



# **BOJ**

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## **Money Market Operations in Fiscal 2013**

**Financial Markets Department**

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Financial Markets Department, Bank of Japan

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## **I. Introduction**

During fiscal 2013 (April 1, 2013 to March 31, 2014), the Bank of Japan pursued extremely powerful monetary easing under quantitative and qualitative monetary easing and significantly increased the amount outstanding of the monetary base through purchases of a wide range of assets, including large-scale purchases of Japanese government bonds (JGBs).

At the Monetary Policy Meeting (MPM) held on April 3 and 4, 2013, immediately after the start of the fiscal year, the Bank introduced quantitative and qualitative monetary easing. Specifically, to achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the consumer price index (CPI) at the earliest possible time, with a time horizon of about 2 years, the Bank decided to change the main operating target for money market operations from the uncollateralized overnight call rate to the monetary base and to double the monetary base and the amounts outstanding of JGBs and exchange-traded funds (ETFs) in 2 years, as well as to more than double the average remaining maturity of JGB purchases.

Under this quantitative and qualitative monetary easing, the Bank sought to expand the monetary base through purchases of a wide range of assets, including purchases of JGBs, in its money market operations. As a result, the monetary base at the end of 2013 stood at 201.8 trillion yen, an increase of 63.4 trillion yen from the same time a year earlier. The Bank's operations continued to steadily increase the monetary base, which reached 219.9 trillion yen at the end of March 2014, up 73.8 trillion yen from a year earlier.

Through such money market operations, the amount outstanding of JGBs held by the Bank reached 141.6 trillion yen at the end of 2013, up 52.4 trillion yen from a year earlier, and 154.2 trillion yen at the end of March 2014, up 62.8 trillion yen from a year earlier. The average remaining maturity of JGB purchases during fiscal 2013 more than doubled to 7.3 years from slightly less than 3 years prior to the introduction of quantitative and qualitative monetary easing.

This paper first gives an outline of the conduct of money market operations during fiscal 2013 and explains the resulting changes in the Bank's balance sheet. It then discusses developments in financial markets under the conduct of these money market operations. Finally, the paper describes the conduct of individual measures in money market operations and systemic changes surrounding money market operations.

## **II. Outline of the Conduct of Money Market Operations**

This chapter contains an overview of money market operations during fiscal 2013.

### **A. Conduct of Money Market Operations by the Bank**

#### **1. Monetary Policy Decisions Made in Fiscal 2013**

At the MPM held on April 3 and 4, 2013, immediately after the start of the fiscal year, the Bank decided on the introduction of quantitative and qualitative monetary easing as described below.

The Bank will achieve the price stability target of 2 percent in terms of the year-on-year rate of change in the CPI at the earliest possible time, with a time horizon of about 2 years. In order to do so, it will enter a new phase of monetary easing both in terms of quantity and quality. It will double the monetary base and the amounts outstanding of JGBs as well as ETFs in 2 years, and more than double the average remaining maturity of JGB purchases.

a. The adoption of the "monetary base control"

With a view to pursuing quantitative monetary easing, the main operating target for money market operations is changed from the uncollateralized overnight call rate to the monetary base. The guideline for money market operations is to "conduct money market operations so that the monetary base will increase at an annual pace of about 60-70 trillion yen."

b. An increase in JGB purchases and their maturity extension

With a view to encouraging a further decline in interest rates across the yield curve, the Bank will purchase JGBs so that their amount outstanding will increase at an annual pace of about 50 trillion yen. In addition, JGBs with all maturities including 40-year bonds

will be made eligible for purchase, and the average maturity of the Bank's JGB purchases will be extended from slightly less than 3 years at present to about 7 years -- equivalent to the average maturity of the amount outstanding of JGBs issued.

c. An increase in ETF and Japan real estate investment trust (J-REIT) purchases

With a view to lowering risk premia of asset prices, the Bank will purchase ETFs and J-REITs so that their amounts outstanding will increase at an annual pace of 1 trillion yen and 30 billion yen, respectively.

d. The continuation of the quantitative and qualitative monetary easing

The Bank will continue with the quantitative and qualitative monetary easing, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.

With the introduction of quantitative and qualitative monetary easing, the Asset Purchase Program (APP), a program established on the Bank's balance sheet in 2010 to conduct outright purchases of various financial assets and funds-supplying operations, was terminated. The purchases of JGBs conducted for facilitating money market operations -- including the amount outstanding of JGBs already purchased -- were to be absorbed into JGB purchases conducted under the framework of quantitative and qualitative monetary easing.

Moreover, JGB purchases conducted under quantitative and qualitative monetary easing would be executed for the purpose of conducting monetary policy and not for the purpose of financing fiscal deficits, and the government -- in the joint statement released with the Bank in January 2013 -- stated that "in strengthening coordination between the Government and the Bank of Japan, the Government will steadily promote measures aimed at establishing a

sustainable fiscal structure with a view to ensuring the credibility of fiscal management."<sup>1</sup> Based on such recognition, the Bank decided to temporarily suspend the so-called banknote principle, which indicated that the purchases of JGBs conducted for facilitating money market operations were subject to the limitation that the outstanding amount of long-term government bonds effectively held by the Bank be kept below the outstanding balance of banknotes issued.

In addition, to facilitate massive JGB purchases and significantly large-scale provision of the monetary base under quantitative and qualitative monetary easing, the Bank decided to set forums for enhanced dialogue with market participants in order to exchange views pertaining to money market operations and market transactions more generally.

Furthermore, the Bank decided to extend the periods for the funds-supplying operation to support financial institutions in disaster areas and the relaxation of the collateral eligibility standards for the debt of companies in disaster areas by 1 year.<sup>2</sup>

Also, from April 26, 2013, the Bank decided at MPMs during fiscal 2013 to continue to pursue this quantitative and qualitative monetary easing.

Along with these measures, the Bank actively supported financial institutions' efforts to stimulate lending and strengthen the foundations for economic growth. Specifically, at the MPM held on February 17 and 18, 2014, the Bank decided to double the scale of (1) the Fund-Provisioning Measure to Stimulate Bank Lending (hereafter "Stimulating Bank Lending Facility") and (2) the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth (hereafter "Growth-Supporting Funding Facility"), and to extend the application period for these facilities by 1 year. Specifically, under the Stimulating Bank Lending Facility, financial institutions were able to borrow funds from the Bank up to an amount that was twice as much as the net increase in their lending. As for

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<sup>1</sup> "Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth" (January 22, 2013).

<sup>2</sup> At the MPM held on February 17 and 18, 2014, the Bank decided to further extend these measures by 1 year.



the Growth-Supporting Funding Facility, the maximum amount of the Bank's fund-provisioning under the main rules was doubled from 3.5 trillion yen to 7 trillion yen. Under these facilities, financial institutions were now able to borrow funds at a fixed rate of 0.1 percent per annum for 4 years (instead of 1-3 years before these decisions were made).

## **2. Summary of the Conduct of Money Market Operations**

Based on the above decisions, the Bank conducted money market operations as described below during fiscal 2013.

First, the Bank conducted outright purchases of JGBs, taking account of transparency and flexibility to market conditions, by clarifying the guidelines for purchases in a statement ("Outline of Outright Purchases of Japanese Government Bonds"), as the amount of its purchases was becoming large in scale.

Specifically, after the introduction of quantitative and qualitative monetary easing, the Bank at first intended to purchase JGBs 6 times per month in principle. Considering the impact on financial markets, however, the Bank carried out a review to fine-tune the operations while increasing the frequency of purchases to approximately 8 times per month from April 19, 2013, and approximately 8-10 times per month in principle from June 2013, and preventing the amount of purchases per operation from becoming too large. Under these guidelines, the Bank purchased around 6-8 trillion yen of JGBs per month during fiscal 2013.

During fiscal 2013, the Bank continued to offer outright purchases of treasury discount bills (T-Bills) once a week in principle and purchased 1-2.5 trillion yen of T-Bills per operation. Outright purchases of CP, corporate bonds, and other financial assets were also carried out under quantitative and qualitative monetary easing.

In principle, the Bank continued to offer the fixed-rate funds-supplying operations against pooled collateral with a 1- to 4-month term at a pace of 800 billion yen per operation, while considering market participants' incentive to bid. Nonetheless, reflecting the Bank's provision of ample funds to financial markets through the large-scale purchases of a wide

range of assets conducted concurrently under quantitative and qualitative monetary easing, perceptions of abundant liquidity remained extremely strong in the money markets, and the demand for the funds-supplying operations against pooled collateral was generally sluggish. In April and May 2013 -- immediately after the introduction of quantitative and qualitative monetary easing -- the Bank flexibly offered 7 funds-supplying operations against pooled collateral with a 1-year term and 1.5-2 trillion yen per operation to meet the temporary growing needs for longer-term funds among market participants due to an increase in interest rate volatility.

Based on the U.S. dollar liquidity swap arrangements with the Federal Reserve, the Bank offered the 1-week U.S. dollar funds-supplying operations once a week and the 3-month operations about once every 4 weeks. These U.S. dollar liquidity swap arrangements had been effective through February 1, 2014, but the Bank of Japan, the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve, and the Swiss National Bank decided in October 2013 to convert their existing temporary bilateral liquidity swap arrangements to standing arrangements. Since the dollar funding market and foreign exchange swap markets remained calm on the whole, all bids reflected the incentive to test the operational procedure.

Regarding the Stimulating Bank Lending Facility and the Growth-Supporting Funding Facility, offers were made once every 3 months for each. The funds-supplying operation to support financial institutions in disaster areas was conducted once a month.

## **B. The Bank's Balance Sheet**

Under the conduct of the aforementioned money market operations, the monetary base and the Bank's balance sheet expanded significantly. Specifically, at the end of 2013, the monetary base stood at 201.8 trillion yen, and the size of the Bank's balance sheet amounted to 224.2 trillion yen, up 63.4 trillion yen and 65.8 trillion yen, respectively, from the end of 2012. The monetary base and the size of the Bank's balance sheet continued to expand, reaching 219.9 trillion yen and 240.8 trillion yen, respectively, at the end of March 2014.

These figures represented increases of 73.8 trillion yen and 76.5 trillion yen, respectively, from the end of March 2013.

On the asset side, as a result of the Bank's purchases of JGBs, ETFs, J-REITs, CP, and corporate bonds under quantitative and qualitative monetary easing, the amounts outstanding of these assets increased steadily and at the end of 2013 were roughly consistent with the Bank's balance sheet projection for the end of 2013 that was released when quantitative and qualitative monetary easing was introduced (Chart 1).

