonds	0.2 (0.2)		
Outright purchases of ETFs	0.2 (0.2)		
Outright purchases of J-REITs	0.0 (0.0)		
Complementary lending facility	0.0 (0.0)		
Fund-provisioning measure to support strengthening the foundations for economic growth	2.2 (2.2)		
Others	8.2 (0.4)		
Total assets	142.9 (21.1)	Total liabilities and net assets	142.9 (21.1)

Notes: 1. The figures for end-March 2011 are preliminary figures.

2. "Long-term JGBs" and "outright purchases of T-Bills" do not include the purchases conducted through the Asset Purchase Program.

3. "T-Bills underwritten by the Bank" includes "T-Bills underwritten by the Bank to supply yen funding to foreign central banks and other overseas account holders" and "T-Bills underwritten by the Bank to roll over JGBs and T-Bills."

4. "Other short-term funds-supplying operations" is the sum of "variable-rate funds-supplying operation against pooled collateral," "purchases of JGSs with repurchase agreements," and "purchases of CP with repurchase agreements." "Other short-term funds-supplying operations" at end-March 2010 includes "special funds-supplying operations to facilitate corporate financing," "outright purchases of CP to facilitate corporate financing," and "outright purchases of corporate bonds to facilitate corporate financing."

5. "Fixed-rate funds-supplying operations against pooled collateral" at end-March 2010 indicates the conventional fixed-rate funds-supplying operation against pooled collateral before the establishment of the Asset Purchase Program.

6. "Others" in "liabilities and net assets" includes "sales of JGBs to the government with repurchase agreements" and "deposits of the government."

A review of year-on-year changes indicates that although the amount outstanding of T-Bills underwritten decreased by 2.1 trillion yen, that of long-term JGBs held, the Asset Purchase Program, and the fund-provisioning measure to facilitate strengthening of the foundations for economic growth increased by 8.0 trillion yen, 21.3 trillion yen and 2.2 trillion yen, respectively. The amount outstanding of other short-term funds-supplying operations decreased by 4.8 trillion yen, but excluding the special funds-supplying operations to facilitate corporate financing (down 5.5 trillion yen from the previous year), it increased by 0.8 trillion yen. This reflected the fact that, because the rate target under the guideline for money market operations was changed to include a lower bound of zero percent ("encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent") following the introduction of the comprehensive monetary easing policy, there was no longer a need to sharply reduce the variable-rate funds-supplying operation against pooled collateral. An additional factor contributing importantly to this development was the further increase in funds provision following the Great East Japan Earthquake.

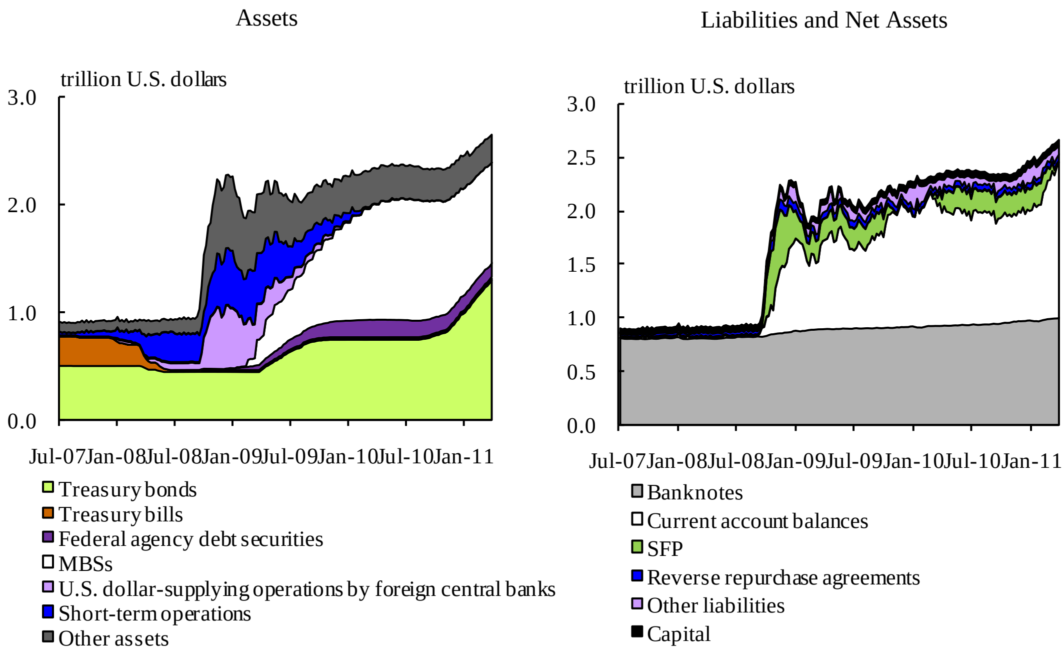
Box 2: Comparison of Central Banks' Balance Sheets

Following the failure of Lehman Brothers in autumn 2008, the Federal Reserve, the ECB, and the Bank of Japan lowered their policy interest rates to extremely low levels while increasing their liquidity provision and implementing asset purchases. During fiscal 2010, these central banks took various measures, depending on the market functioning as well as the economic and financial conditions.

First, the Federal Reserve authorized the reestablishment of temporary U.S. dollar liquidity swap facilities at the Federal Open Market Committee (FOMC) held on May 9, 2010. Second, on August 10, the FOMC decided to reinvest principal payments from agency debt and agency mortgage-backed securities (MBSs) purchased after the failure of Lehman Brothers in longer-term Treasury securities in order to avoid a reduction in the size of its balance sheet and a resulting unintended tightening of financial conditions. And third, at the FOMC held on November 3, the Federal Reserve decided to purchase a further 600 billion dollars of longer-term Treasury securities. Together with the second measure above, the Federal Reserve intends to purchase the Treasury securities by the end of June 2011, at a pace of about 75-80 billion dollars per month. These measures resulted in a further expansion of the size of the Federal Reserve's balance sheet, and the balance sheet stood at 2.7 trillion dollars at the end of March 2011 (an increase of 0.3

trillion dollars from the same time last year). On the asset side, the share of longer-term Treasury securities increased mainly because the Federal Reserve did not implement short-term funds-supplying operations to address the temporary and short-term shortage of funds. On the liability side, excess reserves increased. Given a reduction in the size of the Supplementary Financing Program (SFP) beginning in February 2011, however, the amount of the SFP Account decreased. Under the SFP, the U.S. Department of the Treasury issues specific cash management bills (SFP bills) and places the proceeds in the special account for the Treasury at the Federal Reserve Bank of New York. Thus, this has the effect of draining excess reserves (Chart 33).

Chart 33: Federal Reserve's Balance Sheet

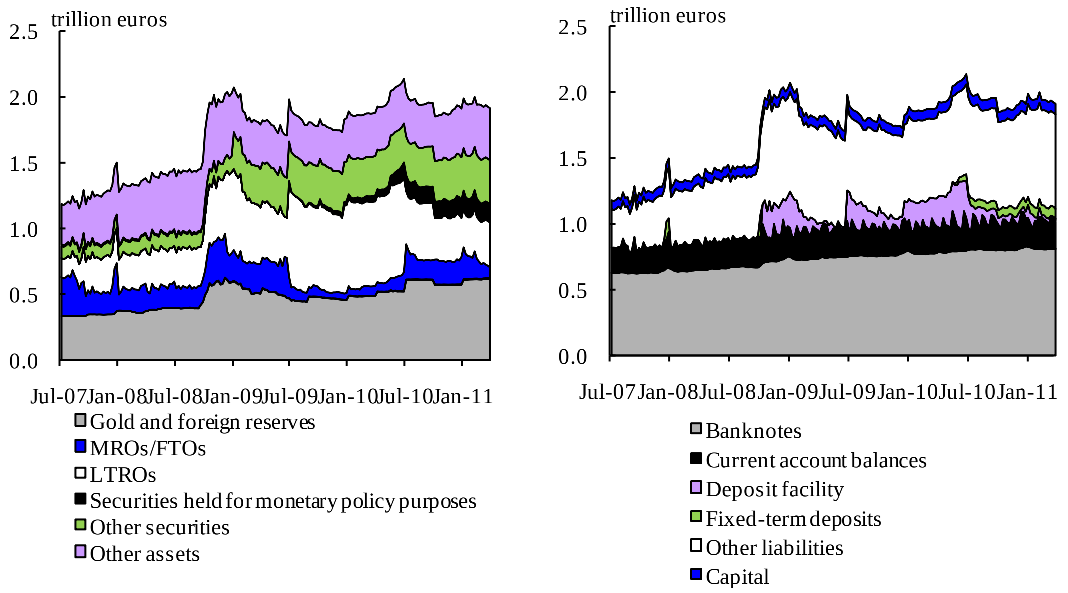


On May 10, 2010, to address the heightened tensions in financial markets triggered by fiscal problems in peripheral European countries, the ECB decided and announced to (1) introduce the Securities Markets Programme (SMP), (2) resume the three-month and six-month longer-term refinancing operations (LTROs) as fixed-rate tender procedures, and (3) reactivate the temporary U.S. dollar liquidity swap lines with the Federal Reserve. The objective of the first measure was to address the malfunctioning of securities markets and restore an appropriate monetary policy transmission mechanism. Through the SMP, the national central banks of the Eurosystem conduct interventions in the public and private debt securities markets to ensure market liquidity. The ECB's balance sheet expanded temporarily in the middle of 2010 due to an increase in the supply of funds through the first and second measures. Then the pace of expansion slowed reflecting the decrease in bids for LTROs. At the end of March 2011, the amount outstanding stood at 1.9 trillion euros (up 0.0 euros from the same time last year), recording the same level as the same time last year. On the liability side, use of the deposit facility decreased after the middle of 2010 (Chart 34).

Chart 34: ECB's Balance Sheet

Assets

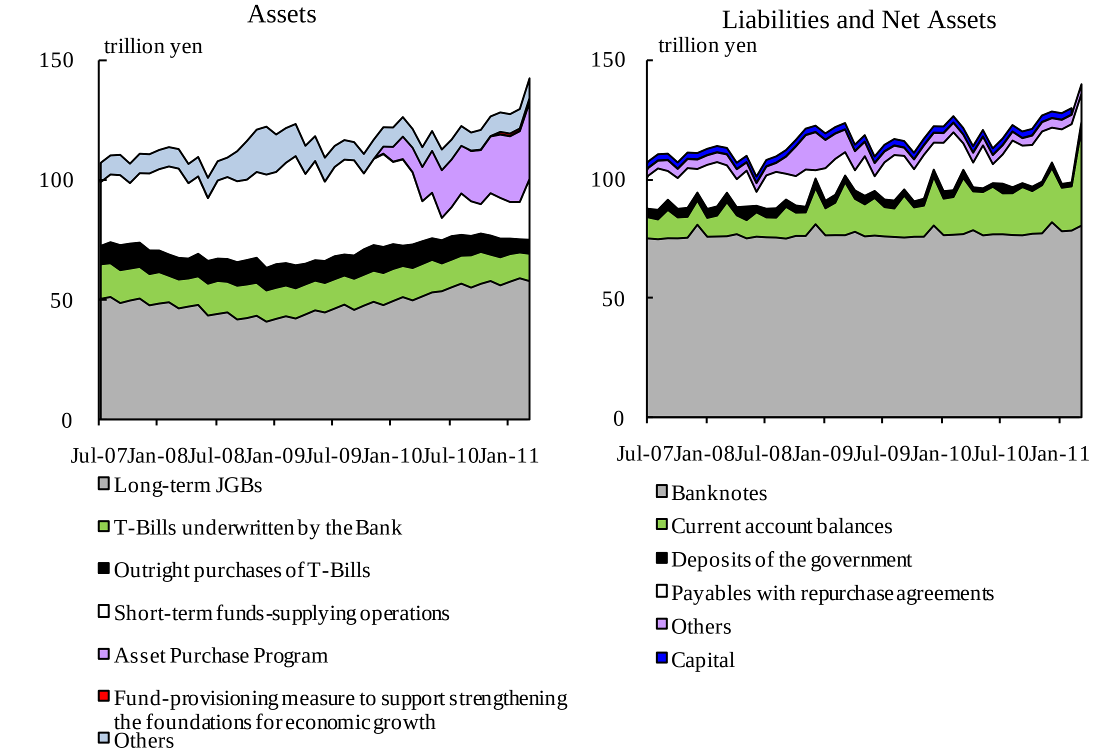
Liabilities and Net Assets



Note: MROs, FTOs, and LTROs denote the main refinancing operations, fine-tuning operations, and longer-term refinancing operations, respectively.

While continuing to provide ample funds, the Bank of Japan conducted asset purchases through the Asset Purchase Program as part of its comprehensive monetary easing policy. In addition, the Bank further increased the amount of funds supply in response to the Great East Japan Earthquake. As a result, the Bank's balance sheet expanded to 142.9 trillion yen at the end of March 2011 (up 21.1 trillion yen from the same time last year). On the liability side, excess reserves increased (Chart 35).

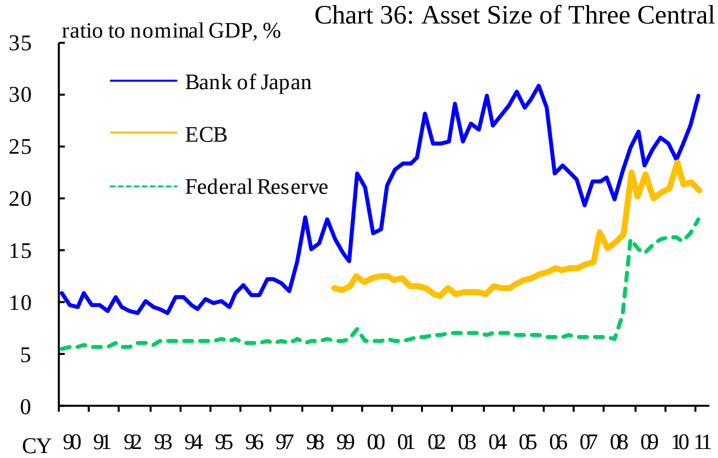
Chart 35: Bank of Japan's Balance Sheet



Notes: 1. "Short-term funds-supplying operations" is the sum of "variable-rate funds-supplying operation against pooled collateral," "purchases of JGSs with repurchase agreements," "purchases of CP with repurchase agreements," "special funds-supplying operations to facilitate corporate financing," "outright purchases of CP to facilitate corporate financing," and "outright purchases of corporate bonds to facilitate corporate financing."
2. Before October 28, 2010, "Asset Purchase Program" includes conventional fixed-rate funds-supplying operation against pooled collateral before the establishment of the program.

With regard to the ratio of the central banks' balance sheets total to nominal GDP, that for the Federal Reserve and the ECB was about 18 percent and 21 percent, respectively, while that for the Bank of Japan continued to record the highest at about 30 percent (Chart 36).

Chart 36: Asset Size of Three Central Banks



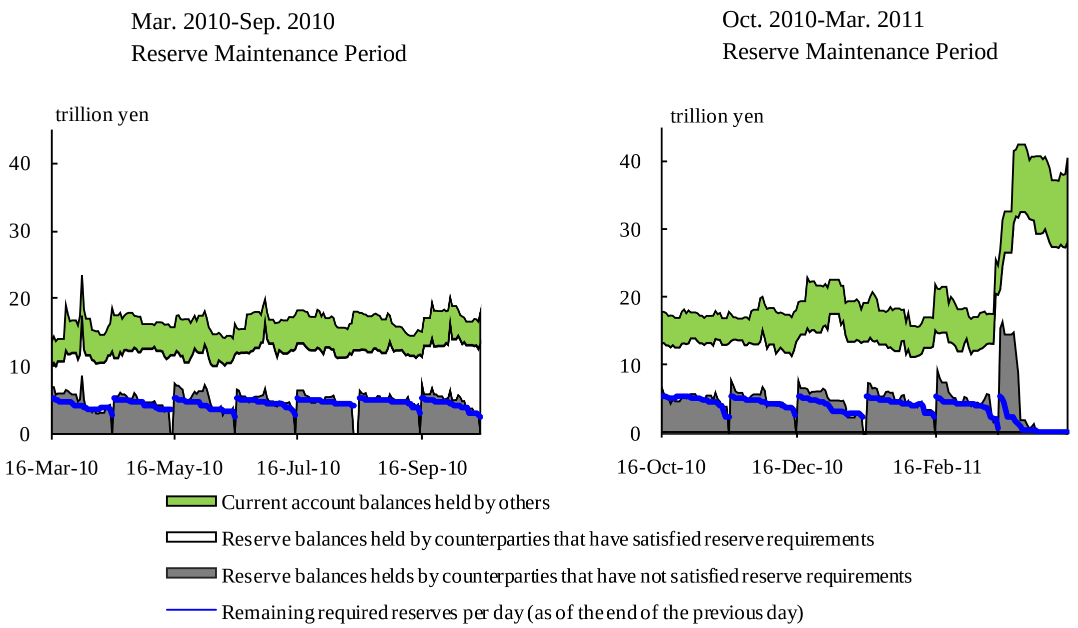
Notes: 1. Figures of asset sizes are as of quarter-ends.
2. It is assumed that the nominal GDP for January-March 2011 remains unchanged from the previous quarter.

B. Developments in Current Account Balances at the Bank

As the asset side of the Bank's balance sheet expanded as a result of the implementation of various policy measures, a parallel expansion was seen on the liability side as current account balances at the Bank followed an uptrend.

As of the end of September 2010, current account balances at the Bank amounted to 20.2 trillion yen, marking an increase of 2.6 trillion yen from the previous year. Moreover, with the introduction of the comprehensive monetary easing policy and the provision of extremely ample funds toward the fiscal year-end following the Great East Japan Earthquake, current account balances at the Bank set new record highs on three consecutive days beginning on March 22, 2011 (peaking at 42.6 trillion yen on March 24, 2011, compared to the previous high of 36.4 trillion yen registered on March 31, 2004). As a result, current account balances at the Bank stood at 40.8 trillion yen at the end of March 2011, marking a 17.3 trillion yen increase over the previous year (Chart 37).

Chart 37: Current Account Balances at the Bank

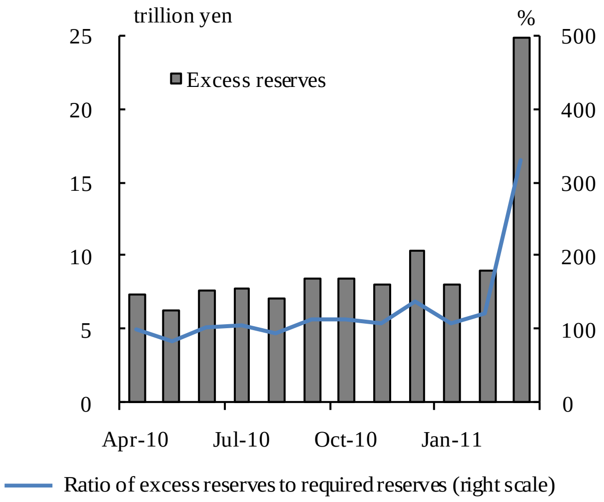


Notes: 1. "Reserve balances held by counterparties that have satisfied reserve requirements," "reserve balances held by counterparties that have not satisfied reserve requirements" and "remaining required reserves per day (as of the end of the previous day)" do not include figures for Japan Post Bank.
2. "Counterparties that have satisfied reserve requirements" are those subject to reserve requirements that have completed the accumulation of reserves required for the current reserve maintenance period as of the end of the day.
3. "Counterparties that have not satisfied reserve requirements" are those subject to reserve requirements that have not completed the accumulation of reserves required for the current reserve maintenance period as of the end of the day.
4. "Others" are counterparties not subject to reserve requirements and Japan Post Bank.

Excess reserves (current account balances at the Bank in excess of required reserves held by financial institutions subject to the reserve requirement system) and current account balances at the Bank held by counterparties not subject to the reserve requirement system (such as securities companies and *tanshi* companies) remained at high levels. This was due to the fact that the opportunity cost of holding excess reserves declined as the upper bound of the target rate was set equal to the rate applied to the complementary deposit facility (0.1 percent). Furthermore, the introduction of the comprehensive monetary easing policy and the further expansion of funds provision following the Great East Japan Earthquake resulted in a significant increase in excess reserves toward the fiscal year-end (Chart 38).

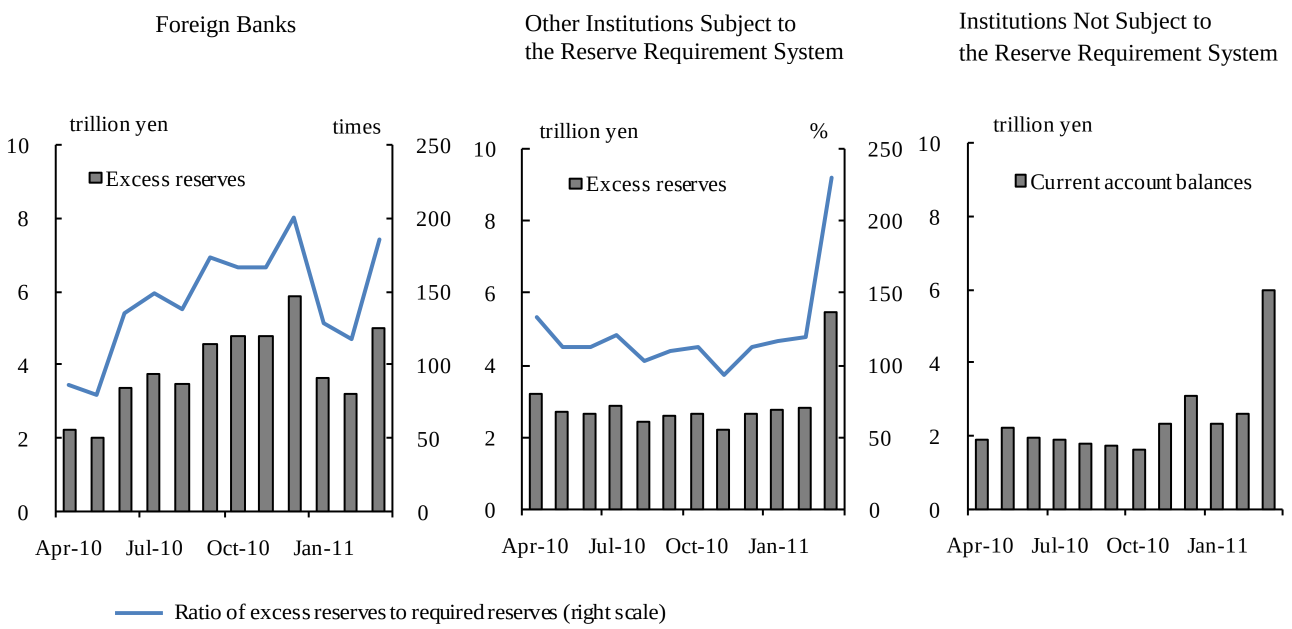
By sector, excess reserves held by foreign banks and "other institutions subject to the reserve requirement system" (such as Japan Post Bank and large *shinkin* banks) and current account balances at the Bank held by counterparties not subject to the reserve requirement system remained at high levels (Chart 39). Excess reserves held by regional banks, regional banks II, and trust banks remained more or less unchanged, except for a sharp increase in excess reserves registered in the March reserve maintenance period (Chart 40). Compared to other sectors, city banks continued to hold relatively low levels of excess reserves with the exception of the March reserve maintenance period, when a sharp increase in excess reserves was seen. The low level of excess reserves holdings by city banks reflected their investment of excess funds in repo transactions and T-Bills (Chart 41).

Chart 38: Excess Reserves of Institutions Subject to the Reserve Requirement System (Total)



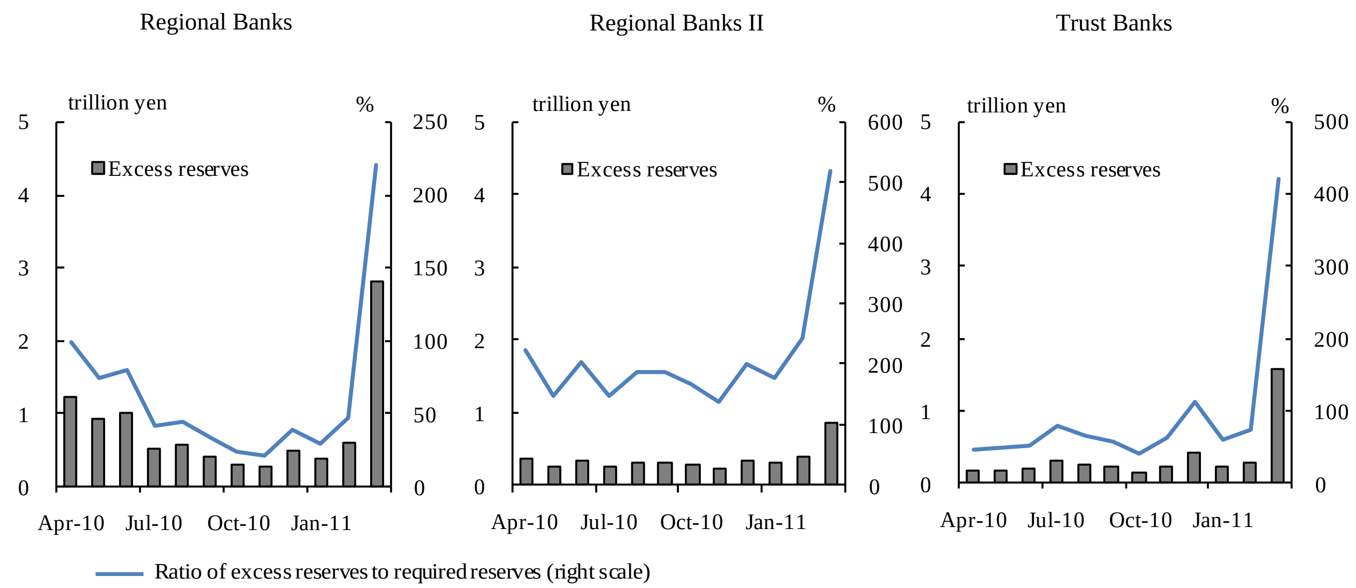
Notes: 1. Average amount outstanding for each reserve maintenance period.
2. Figures for the February and March 2011 reserve maintenance periods are provisional.

Chart 39: Foreign Banks, Other Institutions Subject to the Reserve Requirement System, and Institutions Not Subject to That System



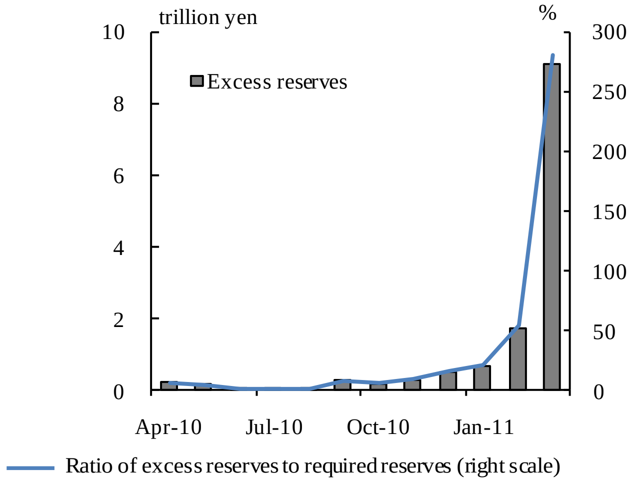
Notes: 1. Average amount outstanding for each reserve maintenance period.
2. Figures for the February and March 2011 reserve maintenance periods are provisional.

Chart 40: Regional Banks, Regional Banks II, and Trust Banks



Notes: 1. Average amount outstanding for each reserve maintenance period.
2. Figures for the February and March 2011 reserve maintenance periods are provisional.

Chart 41: City Banks

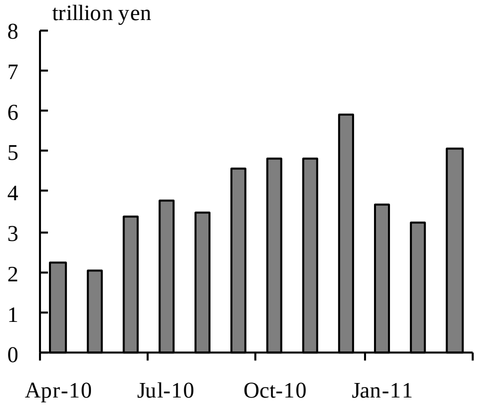


Notes: 1. Average amount outstanding for each reserve maintenance period.
2. Figures for the February and March 2011 reserve maintenance periods are provisional.

Box 3: Developments in Current Account Balances at the Bank Held by Foreign Banks

By sector, the current account balances at the Bank held by foreign banks increased remarkably toward the second half of 2010 (Chart 42). This seemed to be affected by the growing fiscal problem in Europe and the subsequent tightening of U.S. dollar funding conditions. In other words, from late April 2010 the heightened anxiety about fiscal problems in peripheral European countries boosted the demand for dollar funds particularly from European financial institutions, leading to a tightening of dollar funding conditions. Japanese financial institutions demand a certain level of dollar funds to conduct foreign bond investment and foreign exchange businesses for their customers. As dollar funding conditions tightened, the dollar funding premiums surged temporarily in the dollar/yen foreign exchange swap market (Chart 43). A rise in the dollar funding premiums means a decline in the yen funding rates for foreign banks, counterparties providing dollar funds (i.e., a decline in the cost of raising yen funds in exchange for another currency). As a result, foreign banks could obtain a certain amount of interest margin by raising yen funds at a low interest rate and then depositing them in the Bank's current account or investing them in T-Bills (Chart 44).

Chart 42: Current Account Balances of Foreign Banks



Notes: 1. Average amount outstanding for each reserve maintenance period.
2. Figures for the February and March 2011 reserve maintenance periods are provisional.

Chart 43: Yen Conversion Costs

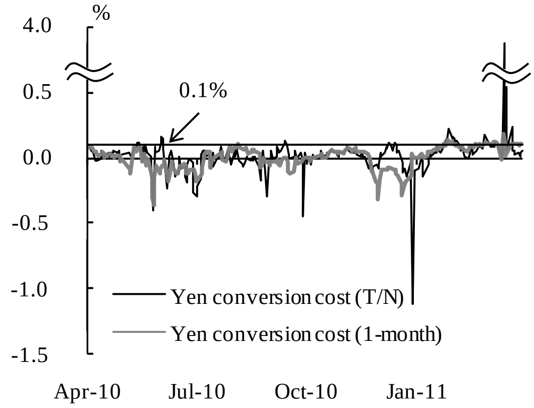
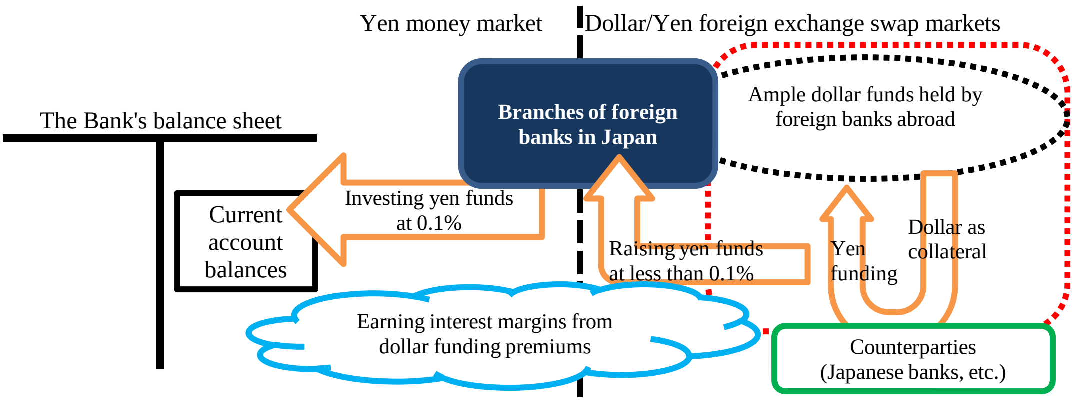


Chart 44: Foreign Banks' Behavior in the Dollar/Yen Foreign Exchange Swap Market



Later, partly reflecting the fact that major central banks decided to reestablish a temporary U.S. dollar swap agreement and resume the dollar funds-supplying operation, severe strains in the market eased gradually and the dollar funding premiums decreased. Some foreign banks, however, actively increased yen funding as the liquidity in foreign exchange swap market recovered. Because these banks kept ample dollar funds on hand by using their extensive ability to raise such funds, they were able to obtain yen funds at an interest rate below 0.1 percent in the foreign exchange swap market by using the term instruments as well. Thus, they actively seek to obtain interest margin by depositing these yen funds in the Bank's current account. As a result, the current account balances at the

Bank held by foreign banks followed an increasing trend. Particularly in the December 2010 reserve maintenance period, as the dollar funding premiums temporarily surged due to year-end factors, the balances marked 5.9 trillion yen, the highest level recorded since the October 2005 reserve maintenance period (7.3 trillion yen) during the period of quantitative easing policy.

From the beginning of 2011, the year-end factors subsided, and U.S. dollar funding conditions improved further. Also, financial institutions became less willing to invest in foreign bonds, and their demand for raising dollar funds in exchange for the yen fell. Under these circumstances, the dollar funding premiums decreased, and the cost of raising yen funds in exchange for another currency often rose above 0.1 percent. As a result, the current account balances at the Bank held by foreign banks started to decrease, reaching 3.2 trillion yen in the February 2011 reserve maintenance period. In the March reserve maintenance period, although the yen funding premiums temporarily surged in the foreign exchange swap market, the current account balances at the Bank as a whole increased significantly, and under the circumstances, the current account balances at the Bank held by foreign banks stood at 5.0 trillion yen.

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

Current account balances at the Bank fluctuate in tandem with receipts and payments of banknotes and treasury funds between financial institutions and the Bank or the government. In the case of banknotes, (1) financial institutions' withdrawal of banknotes from the Bank (issuance of banknotes) constitutes sources of decrease in current account balances, while (2) financial institutions' deposits of banknotes at the Bank (return of banknotes) constitute sources of increase in current account balances. In the case of treasury funds, (1) the issuance of JGSs and payment of taxes (treasury fund receipts) result in transfers of funds from financial institutions' current accounts to the government's account and constitute sources of decrease in current account balances, while (2) the redemption of JGSs, pension payments, and other fiscal expenditures (treasury fund payments) made from the government's account to financial institutions' current accounts at the Bank constitute sources of increase in current account balances.

To ensure that the uncollateralized overnight call rate remains at the target level, the Bank conducts money market operations as needed to adjust the current account balances in response to day-to-day changes in current account balances resulting from receipts and payments of banknotes and treasury funds. Thus, the above sources of changes in current account balances at the Bank (autonomous factors) constitute important preconditions for the Bank's money market operations.

Sources of changes in current account balances at the Bank are summarized in "changes in banknotes" and "changes in treasury funds and others." The sum of these two items is equivalent to "excess and shortage of funds." The following section reviews the developments in sources of changes in current account balances at the Bank during fiscal 2010 in the following order: changes in banknotes, changes in treasury funds and others, and excess and shortage of funds.

1. Changes in Banknotes

Net issuance of banknotes for fiscal 2010 was 3.6 trillion yen (sources of decrease in current account balances and a shortage of funds), and the shortage of funds increased from fiscal 2009 (0.5 trillion yen).

A review of developments in net issuance of banknotes during fiscal 2010 shows that the shortage of funds increased sharply toward the end of December, reaching 5.0 trillion yen, but declined to 0.3 trillion yen after the start of the new year. Thereafter, net issuance again increased toward the fiscal year-end due to heightened demand for banknotes following the Great East Japan Earthquake (Chart 45). The outstanding balance of banknotes stood at 82.3 trillion yen at the end of December 2010 and at 80.9 trillion yen at the end of March 2011. These figures represented year-on-year increases of 1.7 percent and 4.6 percent, respectively (Chart 46).

Chart 45: Banknotes

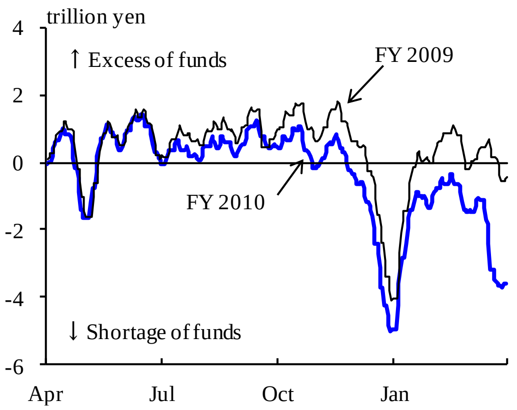
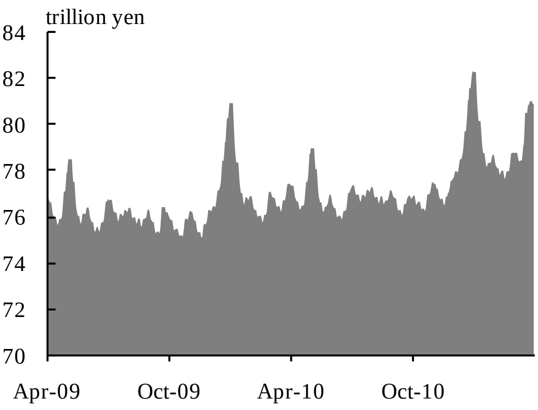


Chart 46: Outstanding Balance of Banknotes



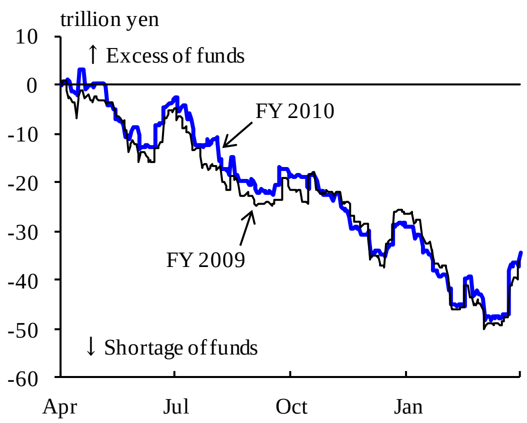
2. Changes in Treasury Funds and Others

During fiscal 2010, net receipts from JGBs and T-Bills (sources of decrease in current account balances and a shortage of funds) exceeded net payments of fiscal payments and foreign exchange transactions (sources of increase in current account balances and an excess of funds). As a result, changes in treasury funds and others registered net receipts of

34.3 trillion yen. The shortage of funds was somewhat smaller than fiscal 2009 (35.8 trillion yen).

A review of developments in changes in treasury funds and others during fiscal 2010 shows small amounts of net payments in April 2010 with the allotment of local allocation taxes and pension payments. Following these payments, net receipts gradually increased through early June 2010, but underwent a temporary decline due to pension payments in mid-June and a large redemption of JGBs in late June. Thereafter, net receipts continued to increase and reached 48.2 trillion yen at the beginning of March 2011. Toward the end of March 2011, the shortage of funds resulting from changes in treasury funds and others, which had continued throughout the fiscal year, decreased somewhat as a result of a large redemption of JGBs and fiscal payments (Chart 47).

Chart 47: Treasury Funds and Others



a. Fiscal Payments and Revenues

"Fiscal payments and revenues" is a concept that includes all treasury payments and receipts but excludes payments and receipts related to the issuance and redemption of JGBs (over one year) and T-Bills and foreign exchange transactions. Fiscal revenues comprise receipts of taxes -- corporate taxes (at the beginning of every month) and withholding income taxes (in the middle of every month) -- and pension insurance premiums (at the beginning of every month). Fiscal payments include pension payments (in the middle of even months), allotments of local allocation taxes (in early April, June, September, November), payments for public works (March), payments of adjustments for receipts and disbursements (April), and year-end payments (December).

In fiscal 2010, "fiscal payments and receipts" resulted in net payments of 32.3 trillion yen, down from 49.9 trillion yen in fiscal 2009. The decrease in net payments was mainly due to decreased payments related to the government's supplementary budget, increased receipts of corporate taxes, and decreased payments of tax refunds.

b. JGBs (Over One Year)

"JGBs (over one year)" includes the issuance and redemption of JGBs. "JGBs (over one year)" is a major source of an excess of funds in the months of March, June, September, and December, when interest payments and redemption of JGBs are concentrated. However, in all other months, it is a major source of a shortage of funds.

During fiscal 2010, "JGBs (over one year)" amounted to net government receipts of 60.6 trillion yen, marking a very large increase from fiscal 2009 (37.0 trillion yen). Issuance during this period amounted to 121.6 trillion yen, up from 112.6 trillion yen in fiscal 2009, while redemption amounted to 60.9 trillion yen, down from 75.6 trillion yen in fiscal 2009. The decrease in redemption amount was mainly due to the following. From February 2009, treasury bills (TBs) and financing bills (FBs) were integrated to form T-Bills. Consequently, the redemption amount of TBs, previously included in "JGBs," became zero (a 9.7 trillion yen contribution to the decrease in redemption).

c. Treasury Discount Bills

"Treasury discount bills" includes the issuance and redemption of T-Bills.

Net receipts of "treasury discount bills" amounted to 9.2 trillion yen in fiscal 2010, marking a very large decrease from fiscal 2009 (49.4 trillion yen). Issuance during this period amounted to 347.9 trillion yen, down considerably from fiscal 2009 (388.3 trillion yen).

Redemption amounted to 338.7 trillion yen, which was virtually unchanged from fiscal 2009 (338.8 trillion yen). It should be noted that the redemption amount for fiscal 2010 reflected the integration of TBs and FBs from February 2009 to form T-Bills (a 19.3 trillion yen contribution to the increase in redemption).

d. Foreign Exchange

"Foreign exchange" includes foreign exchange intervention and receipts of yen funds pertaining to the Japan Bank for International Cooperation's yen/U.S. dollar exchange via the Foreign Exchange Fund Special Account.

During fiscal 2010, "foreign exchange" registered net payments of 2.5 trillion yen, compared to net receipts of 0.6 trillion yen in fiscal 2009. This was mainly due to the payment of yen funds pertaining to yen selling/U.S. dollar purchasing intervention in foreign exchange markets conducted in September 2010 and March 2011.

e. Others

"Others" includes receipts and payments of funds between yen deposit accounts held by foreign central banks and international organizations at the Bank (deposits of overseas account holders) and those held by financial institutions and the Bank's provision of funds for maintaining stability of the financial system, such as the provision of loans as stipulated under Article 38 of the Bank of Japan Act, referred to as "*Tokuyu* (a special loan)," and loans to the Deposit Insurance Corporation of Japan. Together with receipts and payments of treasury funds, these are included in "changes in treasury funds and others" (represented by "others"). For example, an increase in deposits accepted from overseas account holders results in a decrease in current account balances at the Bank. Conversely, a decrease in deposits accepted from overseas account holders results in an increase in current account balances at the Bank.

During fiscal 2010, "others" registered net payments of 0.7 trillion yen, marking a decrease in net payments from fiscal 2009 (1.4 trillion yen).

3. Excess and Shortage of Funds (Changes in Banknotes + Changes in Treasury Funds and Others)

During fiscal 2010, changes in "excess and shortage of funds" contributed to reducing current account balances at the Bank, mainly due to changes in treasury funds and others as in the past. The shortage of funds in fiscal 2010 amounted to 37.9 trillion yen, up from 36.2 trillion yen in fiscal 2009 (Chart 48).

Chart 48: Autonomous Factors

(1) Sources of Changes in Current Account Balances at the Bank in Fiscal 2010

trillion yen

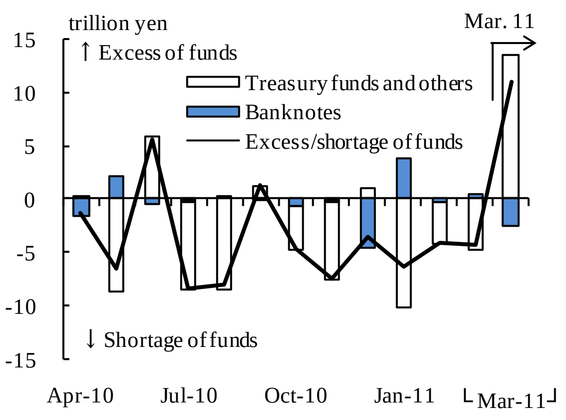
	FY 2009	FY 2010	
			y/y change
Banknotes	-0.5	-3.6	-3.1
Treasury funds and others	-35.8	-34.3	+1.5
Fiscal payments	+49.9	+32.3	-17.6
JGBs (over one year)	-37.0	-60.6	-23.6
Treasury discount bills	-49.4	-9.2	+40.2
Foreign exchange	-0.6	+2.5	+3.1
Others	+1.4	+0.7	-0.7
Excess/shortage of funds	-36.2	-37.9	-1.6

(Reference)

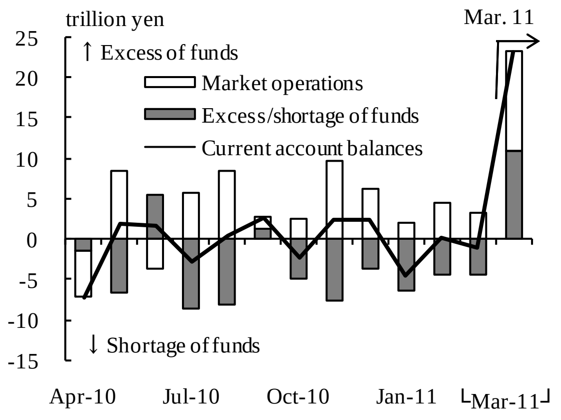
	FY 2009	FY 2010
Outstanding balance of banknotes	77.4	80.9

Note: Positive figures show an increase in the current account balances or excess of funds, and negative figures show a decrease in the current account balances or shortage of funds.
Banknotes: Negative figures show net issuance.
Treasury funds and others: Positive figures show net payment, and negative figures show net receipts.

(2) Excess/Shortage of Funds (Monthly)

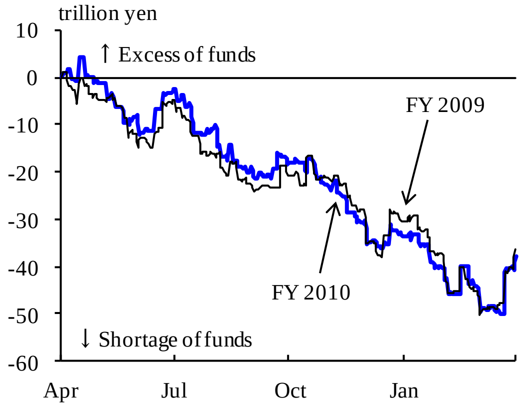


(3) Excess/Shortage of Funds and Operations (Monthly)



Developments in "excess and shortage of funds" throughout fiscal 2010 were, as in the past, generally in line with changes in treasury funds and others (Chart 49).

Chart 49: Cumulative Amount of Excess/Shortage of Funds



Box 4: Effects of the Money Market Operations on Excess and Shortage of Funds

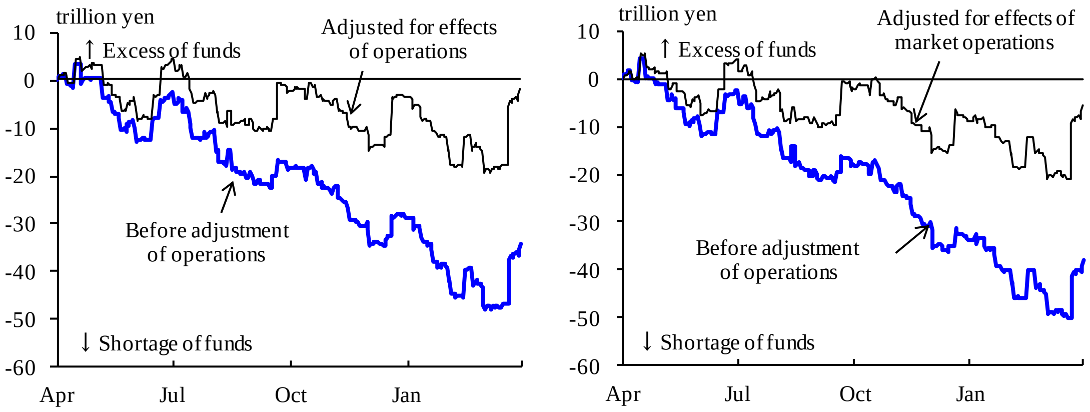
In general, central banks cannot control excess and shortage of funds. Therefore, excess and shortage of funds are referred to as "autonomous factors." However, among "treasury funds and others," "JGBs (over one year)" and "treasury discount bills" are influenced by the Bank's money market operations. This is because, when the Bank purchases JGBs and T-Bills from financial institutions and holds them to maturity, redemption funds that would have been deposited in current accounts of the financial institutions involved are paid to the Bank. This transaction results in a decline in treasury payments to the current accounts. As a result, "treasury funds and others," receipts and payments of which should be more or less equal, shows large net receipts (shortage of funds).

In order to grasp the developments in treasury funds accurately, it is assumed that funds paid for the redemption of JGBs and T-Bills acquired through purchasing operations are paid to financial institutions involved. The shortage of funds of "treasury funds and others" (adjusted for effects of operations) throughout the fiscal year decreases significantly, compared with that before the adjustment (Chart 50-1). Similarly, the shortage of funds of "autonomous factors" as a whole (adjusted for effects of operations) decreases significantly (Chart 50-2).

Chart 50: Cumulative Amounts before and after Adjustment for Effects of Operations

(1) Treasury Funds and Others

(2) Excess/Shortage of Funds of Autonomous Factors as a Whole



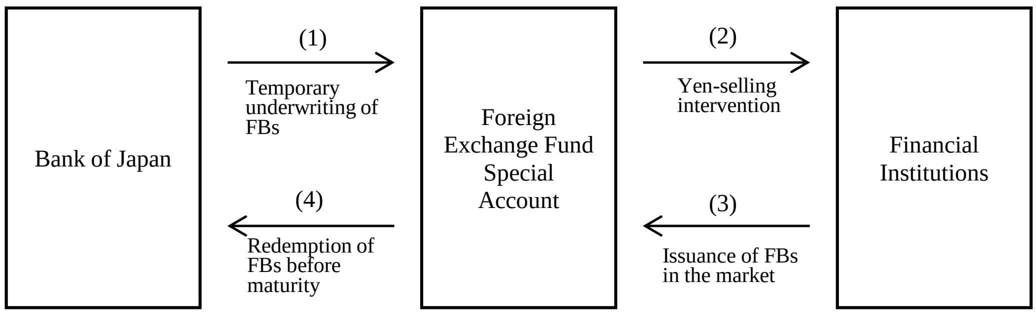
Box 5: Foreign Exchange Intervention and Sources of Changes in Current Account Balances at the Bank

In Japan, the Minister of Finance is responsible for foreign exchange intervention and decides the timing and amount of the intervention. The Bank carries out the actual operations based on instructions from the Minister of Finance and acts as the agent.

Foreign exchange intervention is the buying and selling of currencies, and its execution involves payments and receipts of funds. To be more specific, foreign exchange intervention is conducted by using funds held in the government's Foreign Exchange Fund Special Account managed by the Minister of Finance. For example, in the case of foreign exchange intervention in which the yen is sold and the U.S. dollar is bought in the foreign exchange market (yen selling/dollar purchasing intervention), the dollar is bought in exchange for yen funds raised through the issuance of FBs (even after the integration of FBs and TBs, the treatment of FBs under the fiscal system is not changed) (Chart 51).

On the other hand, dollar selling/yen purchasing intervention is conducted by selling dollar funds held in the Foreign Exchange Fund Special Account in exchange for the yen.

Chart 51: Flow of Yen Funds Following Yen-Selling Intervention



Foreign currency intervention is settled on the second business day after the intervention. In the case of yen selling/U.S. dollar purchasing intervention, dollar funds are paid to the Foreign Exchange Fund Special Account by the financial institutions as the counterparties of the intervention. Meanwhile, yen funds are paid to their current accounts at the Bank from the Foreign Exchange Fund Special Account. At that time, necessary yen funds to settle the intervention are temporarily raised by bridging methods such as the underwriting of FBs by the Bank. Such payments of yen funds made from the Foreign Exchange Fund Special Account cause current account balances held by these counterparties to increase, leading to an excess of funds on a macro basis. In general, the Foreign Exchange Fund Special Account raises yen funds needed to redeem FBs held by the Bank before maturity by issuing FBs in the market. Payments for FBs issued in the market are made to the Foreign Exchange Fund Special Account through current accounts at the Bank, causing a decrease in current account balances on a macro basis. Consequently, in total, the effects of this series of transactions related to yen selling/dollar purchasing intervention on current account balances offset one another (Chart 52).

Chart 52: Changes in the Bank's Balance Sheet and their Effects on the Autonomous Factors Following Yen-Selling Intervention

(Sources of changes in current account balances at the Bank)

(1) The Bank's Temporary Underwriting of FBs

(Assets)		(Liabilities and net assets)	
FBs	(+)	Deposits of the government	(+)

Banknotes	
Treasury funds and others	
:	
FBs	
Foreign exchange	

(2) Yen-Selling Intervention

(Assets)		(Liabilities and net assets)	
		Deposits of the government	(−)
		Current account balances	(+)

Banknotes	
Treasury funds and others	(+)
:	
FBs	
Foreign exchange	(+)

(3) Issuance of FBs in the Market

(Assets)		(Liabilities and net assets)	
		Deposits of the government	(+)
		Current account balances	(−)

Banknotes	
Treasury funds and others	(−)
:	
FBs	(−)
Foreign exchange	

(4) FBs Redemption before Maturity

(Assets)		(Liabilities and net assets)	
FBs	(−)	Deposits of the government	(−)

Banknotes	
Treasury funds and others	
:	
FBs	
Foreign exchange	

On the other hand, in the case of U.S. dollar selling/yen purchasing intervention, dollar funds held at the Foreign Exchange Fund Special Account are paid to the financial institutions as the counterparties of the intervention. Meanwhile, yen funds are paid to the Foreign Exchange Fund Special Account through the counterparties' current accounts at the Bank. As a result, current account balances held by these counterparties decrease, leading to a shortage of funds on a macro basis. Ultimately, the Foreign Exchange Fund

Special Account uses yen funds received from the intervention to redeem FBs that have already been issued. Payments to redeem FBs held by financial institutions are deposited in the institutions' current accounts at the Bank, causing an excess of funds on a macro basis. Consequently, in total, the effects of this series of transactions related to dollar selling/yen purchasing intervention on current account balances offset one another.

Box 6: Accuracy of Projections of Sources of Changes in Current Account Balances at the Bank (Autonomous Factors)

For market participants' convenience, the Bank releases, on its web site and through information vendors, projections and final figures of sources of changes in current account balances (autonomous factors) as well as projections of reserve balances for that day. These figures constitute preconditions for the Bank's money market operations.

The gap between the daily projections of changes in the next business day's current account balances at the Bank and the actual figures for fiscal 2010 (average error) was 45.4 billion yen. This was more or less unchanged from fiscal 2009 (44.7 billion yen) (Chart 53).

A review of projection errors broken down into "banknotes" and "treasury funds and others" shows that both the average error and maximum error were larger for the autonomous factor of "treasury funds and others." This partly reflected the difficulty in factoring fluctuations in yen deposits of overseas account holders into the projections. In fiscal 2010, the daily increase and decrease in yen deposits of overseas account holders (the absolute value) were 105.1 billion yen on average (77.5 billion yen on average in fiscal 2009), and they had a significant influence on the accuracy of projections of "treasury funds and others." When estimating the figures by excluding the effects of fluctuations in yen deposits of overseas account holders, both the average error and maximum error for "treasury funds and others" became considerably smaller.

Chart 53: Accuracy of Projections of Autonomous Factors in Fiscal 2010

100 million yen

		Actual average		Average error		Maximum error		Minimum error	
Excess/shortage of funds		8,308	(8,666)	454	(447)	7,355	(5,038)	3	(0)
	Banknotes	1,458	(1,511)	177	(170)	3,361	(683)	1	(1)
	Treasury funds and others	8,360	(8,784)	410	(425)	7,324	(4,971)	0	(1)

[Reference] Figures Estimated by Excluding the Effects of Fluctuations in Yen Deposits of Overseas Account Holders

100 million yen

		Actual average		Average error		Maximum error		Minimum error	
Excess/shortage of funds		8,182	(8,542)	224	(223)	3,393	(2,371)	1	(1)
	Banknotes	1,458	(1,511)	177	(170)	3,361	(683)	1	(1)
	Treasury funds and others	8,256	(8,709)	111	(125)	2,128	(2,150)	1	(1)

Notes: 1. Actual average is the average of the absolute size of actual daily autonomous factors.
2. Errors represent the absolute difference between the actual size of autonomous factors and projection made on the previous business day.
3. Figures in parentheses are for the previous year.

IV. Developments in Money Market Operations

This chapter explains developments in money market operations during fiscal 2010.

A. Conventional Operation Tools

1. Funds-Supplying, Long-Term, and Outright Operations

(Outright Purchases of JGBs)

During fiscal 2010, as in fiscal 2009, the Bank continued to purchase JGBs from specific brackets classified by bond type and residual maturity at a pace of 21.6 trillion yen per year (1.8 trillion yen per month). The Bank conducted the purchasing operation four times a month. In each operation, it offered to purchase JGBs from two out of five brackets, which are "up to one year," "more than one year and up to ten years," "more than ten years and up to 30 years," "floating-rate bonds," and "inflation-indexed bonds."

Box 7: Amounts Outstanding of the Bank's JGB Holdings and Banknotes in Circulation

The Bank limits the amount outstanding of its JGB holdings within that of banknotes in circulation. This is because the Bank ensures smooth money market operations based on the following thinking: government deposits and other debts that fluctuate widely in the short term, as well as current account deposits that require timely control over the amount outstanding, should be backed by short-term financial assets obtained by the Bank through its money market operations; and similarly, banknotes in circulation, which are long-term liabilities of the Bank, should be backed by JGBs, which are long-term assets. The Bank's stance also demonstrates clearly that the Bank's outright purchases of JGBs are not to support JGB prices or government financing. Other than conventional JGB outright purchasing operations, the Bank conducts outright purchases of JGBs through the Asset Purchase Program. The purchases of JGBs through the Asset Purchase Program are conducted as a temporary measure, and serve a different purpose compared with the conventional JGB outright purchasing operations. Therefore, the Bank's holdings of JGBs purchased through the Asset Purchase Program are treated differently from JGBs purchased within the ceiling of the amount of banknotes in circulation.

Looking at the amount outstanding of the Bank's holdings of JGBs (excluding those purchased through the Asset Purchase Program; hereinafter the same applies in this box), during fiscal 2010 the Bank purchased 21.6 trillion yen of JGBs, while the amount of redemptions of JGBs held by the Bank was 13.7 trillion yen. As a result, the amount outstanding of the Bank's JGB holdings at the end of March 2011 stood at 58.2 trillion yen, increasing by 8.0 trillion yen from the end of March 2010 (50.2 trillion yen). The average residual maturity of JGBs purchased by the Bank during fiscal 2010 (flow) was 3.8 years, and that of JGBs held by the Bank at the end of March 2011 (stock) was 4.9 years (Chart 54). The residual maturity of JGBs purchased by the Bank fluctuates, depending on counterparties' desire to sell bonds to the Bank. However, a scheme to purchase JGBs from specific maturity segments implemented since February 2009 prevents the residual maturities of JGBs purchased from becoming too short or too long. The amount outstanding of the Bank's JGB holdings is likely to continue to increase for the time being under the following conditions: the Bank maintains the present amount of JGB purchases; and the present maturity composition of the Bank's JGB holdings remains the same. Nevertheless, the pace of increase is likely to slow, as the amount of redemptions of JGBs held by the Bank will increase from the current level.

The amount outstanding of banknotes in circulation at the end of March 2011 amounted to 80.9 trillion yen, increasing by 4.6 percent from the end of March 2010 (77.4 trillion yen). Since the ratio of banknotes in circulation to nominal GDP is currently well above the average level in recent decades (Chart 55), future developments in the amount outstanding of banknotes in circulation are difficult to foresee.

Therefore, the relationship between the amount outstanding of the Bank's JGB holdings and that of banknotes in circulation is uncertain. Taking this into account, and assuming that the amount outstanding of banknotes in circulation remains more or less unchanged, the following projection can be made. If the Bank purchases the same amount of JGBs with the present maturity composition of its JGB holdings as in fiscal 2010, the difference between the amount outstanding of the Bank's JGB holdings and that of banknotes in circulation will continue to narrow. In such a case, the amount outstanding of the Bank's JGB holdings is likely to approach the amount outstanding of banknotes in circulation within several years (Chart 56).

Chart 54: Maturity Composition of Amounts Outstanding of JGBs Purchased or Held by the Bank

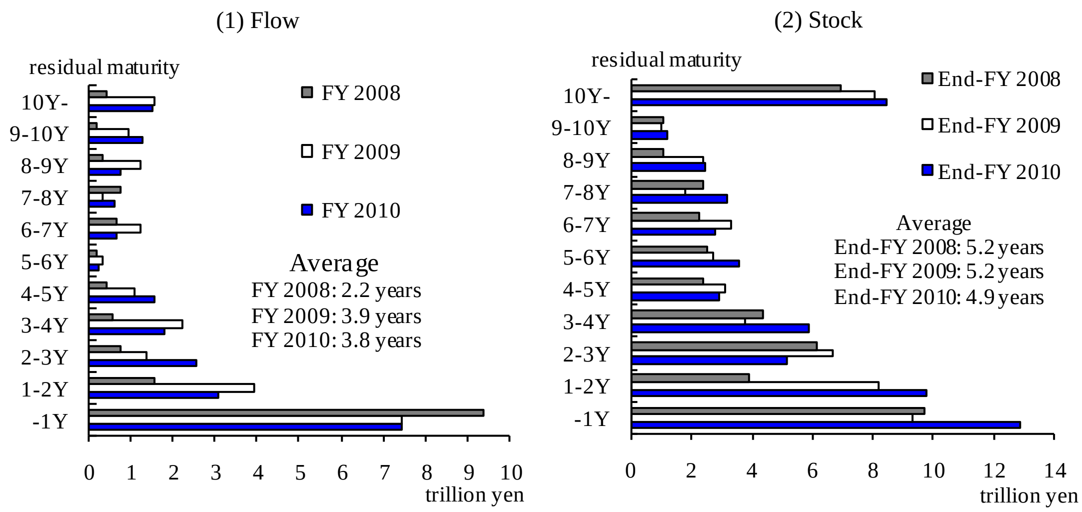
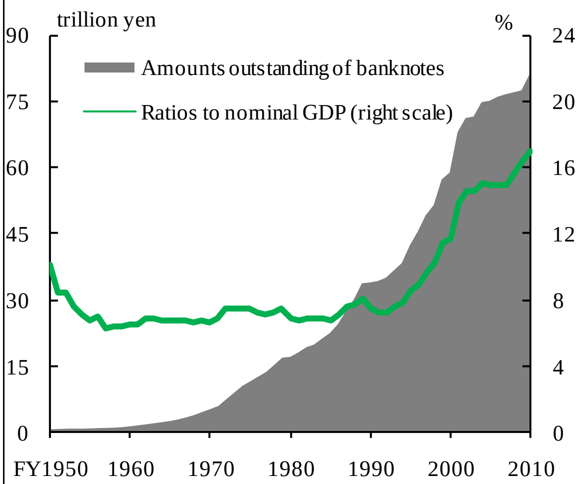
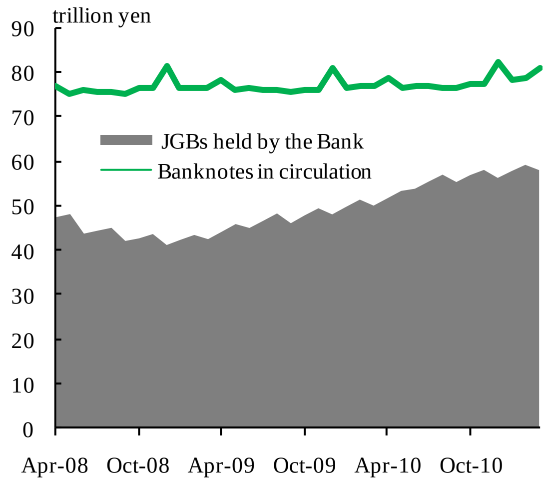


Chart 55: Amounts Outstanding of Banknotes in Circulation and its Ratio to Nominal GDP



Notes: 1. Figures of the "amounts outstanding of banknotes in circulation" are as of the fiscal-year ends.
2. It is assumed that the nominal GDP for January-March 2011 remains unchanged from the previous quarter.

Chart 56: Amounts Outstanding of JGBs Held by the Bank and Banknotes in Circulation



Note: Figures are as of the end of the month.

2. Funds-Supplying, Short-Term, and Outright Operations

(Outright Purchases of T-Bills)

During fiscal 2010, outright purchases of T-Bills were offered about once a week until December 2010. The amount purchased per operation was 400 billion yen up through May 2010 and 300 billion yen from June 2010 onward. Given the conditions in the T-Bill market, the Bank decreased the frequency of the operation from January 2011, while keeping the amount purchased per operation unchanged at 300 billion yen. At the end of March 2011, the amount outstanding stood at 5.4 trillion yen with the average residual maturity of 4.3 months.

3. Funds-Supplying and Short-Term Operations with the Fixed Maturity

(Funds-Supplying Operation against Pooled Collateral)

During fiscal 2010, given that the duration of the fixed-rate funds-supplying operation against pooled collateral conducted through the Asset Purchase Program was about three months or six months, the Bank offered funds with short-term maturities of less than three months in the variable-rate funds-supplying operation against pooled collateral, whereby the interest rates to be applied were determined by a multiple-rate competitive auction. Specifically, the Bank offered relatively longer-term funds with maturities of three weeks to about two months mainly on a T+2 basis (settled on two business days after the offer date). These funds were also offered earlier than usual on a T+4 basis (settled on four business days after the offer date) to preemptively address significant shortages of funds. Meanwhile, shorter-term funds with maturities of about one to two weeks were offered basically on a T+1 basis (settled on the next business day after the offer date).

To ensure the functioning of the money market, the Bank increased the amount of relatively longer-term funds provided through the variable-rate funds-supplying operation against pooled collateral -- mainly conducted at All Offices of the Bank (lending to a wide range of counterparties that have transactions with the Head Office and branches of the Bank) -- on a

T+2 or T+4 basis. On the other hand, the shorter-term funds supplying operation -- mainly at the Head Office (leading solely to a counterparties that have transactions with the Head Office of the Bank) -- on a T+1 basis was offered only on days which the money market rates tended to edge up, thereby leaving adjustments of the daily funds imbalance among market participants to the market. As a result, in the variable-rate funds-supplying operation against pooled collateral, the share of operations conducted at All Offices rose significantly, and the proportion of the amount outstanding of the operations conducted at All Offices increased from around 60 percent at the end of March 2010 to 100 percent at the end of March 2011. The amount outstanding of the variable-rate funds-supplying operation against pooled collateral stood at 25.1 trillion yen at the end of March 2011.

During fiscal 2010, the Bank offered same-day funds-supplying operations, operations on a T+0 basis (settled on the offer date) 15 times. Specifically, same-day operations were offered three times in May 2010 to prevent the contagion of the increased strains in U.S. dollar short-term funding markets in Europe to the Japanese money market, and twelve times in March 2011 to avoid potential instability in the money market after the Great East Japan Earthquake.

(Purchases of JGSs with Repurchase Agreements)

During fiscal 2010, with a view to stabilizing the repo market, the Bank conducted daily one-week JGS purchasing operations with repurchase agreements on a T+2 basis until the middle of July. The amount offered per operation was 600 billion yen until early June 2010 and 400 billion yen until the middle of July 2010. In addition, responding to temporary upward pressure on GC repo rates, the Bank offered overnight operations on a T+1 basis (T/N) or on a T+2 basis (S/N) four times in total. The amount offered in each operation ranged from 800 billion yen to 1 trillion yen. From the middle of July 2010, while confirming the stability in the repo market, the Bank suspended the JGS repurchase operations. After the Great East Japan Earthquake, city banks refrained from providing funds in the repo market. In response, the Bank conducted JGS repurchase operations on an S/N basis from March 14 to March 30, 2011. The amount offered in each operation was in the range of 2 to 3 trillion yen (800 billion yen on March 30, 2011). The amount outstanding stood at 0.06 trillion yen at the end of March 2011.

(Purchases of CP with Repurchase Agreements)

During fiscal 2010, as conditions in the CP market were stable, the Bank did not conduct CP purchasing operations with repurchase agreements until February 2011. After the Great East Japan Earthquake, liquidity in the CP market declined, and severe upward pressure was exerted on CP issuance rates and repo rates. In response, the Bank conducted CP repurchase operations on March 22 and 28, 2011. The amount offered was 300 billion yen per operation, and the maturities were about two weeks. The amount outstanding stood at 0.6 trillion yen at the end of March 2011.

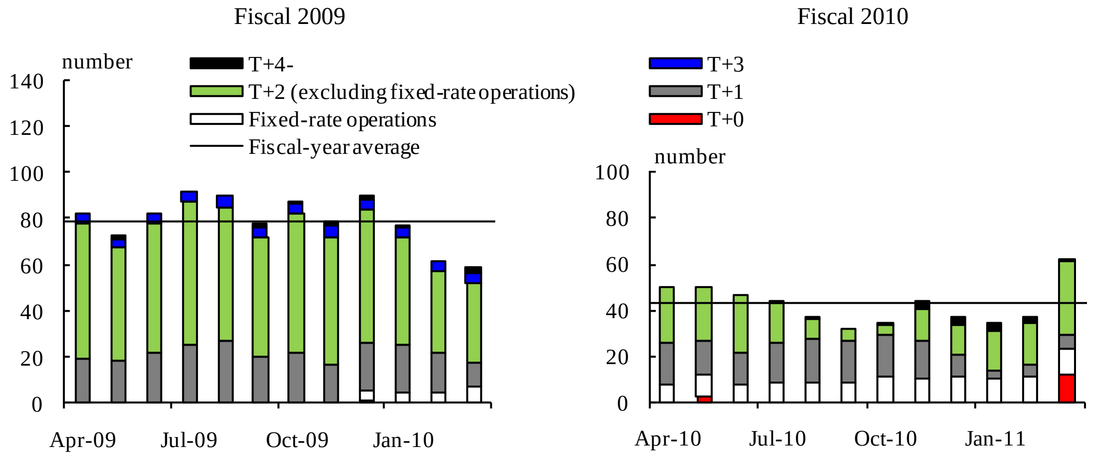
Box 8: Number of Short-Term Funds-Supplying Operations Offered and Their Average Duration

During fiscal 2010, the Bank offered 394 short-term funds-supplying operations, well below the 931 operations offered during fiscal 2009 (Chart 57). The number of operations offered, including the fixed-rate funds-supplying operation against pooled collateral, was 510 (950 in fiscal 2009). This decrease in the number of operations offered reflected the following factors: the Bank stopped overnight (S/N) and one-week JGS repurchase operations, which had been conducted daily since the middle of November 2008, after late January and the middle of July 2010, respectively; the amount outstanding of JGBs and other assets purchased through the Asset Purchase Program increased; and the Bank increased the share of the provision of relatively longer-term funds, thereby leaving adjustments of the daily funds imbalance among market participants to the market.

The average duration of short-term funds-supplying operations, including the fixed-rate funds-supplying operation against pooled collateral, lengthened from fiscal 2009 (Chart 58).

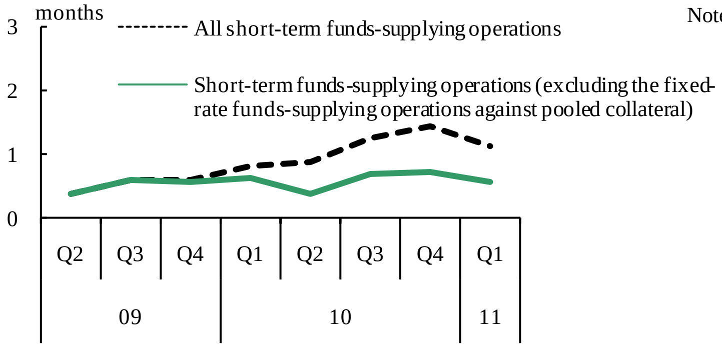
Reflecting the growing sense of an abundance of liquidity, from December 28, 2010 onward undersubscription frequently occurred, in that bids fell short of the Bank's offers (Chart 59). Specifically, out of 132 funds-supplying operations offered from January to March 2011, 68 operations were undersubscribed (52 percent). This was the second highest frequency of the undersubscription, following the peak recorded in the January-March quarter of 2002 during the period of quantitative easing policy (66 percent).

Chart 57: Number of Short-Term Funds-Supplying Operations Offered



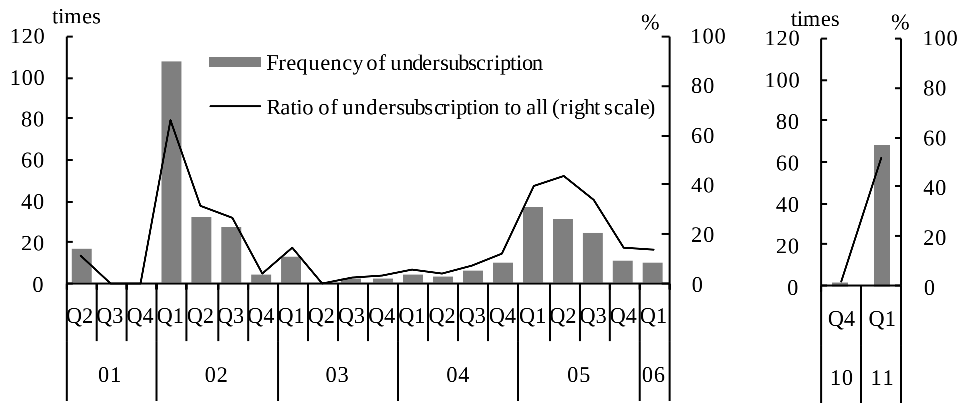
Notes: 1. Offer-date basis.
2. "Short-term funds-supplying operations" is the sum of "variable-rate funds-supplying operation against pooled collateral," "purchases of JGSs with repurchase agreements," and "purchases of CP with repurchase agreements." "Short-term funds-supplying operations" for fiscal 2009 includes "special funds-supplying operations to facilitate corporate financing."
3. "Fixed-rate operations" indicates the conventional fixed-rate funds-supplying operation against pooled collateral before the establishment of the Asset Purchase Program. After the establishment, it indicates the fixed-rate funds-supplying operation against pooled collateral conducted through the Asset Purchase Program.

Chart 58: Average Duration of Short-Term Funds-Supplying Operations



Notes: 1. Calendar year and offer-date basis.
2. "Average duration" is the average of the duration of funds-supplying operations offered in each quarter, weighted by the allotment amount.
3. "The fixed-rate funds-supplying operations against pooled collateral" is the conventional fixed-rate funds-supplying operation against pooled collateral before the establishment of the Asset Purchase Program. After the establishment, it is the fixed-rate funds-supplying operation against pooled collateral conducted through the Asset Purchase Program.

Chart 59: Undersubscriptions in Funds-Supplying Operations



Notes: Calendar year and offer-date basis.

4. Funds-Absorbing Operations

During fiscal 2010, as in fiscal 2009, the Bank did not conduct funds-absorbing operations. This was because the complementary deposit facility functioned to prevent an excessive fall in overnight rates such as the uncollateralized overnight call rate, and the Bank changed its target rate from "around 0.1 percent" to "around 0 to 0.1 percent" as part of the comprehensive monetary easing policy.

5. Other Operations

(Securities Lending Facility)

During fiscal 2010, the Bank conducted securities lending operations 17 times in total. This was fewer than 27 operations in fiscal 2008 when liquidity in the repo and JGB markets decreased sharply following the failure of Lehman Brothers, but was more than the nine operations conducted in fiscal 2009. The Bank supplied inflation-indexed bonds most frequently. Regarding inflation-indexed bonds, new issuance has paused since August 2008, and buybacks by the National Debt Consolidation Fund and purchasing operations by the Bank have continued. Under these circumstances, the size, liquidity, and functioning of special collateral (SC) repo transactions have been declining in the market for inflation-indexed bonds.

B. Asset Purchase Program

Following the decision at the MPM on October 4 and 5, 2010, the Bank accumulated the amount of asset purchases through the Asset Purchase Program. As a result, the amount outstanding of the program reached 31.8 trillion yen at the end of March 2011 (Chart 60), while that of the fixed-rate funds-supplying operation against pooled collateral stood at 20.8 trillion yen at the end of September 2010.

Chart 60: Operations Conducted through the Asset Purchase Program

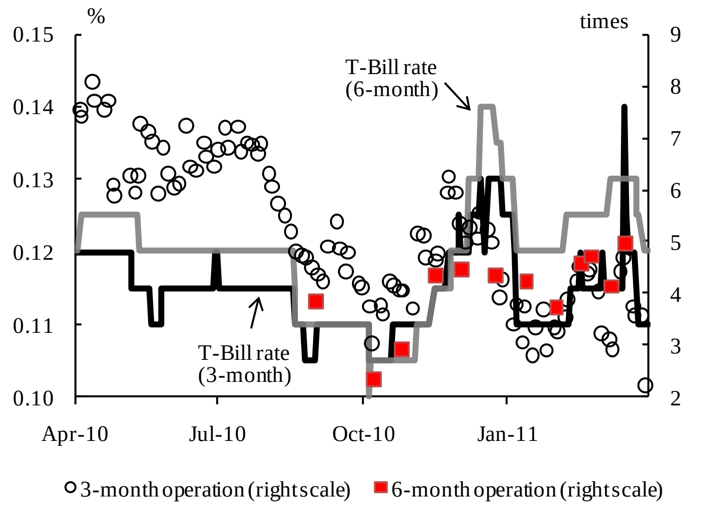
yen

	Total	Fixed-rate funds-supplying operation against pooled collateral	Asset purchases (figures in parentheses are the start dates)						
				JGBs (Nov. 8)	T-Bills (Nov. 9)	CP (Dec. 10)	Corporate bonds (Dec. 3)	ETFs (Dec. 15)	J-REITs (Dec. 16)
Amount outstanding (as of the end of Mar. 2011)	31,760.3 billion	28,829.2 billion	2,930.9 billion	900.7 billion	1,349.9 billion	274.3 billion	203.2 billion	185.1 billion	17.7 billion
Maximum amount outstanding	40 trillion	30 trillion	10 trillion	2 trillion	3 trillion	2 trillion	2 trillion	0.9 trillion	0.1 trillion

1. Fixed-Rate Funds-Supplying Operation against Pooled Collateral (Maximum Amount Outstanding of Loans: About 30 Trillion Yen)

The Bank conducted the three-month operation twice a week in general with 800 billion yen offered per operation. After the amount outstanding of the operation reached around 20 trillion yen in June 2010, the Bank maintained its level by rolling over all loans that reached maturity. The Bank decided to introduce the six-month operation at the MPM on August 30, 2010, and the first auction was offered on September 1, 2010. Thereafter, the Bank conducted the six-month operation once or twice a month with 800 billion yen offered per operation. The bid-to-cover ratios of three-month and six-month operations, influenced by the market rates, fluctuated roughly at the 2.0-7.0 level and the 2.0-5.0 level, respectively (Chart 61). At the end of March 2011, the amount outstanding of three-month and six-month operations stood at 28.8 trillion yen in total out of the maximum amount outstanding of about 30 trillion yen.

Chart 61: Bid-Cover Ratios of Fixed-Rate Funds-Supplying Operation against Pooled Collateral



2. Outright Purchases of JGBs (Maximum Amount Outstanding of JGBs to Be Purchased: About 2.0 Trillion Yen)

Among two-year, five-year, and ten-year JGBs with a residual maturity of one year or more and up to two years, the Bank purchased two predetermined issues with long residual maturities of each issuing maturity. The first auction was offered on November 8, 2010. Thereafter, the Bank conducted outright purchases of JGBs once a month in general (six times in fiscal 2010) with 150 billion yen offered per operation. At the end of March 2011, the amount outstanding stood at 0.9 trillion yen out of the maximum amount outstanding of about 2.0 trillion yen, and the average residual maturity was 1.8 years.

3. Outright Purchases of T-Bills (Maximum Amount Outstanding of T-Bills to Be Purchased: About 3.0 Trillion Yen)

The Bank purchased the two latest issues of six-month T-Bills and the circulating one-year T-Bills with a residual maturity of six months or more. The first auction was offered on November 9, 2010. Thereafter, the Bank conducted outright purchases of T-Bills once a month in general with 150 billion yen offered per operation. Toward the year-end, the Bank conducted purchasing operations twice in November and three times in December 2010, by using the room for additional purchases made possible as the purchased T-Bills reached maturity. After the Bank decided to increase the amount of purchases of T-Bills by about 1.0 trillion yen at the MPM held on March 14, 2011, the Bank implemented outright purchases of T-Bills twice a month (nine times in fiscal 2010) with 150 billion yen offered per operation. At the end of March 2011, the amount outstanding stood at 1.3 trillion yen out of the maximum amount outstanding of about 3.0 trillion yen, and the average residual maturity was 8.6 months.

4. Outright Purchases of CP (Maximum Amount Outstanding of CP to Be Purchased: About 2.0 Trillion Yen)

In line with the pre-announced auction schedule, the first auction was offered on December 10, 2010. At first, the Bank conducted outright purchases of CP once a month with 100 billion yen offered per operation. After the Bank decided to increase the amount of purchases of CP by about 1.5 trillion yen at the MPM held on March 14, 2011, the Bank announced to conduct the outright purchases twice a month (five times in fiscal 2010) with 300 billion yen offered per operation. At the end of March 2011, the amount outstanding stood at 0.3 trillion yen out of the maximum amount outstanding of about 2.0 trillion yen.

5. Outright Purchases of Corporate Bonds (Maximum Amount Outstanding of Corporate Bonds to Be Purchased: About 2.0 Trillion Yen)

In line with the pre-announced auction schedule, the first auction was offered on December 3, 2010. At first, the Bank conducted outright purchases of corporate bonds once every two months with 100 billion yen offered per operation. After the Bank decided to increase the amount of purchases of corporate bonds by about 1.5 trillion yen at the MPM held on March 14, 2011, the Bank announced to conduct the outright purchases once a month (twice in fiscal 2010) with 150 billion yen offered per operation. At the end of March 2011, the amount outstanding stood at 0.2 trillion yen out of the maximum amount outstanding of about 2.0 trillion yen.

6. Outright Purchases of ETFs (Maximum Amount Outstanding of ETFs to Be Purchased: About 0.9 Trillion Yen)

The first purchase was conducted on December 15, 2010. At the end of March 2011, the amount outstanding stood at 0.2 trillion yen out of the maximum amount outstanding of about 0.9 trillion yen.

7. Outright Purchases of J-REITs (Maximum Amount Outstanding of J-REITs to Be Purchased: About 0.1 Trillion Yen)

The first purchase was conducted on December 16, 2010. At the end of March 2011, the amount outstanding stood at 0.02 trillion yen out of the maximum amount outstanding of about 0.1 trillion yen.

C. Complementary Lending Facility

During fiscal 2010, use of the complementary lending facility was down further from fiscal 2009, when it decreased sharply compared to fiscal 2008, reflecting the supply of ample funds by the Bank. According to daily data of sources of changes in current account balances at the Bank, amounts used of the complementary lending facility (on a net basis, excluding the amount repaid on a day) exceeded 5 billion yen only on two days in fiscal 2010 -- namely, March 11, when the Great East Japan Earthquake occurred (310 billion yen) and the fiscal year-end of March 31 (20 billion yen) -- compared with 44 days in fiscal 2008 and ten days in fiscal 2009.

D. Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth

During fiscal 2010, the Bank disbursed the first new loans of 462.5 billion yen to 47 financial institutions (on September 6), the second new loans of 998.3 billion yen to 106 financial institutions (on December 7), and the third new loans of 722.1 billion yen to 122 financial institutions (on March 7) (Chart 62). At the end of March 2011, the amount outstanding stood at 2.2 trillion yen out of the maximum amount outstanding of 3.0 trillion yen (on a net basis, excluding the amount prepaid).

The number of financial institutions selected as eligible counterparties increased from 66 for the initial selection in June 2010 to 153 at the end of March 2011. The breakdown of the borrower financial institutions showed that the measure covered a wider range of businesses, including not only major banks but also regional banks.

Chart 62: Loan Disbursement under the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth

number of institutions, billion yen

	1st		2nd		3rd		Number of financial institutions selected as eligible counterparties (as of the end of Mar. 2011)
	Number of borrowers	Amount of loans to be disbursed	Number of borrowers	Amount of loans to be disbursed	Number of borrowers	Amount of loans to be disbursed	
Major banks	10	320.4	12	598.7	12	262.7	12
Regional banks	33	116.6	90	360.7	103	405.2	132
Other institutions	4	25.5	4	38.9	7	54.2	9
Total	47	462.5	106	998.3	122	722.1	153

Notes: 1. Eligible counterparties of the fund-provisioning measure to support strengthening the foundations for economic growth are selected from eligible counterparties of the funds-supplying operations against pooled collateral at All Offices of the Bank and the Development Bank of Japan that wish to be counterparties in the fund-provisioning measure.

2. Major banks comprise Mizuho Bank, The Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, Resona Bank, Mizuho Corporation Bank, Saitama Resona Bank, Mitsubishi UFJ Trust and Banking Company, Mizuho Trust and Banking Company, The Chuo Mitsui Trust and Banking Company, The Sumitomo Trust and Banking Company, Shinsei Bank, and Aozora Bank. Regional banks comprise the member banks of the Regional Banks Association of Japan, the member banks of the Second Association of Regional Banks, and *shinkin* banks. Other institutions comprise foreign financial institutions, securities companies, central organizations for financial cooperatives, governmental financial institutions, etc.

E. U.S. Dollar Funds-Supplying Operations

During fiscal 2010, in line with the pre-announced auction schedule, the first auction after the reestablishment of the operation was offered on May 18, and the Bank conducted the 84-day operations once every four weeks thereafter. In these operations, an unlimited amount of funds was provided at a fixed rate (set by the Federal Reserve Bank of New York taking into account the prevailing U.S. dollar Overnight Indexed Swap market rate that corresponded to the duration of the loan). As the rates in the Bank's operations continued to exceed those in the market reflecting the improvement in conditions in the dollar funding market, the bidding amounts remained at low levels throughout fiscal 2010. Specifically, the bidding amount in the first auction after the reestablishment of the operation was 210 million dollars (offered on May 18), with 3 million dollars and 1 million dollars in the second and third auctions (offered on June 15 and July 13), respectively. No bids had been submitted since the fourth auction (offered on August 10) (twelve times in total). The amount outstanding was also zero at the end of March 2011.

On March 25, 2011, to fully ensure market stability in response to the Great East Japan Earthquake, the Bank announced the conduct of auctions for the one-week U.S. dollar funds-supplying operations once a week, in addition to 84-day operations. No bids were submitted in the first auction (offered on March 29).

V. Revisions in Operation Tools and Procedures

A. Revision in Business Operations for the Securities Lending Facility

During fiscal 2010, the Bank made revision in the following business operations for the securities lending facility.

First, given the introduction of fails charges and earlier cut-off time due to changes in market practices for JGB transactions on November 1, 2010, the Bank changed (a) the selling yields for roll-over transactions and (b) the timetable, effective from that day (Chart 63).

Chart 63: Revision in Business Operations for the Securities Lending Facility (1)

(a) Selling Yields for Roll-Over Transactions

Until Oct. 29, 2010	From Nov. 1, 2010
Initial selling yields or 0% (Apply the lower rate)	"The target level of the policy rate - 3%," initial selling yields or 0% (Apply the lowest rate)

Note: "The target level of the policy rate" is the level of the uncollateralized overnight call rate stipulated in the guideline for money market operations that is decided at the MPMs. When the target level is shown as a range, "the target level of the policy rate" is the lower bound of the range.

(b) Timetable

	Until Sep. 12, 2008	Until Oct. 29, 2010 (relaxation in conditions)	From Nov. 1, 2010
Time limit for accepting requests for selling	9:00 a.m.- 11:30 a.m.	9:00 a.m.- 1:00 p.m.	9:00 a.m.- 1:00 p.m.
Offer	1:00 p.m.	2:00 p.m.	2:00 p.m.
Bid submission cut-off time	1:45 p.m.	2:30 p.m.	2:30 p.m.
Notification of respective result to counterparties	Around 2:00 p.m.	Around 2:45 p.m.	Around 2:45 p.m.
Payment and settlement	Around 2:00 p.m.- 3:30 p.m.	Around 2:45 p.m.- 4:00 p.m.	Around 2:45 p.m.- 3:30 p.m.

Note: On days when the operating hours of the BOJ-NET JGB Services are extended, the payment and settlement time is also extended accordingly.

Since the autumn of 2008, the conditions for the operation had been relaxed as follows to improve liquidity in the JGB repo market: (1) changing the number of requests for implementation of offers from three or more counterparties in principle to one or more counterparties in principle for an issue; (2) extending the time limit for accepting requests for lending from until 11:30 a.m. to until 1:00 p.m.; (3) raising the maximum amount bid by a bidder per operation from 50 percent to 100 percent; and (4) lowering the minimum fee rate applied to the facility from 1 percent to 0.5 percent. Of the four measures, the second was made permanent regarding the change in the timetable (see Chart 63 [b]).

Second, effective from February 1, 2011, the first and the third measures of the above-mentioned relaxation were made permanent, and the fourth measure expired (Chart 64).

Chart 64: Revision in Business Operations for the Securities Lending Facility (2)

First Measure: Number of Requests for Implementation of Offers

Until Sep. 12, 2008	Until Jan. 31, 2011 (relaxation in conditions)	From Feb. 1, 2011
In principle, the Bank shall have auctions of those issues that <u>three or more</u> counterparties request the Bank to sell.	In principle, the Bank shall have auctions of those issues that <u>one or more</u> counterparties request the Bank to sell.	In principle, the Bank shall have auctions of those issues that <u>one or more</u> counterparties request the Bank to sell.

Third Measure: Maximum Amount Bid by a Bidder per Operation

	Until Sep. 12, 2008	Until Jan. 31, 2011 (relaxation in conditions)	From Feb. 1, 2011
Upper limit of the total bids	50% of the total amount of selling	100% of the total amount of selling	100% of the total amount of selling
Upper limit of the bids of each issue	50% of the upper limit of selling of each issue	100% of the upper limit of selling of each issue	100% of the upper limit of selling of each issue

Fourth Measure: Minimum Fee Rate Applied to the Facility

Until Oct. 14, 2008	Until Jan. 31, 2011 (relaxation in conditions)	From Feb. 1, 2011
1%	0.5%	1%

Note: The Bank shall change the minimum fee rate (applied to the facility) taking into account the conditions of financial markets.

B. Expiration of Expansions in the Range of Eligible Collateral

Following the failure of Lehman Brothers, to ensure market stability by facilitating corporate financing, the Bank had temporarily expanded the range of asset-backed CP (ABCP) and corporate debt eligible as collateral. Specifically, debt obligations guaranteed by counterparties with current account balances at the Bank are, in principle, ineligible. At the MPM held on October 14, 2008, however, the Bank decided to temporarily accept ABCP guaranteed by its counterparties as collateral. Moreover, in terms of the rating, corporate bonds and loans on deeds to companies rated "A or higher" are in principle deemed eligible as collateral. At the MPM held on December 2, 2008, however, rating requirements of these assets as eligible collateral were temporarily relaxed to "BBB-rated or higher." The temporary expansions in the range of eligible collateral expired at the end of December 2010, given the state of corporate financing and financial markets.

C. Periodic Review of Collateral Value of Eligible Collateral and Other Related Matters

Since fiscal 2005, the Bank generally conducts an annual review of collateral values of eligible collateral and other related matters -- namely, (1) collateral value of eligible collateral; (2) the margin ratios of JGSs used in JGS purchasing operations with repurchase agreements and the collateral value of margin collateral; and (3) margin ratios of JGSs used in the securities lending facility -- based on developments in financial markets and makes necessary revisions accordingly. Collateral value and other related matters were revised at the MPM held on October 4 and 5, 2010.

"Money Market Operations in Fiscal 2010"

List of Data Sources and Referenced Materials

Chart 1: Bloomberg.

Chart 2: Bloomberg.

Chart 3: Bloomberg.

Chart 4: Bloomberg.

Chart 5: Bloomberg; Japan Bond Trading.

Chart 6: Bloomberg; Tokyo Financial Exchange.

Chart 7: Bank of Japan, "Tokyo Repo Rate," "Uncollateralized Overnight Call Rate."

Chart 8: Japan Bond Trading.

Chart 9-1: Bloomberg; Japan Bond Trading.

Chart 9-2: Bloomberg.

Chart 10: Bloomberg.

Chart 11: Bloomberg; Japan Bond Trading.

Chart 12: Bank of Japan, "Tokyo Repo Rate," "Uncollateralized Overnight Call Rate."

Chart 13: Japan Bond Trading.

Chart 14-1: Bloomberg; Japan Bond Trading.

Chart 14-2: Bloomberg.

Chart 15: Japan Securities Depository Center.

Chart 16: Japan Securities Dealers Association, "Reference Price (Yields) Table for OTC Bond Transactions."

Chart 17: Bloomberg.

Chart 18: QUICK.

Chart 19: Bloomberg; Japan Bond Trading.

Chart 20: Bloomberg.

Chart 21: Bloomberg; Tokyo Financial Exchange.

Chart 22: Bank of Japan, "Bank of Japan Operations."

Chart 23: Bank of Japan.

Chart 24: Ministry of Finance Japan.

Chart 25: Bank of Japan, "Bank of Japan Operations."

Chart 26: Bank of Japan, "Amounts Outstanding in the Call Money Market."

Chart 27: Bank of Japan, "Amounts Outstanding in the Call Money Market," "Financial Institutions Accounts."

Chart 28: Bank of Japan, "Amounts Outstanding in the Call Money Market."

Chart 29: Bank of Japan, "Amounts Outstanding in the Call Money Market."

Chart 30: Bank of Japan, "Bank of Japan's Transactions with the Government," "Financial Statements of the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."

Chart 31: Bank of Japan, "Bank of Japan Operations."

Chart 32: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)," "Bank of Japan's Transactions with the Government," "Financial Statements of the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."

Chart 33: Federal Reserve, "Factors Affecting Reserve Balances."

Chart 34: European Central Bank, "Minimum Reserves and Liquidity."

Chart 35: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)," "Bank of Japan's Transactions with the Government," "Financial Statements of the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."

Chart 36: Bureau of Economic Analysis; Cabinet Office; European Central Bank; Eurostat; Federal Reserve; Bank of Japan.

Chart 37: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 38: Bank of Japan, "BOJ Current Account Balances by Sector."

Chart 39: Bank of Japan, "BOJ Current Account Balances by Sector."

Chart 40: Bank of Japan, "BOJ Current Account Balances by Sector."

Chart 41: Bank of Japan, "BOJ Current Account Balances by Sector."

Chart 42: Bank of Japan, "BOJ Current Account Balances by Sector."

Chart 43: Meitan Tradition; Bank of Japan.

Chart 45: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 46: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."

Chart 47: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 48-1: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Final Figures)."

Chart 48-2: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Final Figures)," "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 48-3: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Final Figures)," "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 49: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."

Chart 50-1: Bank of Japan, "Japanese Government Bonds Held by the Bank of Japan," "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)," "T-Bills Purchased by the Bank of Japan."

Chart 50-2: Bank of Japan, "Japanese Government Bonds Held by the Bank of Japan," "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)," "T-Bills Purchased by the Bank of Japan."

Chart 53: Bank of Japan.

Chart 54: Bank of Japan.

Chart 55: Cabinet Office; Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."

Chart 56: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."

Chart 57: Bank of Japan, "Bank of Japan Operations."

Chart 58: Bank of Japan, "Bank of Japan Operations."

Chart 59: Bank of Japan, "Bank of Japan Operations."

Chart 60: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."

Chart 61: Japan Bond Trading; Bank of Japan, "Bank of Japan Operations."

Chart 62: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth."