



BOJ *Reports & Research Papers*

August 2024

Market Operations in Fiscal 2023

**Financial Markets Department
Bank of Japan**

Please contact below in advance to request permission when reproducing or copying the content of this report for commercial purposes.

Financial Markets Department, Bank of Japan

Please credit the source when reproducing or copying the content of this report.

Table of Contents

I. Summary	2
II. Developments in the Financial Markets and the Conduct of Market Operations	5
A. Developments in the Money Markets	5
Box 1: Growth of Uncollateralized Call Transactions and the Expansion of Trading Networks under the Three-Tier System	7
Box 2: Structure of the GC Repo Market under the Negative Interest Rate Policy and Background to the Purchases of JGSs with Repurchase Agreements during Fiscal 2023	13
Box 3: Developments in the Money Markets Just after the Termination of the Negative Interest Rate Policy	16
B. Developments in the T-Bill Market and Outright Purchases of T-Bills	19
C. Developments in the JGB Market and Outright Purchases of JGBs	21
Box 4: A Series of Market Operations following the Decision to Conduct Yield Curve Control with Greater Flexibility	31
Box 5: Bond Market Functioning since the Bank's Decision to Conduct Yield Curve Control with Greater Flexibility	36
D. SC Repo Market and Supply of JGBs	39
E. Developments in the CP Market and Outright Purchases of CP	41
F. Developments in the Corporate Bond Market and Outright Purchases of Corporate Bonds	43
G. Developments in the FX Swap Market and Supply of U.S. Dollar Funds	45
H. Outright Purchases of Other Assets	47
I. Other Operations	49
Box 6: Usage of the Climate Response Financing Operations	54
J. Complementary Lending Facility	57
III. Developments in Current Account Balances at the Bank and the Bank's Balance Sheet	58
A. Developments in Exogenous Sources of Changes in Current Account Balances at the Bank	58
Box 7: Factors behind the Decline in the Outstanding Balance of Banknotes	62
B. Three-Tier System of Current Accounts at the Bank	65
C. The Bank's Balance Sheet	70
IV. Major Changes in the Frameworks Related to Market Operations and Others	72
V. Actions to Enhance Dialogue with Market Participants	76
List of Data Sources and Referenced Materials	79

I. Summary

For most of fiscal 2023, the Bank of Japan continued with Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control, with a view to achieving the price stability target of 2 percent in a sustainable and stable manner. Specifically, for the short-term policy interest rate, the Bank applied a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the Bank. With regard to the long-term interest rate, it purchased a necessary amount of Japanese government bonds (JGBs) without setting an upper limit so that 10-year JGB yields would remain at around zero percent. Meanwhile, in July 2023, the Bank decided to conduct yield curve control with greater flexibility. Specifically, while continuing to allow 10-year JGB yields to fluctuate in the range of around plus and minus 0.5 percentage points from the target level, the Bank decided to offer purchases of 10-year JGBs at 1.0 percent, instead of the previous 0.5 percent, through fixed-rate purchase operations, regarding the upper and lower bounds of the range as references, not as rigid limits. Then, in October, it decided to further increase the flexibility in the conduct of yield curve control. Specifically, it decided to conduct yield curve control with the upper bound of 1.0 percent for 10-year JGBs as a reference. In line with this decision, strict control over 10-year JGBs through fixed-rate purchase operations conducted every business day was eliminated.

The following were the key points in the conduct of the Bank's operations under the aforementioned guidelines for market operations.

For short-term interest rates, under the three-tier system during the negative interest rate policy, the uncollateralized call rate generally stayed between minus 0.08 percent and minus 0.01 percent. The GC repo rate stayed at around minus 0.10 percent on the whole. However, the rate temporarily increased somewhat significantly in July 2023 and February 2024, with an imbalance between cash borrowing and lending. Under these circumstances, the Bank provided ample funds to the financial markets by offering purchases of Japanese government securities (JGSs) with repurchase agreements in a flexible and timely manner, with a view to maintaining short-term interest rates in negative territory in a stable manner.

With regard to outright purchases of JGBs, the Bank continued with large-scale JGB purchases and conducted nimble market operations, such as unscheduled purchases of JGBs, to encourage the formation of a yield curve consistent with the guideline for market operations. After the Bank decided to conduct yield curve control with greater flexibility in July 2023, from summer to autumn, there was significant upward pressure on Japanese interest rates because of higher U.S. interest rates and higher expectations for interest rate increases in Japan (long-term interest rates temporarily hit 0.97 percent

at the beginning of November). In response to these rate hikes, the Bank conducted (1) unscheduled outright purchases of JGBs a total of seven times (including additions to the purchase schedule) and (2) the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years a total of three times, based on its stance that it would adjust the speed of rate increases. From November, the Bank gradually reduced the amount of outright purchases of JGBs, taking into account, for example, a tightening of supply-demand conditions for bonds. As a result of such conduct of outright purchases, the amount of monthly outright purchases of JGBs increased from approximately 7 trillion yen in the April-June quarter to approximately 9 trillion yen in October and stayed at around 6 trillion yen after the turn of 2024.

As for outright purchases of assets other than JGBs, the Bank made one purchase of exchange-traded funds (ETFs) amounting to 70.1 billion yen in October 2023, in accordance with the guideline for asset purchases, in which it would purchase ETFs as necessary with an upper limit of about 12 trillion yen on the annual pace of increase in the amount outstanding. Meanwhile, the amount of new outright purchases of Japan real estate investment trusts (J-REITs) was zero under the guideline for asset purchases, in which the Bank would purchase J-REITs as necessary with an upper limit of about 180 billion yen on the annual pace of increase in the amount outstanding.

Meanwhile, the Bank offered twice a month to purchase CP amounting to 400 billion yen, for a total of 800 billion yen per month, in accordance with the guideline for asset purchases, in which it would maintain the amount outstanding of CP at about 2 trillion yen. It also offered once a month to purchase corporate bonds amounting to 100 billion yen, in line with the guideline for asset purchases, in which it would purchase corporate bonds at about the same pace as prior to the COVID-19 pandemic, so that their amount outstanding would gradually return to the pre-pandemic level of about 3 trillion yen.

At the Monetary Policy Meeting (MPM) held on March 18 and 19, 2024, the Bank judged it was now within sight that the price stability target of 2 percent would be achieved in a sustainable and stable manner. Specifically, the Bank considered that the policy framework of QQE with Yield Curve Control and the negative interest rate policy to date had fulfilled their roles. With the price stability target of 2 percent, it decided to conduct monetary policy as appropriate, guiding the short-term interest rate as a primary policy tool, in response to developments in economic activity and prices as well as financial conditions from the perspective of sustainable and stable achievement of the target. On this basis, the Bank decided on the following: (1) for the guideline for market operations, it would encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent; (2) it would continue its JGB purchases at broadly the same amount as before; (3) with regard to asset purchases other than JGB purchases, it would discontinue purchases of ETFs and J-REITs and gradually reduce

the amount of purchases of CP and corporate bonds to discontinue the purchases in about one year; and (4) it would provide loans with an interest rate of 0.1 percent and a duration of one year under the Fund-Provisioning Measure to Stimulate Bank Lending, the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas, and the Funds-Supplying Operations to Support Financing for Climate Change Responses.

Looking at developments in short-term interest rates just after the changes in the monetary policy framework, as the Bank started applying an interest rate of 0.1 percent to the entire part of current account balances held by financial institutions at the Bank excluding required reserve balances ("excess reserves") on March 21, the uncollateralized call rate jumped from minus 0.001 percent the previous day to plus 0.074 percent and stayed stable at around that level through the fiscal year-end of March 2024. The GC repo rate rose from minus 0.10 percent into positive territory and remained slightly positive until the end of March. Meanwhile, the Bank continued JGB purchases at broadly the same amount as before, in line with the new guideline.

The remainder of this report describes the Bank's market operations during fiscal 2023. First, Chapter II describes developments in financial markets such as Japanese money markets and JGB markets, and the conduct of each measure in market operations. Next, Chapter III describes developments in current account balances at the Bank and the Bank's balance sheet. Chapter IV explains major changes in the frameworks related to market operations and others. Finally, Chapter V presents the Bank's actions to enhance dialogue with market participants.

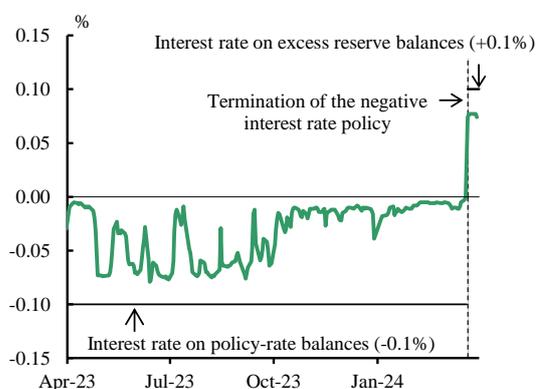
II. Developments in the Financial Markets and the Conduct of Market Operations

A. Developments in the Money Markets

1. Developments in the Uncollateralized Call Market

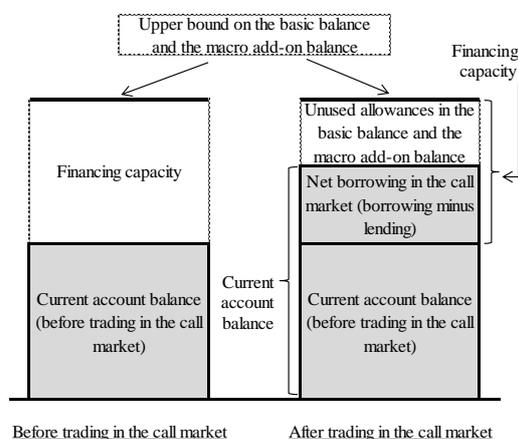
The uncollateralized overnight call rate generally stayed between minus 0.08 percent and minus 0.01 percent until the negative interest rate policy was terminated in March 2024 (Chart 2-1). Looking at the details, the call rate started to experience upward pressure in the October 2023 reserve maintenance period, as regional banks in particular became more active in borrowing cash. The rate rose to a level slightly above minus 0.01 percent from the January 2024 reserve maintenance period.

Chart 2-1: Uncollateralized Overnight Call Rate



Note: Weighted average.

Chart 2-2: Illustration of Financing Capacity under the Three-Tier System



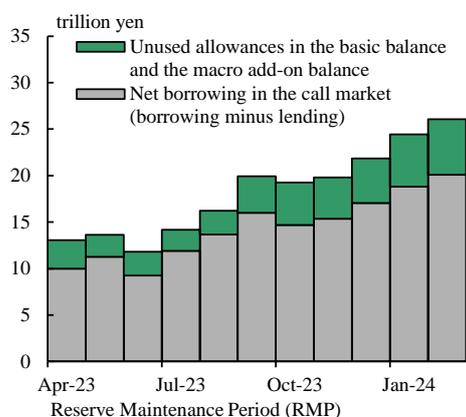
On the cash borrowing side, mainly regional banks continued to be active in borrowing cash throughout the fiscal year. The regional banks' financing capacity¹ expanded, as the upper bound on their macro add-on balances was raised due to their active use of funds-supplying operations. Thus, as part of their search for profit opportunities, they actively engaged in arbitrage trading to obtain call money at negative interest rates and add it to their macro add-on balances (see Box 1 for the growth of uncollateralized call transactions under the three-tier system). In particular, regional banks' financing capacity expanded further from autumn with the increased use of the Stimulating Bank Lending Facility and the Climate Response Financing Operations, which encouraged them to engage in more arbitrage trading, leading to an increase in the call rate (Charts 2-2 and 2-3).

¹ The definition of financing capacity specifies that it is "calculated by deducting the balances of current accounts before trading in the uncollateralized call market from the upper bound on their basic balances and macro add-on balances."

On the cash lending side, investment trusts remained major suppliers of funds in the call market, and some city banks actively lent funds to engage in arbitrage trading between the repo and call markets and to avoid having policy-rate balances.

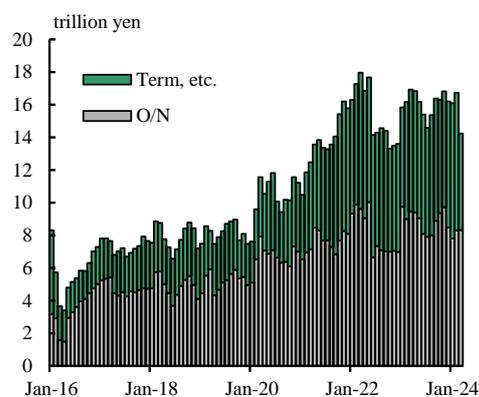
With the aforementioned active arbitrage trading, the amount outstanding in the uncollateralized call market remained high (Chart 2-4).

Chart 2-3: Financing Capacity of Regional Banks under the Three-Tier System



Note: The latest figures are as of the February 2024 RMP.

Chart 2-4: Amounts Outstanding in the Uncollateralized Call Market



Note: Transactions intermediated by *tanshi* companies. Monthly average. Overnight transactions delivered one or more business days after the trade date, such as "T/N" and "S/N," are counted as "O/N" until December 2016 and as "Term, etc." afterward.

After the Bank decided to terminate the negative interest rate policy at the MPM held on March 18 and 19, 2024, and started applying an interest rate of 0.1 percent to excess reserves on March 21, the uncollateralized call rate jumped from minus 0.001 percent the previous day to plus 0.074 percent. It stayed at around that level through the fiscal year-end of March 2024 (see Box 3 for developments in the money markets just after the termination of the negative interest rate policy).

Box 1: Growth of Uncollateralized Call Transactions and the Expansion of Trading Networks under the Three-Tier System

During the negative interest rate policy, arbitrage trading in the uncollateralized call market increased under the three-tier system of current accounts at the Bank. The following summarizes the factors behind the growth of call transactions and the resultant expansion of trading networks.

The amount outstanding in the uncollateralized call market (the total of outstanding overnight and term trades intermediated by *tanshi* companies [money market brokers]) was approximately 7 trillion yen prior to the introduction of the negative interest rate policy. Under the three-tier system, however, the amount outstanding followed an upward trend. In particular, it jumped after the introduction of the Special Funds-Supplying Operations to Facilitate Financing in Response to the Novel Coronavirus (Special Operations in Response to COVID-19) in March 2020, reaching approximately 16 trillion yen by March 2024, just before the negative interest rate policy was terminated (Box Chart 1-1).

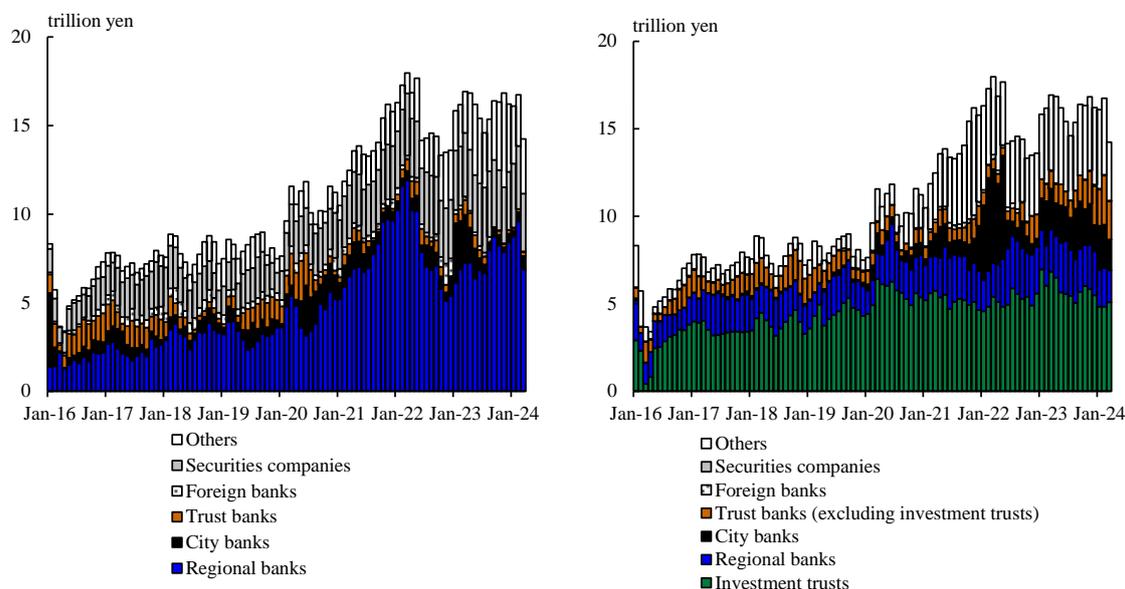
By sector, while investment trusts remained major suppliers of funds on the cash lending side, regional banks increased their presence on the cash borrowing side (Box Chart 1-1). Under the three-tier system during the negative interest rate policy, arbitrage trading took place in the uncollateralized call market between institutions with unused allowances in their macro add-on balances, to which a zero interest rate was applied, and those with policy-rate balances. The growth of such trading was particularly bolstered by the measure to add twice the amount outstanding of funds that counterparties receive under some funds-supplying operations to their macro add-on balances (Box Chart 1-2).

In fact, after the introduction of the Special Operations in Response to COVID-19, regional banks that used these operations actively engaged in arbitrage trading by borrowing cash in the uncollateralized call market and adding it to their macro add-on balances. After these operations were discontinued, the upper limits on regional banks' macro add-on balances temporarily decreased but later began to rise again as these banks increased the use of the Fund-Provisioning Measure to Stimulate Bank Lending (Stimulating Bank Lending Facility). Therefore, regional banks continued to actively borrow funds in the call market. On the cash lending side, after the introduction of the Special Operations in Response to COVID-19, city banks, which increased their lending positions in response to the lowering of the Benchmark Ratio, expanded their presence. Even after the Special Operations were phased out, city banks ramped up arbitrage trading between the repo and call markets, making them the recipients of regional banks' increased borrowing in the call market (Box Chart 1-3).

This growth in regional banks' call market borrowing came about with the expansion of trading

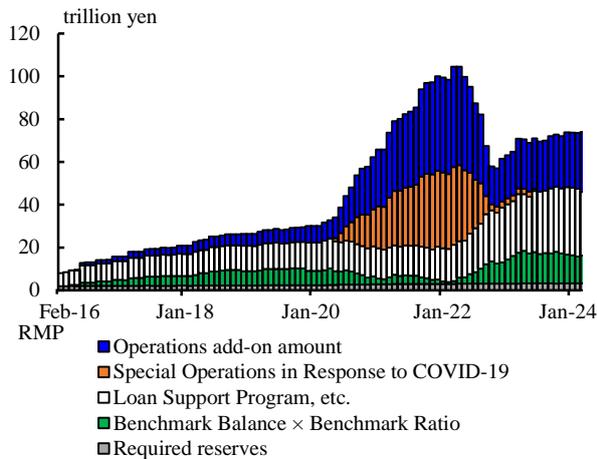
networks. With individual trade data to identify the number of financial institutions that borrowed funds in the uncollateralized call market, it was confirmed that the number of regional banks clearly increased under the three-tier system (Box Chart 1-4). This finding suggests that the aforementioned measure related to the macro add-on balances contributed to expanding the scope of uncollateralized call market transactions, as it incentivized even smaller regional banks that had not been active in the call market before the introduction of the three-tier system. This expansion of trading networks is expected to exert a hysteresis effect on the uncollateralized call market even after the termination of the negative interest rate policy and help facilitate market trading (see Box 3 for developments in the uncollateralized call market just after the termination of the negative interest rate policy).

BOX Chart 1-1: Amounts Outstanding in the Uncollateralized Call Market by Sector
(Cash Borrowing Side) (Cash Lending Side)



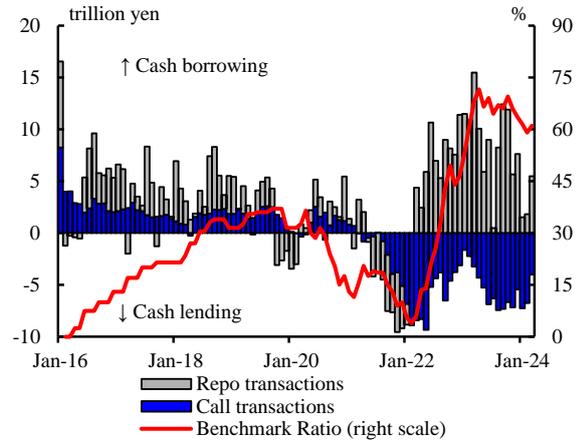
Note: Transactions intermediated by *tanshi* companies. Figures are the sum of "O/N" and "Term etc."

BOX Chart 1-2: Upper Bound on Macro Add-on Balances of Regional Banks



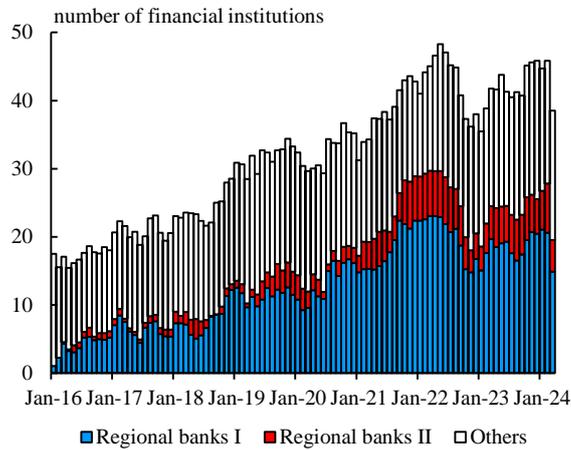
Note: "Loan Support Program, etc." includes the Stimulating Bank Lending Facility, the Growth-Supporting Funding Facility, the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas (including the funds-supplying operations to support financial institutions in disaster areas of the Great East Japan Earthquake and of the 2016 Kumamoto Earthquake before they were abolished), the Funds-Supplying Operations to Support Financing for Climate Change Responses, the amount based on the "Special Rules regarding Calculation of Interest of Complementary Deposit Facility for Money Reserve Funds, etc.," and the amount added or reduced in the calculation of the limit of the Macro Add-on Balance.

BOX Chart 1-3: Call and Repo Transactions by City Banks



Note: Figures for "Repo transactions" are the sum of city banks' securities lending with cash collateral and securities sales with repurchase agreements (as of the month-end).

BOX Chart 1-4: Number of Financial Institutions Borrowing Cash in the Uncollateralized Call Market by Sector

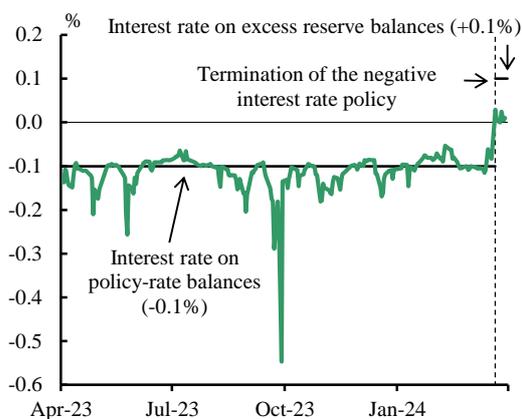


Note: The number of financial institutions that have amounts outstanding on the cash borrowing side of the uncollateralized call market is aggregated by sector based on transaction data of direct dealing (monthly average).

2. GC Repo Market

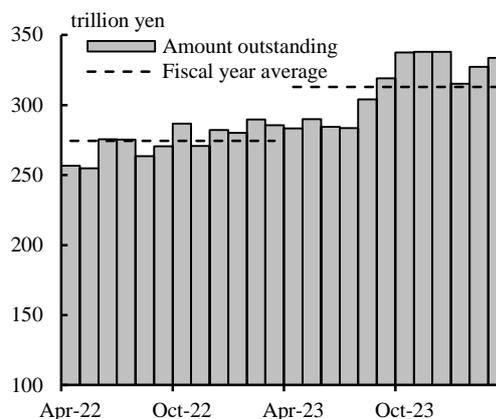
The GC tomorrow-next repo rate stayed at around minus 0.10 percent on the whole until the termination of the negative interest rate policy in March 2024. However, it declined significantly on some occasions particularly at quarter-end, due to tight supply-demand conditions for bonds. Conversely, the rate temporarily increased somewhat significantly in July 2023 and February 2024, with an imbalance between cash borrowing and lending (Chart 2-5).

Chart 2-5: GC Repo Rate



Note: The Tokyo Repo Rate (T/N).

Chart 2-6: Amounts Outstanding in the Repo Market



Note: Figures are the sum of securities lending with cash collateral and securities sales with repurchase agreements.

Looking at the details, the GC repo rate often declined below minus 0.10 percent from April through December 2023, particularly at quarter-end. This reflected tight supply-demand conditions for JGBs resulting from the Bank's large-scale purchases and for treasury discount bills (T-Bills) due to reduced issuance of these securities and strong demand from overseas investors. Conversely, the repo rate faced upward pressure when (1) demand for inventory funding by securities firms temporarily increased immediately following bond auctions, and (2) domestic investors became less active in lending funds due to changes in cash positions. In July 2023 and February 2024, in particular, these occurred concurrently, causing an imbalance of supply-demand conditions in the repo market and driving up the repo rate somewhat significantly.

The amount outstanding in the repo market remained higher than that in fiscal 2022, as (1) cash borrowing for arbitrage trading between the repo and call market ramped up and (2) arbitrage trading between the GC repo and SC repo market continued to be active due to tight supply-demand conditions of bonds (Chart 2-6).

After the negative interest rate policy was terminated, the GC repo rate rose from minus 0.10 percent into positive territory and stayed slightly positive thereafter. However, the rate remained lower than the uncollateralized call rate because of (1) limited demand for inventory funding by securities firms and (2) a lack of active cash borrowing particularly by banks ahead of the fiscal year-end due to the limited availability of collateral.

3. Purchases of JGSs with Repurchase Agreements

Under the negative interest rate policy, the Bank offered purchases of JGSs with repurchase agreements in a flexible and timely manner mainly in light of developments in the money markets to provide ample funds to the financial markets. These operations were conducted with a view to maintaining short-term interest rates in negative territory in a stable manner under the guidelines for market operations, in which the interest rate to be applied to the policy-rate balance was set to minus 0.1 percent (Chart 2-7).

Chart 2-7: Implementation of Purchases of JGSs with Repurchase Agreements

100 million yen, percent per annum

Offer date	Exercise date	Term	Amounts offered	100 million yen, percent per annum		
				Bid-to-cover ratio	Average successful bid rate	Pro-rata rate
Jul. 10, 2023	T+0	1D	10,000	1.05	-0.100	-0.100
Jul. 10	T+1	1D	20,000	2.50	-0.092	-0.100
Jul. 13	T+1	1D	40,000	1.78	-0.094	-0.100
Feb. 5, 2024	T+0	1D	50,000	0.99	-0.099	-0.100
Feb. 5	T+1	1W	40,000	0.78	-0.093	-0.100
Feb. 9	T+1	1D	30,000	1.21	-0.096	-0.100
Feb. 14	T+1	1D	25,000	1.47	-0.090	-0.100
Mar. 18	T+1	2D	30,000	1.13	-0.098	-0.100

Specifically, toward the end of the June 2023 reserve maintenance period, the supply and demand for funds in the repo market became imbalanced, as domestic investors' stance on cash lending shifted due to changes in their cash positions. To hold down the resultant upward pressure on the GC repo rate, the Bank offered to purchase JGSs with overnight and 1-day repurchase agreements on July 10. It also offered 1-day operations on July 13.

Moreover, in the latter part of the January 2024 reserve maintenance period, the GC repo rate experienced upward pressure stemming from (1) a temporary increase in securities firms' demand for inventory funding on the back of multiple issuances of T-Bills and (2) changes in domestic investors' stance on cash lending due to changes in their cash positions, as was the case in the June reserve

maintenance period. The Bank therefore offered operations on February 5 with an overnight term and a term maturing on the last day of the reserve maintenance period. It also offered 1-day operations on February 9 and 14 (see Box 2 for the structure of the GC repo market under the negative interest rate policy).

Furthermore, in March 2024, amid increased speculation that the negative interest rate policy would be lifted by the end of the March reserve maintenance period, the Bank offered 1-day operations on March 18, the first day of the MPM, to stem upward pressure on the GC repo rate, as domestic investors were expected to hold back on cash lending, which they usually engaged in to reduce their policy-rate balances.

For these repurchase operations, the minimum yield was set at minus 0.1 percent with a view to encouraging the formation of appropriate rates in money markets, given that the short-term policy interest rate was set at minus 0.1 percent under the negative interest rate policy. Additionally, the maximum bidding amount for each counterparty was set in a flexible manner, mainly taking account of market participants' cash funding needs and the impact on market functioning.

Box 2: Structure of the GC Repo Market under the Negative Interest Rate Policy and Background to the Purchases of JGSs with Repurchase Agreements during Fiscal 2023

Under the negative interest rate policy, the GC tomorrow-next repo rate generally remained around minus 0.10 percent, except on some occasions, such as at quarter end. However, the rate rose somewhat significantly when the balance between cash borrowing and lending in the repo market was skewed toward the borrowing side. In fact, upward pressure on the GC repo rate was sometimes observed during fiscal 2023, and the Bank conducted purchases of JGSs with repurchase agreements a total of eight times. The following summarizes the causes of changes in the GC repo rate and the structure of supply and demand in the repo market under the negative interest rate policy and explains the background to the Bank's conduct of purchases of JGSs with repurchase agreements.

Under the negative interest rate policy, the GC tomorrow-next repo rate remained below the uncollateralized overnight call rate, and there was a certain spread between these two rates (Box Chart 2-1). This could be attributed to tight supply-demand conditions for JGBs and the existence of the U.S. dollar funding premium. Looking at the results of a regression analysis that takes the GC repo rate as the dependent variable and the uncollateralized call rate, JGB holdings by entities other than the Bank, and the U.S. dollar funding premium as explanatory variables (Box Chart 2-2), the sign of the coefficient for JGB holdings by entities other than the Bank is positive. This suggests that an increase in JGB holdings by market participants pushes up the repo rate (in other words, an increase in the Bank's holdings of JGBs pushes down the repo rate). Additionally, the sign of the coefficient for the U.S. dollar funding premium is negative, indicating that an increase in the U.S. dollar funding premium pushes up the repo rate by encouraging overseas investors to lend cash.

Turning to the structure of daily cash borrowing and lending in the GC repo market under the three-tier system during the negative interest rate policy, the following were the major cash borrowers: (1) securities firms funding their inventories, and (2) banks and others engaging in arbitrage trading by borrowing cash and adding it to their macro add-on balances, to which a zero interest rate was applied. On the other hand, the following were the main cash lenders: (1) securities firms that needed to borrow securities, and (2) banks and others with policy-rate balances. With such a market structure, the GC repo rate tended to remain low at the start of the reserve maintenance period because financial institutions with policy-rate balances actively lent cash to reduce their policy-rate balances.² However, toward the end of the reserve maintenance period, the balance between cash borrowing and lending occasionally became skewed to the borrowing side if policy-rate balances were reduced at a greater

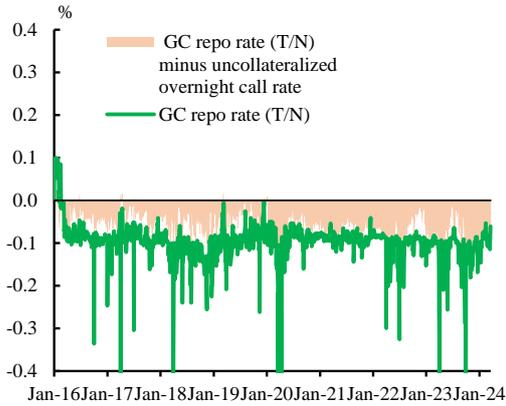
² Some financial institutions sometimes lent funds at a rate clearly lower than minus 0.1 percent to reduce policy-rate balances with priority.

pace than anticipated and securities firms' inventory funding needs increased simultaneously.

The situation described above occurred in July 2023 and February 2024, and the GC repo rate, which had remained low during the first half of the reserve maintenance periods, increased significantly in the latter half of the periods. In response to these rate hikes, the Bank offered purchases of JGSs with repurchase agreements amounting to 7 trillion yen in July 2023 and 14.5 trillion yen in February 2024. Moreover, in March 2024, amid heightened speculation about the termination of the negative interest rate policy, the Bank purchased 3 trillion yen worth of JGSs with repurchase agreements to ease upward pressure on the GC repo rate, as domestic investors were expected to hold back on cash lending, which they usually engaged in to reduce their policy-rate balances (Box Chart 2-3).

The structure of the GC repo market described above is considered to have changed after the termination of the negative interest rate policy. Specifically, since the negative interest rate policy was terminated, the following have been the major cash borrowers: (1) securities firms funding their inventories, and (2) banks and others engaging in arbitrage trading by borrowing cash and adding it to their current account balances at the Bank, to which a positive interest rate of 0.1 percent is applied. On the cash lending side, it has become no longer necessary for banks to reduce their excess cash positions by lending funds, and thus securities firms that need to borrow securities have become the main cash lenders. In view of these changes in the market structure, the spread between the GC repo rate and the uncollateralized call rate will likely narrow compared to when the negative interest rate policy was in place, although the tight supply-demand conditions of JGBs are expected to continue exerting downward pressure on the GC repo rate with the Bank holding a large share of JGBs.

BOX Chart 2-1: Spread between the GC Repo Rate and the Uncollateralized Overnight Call Rate



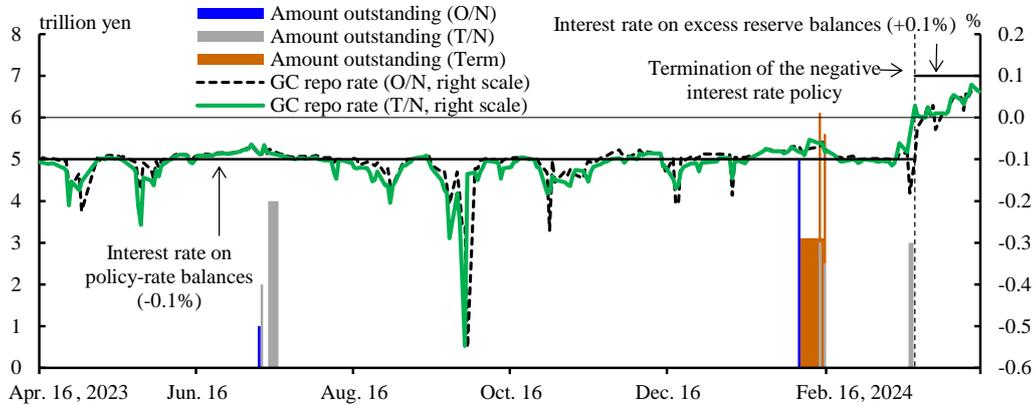
Note: The latest figures are as of March 18, 2024.

BOX Chart 2-2: Factors Affecting the GC Repo Rate

Dependent variable : GC repo rate (% , T/N)	
Uncollateralized overnight call rate (%)	0.545 ***
JGB outstanding (excl. BOJ holdings, tril. yen)	0.002 ***
US Dollar funding premium (%)	-0.079 ***
US Dollar funding premium (%) × dummy variable for year-end funding	0.088 ***
(Constant)	-0.000

Note: The estimation period is from February 16, 2016 (start of the negative interest rate policy) through the end of July 2023. Dependent and explanatory variables are estimated with the first differences. The repo rate is estimated based on the start date. *** denotes statistical significance at the 1 percent level. The U.S. Dollar funding premium is on a three-month term. The regression coefficients for control variables (quarter-end funding effects) are not shown in the chart.

BOX Chart 2-3: GC Repo Rate and Amounts Outstanding of Purchases of JGSs with Repurchase Agreements



Box 3. Developments in the Money Markets Just after the Termination of the Negative Interest Rate Policy

At the MPM on March 18 and 19, 2024, the Bank decided to terminate the negative interest rate policy and set a guideline for market operations, in which it encourages the uncollateralized overnight call rate to remain at around 0 to 0.1 percent. To achieve this guideline, it decided to apply an interest rate of 0.1 percent to excess reserves, starting the following business day, March 21. The following summarizes developments in the money markets after the termination of the negative interest rate policy through the end of fiscal 2023.

In the uncollateralized call market, financial institutions eligible to receive interest under the Complementary Deposit Facility are expected to borrow funds at a rate below 0.1 percent after the termination of the negative interest rate policy. Meanwhile, those not eligible, such as investment trusts, are expected to lend funds at a rate above 0 percent given the abolishment of trust bank fees for money trusts. Looking at trading through *tanshi* companies after the termination of the negative interest rate policy, regional banks actively borrowed funds using the trading networks established under the three-tier system. Therefore, the uncollateralized overnight call rate was stable in the range of 0.075-0.08 percent, slightly below 0.1 percent -- the rate applied to excess reserves -- toward the end of the fiscal year-end (Box Chart 3-1). Thus, the uncollateralized call market transitioned smoothly from the world of "negative interest rates" to the one with "positive interest rates" without major disruption.

Meanwhile, the amount outstanding of funds intermediated by *tanshi* companies in the uncollateralized call market declined from the level during the latter half of the negative interest rate policy period mainly for two reasons. First, unlike during the negative interest rate policy, it has become no longer necessary particularly for banks to lend cash to reduce their excess cash positions; as a result, trading between financial institutions eligible to receive interest was no longer observed. Second, some financial institutions shifted from trading through *tanshi* companies to direct trading (Box Chart 3-2).

As detailed in Box 2, under the three-tier system during the negative interest rate policy, securities firms funding their inventories and banks and others engaging in arbitrage trading by borrowing cash and adding it to their macro add-on balances, to which a zero interest rate was applied, were the major cash borrowers in the GC repo market, and securities firms that needed to borrow securities and banks and others with policy-rate balances were the major cash lenders. Since the termination of the negative interest rate policy, the structure of cash borrowing and lending has changed. On the cash borrowing side, securities firms funding their inventories and banks and others engaging in arbitrage trading by

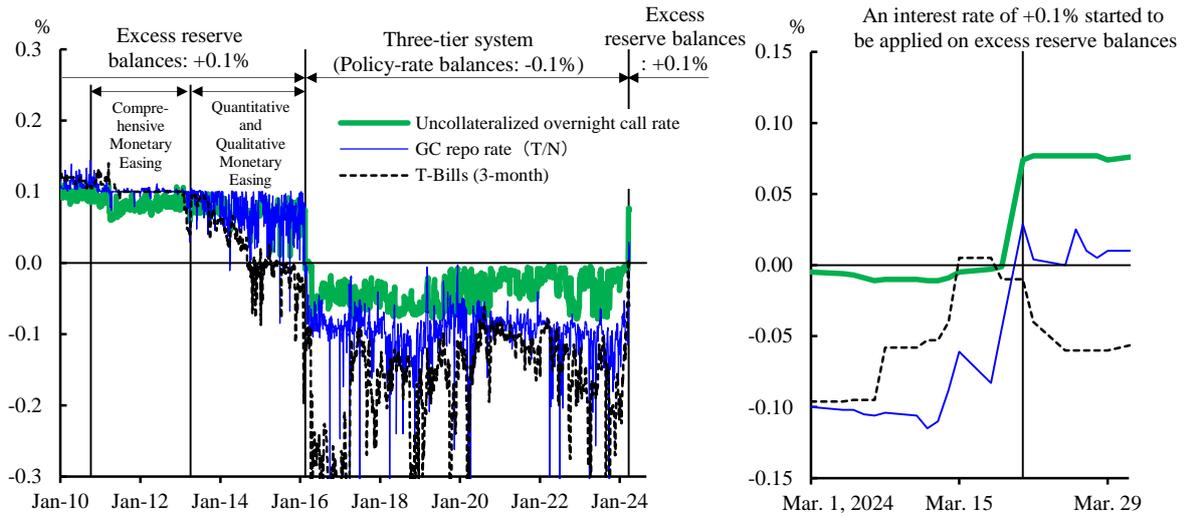
borrowing cash and adding it to their current account balances at the Bank, to which a positive interest rate of 0.1 percent is applied, have been the major cash borrowers. On the cash lending side, it has become no longer necessary for banks to lend funds in the repo market to reduce their excess cash positions.

Under these circumstances, the GC tomorrow-next repo rate rose into positive territory from its previous level of around minus 0.10 percent after the termination of the negative interest rate policy. However, the rate remained only slightly positive; thus, its spread with the uncollateralized call rate was maintained. This reflected the fact that (1) the amount of securities firms' inventory funding declined due to strong demand for T-Bills from overseas investors and domestic banks, and (2) some banks were hesitant to borrow funds due to the limited availability of collateral (Box Chart 3-1).

Moreover, while some banks adopted a wait-and-see attitude, the GC repo rate through the end of the fiscal year became susceptible to the amount of securities firms' inventory funding -- the amount of securities they needed to borrow from the market. Consequently, intraday fluctuations in the GC repo rate became slightly larger than those before the termination of the negative interest rate policy.

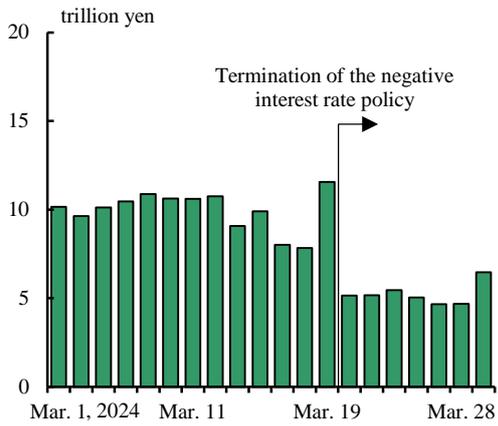
In the T-Bill market, with market participants speculating about the termination of the negative interest rate policy at the March 2024 MPM, yields on 3-month T-Bills temporarily rose into positive territory following the March 15 auction. However, they subsequently turned slightly negative, due to (1) strong demand from overseas investors for dollar-yen conversion owing to the existence of the U.S. dollar funding premium and (2) demand from domestic banks as collateral toward the fiscal year-end (Box Chart 3-1).

BOX Chart 3-1: Short-Term Interest Rates

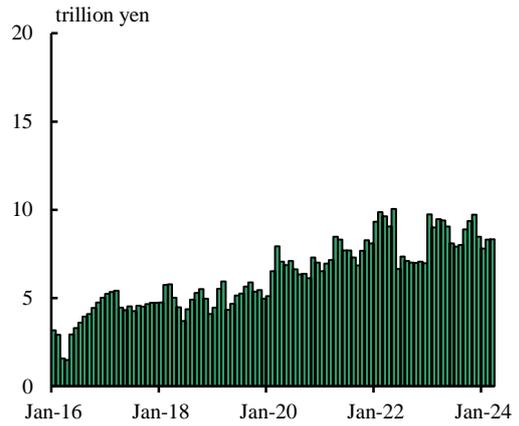


BOX Chart 3-2: Amounts Outstanding in the Uncollateralized Call Market

(Daily Developments since March 1, 2024)



(Monthly Developments since January 2016)



Note: The amount outstanding of overnight transactions intermediated by *tanshi* companies. Figures on the right-hand chart show monthly averages. Figures before December 2016 include overnight transactions delivered one or more business days after the trade date, such as "T/N" and "S/N."

B. Developments in the T-Bill Market and Outright Purchases of T-Bills

1. Developments in the T-Bill Market

During fiscal 2023, yields on 3-month T-Bills stayed at a level below minus 0.10 percent, albeit with fluctuations, through February 2024. However, these yields increased from the start of March, reflecting increased speculation about the termination of the negative interest rate policy (Chart 2-8).

Chart 2-8: Yields on T-Bills

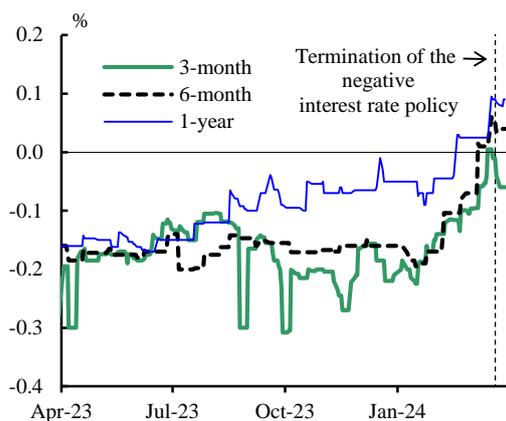
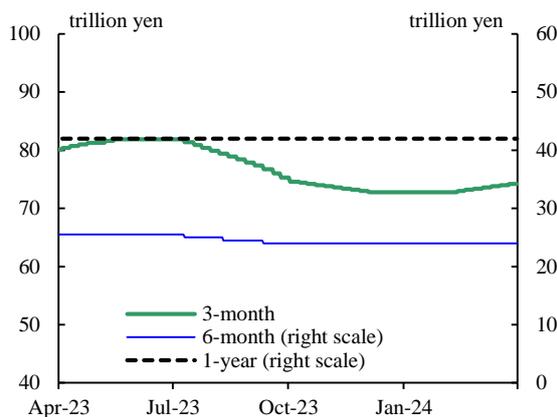


Chart 2-9: Amounts Outstanding of T-Bills by Maturity Period

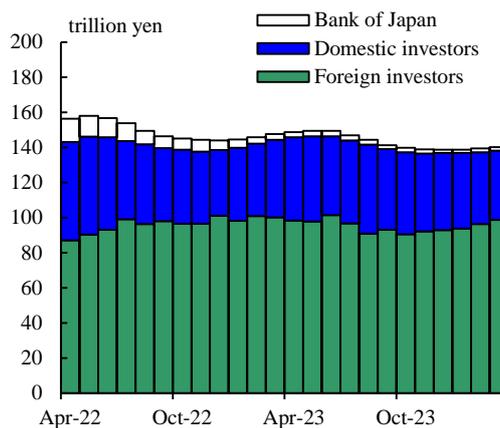


Specifically, yields on 3-month T-Bills declined significantly on some occasions from summer 2023, while their amount outstanding decreased from July (Chart 2-9). This decline was attributed to strong collateral demand from domestic investors and demand from foreign investors stemming from a seasonal decline in the FX swap-implied yen rate from the U.S. dollar over the year-end. After the beginning of 2024, they gradually increased and turned positive in mid-March for the first time since June 2015. This reflected the facts that (1) demand from overseas investors ceased to increase as the FX swap-implied yen rate from the U.S. dollar increased with the dissipation of the year-end factor, and (2) market participants' speculation about the termination of the negative interest rate policy was heightened. They subsequently declined due to collateral demand from domestic investors over the fiscal year-end. By the end of March 2024, the yields were slightly negative.

Yields on 6-month and 1-year T-Bills generally followed similar paths to that of 3-month T-Bills. In particular, yields on 1-year T-Bills started to increase in autumn 2023, due to speculation about an end to the negative interest rate policy. Subsequently, yields on 1-year T-Bills turned positive in February 2024 for the first time since October 2014, and yields on 6-month T-Bills also turned positive in March for the first time since November 2014.

Looking at the amounts outstanding of T-Bill holdings by entity, the amounts outstanding of T-Bills held by overseas investors and domestic investors stayed at high levels, despite a decline in the issuance volume of 3-month T-Bills, in particular. Conversely, the amount outstanding held by the Bank decreased, as the Bank conducted outright purchases in modest amounts amid generally favorable supply-demand conditions (Chart 2-10).

Chart 2-10: Amounts Outstanding of T-Bill Holdings by Entity



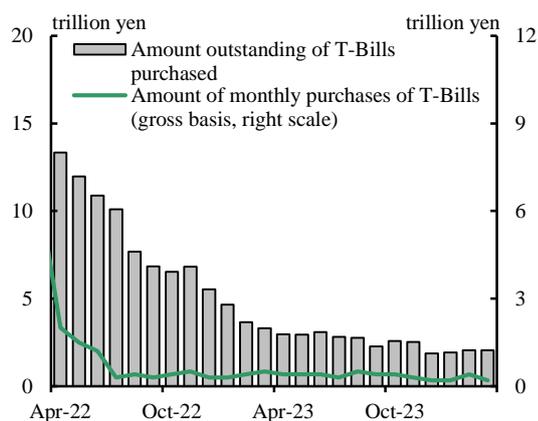
Note: Excludes T-Bills held by the government and the Fiscal Loan Fund, as well as those underwritten by the Bank. Figures for the amount outstanding of foreign investors' T-Bill holdings are estimated by adding monthly net investment flows to the quarterly gross external debts (general government/short-term debt securities). Figures for domestic investors are calculated by deducting the amounts outstanding of T-Bills held by the Bank and foreign investors from the total.

2. Outright Purchases of T-Bills

During fiscal 2023, the Bank flexibly conducted outright purchases of T-Bills, taking account of developments in supply and demand in the market, and continued to purchase about 100 billion yen of T-Bills per auction. With regard to the schedule of purchases, while conducting purchases on the second business day following the auction date, in principle, it flexibly conducted purchases in response to supply and demand in the market. With respect to T-Bills eligible for purchases, the Bank excluded some T-Bills from the scope of outright purchases in a flexible manner in the case of, for example, a significant decline in the yield on such T-Bills relative to adjacent maturity zones while carefully taking into consideration trends in individual T-Bills and the background thereof.

With such outright purchases, the amount outstanding of T-Bills purchased by the Bank stood at 2.0 trillion yen at the end of March 2024, a decrease of 1.3 trillion yen from a year earlier (Chart 2-11).

Chart 2-11: Amounts Outstanding of T-Bills Purchased and Amounts of Monthly Purchases of T-Bills



C. Developments in the JGB Market and Outright Purchases of JGBs

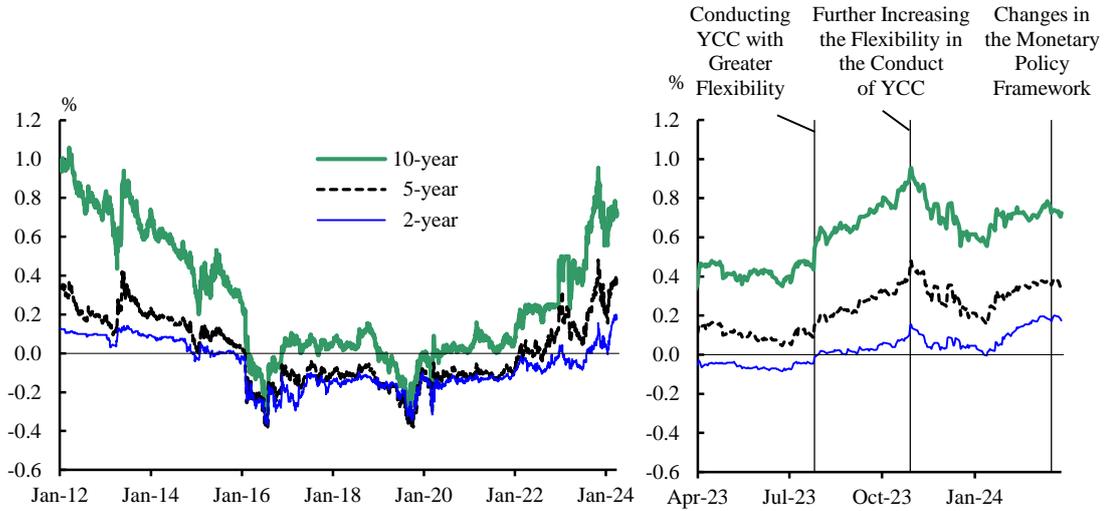
1. Developments in the JGB Market

Long-term interest rates

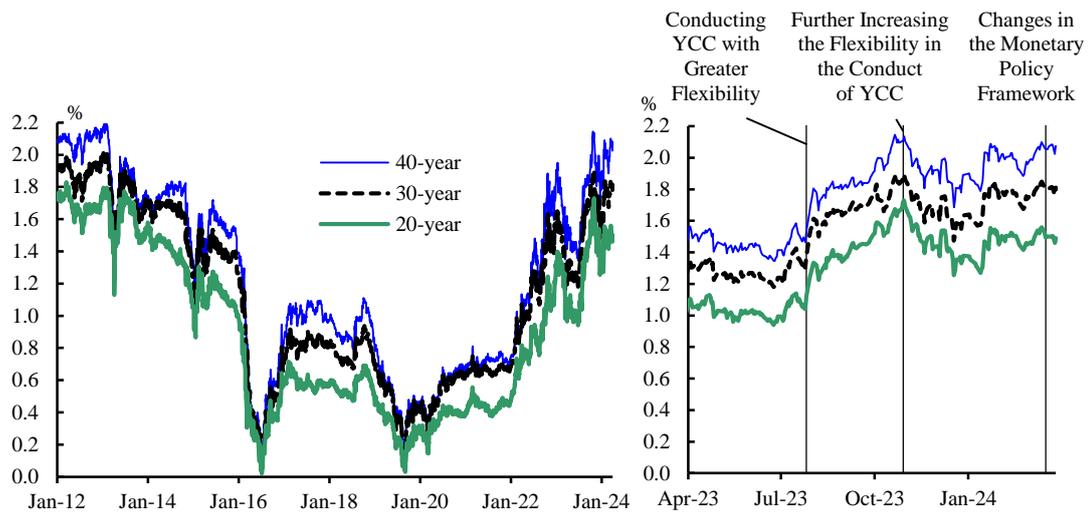
During fiscal 2023, after the Bank decided to conduct yield curve control with greater flexibility in July, long-term interest rates rose to a level slightly below 1 percent toward early November against the backdrop of higher U.S. interest rates and higher expectations for interest rate increases in Japan. Long-term interest rates subsequently decreased to the 0.5-0.6 percent range for some time, due to such factors as a decline in U.S. interest rates. However, they rose again to the 0.7-0.8 percent range from late January 2024 due to heightened speculation about an end to negative interest rate policy. After the changes in the monetary policy framework in March 2024, long-term interest rates remained stable at the 0.7-0.8 percent range through the fiscal year-end of March 2024, with the Bank continuing its JGB purchases at broadly the same amount as before (Chart 2-12).

Chart 2-12: Yields on JGBs

(Medium- to Long-Term Zone)



(Super-Long-Term Zone)



Looking at the detailed developments, long-term interest rates remained at around 0.5 percent until late July 2023, the upper limit on the range of fluctuations at the time, against the backdrop of higher U.S. interest rates and speculation over a change in monetary policy by the Bank. At the July MPM, the Bank decided to conduct yield curve control with greater flexibility. Specifically, while continuing to allow 10-year JGB yields to fluctuate in the range of around plus and minus 0.5 percentage points from the target level, it decided to offer purchases of 10-year JGBs at 1.0 percent, instead of the previous 0.5 percent, through fixed-rate purchase operations, regarding the upper and lower bounds of the range as references, not as rigid limits. Subsequently, long-term interest rates rose to the 0.6-0.7 percent range and generally remained at that level until early September.

From mid-September, long-term interest rates rose to the 0.85-0.9 percent range, due to an increase in U.S. interest rates and heightened speculation over a change in monetary policy by the Bank. At the October 2023 MPM, the Bank decided to further increase the flexibility in the conduct of yield curve control. Specifically, it decided to conduct yield curve control with the upper bound of 1.0 percent for 10-year JGBs as a reference. In line with this decision, strict control over 10-year JGBs through fixed-rate purchase operations conducted every business day was eliminated. Consequently, long-term interest rates temporarily hit 0.97 percent at the beginning of November.

Nevertheless, long-term interest rates turned to a decline thereafter, in tandem with the reduction in U.S. interest rates associated with slowing U.S. inflation. Until the January 2024 MPM, the rates temporarily fell to the 0.5-0.6 percent range, as speculation about an early end to the negative interest rate policy retreated, mainly due to the following: (1) Japan's lower-than-expected GDP for the July-September quarter; (2) unchanged monetary policy at the December MPM; and (3) the impact of the Noto Peninsula Earthquake in early January.

From late January through mid-March 2024, long-term interest rates rose again to the 0.7-0.8 percent range, as speculation about the lifting of the negative interest rate policy increased following the release of "Summary of Opinions" of the January MPM and the delivery of remarks by the Bank's officials. Subsequently, at the March 2024 MPM, the Bank decided to change the monetary policy framework, considering that the policy framework of QQE with Yield Curve Control and the negative interest rate policy had fulfilled their roles. Even after this decision, however, long-term interest rates remained steady in the 0.7-0.8 percent range until the end of March 2024, with the Bank continuing its JGB purchases at broadly the same amount as before.

Short- and medium-term interest rates

Short- and medium-term interest rates, such as yields on 2-year and 5-year JGBs, rose after the July 2023 MPM, in tandem with long-term interest rates, and yields on 2-year JGBs entered positive territory in August. These rates further increased from mid-September, partly due to speculation about an early end to the negative interest rate policy. Thereafter, from November until the January 2024 MPM, in tandem with long-term interest rates, 2-year JGB yields fell back into negative territory, and 5-year JGB yields declined to around 0.15 percent. As speculation increased about an end to the negative interest rate policy from late January 2024, yields on 2-year JGB went up to 0.20 percent, and those on 5-year JGBs also rose to 0.39 percent. After the Bank decided to terminate the negative interest rate policy at the March 2024 MPM, short- and medium-term interest rates remained flat through the fiscal year-end of March 2024 (Chart 2-12).

Super-long-term interest rates

Super-long-term interest rates significantly increased toward the end of October 2023, as some domestic investors shifted their bond investment from the super-long-term zone to the long-term zone, in light of the rise in long-term interest rates following the Bank's decision to conduct yield curve control with greater flexibility. Yields on 20-year JGBs were especially affected by the shift in the main investment zone, and a 96 yen-cent tail (average successful bid price less lowest accepted bid price) occurred in the August auction, a level not seen for 36 years. Super-long-term interest rates then declined in tandem with long-term interest rates through the end of December but rose again from January 2024 due to factors such as a reduction in the frequency of the Bank's outright purchases per month for the super-long-term zone ("more than 10 years and up to 25 years" and "more than 25 years"), as described later. Prior to the March MPM, yields on 20-year, 30-year, and 40-year JGBs were approximately 1.55 percent, 1.85 percent, and 2.1 percent, respectively. Following the MPM, super-long-term interest rates remained flat through the end of March 2024, as did other maturity zones (Chart 2-12).

Inflation-indexed JGBs

Looking at the break-even inflation (BEI) rate for inflation-indexed JGBs, which is calculated as the difference between yields on inflation-indexed JGBs and those on nominal bonds of the same maturity, the BEI rate rose to the 1.0-1.5 percent range toward early June 2023, mainly due to demand from investors who perceived inflation-indexed JGBs to be undervalued in light of price developments in Japan. Thereafter, the rate remained flat in general, although it temporarily rose above 1.4 percent in early November, mainly in light of the upward revisions in the Bank's CPI forecast in its October *Outlook for Economic Activity and Prices* (the Outlook Report) (Chart 2-13).

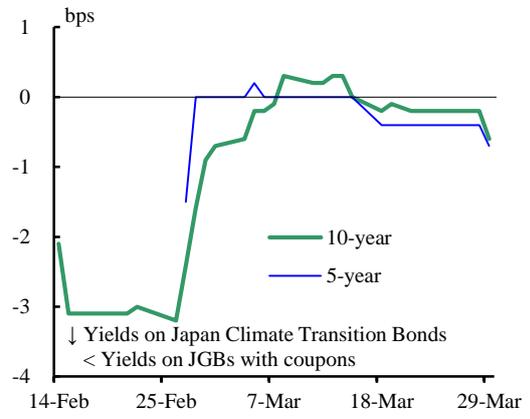
Japan Climate Transition Bonds

In February 2024, the government began issuing Japan Climate Transition Bonds in accordance with GX Promotion Act. The difference between yields on the 5-year and 10-year Japan Climate Transition Bonds from the first issuance in February 2024 and JGBs with coupons of the same maturity was somewhat volatile just after the issuance. Subsequently, yields on Japan Climate Transition Bonds remained somewhat lower than those on JGBs with coupons of the same maturity until the end of March (Chart 2-14).

Chart 2-13: Break-Even Inflation Rate



Chart 2-14: Yield Difference between Japan Climate Transition Bonds and JGBs with Coupons of the Same Maturity

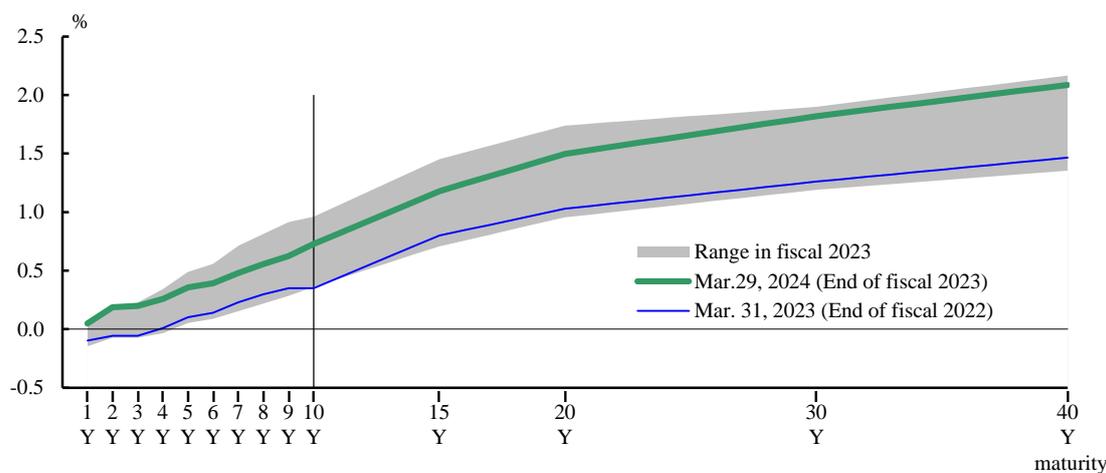


2. Outright Purchases of JGBs

Summary

Until the decision to change the monetary policy framework in March 2024, the Bank continued with large-scale JGB purchases and conducted nimble market operations, such as unscheduled purchases of JGBs, under QQE with Yield Curve Control. Through these operations, the Bank aimed to encourage the formation of a yield curve consistent with the guideline for market operations (Chart 2-15). With such operations, the amount of JGB purchases increased toward autumn, when strong upward pressure was exerted on long-term interest rates. The amount of monthly purchases of JGBs increased from approximately 7 trillion yen in the April-June quarter to approximately 9 trillion yen in October. However, after November, when upward pressure on long-term interest rates eased, the Bank gradually reduced the amount of JGB purchases to approximately 6 trillion yen as of February 2024. After the Bank decided to change the monetary policy framework at the March 2024 MPM, it continued to purchase JGBs at broadly the same amount as before, in line with the new guideline for JGB purchases.

Chart 2-15: Changes in the JGB Yield Curve



Meanwhile, to ensure the transparency of its conduct of market operations, the Bank continued to release the "Outline of Outright Purchases of Japanese Government Securities." In accordance with the outline, it continued to show a range of the purchase size per auction for the coming three months and announced scheduled dates of purchases for the following month in advance.

Developments in the range of the purchase size per auction

Looking at the range of the purchase size per auction for fiscal 2023 (Chart 2-16), in the quarterly schedule for April through June 2023, released at the end of March 2023, the Bank expanded the upper and lower bounds of the range in all maturity zones, while keeping the median of the range unchanged, so that it could appropriately conduct yield curve control amid high uncertainty about the future course of interest rates. Following the decision to conduct yield curve control with greater flexibility at the July MPM, the Bank released the schedule for outright purchases in August and September and slightly expanded the upper and lower bounds for the two maturity zones of "more than 3 years and up to 5 years" and "more than 5 years and up to 10 years."

In the quarterly schedule for January through March 2024, released at the end of December, (1) the Bank reduced the lower bound of the range by 50 billion yen for the maturity zones of "more than 1 year and up to 3 years," "more than 3 years and up to 5 years," and "more than 5 years and up to 10 years" since the amount of JGB purchases in these zones had been approaching the lower bound. Furthermore, (2) for the maturity zones of "more than 10 years and up to 25 years" and "more than 25 years," in which the amount of outright purchases had significantly increased in response to upward pressure on interest rates since June 2022, the Bank reduced the frequency of outright purchases from four times to three times and from three times to two times, respectively, in view of developments in interest rates and the supply-demand conditions.

In the quarterly schedule for April through June released following the changes in the monetary policy framework in March 2024, the Bank reduced the upper bound of the range for all maturity zones (1-3 years, 3-5 years, 5-10 years, 10-25 years, and more than 25 years) while keeping the lower bound unchanged so that the median of the range was the same as the latest offer amount. The revision was made in line with the new guideline for market operations to continue purchases of JGBs at broadly the same amount as before.

Chart 2-16: Changes in Monthly Scheduled Amounts of Outright Purchases of JGBs

Residual maturity	Jan-Mar 2023	Apr-Jun 2023	Jul 2023	Aug-Dec 2023	Jan-Mar 2024	Apr-Jun 2024
-1Y	1,500	1,500	1,500	1,500	1,500	1,500
	1	1	1	1	1	1
1-3Y	4,250-5,750	3,500-6,500	3,500-6,500	3,500-6,500	3,000-6,500	3,000-4,500
	4	4	4	4	4	4
3-5Y	5,000-6,500	4,250-7,250	4,250-7,250	4,000-7,500	3,500-7,500	3,500-5,000
	4	4	4	4	4	4
5-10Y	5,750-7,750	4,750-8,750	4,750-8,750	4,500-9,000	4,000-9,000	4,000-5,500
	4	4	4	4	4	4
10-25Y	2,000-4,000	1,000-5,000	1,000-5,000	1,000-5,000	1,000-5,000	1,000-2,000
	4	4	4	4	3	3
25Y-	1,000-3,000	500-3,500	500-3,500	500-3,500	500-3,500	500-1,000
	3	3	3	3	2	2
Inflation-indexed bonds	600	600	600	600	600	600
	1	1	1	1	1	1
Floating-rate bonds	300	300				
	Once a quarter	Once a quarter				

Notes: 1. From top to bottom, figures are the offered amount per auction (100 million yen) and the frequency of auctions.
 2. The shaded areas indicate increases or decreases in amounts and frequency of purchases.
 3. Purchase sizes of the auctions listed above are approximate.
 4. Figures within the bold frame are those for fiscal 2023.

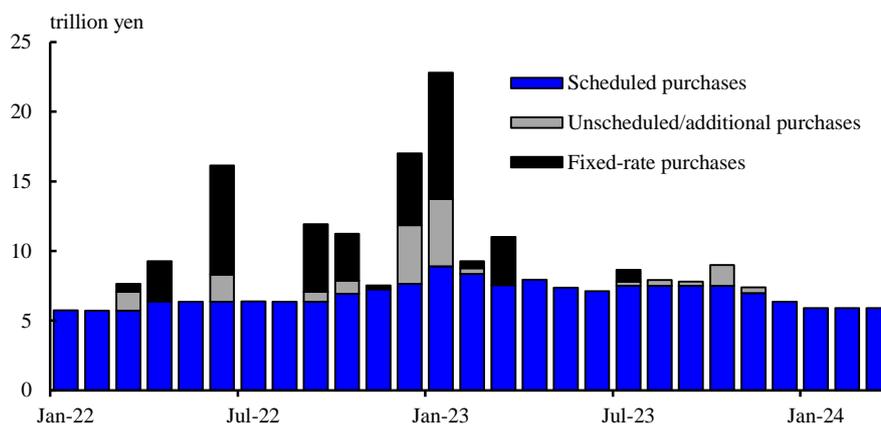
Developments in the amount of outright purchases

Based on the aforementioned schedule for outright purchases of JGBs, the Bank continued with large-scale purchases. Moreover, when long-term interest rates rose somewhat rapidly, the Bank conducted nimble market operations, such as unscheduled purchases of JGBs (see Boxes 4 and 5 for a series of market operations following the decision to conduct yield curve control with greater flexibility and the functioning of the bond market, respectively). The Bank conducted unscheduled outright purchases of JGBs a total of seven times (including additions to the purchase schedule) between the end of July and the beginning of November, including three times in October when the upward pressure on long-term interest rates was particularly intense. As a result, the amount of monthly outright purchases of JGBs, which had been approximately 7 trillion yen in the April-June quarter, grew toward autumn and reached approximately 9 trillion yen in October.

Conversely, when interest rates started declining in November, the Bank gradually reduced the amount of outright purchases of JGBs across a wide range of maturity zones as supply-demand conditions for bonds tightened, partly due to large investors' purchases of JGBs. As a result, the amount of monthly

outright purchases of JGBs dropped from approximately 7 trillion yen in November to approximately 6.5 trillion yen in December and then to approximately 6 trillion yen in January through March 2024, reaching almost the same levels as January and February 2022, which was before any upward pressure on long-term interest rates (Chart 2-17).

Chart 2-17: Amounts of Monthly Purchases of JGBs



In terms of issues of JGBs eligible for outright purchase, the Bank continued to select eligible issues, mainly taking into consideration the yield differences between other issues of JGBs with close remaining maturities, the amount outstanding in the market, and the supply-demand conditions in the repo market.

Regarding outright purchases using the fixed-rate method (fixed-rate purchase operations), until the July 2023 MPM, the Bank offered to purchase three on-the-run issues and the cheapest-to-deliver issues³ of 10-year JGBs at 0.5 percent through fixed-rate purchase operations every business day. After the decision to conduct yield curve control with greater flexibility at the July MPM, it offered to purchase these issues at 1.0 percent through fixed-rate purchase operations. Among these offers, the only fixed-rate purchase operations for which an actual bid was made were those conducted on July 28 targeting three on-the-run issues of 10-year JGBs (the actual bid amount was 842.9 billion yen).

Subsequently, at the October MPM, the Bank decided to further increase the flexibility in the conduct of yield curve control, and fixed-rate purchase operations, in which it purchases JGBs at 1.0 percent,

³ With regard to fixed-rate purchase operations of the cheapest-to-deliver issues for consecutive days, the Bank conducted these operations while adding and replacing the cheapest-to-deliver issues eligible to the operations, given the rollover of JGB futures contracts.

were ceased. Thereafter, the Bank did not offer fixed-rate purchase operations until the end of March 2024.

With regard to inflation-indexed JGBs, the Bank continued with outright purchases of 60 billion yen per month. As for floating-rate JGBs, the Bank did not make outright purchases after April 2023 because all issues were redeemed in May.

Regarding Japan Climate Transition Bonds (5-year and 10-year), in December 2023, the Bank announced that these bonds would be eligible for the Bank's JGB purchase operations. After the government started issuing these bonds in February 2024, the Bank conducted outright purchases using the competitive auction method, in the same manner as the purchases of already issued JGBs with coupons. For 10-year Japan Climate Transition Bonds from the first issuance, the Bank set an upper limit on the total successful bid amount for the February 28 operation and also excluded the issue from the scope of its outright purchases from March 8, from the perspective of giving adequate consideration to market liquidity.⁴ This was because (1) Japanese Climate Transition Bonds are issued in limited amounts and (2) the market liquidity of these bonds would not be increased by liquidity-enhancement auctions. Additionally, for 5-year Japan Climate Transition Bonds from the first issuance, the Bank set an upper limit on the total successful bid amount from the first operation on March 8, also from the perspective of giving adequate consideration to market liquidity.

⁴ As of March 31, 2024, the total face values of 10-year and 5-year Climate Transition Bonds from the first issuance held by the Bank were 336.6 billion yen and 117.9 billion yen, respectively.

Box 4: A Series of Market Operations following the Decision to Conduct Yield Curve Control with Greater Flexibility

Following the Bank's decision to conduct yield curve control with greater flexibility in July 2023, Japanese long-term interest rates experienced strong upward pressure until autumn due to higher U.S. interest rates and heightened speculation over a change in monetary policy by the Bank. In response, the Bank continued to conduct large-scale outright purchases of JGBs and conducted nimble market operations, such as offering unscheduled outright purchases of JGBs and longer-term Funds-Supplying Operations against Pooled Collateral (Box Chart 4-1). Subsequently, from mid-November until the end of the year, as interest rate movements became less volatile, the Bank gradually reduced the amount of outright purchases of JGBs, mainly taking account of developments in supply-demand conditions for JGBs. The following is a chronology of the Bank's market operations in each phase and the thinking behind them.

Conduct of unscheduled outright purchases of JGBs (July 31-August 3)

At the MPM held on July 27 and 28, the Bank decided to conduct yield curve control with greater flexibility. Specifically, while continuing to allow 10-year JGB yields to fluctuate in the range of around plus and minus 0.5 percentage points from the target level, it decided to offer purchases of 10-year JGBs at 1.0 percent through fixed-rate purchase operations, regarding the upper and lower bounds of the range as references, not as rigid limits.

Following this decision, financial markets began to test the extent to which the Bank would allow long-term interest rates to increase. As a result, long-term interest rates rose to 0.605 percent on the morning of July 31. In response, on that day, the Bank made unscheduled outright purchases of JGBs with residual maturities of "more than 5 years and up to 10 years." The Bank made these purchases based on its stance that it would adjust the speed of rate increases through nimble responses when an increase in interest rates was deemed relatively rapid and no major changes were occurring in Japan's fundamentals of economic activity and price development. On August 3, following the rise in U.S. interest rates the previous day, Japanese long-term interest rates hit 0.655 percent. In light of this situation, the Bank made unscheduled outright purchase of JGBs in the two maturity zones of "more than 5 years and up to 10 years" and "more than 3 years and up to 5 years" at 1:00 p.m. that day.

With these operations, the view spread among market participants that the Bank intended to conduct nimble market operations when long-term interest rates rose somewhat rapidly. Consequently, long-term interest rates generally remained stable until early September.

Conduct of the Funds-Supplying Operations against Pooled Collateral and additional outright purchases of JGBs (September 11-November 1)

After the start of September, strong upward pressure was exerted on interest rates, particularly in the short- and medium-term zones, as market speculation over an early end to the negative interest rate policy heightened. Specifically, the 5-year yen swap rate increased to almost 0.5 percent (Box Chart 4-2). Considering this situation, on September 11 at 1:00 p.m., the Bank announced that it would conduct the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years using the variable-rate method on September 14 to contain increases in yields on cash JGBs through swap rates.

Yields on JGBs came under further upward pressure thereafter with an increase in U.S interest rates, and long-term interest rates rose to 0.77 percent, a level not seen since September 2013. Although the rise in Japanese long-term interest rates was mainly driven by interest rate increases in the United States, the speed of rate increase was relatively rapid, with no major changes observed in Japan's fundamentals. In this situation, at 1:00 p.m. on September 29, the Bank made unscheduled outright purchases of JGBs in the maturity zone of "more than 5 years and up to 10 years." Moreover, at 1:00 p.m. on October 2, it announced that in its October 4 JGB purchase operation, it would purchase JGBs in the maturity zone of "more than 5 years and up to 10 years," in addition to the scheduled purchase zones. Although the rise in long-term interest rates was temporarily contained by the Bank's operations, they hit 0.805 percent, and the 5-year swap rate reached nearly 0.6 percent during the afternoon trading session on October 4 due to the rise in U.S. interest rates during Tokyo hours. In light of these interest rate increases, at 5:00 p.m. that day, the Bank announced that on October 6, it would conduct the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years using the variable-rate method.

In mid-October, the entire curve faced strong upward pressure due to a further increase in U.S. interest rates and speculation over the outcome of the Bank's upcoming MPM at the end of the month. In this situation, long-term interest rates hit 0.815 percent on October 18, partly because of the previous day's extremely weak auction for 20-year JGBs. In response, on the same day, the Bank conducted unscheduled outright purchases of JGBs in both the "more than 5 years and up to 10 years" and "more than 10 years and up to 25 years" maturity zones. Even then, upward pressure on interest rates persisted in many maturity zones, and on October 20, the Bank announced that it would conduct the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years using the variable-rate method on October 24. On October 24, it also conducted unscheduled outright purchases of JGBs in the two maturity zones of "more than 5 years and up to 10 years" and "more than 10 years and up

to 25 years."

At the MPM held on October 29 and 30, the Bank decided to further increase the flexibility in the conduct of yield curve control with the upper bound of 1.0 percent for JGB yields as a reference, and strict control over the upper bound for JGB yields through fixed-rate purchase operations conducted every business day was eliminated. Following this decision, on the morning of November 1, yields on 10-year JGBs hit 0.97 percent, and those on 5-year JGBs rose to 0.48 percent. In response to this somewhat rapid increase in JGB yields, at 1:00 p.m. that day, the Bank conducted unscheduled outright purchases of JGBs in the two maturity zones of "more than 5 years and up to 10 years" and "more than 3 years and up to 5 years" to rein in rising interest rates.

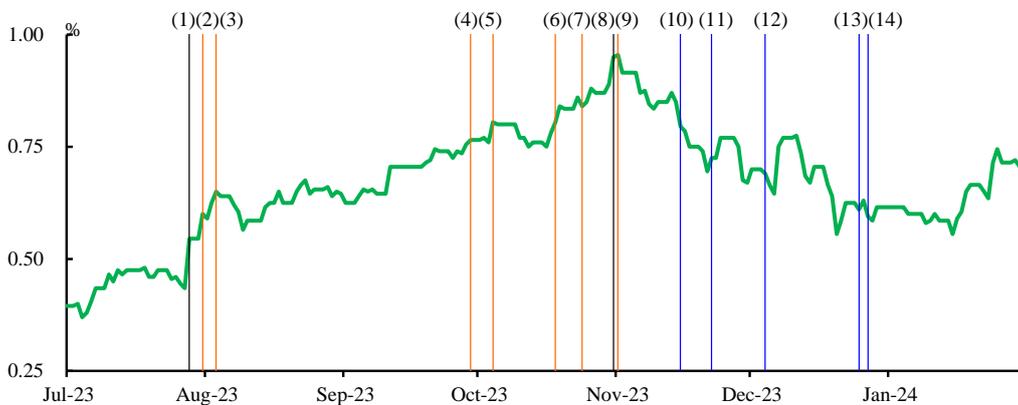
Reduction in the amounts of scheduled purchases, lowering of the upper bound on the purchase amount in the quarterly schedule, and reduction in the frequency of purchases (November 15-December 27)

After the start of November, the increase in Japanese long-term interest rates paused as U.S. interest rates turned to a decline due to such factors as a slowdown in U.S. inflation. Japanese long-term interest rates subsequently declined somewhat significantly. This was because expectations for higher interest rates temporarily retreated after Japan's GDP for the July-September quarter came in lower than expected, and short positions that had accumulated during the interest rate increase since summer were unwound at a rapid pace. Meanwhile, bond supply-demand conditions tightened due to increased investments in JGBs by large domestic investors. Reflecting these developments in interest rates and supply-demand conditions, market participants' need to sell bonds through JGB purchase operations decreased, resulting in a decline in the bid-to-cover ratio, and the lowest accepted bid rate continued to be significantly below the prevailing market yields (Box Chart 4-3).

In light of the results of these operations, the Bank gradually reduced the amount of outright purchases of JGBs. Specifically, from mid-November through late December, it reduced the amount of purchases of JGBs in all maturity zones, from "more than 1 year and up to 3 years" through "more than 25 years," to almost the lower bound of the amount shown in the quarterly schedule. Additionally, as stated in the main text of this report, in the quarterly schedule of outright purchases for January through March 2024, released on December 27, the Bank reduced (1) the lower bound of the range by 50 billion yen for the three maturity zones of "more than 1 year and up to 3 years," "more than 3 years and up to 5 years," and "more than 5 years and up to 10 years" and (2) the frequency of outright purchases per month by one time for the two maturity zones of "more than 10 years and up to 25 years" and "more than 25 years."

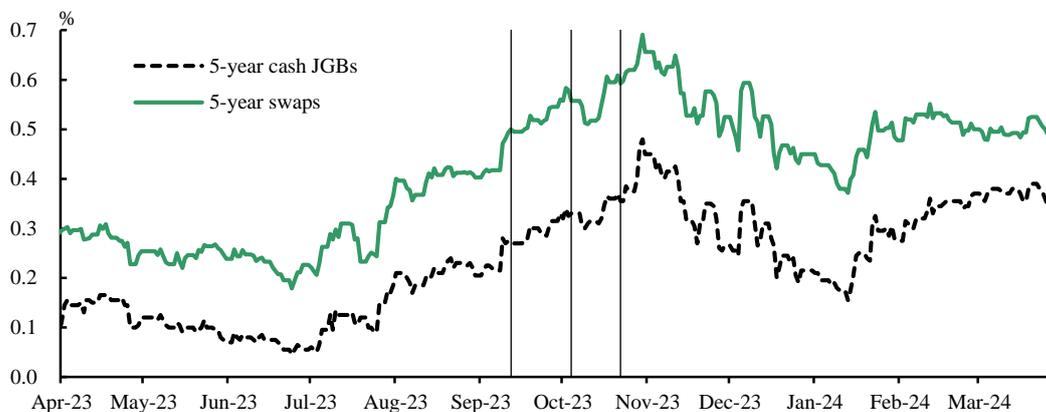
Owing to the reduction in the Bank's purchase amount of JGBs, the supply-demand conditions for bonds eased somewhat, and the situation under which the lowest accepted bid rate had been significantly below the prevailing market yields improved (Box Chart 4-3). Moreover, the proportion of the Bank's JGB purchases in the super-long-term zone, in which the amount of outright purchases had grown since the second half of 2022, declined from about 20 percent in February 2023 to about 10 percent in March 2024, owing to the aforementioned purchase reductions and reduction in the frequency of outright purchases per month (Box Chart 4-4).

BOX Chart 4-1: 10-Year JGB Yields



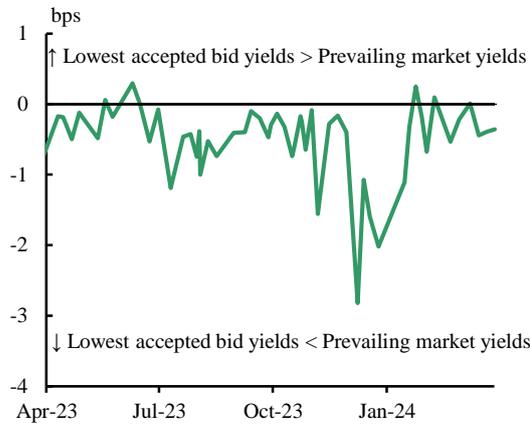
- (1) MPM held on July 27 and 28, 2023
- (2) Unsheduled outright purchase of JGBs (5-10Y: 300 billion yen)
- (3) Unsheduled outright purchase of JGBs (3-5Y: 100 billion yen, 5-10Y: 300 billion yen)
- (4) Unsheduled outright purchase of JGBs (5-10Y: 300 billion yen)
- (5) Additional outright purchase of JGBs (5-10Y: 675 billion yen)
- (6)(7) Unsheduled outright purchase of JGBs (5-10Y: 300 billion yen, 10-25Y: 100 billion yen)
- (8) MPM held on October 30 and 31, 2023
- (9) Unsheduled outright purchase of JGBs (3-5Y: 100 billion yen, 5-10Y: 300 billion yen)
- (10) Reduciton of the purchase size (1-3Y: -50 billion yen, 5-10Y: -100 billion yen)
- (11) Reduciton of the purchase size (5-10Y: -50 billion yen, 25Y: -25 billion yen)
- (12) Reduciton of the purchase size (10-25Y: -50 billion yen)
- (13) Reduciton of the purchase size (3-5Y: -25 billion yen, 5-10Y: -50 billion yen)
- (14) Annoucement of the quarterly schedule for outright purchases of JGBs for January-March 2024

BOX Chart 4-2: Yields on 5-Year Cash JGBs and Swaps



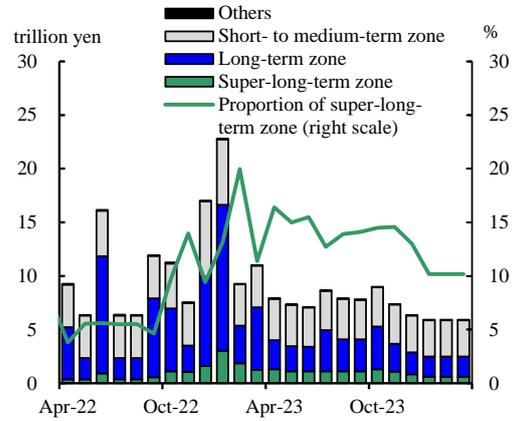
Note: The vertical lines indicate the offer dates of the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years.

BOX Chart 4-3: Spread between the Lowest Accepted Bid Rate and the Prevailing Market Yields (5-10 Year JGBs)



Note: The prevailing market yields are the weighted average of yields on issues accepted as the lowest bid in the secondary market just before the deadline for submitting bids.

BOX Chart 4-4: Amounts of Monthly Purchases of JGBs



Note: "Others" represent inflation-indexed JGBs and floating-rate JGBs.

Box 5: Bond Market Functioning since the Bank's Decision to Conduct Yield Curve Control with Greater Flexibility

Since April 2013, under QQE with Yield Curve Control, the Bank had increased its involvement in the JGB market through large-scale outright purchases of JGBs. Through this process, market functioning had declined particularly in terms of market liquidity.⁵ However, after the Bank's decision to conduct yield curve control with greater flexibility in July 2023, functioning in the JGB market began to improve, as described below (yield curve control was further relaxed in October and then discontinued in March 2024).

According to the results of the Bank's quarterly *Bond Market Survey*, the diffusion index (DI) for the degree of bond market functioning from the viewpoint of surveyed institutions improved gradually, albeit remaining in negative territory (Box Chart 5-1). Additionally, although inter-dealer transaction volume for cash JGBs had long been on a downward trend, it turned to a slight increase following the decision to conduct yield curve control with greater flexibility (Box Chart 5-2).

Meanwhile, the price range of long-term interest rates expanded somewhat, following the decision to conduct yield curve control with greater flexibility and the revision to strict control over long-term interest rates (Box Chart 5-3). This expansion of the price range initially led to divergent investor views about interest rates, resulting in the expansion of the tail (average successful bid price less lowest accepted bid price) in JGB auctions. In fact, many of these auctions were met with weak demand just after the decision to conduct yield curve control with greater flexibility in July 2023. Even later, some auctions were met with weak demand due to expectations of higher interest rates amid speculation over a change in monetary policy by the Bank. However, over time, investors' views about interest rates converged, and the tail in JGB auctions diminished toward the end of the fiscal year.

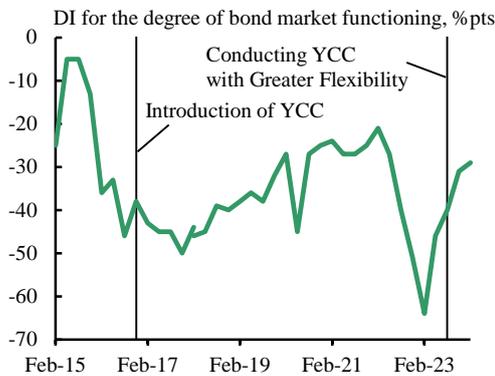
The aforementioned expansion in the price range of long-term interest rates could be regarded as a sign of improved market functioning, if it reflected such factors as developments in overseas interest rates and the strength or weakness of Japanese economic indicators. Looking at the sensitivity of Japanese long-term interest rates to U.S. interest rates, following the decision to conduct yield curve control with greater flexibility, the correlation between Japanese and U.S. interest rates strengthened (Box Chart 5-4). Furthermore, regarding the correlation between Japanese economic indicators and bond prices, looking at, for instance, the reaction to the first preliminary estimate of GDP released on

⁵ For details on the impact of monetary policy on the functioning of the JGB market, see the presentation, "Looking Back on the Last 25 Years in Japan's Financial Markets: The Impact of Monetary Policy on Market Functioning" (available only in Japanese), given at the first workshop on the Review of Monetary Policy from a Broad Perspective held on December 4, 2023.

November 15, 2023, and February 15, 2024, bond prices went up in the morning session in response to weaker-than-expected GDP data, suggesting that these prices became more susceptible to economic indicators than they previously were (Box Chart 5-5).

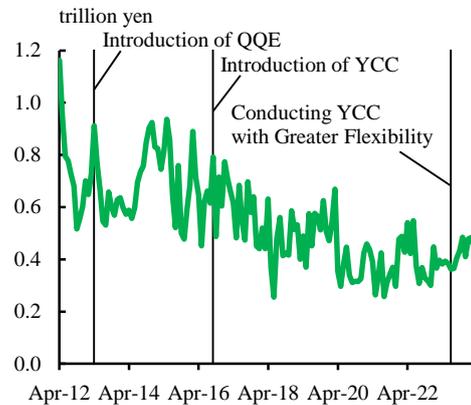
Thus, bond market functioning appears to have been on an improving trend since the decision to conduct yield curve control with greater flexibility. However, sustained improvement in market functioning is only halfway achieved; for example, inter-dealer transaction volume remains low despite recent uptrends. Given its decision to change the monetary policy framework in March 2024, the Bank will conduct outright purchases of JGBs appropriately while also paying due attention to market functioning.

BOX Chart 5-1: DI for the Degree of Bond Market Functioning



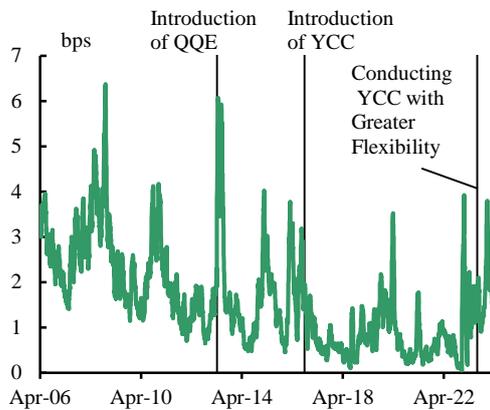
Notes: 1. The DI is calculated as follows: DI for the degree of current bond market functioning = "high" - "low."
 2. Data from February 2018 onward include responses from additional respondents.

BOX Chart 5-2: Inter-Dealer Transaction Volume for Cash JGBs



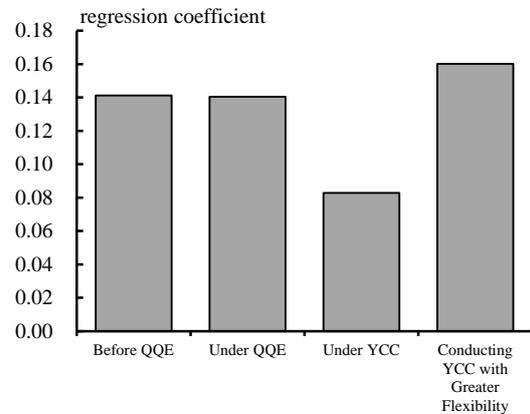
Note: Figures are the sum of daily transaction volume of 2-year, 5-year, 10-year, 20-year, 30-year, and 40-year JGBs.

BOX Chart 5-3: Daily Range of 10-Year JGB Yields (20-Day Backward Moving Average)



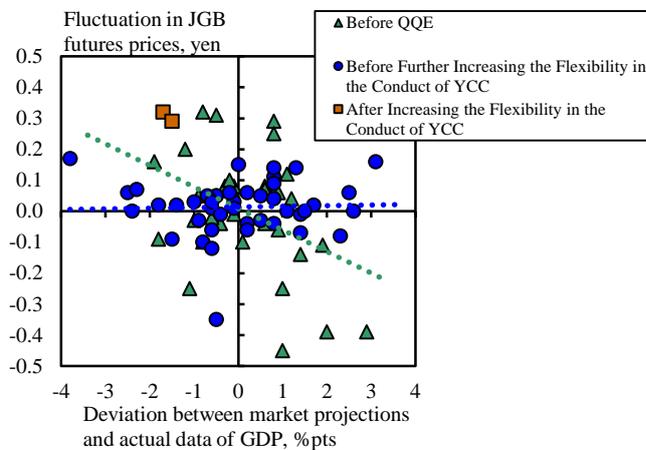
Note: The difference between the intraday highest and lowest yields of newly issued 10-year JGBs.

BOX Chart 5-4: Sensitivity of JGB Yields to U.S. Interest Rates



Notes: 1. Changes in 10-year JGB yields from the previous business day are regressed on 1-day lagged changes in U.S. 10-year yields from the previous business day and intercept.
 2. "Before QE" indicates April 2005 through March 2013, "Under QE" indicates April 2013 through September 2016, "Under YCC" indicates October 2016 through July 2023, and "Conducting YCC with Greater Flexibility" indicates August 2023 through March 2024.

BOX Chart 5-5: Correlation between JGB Futures Prices and GDP



Notes: 1. "Before QE" indicates April 2005 through March 2013, "Before Further Increasing the Flexibility in the Conduct of YCC" indicates April 2013 through October 2023, and "After Further Increasing the Flexibility in the Conduct of YCC" indicates November 2023 through March 2024.
 2. "Deviation between market projections and actual data of GDP" indicates the deviation between the actual data of the first preliminary estimate of real GDP and Bloomberg economist forecasts (year-on-year rate of change, seasonally adjusted basis).
 3. "Fluctuation in JGB futures prices" indicates the fluctuation in JGB futures prices between the end of the afternoon session and the opening of the following day's morning session for figures until 2011, and that between the opening of the morning session and the end of the morning session of that day for figures from 2012 onward.
 4. The dashed line for each period indicates the regression line using the least-squares method.

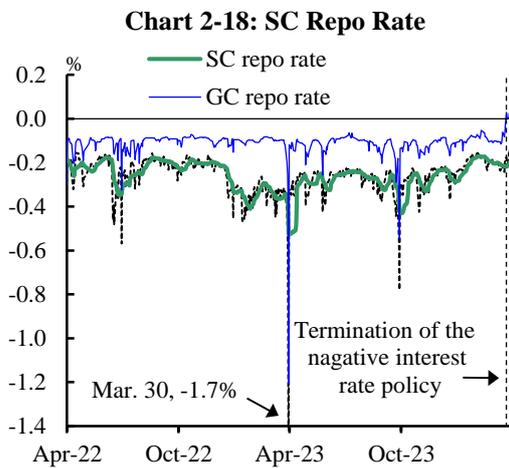
D. SC Repo Market and Supply of JGBs

1. Developments in the SC Repo Market

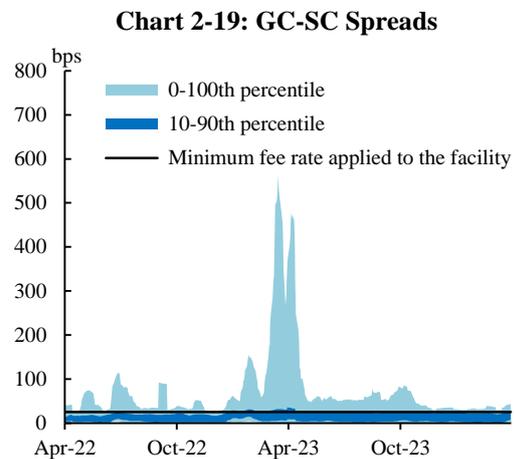
During fiscal 2023, the SC repo rate moved mostly in tandem with the GC repo rate, as the supply and demand for JGBs in the repo market remained tight, with the Bank continuing with large-scale purchases of JGBs (Chart 2-18).

Specifically, the SC repo rate temporarily declined somewhat significantly (securities borrowing costs increased) on some occasions, as some market participants reduced their securities lending in the repo market at quarter-end to reduce their balance sheets, and ahead of MPMs to enable flexible selling and buying of JGBs. The SC repo rate rose somewhat after the termination of the negative interest rate policy in March 2024, in tandem with the rise in the GC repo rate.

Although the GC-SC spread stayed high, it remained steady compared to the previous fiscal year, with the minimum fee rate of the Securities Lending Facility effectively functioning as its lower limit. In particular, the 100th percentile of the GC-SC spread declined after further flexibility was added to the conduct of yield curve control in October 2023, as the number of issues for which supply-demand conditions were tight somewhat declined with the Bank reducing outright purchases of JGBs in most maturity zones (Chart 2-19).



- Notes: 1. The SC repo rate and the GC repo rates are both T/N rates.
 2. The dashed line indicates volume-weighted average of all traded issues for SC repo trades. The bold line indicates 10-day backward moving average.



- Notes: 1. For the GC repo rate, the Tokyo Repo Rate (T/N) is used.
 2. The GC-SC spreads are calculated using all individual issues traded on JBOND.
 3. Each percentile is calculated using 10-business-day backward moving averages.
 4. The minimum fee rate applied to the facility is the lowest fee if it varies by issue.

2. Securities Lending Facility

The Bank held auctions of the Securities Lending Facility every business day in the morning and afternoon sessions, continuing to make offers for all JGB issues with coupons and T-Bills (Chart 2-20). The amounts of bids accepted for the Securities Lending Facility declined compared with the January-March 2023 quarter, when bids for fixed-rate purchase operations and outright purchases of JGBs ballooned. However, they remained at a high level, with the share of the Bank's JGB holdings remaining large (Chart 2-21). Meanwhile, at quarter-end and before MPMs, supply-demand conditions in the SC repo market tightened, and the amount of accepted bids temporarily increased, as some investors held back on borrowing cash and lending JGBs in the repo market.

Just after the negative interest rate policy was terminated in March 2024,⁶ the use of the Securities Lending Facility increased temporarily due to tighter supply-demand conditions in the SC repo market, as market participants on both the cash borrowing and securities lending sides adopted wait-and-see attitudes. However, wait-and-see attitudes subsequently eased, and the amount of accepted bids in the final week of March 2024 returned to the same level as prior to the termination of the negative interest rate policy.

Chart 2-20: Number of Securities Lending Facility Auctions

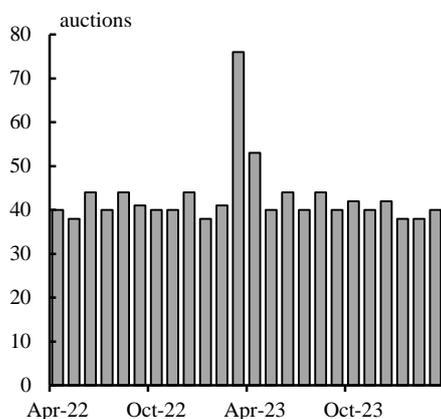
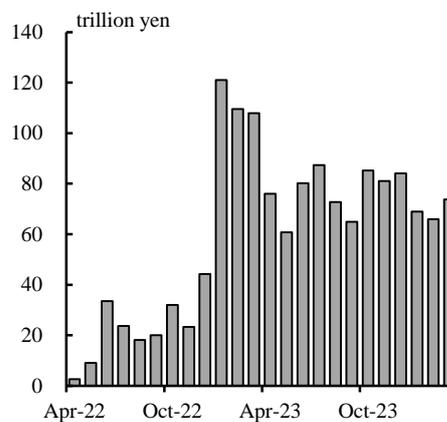


Chart 2-21: Acceptance of Bids through the Securities Lending Facility



⁶ After the Bank decided to change the monetary policy framework in March 2024, it announced that the measures regarding the Securities Lending Facility, including "Relaxation of the Terms and Conditions for the Securities Lending Facility for the Cheapest-to-Deliver Issues" published on February 29, 2024, would remain effective for the time being. In view of the removal of the yield curve control framework, however, the Bank ceased the measures specified in "Market Operations for Three On-the-Run Issues of 10-year Japanese Government Bonds" published on February 16, 2023.

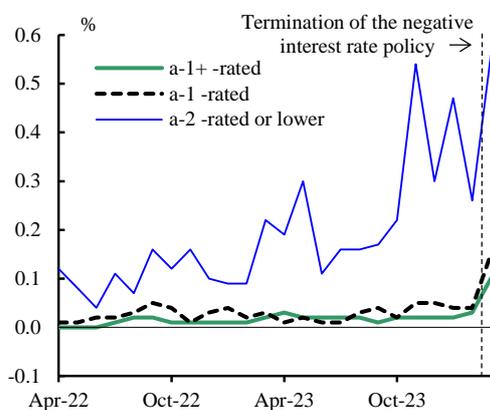
E. Developments in the CP Market and Outright Purchases of CP

1. Developments in the CP Market

Looking at issuance rates for 1-month CP, rates for issues with high ratings stayed at around 0 to 0.05 percent through February 2024. These rates then turned to an increase in early March, as speculation arose that the negative interest rate policy would be lifted, and rose to around 0.1 percent, in tandem with movements in TIBOR and other short-term interest rates, after the negative interest rate policy was terminated. Meanwhile, rates for CP issued by other financial institutions (such as leasing companies and nonbanks) and with low ratings started to rise in autumn 2023 due to speculation over an end to the negative interest rate policy. Regarding the discontinuation of outright purchases of CP decided in March 2024, market participants absorbed the decision with little disruption, partly because of the Bank's announcement to gradually reduce the amount of outright purchases. Consequently, the impact on the issuance conditions was limited (Chart 2-22).

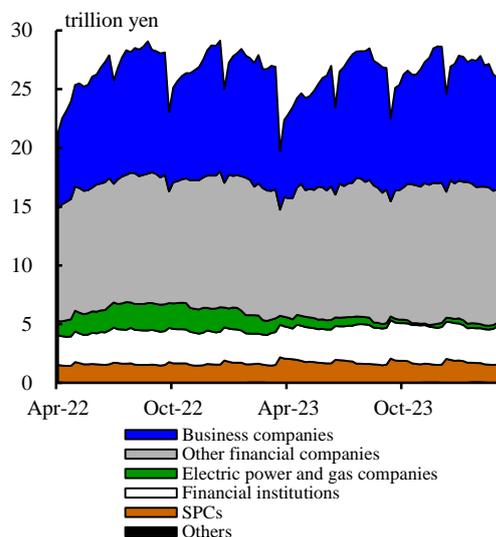
The amount outstanding of CP remained high, mainly due to demand for working capital stemming from previous increases in raw material costs and the gradual recovery of Japan's economy (Chart 2-23).

Chart 2-22: CP Issuance Rates



Notes: 1. 1-month rates.
2. CP issuance rates of business companies (including electric power and gas companies) and other financial companies (including leasing companies and nonbanks) on a monthly basis.

Chart 2-23: Amount Outstanding of CP



Note: "Business companies" excludes "Electric power and gas companies" and "Other financial companies."

2. Outright Purchases of CP

During fiscal 2023, the Bank offered twice a month to purchase CP amounting to 400 billion yen, for a total of 800 billion yen per month (Chart 2-24). This was in line with the guidelines for asset

purchases decided at the MPMs from April 2023 through January 2024, in which it would maintain the amount outstanding of CP at about 2 trillion yen.

At the March 2024 MPM, the Bank decided to gradually reduce the amount of purchases of CP and discontinue purchases in about one year. In line with this decision, at the end of March, the Bank announced that it would reduce the amount offered in May to 600 billion yen, from the previous 800 billion yen.

The lowest accepted bid yields for outright purchases of CP generally remained around 0 percent through November 2023, although at times, they dipped due to tight supply-demand conditions from seasonal declines in the pace of new issuance. From December, these yields rose somewhat, due to speculation over a change in monetary policy by the Bank (Chart 2-25). Meanwhile, the Bank continued to set a lower limit on bid rates for each offer with a view to inducing appropriate pricing of CP and ensuring stability in financial markets.

Chart 2-24: Offered Amounts of Outright Purchases of CP

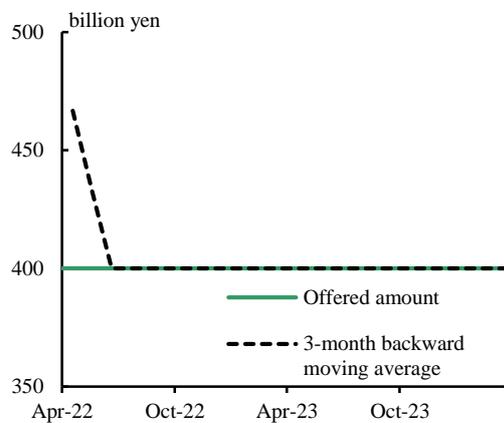
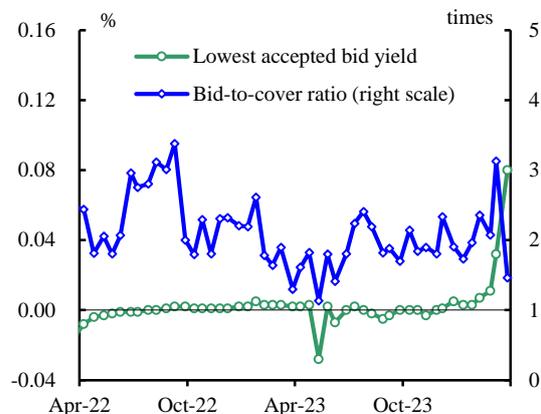


Chart 2-25: Lowest Accepted Bid Yields of Outright Purchases of CP and Bid-to-Cover Ratios



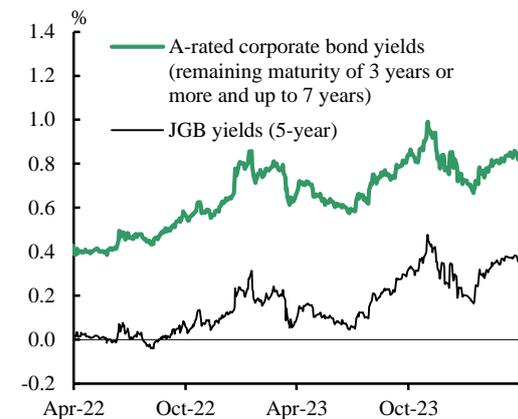
F. Developments in the Corporate Bond Market and Outright Purchases of Corporate Bonds

1. Developments in the Corporate Bond Market

Corporate bond yields rose from summer 2023, in tandem with JGB yields, which are the base rates, but declined somewhat from November (Chart 2-26). The yield spreads between corporate bonds and JGBs in the secondary market generally remained steady, although at times they expanded slightly due to loose supply-demand conditions when investors took a somewhat cautious stance in expectation of rising interest rates amid speculation over a change in monetary policy by the Bank. The Bank's decision in March 2024 to discontinue outright purchases of corporate bonds had a limited impact on the issuance conditions for the remainder of March 2024. This was mainly because (1) the amount of outright purchases was already low, and (2) the Bank announced that it would gradually reduce the amount of outright purchases (Chart 2-27).

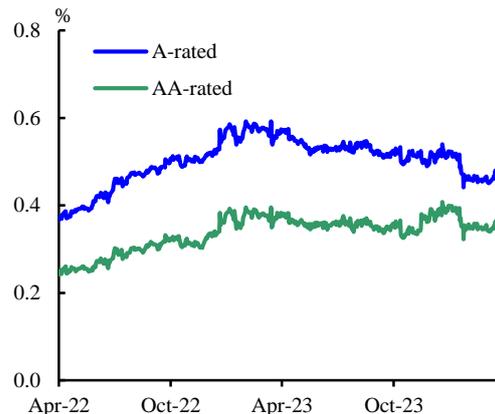
The issuance amount of corporate bonds increased at a pace faster than in fiscal 2022, as the issuance conditions remained generally favorable (Chart 2-28).

Chart 2-26: Yields on Corporate Bonds and JGBs



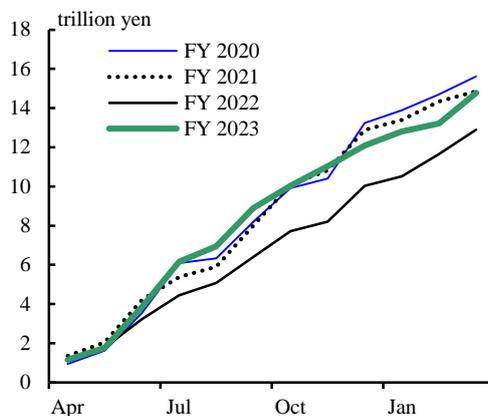
Note: Rated by R&I. The same applies to Chart 2-27.

Chart 2-27: Yield Spreads between Corporate Bonds and JGBs



Note: Corporate bonds with a remaining maturity of 3 years or more and up to 7 years.

Chart 2-28: Cumulative Issuance of Straight Corporate Bonds from the Start of the Fiscal Year



Notes: 1. Figures are as of the month-end.
2. On a nominal basis. Privately offered bonds are excluded.

2. Outright Purchases of Corporate Bonds

During fiscal 2023, the Bank offered once a month to purchase corporate bonds amounting to 100 billion yen. This was in line with the guidelines for asset purchases decided at the MPMs from April 2023 through January 2024 that it would purchase corporate bonds at about the same pace as prior to the COVID-19 pandemic, so that their amount outstanding would gradually return to the pre-pandemic level of about 3 trillion yen.⁷ With the Bank's purchase amount declining vis-à-vis the amount of redemption, the amount outstanding of corporate bonds trended gradually downward throughout the fiscal year to around 6 trillion yen at the end of March 2024 (Chart 2-29).

At the March 2024 MPM, the Bank decided to gradually reduce the amount of corporate bond purchases and discontinue purchases in about one year. In accordance with this decision, the Bank announced at the end of March that it would reduce the offered amount for May to 75 billion yen from the previous 100 billion yen.

The lowest accepted bid yields for outright purchases of corporate bonds rose after summer 2023 but declined somewhat from December, generally in tandem with JGB yields, which are the base rates (Chart 2-30). The Bank continued to set a lower limit on bid rates for each offer with a view to inducing appropriate pricing of corporate bonds and ensuring stability in financial markets.

Chart 2-29: Amounts Outstanding of Corporate Bonds Purchased and Amounts of Monthly Purchases of Corporate Bonds

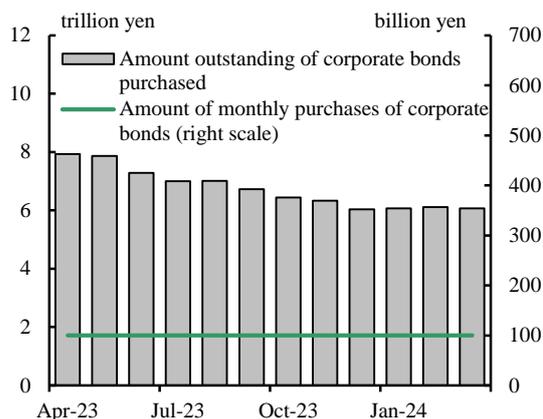
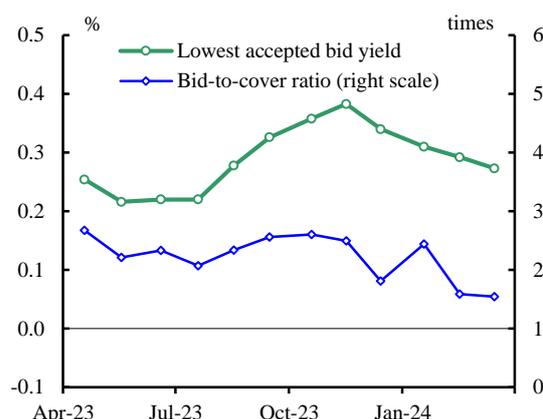


Chart 2-30: Lowest Accepted Bid Yield of Outright Purchases of Corporate Bonds and Bid-to-Cover Ratios



⁷ In view of the generally favorable issuance conditions for corporate bonds, the Bank gradually reduced the upper limits on the amounts outstanding of a single issuer's corporate bonds to be purchased and the share of the Bank's holdings of these bonds within the total amount outstanding of issuance. Specifically, at the end of November 2023, it announced that it would reduce the upper limit on the amounts outstanding for the January-March 2024 quarter from 200 billion yen to 150 billion yen. Subsequently, at the end of February 2024, it announced that from April, it would reduce the upper limits on the amounts outstanding and their share from 150 billion yen to 100 billion yen and from 30 percent to 25 percent, respectively. As a result, these upper limits returned to the pre-pandemic levels.

G. Developments in the FX Swap Market and Supply of U.S. Dollar Funds

1. Developments in the FX Swap Market

In the FX swap market, U.S. dollar funding costs (short-term FX swap-implied U.S. dollar rate from the yen) rose in the first half of fiscal 2023, mainly due to an increase in the U.S. dollar overnight index swap (OIS) rate, as the Federal Reserve proceeded with policy rate hikes. The funding costs remained generally flat in the second half of the fiscal year, with the U.S. policy rate being kept unchanged (Chart 2-31).

Meanwhile, the U.S. dollar funding premium temporarily increased toward the end of 2023, partly due to concerns over the possibility that some foreign banks would reduce their U.S. dollar fund supply as in preceding years in consideration of the impact on their global systemically important bank (G-SIB) scores. After the start of 2024, the dollar funding premium diminished as these year-end factors dissipated (Chart 2-32).

Chart 2-31: U.S. Dollar Funding Costs through Short-Term FX Swaps

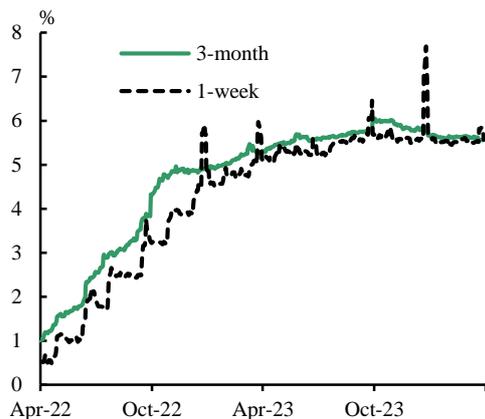
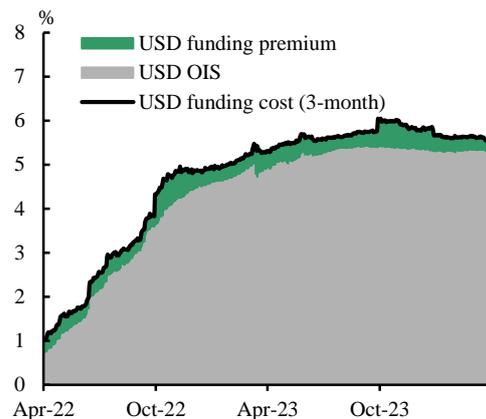


Chart 2-32: Breakdown of U.S. Dollar Funding Costs through Short-Term FX Swaps



Note: The U.S. dollar funding costs through short-term FX swaps are the total funding costs of raising yen at JPY OIS and converting the proceeds into dollars through FX swap transactions.

2. Supply of U.S. Dollar Funds

The U.S. Dollar Funds-Supplying Operations are to be used as a backstop for such cases as when market participants find difficulty in obtaining U.S. dollars despite adequate efforts to obtain them in the markets due to heightened tensions in the U.S. dollar money markets, or when there is a substantial rise in the U.S. dollar funding rate.

During fiscal 2023, the Bank offered 1-week operations every business day until the end of April, as central banks including the Bank had enhanced U.S. dollar operations as a coordinated action in response to the heightening uncertainty surrounding the financial sector in the United States and

Europe at the end of fiscal 2022. Starting in May 2023, the Bank reduced the frequency of these operations and returned to basically offering 1-week operations on a weekly basis, as there was no use of the operations on the back of improvement in funding conditions for U.S. dollar funds.

Turning to the use of the operations, as no particular problems were seen in Japanese banks' U.S. dollar funding, counterparties only used the operations in very small sums for training purposes throughout the fiscal year, including in April, when these operations were offered every business day.

Meanwhile, the framework of the Securities Lending to Provide JGSs as Collateral for the U.S. Dollar Funds-Supplying Operations was used only sporadically in small sums for the purpose of verifying administrative preparedness.

H. Outright Purchases of Other Assets

1. Outright Purchases of ETFs

Until mid-March 2024, the Bank conducted outright purchases of ETFs in accordance with the guideline for asset purchases, in which it would purchase ETFs as necessary, with an upper limit of about 12 trillion yen on the annual pace of increase in the amount outstanding. During this period, the Bank made one purchase amounting to 70.1 billion yen in October 2023. Subsequently, at the March 2024 MPM, the Bank decided to discontinue purchases of ETFs.⁸

As a result, the amount outstanding of ETFs purchased by the Bank stood at 37.2 trillion yen at the end of March 2024 (Chart 2-33).

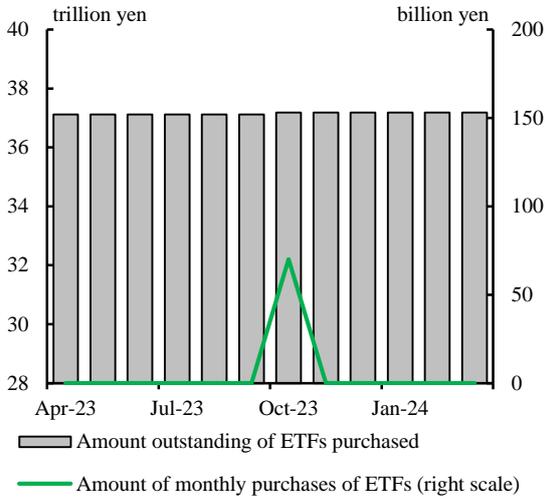
2. Outright Purchases of J-REITs

Until mid-March 2024, the Bank conducted outright purchases of J-REITs in accordance with the guideline for asset purchases, in which it would purchase J-REITs as necessary with an upper limit of about 180 billion yen on the annual pace of increase in the amount outstanding. During this period, the amount of new outright purchases was zero. Subsequently, at the March 2024 MPM, the Bank decided to discontinue purchases of J-REITs.

As a result, at the end of March 2024, the amount outstanding of J-REITs purchased by the Bank stood at 656.1 billion yen (excluding accrued dividends receivable) (Chart 2-34).

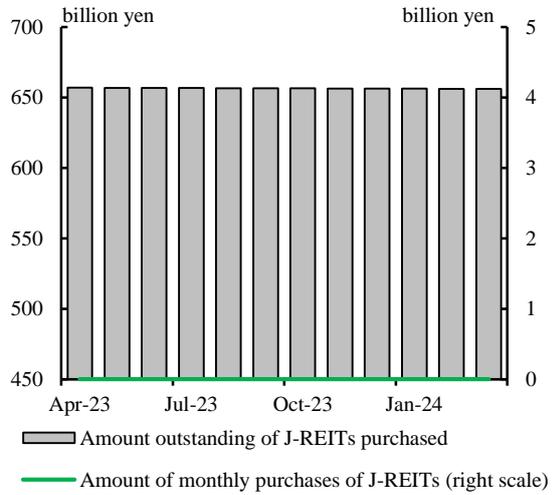
⁸ At the March 2024 MPM, the Bank also decided to discontinue outright purchases of ETFs composed of stocks issued by "firms that are proactively investing in physical and human capital." The amount of the Bank's outright purchases of such ETFs during fiscal 2023 was zero.

Chart 2-33: Amounts Outstanding of ETFs Purchased and Amounts of Monthly Purchases of ETFs



Note: "Amount of monthly purchases of ETFs" is based on trade date. The same applies to Chart 2-34.

Chart 2-34: Amounts Outstanding of J-REITs Purchased and Amounts of Monthly Purchases of J-REITs

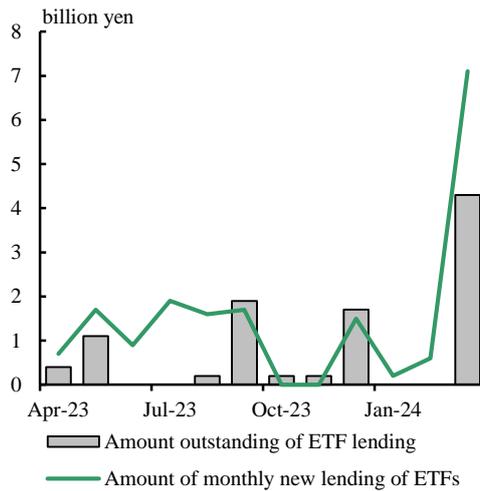


Note: "Amount outstanding of J-REITs purchased" excludes accrued dividends receivable.

3. ETF Lending Facility

The Bank lent its holdings of ETFs a total of 44 times during fiscal 2023, and the amount outstanding of ETF lending at the end of March 2024 stood at 4.3 billion yen. Moreover, the amount of monthly new lending (based on trade date) ranged from 0 to 7.1 billion yen during fiscal 2023 (Chart 2-35).

Chart 2-35: Amount Outstanding of ETF Lending and Amounts of Monthly New Lending of ETFs



Note: "Amount of monthly new lending of ETFs" is based on trade date.

I. Other Operations

1. Funds-Supplying Operations against Pooled Collateral

Until mid-March 2024, the Bank continued to offer short-term Funds-Supplying Operations against Pooled Collateral with a fixed interest rate of 0 percent and 2-week terms, in principle, at a pace of roughly once every two weeks, with no upper limit on the amount of fund-provisioning. At the March 2024 MPM, the Bank reviewed the treatment of these operations, which had provided funds with no upper limit, and decided to set the amount of offer for each auction taking account of market conditions.

For the Funds-Supplying Operations against Pooled Collateral with loan durations of more than one year, the Bank provided loans amounting to approximately 3 trillion yen with 5-year terms using the variable rate method through autumn 2023, as the yen swap rates rose significantly and the entire yield curve came under upward pressure, mainly against the backdrop of an increase in U.S. interest rates and heightened speculation about a change in monetary policy by the Bank (Chart 2-36). These operations were conducted with a view to encouraging longer-term interest rates to remain stable at low levels through their effects on the swap rates.

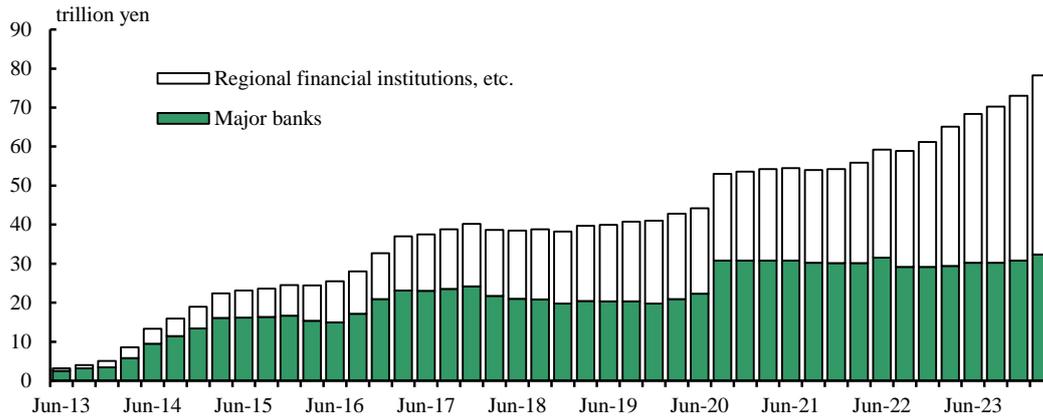
Chart 2-36: Implementation of the Funds-Supplying Operations against Pooled Collateral (with a Loan Duration of More than One Year)

100 million yen, percent per annum

Offer date	Term	Interest rate on loans	Amounts offered	100 million yen, percent per annum		
				Bid-to-cover ratio	Average successful bid rate	Pro-rata rate
Sep. 14, 2023	5Y	Variable-rate method	10,000	3.73	0.208	0.170
Oct. 6	5Y	Variable-rate method	10,000	3.42	0.288	0.250
Oct. 24	5Y	Variable-rate method	10,000	3.51	0.338	0.320

Turning to the use of the operations, demand for 2-week loans was sluggish in general. However, the use of such operations temporarily increased just before the March 2024 MPM, partly due to speculation that the negative interest rate policy would be terminated. For 5-year loans, the bid-to-cover ratio was greater than three in all auctions, which suggested strong demand from a wide range of financial institutions, such as major banks (city banks and trust banks), financial cooperatives, regional financial institutions, and securities firms, mainly for arbitrage transactions between cash JGBs and yen interest rate swaps (Chart 2-37). As a result, the amount outstanding of the operations stood at 18.5 trillion yen at the end of March 2024, an increase of 4.5 trillion yen from a year earlier (Chart 2-38).

Chart 2-40: Amounts Outstanding of the Stimulating Bank Lending Facility



3. Growth-Supporting Funding Facility

During fiscal 2023, the Bank conducted only rollovers of loans under the special rules for the U.S. dollar lending arrangement for investments and loans denominated in foreign currencies introduced in April 2012 (Chart 2-41).⁹

At the end of March 2024, the outstanding balance of loans under the main rules was 2.9 trillion yen, a decrease of 1.9 trillion yen from a year earlier. The outstanding balance of loans under the special rules for the U.S. dollar lending arrangement was 16.4 billion U.S. dollars, a decrease of 1.3 billion U.S. dollars from a year earlier (Chart 2-42).

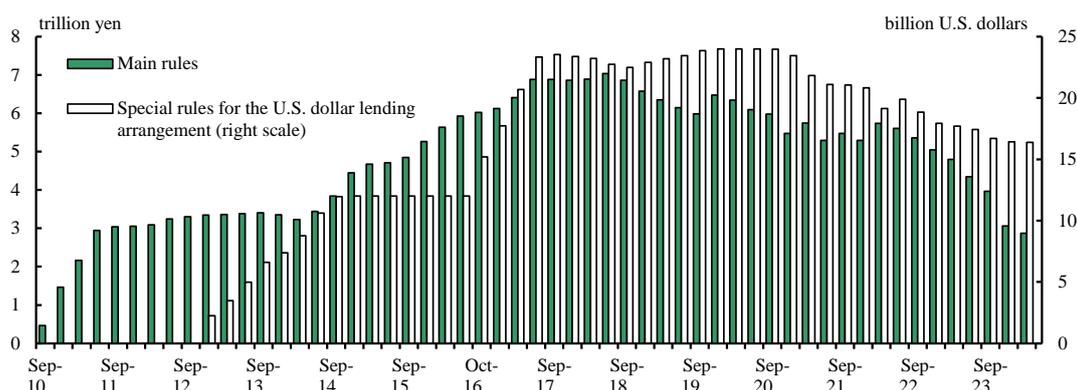
Chart 2-41: Loan Disbursement under the Growth-Supporting Funding Facility

100 million yen	million U.S. dollars
Main rules (as of end-Mar. 2024)	Special rules for the U.S. dollar lending arrangement (as of end-Mar. 2024)
28,711 (7,002)	16,370

Note: The value in parentheses below the outstanding balance of loans under the main rules is the outstanding balance of loans to financial institutions that are members of central organizations (financial institutions that do not hold current accounts at the Bank).

⁹ The Bank discontinued new loan disbursement in June 2022 under the special rules for the U.S. dollar lending arrangement as well as under the main rules, which had been introduced in June 2010 and revised in October 2019.

Chart 2-42: Amounts Outstanding of the Growth-Supporting Funding Facility



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

During fiscal 2023, the Bank offered the operations once a quarter, for a total of four times (Chart 2-43). The outstanding balance stood at 100.1 billion yen at the end of March 2024, a decrease of 71.5 billion yen from a year earlier, due to the repayment of existing loans.

Chart 2-43: Loan Disbursement under the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas

100 million yen				
20th (May 10, 2023)	21st (Aug. 16)	22nd (Nov. 15)	23rd (Feb. 14, 2024)	Outstanding balance of loans (as of end-Mar. 2024)
181	0	0	0	1,001

Note: The date in parentheses is the offer day, and the value denotes new loans.

5. Funds-Supplying Operations to Support Financing for Climate Change Responses

During fiscal 2023, the Bank offered the operations once every six months, for a total of twice (Chart 2-44). The outstanding balance grew with increases in the amount outstanding of investment and loans eligible for the operations and in the number of eligible counterparties. As a result, the outstanding balance reached 8.2 trillion yen at the end of March 2024, an increase of 3.7 trillion yen from a year earlier (see Box 6 for details on the use of these operations).

Chart 2-44: Loan Disbursement under the Funds-Supplying Operations to Support Financing for Climate Change Responses

100 million yen

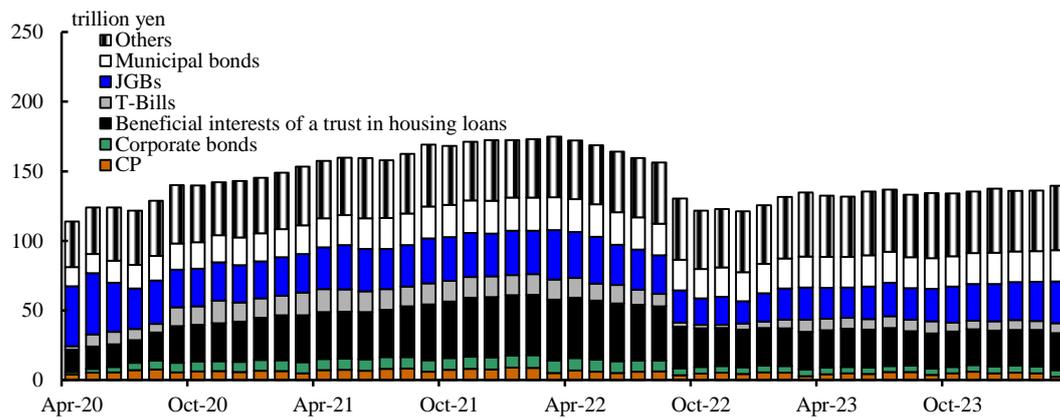
4th (Jul. 20, 2023)	5th (Jan. 29, 2024)	Outstanding balance of loans (as of end-Mar. 2024)
34,398	47,268	81,663

Note: The date in parentheses is the offer day, and the value denotes new loans.

6. Collateral Pledged to the Bank of Japan

The amount outstanding of collateral pledged to the Bank by financial institutions increased slightly from April 2023, due to such factors as increased use of the Stimulating Bank Lending Facility (Chart 2-45).

Chart 2-45: Amounts Outstanding of Collateral Accepted by the Bank of Japan



Box 6: Usage of the Climate Response Financing Operations

In order to support financing of the private sector for their efforts on climate change, the Bank decided to introduce the Climate Response Financing Operations at its September 2021 MPM. Through these operations, it provides funds to financial institutions for investment or loans that they make to address climate change issues in Japan.¹⁰ To date, it has held auctions twice a year, for a total of five times, with a steady increase in loan amounts. The following summarizes usage of the Climate Response Financing Operations by financial institutions.

Since the Bank made its first auction in December 2021, a wide range of financial institutions have used the operations on the back of an increase in the amount outstanding of eligible investment and loans. At the fifth auction in January 2024, loans worth 4.7 trillion yen were disbursed, and the amount outstanding of loans reached 8.2 trillion yen, increases of 2.7 trillion yen and 6.1 trillion yen, respectively, from the first auction (Box Charts 6-1 and 6-2). The number of eligible counterparties also increased, mainly among regional banks, from 43 to 81 at the fifth auction (Box Chart 6-3).

Looking at the results of the latest fifth auction to assess how much these operations are utilized to support financing for climate-related efforts, approximately 60 percent of auction participants obtain loans up to the maximum amount (i.e., the usage rate calculated as the ratio of new loans in each counterparty's lending limit¹¹ was 100 percent) (Box Chart 6-4). It appears that these financial institutions are actively engaged in climate-related investment and loans as an area of management focus based on the premise that they use the Climate Response Financing Operations. Furthermore, under the negative interest rate policy, twice the amount of funds that counterparties receive was added to the macro add-on balances in their current accounts at the Bank, incentivizing financial institutions to use the operations. Despite interest in the Climate Response Financing Operations, some financial institutions with low usage rates prioritize the use of the Stimulating Bank Lending Facility, which provides loans with longer terms (four years through the March 2024 auction) due to constraints on the availability of collateral for funds-supplying operations.

Meanwhile, with a view to extending the Climate Response Financing Operations, the Bank decided to expand the range of eligible counterparties by establishing special rules for financial cooperatives

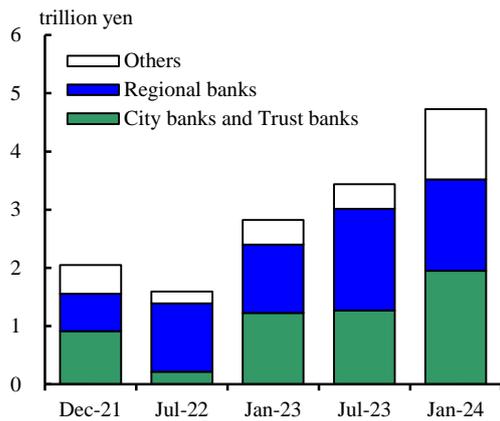
¹⁰ For the outline of the Climate Response Financing Operations, see https://www.boj.or.jp/en/mopo/mpmdeci/mpr_2021/rel210922c.pdf.

¹¹ This is the amount outstanding of eligible investment and loans less the amount outstanding of loans extended under the operations (excluding those repaid on the auction day). Eligible counterparties can take out loans up to the lending limit.

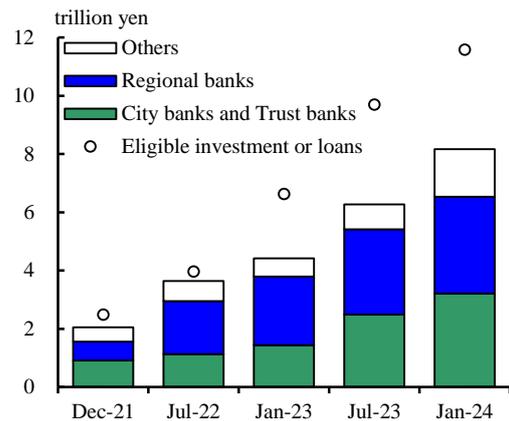
in January 2023 and implemented these rules in April 2023.¹² Additionally, in December 2023, in light of the issuance of Japan Climate Transition Bonds by the Japanese government scheduled to start in February 2024, the Bank announced that these bonds would be treated as investment or loans eligible for the operations.

Subsequently, at the March 2024 MPM, the Bank decided to change its monetary policy framework. As part of this decision, it decided to provide loans with an interest rate of 0.1 percent (previously, 0 percent) and a duration of one year (unchanged) under the Climate Response Financing Operations. In addition, with the termination of the negative interest rate policy, the aforementioned measure related to macro add-on balances was discontinued.¹³ The Bank will continue to support financing of the private sector for their efforts on climate change and carefully monitor the usage of the operations.

Box Chart 6-1: Amounts of New Loan Disbursement



Box Chart 6-2: Outstanding Balance of Loans and Amounts Outstanding of Eligible Investment and Loans

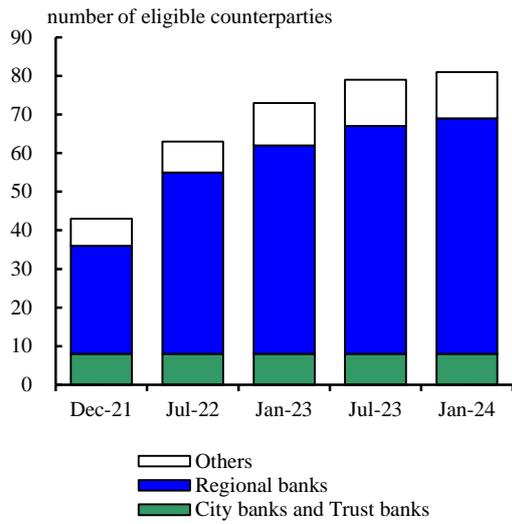


Note: The bars in the chart show the outstanding balance of loans by sector.

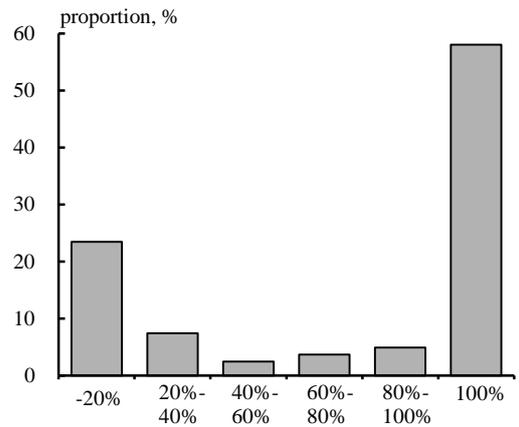
¹² This is a framework for enabling financial institutions that do not have a current account at the Bank to use the Climate Response Financing Operations through their central organizations.

¹³ The Bank also decided to provide loans with an interest rate of 0.1 percent and a duration of one year under Fund-Provisioning Measure to Stimulate Bank Lending and the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas, as in the case of Climate Response Financing Operations.

Box Chart 6-3: Number of Eligible Counterparties



Box Chart 6-4: Distribution of Counterparties by Usage Ratio



Note: The usage ratio is calculated as the ratio of new loans provided in the fifth loan disbursement to each counterparty's lending limit at the time. All counterparties eligible for the operations (81 financial institutions) are categorized based on their usage ratio.

J. Complementary Lending Facility

During fiscal 2023, the use of the facility remained at an extremely low level. This reflected strong perceptions of abundant liquidity in money markets, with accommodative financial conditions being maintained.

III. Developments in Current Account Balances at the Bank and the Bank's Balance Sheet

A. Developments in Exogenous Sources of Changes in Current Account Balances at the Bank

Financial institutions' current account balances at the Bank change along with market operations as well as receipts and payments of banknotes and treasury funds between financial institutions and the Bank or the government. Changes in current account balances at the Bank resulting from factors other than market operations are called "exogenous sources of changes in current account balances at the Bank." Exogenous sources of changes in current account balances at the Bank are categorized into (1) "changes in banknotes" resulting from exchanges of banknotes for deposits in the current accounts, and (2) "changes in treasury funds and others" mainly resulting from exchanges of funds between the current accounts and government deposits.

During fiscal 2023, exogenous sources of changes in current account balances at the Bank caused current account balances to decrease by 92.3 trillion yen, as the transfer of funds to government deposits due to changes in treasury funds and others increased substantially, despite a slight decline in the outstanding balance of banknotes issued, which had the effect of increasing current account balances. The amount of the decrease was more or less unchanged from the 92.0 trillion yen decline in fiscal 2022.

1. Changes in Banknotes

The pace of increase in the outstanding balance of banknotes issued slowed in fiscal 2023 due to the post-pandemic release of hoarded cash and the spread of cashless payments. The balance stood at 124.6 trillion yen at the end of December 2023, down 0.4 percent from a year earlier and the first year-on-year decline in 11 years. The balance further declined to 120.9 trillion yen at the end of March 2024, down 0.9 percent from a year earlier (Chart 3-1; see Box 7 for the factors behind the recent decline in the outstanding balance of banknotes issued). Reflecting this development, changes in banknotes in fiscal 2023 turned into a source of increase in current account balances at the Bank, with a net redemption of 1.1 trillion yen, compared to a net issuance of 2.1 trillion yen in fiscal 2022.

As for cumulative changes in banknotes from the start of fiscal 2023, seasonal changes in issuance and redemption generally followed the same pattern as in fiscal 2022. However, net redemptions were recorded over a prolonged period of the fiscal year (Chart 3-2).

Chart 3-1: Outstanding Balance of Banknotes Issued

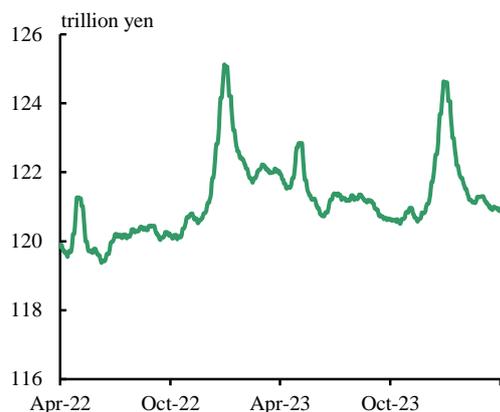
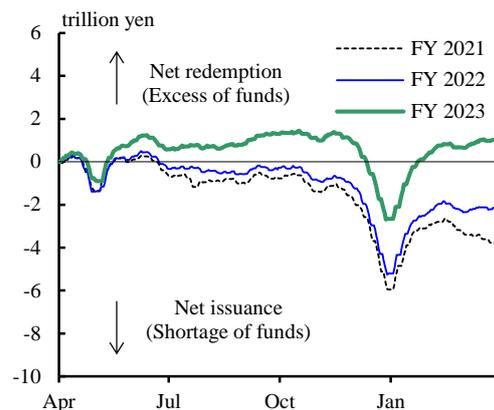


Chart 3-2: Cumulative Changes in Banknotes from the Start of the Fiscal Year



2. Changes in Treasury Funds and Others

In fiscal 2023, changes in treasury funds and others amounted to net receipts of 93.3 trillion yen (decrease in current account balances at the Bank),¹⁴ which was an increase from the net receipts of 89.9 trillion yen in fiscal 2022 (Chart 3-3). After adjusting for the increment by which the repayment amount to financial institutions decreased because of the Bank having purchased JGBs and T-Bills as part of its market operations (hereinafter referred to as the "repayment adjustment"),¹⁵ net receipts amounted to 11.6 trillion yen. Compared with fiscal 2022, when the amount was 7.2 trillion yen of net receipts after the repayment adjustment, these net receipts reduced the current account balances at the Bank by 4.4 trillion yen (Charts 3-4 and 3-5). This was mainly because net payments under "net fiscal payments" declined compared to fiscal 2022 while net receipts of "others" increased.

¹⁴ The net amount of JGBs and T-Bills issued (or redeemed) is registered as changes in treasury funds and others, provided that the Bank does not engage in market operations. If the Bank purchases JGBs and T-Bills from financial institutions and holds them to maturity, these positions are not netted out. Specifically, the Bank records net receipts for changes in treasury funds and others (decrease in current account balances at the Bank) when JGBs and T-Bills are issued by the government. The Bank's purchases of JGBs and T-Bills are sources of increase in current account balances at the Bank, while the current account balances do not see a change upon redemption of the securities. As a result, changes in treasury funds and others record substantial net receipts (decreases in current account balances at the Bank) due to the Bank's market operations, although receipts and payments for changes in treasury funds and others are assumed to be largely commensurate with one another.

¹⁵ With "repayment adjustments," regarding JGBs and T-Bills redeemed from the government to the Bank, adjustments are made to treat these as if the Bank sold them to financial institutions just before redemption and financial institutions received the redemptions from the government. For this reason, after repayment adjustments are carried out, there are changes in the amount of fluctuation for JGBs (with a residual maturity of more than 1 year) and T-Bills from among changes in treasury funds and others, as well as in purchases of JGBs and T-Bills as part of market operations (Chart 3-5).

Regarding "net fiscal payments," although a large-scale budget was implemented to deal with rising prices, there were decreases in expenditures for economic programs and infection control measures related to COVID-19 and for economic programs associated with other supplementary budgets (Chart 3-6). Moreover, tax revenues, mainly from corporate tax, consumption tax, and income tax, as well as pension premiums, increased on the back of the recovery of economic activity and gradual improvement in the employment and income situation. This, along with the reduction in expenditures, led to an overall decrease in net fiscal payments. Meanwhile, net receipts of "foreign exchange" declined, as the receipts of yen funds decreased compared to the previous fiscal year, when U.S. dollar selling/yen purchasing foreign exchange interventions were conducted.

As a result, the government deposit balance at the end of March 2024 increased by 0.1 trillion yen year-on-year to 15.7 trillion yen (Chart 3-7).

Developments of yen-denominated deposits received by the Bank from foreign central banks and international institutions also affect the current account balances at the Bank, which are included in the "others" of "Treasury funds and others." In fiscal 2023, net receipts of "others" grew due to a substantial increase in the balance of deposits received from overseas monetary authorities. This balance tends to fluctuate significantly, due mainly to the foreign reserves investment policies of individual depositors, contributing to fluctuations seen in the current account balances at the Bank.

Chart 3-3: Cumulative Changes in Treasury Funds and Others from the Start of the Fiscal Year

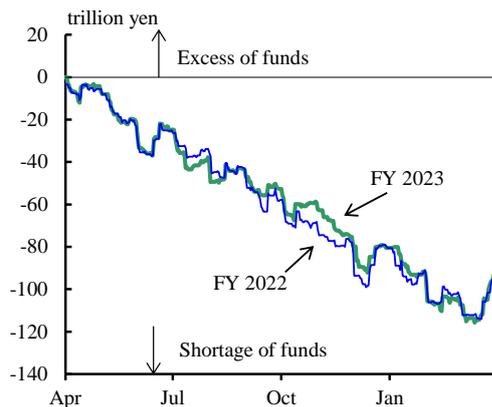


Chart 3-4: Cumulative Changes in Treasury Funds and Others from the Start of the Fiscal Year (After Repayment Adjustments)

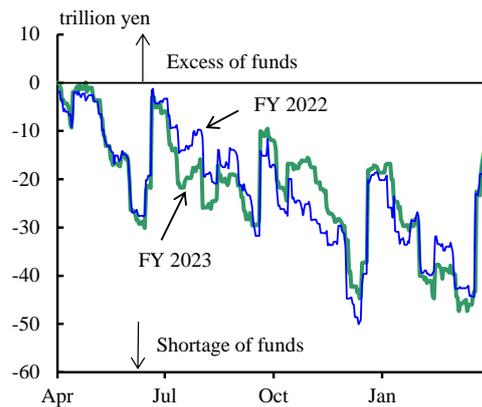


Chart 3-5: Sources of Changes in Current Account Balances at the Bank

trillion yen

	Before adjustment			After adjustment		
	FY 2022	FY 2023	Year-on-year	FY 2022	FY 2023	Year-on-year
Banknotes	-2.1	1.1	3.2	-2.1	1.1	3.2
Treasury funds and others	-89.9	-93.3	-3.4	-7.2	-11.6	-4.4
Net fiscal payments	35.8	26.0	-9.8	35.8	26.0	-9.8
JGBs (more than 1 year)	-102.2	-111.7	-9.5	-37.0	-35.3	1.7
T-Bills	-12.2	1.9	14.1	5.3	7.2	1.9
Foreign exchange	-9.3	-0.3	9.0	-9.3	-0.3	9.0
Others	-2.0	-9.1	-7.1	-2.0	-9.1	-7.1
Surplus/shortage of funds	-92.0	-92.3	-0.2	-9.3	-10.5	-1.2
BOJ loans and market operations	77.9	104.4	26.4	-4.8	22.6	27.4
Outright purchases of JGBs	136.0	87.6	-48.4	70.8	11.2	-59.6
Outright purchases of T-Bills	8.1	4.1	-4.0	-9.4	-1.3	8.2
Special Operations in Response to COVID-19	-80.9	-6.0	74.9	-80.9	-6.0	74.9
Funds-Supplying Operations to Support Financing for Climate Change Responses	2.4	3.7	1.4	2.4	3.7	1.4
Funds-Supplying Operations against Pooled Collateral	13.5	4.5	-9.0	13.5	4.5	-9.0
Loan Support Program	8.3	11.3	3.0	8.3	11.3	3.0
Other loans and market operations	-9.4	-0.9	8.6	-9.4	-0.9	8.6
Net change in current account balances	-14.1	12.1	26.2	-14.1	12.1	26.2

Notes: 1. For banknotes, negative figures represent a net increase in banknotes. For treasury funds and others, negative figures represent net receipts of the treasury. For BOJ loans and market operations, positive figures represent the supply of funds.
 2. The shaded areas indicate increases or decreases in figures after repayment adjustments.

Chart 3-6: Treasury Funds Payments to Private Sector

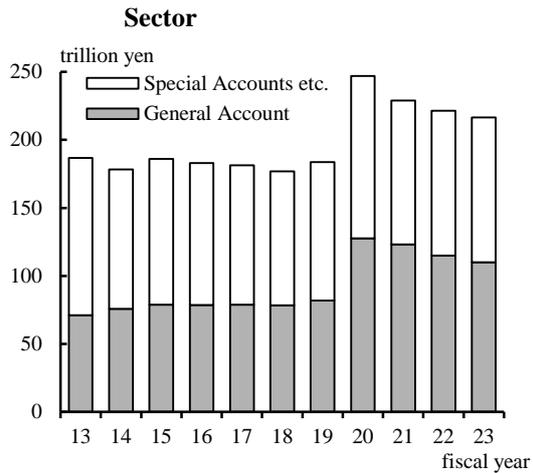
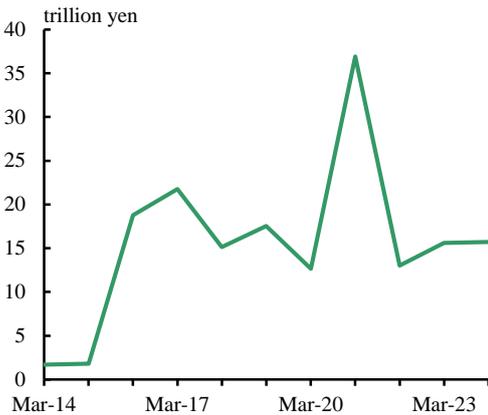


Chart 3-7: Government Deposit Balance



Box 7: Factors behind the Decline in the Outstanding Balance of Banknotes

The outstanding balance of banknotes issued had continuously increased over the years, and the pace of increase stepped up during the COVID-19 pandemic. However, there has recently been a change in this trend (Box Chart 7-1). The rate of increase in the outstanding balance of banknotes issued began to decline in early 2023. In December 2023, the year-on-year rate of increase turned negative for the first time in 11 years and 9 months since March 2012 (Box Chart 7-2). As demand for banknotes can be roughly classified into "transactional demand" for use as a medium of exchange and "non-transactional demand" for the other purposes, the following summarizes the factors behind the recent decline in the outstanding balances of banknotes from these two perspectives.¹⁶

From the perspective of "transactional demand," the impact of the spread of cashless payments can be pointed out. Cashless payments have become widespread, mainly owing to the point-reward programs of the government and business operators and the growth of e-commerce during the pandemic. Such payments have continued on the rise, facilitated by improvements in the cashless infrastructure. In fact, the cash usage rate for ordinary expenses has declined considerably, and this has curbed transactional demand for banknotes (Box Chart 7-3).

In terms of "non-transactional demand," cash hoarded during the pandemic for precautionary purposes has been increasingly released. The contribution of non-transactional demand to the year-on-year increase in the outstanding balance of banknotes issued expanded in 2020, bolstered by a rise in precautionary demand due to the pandemic, and remained high thereafter. From the start of 2023, however, the contribution of non-transactional demand began to decrease, and by November 2023, its contribution to the year-on-year increase in the outstanding balance of banknotes issued became negative (Box Chart 7-4). This was attributable to an increase in the redemption of banknotes resulting from the release of hoarded cash against the backdrop of the relaxation and termination of restrictions on going outside, the waning of pandemic-induced uncertainty about the economy, and the resultant decline in precautionary demand. Similar to Japan, the rate of growth in the outstanding balance of banknotes issued has recently declined or even turned negative in the United States and Europe after experiencing an increase in precautionary demand and an accumulation of hoarded cash during the pandemic (Box Chart 7-5).

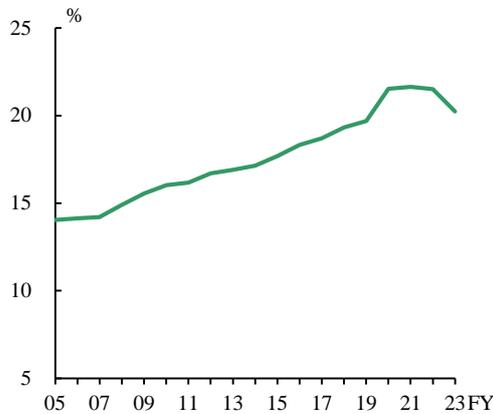
While both transactional and non-transactional demand has been declining, some financial institutions have also become more aware of the recent increase in the costs of transporting and storing cash, and

¹⁶ Typical forms of "non-transactional demand" include demand for use as a store of value and that for precautionary purposes in advance of an unpredictable situation (e.g., an increased need to have cash at hand in response to heightened uncertainty about future economic conditions and the financial system).

have started reducing their outstanding balance of cash holdings in recent years (Box Chart 7-6).

With regard to the outlook, as financial institutions are beginning to increase their deposit interest rates following the termination of the negative interest rate policy in March 2024, the outstanding balance of banknotes issued could be affected by such changes in the opportunity costs. Moreover, a new series of banknotes is scheduled to be issued in July 2024 for the first time in 20 years, possibly bringing about fluctuations in net receipts and payments of banknotes, just as when the previous series was inaugurated. The Bank will closely monitor developments in demand for banknotes as a source of changes in current account balances.

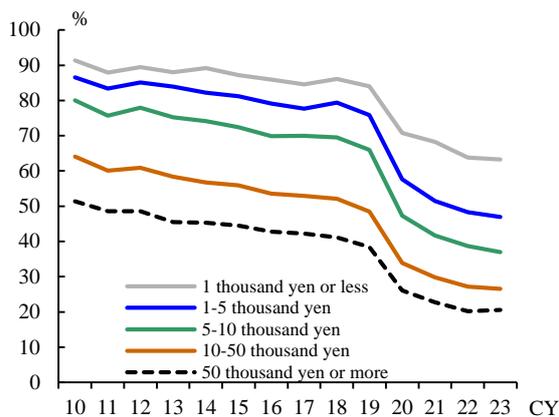
Box Chart 7-1: Ratio of Banknotes Issued to GDP



BOX Chart 7-2: Year-on-Year Change in Banknotes Issued

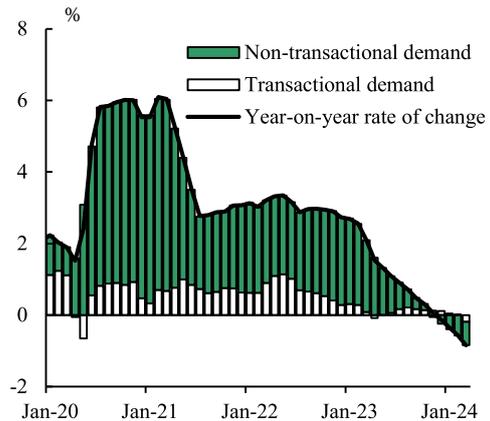


Box Chart 7-3: Preference for Banknotes in Ordinary Expenditures



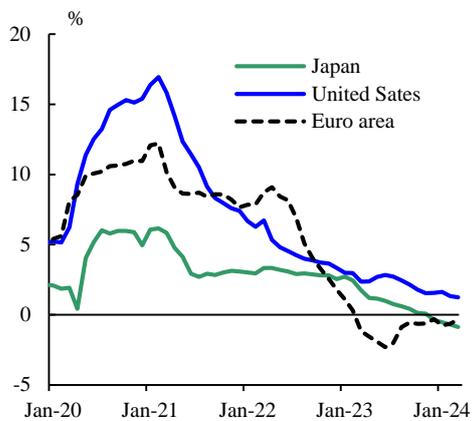
Note: The proportion of respondents who selected "cash" to a question "For ordinary expenses (such as shopping), which payment instruments do you use for different values of payment? Please choose the instruments which are used frequently for each range of payment values (choose up to two answers)" in the *Public Opinion Survey on Household Financial Assets and Liabilities* conducted by the Central Council for Financial Services Information.

BOX Chart 7-4: Sources of Year-on-Year Changes in Banknotes Issued: Transactional Demand and Non-Transactional Demand

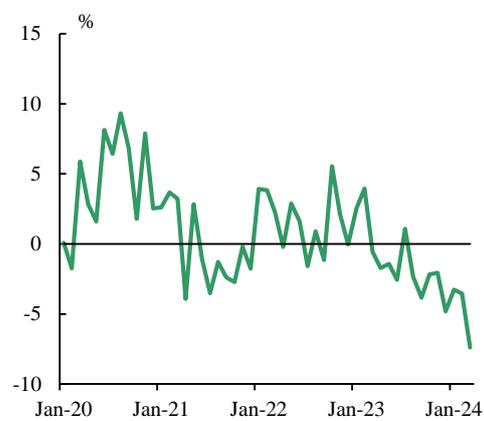


Note: The contribution to the year-on-year rate of change in banknotes issued is decomposed into transactional demand and non-transactional demand. The number of 1,000 yen bills issued, which are mostly used for ordinary expenses, is regarded as transactional demand. The difference between the number of 10,000 yen and 1,000 yen bills issued is regarded as non-transactional demand.

Box Chart 7-5: Year-on-Year Change in Banknotes Issued (Japan, the United States, and the Euro Area)



BOX Chart 7-6: Year-on-Year Change in Cash Holdings by Financial Institutions



B. Three-Tier System of Current Accounts at the Bank

For most of fiscal 2023, the Bank, under QQE with Yield Curve Control, adopted a three-tier system in which the outstanding balance of each financial institution's current account at the Bank was divided into three tiers. Under this system, a positive interest rate (0.1 percent) was applied to basic balances, a zero interest rate was applied to macro add-on balances, and a negative interest rate (minus 0.1 percent) was applied to policy-rate balances (Chart 3-8). Starting on March 21, 2024, in accordance with the changes in the monetary policy framework decided at the MPM held on March 18 and 19, the Bank applied an interest rate of 0.1 percent to current account balances held by financial institutions at the Bank, excluding required reserve balances. This section summarizes developments in current account balances under the three-tier system through the February 2024 reserve maintenance period, when a negative interest rate of minus 0.1 percent was applied to policy-rate balances.

Chart 3-8: Three-Tier System of Current Accounts

Tier	Subject to Calculation	Applied interest rate
(1) Basic Balance	Benchmark Balance (average outstanding balance for 2015) – Required reserves	+0.1%
(2) Macro Add-on Balance	Benchmark Balance × Benchmark Ratio ¹⁷	0.0%
	Balances associated with the Bank's various fund-provisioning measures ¹⁸ (Loan Balance 1) ¹⁹	
	Increase in balances associated with the Bank's various fund-provisioning measures compared with at end-March 2016 (Loan Balance 2)	
	Amount based on the special rules for money reserve	

¹⁷ Ratio equally applied to all financial institutions.

¹⁸ The Bank's measures include the Stimulating Bank Lending Facility, Growth-Supporting Funding Facility, Funds-Supplying Operation to Support Financial Institutions in Disaster Areas (including the funds-supplying operations to support financial institutions in disaster areas of the Great East Japan Earthquake and of the 2016 Kumamoto Earthquake, before they were abolished), the Special Operations in Response to COVID-19, and the Funds-Supplying Operations to Support Financing for Climate Change Responses.

¹⁹ With a view to providing incentives to use various fund-provisioning measures (excluding fund-provisioning against government-supported loans through the Special Operations in Response to COVID-19), balances of those measures (Loan Balances 1) as well as the increase in balances compared with those at the end of March 2016 (Loan Balances 2) were included in the calculation of the Macro Add-on Balance limit.

	funds ²⁰ and those for new institutions ²¹	
	Amount added/reduced in the calculation of the limit of the Macro Add-on Balance ²²	
	Required reserves	
(3) Policy-Rate Balance	Amount obtained by subtracting (1) and (2) from current account balances	-0.1%

Under the three-tier system during the negative-interest rate policy, some financial institutions could have allowances up to the upper bound on their basic balances and macro add-on balances (hereinafter referred to as "unused allowances") because the amount of their current account balances at the Bank fell below the upper bound. Other financial institutions could have policy-rate balances generated because the amount of their current account balances at the Bank exceeded the upper bound on their basic balances and macro add-on balances. Unused allowances or policy-rate balances constituted one of the factors that induced arbitrage trading by financial institutions, which was carried out by borrowing (lending) cash at interest rates that were lower (higher) than those applied according to their current account balances at the Bank and depositing funds in (supplying funds from) their current accounts at the Bank. Assuming that financial institutions with unused allowances in their basic balances and/or macro add-on balances utilize all of their unused allowances to borrow cash from financial institutions with policy-rate balances through such arbitrage trading, the policy-rate balance left was referred to by the Bank as the "hypothetical policy-rate balance after arbitrage transactions have taken place in full" (the "hypothetical policy-rate balance").

In line with the policy to "reduce [this balance] from the current level of about 10 trillion yen on average" "...under the condition that the yield curve control can be conducted appropriately," which was decided at the MPM held in July 2018, the Bank reviewed the Benchmark Ratio every reserve maintenance period so that the "hypothetical policy-rate balance" stayed at about 5 trillion yen. The Bank adjusted the Benchmark Ratio downward in many reserve maintenance periods in the latter half

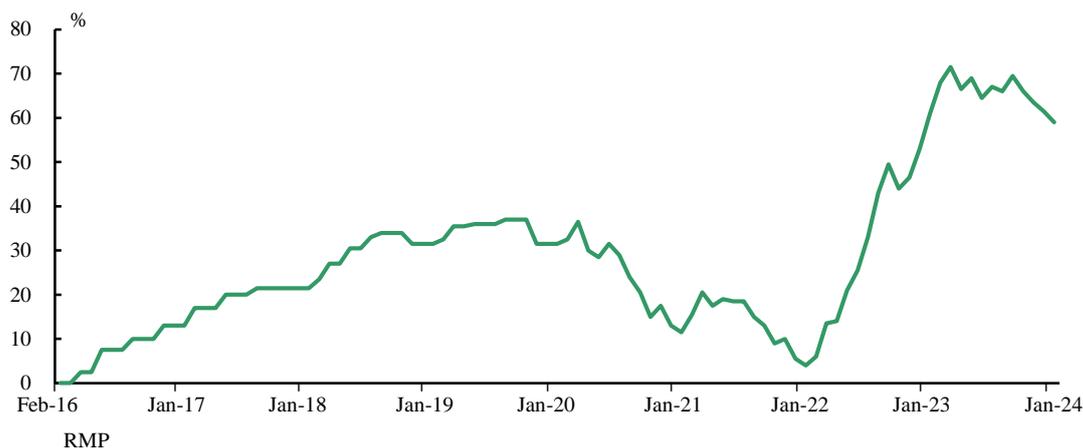
²⁰ The smaller of the average amount outstanding of money reserve funds entrusted to an institution during the reserve maintenance periods from January to December 2015 (on a net asset basis; including the amount that was not deposited in the current accounts at the Bank as a result of investment) and that entrusted to an institution during the designated reserve maintenance period (on a net asset basis; excluding the amount that was not deposited in the current accounts as a result of investment).

²¹ The balance obtained by multiplying the benchmark ratio by the Deemed Benchmark Balance based on the "Special Rules regarding Calculation of Interest of Complementary Deposit Facility for New Institutions."

²² Amounts added to or reduced in the calculation of the limit of the Macro Add-on Balances introduced in light of the Bank's Assessment in March 2021. For details, see "Appendix 4: Operation of the Complementary Deposit Facility" ("Revision regarding 1." and "Revision regarding 2.") of the "Assessment for Further Effective and Sustainable Monetary Easing (The Background)" released on March 19, 2021.

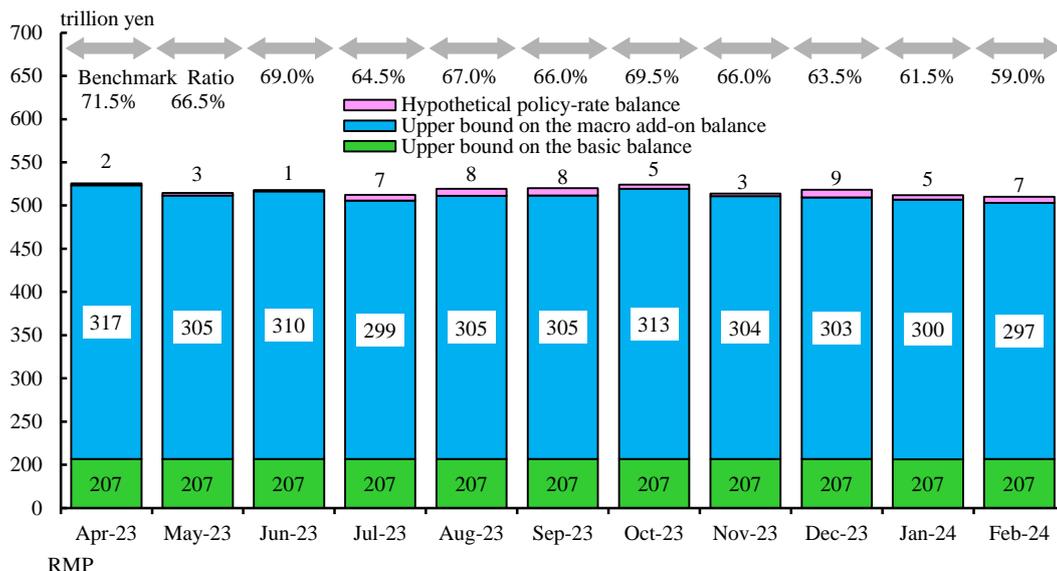
of the fiscal year, reflecting the increased use of the Stimulating Bank Lending Facility and the Climate Response Financing Operations (Chart 3-9). Additionally, in the February 2024 reserve maintenance period, the Benchmark Ratio was set at a slightly low level in light of the increases in the uncollateralized call and GC repo rates.

Chart 3-9: Benchmark Ratio



"Hypothetical rate balances" remained at around 5 trillion yen, albeit with fluctuations stemming from the conduct of market operations and changes in treasury funds and others (Chart 3-10).

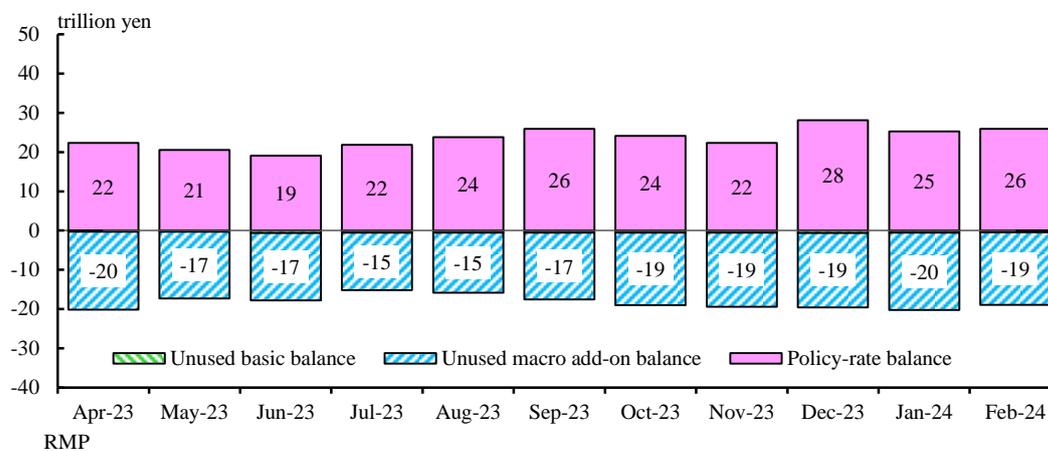
Chart 3-10: Upper Bound on the Basic Balance and the Macro Add-on Balance and the Hypothetical Policy-Rate Balance



"Unused allowances," chiefly consisting of those of macro add-on balances and actual policy-rate balances, generally stayed steady, albeit with fluctuations associated with changes in financial

institutions' borrowing stance and the upper bound on macro add-on balances. Meanwhile, policy-rate balances increased somewhat, albeit with some fluctuations (Chart 3-11).

Chart 3-11: Unused Allowances in Tiers and the Policy-Rate Balance

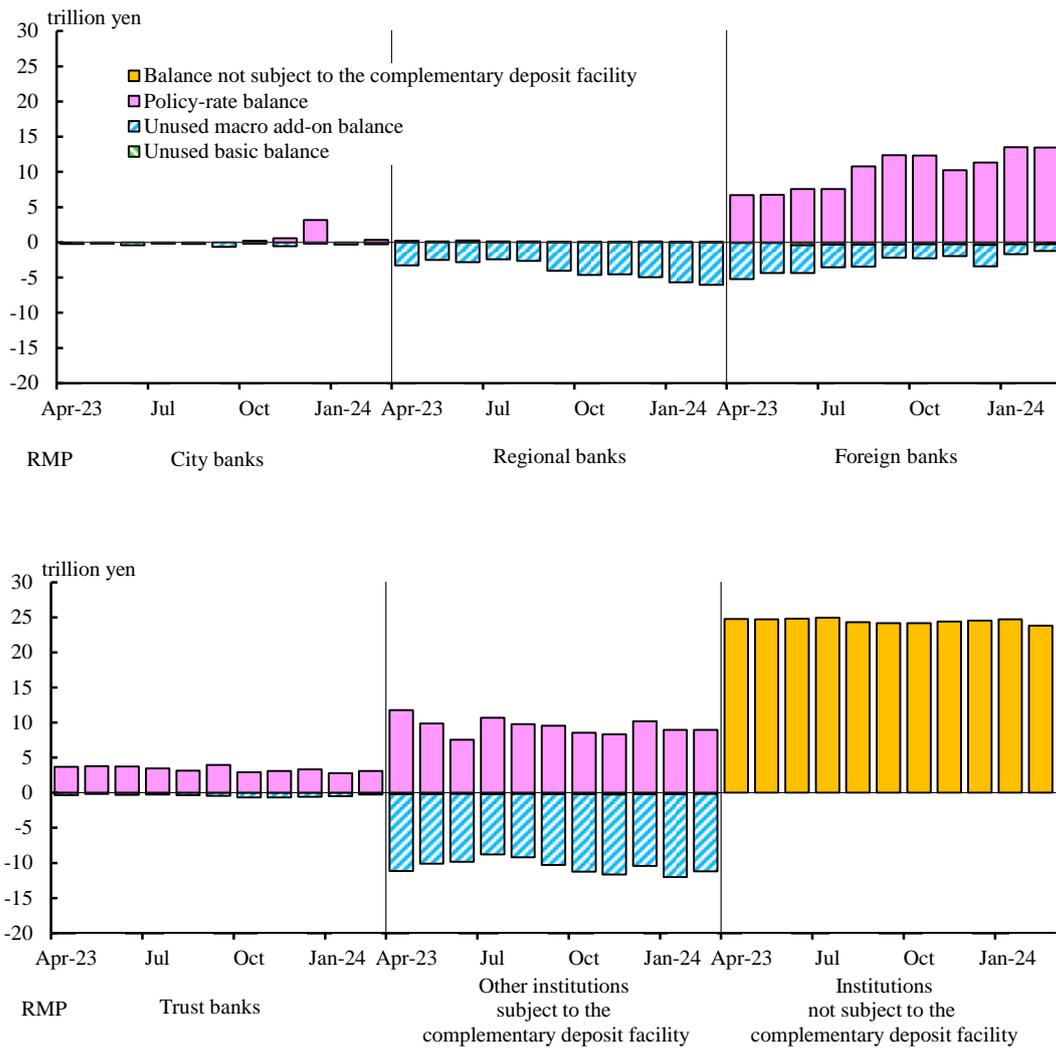


Specifically, unused allowances decreased toward the August 2023 reserve maintenance period, mainly among regional banks and other institutions subject to the Complementary Deposit Facility. The decrease stemmed from increased fundraising through overnight call transactions, reflecting the low uncollateralized overnight call rate. Unused allowances increased in the October reserve maintenance period, as the upper bound on macro add-on balances was raised mainly for regional banks due to their active use of the Stimulating Bank Lending Facility. Unused allowances remained flat thereafter.

Policy-rate balances increased toward the September reserve maintenance period as foreign banks actively converted dollar funds into yen and added them to their current account balances at the Bank against the backdrop of the yen's depreciation and the heightened attractiveness of conversion to yen. Policy-rate balances then declined momentarily, partly because other institutions subject to the Complementary Deposit Facility actively purchased JGBs in light of a rise in Japanese long-term interest rates. However, these balances increased again somewhat significantly from the December 2023 reserve maintenance period and remained high until the February 2024 reserve maintenance period. This was because some city banks became less active in purchasing T-Bills in the expectation of higher interest rates, and foreign banks increased the conversion of dollars into yen due to the year-end demand for dollars, mainly by city banks.

Developments in the three-tier system described above are presented in Chart 3-12 by sector.

Chart 3-12: Three-Tier System of the Current Accounts by Sector



- Notes: 1. "Other institutions subject to the complementary deposit facility" are other institutions subject to the reserve requirement and institutions not subject to the reserve requirement.
2. Other institutions subject to the reserve requirement include the following: *Shinkin* Banks (with deposits of more than 160 billion yen); PayPay Bank; Seven Bank; Sony Bank; Rakuten Bank; SBI Sumishin Net Bank; au Jibun Bank; AEON Bank; Daiwa Next Bank; ORIX Bank; Custody Bank of Japan; SBI Shinsei Bank; Aozora Bank; Shinhan Bank Japan; The Resolution and Collection Corporation; The Norinchukin Bank; Japan Post Bank; Lawson Bank; GMO Aozora Net Bank; Minna Bank; and UI Bank.
3. Institutions not subject to the reserve requirement include the following: securities companies; *tanshi* companies (money market brokers); securities finance companies; Shinkin Central Bank; *Shinkin* Banks (with deposits of 160 billion yen or less); The Shoko Chukin Bank; The Shinkumi Federation Bank; and The Rokinren Bank.
4. "Institutions not subject to the complementary deposit facility" include the following: Japanese Bankers Association; Japanese Banks' Payment Clearing Network; Tokyo Financial Exchange; Japan Securities Clearing Corporation; JASDEC DVP Clearing Corporation; CLS BANK International; Development Bank of Japan; Japan Finance Corporation; Japan Bank for International Cooperation; and Deposit Insurance Corporation of Japan.

C. The Bank's Balance Sheet

As a result of the market operations described in Chapter II, the Bank's balance sheet and the monetary base grew in fiscal 2023 (Chart 3-13).

The Bank's balance sheet stood at 756.4 trillion yen at the end of March 2024, an increase of 21.3 trillion yen from a year earlier. Meanwhile, the monetary base amounted to 686.8 trillion yen at the end of March 2024, an increase of 10.9 trillion yen from a year earlier.

On the asset side, JGBs increased by 9.4 trillion yen from a year earlier to 585.6 trillion yen, and the Funds-Supplying Operations against Pooled Collateral increased by 4.5 trillion yen to 18.5 trillion yen. This resulted from the Bank's increased outright purchases of JGBs and the conduct of the Funds-Supplying Operations against Pooled Collateral with a loan duration of five years from summer through early autumn 2023, when Japanese long-term interest rates were facing upward pressure. The Stimulating Bank Lending Facility increased by 11.3 trillion yen to 81.2 trillion yen and the Climate Response Financing Operations increased by 3.7 trillion yen to 8.2 trillion yen, both of which were actively used particularly by regional banks. Conversely, the amount outstanding of the Special Operations in Response to COVID-19 turned zero following the termination of the operations. Outright purchases of T-Bills declined by 1.3 trillion yen to 2.0 trillion yen, as the Bank continued to conduct outright purchases in modest amounts taking account of developments in the supply-demand conditions in the market.

On the liability side, current account balances at the Bank increased by 12.1 trillion yen to 561.2 trillion yen. Conversely, payables under repurchase agreements decreased by 1.1 trillion yen to 4.3 trillion yen, mainly due to declined use of the Securities Lending Facility. Banknotes also decreased by 1.1 trillion yen to 120.9 trillion yen.

Chart 3-13: The Bank's Balance Sheet

trillion yen

	End-Mar.2019	End-Mar.2020	End-Mar.2021	End-Mar.2022	End-Mar.2023	End-Mar.2024	Year-on-year
JGBs	459.6	473.5	495.8	511.2	576.2	585.6	+9.4
CP	2.0	2.6	2.9	2.5	2.1	2.2	+0.1
Corporate bonds	3.2	3.2	7.5	8.6	8.0	6.1	-1.9
ETFs	24.8	29.7	35.9	36.6	37.0	37.2	+0.1
J-REITs	0.5	0.6	0.7	0.7	0.7	0.7	-0.0
Loan Support Program	46.1	49.2	60.0	61.6	69.9	81.2	+11.3
Outright purchases of T-Bills	7.9	10.2	34.2	12.7	3.3	2.0	-1.3
Funds-Supplying Operation to Support Financial Institutions in Disaster Areas	0.7	0.5	0.5	0.5	0.2	0.1	-0.1
Special Operations in Response to COVID-19	-	3.4	64.8	86.8	6.0	-	-6.0
Funds-Supplying Operations to Support Financing for Climate Change Responses	-	-	-	2.0	4.4	8.2	+3.7
Funds-Supplying Operations against Pooled Collateral	0.7	1.2	0.5	0.5	14.0	18.5	+4.5
Foreign currency assets	6.7	26.0	7.7	8.3	9.1	10.7	+1.6
Total assets (including others)	557.0	604.5	714.6	736.3	735.1	756.4	+21.3
Banknotes	107.6	109.6	116.0	119.9	122.0	120.9	-1.1
Current account balances	393.9	395.3	522.6	563.2	549.1	561.2	+12.1
Other deposits	27.5	51.8	26.8	26.6	28.9	37.8	+8.9
Deposits of the government	17.5	12.6	36.9	13.0	15.6	15.7	+0.1
Payables under repurchase agreements	0.2	24.1	0.6	0.9	5.4	4.3	-1.1
Total liabilities and net assets (including others)	557.0	604.5	714.6	736.3	735.1	756.4	+21.3
Monetary base	506.3	509.8	643.6	688.0	675.8	686.8	+10.9

- Notes: 1. "Loan Support Program" does not include the Special Rules for the U.S. Dollar Lending Arrangement to Enhance the Growth-Supporting Funding Facility.
2. "Outright purchases of T-Bills" does not reflect changes in the amount of T-Bills induced by, for example, the Bank's transactions with the government.
3. "Funds-Supplying Operation to Support Financial Institutions in Disaster Areas" includes the funds-supplying operations to support financial institutions in disaster areas of the Great East Japan Earthquake and of the 2016 Kumamoto Earthquake before they were abolished.
4. "Special Operations in Response to COVID-19" at the end-March 2020 is the balance of the Special Funds-Supplying Operations to Facilitate Corporate Financing regarding the Novel Coronavirus (COVID-19).
5. "Foreign currency assets" is the sum of foreign currency-denominated assets held by the Bank, foreign currency loans by the U.S. Dollar Funds-Supplying Operations against pooled collateral, and other assets.
6. "Other deposits" represents deposits such as those held by foreign central banks.
7. "Payables under repurchase agreements" includes the Securities Lending Facility, sales of JGSs with repurchase agreements, and the Securities Lending to Provide JGSs as Collateral for the U.S. Dollar Funds-Supplying Operations.

IV. Major Changes in the Frameworks Related to Market Operations and Others

A. Greater Flexibility in the Conduct of Yield Curve Control

At the MPM held on July 27 and 28, 2023, the Bank decided to conduct yield curve control with greater flexibility. The Bank decided on the following regarding yield curve control:

(Yield curve control)

The short-term policy interest rate:

The Bank will apply a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the Bank.

The long-term interest rate:

The Bank will purchase a necessary amount of JGBs without setting an upper limit so that 10-year JGB yields will remain at around zero percent.

(Conduct of yield curve control)

The Bank will continue to allow 10-year JGB yields to fluctuate in the range of around plus and minus 0.5 percentage points from the target level, while it will conduct yield curve control with greater flexibility, regarding the upper and lower bounds of the range as references, not as rigid limits, in its market operations. The Bank will offer to purchase 10-year JGBs at 1.0 percent every business day through fixed-rate purchase operations, unless it is highly likely that no bids will be submitted. In order to encourage the formation of a yield curve that is consistent with the above guideline for market operations, the Bank will continue with large-scale JGB purchases and make nimble responses for each maturity by, for example, increasing the amount of JGB purchases and conducting fixed-rate purchase operations and the Funds-Supplying Operations against Pooled Collateral.

B. Further Increase in the Flexibility in the Conduct of Yield Curve Control

At the MPM held on October 30 and 31, 2023, the Bank decided to further increase the flexibility in the conduct of yield curve control. The Bank decided on the following regarding yield curve control:

(Yield curve control)

The short-term policy interest rate:

The Bank will apply a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the Bank.

The long-term interest rate:

The Bank will purchase a necessary amount of JGBs without setting an upper limit so that 10-year JGB yields will remain at around zero percent.

(Conduct of yield curve control)

The Bank will regard the upper bound of 1.0 percent for 10-year JGB yields as a reference in its market operations, and in order to encourage the formation of a yield curve that is consistent with the above guideline for market operations, it will continue with large-scale JGB purchases and make nimble responses for each maturity by, for example, increasing the amount of JGB purchases and conducting fixed-rate purchase operations and the Funds-Supplying Operations against Pooled Collateral.

C. Extension of the Duration of the Fund-Provisioning Measure to Stimulate Bank Lending

At the MPM held on January 22 and 23, 2024, the Bank decided to extend by one year the deadline for loan disbursement under the Fund-Provisioning Measure to Stimulate Bank Lending, with a view to continuing to promote financial institutions' aggressive action and help increase proactive credit demand of firms and households.

D. Changes in the Monetary Policy Framework

At the MPM held on March 18 and 19, 2024, the Bank judged it came in sight that the price stability target of 2 percent would be achieved in a sustainable and stable manner. On this basis, the Bank considered that the policy framework of QQE with Yield Curve Control and the negative interest rate policy to date had fulfilled their roles and decided to conduct monetary policy as appropriate, guiding the short-term interest rate as a primary policy tool, in response to developments in economic activity and prices as well as financial conditions. The Bank made the following decisions, including that on the guideline for market operations:

(a) Guideline for market operations

The Bank will encourage the uncollateralized overnight call rate to remain at around 0 to 0.1 percent.²³

(b) Purchase of JGBs

The Bank will continue its JGB purchases with broadly the same amount as before.²⁴ In case of a rapid rise in long-term interest rates, it will make nimble responses by, for example, increasing the amount of JGB purchases and conducting fixed-rate purchase operations of JGBs -- both of

²³ In order to achieve this guideline, the Bank will apply an interest rate of 0.1 percent to current account balances held by financial institutions at the Bank (excluding required reserve balances). The new guideline for market operations and the new interest rate on the current account balances will be effective from March 21, 2024.

²⁴ The amount of JGB purchases is currently about 6 trillion yen per month. The Bank will continue to announce the planned amount of JGB purchases with a range and will conduct the purchases while taking account of factors such as market developments and supply and demand conditions for JGBs.

which can be done so regardless of the monthly schedule of JGB purchases -- and the Funds-Supplying Operations against Pooled Collateral.

(c) Asset purchases other than JGB purchases

The Bank will discontinue purchases of ETFs and J-REITs.

The Bank will gradually reduce the amount of purchases of CP and corporate bonds and will discontinue the purchases in about one year.

(d) Treatment of new loan disbursements under the Fund-Provisioning Measure to Stimulate Bank Lending, etc.

The Bank will provide loans under the Fund-Provisioning Measure to Stimulate Bank Lending, the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas, and the Funds-Supplying Operations to Support Financing for Climate Change Responses with an interest rate of 0.1 percent and a duration of one year. With regard to the Fund-Provisioning Measure to Stimulate Bank Lending, the maximum amount of funds that each eligible counterparty can borrow will be equivalent to the net increase in its amount outstanding of loans.

E. Measures following the Changes in the Monetary Policy Framework

The Bank implemented the following measures in accordance with the changes in the monetary policy framework decided at the MPM held on March 18 and 19, 2024:

(a) Conduct of short-term Funds-Supplying Operations against Pooled Collateral

With regard to the provision of short-term funds under the Funds-Supplying Operations against Pooled Collateral, which has been conducted with no upper limit since September 27, 2022, the Bank will set the amount of offer per auction taking account of market conditions starting on March 21, 2024.

(b) Conduct of the Securities Lending Facility

The current measures regarding the Securities Lending Facility, including "Relaxation of the Terms and Conditions for the Securities Lending Facility for the Cheapest-to-Deliver Issues" published on February 29, 2024, will remain effective for the time being. The Bank, however, will cease the measures specified in "Market Operations for Three On-the-Run Issues of 10-year Japanese Government Bonds" published on February 16, 2023.

(c) ETF Lending Facility and the Securities Lending to Provide JGSs as Collateral for the U.S. Dollar Funds-Supplying Operations

Starting on March 21, 2024, the interest rate on cash collateral submitted by eligible counterparties of the ETF Lending Facility shall be equal to the Bank's target for the uncollateralized overnight call rate stipulated in the guideline for market operations. The interest rate shall be equal to the lower limit of the target if the target is set in a range.

The upper limit on selling yields in the Securities Lending to Provide JGSs as Collateral for the U.S. Dollar Funds-Supplying Operations shall also be equal to the Bank's target for the uncollateralized overnight call rate stipulated in the guideline for market operations. The upper limit on selling yields shall be equal to the lower limit of the target if the target is set in a range.

V. Actions to Enhance Dialogue with Market Participants

In conducting market operations in line with the guidelines decided at MPMs, the Bank carefully examines the developments and functioning of financial markets, as well as the impacts of its market operations. The Bank also conducts daily market monitoring and various market surveys, such as the Bond Market Survey and the Tokyo Money Market Survey, with a view to further deepening dialogue with market participants. In fiscal 2023, in addition to its existing efforts, the Bank conducted a special survey for the Bond Market Survey as part of the Review of Monetary Policy from a Broad Perspective that looked back on the positive and side effects of the Bank's unconventional monetary policy measures over the past 25 years.^{25,26}

Utilizing these survey results, the Bank's Financial Markets Department undertook various initiatives related to dialogue with market participants, as follows. While all meetings were held remotely using online conferencing or teleconferencing systems in fiscal 2022, in-person meetings resumed in fiscal 2023, with continued use of remote settings, mainly in light of the classification change of COVID-19 to a Class 5 infectious disease.

1. Holding of the Meeting on Market Operations

The Meeting on Market Operations, which is held twice a year with eligible counterparties for market operations, was held on October 12, 2023, and February 22, 2024. At these meetings, the Bank explained and exchanged opinions with participants on (1) recent developments in financial markets and market operations, (2) liquidity in and functioning of the JGB markets, and (3) the results of the Tokyo Money Market Survey, interest rate benchmark reform, and the results of the special survey for the Bond Market Survey.²⁷

2. Holding of the Bond Market Group Meeting

The Bond Market Group Meeting, which, in principle, is held twice a year with bond market participants, was held on June 5 and 6, and December 7 and 8, 2023. At these meetings, the Bank explained and exchanged views with participants on (1) the results of the Bond Market Survey, (2) liquidity in the JGB market, and (3) recent developments in the financial markets and market

²⁵ For the survey results, see

https://www.boj.or.jp/en/paym/bond/bond_list/bond2311b.pdf.

²⁶ For details of the Bank's initiatives of the Review of Monetary Policy from a Broad Perspective, see <https://www.boj.or.jp/en/mopo/outline/bpreview/index.htm>.

²⁷ For summaries of the meetings held in fiscal 2023, see:

The October 2023 meeting

<https://www.boj.or.jp/en/paym/market/mkt231013a.pdf>.

The February 2024 meeting

<https://www.boj.or.jp/en/paym/market/mkt240226a.pdf>.

operations.²⁸

3. Dialogue with the Study Group for Activation of Short-Term Money Markets

The Bank participated in the Study Group for Activation of Short-Term Money Markets, comprising representatives of businesses that conduct short-term money market transactions, and actively supported the deliberations and initiatives by market participants for the activation of short-term money markets. Moreover, the Bank hosted a working-level meeting, which, in principle, is held once a year with the Study Group for Activation of Short-Term Money Markets on November 20, 2023. The Bank exchanged opinions on developments in the short-term money markets and interest rate benchmark reform.

4. Reporting and Opinion Exchange at the Review of Monetary Policy from a Broad Perspective

The Bank held the first workshop on the Review of Monetary Policy from a Broad Perspective entitled "The Effects and Side Effects of Unconventional Monetary Policy," on December 4, 2023. At the workshop, the Financial Markets Department provided an overview of domestic financial markets over the past 25 years and the impact of monetary policy on the degree of market functioning, and exchanged opinions with economists, market participants, and other experts.

5. Initiatives Regarding Interest Rate Benchmarks

Meetings of the Cross-Industry Forum on Interest Rate Benchmarks were held on June 7 and December 5, 2023. The Forum, for which the Bank served as the secretariat, was established to provide opportunities for a wide range of market participants and interest rate benchmark users to exchange opinions and facilitate smooth transactions referencing Japanese yen interest rate benchmarks in the Japanese markets. At the meetings, participants discussed progress in the transition away from U.S. dollar LIBOR and trends in alternative interest rate benchmarks for the Japanese market.²⁹ As the transition away from U.S. LIBOR was generally completed after the discontinuation of its publication without major disruption at the end of June 2023, the Forum's activities were wound down with the convening of its December 5 meeting. As a follow-up, a network of practitioners on interest rate benchmarks was established in January 2024, with the Bank serving as the secretariat, to maintain connections among practitioners who had participated in the Forum.

²⁸ For details, see <https://www.boj.or.jp/en/paym/bond/index.htm>.

²⁹ For details, see https://www.boj.or.jp/en/paym/market/i_forum/index.htm.

Reference: Numbers of Auctions and Eligible Counterparties for Market Operations

numbers

	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	Number of eligible counterparties
Outright purchases of JGBs	302	208	790	585	59
Outright purchases of T-Bills	50	43	44	41	56
Outright purchases of CP	27	24	24	24	37
Outright purchases of corporate bonds	24	24	12	12	37
Outright purchases of ETFs	56	8	7	1	—
Outright purchases of J-REITs	58	2	1	0	—
Lending of ETFs	97	55	39	44	11
Funds-Supplying Operations against Pooled Collateral	27	27	36	29	353
Growth-Supporting Funding Facility	38	20	14	9	160
Stimulating Bank Lending Facility	10	4	4	4	219
Funds-Supplying Operation to Support Financial Institutions in Disaster Areas	15	6	4	4	40
Special Operations in Response to COVID-19	17	12	12	—	—
Funds-Supplying Operations to Support Financing for Climate Change Responses	—	1	2	2	81
Purchases of JGSs with repurchase agreements	0	8	0	8	56
Sales of JGSs with repurchase agreements	0	0	0	0	56
U.S. Dollar Funds-Supplying Operations	161	62	57	66	88
Securities Lending Facility	490	488	526	501	59
Securities Lending to Provide JGSs as Collateral for the U.S. Dollar Funds-Supplying Operations	31	5	4	10	49
Total	1,403	997	1,576	1,340	—

- Notes: 1. The number of auctions (excluding outright purchases of ETFs and J-REITs and lending of ETFs) is the number of the Bank's notifications of auction guidelines (offers) to eligible counterparties.
2. The number of eligible counterparties is as of end-March 2024. The number of eligible counterparties for the Funds-Supplying Operations against Pooled Collateral is that for the Funds-Supplying Operations against Pooled Collateral at all offices (of which 41 counterparties are also eligible for the Funds-Supplying Operations against Pooled Collateral at the Head Office).
3. The number of outright purchases of ETFs excludes purchases of ETFs to support firms proactively investing in physical and human capital.
4. The number of "Funds-Supplying Operation to Support Financial Institutions in Disaster Areas" includes the number of funds-supplying operations to support financial institutions in disaster areas of the Great East Japan Earthquake and of the 2016 Kumamoto Earthquake before they were abolished.
5. The number of "Special Operations in Response to COVID-19" in fiscal 2020 indicates the number of Special Funds-Supplying Operations to Facilitate Corporate Financing regarding the Novel Coronavirus (COVID-19).

List of Data Sources and Referenced Materials

- Chart 2-1: Bank of Japan, "Call Money Market Data (Updated Every Business Day)."
- Chart 2-2: Bank of Japan.
- Chart 2-3: Bank of Japan.
- Chart 2-4: Bank of Japan, "Amounts Outstanding in the Call Money Market."
- Chart 2-5: Japan Securities Dealers Association, "Tokyo Repo Rate."
- Chart 2-6: Japan Securities Dealers Association.
- Chart 2-7: Bank of Japan.
- Chart 2-8: Japan Bond Trading.
- Chart 2-9: Ministry of Finance.
- Chart 2-10: Ministry of Finance; Bank of Japan.
- Chart 2-11: Bank of Japan, "Market Operations by the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."
- Chart 2-12: Japan Bond Trading.
- Chart 2-13: QUICK.
- Chart 2-14: Japan Securities Dealers Association.
- Chart 2-15: Bloomberg.
- Chart 2-16: Bank of Japan.
- Chart 2-17: Bank of Japan.
- Chart 2-18: JBOND Totan Securities; Japan Securities Dealers Association, "Tokyo Repo Rate."
- Chart 2-19: JBOND Totan Securities; Japan Securities Dealers Association, "Tokyo Repo Rate."
- Chart 2-20: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-21: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-22: Japan Securities Depository Center.
- Chart 2-23: Japan Securities Depository Center.
- Chart 2-24: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-25: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-26: Bloomberg; Japan Securities Dealers Association; QUICK.
- Chart 2-27: Bloomberg; Japan Securities Dealers Association; QUICK.
- Chart 2-28: Japan Securities Depository Center.
- Chart 2-29: Bank of Japan, "Market Operations by the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."

- Chart 2-30: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-31: Bloomberg.
- Chart 2-32: Bloomberg.
- Chart 2-33: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions," "Purchases of ETFs and J-REITs."
- Chart 2-34: Bank of Japan, "Monetary Base and the Bank of Japan's Transactions," "Purchases of ETFs and J-REITs."
- Chart 2-35: Bank of Japan, "New Lending of ETFs," "Outstanding Balance of ETF Lending at Month-End."
- Chart 2-36: Bank of Japan.
- Chart 2-37: Bank of Japan, "Market Operations by the Bank of Japan."
- Chart 2-38: Bank of Japan, "Market Operations by the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."
- Chart 2-39: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Stimulate Bank Lending."
- Chart 2-40: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Stimulate Bank Lending."
- Chart 2-41: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth."
- Chart 2-42: Bank of Japan, "Loan Disbursement under the Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth."
- Chart 2-43: Bank of Japan, "Loan Disbursement under the Funds-Supplying Operation to Support Financial Institutions in Disaster Areas."
- Chart 2-44: Bank of Japan, "Loan Disbursement under the Funds-Supplying Operations to Support Financing for Climate Change Responses."
- Chart 2-45: Bank of Japan.
- Chart 3-1: Bank of Japan.
- Chart 3-2: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 3-3: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 3-4: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Updated Every Business Day)."
- Chart 3-5: Bank of Japan, "Sources of Changes in Current Account Balances at the Bank of Japan and Market Operations (Final Figures)."

- Chart 3-6: Ministry of Finance, "Receipts and Payments of Treasury Funds with the Private Sector."
- Chart 3-7: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)."
- Chart 3-8: Bank of Japan.
- Chart 3-9: Bank of Japan.
- Chart 3-10: Bank of Japan, "BOJ Current Account Balances by Sector."
- Chart 3-11: Bank of Japan, "BOJ Current Account Balances by Sector."
- Chart 3-12: Bank of Japan, "BOJ Current Account Balances by Sector."
- Chart 3-13: Bank of Japan, "Bank of Japan Accounts (Every Ten Days)," "Financial Statements of the Bank of Japan," "Monetary Base and the Bank of Japan's Transactions."
- Box Chart 1-1: Bank of Japan, "Amounts Outstanding in the Call Money Market."
- Box Chart 1-2: Bank of Japan.
- Box Chart 1-3: Bank of Japan; Japan Securities Dealers Association.
- Box Chart 1-4: Bank of Japan.
- Box Chart 2-1: Japan Securities Dealers Association, "Tokyo Repo Rate;" Bank of Japan, "Call Money Market Data (Updated Every Business Day)."
- Box Chart 2-2: Bank of Japan.
- Box Chart 2-3: Bank of Japan; Japan Securities Dealers Association, "Tokyo Repo Rate."
- Box Chart 3-1: Bank of Japan, "Call Money Market Data (Updated Every Business Day);" Japan Securities Dealers Association, "Tokyo Repo Rate;" Japan Bond Trading.
- Box Chart 3-2: Bank of Japan, "Call Money Market Data (Updated Every Business Day)."
- Box Chart 4-1: Japan Bond Trading.
- Box Chart 4-2: Japan Bond Trading; Totan ICAP.
- Box Chart 4-3: Bank of Japan; Tradeweb.
- Box Chart 4-4: Bank of Japan.
- Box Chart 5-1: Bank of Japan.
- Box Chart 5-2: Japan Bond Trading.
- Box Chart 5-3: Japan Bond Trading.
- Box Chart 5-4: LSEG; Japan Bond Trading.
- Box Chart 5-5: QUICK; Bloomberg; LSEG.
- Box Chart 6-1: Bank of Japan.
- Box Chart 6-2: Bank of Japan.
- Box Chart 6-3: Bank of Japan.
- Box Chart 6-4: Bank of Japan.

Box Chart 7-1:	Bank of Japan; Cabinet Office.
Box Chart 7-2:	Bank of Japan.
Box Chart 7-3:	Central Council for Financial Services Information, "Public Opinion Survey on Household Financial Assets and Liabilities."
Box Chart 7-4:	Bank of Japan.
Box Chart 7-5:	Bank of Japan; Federal Reserve Board; European Central Bank.
Box Chart 7-6:	Bank of Japan.
Reference	Bank of Japan.