The amounts outstanding of major assets at the end of March 2014 showed that they had all increased from their year-earlier levels, with JGBs amounting to 154.2 trillion yen (up 62.8 trillion yen year on year), T-Bills purchased amounting to 31.6 trillion yen (up 15.2 trillion yen year on year), CP amounting to 1.9 trillion yen (up 0.6 trillion yen year on year), corporate bonds amounting to 3.2 trillion yen (up 0.3 trillion yen year on year), ETFs amounting to 2.9 trillion yen (up 1.3 trillion yen year on year), and J-REITs amounting to 0.15 trillion yen (up 0.03 trillion yen year on year). The Loan Support Program also increased by 8.4 trillion yen from a year-earlier level to 11.8 trillion yen.

Meanwhile, the amount outstanding of the fixed-rate funds-supplying operations against pooled collateral decreased by 7.5 trillion yen from the end of March 2013 to 14.1 trillion yen at the end of March 2014, reflecting extremely strong perceptions of abundant liquidity in the money markets.

**Chart 1: The Bank's Balance Sheet**

trillion yen

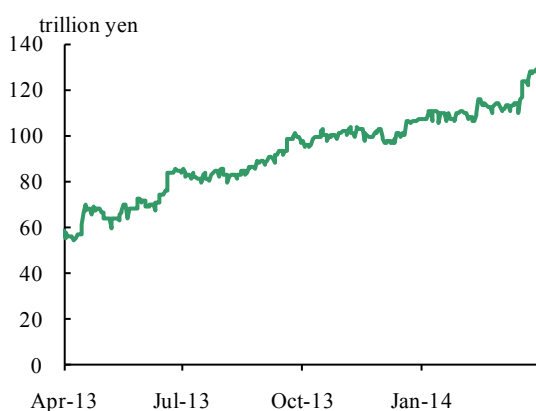
	End-Dec. 2012	End-Mar. 2013	End-Dec. 2013	End-Mar. 2014	Projection as of Apr. 4, 2013	
					End-2013	End-2014
Monetary base	138.5	146.0	201.8	219.9	200	270

Breakdown of the Bank's balance sheet

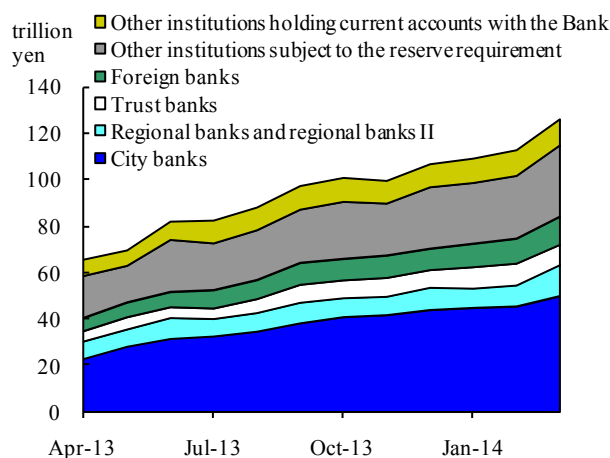
JGBs	89.2	91.3	141.6	154.2	140	190
CP	2.1	1.2	2.2	1.9	2.2	2.2
Corporate bonds	2.9	2.9	3.2	3.2	3.2	3.2
ETFs	1.5	1.5	2.5	2.9	2.5	3.5
J-REITs	0.11	0.12	0.14	0.15	0.14	0.17
Loan Support Program	3.3	3.4	8.4	11.8	13	18
Outright purchases of T-Bills	9.6	16.4	24.2	31.6	—	—
Funds-supplying operations against pooled collateral	26.9	21.7	18.1	14.1	—	—
Total assets (including others)	158.4	164.3	224.2	240.8	220	290
Banknotes	86.7	83.4	90.1	86.6	88	90
Current account balances	47.2	58.1	107.1	128.7	107	175
Total liabilities and net assets (including others)	158.4	164.3	224.2	240.8	220	290

On the liability side, the current account balances at the Bank increased to 107.1 trillion yen at the end of 2013, roughly consistent with the projection, reflecting the increase in the Bank's provision of funds through, for example, purchases of various assets under quantitative and qualitative monetary easing. The balances reached 128.7 trillion yen at the end of March 2014, up 70.5 trillion yen year on year (Chart 2). By sector, the increase was especially large for city banks (Chart 3).

**Chart 2: Current Account Balances at the Bank**



**Chart 3: Current Account Balances at the Bank by Sector**



Notes: 1. Average amount outstanding for each reserve maintenance period.  
 2. "Other institutions holding current accounts with the Bank" indicates those that are not subject to the reserve requirement but hold current accounts at the Bank.

**Box 1: Developments in Current Account Balances at the Federal Reserve by Sector**

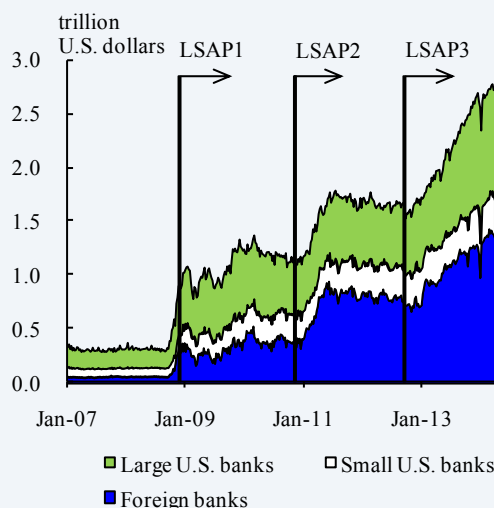
While the Bank of Japan has significantly increased its current account balances under quantitative and qualitative monetary easing, the Federal Reserve has also significantly expanded its current account balances through, for example, 3 rounds of large-scale asset purchases (LSAPs). By sector, it is notable that foreign banks have considerably boosted their share of current account balances particularly during LSAP2 and LSAP3 (Chart 4).

As the background to this, the following factors can be pointed out.

First, when LSAP2 started in 2010, financial institutions, especially European ones, might have more actively secured precautionary U.S. dollar liquidity due to growing concerns over the European sovereign debt crisis. Also, some market participants pointed out that money market rates had more frequently been at a level below the interest on excess reserves (IOER) rate (0.25 percent from December 18, 2008), and this created a greater number of opportunities for arbitrage activities between market financing and current account holdings, especially by foreign banks. Specifically, as the Federal Deposit Insurance Corporation (FDIC) had included funds raised in financial markets for the fee assessment calculation for its deposit insurance since April 2011, FDIC-insured financial

institutions were more likely to be constrained from arbitrage activities due to costs even when money market rates were below the IOER rate. On the other hand, foreign banks, many of which were not FDIC-insured, might have found it easier to conduct the aforementioned arbitrage activities.

**Chart 4: Current Account Balances at the Federal Reserve by Sector**



Notes: 1. Vault cash, balances due from depository institutions, etc., are included.  
 2. LSAP1 indicates the timing of the introduction of the purchases of agency MBSs and agency debt. LSAP2 indicates the timing of the introduction of the purchases of U.S. Treasuries. LSAP3 indicates the timing of the introduction of the purchase of agency MBSs.

While the current account balances at the Bank of Japan significantly increased as a whole, a breakdown by sector shows that the increase in such balances held by foreign banks was limited. This appears to reflect the fact that (1) many foreign banks manage risks to limit their total amount of the yen and yen asset holdings within a certain level as part of the management of their currency allocation; and (2) unlike the United States, there is no difference in costs arising from deposit insurance fees between Japanese and foreign financial institutions with regard to market financing.

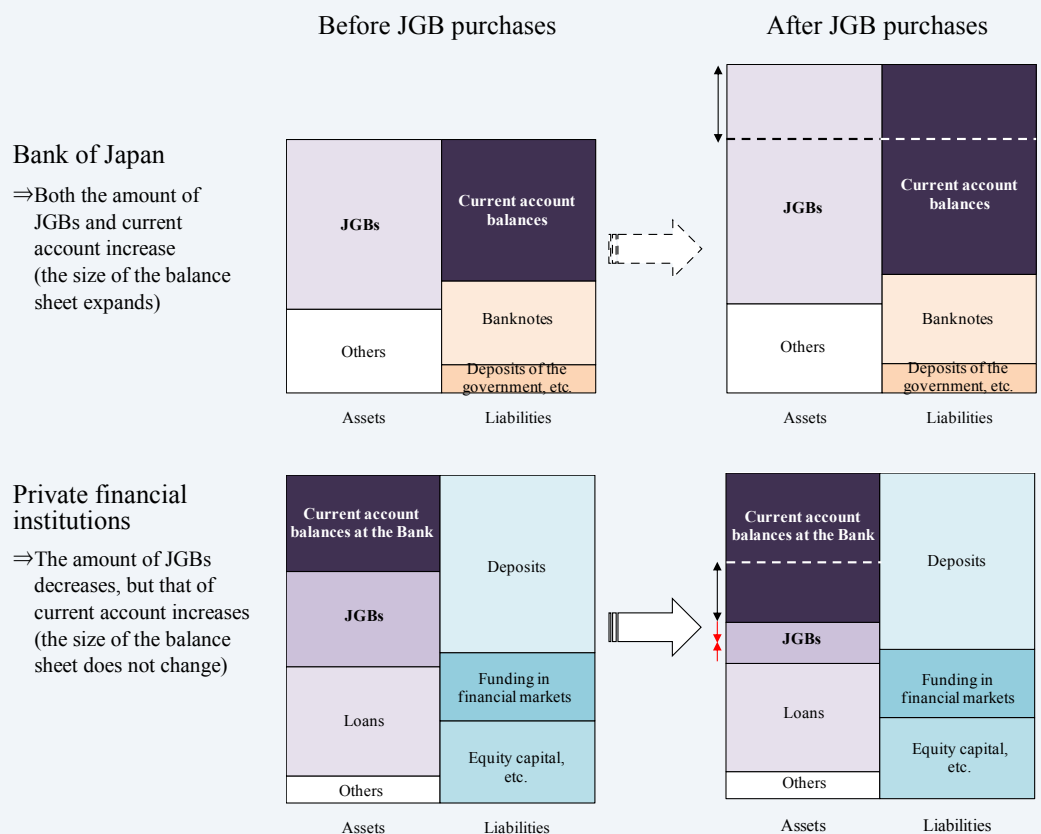
**Box 2: Asset Purchases and Changes in Current Account Balances at the Bank**

The Bank's purchases of assets, for example, JGBs, do not change the size of counterparty private financial institutions' balance sheets but alter their composition by reducing JGBs and increasing current account balances on the asset side. Regarding the Bank's balance

sheet, JGBs on the asset side have increased, as have the current account balances on the liability side (Chart 5). Progress in the Bank's outright purchases of JGBs exerts downward pressure on JGB yields. Therefore, when financial institutions consider reinvesting the funds gained from the sales of JGBs to the Bank, they are expected to increase their investment in risky assets and lending to maintain the profitability of their portfolios as a whole (the portfolio rebalancing effect).

**Chart 5: Change in Balance Sheets of the Bank and Private Financial Institutions**

**(Example: Outright purchases of JGBs)**



Furthermore, when one financial institution increases investment in stocks and lending to change its portfolio, the funds paid for stock purchases and loans disbursed are deposited in other financial institutions, leading to an increase in current account balances at the Bank of the financial institutions that accept such deposits. In other words, transactions within the private sector change individual financial institutions' current account balances at the Bank, but these changes offset each other, resulting in no change in the size of current account

balances at the Bank as a whole. The current account balances of the financial system as a whole held at the Bank are determined solely by the Bank's supply of funds (through, for example, asset purchases). Thus, it can be said that the portfolio rebalancing effect manifests itself in not transferring the current account balances at the Bank as a whole to investment in stocks and lending but changing the composition of private financial institutions' balance sheets and affecting their behavior.

### **C. Developments in Excess and Shortage of Funds**

Developments in excess and shortage of funds showed that the shortage of funds amounted to 111.6 trillion yen, up significantly from 41.2 trillion yen in fiscal 2012 (although the current account balances at the Bank followed an uptrend given the Bank's large-scale asset purchases, which more than offset such shortage of funds). This reflected a significant decrease in the redemption of Japanese government securities (JGSs) to private financial institutions due to the Bank's large-scale purchases of JGBs and T-Bills under quantitative and qualitative monetary easing.

#### **1. Changes in Banknotes**

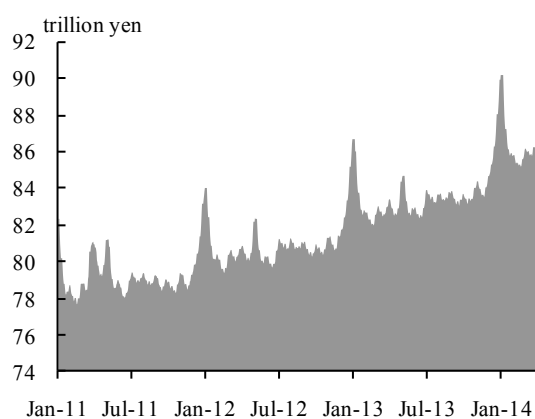
During fiscal 2013, the outstanding balance of banknotes remained on an uptrend, reaching 90.1 trillion yen (up 4.0 percent year on year) at the end of December 2013 and 86.6 trillion yen (up 3.9 percent year on year) at the end of March 2014 (Chart 6). Reflecting this increase in banknote issuance, changes in banknotes in terms of the supply and demand conditions of funds constituted the sources of decrease in the current account balances at the Bank, or shortage of funds, as the amount of net issuance had further expanded from 2.5 trillion yen in fiscal 2012 to 3.3 trillion yen in fiscal 2013.

The cumulative changes in banknotes from the start of fiscal 2013 showed that seasonal fluctuations in the amounts of issuance and redemption remained more or less unchanged from fiscal 2012. However, at the end of December 2013, net issuance expanded to 6.8 trillion yen to meet the year-end demand for banknotes, which was greater than that of a year earlier.

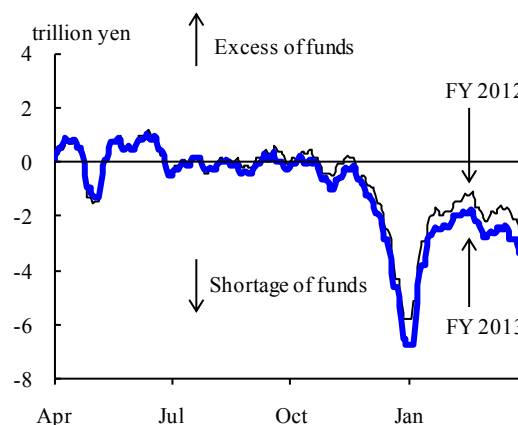


After the turn of the year, as banknotes issued at the year-end were withdrawn from circulation, net issuance continued to follow a decreasing trend, falling to 3.3 trillion yen at the end of March 2014 (Chart 7).

**Chart 6: Outstanding Balance of Banknotes**



**Chart 7: Cumulative Changes in Banknotes in terms of Excess and Shortage of Funds**



## 2. Changes in Treasury Funds and Others

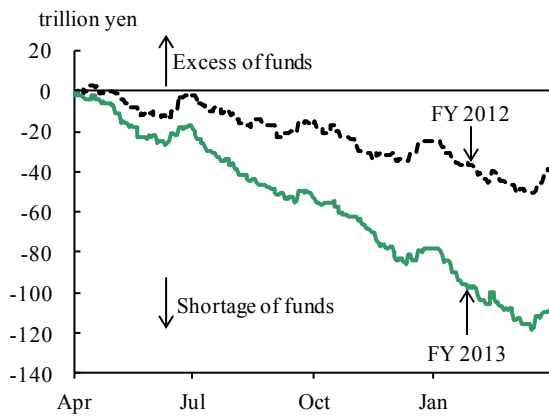
In fiscal 2013, net receipts from JGBs and T-Bills (sources of decrease in current account balances at the Bank, or shortage of funds) exceeded net payments of fiscal payments and revenues (sources of increase in current account balances, or excess of funds). As a result, changes in treasury funds and others registered net receipts of 108.4 trillion yen, up significantly from net receipts of 38.7 trillion yen in fiscal 2012 (Chart 8).

The sharp increase in net receipts during fiscal 2013 occurred mainly because the redemption to the Bank increased, resulting from the Bank's large-scale purchases of JGBs and T-Bills under quantitative and qualitative monetary easing, while the redemption to private financial institutions (payments to current accounts at the Bank) decreased.<sup>3</sup> After the impact of money market operations conducted by the Bank was removed, net receipts of

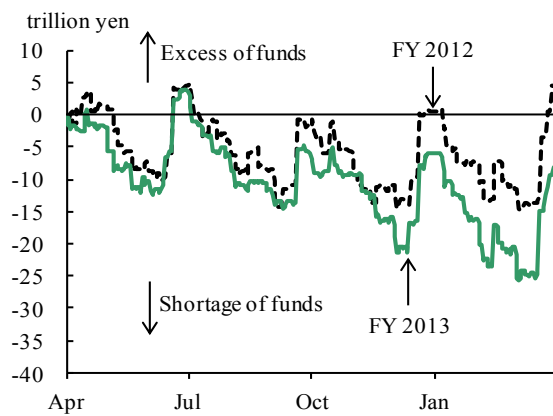
<sup>3</sup> When the Bank purchases JGBs and T-Bills from financial institutions and holds them to maturity, redemption proceeds that would have been deposited in current accounts of financial institutions involved are paid to the Bank. Such transactions result in declines in treasury payments to current accounts at the Bank. Although receipts and payments of "treasury funds and others" during a fiscal year as a whole are supposed to be more or less equal, such treatment of redemption proceeds leads to large net receipts (shortage of funds).

treasury funds and others in fiscal 2013 amounted to 8.1 trillion yen vis-à-vis net payments of 4.4 trillion yen in fiscal 2012 (also after removing the impact of the Bank's money market operations), having moved in the direction of shortage of funds by 12.5 trillion yen (Chart 9). This was mainly attributed to the increase in the issuance of JGSs in fiscal 2013 as compared with fiscal 2012, as well as an increase in tax receipts.

**Chart 8: Cumulative Changes in Treasury Funds and Others in terms of Excess and Shortage of Funds**



**Chart 9: Cumulative Changes in Treasury Funds and Others in terms of Excess and Shortage of Funds (Reflecting Effects of Operations)**



### **III. Developments in the Domestic Money Markets and Bond Markets**

Against the background of the aforementioned market operations conducted by the Bank, developments in the money markets and bond markets in Japan as well as the foreign exchange swap markets were as follows.

#### **A. Overnight Money Market**

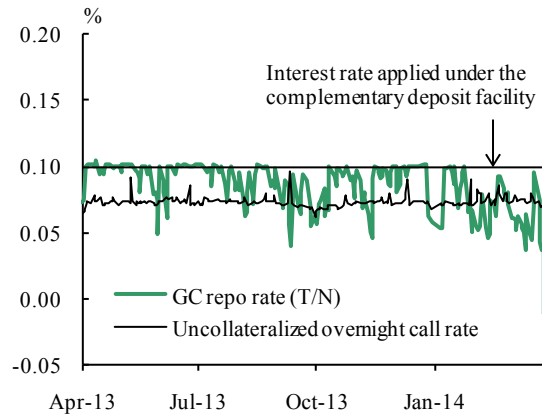
During fiscal 2013, interest rates in the overnight money market remained at extremely low levels, mainly due to the Bank's provision of ample funds under quantitative and qualitative monetary easing.

The uncollateralized overnight call rate remained at an extremely low level of around 0.07 percent amid the Bank's continued provision of ample funds, although the rate was no longer the main operating target for money market operations following the introduction of quantitative and qualitative monetary easing (Chart 10).

The general collateral (GC) repo rate had frequently been at a level clearly below the interest rate applied under the complementary deposit facility of 0.1 percent, albeit with some fluctuations. As the background to this, the following factors can be pointed out: (1) on the fund-raising side, the supply and demand conditions of T-Bills tightened due to progress in the Bank's purchases of T-Bills, and the funding needs of securities companies to finance their inventories remained at a low level; and (2) on the investment side, financial institutions not eligible for the complementary deposit facility (institutions not eligible for remuneration) such as investment trusts continued to need to provide funds even at rates below the interest rate applied under the complementary deposit facility of 0.1 percent. Particularly during periods such as quarter-ends, when funding needs declined further in tandem with a greater tendency for investment needs to grow in the repo market, the GC repo rate temporarily declined to levels significantly below 0.1 percent. Especially at the fiscal year-end in March 2014, the GC repo rate fell into negative territory, albeit only marginally, for the first time since compilation of the statistics began in December 2000.

From the beginning of April 2014, however, the GC repo rate entered positive territory as the quarter-end factor abated.

**Chart 10: Overnight Interest Rates**



Note: Based on contract date.

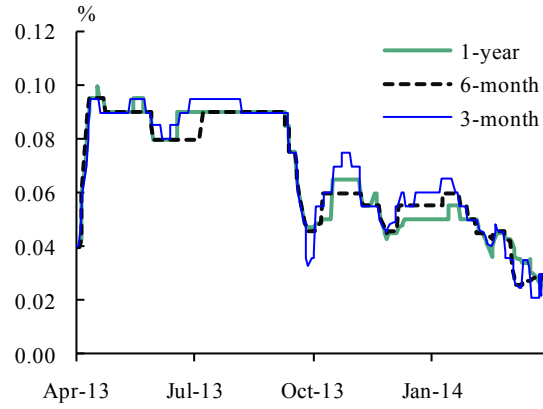
## **B. T-Bill Market**

Before the MPM held on April 3 and 4, 2013, yields on T-Bills had fallen significantly below 0.1 percent as market participants' speculation was mounting that the interest rate applied under the complementary deposit facility might be lowered. After the introduction of quantitative and qualitative monetary easing was decided, however, yields on T-Bills temporarily rose, approaching 0.1 percent, due to arbitrage with the interest rate applied under the complementary deposit facility.

Later, while the Bank purchased a large amount of T-Bills under quantitative and qualitative monetary easing, the amount outstanding of T-Bills in the market followed a downtrend. In this situation, as private financial institutions needed to hold T-Bills as collateral and institutions not eligible for remuneration such as foreign investors and investment trusts needed to hold T-Bills as a fund management tool even though yields on T-Bills had fallen below the interest rate applied under the complementary deposit facility, the supply and demand conditions of T-Bills tightened slowly. As a result, yields on T-Bills gradually trended lower as a whole. Particularly at quarter-ends in September 2013 and

March 2014, the yields declined significantly against the background of the growing demand for T-Bills (Chart 11).

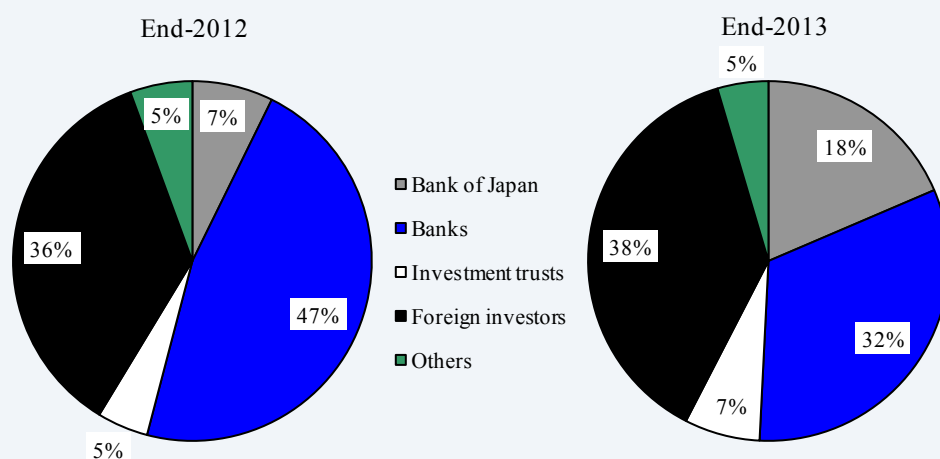
**Chart 11: T-Bill Rates in the Secondary Market**



**Box 3: Investment in T-Bills by Institutions Not Eligible for Remuneration (Such as Foreign Investors and Investment Trusts)**

T-Bill holdings by sector at the end of 2012 and 2013 showed that the Bank increased its share reflecting its large-scale purchases under quantitative and qualitative monetary easing, while banks and other institutions reduced their share. Meanwhile, foreign investors and investment trusts, which are institutions not eligible for remuneration, increased their share -- albeit slightly -- and these investors seemed to have a persistent need for T-Bills to manage their funds (Chart 12).

**Chart 12: Share of T-Bill Holdings by Sector**



Notes: 1. T-Bills held by the central government and the Fiscal Loan Fund are excluded.  
2. T-Bills underwritten by the Bank are excluded.

T-Bill holdings by foreign investors seemed to consist mainly of foreign reserve management by, for example, foreign central banks. In many cases, these foreign investors allocated a certain amount of funds to the yen as a "safe-haven currency" for risk management. In this situation, T-Bills with high credit quality and liquidity appeared likely to remain major investment assets despite their low yields. In addition, T-Bill holdings might have been encouraged by the low level of yen funding costs in the U.S. dollar/yen foreign exchange swap market, which often enabled foreign investors to obtain funds at rates lower than yields on T-Bills.

Among institutions not eligible for remuneration, investment trusts such as money reserve

funds (MRFs) are the major domestic players that continually invest in T-Bills. Emphasizing safety and liquidity to manage settlement and accumulated funds for securities investment, MRFs set restrictions on the remaining maturity of investment assets (1 year or less) and holdings of risky assets such as CP and corporate bonds. T-Bills are accordingly important assets for MRFs in managing their funds. During 2013, as funds flowed into securities accounts mainly due to an uptrend in stock prices, investment trusts such as MRFs seemed to have a growing need to invest in T-Bills.

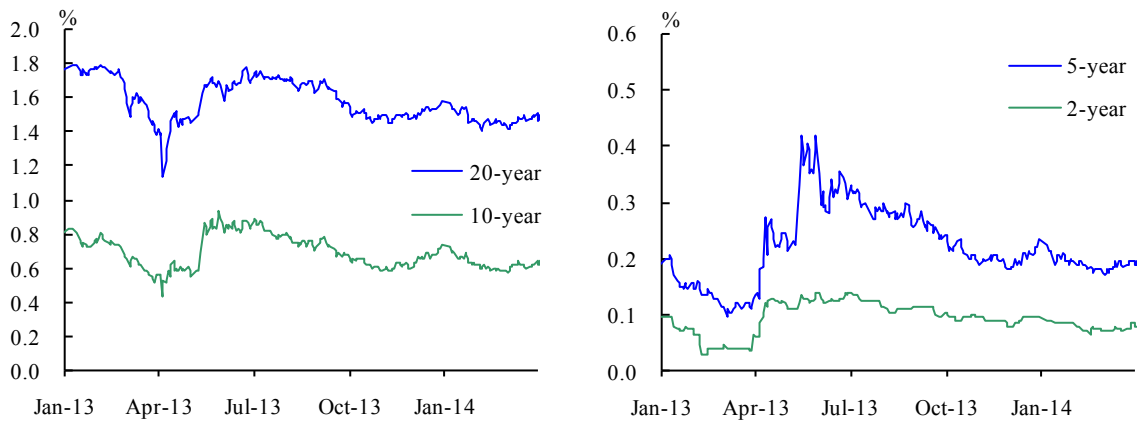
### **C. JGB Market**

Immediately after the introduction of quantitative and qualitative monetary easing, long-term interest rates fluctuated between a historical low of 0.3-0.4 percent (on an intraday basis) and 0.6-0.7 percent, as market participants had mixed views on its effects. Thereafter, however, long-term interest rates temporarily rose to around 1 percent (on an intraday basis) in late May 2013, primarily reflecting a cautious stance on bond investment among market participants, which stemmed from such heightening of interest rate volatility, better-than-expected business sentiment abroad, a rise in stock prices at home and abroad, depreciation of the yen, and speculation about the direction of U.S. monetary policy (Chart 13). While U.S. and European long-term interest rates moved up, Japanese long-term interest rates followed a moderate downtrend as the Bank's large-scale JGB purchases continued to exert downward pressure on interest rates from the supply and demand perspective. From September 2013, long-term interest rates remained generally stable within a range between 0.6 and 0.7 percent (Chart 14). In line with these developments, interest rate volatility decreased, and from autumn 2013 it almost returned to the level recorded before the introduction of quantitative and qualitative monetary easing (Chart 15). Yields on 20-year JGBs generally followed long-term interest rates (Chart 13).

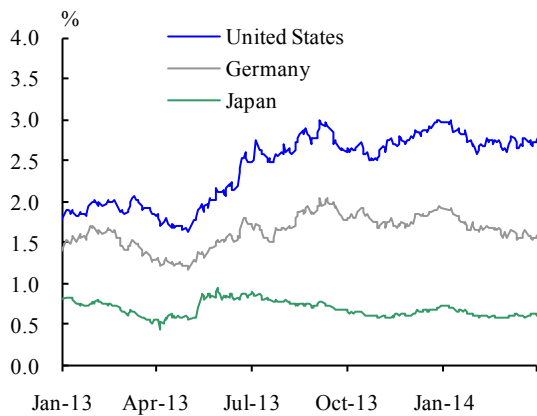
Before the MPM held on April 3 and 4, 2013, yields on 2-year and 5-year JGBs had declined as market participants' speculation was mounting that the interest rate applied under the complementary deposit facility might be lowered. However, like long-term interest rates, these yields fluctuated widely immediately after the introduction of quantitative and qualitative monetary easing. Thereafter, yields on 5-year JGBs rose to

0.4-0.5 percent toward mid-June 2013 in tandem with a rise in long-term interest rates, but they then gradually fell close to 0.2 percent, remaining almost unchanged from October 2013 as the Bank's large-scale JGB purchases continued to exert downward pressure on interest rates. Reflecting investors' steady demand for short-term JGBs, yields on 2-year JGBs followed a declining trend from the middle of 2013, hovering below the interest rate applied under the complementary deposit facility of 0.1 percent from November 2013 (Chart 13).

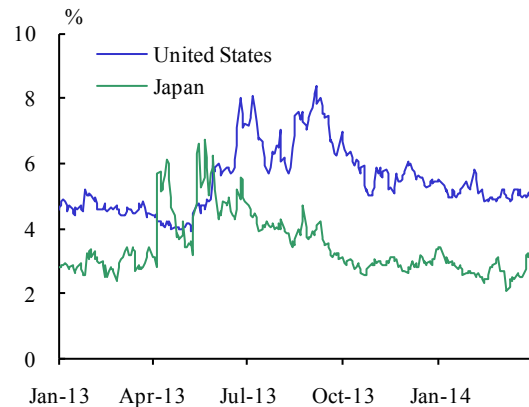
**Chart 13: Yields on JGBs**



**Chart 14: Long-Term Yields**



**Chart 15: Implied Volatilities of Government Futures Bond Prices**



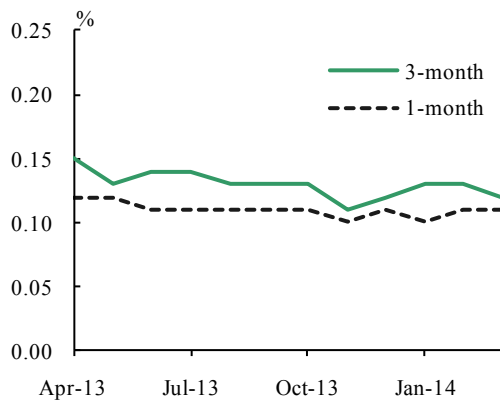
Notes: 1. Model-free implied volatilities that are calculated by using price information from futures options markets and correspond to options market participants' expected change in government bond prices for the next 3 months.  
 2. Options on JGB futures traded on the Tokyo Stock Exchange for Japan; options on U.S. Treasury futures traded on the Chicago Board of Trade for the United States.



## D. CP and Corporate Bond Markets

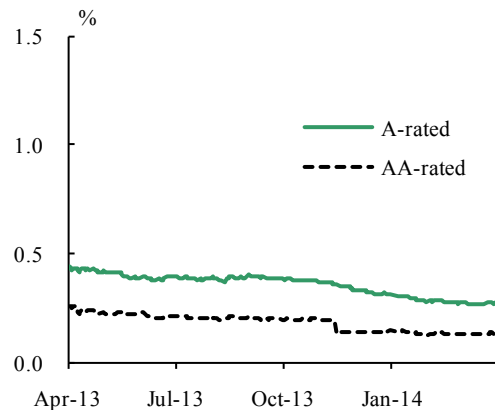
Yields on credit instruments such as CP issuance rates and corporate bond yields generally remained stable at low levels thanks to improved credit risk perceptions among market participants and the Bank's continued purchases of CP and corporate bonds against the background of the sustained accommodative monetary environment (Charts 16 and 17). In the CP market, issuance rates often fell below 0.1 percent, especially among issues with high ratings. In the corporate bond market, yield spreads between corporate bonds and JGBs generally followed a moderate narrowing trend. The yield differentials among issues -- which were caused by yield spikes or sustained high yields in some industries in fiscal 2012 -- diminished during the second half of fiscal 2013.

**Chart 16: CP Issuance Rates**



Note: Those of the corporate sector, on a monthly basis.

**Chart 17: Yield Spreads between Corporate Bonds and JGBs**

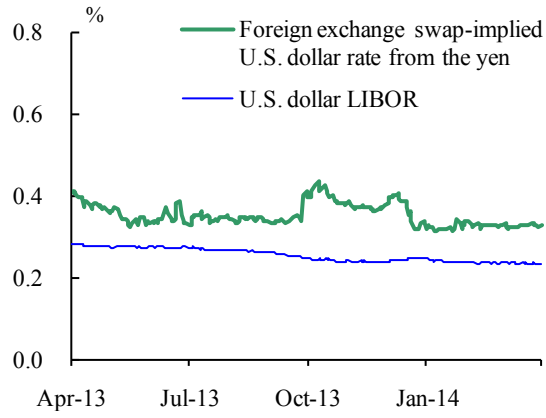


Note: Yields on JGBs with a remaining maturity of 5 years. Yields on corporate bonds are based on the expanded pool of issues with a remaining maturity of 3 to 7 years.

## E. Foreign Exchange Swap Market

In the foreign exchange swap market, the U.S. dollar-funding environment generally remained calm (Chart 18). Despite a temporary increase in uncertainty about the debt ceiling issue in the United States toward mid-October 2013, there was no visible rise in dollar-funding costs except for the premiums on dollar funding over the year-end. Although there were some concerns about the debt ceiling issue in the United States toward early February 2014, they had little impact on the dollar-funding costs.

**Chart 18: U.S. Dollar LIBOR and Foreign Exchange Swap-Implied Rate from the Yen (3-Month)**



Note: The foreign exchange swap-implied U.S. dollar rate from the yen is the total funding cost of raising yen at yen LIBOR and converting the proceeds into dollars through a foreign exchange swap transaction.

## **IV. Conduct of Individual Measures in Money Market Operations**

This chapter explains the individual measures taken in the course of the money market operations conducted during fiscal 2013.

### **A. Asset Purchases**

#### **1. Outright Purchases of JGBs**

Under quantitative and qualitative monetary easing introduced in early April 2013, with a view to encouraging a further decline in interest rates across the yield curve, the Bank decided to purchase JGBs so that their amount outstanding would increase at an annual pace of about 50 trillion yen. In addition, the Bank decided to make JGBs with all maturities including 40-year bonds eligible for purchase and extend the average remaining maturity of the Bank's JGB purchases from slightly less than 3 years at that time to about 7 years. As actions accompanied by the introduction of quantitative and qualitative monetary easing, the Bank terminated the APP and temporarily suspended the so-called banknote principle.

In conducting such large-scale JGB purchases, the Bank's Financial Markets Department established a framework enabling it to respond flexibly and take account of market conditions, while paying attention to the predictability of operations. Specifically, on April 4, 2013, the Bank released "Outline of Outright Purchases of Japanese Government Bonds," detailing the guidelines for JGB purchases, such as amounts to be purchased from specific brackets classified by bond type and remaining maturity and frequency of purchases, and decided to purchase JGBs 6 times per month in principle. Considering the market impact of an excessively large amount of purchases per operation, however, the Bank revised "Outline of Outright Purchases of Japanese Government Bonds" on April 18 and May 31, 2013. Namely, to avoid an undue impact of operations on financial markets and conduct operations in a more flexible manner, the frequency of purchases was changed to approximately 8 times per month from April 19, 2013 and approximately 8-10 times per month in principle from June 2013. Under these guidelines, the Bank purchased around 6-8 trillion yen of JGBs per month during fiscal 2013 (Chart 19).

Under the aforementioned conduct of money market operations, the amount outstanding of JGBs held by the Bank stood at 141.6 trillion yen at the end of 2013, up 52.4 trillion yen from the same time a year earlier. The amount outstanding at the end of March 2014 reached 154.2 trillion yen, up 62.8 trillion yen from a year earlier (Chart 20). The average remaining maturity of the Bank's JGB purchases (flow) lengthened to 7.3 years in fiscal 2013 from 3.0 years (including those purchased through the APP) in fiscal 2012 (Chart 21). The average remaining maturity of the Bank's JGB purchases (flow) lengthened to 7.3 years in fiscal 2013 from 3.0 years (including those purchased through the APP) in fiscal 2012 (Chart 21).

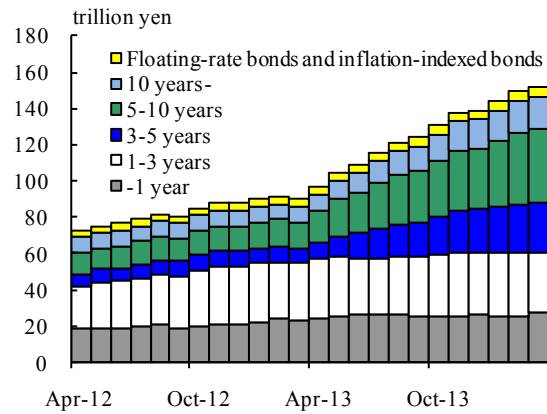
**Chart 19: Amounts of Monthly Purchases of JGBs**

trillion yen

	Based on dates of offers	Based on dates of exercise
Apr. 2013	7.6	6.9
May	7.7	8.5
June	8.2	7.5
July	7.1	7.7
Aug.	7.2	6.6
Sep.	7.4	7.1
Oct.	7.5	7.4
Nov.	7.2	8.2
Dec.	6.8	5.6
Jan. 2014	6.7	7.0
Feb.	6.7	7.0
Mar.	6.5	6.5

Note: Face value. JGBs purchased through the APP are included.

**Chart 20: Amounts Outstanding of the Bank's JGB Holdings**



Note: Face value. JGBs purchased through the APP are included. Maturity segments are as of the end of month.

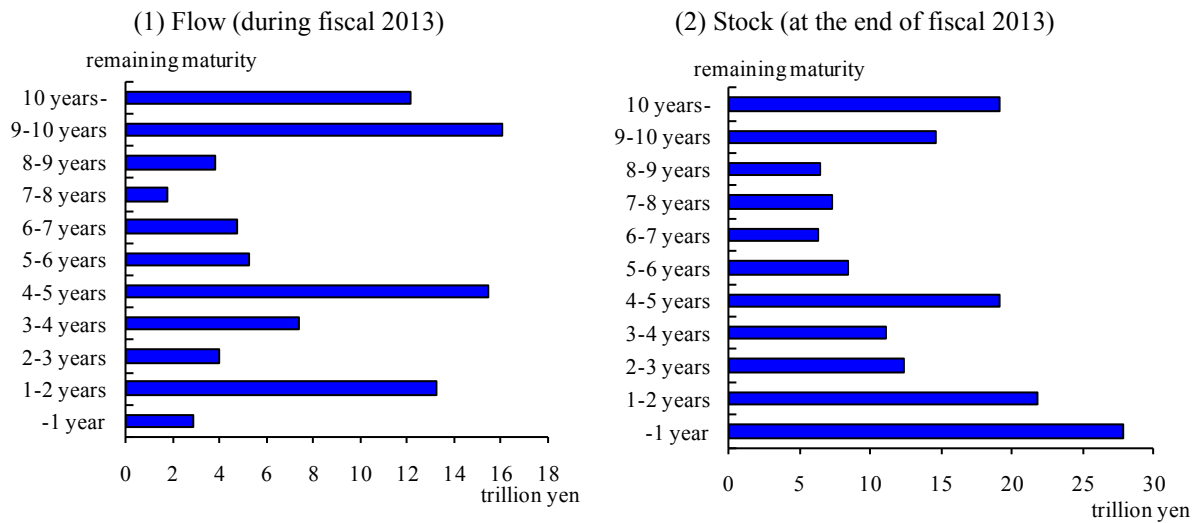
**Chart 21: Average Maturity of JGBs Purchased by the Bank**

years

	Flows during the fiscal years	Stock at the end of the fiscal year
Fiscal 2010	3.7	4.9
Fiscal 2011	3.0	4.3
Fiscal 2012	3.0	3.9
Fiscal 2013	7.3	5.6

Note: JGBs purchased through the APP are included.

**Chart 22: Maturity Composition of Amounts Outstanding of JGB Purchases**



**Box 4: Market Developments after the Offer of Outright Purchases of JGBs**

The Bank's outright purchases of JGBs under quantitative and qualitative monetary easing could have a range of effects on the JGB market. This box examines developments in the JGB market immediately after the offer of outright purchases from bid-ask spreads.

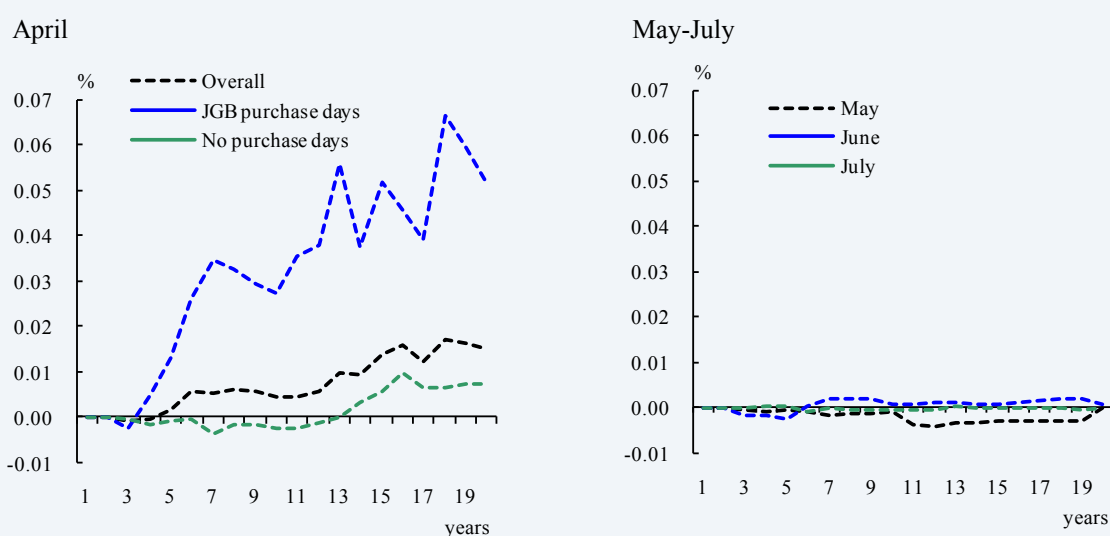
The bid-ask spread is the difference between a bid price offered by buyers and an ask price offered by sellers. When the bid-ask spread is large, it is more difficult for traders to execute transactions around their intended prices. As bid-ask spreads are influenced by a variety of factors, it is difficult to extract only the effects of the Bank's outright purchases of JGBs. In what follows, we observe the effects of purchases on financial markets by looking at changes in spreads immediately after the offer of outright purchases of JGBs.

Changes in bid-ask spreads for about 10 minutes from just before the outright purchases of JGBs were offered (at 10:10 a.m.) showed that bid-ask spreads, particularly for JGBs with a remaining maturity of 5 years or more, widened by around 0.01-0.07 percent on the offer dates during April 2013. From May 2013, however, changes in bid-ask spreads after the offer of outright purchases of JGBs became smaller (Chart 23).

This seemed to be mainly attributable to the fact that although market participants initially

had a strong feeling of uncertainty about the effects of the Bank's large-scale outright purchases of JGBs on financial markets, their views on the offer schedule for purchases and the impact of purchases on financial markets started to converge as the Bank revised the guidelines for purchases -- by increasing the frequency of purchases and decreasing the amount of purchases per operation -- while the market participants gradually gained experience with the outright purchases.<sup>4</sup>

**Chart 23: Changes in Bid-Ask Spreads for about 10 Minutes from Just before the Offer of Outright Purchases of JGBs**



Notes: 1. Average daily range.  
2. Plots on the right-hand chart are based on the offer dates.

## 2. Outright Purchases of CP

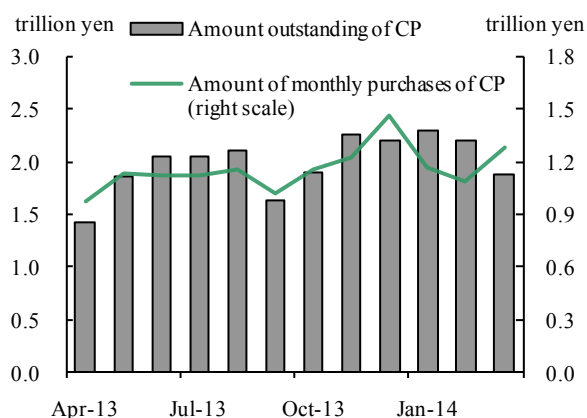
Under quantitative and qualitative monetary easing, the Bank purchased CP until the amount outstanding reached 2.2 trillion yen at the end of 2013 and then maintained it at around 2.2 trillion yen.

Complying with these guidelines, the Bank offered outright purchases 3 times a month with 400 billion yen per operation in principle. Reflecting the fact that CP redemption schedules were concentrated at quarter-ends, those for issues that had been purchased by the Bank were also concentrated at quarter-ends. Based on this, the Bank offered 3 outright purchases

<sup>4</sup> The Bank announced the revisions on April 18 and May 30, 2013.

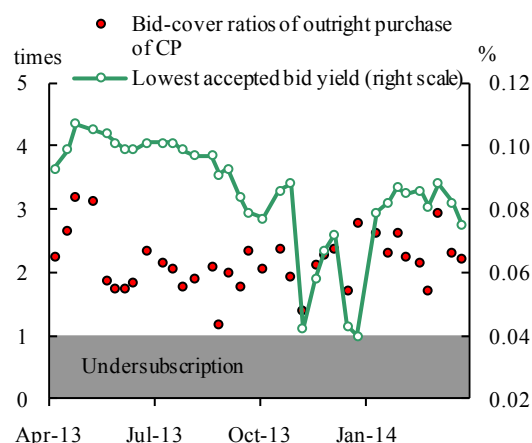
with 450 billion yen per operation in November 2013, 2 outright purchases with 500 billion yen per operation, and 1 outright purchase with 650 billion yen per operation in December 2013. As a result, the amount outstanding of purchases reached 2.2 trillion yen at the end of 2013 despite the large amount of redemptions. In addition, the Bank offered 3 outright purchases with 500 billion yen per operation in March 2014, an amount that was somewhat larger than usual, but the amount outstanding of purchases temporarily decreased to 1.9 trillion yen at the end of March 2014 (Chart 24). This was because many firms refrained from issuing CP over the end of the accounting period in March to reduce interest-bearing debt, and the redemption schedules of the issues that had been purchased by the Bank were concentrated more heavily than at the end of 2013.

**Chart 24: Amount Outstanding and Amount of Monthly Purchases of CP**



Note: CP purchased through the APP is included.

**Chart 25: Bid-Cover Ratios and Lowest Accepted Bid Yield of Outright Purchase of CP**



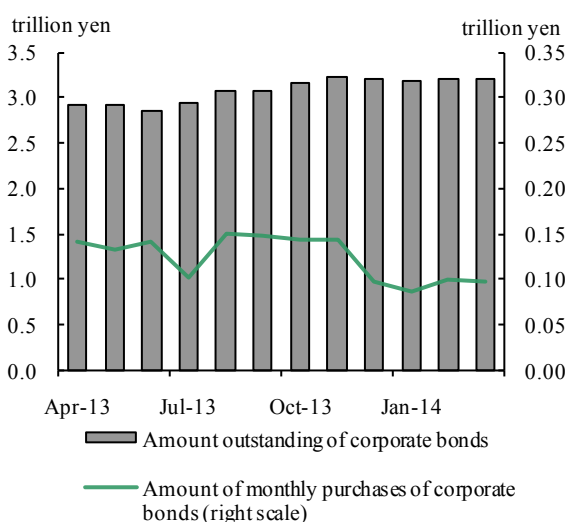
Meanwhile, the lowest accepted bid yield frequently fell below the interest rate applied under the complementary deposit facility of 0.1 percent. Particularly at the end of 2013, when the Bank increased the offered amount of CP purchases, the lowest accepted bid yield dropped significantly (Chart 25).

### 3. Outright Purchases of Corporate Bonds

Under quantitative and qualitative monetary easing, the Bank purchased corporate bonds until the amount outstanding reached 3.2 trillion yen at the end of 2013 and then maintained it at around 3.2 trillion yen.

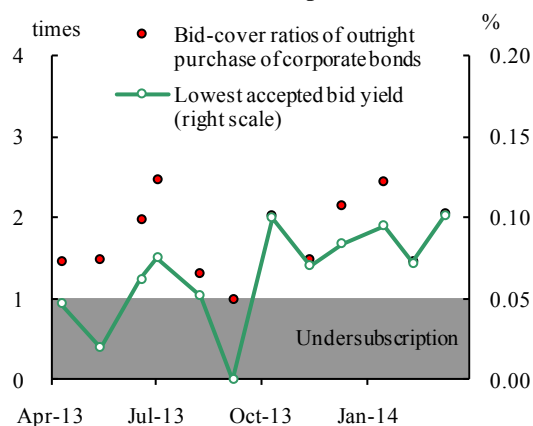
Complying with these guidelines, the Bank offered outright purchases once a month with 150 billion yen per operation during 2013. The amount outstanding of purchases stood at 3.2 trillion yen at the end of 2013 (up 0.3 trillion yen from the same time a year earlier). From the beginning of 2014, the Bank offered outright purchases once a month with 100 billion yen per operation, taking into account the redemption schedules of the issues that had been purchased. The amount outstanding of purchases was 3.2 trillion yen at the end of March 2014 (up 0.3 trillion yen from a year earlier; Chart 26).

**Chart 26: Amount Outstanding and Amount of Monthly Purchases of Corporate Bonds**



Note: Corporate bonds purchased through the APP are included.

**Chart 27: Bid-Cover Ratios and Lowest Accepted Bid Yield of Outright Purchase of Corporate Bonds**



#### 4. Outright Purchases of ETFs

To increase the amount outstanding at an annual pace of 1 trillion yen under quantitative and qualitative monetary easing, the Bank purchased ETFs 77 times in total during fiscal 2013. The amount outstanding of ETFs purchased by the Bank at the end of 2013 stood at 2.5 trillion yen (up 1.0 trillion yen from the same time a year earlier), and that at the end of March 2014 stood at 2.9 trillion yen (up 1.3 trillion yen from a year earlier).



## **5. Outright Purchases of J-REITs**

To increase the amount outstanding at an annual pace of 30 billion yen under quantitative and qualitative monetary easing, the Bank purchased J-REITs 77 times in total during fiscal 2013. The amount outstanding of J-REITs purchased by the Bank at the end of 2013 stood at 0.14 trillion yen (up 0.03 trillion yen from the same time a year earlier), and that at the end of March 2014 stood at 0.15 trillion yen (up 0.03 trillion yen from a year earlier).

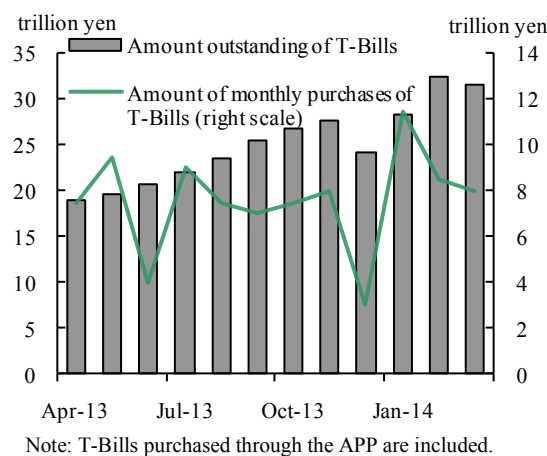
## **B. Short-Term Operations**

### **1. Outright Purchases of T-Bills**

Under quantitative and qualitative monetary easing, the Bank continually offered outright purchases of T-Bills once a week in principle during fiscal 2013. As the amount outstanding of the fixed-rate funds-supplying operations against pooled collateral followed a decreasing trend with extremely strong perceptions of abundant liquidity in the money markets, the amount outstanding of purchases of T-Bills trended up.

During 2013, the Bank offered 1-2 trillion yen per operation, and the amount outstanding of purchases of T-Bills stood at 24.2 trillion yen at the end of 2013, up 14.6 trillion yen from the same time a year earlier. From the beginning of 2014, to steadily accumulate the amount outstanding of the monetary base, the Bank offered 2-2.5 trillion yen per operation. As a result, at the end of March 2014, the amount outstanding of purchases increased to 31.6 trillion yen, up 15.2 trillion yen from a year earlier (Chart 28).

**Chart 28: Amount Outstanding and Amount of Monthly Purchases of T-Bills**



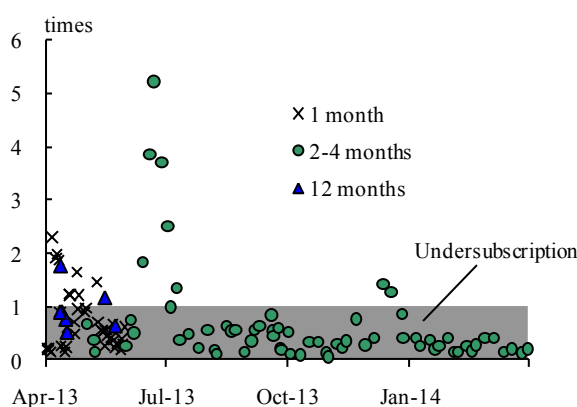
## 2. Fixed-Rate Funds-Supplying Operation against Pooled Collateral

The Bank continually offered the fixed-rate funds-supplying operations against pooled collateral as a means of providing the monetary base.

In principle, the Bank conducted the fixed-rate funds-supplying operations against pooled collateral with a 1- to 4-month term at a pace of 800 billion yen per operation, when the loans matured. Nonetheless, reflecting the Bank's provision of ample funds to financial markets through the large-scale purchases of a wide range of assets conducted concurrently under quantitative and qualitative monetary easing, perceptions of abundant liquidity remained extremely strong, as evident in the GC repo rate generally remaining below 0.1 percent, and the demand for the funds-supplying operations against pooled collateral was generally sluggish. Thus, the so-called undersubscriptions -- where total bidding amounts fell short of the offered amounts -- occurred frequently (Chart 29). As bidding amounts were often smaller than the amount of loans that matured, the amount outstanding of the funds-supplying operations against pooled collateral followed a decreasing trend. As a result, the amount outstanding of the operations stood at 18.1 trillion yen at the end of 2013 (down 8.8 trillion yen from the same time a year earlier) and 14.1 trillion yen at the end of March 2014 (down 7.5 trillion yen from a year earlier; Chart 30).

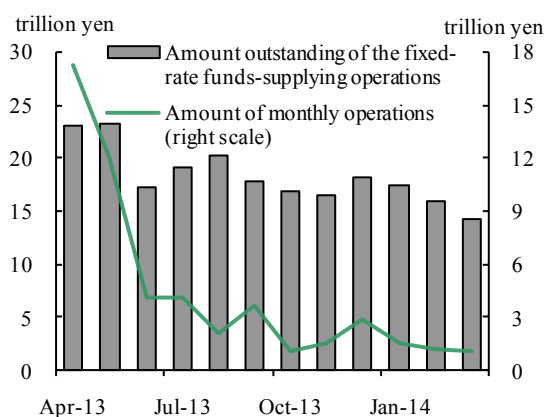
In April and May 2013 -- immediately after the introduction of quantitative and qualitative monetary easing -- the Bank offered 7 fixed-rate funds-supplying operations against pooled collateral with a 1-year term and 1.5-2 trillion yen per operation to meet the growing needs for longer-term funds among market participants for risk management due to an increase in interest rate volatility. Active bidding was observed on these offers, and the amount outstanding of 1-year operations reached 10.4 trillion yen at the end of March 2014.

**Chart 29: Bid-Cover Ratios of the Fixed-Rate Funds-Supplying Operation against Pooled Collateral**



Note: Fixed-rate funds-supplying operations against pooled collateral conducted through the APP are included.

**Chart 30: Amount Outstanding and Amount of Monthly Operations of the Fixed-Rate Funds-Supplying Operation against Pooled Collateral**



Note: Fixed-rate funds-supplying operations against pooled collateral conducted through the APP are included.

## C. Loan Support Program

### 1. Growth-Supporting Funding Facility

During fiscal 2013, the Bank disbursed new loans under the main rules for the Growth-Supporting Funding Facility introduced in June 2010 once a quarter, 4 times in total. In addition, the Bank disbursed new loans once a quarter, 4 times in total each under (1) a line of credit for equity investments and asset-based lending established in June 2011 (special rules for equity investments and asset-based lending), (2) a line of credit for small-lot investments and loans (for 1 million yen or more but less than 10 million yen) introduced in March 2012 (special rules for small-lot investments and loans), and (3) a line of credit for investments and loans denominated in foreign currencies introduced in April 2012 (special rules for the U.S. dollar lending arrangement; Chart 31).

At the end of March 2014, the outstanding balance of loans under the main rules reached 3.1 trillion yen out of the ceiling for loans to be disbursed at that time of 3.5 trillion yen. The outstanding balance of loans under the special rules for equity investments and asset-based lending stood at 80.8 billion yen out of the ceiling of 0.5 trillion yen; those under the special rules for small-lot investments and loans at 8.1 billion yen out of the ceiling of 0.5 trillion yen; and those under the special rules for the U.S. dollar lending arrangement at 8.8 billion dollars out of the ceiling of 12 billion dollars.

**Chart 31: Loan Disbursement under the Growth-Supporting Funding Facility**

(Main rules)

100 million yen

	12th (May 31, 2013)	13th (Aug. 30)	14th (Nov. 29)	15th (Feb. 28, 2014)	Outstanding balance of loans (as of end-Mar. 2014)
Major banks	798	312	461	301	10,894.4
Regional banks, etc	2,301	1,496	1,776	1,565	20,524.8
Total	3,099	1,808	2,237	1,866	31,419.2

(Special rules for equity investments and asset-based lending)

100 million yen

	8th (May 31, 2013)	9th (Aug. 29)	10th (Nov. 28)	11th (Feb. 27, 2014)	Outstanding balance of loans (as of end-Mar. 2014)
Total	30	29	50	116	807.5

(Special rules for small-lot investments and loans)

100 million yen

	5th (May 30, 2013)	6th (Aug. 29)	7th (Nov. 28)	8th (Feb. 27, 2014)	Outstanding balance of loans (as of end-Mar. 2014)
Total	6.92	6.34	7.42	12.25	80.63

(Special rules for the U.S. dollar lending arrangement)

million U.S. dollars

	4th (May 30, 2013)	5th (Aug. 29)	6th (Nov. 28)	7th (Feb. 27, 2014)	Outstanding balance of loans (as of end-Mar. 2014)
Total	1,518	1,636	864	1,418	8,777.0

## 2. Stimulating Bank Lending Facility

During fiscal 2013, the Bank disbursed loans under the Stimulating Bank Lending Facility introduced in December 2012 once a quarter, 4 times in total (Chart 32). At the end of March 2014, the outstanding balance of these loans reached 8.5 trillion yen.

**Chart 32: Loan Disbursement under the Stimulating Bank Lending Facility**

100 million yen

	June 2013 (June 18)	Sep. 2013 (Sep. 12)	Dec. 2013 (Dec. 12)	Mar. 2014 (Mar. 14)	Outstanding balance of loans (as of end-Mar. 2014)
Major banks	25,400	6,142	2,790	23,604	57,936
Regional banks, etc.	6,119	2,670	7,738	11,049	27,560
Total	31,519	8,812	10,528	34,653	85,496

## D. Other Operations

### 1. Securities Lending Facility

Given the large-scale purchases of JGBs in introducing quantitative and qualitative monetary easing, the Bank relaxed the terms and conditions under the securities lending facility for the time being in order to ensure that the market liquidity of JGBs was maintained (see Chapter V.A). Due to these measures to ease the terms and conditions as well as an increase in the number of fails during fiscal 2013, the number of the securities lending facility auctions conducted in fiscal 2013 increased from fiscal 2012 (Chart 33).

**Chart 33: Number of Securities Lending Facility Auctions**

	Number of operations
Fiscal 2011	14
Fiscal 2012	13
Fiscal 2013	48

### 2. Funds-Supplying Operation to Support Financial Institutions in Disaster Areas

During fiscal 2013, the Bank disbursed loans once a month, 12 times in total (Chart 34). The outstanding balance at the end of March 2014 stood at 0.4 trillion yen out of the ceiling of 1 trillion yen.

**Chart 34: Loan Disbursement under the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas**

100 million yen

	24th (Apr. 18, 2013)	25th (May 16)	26th (June 24)	27th (July 22)	28th (Aug. 26)	29th (Sep. 20)	30th (Oct. 18)	31st (Nov. 22)	32nd (Dec. 18)	33rd (Jan. 17, 2014)	34th (Feb. 21)	35th (Mar. 24)	Outstanding balance of loans (as of end-Mar. 2014)
Major banks	0	31	0	2	3	0	79	9	30	1	0	0	155
Regional banks, etc.	0	0	543	1,265	604	808	430	0	0	0	0	0	3,650
Total	0	31	543	1,267	607	808	509	9	30	1	0	0	3,805

### 3. U.S. Dollar Funds-Supplying Operations

During fiscal 2013, in line with the pre-announced auction schedule, the Bank conducted the 1-week U.S. dollar funds-supplying operations once a week and the 3-month operations about once every 4 weeks. In these operations, an unlimited amount of funds was provided at a fixed rate against eligible collateral submitted to the Bank by individual financial institutions.

With respect to the use of these operations, as the U.S. dollar funding market remained calm and as the rates in the Bank's operations continued to exceed those in the market, there was no bid stemming from actual demand for funds. As a result, the amount outstanding of the operations remained almost zero throughout fiscal 2013.

In view of the considerable improvement in U.S. dollar funding, the Bank, in cooperation with the Bank of England, the European Central Bank, and the Swiss National Bank, decided to cease the regular offering of the 3-month U.S. dollar funds-supplying operations from May 2014. As for the 1-week operations, the Bank decided to continue the regular offering at least until July 31, 2014.

#### E. Complementary Lending Facility

During fiscal 2013, the use of the complementary lending facility was extremely limited, against the background of the supply of ample funds to financial markets by the Bank under quantitative and qualitative monetary easing, which gave rise to extremely strong perceptions of abundant liquidity in the money markets.

## V. Systemic Changes Related to Money Market Operations

### A. Relaxation in Conditions for Conducting the Securities Lending Facility

Given the large-scale outright purchases of JGBs under quantitative and qualitative monetary easing, the Bank relaxed the conditions for conducting the securities lending facility effective from April 5, 2013 (Chart 35). The relaxation included, for the time being, (1) lowering the minimum fee rates (from 1 percent to 0.5 percent), (2) abolishing the upper limit to the total amount of sales per day (which was set at around 100 billion yen), and (3) raising the upper limit to the amount of sales per issue (from 50 percent of the amount outstanding of the Bank's holdings to 100 percent of the amount outstanding of the Bank's holdings or 200 billion yen, whichever is smaller; Chart 35).

**Chart 35: Relaxation in Conditions for Conducting the Securities Lending Facility**

	Previous policy	New policy From Apr. 5, 2013
Minimum fee rates	1.0 percent	0.5 percent
Upper limit to the total amount of sales per day	About 100 billion yen	Unlimited
Upper limit to the amount of sales per issue	50 percent of the amount outstanding of the Bank's holdings	The amount outstanding of the Bank's holdings or 200 billion yen, whichever is smaller

#### **Box 5: Operational Changes to the Securities Lending Facility**

On April 14, 2014, the Bank announced that it would implement the following measures regarding the securities lending facility, to ease stress on transactions and settlements in the JGS market with a view to further facilitating the Bank's money market operations as well as contributing to smooth settlement of JGSs.

First, to effectively avoid a chain of fails in the overall financial market by making it possible to cover fails in the early hours of the settlement date, the Bank decided to make the securities lending facility available twice a day (Chart 36).

**Chart 36: Additional Offer in the Morning**

(1) Timetable

	Previous schedule (once a day)	New schedule (twice a day)	
		Offer in the morning	Offer in the afternoon
Accepting requests for offer	9:00 a.m.- 1:00 p.m.	9:00 a.m.-11:15 a.m.	12:30 p.m.-1:15 p.m.
Offer	2:00 p.m.	11:50 a.m.	1:50 p.m.
Bid submission cut-off time	2:30 p.m.	12:15 p.m.	2:15 p.m.
Notification of respective result to counterparties	Around 2:45 p.m.	Around 12:30 p.m.	Around 2:30 p.m.
Payment and settlement	Around 2:45 p.m.-3:30 p.m.	Around 12:30 p.m.-1:15 p.m.	Around 2:30 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.

(2) Upper limit to the amount of sales per issue

	Previous upper limit	New upper limit	
		Offer in the morning	Offer in the afternoon
Upper limit to the amount of sales per issue	The amount outstanding of the Bank's holdings or 200 billion yen, whichever is smaller	Same	Same but excluding the amount sold in the morning

Second, to provide greater transparency about issues that could be obtained through the securities lending facility, the Bank decided to increase the frequency of release of "Japanese Government Bonds Held by the Bank of Japan" to 3 times a month (once every 10 days; Chart 37).



**Chart 37: Increase in the Frequency of Release of "Japanese Government Bonds Held by the Bank of Japan"**

	Previous policy	New policy
Frequency of release	Every month	Every 10 days
Timing of release	The amount outstanding as of the last business day of each month is released 2 business days later, in the evening.	The amount outstanding as of the 10th and 20th calendar days and the last business day of each month is released 2 business days later, in the evening.

Note: If the 10th or 20th calendar day falls on a holiday or weekend, the amount outstanding as of the previous business day is released.

And third, to improve the predictability regarding continuous use of the securities lending facility, the Bank decided to clarify the rules on the consecutive sales transactions per issue with the same counterparty<sup>Note 1</sup> (Chart 38).

**Chart 38: Continuous Use of the Securities Lending Facility**

Rules on consecutive sales transactions per issue
In principle, counterparties will be permitted to consecutively purchase the same issue from the Bank for a maximum of 5 business days. <sup>2</sup>
The Bank may extend the period for consecutive sales transactions per issue when deemed necessary in light of the conditions of financial markets.

Notes: 1. This rule is not applicable to roll-over transactions subject to the fails charge in accordance with market practice.  
2. Securities sold under the securities lending facility are repurchased on the next business day.

**B. Extension of Period for the Funds-Supplying Operations to Support Financial Institutions in Disaster Areas and the Relaxation of the Collateral Eligibility Standards for the Debt of Companies in Disaster Areas**

At the MPMs held on April 3 and 4, 2013, and on February 17 and 18, 2014, to support financial institutions in disaster areas in their efforts to meet demand for funds for restoration and rebuilding and to secure sufficient financing capacity at the financial institutions in disaster areas, the Bank decided to extend by 1 year (1) the deadline for new

applications for loans under the funds-supplying operation to support financial institutions in disaster areas (from the end of April 2013 to the end of April 2014 and to the end of April 2015) and (2) the application period for the relaxation of the collateral eligibility standards for the debt of companies in disaster areas (from the end of April 2014 to the end of April 2015 and to the end of April 2016).

### **C. Acceptance of Electronically Recorded Monetary Claims as Eligible Collateral**

At the MPM held on October 3 and 4, 2013, the Bank decided to accept electronically recorded monetary claims as eligible collateral for the Bank's provision of credit with a view to further facilitating the Bank's money market operations (and began accepting them from February 21, 2014, after completing necessary arrangements).

### **D. Periodic Review of Collateral Value of Eligible Collateral and Other Related Matters**

Since fiscal 2005, the Bank has generally conducted an annual review of collateral values of eligible collateral and other related matters, comprising (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. The review is based on developments in financial markets, and the Bank makes necessary revisions accordingly.

During fiscal 2013, the collateral value and other related matters were revised at the MPM held on October 3 and 4, 2013. Also, the Bank allowed pooled collateral to be used to meet margin calls in the purchase/sales of JGSs with repurchase agreements in conjunction with the implementation of the first phase of the new Bank of Japan Financial Network System (BOJ-NET) on January 6, 2014 (decided at the MPM held on November 20 and 21, 2013).

## **E. Introduction of Standing Liquidity Swap Arrangements among Central Banks**

At the MPM held on October 31, 2013, the Bank decided to convert the existing temporary bilateral liquidity swap arrangements with 5 overseas central banks (the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve, and the Swiss National Bank) that had been effective through February 1, 2014 to standing arrangements.

The standing arrangements constituted a network of bilateral swap lines among the 6 central banks. These arrangements allowed for the provision of liquidity in each jurisdiction in any of the 5 currencies foreign to the jurisdiction, should the 2 central banks in a particular bilateral swap arrangement judge that market conditions warranted such action in one of their currencies.

## **F. Extension and Enhancement of the Stimulating Bank Lending Facility and the Growth-Supporting Funding Facility**

At the MPM held on February 17 and 18, 2014, the Bank decided to double the scale of the Stimulating Bank Lending Facility and the Growth-Supporting Funding Facility and extend the deadlines for new applications under these facilities by 1 year. Specifically, under the Stimulating Bank Lending Facility, financial institutions would be able to borrow funds from the Bank up to an amount that was twice as much as the net increase in their lending. As for the Growth-Supporting Funding Facility, the maximum amount of the Bank's fund-provisioning under the main rules would be doubled from 3.5 trillion yen to 7 trillion yen (Chart 39). Under these facilities, financial institutions would be able to borrow funds at a fixed rate of 0.1 percent per annum for 4 years (instead of 1-3 years before the extension). The disbursement under the enhanced frameworks would begin in June 2014.

The Bank took these measures to further promote financial institutions' actions as well as stimulate firms' and households' demand for credit, with a view to encouraging banks' lending and strengthening the foundations for economic growth.

**Chart 39: Outline of the Extension and Enhancement of the Stimulating Bank Lending Facility and the Growth-Supporting Funding Facility**

Stimulating Bank Lending Facility	Growth-Supporting Funding Facility
<p>1. The deadline for new applications under the facility is extended by 1 year.</p> <p>2. The maximum amount of the Bank's fund-provisioning to each financial institution is an amount that is twice as much as the net increase in its lending.</p> <p>3. The interest rate applied to the facility is fixed at 0.1 percent per annum for 4 years. Financial institutions have an option to make prepayment each year.</p>	<p>1. The deadline for new applications under the main rules as well as special rules for equity investments and asset-based lending, small-lot investments and loans, and the U.S. dollar lending arrangement is extended by 1 year.</p> <p>2. The maximum amount of the Bank's fund-provisioning under the main rules is doubled from 3.5 trillion yen to 7 trillion yen. The maximum amount of its fund-provisioning to each financial institution is increased from 150 billion yen to 1 trillion yen.</p> <p>3. The interest rate applied to the facility under the main rules, special rules for equity investments and asset-based lending, and small-lot investments and loans is fixed at 0.1 percent per annum for 4 years. Financial institutions have an option to make prepayment each year.</p>

## **List of Data Sources and Referenced Materials**

- Chart 1: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)," "Monetary Base and the Bank of Japan's Transactions."
- Chart 2: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 3: Bank of Japan, "BOJ Current Account Balances by Sector."
- Chart 4: Board of Governors of the Federal Reserve System, "Assets and Liabilities of Commercial Banks in the United States."
- Chart 6: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."
- Chart 7: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 8: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 9: 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 10: Japan Securities Dealers Association, "Tokyo Repo Rate;" Bank of Japan, "Uncollateralized Overnight Call Rate."
- Chart 11: Japan Bond Trading.
- Chart 12: Bank of Japan, "Flow of Funds Accounts," "Monetary Base and the Bank of Japan's Transactions."
- Chart 13: Japan Bond Trading.
- Chart 14: Bloomberg; Japan Bond Trading.
- Chart 15: Bloomberg; Bank of Japan.
- Chart 16: Japan Securities Depository Center.
- Chart 17: Japan Securities Dealers Association.
- Chart 18: Bloomberg.
- Chart 19: Bank of Japan, "Bank of Japan Operations."
- Chart 20: Bank of Japan, "Japanese Government Bonds Held by the Bank of Japan."
- Chart 21: Bank of Japan.

Chart 22: Bank of Japan.

Chart 23: Bloomberg.

Chart 24: Bank of Japan, "Bank of Japan Operations," "Monetary Base and the Bank of Japan's Transactions."

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

Chart 26: Bank of Japan, "Bank of Japan Operations," "Monetary Base and the Bank of Japan's Transactions."

Chart 27: Bank of Japan, "Bank of Japan Operations."

Chart 28: Bank of Japan, "Bank of Japan Operations," "Monetary Base and the Bank of Japan's Transactions."

Chart 29: Bank of Japan, "Bank of Japan Operations."

Chart 30: Bank of Japan, "Bank of Japan Operations," "Monetary Base and the Bank of Japan's Transactions."

Chart 31: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth."

Chart 32: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Stimulate Bank Lending."

Chart 33: Bank of Japan, "Bank of Japan Operations."

Chart 34: Bank of Japan, "Loan Disbursement under the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas."