

### 2023

# Debt Management Report

The Government Debt Management and the State of Public Debts

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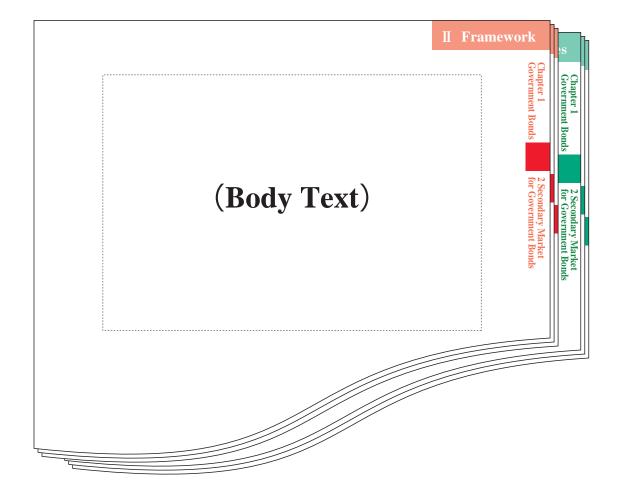
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# Preface



# About "Debt Management Report"

The objective of the "Debt Management Report," which has been published since 2004, is to provide readers across a wide spectrum spanning domestic and foreign markets, government affairs, and research, etc., with the opportunity to gain a deeper understanding of Japan's debt management policy. While this report focuses on Japanese Government Bond (JGB) management policy as a debt management policy, it covers issues involving public debts in general.

To begin with, Part I, titled "State of Debt Management Policies," discusses the recent trends in the JGB market, as well as various recent policies, specifically in relation to the JGB Issuance Plan for this fiscal year.

Part II, titled "Framework," concerns itself with the fundamental mechanisms of public debt and debt management policy in general.

Lastly, Part III, the "Appendices," lists those materials that did not fit into the previous areas; this section should be used with reference to Part II "Framework."

In this latest report as well, we provide several cross-references including some that link Part II "Framework" with Part III "Appendices" so that readers are able to quickly access the information that they require. Your comments are highly appreciated for further improvements of this report.



# What is Debt Management Policy?

#### (1) Overview

Under the FY2023 budget (April-March), the central government plans to issue JGBs equivalent to 205.8 trillion yen, posting a decrease of 9.3 trillion yen from the initial level for FY2022. Construction Bonds and Special Deficit-Financing Bonds to provide General Account revenues decrease by 1.3 trillion yen from the initial level for the previous year to 35.6 trillion yen. On the other hand, JGBs outstanding at the end of FY2022 totaled up to 1,127.9 trillion yen.

The government raises funds from Financing Bills and Borrowings as well as JGBs. If Financing Bills and Borrowings are included, outstanding government debts excluding government-guaranteed debt came to 1,270.5 trillion yen. Moreover, the government gives guarantees to Incorporated Administrative Agencies in order for them to carry out funding to implement public projects, with this government-guaranteed debt totaling 29.4 trillion yen (Figures are as of the end of FY2022).

The government's fundraising amount or flow has become enormous. Outstanding debts on a stock basis have been increasing continuously. Government debt management affects not only choices of financial assets for economic entities such as corporations and households, but also the flow of funds on a macro-scale, which would eventually influence interest rates. In turn, changes to market interest rates influence government funding activities and the activities of all economic entities.

Based on these points, the government, while trying to mitigate fiscal burden, implements JGB issuance, absorption, distribution and redemption measures to allow government debts (JGBs, Financing Bills, Borrowings, Government-Guaranteed Debt and Subsidy Bonds) to be smoothly accepted at each stage of the national economy. These measures represent "debt management policy." In Japan, based on the following basic goals for the JGB Management Policy, the government carefully implements "communications with the market" through various meetings for the formulation and operation of the JGB Issuance Plan, tries to base JGB issuance fully on market needs, and tackles the diversification of JGB holders by:

- (1) To ensure the smooth and secure issuance of Japanese Government Bonds
- (2) To minimize medium- to long-term fundraising costs

Meanwhile, any excessive response to temporary or short-term changes in market demand could affect market transparency and predictability for market participants, leading to a rise in medium- to long-term fundraising costs. While a massive government debt issuance is expected in future, the government will try to issue JGBs in a more stable and transparent manner by identifying medium- to long-term demand trends.

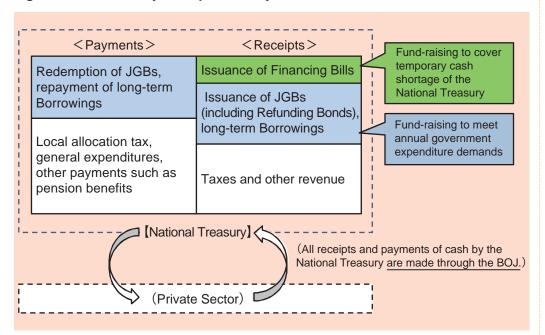
The "Guidelines for Public Debt Management," published by the International Monetary Fund and the World Bank in 2001, describes sovereign debt management as "the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding" and the objective of sovereign debt management as being "to raise the required amount of funding at the lowest possible cost over the medium to long term, consistent with a prudent degree of risk."

#### (2) Framework of "Government Funding Activities"

Government expenditures for a year should fundamentally be covered by tax and other revenues within that year. To satisfy expenditure demands that cannot be covered by these revenues, the government issues JGBs or carries out Borrowings (). The government also issues Financing Bills to cover temporary cash shortages for daily cash management of the National Treasury. The following discusses the framework of these government fundraising activities.

Unlike JGBs, Borrowings are a form of funding that does not involve the issuing of securities.

Fig.1 National Treasury Receipts and Payments



The central government budget consists of the General Account and 13 Special Accounts (as of April 1, 2023), and all receipts and payments in these accounts are managed through the Bank of Japan (BOJ). The government smoothly implements spending within the budget by using JGBs and Borrowings to meet expenditure demand that cannot be covered by tax and other revenues and by issuing Financing Bills to cover temporary cash shortages of the National Treasury as follows.

#### A. JGBs and Borrowings to meet annual government expenditure demand

The government issues JGBs or carries out Borrowings to satisfy expenditure demand that cannot be covered by tax and other revenues and records funds raised through JGBs and Borrowings as revenues. The government smoothly implements budget spending as needed, by raising funds in this manner.

In addition to planning the government debt management policy, the Financial Bureau of the Ministry of Finance implements the policy by conducting auctions, issuance and redemption of JGBs, and auctions for Borrowings.

#### B. Financing Bills to cover temporary cash shortages for the National Treasury

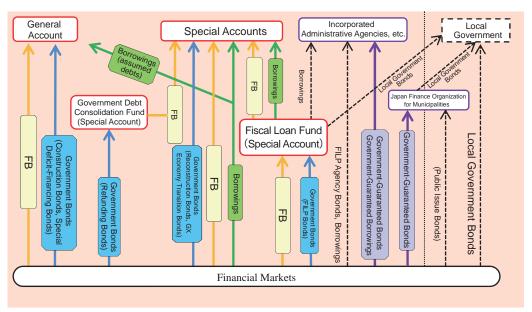
Government ministries, agencies or special accounts carry out large quantities of fiscal activities each day. All receipts and payments are made through the BOJ, for integrated

handling in the National Treasury. As explained in section A, the government raises funds with JGBs and Borrowings to meet expenditure demand that cannot be covered by tax and other revenues. However, the government encounters temporary cash shortages and surpluses due to lags for day-to-day receipts and payments of National Treasury funds. The Financial Bureau of the Ministry of Finance makes adjustments through the issuance of Financing Bills in the case of shortage, and through the temporary use of treasury surplus in the case of surplus ("Cash Management in the National Treasury") (\*\*).

#### (3) Debts with Public Characteristics

Besides government debt, there are several forms of public debt including local government bonds and the debts of Incorporated Administrative Agencies, etc. This public debt affects government debt management through the market interest rate formation mechanism.

Fig.2 Public Debts (Conceptual Diagram)



Note 1: The highlighted area represents government debts.

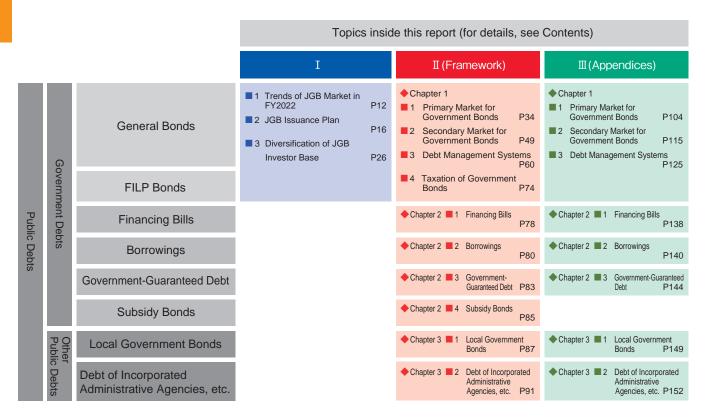
Note 2: In addition to these debts, there are government bonds that are held by the Bank of Japan as a means of open market operations.

Note 3: The Government-Guaranteed Bonds issued by the Japan Finance Organization for Municipalities are issued only for refunding of Government-Guaranteed Bonds converted from the former Japan Finance Corporation for Municipal Enterprises.

Based on the above, the chart below provides an overview of various elements of public debt and lists the relevant reference points in this report.

The term "revenue" refers to all income in one fiscal year and the term "income" means received funds that serve as the source of payment to meet the demands arising from the various levels of the State. Financing Bills, which are issued to manage the National Treasury, are not counted as revenue, since Financing Bills are redeemed with the revenue of the same fiscal year.

Fig.3 Various Elements of Public Debts and Relevant Reference Points in This Report



### Box 1 JGB Yields

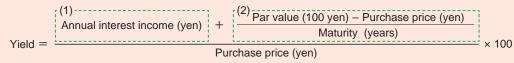
Japanese government bond is a bond the government issues by promising to pay a certain amount of money after a certain period of time. The MOF presets a coupon and maturity for a JGB issuance. While the JGB par value (an amount that a JGB holder will receive upon redemption) remains unchanged, a JGB price at which market participants buy fluctuates depending on the conditions, including supply and demand. For example, a JGB with a par value of 100 yen may be priced at 95 yen, below the par value, or at 105 yen, above the par value. JGB yield is an annual percentage rate of return on a JGB based on the purchase price.

In the case a market participant buys a JGB with the par value of 100 yen, for example, the investment return includes the following:

- (1) An annual interest income (an income gain represented by a coupon), and
- (2) A gap between the par value and the purchase price (capital gain or loss) that is annualized.

The JGB yield is represented by the following equation.

Fig. B1-1 Calculating yield

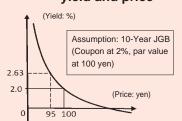


(Yield to maturity, simple interest, before tax, %)

The annual interest income in (1) is fixed by the coupon determined upon issuance and will remain unchanged until redemption. However, the purchase price in (2) fluctuates depending on the purchase timing. Therefore, the JGB yield fluctuates. The graph on the right (Fig. B1-2) indicates the relationship between the JGB price and yield in the above equation for a 10-Year JGB that has a 2% coupon and a par value of 100 yen. As the purchase price falls (from 100 yen to 95 yen), the yield rises (from 2.0% to 2.63%). Conversely, as the price rises (from 95 yen to 100 yen), the yield declines (from 2.63% to 2.0%).

The figure below (Fig. B1-3) shows a cash flow indicating fund receipts and payments from purchasing to redemption for a 10-Year JGB that has a 2% coupon

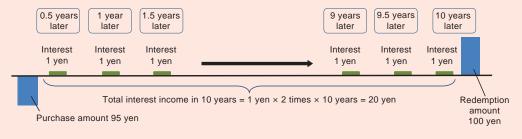
Fig. B1-2 Relationship between yield and price



Note: The figure is for illustrative purposes only.

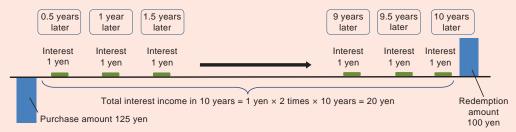
and a par value of 100 yen. If an investor buys the 10-Year JGB at a price of 95 yen and holds it until its redemption, for example, the investor will get a total investment return of 25 yen including the interest income of 20 yen and the gap of 5 yen between the par value and the purchase price. The annual yield (simple interest) comes to approx. 2.63% with the annual interest income of 2 yen and the annual capital gain of 0.5 yen.

Fig. B1-3 Bond investment cash flow (10-Year JGB priced at 95 yen that has a 2% coupon and a par value of 100 yen)



In recent years, JGB yields can be negative. If an investor buys a 10-Year JGB that has a 2% coupon and a par value of 100 yen at a price of 125 yen and holds it until its redemption, for example, the combination of an interest income (20 yen) and the gap (-25 yen) between the par value and the purchase price will bring about a loss (-5 yen) (Fig. B1-4). On an annual basis, the combination of an annual interest income (2 yen) and the annual capital loss (-2.5 yen) brings a yield (simple interest) of minus 0.40%.

Fig. B1-4 Bond investment cash flow (10-Year JGB priced at 125 yen that has a 2% coupon and a par value of 100 yen)



If an investor buys a JGB with a negative yield and holds it until its redemption, a combination of the interest income and the redemption amount will slip below the purchase amount, bringing about a loss. If the investor can sell the JGB at a higher price than the purchase price before its redemption, however, the investor will eventually get a gain.

Besides the "simple interest" as described above, the yield may take the form of "compound interest" reflecting the reinvestment of the interest income.

# **Box 2** Demand for JGBs with negative yields

In recent years, JGB yields in the short- to medium-term zone can be negative. If an investor buys a JGB with a negative yield and holds it until its redemption, the combination of the interest income and the redemption amount will slip below the purchase amount, bringing about a loss.

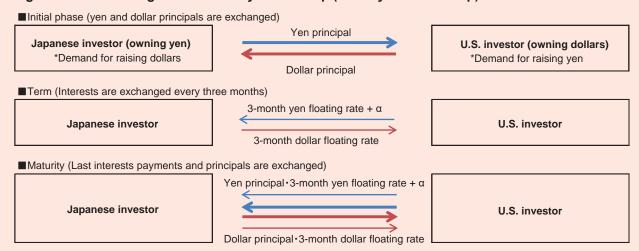
If an investor who bought a JGB with a negative yield sells the JGB at a higher price than the purchase price before its redemption, however, the investor may earn a gain eventually. If the price of the JGB rises due to monetary policy measures, the so-called "flight to quality", etc., for instance, the investor may earn a gain by selling the JGB at a higher price than the purchase price.

Financial institutions, when borrowing funds from the Bank of Japan (BOJ) or conducting foreign exchange and derivatives transactions with each other, may use JGBs as collateral. For instance, the BOJ has adopted JGBs as eligible collateral for operations to supply yen or dollar funds. JGBs are purchased to be used as collateral for such BOJ operations. Particularly since FY2020, the BOJ has introduced the "Special Funds-Supplying Operations to Facilitate Financing in Response to the Novel Coronavirus" to expand fund supply, that increased demand for JGBs as collateral.

In addition, investors with foreign currencies (mainly foreign investors) can earn gains by combining JGB purchases with currency basis swaps.

In a currency basis swap, principals in two different currencies are exchanged at a certain exchange rate for a certain period, during which floating interests for the currencies are exchanged. Fig. B2-1 below outlines a dollar-yen basis swap. In the figure,  $\alpha$  is the so-called basis spread. The spread means a premium on a yen interest rate (annual rate) and fluctuates depending on supply and demand between the currencies. If demand is strong for raising yen even at the cost of an increase in yen interest payments, for instance, upward pressure is exerted on  $\alpha$ . If demand is strong for raising dollars even at the cost of a decline in yen interest receipts, downward pressure is exerted on  $\alpha$ . In recent years, because demand is strong for raising dollars,  $\alpha$  has generally remained negative in all maturities of dollar yen basis swap, and this state of negative value for  $\alpha$  is referred to as a "premium in dollar funding is occurring."

#### Fig. B2-1 Scheme diagram of currency basis swap (dollar-yen basis swap)



Given that  $\alpha$  for a 2-year transaction (a basis spread for a dollar-yen basis swap maturing in 2 years) stands at around minus 0.50% (50 basis points), for instance, the U.S. investor in Fig. B2-1, if using a 2-year dollar-yen basis swap, will receive a 3-month dollar floating rate every three months and pay a 3-month yen floating rate + (- 50 bp) over 2 years. The U.S. investor's payment of interest equivalent to minus 50 bp means the receipt of interest equivalent to plus 50 bp. Given these interest rate levels, the receipt of interest equivalent to 50 bp allows the U.S. investor to earn a higher yield by swapping dollars for yen and investing in JGBs than by investing in U.S. Treasury securities.

# (Fig. B2-2) Comparison between U.S. investors swapping dollars to yen and investing in JGBs and investing in U.S. Treasury securities (using a 2-year dollar-yen basis swap) (transactions in the mid-term portion of Fig. B2-1)

(1) 2-year dollar-yen basis swap + JGB (2-year) purchase



 $\rightarrow$  The U.S. investor earns an annual yield of <u>4.55%</u> (= 4.00% - (-0.10% + (-0.50%)) + (-0.05%))

(2) 2-year U.S. Treasury purchase



- →The U.S. investor earns an annual yield of 4.20%.
- $\rightarrow$ Comparison of (1) and (2) indicates a yield gap of <u>0.35%</u> (= 4.55% 4.20%)

Fig. B2-2 compares U.S. investors swapping dollars for yen and investing in JGBs with investors investing in U.S. Treasury securities (Japanese and U.S. interest levels here are assumptions). If a U.S. investor swaps dollars for yen and invests in JGBs (combining a 2-year dollar-yen basis swap with the purchase of a 2-year JGB), the annual yield for the U.S. investor is simply calculated to be 4.55% (the 3-month dollar floating rate (4.00%) – (the 3-month yen floating rate (- 0.10%) +  $\alpha$  (-0.50%)) + the 2-year JGB (-0.05%)). If the investor invests in U.S. Treasury securities (purchase 2-year Treasury securities), the investor will receive an annual yield of 4.20% on the 2-year Treasury securities. By swapping dollars for yen and investing in JGBs, therefore, the U.S. investor will earn a yield that is 0.35% (=4.55% – 4.20%) higher than the yield on investment in U.S. Treasuries.

- (Note 1) Although the 3-month yen floating rate and the 3-month dollar floating rate in the descriptions above are assumed to remain unchanged, they actually change every three months.
- (Note 2) Interest rate swap transactions for fixing the 3-month yen floating rate and the 3-month dollar floating rate are omitted here to simplify the explanation.

# I

# State of Debt Management Policies

This part provides the most recent updates on Debt Management Policies.



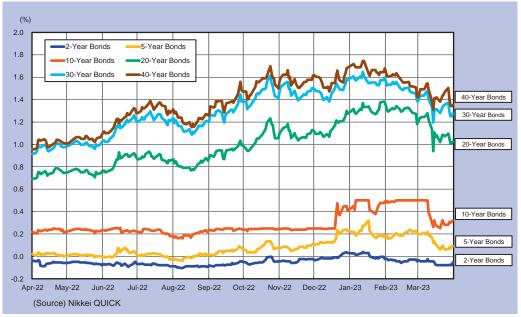
### Trends of JGB Market in FY2022

Debt Management Report 2023

#### (1) Overview

In FY2022, the JGB market fluctuated due to factors such as the rise in overseas interest rates and revisions to the BOJ's monetary policy. In the wake of Russia's invasion of Ukraine in February 2022, and amidst a rise in global prices and central banks around the world moving to increasing policy interest rates, in Japan as well upward pressure on interest rates has intensified since April as the inflation rate exceeded 2% year-on-year. In December, the BOJ expanded the range of 10-year JGB yield fluctuations to between around  $\pm$  0.5% under the yield curve control, and domestic interest rates sharply rose in January 2023. In March, expectations of BOJ policy revisions receded as U.S. interest rates fell due to financial system instability triggered by the failure of regional U.S. banks, and domestic interest rates declined.





Trading volume of coupon-bearing JGBs (\*) in the secondary market in FY2022 was 108.8 trillion yen per month, a significant increase from the 88.7 trillion yen in FY2021. In addition, the day session and night session trading volume of 10-year JGB futures in FY2022 averaged 32,191 contracts per day, a slight decrease from the 33,320 contracts in FY2021.

In February 2022 Russia invaded Ukraine, and crude oil and other commodity prices rose as the fighting between the two countries dragged on. As inflationary pressures intensified in various countries, overseas interest rates rose across the board, and the 10-year JGB yield also approached 0.25%, the upper limit on the fluctuation range set by the BOJ. In order to curb the rise in the 10-year JGB yield, at the end of April the BOJ decided to in principle conduct Fixed-Rate Purchase Operations every day, but interest rates for other maturities continued to rise.

In June, central banks around the world strengthened their stance on raising policy interest rates, and upward pressure on interest rates increased in the domestic market as well. In particular, as the strong selling pressure was seen in the futures market, the BOJ conducted

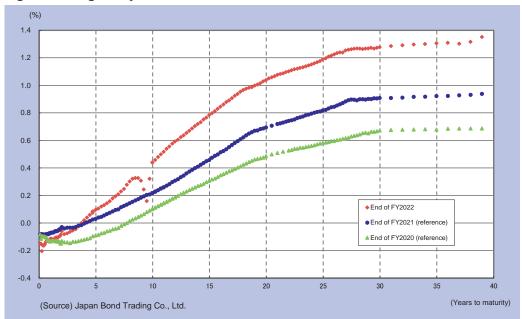
General trading volume of coupon-bearing JGBs from the Japan Securities Dealers Association's "Trading Volume of Over-the-Counter Bonds." Calculated by subtracting onehalf of the trading volume between bond dealers from the total trading volume.

Fixed-Rate Purchase Operations for Consecutive Days on the Cheapest-to-Deliver issue, which could be expected to have the effect of indirectly controlling futures prices.

5.0 4.5 4.0 U.S 3.5 U.K. 3.0 2.5 Germany 20 1.5 1.0 0.5 Japan 0.0 Jul-22 Oct-22 Jan-23 (Source) Bloomberg

Fig. 1-2 Changes in 10-Year Bond Interest Rates





After this, when U.S. interest rates began to decline, the rise in domestic interest rates also paused. However, when U.S. interest rates began to rise again in the fall, upward pressure on interest rates in the domestic market once again increased in the lead up to the BOJ's Monetary Policy Meeting in September. Thereafter, upward pressure on domestic interest rates eased against a backdrop of speculation that the pace of policy interest rate increases in the U.S. would slow down. However, there was a growing tendency for companies to pass on costs to prices, and in October, the rate of increase in the consumer price index (excluding fresh food and energy) also exceeded 2% year-on-year.

In December, the BOJ, citing a decline in market functioning, expanded the range of 10-year JGB yield fluctuations

from between around  $\pm 0.25\%$  to between around  $\pm 0.5\%$ . As a result, interest rates sharply rose, and in mid-January the prices of JGBs with various maturities hit their lowest prices (high yields) in FY2022. In response, the BOJ, in addition to conducting regular Outright Purchases of JGBs, also conducted extraordinary Outright Purchases of JGBs, Fixed-Rate Purchase Operations for 10-year on-the-run issues and the Cheapest-to-Deliver issue, and Funds-Supplying Operations against Pooled Collateral for two years and five years. As a result of these operations, the rise in interest rates have reached a lull.

Financial system unrest intensified in early March, triggered by the failure of regional U.S. banks, and interest rates in the U.S. Treasury market declined due to widespread expectations of policy interest rate cuts on the back of recessionary fears. Domestic interest rates also fell due to the BOJ's decision to maintain monetary policy at the March Monetary Policy Meeting and the decline in U.S. interest rates.

#### (2) Investor Trends

Looking at investment trends in JGBs by investor category in FY2022, medium-to-long-term bonds (2-year bonds, 5-year bonds, and 10-year bonds) were primarily bought and sold by foreign investors. In June, foreign investors and domestic investors sold off medium-to-long-term JGBs against the expectation that the BOJ's monetary policy, especially the yield curve control, would be revised. Then, in July and August, the rise in U.S. interest rates came to a lull and the market turned to net buying of medium-to-long-term JGBs. In September, as U.S. interest rates began to rise again and the rate of increase in Japan's consumer price index accelerated, expectations for future monetary policy revisions remained strong, and 10-year JGB yield stuck to the upper limit of their fluctuation range, resulting in several months of net selling. In December, the BOJ expanded the range of 10-year JGB yield fluctuations from between around  $\pm 0.25\%$  to between around  $\pm 0.5\%$ , which caused medium-to-long-term interest rates to rise sharply, and net selling by foreign investors in December and January increased even further. Subsequently, the BOJ left its monetary policy unchanged in March, and, amidst growing anxiety about the financial system due to the bankruptcies of regional U.S. banks, foreign investors began to buy JGBs and the amount of net buying substantially increased.

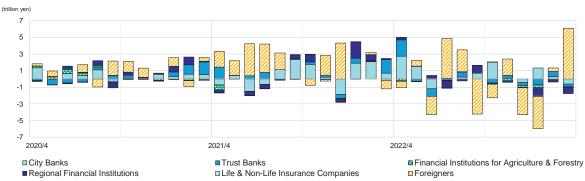
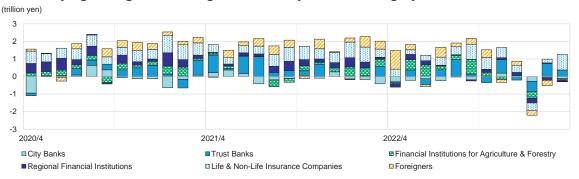


Fig. 1-4 Net buying/selling of medium-to-long-term JGBs by investor category

(Note) Medium- to long-term JGBs are 2-Year, 5-Year and 10-Year JGBs. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks. (Source) Japan Securities Dealers Association

Next, ultra-long-term bonds (20-year bonds, 30-year bonds, and 40-year bonds) were bought by a wide range of investors, including life insurance companies, pension funds, financial institutions for Agricultural and Forestry, and foreign investors. In particular, as in the previous fiscal year, life insurance companies continued to need to buy ultra-long-term bonds in order to comply with new Insurance Capital Standard, and the sharp rise in ultra-long-term interest rates is thought to have led to the net buying until December. Although there was significant net selling in January, this was likely a temporary move by investors who are suffering losses on foreign bond investments due to rising overseas interest rates to their losses by selling ultra-long-term JGBs in which they have unrealized gains. Following this, in February and March there was net buying of ultra-long-term JGBs under the situation that ultra-long-term interest rates began to decline.

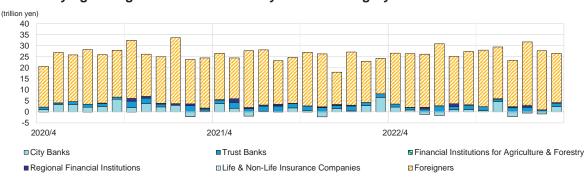
Fig. 1-5 Net buying/selling of ultra-long-term JGBs by investor category



(Note) Ultra-long-term JGBs are 20-Year, 30-Year and 40-Year JGBs. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks. (Source) Japan Securities Dealers Association

Foreign investors continued to be the largest buyers of short-term JGBs (Treasury Discount Bills). The continued availability of premiums to dollar providers in the currency basis swap market is believed to be the primary reason for the ongoing high level of investment in short-term JGBs by foreign investors.

Fig. 1-6 Net buying/selling of short-term JGBs by investor category



(Note) Short-term JGBs are T-Bills. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks.

(Source) Japan Securities Dealers Association



Japan has the worst fiscal conditions among major developed countries, including outstanding general JGBs estimated at about 1,068.0 trillion yen for the end of FY2023 and outstanding long-term central and local government debts at 1,280 trillion yen. It is getting more important for the Japanese government to adequately implement JGB Management Policy to secure the market's stable absorption of JGBs.

#### (1) JGB Issuance Plan for FY2022 (revised under second supplementary budget)

On November 8, 2022, the Japanese government revised the JGB Issuance Plan for FY2022 in line with a Cabinet decision on the draft FY2022 second supplementary budget.

The revised FY2022 JGB Issuance Plan increased the total amount by 9.7 trillion yen from the level of first supplementary budget to 227.5 trillion yen by increasing the size of Newly-Issued Bonds by 22.9 trillion yen under the second supplementary budget while decreasing the size of FILP Bonds by 8.5 trillion yen due to last fiscal year's Fiscal Loan Fund investment results, etc.

As for the 4.5 trillion yen increase in calendar-base JGB market issuance, after careful dialogues with the market and based on the market's capacity to absorb JGBs, issuance was increased by 0.3 trillion yen for 2-Year JGBs and by 4.2 trillion yen for 6-Month TBs.

Fig. 1-7 JGB Issuance Plan for FY2022

< Breakdown by Legal Grounds >

(Unit: billion yen) < Breakdown by Financing Methods >

(Unit: billion ven)

	Initial	1st Supplementary Budget	2nd Su	pplementary	Budget
	(a)	(b)	(c)	(c)-(a)	(c)-(b)
Newly-issued Bonds	36,926.0	39,626.9	62,478.9	25,552.9	22,852.0
Construction Bonds	6,251.0	6,251.0	8,727.0	2,476.0	2,476.0
Special Deficit- Financing Bonds	30,675.0	33,375.9	53,751.9	23,076.9	20,376.0
Reconstruction Bonds	171.6	171.6	I	▲ 171.6	▲ 171.6
FILP Bonds	25,000.0	25,000.0	16,500.0	▲ 8,500.0	▲ 8,500.0
Refunding Bonds	152,940.4	152,940.4	148,487.2	▲ 4,453.1	▲ 4,453.1
For matured Reconstruction Bonds	3,858.9	3,858.9	3,621.7	▲ 237.2	▲ 237.2
Total	215,038.0	217,738.9	227,466.2	12,428.2	9,727.3

	Initial	1st Supplementary Budget	2nd Supplementary Budget			
	(a)	(b)		(c)-(a)	(c)-(b)	
JGB Market Issuance (Calendar Base)	198,600.0	198,600.0	203,100.0	4,500.0	4,500.0	
Non-Price Competitive Auction II , etc.	8,297.0	8,297.0	7,847.3	▲ 449.7	▲ 449.7	
Adjustment between fiscal years	3,041.0	5,741.9	10,698.9	7,657.9	4,957.0	
Subtotal Financed in the Market	209,938.0	212,638.9	221,646.2	11,708.2	9,007.3	
Sales for Households	2,900.0	2,900.0	3,620.0	720.0	720.0	
BOJ Rollover	2,200.0	2,200.0	2,200.0	_	_	
Total	215,038.0	217,738.9	227,466.2	12,428.2	9,727.3	

(Note 1) Figures may not sum up to the total because of rounding.

(Note 2) Buy-back program in FY2022 is planned to be implemented based on market conditions and through discussions with market participants.

(Note 3) The maximum amount of front-loading issuance of Refunding Bonds in FY2022 is 20 trillion yen.

#### Fig. 1-8 Market Issuance Plan by JGB Type for FY2022

(Unit: trillion yen)

	Initial and 1st Supplementary Budget 2nd Supplementary Budge			Budget	
	(per time)	(total ; a )	(per time) (total; b)		(b)-(a)
40-Year	0.7 × 6 times	4.2	0.7 × 6 times	4.2	_
30-Year	0.9 × 12 times	10.8	0.9 × 12 times	10.8	
20-Year	1.2 × 12 times	14.4	1.2 × 12 times	14.4	_
10-Year	2.7 × 12 times	32.4	2.7 × 12 times	32.4	1
5-Year	2.5 × 12 times	30.0	2.5 × 12 times	30.0	
2-Year	2.8 × 12 times	33.6	2.8 × 9 times 2.9 × 3 times	33.9	0.3
TBs		60.4		64.6	4.2
10-Year Inflation- Indexed	0.2 × 4 times	0.8	0.2 × 4 times	0.8	
Liquidity Enhancement Auction		12.0		12.0	_
Total	198.6		203.1		4.5

Figure 1 Issuance for TBs

	Supp	ial and 1st mentary Bud	dget	2nd Supplementary Budg			et		
	(a)			(b)				(b)-(a)	
TBs (1-Year)	3.5	×	12 times	42.0	3.5	×	12 times	42.0	
TBs (6-Month)				18.4				22.6	4.2

Figure.2 Issuance by Zones for Liquidity Enhancement Auctions

		Initial and 1st Supplementary Budget	2nd Supplementary Bu	dget
		(a)	(b)	(b)-(a)
	15.5-39 Year	3.0	3.0	_
	5-15.5 Year	6.0	6.0	_
-	1-5 Year	3.0	3.0	_

<sup>(</sup>Note 1) The 40-Year Bonds will be issued in May, July, September, November, January and March.
(Note 2) Treasury Bills (TBs) are jointly issued with Financing Bills (FBs), under the unified name of Treasury Discount Bills (T-Bills).
(Note 3) The 10-Year Inflation-Indexed Bonds are planned to be issued in May, August, November and February. The issuance may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.

<sup>(</sup>Note 4) The issuance of liquidity enhancement auction and its allocation among each zone may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.

#### (2) Announcement of JGB Issuance Plan for FY2023

On December 23, 2022, the Japanese government publicly announced the JGB Issuance Plan for FY2023 in line with a Cabinet decision on the draft FY2023 government budget.

When developing the JGB Issuance Plan for FY2023, where JGB issues including Refunding Bonds will total 205.8 trillion yen, the government held careful dialogues with market participants through the Meeting of JGB Market Special Participants and some other dialogue sessions and has formulated the JGB Issuance Plan by financing methods considering investor needs and market trends.

#### (3) Overview of Discussions at Various Meetings

The main opinions at the Meeting of JGB Market Special Participants (primary dealers) and the Meeting of JGB Investors held in December 2022 were as follows:

- Basically, we think that each maturity should be left unchanged, but we think that we can handle a slight increase or decrease in any zone.
- With respect to JGB Issuance Plan for FY2023, based on the assumption that the total issuance amount will be reduced, the reduction will mainly be for short-term bonds and there is no need to consider a reduction in couponbearing bonds.
- In the life insurance industry, there continues to be a need to match liabilities, particularly in the super-long-term zone. Additionally, due to factors such as the impact of currency hedging costs, we believe that investment needs for JGBs are increasing relative to those of overseas bonds.
- 10-Year Bonds are the most stressful maturity when monetary policy is revised, so changes in their issuance amount should be carefully considered.
- As for major balance sheet changes, following the termination of the BOJ's Special Funds-Supplying Operations to
  Facilitate Financing in Response to the Novel Coronavirus (COVID-19), we decreased our balance of operations on
  the liability side while at the same time reducing the amount of short-term JGBs held as collateral to be pledged to
  the BOJ.
- Regarding GX Economy Transition Bonds if the government decides to support GX by issuing them as a new financial instrument, then we would agree with this. On the other hand, when making actual investment decisions we would decide whether or not to invest after comprehensively considering factors such as liquidity, profitability, and whether the issue maturity is suitable for our investment.
- Our biggest concern with JGB issuance is that there will be doubts about the stable absorption of JGBs and that JGBs will be downgraded (which includes being put on negative watch). We hope that the Japanese Government will work to maintain the rating of JGBs.

Based on these discussions, the government has formulated the JGB Issuance Plan for FY2023.

#### (4) JGB Issuance Plan for FY2023

#### A. Breakdown by legal grounds

The JGB issuance amount in FY2023 declines by 9.3 trillion yen from the initial level for FY2022 to 205.8 trillion yen but is still extremely high.

A breakdown of the FY2023 JGB Issuance Plan shows that the amount of Construction Bonds and Special Deficit-Financing Bonds to provide revenues for the General Account Budget has been decreased by 1.3 trillion yen from the initial level for FY2022 to 35.6 trillion yen. GX Economy Transition Bonds will be established to realize more than 150 trillion yen of GX investment over the next 10 years through public-private partnerships. In the FY2023 budget 0.5 trillion yen is scheduled to be issued as a financial resource for GX expenditures, and, when including the 1.1 trillion yen of Refunding Bonds refunding GX-related expenses incorporated in advance in the second supplementary budget for FY2022, the total will be 1.6 trillion yen. Aiming at financing reconstruction projects for recovering from the Great East Japan Earthquake, Reconstruction Bonds are issued as bridging finance until Special Taxes for Reconstruction and other revenues are receivable to the government. In FY2023, the government is planning to issue Reconstruction Bonds worth 0.1 trillion yen, down 0.1 trillion yen from the initial level for the previous year. The FILP Bonds issuance amount is determined not only by the scale of new lending under the Fiscal Loan Program but also by the financial position of the overall Fiscal Loan Fund. The FY2023 FILP Bonds issuance amount is decreased by 13.0 trillion yen from the initial level for the previous year to 12.0 trillion yen. Refunding Bonds are issued to refund the General Bonds that were issued in the past and are accounting for a majority of total annual JGB issues. In FY2023, the Refunding Bonds issuance amount is planned to increase by 4.6 trillion yen from the initial level of the previous year to 157.6 trillion yen.

Fig. 1-9 JGB Issuance Plan for FY2023 (Breakdown by Legal Grounds)

(Unit: billion yen)

	FY2022(Initial)	FY2022 (2nd Supplementary Budget)	FY2023 (Initial)		
	(a)	(b)	(c)	(c)-(a)	(c)-(p)
Newly-issued Bonds	36,926.0	62,478.9	35,623.0	<b>▲</b> 1,303.0	▲ 26,855.9
Construction Bonds	6,251.0	8,727.0	6,558.0	307.0	▲ 2,169.0
Special Deficit- Financing Bonds	30,675.0	53,751.9	29,065.0	▲ 1,610.0	<b>1</b> 24,686.9
GX Economy Transition Bonds	_	-	506.1	506.1	506.1
Reconstruction Bonds	171.6	_	99.8	<b>▲</b> 71.8	99.8
FILP Bonds	25,000.0	16,500.0	12,000.0	<b>1</b> 3,000.0	<b>4</b> ,500.0
Refunding Bonds	152,940.4	148,487.2	157,551.3	4,610.9	9,064.1
Total	215,038.0	227,466.2	205,780.3	▲ 9,257.7	▲ 21,685.9

(Note 1) Figures may not sum up to the total because of rounding.

(Note 2) Buy-back program in FY2023 is planned to be implemented based on market conditions and through discussions with market participants.

(Note 3) The maximum amount of front-loading issuance of Refunding Bonds in FY2023 is 25 trillion yen.

Fig. 1-10 Historical Changes in JGB Issuance Plan

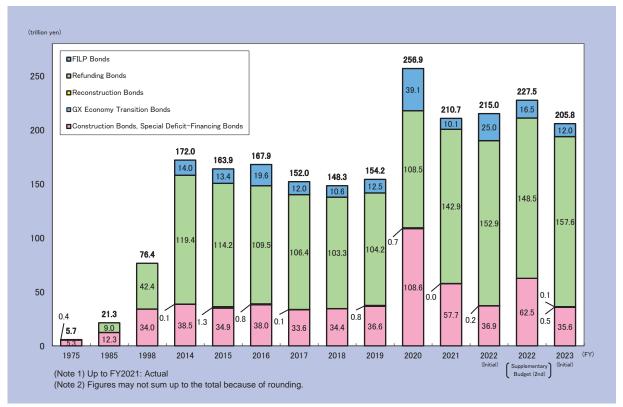
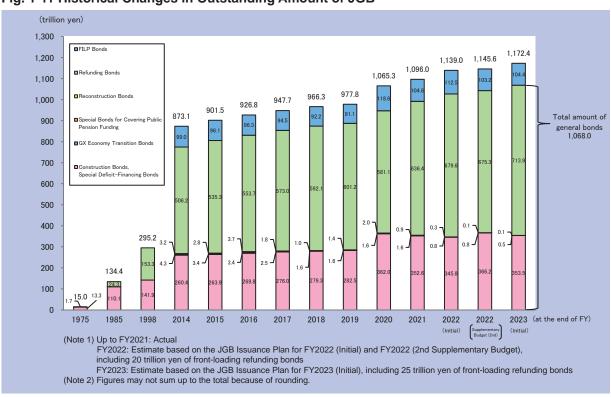


Fig. 1-11 Historical Changes in Outstanding Amount of JGB



#### **B.** Breakdown by Financing Methods

The FY2023 JGB issuance amount of 205.8 trillion yen required for the budget as mentioned in the previous section is categorized by three financing methods: "JGB market issuance," "Sales for Households" and "BOJ Rollover".

Of the "JGB market issuance" accounting for most of the total JGB Issuance, the calendar-base JGB Market Issuance ( to 190.3 trillion yen, down 8.3 trillion yen from the initial level for FY2022.

The JGB issuance amount for Non-Price Competitive Auction II, etc., which has included the planned amount for Non-Price Competitive Auction II (2,3) and the estimated revenue from JGB issuance at prices above par value, is put at 7.0 trillion yen for FY2023.

Sales for Households, which widely fluctuates depending on interest rate and other trends, is increased by 0.6 trillion yen from the initial level for the previous year to 3.5 trillion yen, with current sales conditions taken into account.

"BOJ Rollover" is put at 2.0 trillion yen in FY2023, down 0.2 trillion yen from the initial level for the previous year, based on the total JGB issuance amount and market conditions.

Ref: II Chapter 1 1(3) "Methods of Issuance" (P40)

- The calendar-base JGB Market Issuance refers to the amount (par value) of JGBs planned to be regularly issued through scheduled auctions from April to next March.
- © Non-Price Competitive Auction II (Ref: II Chapter 1 1 (3) "Methods of Issuance" (P40)).
- →③ The issuance amount for Non-Price Competitive Auction II is put at 5.5% of the calendarbase JGB Market Issuance amount for JGBs subject to the auction (40-Year, 30-Year, 20-Year, 10-Year, 5-Year and 2-Year Bonds).

Fig. 1-12 JGB Issuance Plan for FY2023 (Breakdown by Financing Methods)

< Breakdown by Financing Methods >

(Unit: billion yen)

	FY2022 (Initial)	FY2022 (2nd Supplementary Budget)	FY2023 (Initial)			
	(a)	(b)	(c)	(c)-(a)	(c)-(p)	
JGB Market Issuance (Calendar Base)	198,600.0	203,100.0	190,300.0	▲ 8,300.0	<b>▲</b> 12,800.0	
Non-Price Competitive Auction II, etc.	8,297.0	7,847.3	6,963.0	▲ 1,334.0	▲ 884.3	
Adjustment between fiscal years	3,041.0	10,698.9	3,017.3	▲ 23.7	▲ 7,681.6	
Subtotal Financed in the Market	209,938.0	221,646.2	200,280.3	▲ 9,657.7	▲ 21,365.9	
Sales for Households	2,900.0	3,620.0	3,500.0	600.0	▲ 120.0	
BOJ Rollover	2,200.0	2,200.0	2,000.0	▲ 200.0	▲ 200.0	
Total	215,038.0	227,466.2	205,780.3	▲ 9,257.7	▲ 21,685.9	

(Note 1) Figures may not sum up to the total because of rounding.

(Note 2) "Adjustment between fiscal years" refers to leveling-off of the issuance between fiscal years through front-loading issuance and deferred issuance during an accounting adjustment period. (Ref: II Chapter 1 1(1) "JGBs by Legal Grounds of Issuance" (P34)).

#### (5) JGB Issuance Plan Based on Market Trends and Demands

The maturity composition of the calendar-base JGB market issuance amount is determined with market demands and trends taken into account, covering maturities from the short-term to the super long-term, based on government debt management policy requirements.

The FY2023 JGB Issuance Plan reduces the calendar-base JGB market issuance amount by 8.3 trillion yen from the initial level of the previous fiscal year to 190.3 trillion yen. In terms of issuance amount by maturity, the monthly issuance amount of coupon-bearing bonds will be maintained at the level of FY2022 under the second supplementary budget, and the reductions from the previous year will be used to decrease the amount of short-term bonds.

Consequently, the calendar-base (flow basis) average maturity of JGBs for FY2023 is estimated at eight years and one month.

The issuance for Liquidity Enhancement Auction, its allocation among each zone, and the issuance for Inflation-Indexed Bonds, etc. may be adjusted in a flexible manner in response to the market circumstances and demands of investors, which will be determined based on discussions with market participants.

Fig. 1-13 Market Issuance Plan by JGB Type for FY2023

(Unit: trillion yen)

	FY2022 (Initial)		FY2022 (2nd Supplementary Budget)		FY2023 (Initial)			
	(per time)	(total; a)		(total ; b )	(per time)	(total; c)	(c)-(a)	(c)-(b)
40-Year	0.7 × 6 times	4.2	0.7 × 6 times	4.2	0.7 × 6 times	4.2	_	_
30-Year	0.9 × 12 times	10.8	0.9 × 12 times	10.8	0.9 × 12 times	10.8	_	_
20-Year	1.2 × 12 times	14.4	1.2 × 12 times	14.4	1.2 × 12 times	14.4	_	_
10-Year	2.7 × 12 times	32.4	2.7 × 12 times	32.4	2.7 × 12 times	32.4	_	_
5-Year	2.5 × 12 times	30.0	2.5 × 12 times	30.0	2.5 × 12 times	30.0	_	_
2-Year	2.8 × 12 times	33.6	2.8 × 9 times 2.9 × 3 times	33.9	2.9 × 12 times	34.8	1.2	0.9
TBs		60.4		64.6		50.7	<b>▲</b> 9.7	<b>▲</b> 13.9
10-Year Inflation- Indexed	0.2 × 4 times	0.8	0.2 × 4 times (0.25 trillion yen has been issu since August FY2022.)	0.8 led	0.25 × 4 times	1.0	0.2	0.2
Liquidity Enhancement Auction		12.0		12.0		12.0	_	_
Total	198.6		203.1		190.3		▲ 8.3	<b>1</b> 2.8

<sup>(</sup>Note 1) The 40-Year Bonds will be issued in May, July, September, November, January and March.

Fig. 1-14 Issuance for TBs

(Unit: trillion yen)

	FY2022 (Initial)		FY2022 (2nd Supplementary Budget)		FY2023 (Initial)					
	(a)			(b)			(c)		(c)-(a)	(c)-(b)
TBs (1-Year)	3.5 × 12 times	42.0	3.5 ×	12 times	42.0	3.5 ×	12 times	42.0	_	_
TBs (6-Month)		18.4			22.6			8.7	▲ 9.7	▲ 13.9

<sup>(</sup>Note 2) Treasury Bills (TBs) are jointly issued with Financing Bills (FBs), under the unified name of Treasury Discount Bills (T-Bills)

<sup>(</sup>Note 3) The 10-Year Inflation-Indexed Bonds are planned to be issued in May, August, November and February. The issuance may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.

<sup>(</sup>Note 4) The issuance of liquidity enhancement auction and its allocation among each zone may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.

Fig. 1-15 Issuance by Zones for Liquidity Enhancement Auctions

(Unit: trillion yen)

	FY2022 (Initial)	FY2022 (2nd Supplementary Budget)	FY2023 (Initial)		
	(a)	(b)	(c)	(c)-(a)	(c)-(b)
15.5-39 Year	3.0	3.0	3.0	_	_
5-15.5 Year	6.0	6.0	6.0	_	_
1-5 Year	3.0	3.0	3.0	_	_

Fig. 1-16 Historical Changes in JGB Market Issuance by JGB Type

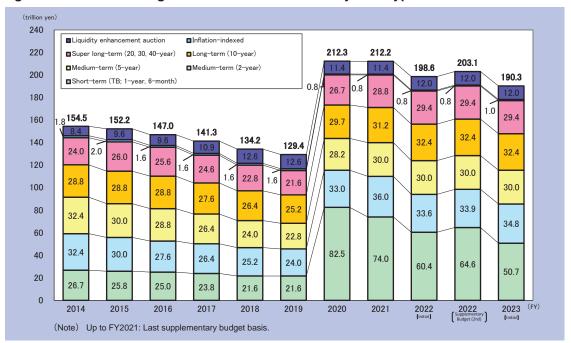
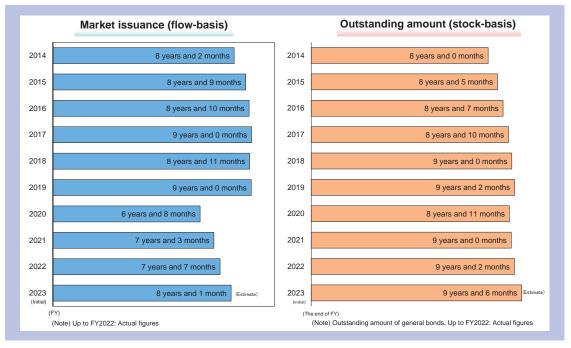


Fig. 1-17 Average Maturity of JGBs



## **Box 3** Cost-at-Risk Analysis

#### Objective

Government debt management must deal with various future risks. It is important to properly assess and manage these risks in order to minimize fundraising costs in the medium-to-long term.

When drafting the annual JGB issuance plan, the Ministry of Finance engages in a dialogue with market participants and additionally uses the results of the Cost-at-Risk ("CaR") analysis for quantitative examination purposes.

Drafting of JGB issuance plans should not be based solely on CaR analysis and other quantitative analyses. It is vital that the JGB issuance plan is formulated from a basis of comprehensive judgment covering investor demand based on dialogue with market participants, the need for maintaining and enhancing market liquidity, and other factors.

#### **2** CaR Analysis

The CaR analysis simulates future chronological interest rate fluctuations using a probabilistic interest rate model and measures and assesses the distribution of future interest payments arising from JGB Issuance Plans and the outstanding amount of JGBs. The analysis estimates the average of interest payments (cost) over the next 10 years and the degree of their fluctuations (risk).

Fig. B3-1 Framework of CaR Analysis

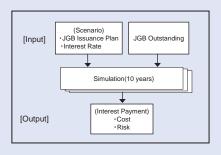
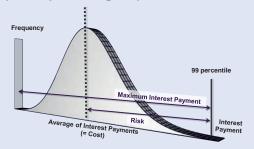


Fig. B3-2 Distribution of Interest Payments (Conceptual Diagram)

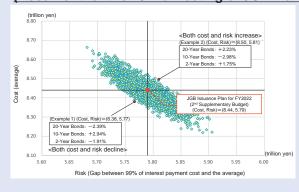


#### **3** Cost and Risk Trend

Fig. B3-3 is from a document the Ministry of Finance presented at the Meeting of JGB Market Special Participants on December 2, 2022.

Based on the maturity composition of the FY2022 JGB Issuance Plan (revised under second supplementary budget), 2,000 patterns of the coupon-bearing JGB maturity composition have been randomly generated to analyze the cost-risk relationship. This indicates that both cost and risk decline for 20- and 2-Year JGB issues through a cut in their shares of the composition from the FY2022 JGB Issuance Plan (revised under second supplementary budget) and for 10-Year issues through an increase in their share of the composition.

Fig. B3-3 Cost-at-Risk Analysis (Document for the 102nd Meeting of JGB Market Special Participants (December 2, 2022))



- [Assumptions]
- Target bonds: General Bonds (excluding Special Bonds for Covering Public Pension Funding and Reconstruction Bonds)
- Funding and Reconstruction Bonds)
   Analysis period: 10 years from FY2022
- Newly-Issued Bonds: Data for the Economic Growth Achieved Case in the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis (July 2022)
- Refunding Bonds: Estimated with consideration given to the utilization of surplus in the Special Account of Government Debt Consolidation Fund
- Interest rates: A total of 3,000 interest rate paths generated by the probabilistic interest rate model (the HJM model [Note 1]) were adjusted as follows for each case:
  - (10-Year JGB Yield) The average at each time point is identical to the relevant nominal long-term interest rate level for the Economic Growth Achieved Case in the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis.
  - (Other JGB yields) The averages at each time point are identical to the relevant estimates based on a simple linear regression model [Note 2] and the relevant nominal long-term interest rate level for the Economic Growth Achieved Case in the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis.
  - (Note 1) The HJM model generated interest rate paths based on the current yield curve as the standard, and volatility over the past 20 years (the current yield curve is as of the end of March 2022).
  - (Note 2) The simple linear regression model was estimated from 10-year and other JGE yields in the past 20 years.

# **Box 4 GX Economy Transition Bonds**

#### **1** Green Transformation (GX)

As addressing the problem of climate change has become a common challenge for all of humankind, Japan has also made international commitments to reduce greenhouse gas emissions by 46% by FY2030 and to achieve carbon neutrality by FY2050.

In promoting decarbonization initiatives, it is important to ensure a stable energy supply, which is the foundation of people's lives and economic activities, and to achieve economic growth. As such, it is necessary to work on a Green Transformation that converts the industrial and social structures, which have been centered around fossil fuel energy since the industrial revolution, to ones that are centered around clean energy.

Against this backdrop, on February 10, 2023, the Cabinet approved the Basic Policy for the Realization of GX, which outlines the policies for initiatives over the next 10 years. In addition, related bills necessary for realizing GX were submitted to the 211th session of the Diet.

#### **2** Creation of GX Economy Transition Bonds

It is estimated that more than 150 trillion yen of public and private GX investments will be required over the next 10 years to simultaneously realize international commitments, strengthen industrial competitiveness, and achieve economic growth. In order to realize such an enormous amount of GX investment, 20 trillion yen worth of "GX Economy Transition Bonds" will be issued based on the "Act on Promoting Transition to the Decarbonized Growth Economic Structure (GX Promotion Act)" in order for Japan to promote investment over the long term and over multiple fiscal years. The issuance will be carried out for 10 years from FY2023, with annual caps to be decided by the Diet.

Additionally, redemptions will be conducted with future revenues that result from the introduction of a carbon pricing mechanism, and are designed to be completed by FY2050, the target year for achieving carbon neutrality.

#### **3** Toward the Issuance of GX Economy Transition Bonds

In order to realize GX investment toward the goal of achieving carbon neutrality in 2050, green finance (which provides funding for green initiatives such as the introduction of renewable energy) and transition finance (which provides funds for efforts to reduce greenhouse gas emissions in accordance with a long-term strategy to archive a decarbonized society) are important. Financing through bonds labeled as "green bonds" or "transition bonds" is one such method, and the market of them is expanding.

In addition, guidelines and other guidelines for such financing are being developed both domestically and internationally. For example, the International Capital Market Association (ICMA) formulated the Green Bond Principles in January 2014 and the Climate Transition Finance Handbook in December 2020.

Existing JGBs have been issued in an integrated manner as the same financial instrument, regardless of their classification by the law under which they were issued (e.g., Construction Bonds, Special Deficit-Financing Bonds, Reconstruction Bonds, etc.). GX Economy Transition Bonds are not limited to such "integrated issuance," but are also being considered with the aim of issuing them in a new form that complies with international standards. In addition, when issuing such new financial instruments, it is assumed that the second party opinion will be obtained for compliance with international standards after having formulated a framework that indicates the use of the funds procured and reporting methods, etc.

However, in order to issue such new financial instruments, it is necessary to solve challenges such as ensuring a certain level of market liquidity, technical readiness on the system that include the private sector, and controlling how bond revenues are spent.

Keeping these points in mind and considering market conditions, investor trends, and other factors, we continue to consider the details regarding the issuance of GX Economy Transition Bonds cooperating with the relevant ministries and agencies.

# 3

### **Diversification of JGB Investor Base**

At present, the outstanding amount of JGBs is enormous. Therefore, the promotion of JGB holdings by a wide range of investors has become important for stabilizing the market's absorption of JGBs and their holdings. Diverse investors' JGB holdings based on various investment needs are expected to stabilize the market by preventing transactions from going in a single direction even if market conditions change. Therefore, the MOF has made efforts to encourage JGB market participation and JGB holdings not only by domestic institutional investors, such as banks and life insurance companies, but also by foreign investors, and to promote JGB holdings by domestic retail investors.

Fig. 1-18 Breakdown by JGB and T-Bill Holders (December 2022, QE)

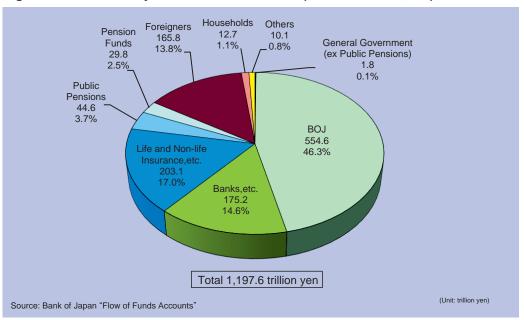


Fig. 1-19 Breakdown by JGB Holders (December 2022, QE)

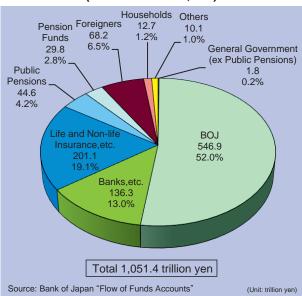
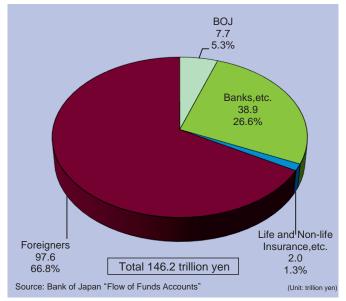


Fig. 1-20 Breakdown by T-Bill Holders (December 2022, QE)



(Note 1) "T-Bill" is the sum of "Treasury Bills (TBs)" and "Financial Bills (FBs)" with a maturity of 1 year or less. TBs and FBs have been jointly issued since February 2009 (Note 2) "JGB" in the figures represents the outstanding balance of JGBs (including FILP bonds) excluding TBs maturing within 1 year or less.

(Note 4) "Life and Non-life insurance, etc." includes "Japan Post Insurance."

<sup>(</sup>Note 3) "Banks, etc." includes "Japan Post Bank," "Securities investment trust" and "Securities companies."

#### (1) JGB Holdings by Retail Investors

To promote JGB sales to retail investors, the government introduced 10-Year Floating-Rate Bonds for Retail Investors in March 2003, 5-Year Fixed-Rate Bonds for Retail Investors in January 2006 and 3-Year Fixed-Rate Bonds for Retail Investors in July 2010, and launched the new Over-The-Counter (OTC) sales system in October 2007.

In FY2022 JGB sales to retail investors increased for the first time in two years to about 3.4 trillion yen due to interest rates on government bonds for individuals also rising in line with the rise in prevailing market interest rates.

However, over the long term, households' share of JGB ownership has remained low. Given such a trend, the government has developed advertisements to expand the scope of purchasers of JGBs for Retail Investors over the medium to long term. In FY2022, in order to promote JGB sales, the government developed advertisements that will lead to purchases by conveying in an easy-to-understand way the attractiveness of JGBs for retail investors both with and without experience purchasing financial products, and without limiting the target audience by age or gender. Specifically, in addition to JGB promotion characters Kokochan for JGBs for Retail Investors and Kokusai Sensei (JGB teacher), popular entertainers were employed to develop Internet ads (banner ads, social media ads, and YouTube video ads, etc.), magazine ads, newspaper ads, and TV commercials, and posters and pamphlets were also created and distributed. Furthermore, in Gunma Prefecture, Shimane Prefecture and Kagoshima Prefecture, etc., there were also measures such as using area-specific ads and conducting seminars. In FY2023, the main target is individuals who have no experience purchasing financial products, with the sub target being individuals who do have experience purchasing financial products, and the government is planning to develop advertisements to guide people to financial institution branch locations (including websites) for the purpose of purchasing JGBs for retail investors.

Ref: II Chapter 1 1(3 "Methods of Issuance" (P40)

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Fig. 1-21 Household JGB Holdings Trend

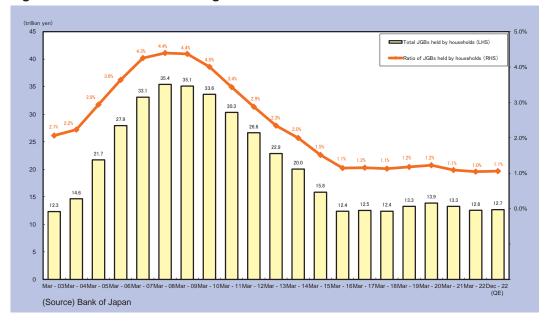


Fig. 1-22 Issuance and Redemption of JGBs for Retail Investors

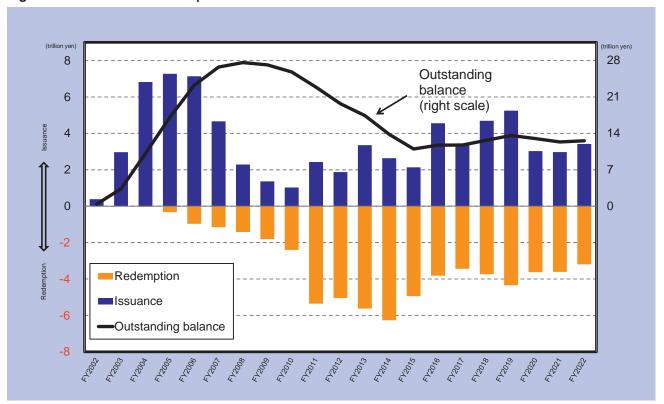
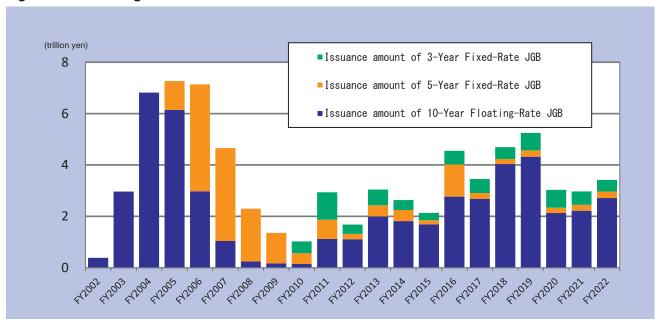


Fig. 1-23 Outstanding JGBs for Retail Investors



#### (2) JGB Holdings by Foreign Investors

#### A. Foreign Investors' Presence

The status of JGB holdings by foreign investors can be found in the "Flow-of-Funds Accounts" published by the BOJ on a quarterly basis (Fig. 1-24).

Foreign investors temporarily reduced JGB holdings as JGB volatility headed higher just after the BOJ's decision at its Monetary Policy Meeting in April 2013 to introduce the Quantitative and Qualitative Monetary Easing policy. Nevertheless, foreign investors' JGB holdings turned upward as JGB yields remained stable at low levels due to destabilization factors in emerging and other foreign countries.

As JGBs have looked attractive to foreign investors due to the low yen fundraising costs on the back of the tightening dollar supply-demand balance in recent years, their JGB holdings have followed an uptrend. Some foreign investors hold JGBs in favor of their stable yields. At the end of December 2022, foreign investors' share of outstanding JGBs totaled 165.8 trillion yen, or 13.8%.

Foreign investors' JGB investment has featured a focus on short-term issues. At the end of December 2022, they held 6.5% of outstanding JGBs (excluding T-Bills) and 66.8% of T-Bills (Fig. 1-25). Foreign investors also feature their active trading on the secondary market. Their share of secondary market transactions at the end of December 2022 reached 42.0% for spot trading and 71.7% for futures trading (Fig. 1-26). Foreign investors' presence on the secondary market is greater than indicated by their JGB holdings. We should keep an eye on the presence of foreign investors.



Fig. 1-24 JGB Holdings by Foreign Investors

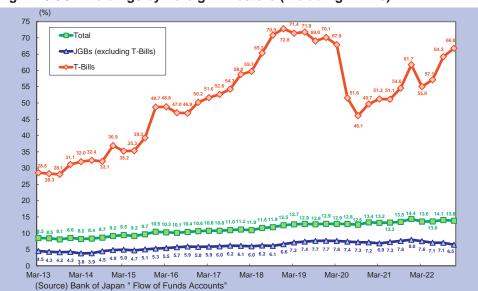
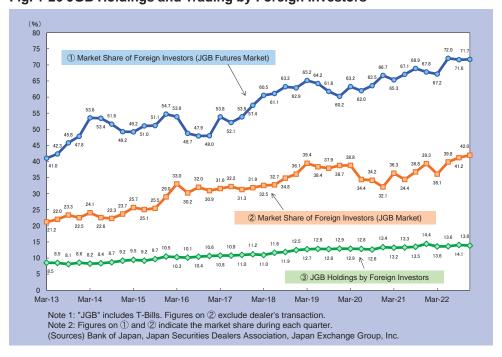


Fig. 1-25 JGB Holdings by Foreign Investors (including T-Bills)

Fig. 1-26 JGB Holdings and Trading by Foreign Investors



## B. Breaking down Foreign Investors

There are various foreign investors, including "real money" institutional investors (such as central banks managing foreign exchange reserves, international financial institutions, pension funds, life insurance companies and asset management firms) and hedge funds.

Generally, it is said that "real money" institutional investors give greater priority to safety, liquidity and stable long-term holdings, while hedge funds mainly invest in a relatively short-term period utilizing derivatives and so on. However, some "real money" institutional investors conduct relatively short-term investment, while some hedge funds implement relatively long-term investment. As shown above, there are a variety of investment styles. Recently, a wide range of foreign investors have intensified investment in short- to medium-term JGBs by taking advantage of basis swaps.

As for a region-by-region breakdown of foreign investors, the Ministry of Finance and the BOJ release statistics (Regional Portfolio Investment and Financial Derivatives Position (Liabilities)). According to these statistics, JGB and other Japanese bond holdings total (1) 112.1 trillion yen in Europe, (2) 52.0 trillion yen in North America, (3) 35.6 trillion yen in Asia, (4) 11.2 trillion yen in Central and South America, and (5) 3.5 trillion yen in the Middle East (Fig. 1-27). A country-by-country breakdown of Japanese bonds held overseas indicates that the five largest holders of these bonds are

(1) the U.S. with 48.5 trillion yen, (2) Belgium with 46.7 trillion yen, (3) Luxembourg with 28.5 trillion yen, (4) China with 18.0 trillion yen, and (5) the U.K. with 11.1 trillion yen.

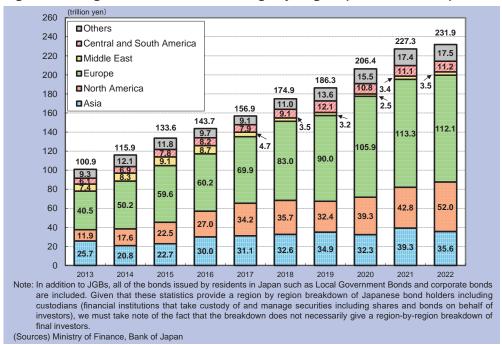


Fig. 1-27 Foreign Investors' Bond Holdings by Region (Custodian Base)

# C. Overseas Investor Relations (IR) Efforts

The Ministry of Finance has made efforts to enhance relations with foreign investors in JGBs.

#### a. Introduction of Overseas IR Efforts

In 2005, the Ministry of Finance launched overseas IR efforts to diversify the JGB investor base, including foreign investors, for the purpose of stabilizing the JGB market and providing accurate information on a timely basis that meets investors' needs for the purpose of encouraging them to hold JGBs longer and more stably. Through overseas IR efforts, the MOF has accurately grasped foreign investors' trends and needs. The MOF has also given back the information to the government's debt management policy.

The Ministry of Finance established the Office of Debt Management and JGB Investor Relations at the Debt Management Policy Division of the Financial Bureau in July 2014 to enhance information arrangements to implement more effective and efficient IR activities in cooperation with research and analysis divisions. In overseas IR activities, we provide various types of investors with information meeting their needs in a fine-tuned manner. For example, we frequently discuss practical topics, such as macroeconomic trends, various government policy measures, JGB issuance plans, and JGB market trends.

## b. Overseas IR Activity Methods

We have adopted overseas IR activity methods fulfilling investors' needs, based on trends of overseas investors and market environment changes as well as opinions at meetings related to government debt management and other occasions. Initially, we mainly sponsored seminars to improve foreign investors' awareness of JGBs. In response to improvements in foreign investors' awareness of JGBs through seminars, we have enhanced not only seminars but also direct visits to investors in recent years. We believe that our visits to foreign investors for direct talks allow us to grasp and respond to their needs in a fine-tuned manner, to promote their understanding of JGBs and the Japanese economy and to build close relations with them.

As face-to-face meetings were restricted due to the spread of COVID-19 starting in FY2020, we have conducted

online overseas IR activities without visiting foreign countries. Online meetings allow us to contact various overseas investors without distance constraints, but, at the same time, entail problems including limited opportunities to meet for some regions due to the time difference. In FY2022, in light of relaxed travel restrictions, etc., we resumed overseas IR activities through on-site visits. Going forward, we will continue to conduct proactive and effective overseas IR, primarily via face-to-face exchanges, while also using online meetings.

The MOF has taken advantage of accumulated experiences with these IR activities over more than 10 years to implement more effective and efficient IR activities. For example, we prepare presentation materials based on foreign investors' past questions and matters of interest and have meetings with the foreign investors. Then, we sort out and accumulate information regarding matters of interest to foreign investors and their investment trends. Thus, we try to build better relations with them based on the PDCA (plan-do-check-act) cycle.

Through these IR activities, we have received various questions and opinions from foreign investors. These opinions are reflected in our debt management and other policies and used effectively. We have also made efforts to disseminate information by, for example, publishing the "JGB Newsletter" (English version) on a monthly basis.

# c. Overseas IR Activies in FY2022

In FY2022, we initially conducted online overseas IR activities, but, in light of relaxed travel restrictions, etc., we resumed face-to-face overseas IR for the first time in three years. We visited 7 cities in 6 countries across North America, Europe, Asia, and Oceania, with a focus on cities such as London and Singapore, where many investors are located, and throughout the fiscal year we conducted a total of 5 local IR visits. In addition to interviews with local investors, we also gave lectures and shared information, for example, by participating in the Regional Forum on Investment Management of Foreign Exchange Reserves hosted by the Asian Development Bank.

In addition, as part of our activities in Japan, we are actively involved in providing lectures at seminars where foreign investors are invited to attend and interview foreign investors visiting Japan.

Through these overseas IR activities, we conducted a total of 130 interviews throughout the fiscal year (Fig. 1-28). Foreign investors indicated their interests in Japan's government debt management policy, its target for achieving a primary balance surplus and macroeconomic trends such as wages and price conditions in Japan.

Fig.1-28 Number of Foreign Investors Subjected to Overseas Interviews

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Number of Meetings	250	213	120	82	76	130

Note: Number of meetings (including local visits, online interviews, and domestic interviews) conducted by the Office of Debt Management and JGB Investor Relations.

In this way, the overseas IR activities play a role in directly providing investors with accurate information on Japanese government debt management and economic policies while responding to wide-ranging and deep needs for information not only on JGBs but also on the economy and fiscal situation.

# I

# Framework of Debt Management

This part explains the fundamental framework of debt management.

# Chapter 1 Government Bonds (JGBs)



# **Primary Market for Government Bonds**

JGBs for financing fiscal expenditure are issued in various types, depending on their applicable legal grounds and bond features. This section explains how JGBs are issued.

# (1) JGBs by Legal Grounds of Issuance

JGBs can be divided into two main categories: General Bonds, and Fiscal Investment and Loan Program Bonds (FILP Bonds). While the government mainly relies on tax revenue and others to redeem General Bonds, the redemption and the interest payments on FILP Bonds are mainly covered by the collection of Fiscal Loan receivable. However, both General Bonds and FILP Bonds are jointly issued as JGBs with the same interest rate and maturity. They are the same financial instruments and are treated in the same manner on the market as well ().

Fig. 2-1 JGBs by Legal Grounds of Issuance

	General Bonds	Construction Bonds		
		Special Deficit-Financing Bonds		
ICDa		Reconstruction Bonds		
JGBs		GX Economy Transition Bonds		
		Refunding Bonds		
	Fiscal Investment and Loan Program Bonds (FILP Bonds)			

## A. General Bonds

General Bonds consist of Construction Bonds, Special Deficit-Financing Bonds, Reconstruction Bonds, GX Economy Transition Bonds and Refunding Bonds. Construction Bonds and Special Deficit-Financing Bonds are issued under the General Account and the revenue from their issuance is reported as the government revenue of the General Account. On the other hand, Reconstruction Bonds are issued under the Special Account for Reconstruction from the Great East Japan Earthquake, GX Economy Transition Bonds under the Special Account for Energy Measures and Refunding Bonds under the Special Account of Government Debt Consolidation Fund and the revenue from their issuance is reported as the government revenue of each Special Account.

#### a. Construction Bonds

Article 4, paragraph (1) of the "Public Finance Act" prescribes that annual government expenditure has to be covered in principle by annual government revenue generated from other than government bonds or borrowings. But as an exception, a proviso of the Article allows the government to raise money through bond issuance or borrowings for the purpose of public works, capital subscription or lending. Bonds governed by this proviso of Article 4, paragraph (1) are called "Construction Bonds."

The Article prescribes that the government can issue Construction Bonds within the amount

Among General Bonds, GX Economy Transition Bonds (including Refunding Bonds for GX Economy Transition Bonds) are being considered with the aim of not only jointly issuing them as the same financial instruments as existing JGBs, but also issuing as a new financial instrument that complies with international standards.

Ref: I, 2 Box 4, "GX Econom Transition Bonds" (P25) approved by the Diet, and the ceiling amount is provided under the general provisions of the General Account budget ().

# b. Special Deficit-Financing Bonds

When estimating a shortage of government revenue despite the issuance of Construction Bonds, the government can issue government bonds based on a special act ((()) to raise money for the purpose of other than public works and the like. These bonds are generally called "Special Deficit-Financing Bonds."

As is the case with Construction Bonds, the government can issue Special Deficit-Financing Bonds within the amount approved by the Diet and the ceiling amount is provided under the general provisions of the General Account budget (\$\infty\$2).

Special Deficit-Financing Bond issuance must be made in exceptional cases. Therefore, the government has to minimize the issuance amount as much as possible within the amount approved by the Diet, while taking into account the state of tax and other revenues ( 3).

#### c. Reconstruction Bonds

To recover from the Great East Japan Earthquake disasters, the government is supposed to issue Reconstruction Bonds from FY2011 to FY2025 in accordance with the "Act on Special Measures concerning the securing of financial resources to execute measures necessary for recovery from the Great East Japan Earthquake (Reconstruction Funding Act)." While necessary financial resources will be financed with revenues of Special Taxes for Reconstruction, the government will issue Reconstruction Bonds as bridging finance until these revenues are receivable to the government.

Reconstruction Bonds can be issued within the amount approved by the Diet, and the ceiling amount is stipulated in the general provisions of the Special Account budget from FY2012 onwards.

# d. GX Economy Transition Bonds

To support upfront investment toward the realization of the "Strategy to Promote Transition to the Decarbonized Growth Economic Structure," () the government is supposed to issue GX Economy Transition Bonds from FY2023 to FY2032, which amount to approximately 20 trillion yen in accordance with the "Act on Promoting Transition to the Decarbonized Growth Economic Structure (GX Promotion Act)."

The bonds will be redeemed with future revenues coming from the introduction of a carbon pricing mechanism.

GX Economy Transition Bonds can be issued within the amount approved by the Diet, and the ceiling amount is stipulated in the general provisions of the Special Account budget.

## e. Refunding Bonds

As for General Bonds, Refunding Bonds are issued in order to raise funds for refunding part of matured JGBs. Among General Bonds, as for Construction Bonds and Special Deficit-Financing Bonds, the issuance amount of Refunding Bonds is determined basically in accordance with the 60-year redemption rule. Regarding Reconstruction Bonds, Refunding Bonds are issued depending on the amount of the revenue from Special

- When intending to get approval for this ceiling amount, the government submits to the Diet a redemption plan that shows the redemption amount and the redemption periods for each fiscal year for reference.
- The "Act on Special Provisions concerning Issuance of Public Bonds to Secure Financial Resources Required for Fiscal Management" allows Special Deficit-Financing Bonds to be issued for five years from FY2021 to FY2025.
- The government is also required to submit a redemption plan to the Diet for reference.
- →③ In this context, it is allowed to issue Special Deficit-Financing Bonds until the end of June in the next fiscal year (deferred issuance in the accounting adjustment term).

This is a strategy to comprehensively and systemically promote GX based on the GX Promotion Act.

Ref: Chapter 1 3 (1)
"Redemption System" (P60)

Taxes for Reconstruction and profit from sales of stocks, which are considered to be financial resources for reconstruction. As for GX Economy Transition Bonds, Refunding Bonds will be issued depending on the amount of the revenues from GX Surcharge (surcharge on fossil fuel supply) and GX-ETS (Emissions Trading Systems) Auction, which will be used to redeem GX Economy Transition Bonds.

Refunding Bonds are the JGBs issued through the Special Account for the Government Debt Consolidation Fund (GDCF). Revenues from Refunding Bonds are directly posted to the fund.

In the issuance of Refunding Bonds, the government is not required to seek the Diet approval for the maximum issuance amount. This is because unlike in the case of bonds issued to secure new revenue resources, such as Construction Bonds and Special Deficit-Financing Bonds, issuing Refunding Bonds does not lead to an increase in the total amount of outstanding debt.

#### (Reference) Front-loading issuance of Refunding Bonds

As massive bonds redemption at maturity is expected to continue, the government is allowed to front-load the issuance of Refunding Bonds in order to mitigate the impact of concentration of bonds redemption at maturity, to control substantial volatility of JGB market issuance in each fiscal year and to enable flexible issuance of them in response to financial conditions and so on.

Front-loading issuance of Refunding Bonds can be made within the upper limit approved by the Diet in accordance with Article 47, Paragraph (1) of the "Act on Special Accounts." The limit is provided in the general provisions of the Special Account budget in each fiscal year. The gap between "the amount of the front-loading issuance of Refunding Bonds that had been scheduled in the previous fiscal year for this fiscal year" and "those that are scheduled front-loading in this fiscal year for the next fiscal year" can be used as part of this fiscal year's financial resources under the government debt management policy. This is called "adjustment between fiscal years ( )" in terms of issuance type in the JGB Issuance Plan.

In line with tax revenues through the consumption tax increases in and after FY2014, Refunding Bonds are issued for Special Bonds for Covering Public Pension Funding, which were issued in FY2012 and FY2013 as bridging finance until tax revenues are assured for the finance of the increase of the Government's contribution to the basic national pension, based on the special law for Special Deficit-Financing Bonds legislated in FY 2012.

The adjustment includes the difference in the amount of issuance in the accounting adjustment term between the current and the previous fiscal years besides that of frontloading-issuance of Refunding Bonds.

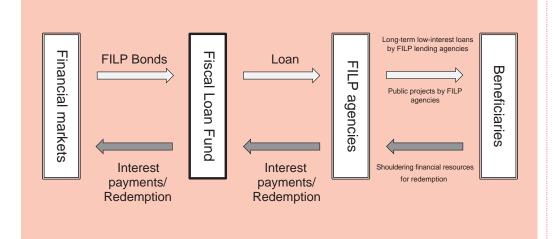
In the accounting adjustment term, which means a period from April to June, some of the Special Deficit-Financing Bonds and others for the previous fiscal year can be issued.

# B. Fiscal Investment and Loan Program Bonds (FILP Bonds)

Since the FY2001 reform of the FILP (Fiscal Investment and Loan Program) that abolished the requirement for all postal savings and pension fund reserves to be deposited at the Fiscal Loan Fund, the government has issued Fiscal Investment and Loan Program Bonds (so-called FILP Bonds) to raise financial resources as necessary for the Fiscal Loan Fund. FILP Bonds are issued integrally with General Bonds based on the credit of the government and treated as the same financial instrument as General Bonds. As is the case with other types of JGBs, FILP Bonds are issued up to the amount approved by the Diet. The FILP Bond issuance ceiling is provided under the general provisions of the Special Account Budget (Article 62, paragraph (2) of the "Act on Special Accounts") ((a) Revenues from the FILP Bonds issuance are allotted to the annual revenue for the Special Account for the Fiscal Investment and Loan Program (FILP Special Account).

However, the FILP Bonds are different from Construction Bonds and Special Deficit-Financing Bonds on one account. While future taxes will be used to redeem Construction Bonds and Special Deficit-Financing Bonds, the redemption on the FILP Bonds are covered by the collection of Fiscal Loan receivable. Therefore, when publishing outstanding debt, FILP Bonds are treated differently from General Bonds ( $\bigcirc$ 2).

Fig. 2-2 FILP Fund Flow Since FILP Reform (image)



Ref: "FILP Report"

◆①As with Construction Bonds and Special Deficit-Financing Bonds, the government is required to submit a redemption plan to the Diet for reference.

2Also in the System of National Accounts (SNA), which is created by the United Nations for each country to create economic statistics based on a common standard, FILP Bonds are not classified as debt of the general government.

# (2) Types of JGBs

Government bonds are the securities issued by the central government. The central government pays the bondholders interest on the securities on a semiannual basis except for short-term bonds, and redeems the principal amount at maturity (i.e., redemption). The JGBs planned to be issued in FY2023 can be classified into six categories: short-term (6-Month and 1-Year Bonds); medium-term (2-Year and 5-Year Bonds); long-term (10-Year Bonds); super long-term (20-Year, 30-Year and 40-Year Bonds); Inflation-Indexed Bonds (10-Year Bonds); and JGBs for Retail Investors (3-Year Fixed-Rate, 5-Year Fixed-Rate and 10-Year Floating-Rate Bonds).

The short-term JGBs are all discount bonds, which are accompanied by no interest payment during their duration to maturity and redeemed at face value at maturity.

On the other hand, all medium-, long-, super long-term bonds and JGBs for Retail Investors (3-Year Fixed-Rate, 5-Year Fixed-Rate) are the bonds with fixed-rate coupons. With fixed-rate coupon-bearing bonds, the interest calculated by the coupon rate (()) determined at the time of issuance (()) is paid on a semiannual basis until the security matures and the principal is redeemed at face value.

Inflation-Indexed Bonds (JGBi) are securities whose principal amounts are linked to the consumer price index (CPI) ((3)). Thus, although their coupon rates are fixed, the interest payment also fluctuates. The principal amount of JGBi will be guaranteed at maturity (deflation floor). In case where the indexation coefficient ((4)) falls below 1 at maturity, the principal amount for the JGBi will be redeemed at the face value.

JGBs for Retail Investors (10-Year Floating-Rate) are JGBs with coupon rates that vary over time according to certain rules.

Fig. 2-3 Types of JGBs

Maturity	Short	-term	Medium-term	Long-term	
ivialunty	6-Month	1-Year	2-Year, 5-Year	10-Year	
Type of issue	Discount bonds		Coupon-bearing bonds		
Min. face value unit	50,000 yen		50,000 yen		
Issuance method	Public offering BOJ Rollover		Public offering OTC sales (making offerings and accepting subscriptions)		
Auction method	Price-competitive auction/ Conventional-style auction		Price-competitive auction/ Conventional-style auction		
Non-price Competitive Auction	Non-Price Competitive Auction I		Non-Competitive Auction Non-Price Competitive Auction I Non-Price Competitive Auction II		
Transfer restrictions	Unrestricted		Unrestricted		

	Super long-term			Inflation-Indexed Bonds	JGBs for Retail Investors	
Maturity	20-Year	30-Year	40-Year	10-Year	3-Year Fixed-Rate, 5-Year Fixed-Rate, 10-Year Floating-Rate	
Type of issue			Coupon-b	pearing bonds		
Min. face value unit		50,000 yen		100,000 yen	10,000 yen	
Issuance method	Public offering			Public offering	OTC sales (making offerings and accepting subscriptions)	
Auction method	Price-competitive auction/ Conventional-style auction		Yield- competitive auction/ Dutch-style auction	Price-competitive auction/ Dutch-style auction	_	
Non-price Competitive Auction	Competitive Non-Price Competitive Auction I		Non-Price Competitive Auction II	—(Note 1)	_	
Transfer restrictions	Unrestricted		Unrestricted	Restricted (Note 2)		

(Note 1) Non-Price Competitive Auction II of Inflation-Indexed Bonds has been suspended since May 2020. (Note 2) JGBs for Retail Investors can be transferred only to retail investors (including certain trust custodians).

- The lower limit of the coupon rate was reduced from 0.1% to 0.005% for issues to be placed from FY2021.
- → ② In the case where the period of time between an issue date and the first interest payment date falls short of six months, accrued interest is generated. The accrued interest is an amount representing interest for the period of time where a JGB purchaser does not hold a JGB (six months minus the period of time where the purchaser actually holds the JGB). It is paid by the JGB purchaser upon JGB issuance for adjustment.
- 3 Japan's Inflation-Indexed Bonds are indexed to the consumer price index (excluding perishables).
- The indexation coefficient measures how much the CPI changed after an issue date.
- ◆ 15 Year Floating-Rate Bonds are JGBs with coupon rates that vary over time according to certain rules. However, issuance of these bonds has been suspended since their issuance in May 2008, and their redemption ended in May 2023.

#### (Reference) Inflation-Indexed Bonds

The Inflation-Indexed Bonds (JGBi) are bonds whose principal (and relevant interests) fluctuates in line with the core consumer price index (Fig. 2-4). The government began to issue JGBi in March 2004 and suspended their issuance in October 2008 due to a sharp demand decline accompanying the global financial crisis and other changes. In October 2013, the government resumed JGBi issuance with the principal guarantee upon maturity (Fig. 2-5).

The development of the JGBi market has remained a key to address market environment changes after overcoming deflation and to diversify JGB products.

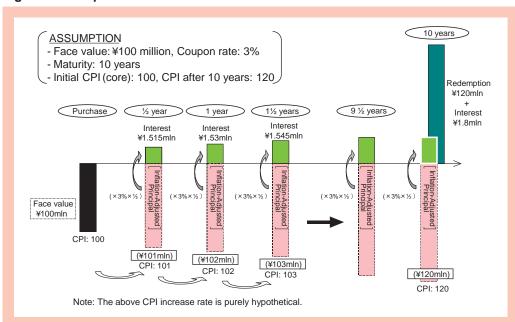
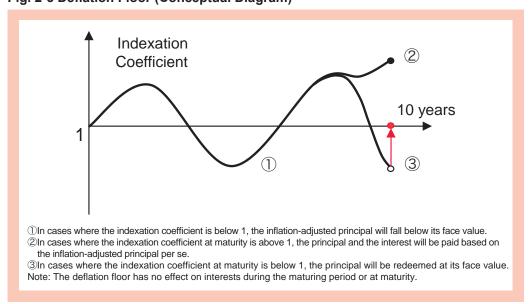


Fig. 2-4 Conceptual Scheme of Inflation-Indexed Bonds

Fig. 2-5 Deflation Floor (Conceptual Diagram)



# (3) Methods of Issuance

Methods of issuing JGBs are basically divided into three: offerings to the market, sales to retail investors, and offerings to the public sector.

# A. Offering to the market

JGBs are principally issued in public offering on market-based issue terms.

#### a. Auction method

#### ① Price/vield-competitive auction

Price/yield-competitive auction is a method in which each auction participant ( ) submits a bidding price (or yield) and bidding amount in response to the issue terms (e.g., issuance amount, maturity, coupon rate ( ) presented by the MOF, and the issuance price and amount will then be determined based on the bids.

In this type of auction, the issuing authority starts selling first to the highest price bidder in descending order (or to the lowest yield bidder in ascending order) till the cumulative total reaches the planned issuance amount. In Japan, the auction method varies by type of security. One is the conventional (multiple price) method by which each winning bidder purchases the security at one's bidding price; and the other is the Dutch-style (single price/yield) method by which all winning bidders pay the lowest accepted bid price regardless of their original bid prices (or yields) (\$\infty\$3).

#### 2 Non-competitive auction

Besides competitive auction, 2-Year, 5-Year and 10-Year Bonds are also issued through non-competitive auction. This approach is to take into account small and medium market participants who tend to submit a smaller bid than their larger counterparts. Biddings for non-competitive auction are offered at the same time as for the price-competitive auction, and the price offered equals to the weighted average accepted price of the price competitive auction. One can bid for either the price competitive auction or the non-price-competitive auction.

The maximum issuance amount is 10% of the planned issuance amount. Each participant is permitted to bid up to 1 billion yen ().

# **3 Non-Price Competitive Auction I & II**

Non-Price Competitive Auction I is an auction in which biddings are offered at the same time as for the price-competitive auction. The maximum issuance amount is set at 20% of the total planned issuance amount and the price offered is equal to the weighted average accepted price of the price-competitive auction. Only the JGB Market Special Participants are eligible to bid in this auction. Each participant is allowed to bid up to the amount set based on the result of its successful bids during the preceding two quarters. 40-year Bonds and Inflation-Indexed Bonds issues are not subject to Non-Price Competitive Auction I.

Non-Price Competitive Auction II is an auction carried out after the competitive auction is finished. The price offered is equal to the weighted average accepted price in the price-competitive auction or issuance price in Dutch-style competitive auction. Only the JGB Market Special Participants are eligible to bid in this auction. Each participant is allowed

- No new 40-Year JGB coupon rate is given in advance as it is determined based on the result of first yield-competitive auction.
- →③ The price-competitive conventional auction is used for all JGB issues excluding the 40-year issue subject to the yield-competitive Dutch auction and the Inflation-Indexed Bonds subject to the price-competitive Dutch auction.

The ceiling amount to bid is not applied to the Shinkin Central Bank, the Shinkumi Federation Bank, the Rokinren Bank and the Norinchukin Bank.

to bid up to the amount set based on the result of its bids during the preceding two quarters (). Inflation-Indexed Bonds and short-term JGBs issues are not subject to Non-Price Competitive Auction II.

#### b. Reopening rule

In March 2001, the immediate reopening rule was introduced for the purpose of the enhancement of JGB liquidity, etc. The rule treats a new JGB issue as an addition to an outstanding issue immediately from the issuance day, in principle, if the redemption date and the coupon rate for the new issue are the same as those for the outstanding issue. 5-Year Bond issues are subject to the rule ().

From the viewpoint of securing market supply of each issue, 10, 20, 30 and 40-year issues in FY2023 are subject to the following rule, which is more advanced than the immediate reopening rule.

The 10-Year Bonds will be integrated into four issues (integrating April, May and June issues in 2023 into the April 2023 issue, July, August and September issues in 2023 into the July 2023 issue, October, November and December issues in 2023 into the October 2023 issue, and January, February and March issues in 2024 into the January 2024 issue) unless interest rates fluctuate wildly (the market yield on an auction day for a new issue deviates from the coupon on the previous issue with the same maturity date by more than 30 basis points). The reopening rule will also be used in principle to integrate 20-Year and 30-Year Bonds each into four issues. The 40-Year Bonds (May, July, September, November, January and March issues) will be integrated into one issue (May issue) in principle. JGBi issues (May, August, November and February issues) will be integrated into one issue (May issue) in principle.

#### Each participant is allowed to bid up to 10% of one's total successful bids in the competitive auction and Non-Price Competitive Auction I.

As redemption dates for 2-Year Bonds differ from auction to auction, 2-Year Bonds are not effectively subject to the reopening rule (Ref: III Chapter 1 1(5) "Principal/Coupon Payment Corresponding to Days of Issuance in FY2023" (P110)).

# B. JGBs and sales system for Retail Investors

#### a. JGBs for Retail Investors

In March 2003, issuance was started on 10-Year Floating-Rate Bonds for Retail Investors ((()) in order to promote JGB holdings among individuals. Moreover, in order to respond to retail investors' various needs and to promote further sales, the government has been improving product features by introducing 5-Year Fixed-Rate and 3-Year Fixed-Rate Bonds.

Issuance of JGBs for Retail Investors rests on handling and distribution by their handling institutions comprised of securities companies, banks, and other financial institutions as well as post offices (about 920 institutions). The handling institutions are commissioned by the government to accept purchase applications and to sell this type of JGBs to retail investors. Handling institutions are paid a commission by the government corresponding to the handled issuance amounts ( $\bigcirc$ 2).

# b. New Over-The-Counter (OTC) sales system for selling marketable JGBs

In addition to JGBs for Retail Investors, in October 2007 a new OTC sales system for marketable JGBs was introduced in order to increase retail investors' purchase opportunities with regard to JGBs (2-Year, 5-Year, and 10-Year Bonds).

With regard to this new OTC sales system, it allows private financial institutions to engage

Ref: I, 3 (1) "JGB Holdings by Retail Investors" (P27)

JGBs for Retail Investors are designed not to lose principal. The minimum interest rate of 0.05% is set to prevent the rate from falling to zero or becoming negative.

◆2 For JGBs for Retail Investors from the October 2020 issue (offered in September 2020), the government cuts the sales commission (to 0.08 yen per 100 yen nominal par for 3-Year Fixed-Rate Bonds, to 0.11 yen for 5-Year Fixed-Rate Bonds and to 0.14 yen for 10-Year Floating-Rate Bonds) and pays 0.02% of the balance of a participant's account at the time of interest payment on this type of JGBs as an account management fee.

in subscription-based OTC sales of JGBs in a manner previously exclusive to post offices. This development allows retail investors to purchase JGBs easily and almost always at numerous financial institutions. Depending on market yield conditions, however, the acceptance of subscriptions may be suspended.

As with JGBs for Retail Investors, for the new OTC sales system, the government has commissioned financial institutions (about 600 institutions) to conduct subscriptions and sales of JGBs. Note that while these financial institutions are required to accept subscription and sell JGBs at prices defined by the MOF for a certain period of time, they are not required to purchase any unsold JGBs.

Fig. 2-6 Comparison of JGBs for Retail Investors and New Over-The-Counter (OTC) Sales System

	JGBs for Retail Investors			New OTC JGBs			
	10-Year Floating-Rate	5-Year Fixed-Rate	3-Year Fixed-Rate	10-Year Marketable Fixed-Rate Bonds	5-Year Marketable Fixed-Rate Bonds	2-Year Marketable Fixed-Rate Bonds	
Maturity	10-year	5-year	3-year	10-year	5-year	2-year	
Frequency of issuance	Montl	nly (12 times per	year)	Monthly (12 times per year)			
Purchase units/purchase value limits	Minimum purchase of 10 thousand yen in 10 thousand yen units/No upper limit			Minimum purchase of 50 thousand yen in 50 thousand yen units/Maximum value of 300 million yen per individual application			
Sales price	100 yen per 100 yen of face value (the same as the redemption)			Determined by MOF for each issue. (It is possible to sell at any time on the market. However, the price may change if the bonds are sold before maturity.)			
Purchasers	Limited to retail investors				No restrictions (can also be purchased by corporate entities or condominium associations etc.,).		
Interest rate	Floating-rate	Fixed	d-rate		Fixed-rate		
Minimum interest rate	Present (0.05%)			Absent			
Redemption before maturity	Once one year has elapsed since issuance, redemption before maturity due to government buy-back shall be possible at any time (there is no principal loss risk). The two interest payments are deducted immediately preceding redemption (pretax) x0.79685.						
Introduction (1st issuance)	March, 2003	January, 2006	July, 2010	October, 2007			

Fig. 2-7 Major Improvements in Features of JGBs for Retail Investors

Implementation timing	Improvements
March 2003	10-Year Floating-Rate Bonds launched
January 2006	5-Year Fixed-Rate Bonds launched
October 2007	New OTC sales system introduced
July 2010	3-Year Fixed-Rate Bonds launched
July 2011	Interest rate-setting formula revised for 10-Year Floating-Rate Bonds (Standard rate $-0.80\% \rightarrow$ Standard rate x 0.66)
April 2012	Period changed for a ban on pre-maturity redemption of 5-Year Fixed-Rate Bonds (2 years → 1 year)
December 2013	Monthly subscription and issuance launched for 10-Year Floating-Rate and 5-Year Fixed-Rate Bonds
May 2016	First interest payment adjustments revised

# C. Offering to the public sector (Bank of Japan Rollover)

In the Bank of Japan rollover, the BOJ underwrites Refunding Bonds instead of asking the government to redeem part of JGBs that mature after being purchased by the central bank in the market.

While Article 5 of the "Public Finance Act" prohibits the BOJ from underwriting government bonds, the abovementioned BOJ rollover is an exception that is allowed up to an amount authorized by the Diet under a proviso to the Article. Every fiscal year, the MOF requests the BOJ rollover that the central bank accepts after confirming that the rollover will cause no problem with its monetary policy.

An increase in the BOJ rollover can reduce the amount of JGBs issued through usual auctions in the market, allowing the MOF to level the effects of fluctuations in the annual JGB redemption amount and fiscal demand on fluctuations in the amount of JGB market issuance through usual auctions. Therefore, the MOF decides on the BOJ rollover request amount based on the annual JGB Issuance Plan, etc.

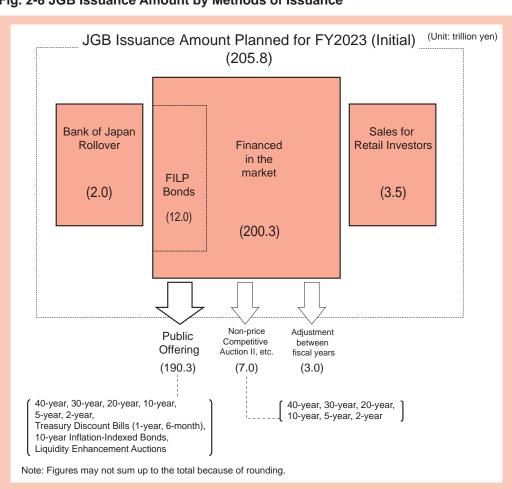


Fig. 2-8 JGB Issuance Amount by Methods of Issuance

# nds (JGBs)

1 Primary Market for Government Bonds

# (4) JGB Market Special Participants Scheme

Amid expectations that JGB issuance in large volumes will continue, the "JGB Market Special Participants Scheme" was introduced in Japan in October 2004 to promote the market's stable absorption of JGBs and to maintain and enhance the liquidity of the JGB market.

This scheme is designed based on the so-called "Primary Dealer System" introduced in major European countries and the U.S. To achieve the above-mentioned purpose of the scheme, the MOF grants special entitlements to certain auction participants who carry out responsibilities essential to debt management policies, such as active participation in JGB auctions.

The following is an outline of the scheme.

# A. Responsibilities of JGB Market Special Participants

· Bidding responsibility:

In every auction, the Special Participants shall bid for an adequate amount (at least the planned issuance amount multiplied by the rate of bidding responsibility) at reasonable prices ((())).

· Purchasing responsibility:

The Special Participants shall purchase and underwrite at least a specified share of the total amount of successful bids ( 2) (0.5% for short-term zone; and 1% for other zones) of the total amount awarded for each of the following zones: short-term, medium-term, long-term, and super long-term zones in auctions for the preceding two quarters.

- Responsibility in the secondary market:
   The Special Participants shall provide sufficient liquidity to the JGB secondary market.
- Provision of Information:

The Special Participants shall provide information on JGB markets and related transactions to the MOF.

# **B.** Entitlements of JGB Market Special Participants

- Entitlement to participate in the Meeting of JGB Market Special Participants:
   The Special Participants may participate in the Meeting of JGB Market Special Participants to exchange opinions with the MOF.
- Entitlement to participate in Non-Price Competitive Auctions I & II:

  The Special Participants may participate in Non-Price Competitive Auction I held concurrently with a normal competitive auction and in Non-Price Competitive Auction II held after a normal competitive auction. These auctions enable Special Participants to obtain JGBs at the weighted average accepted price in a competitive auction (or at the issuance price in a Dutch-style auction) up to the maximum amount preset for each Special Participant on the basis of the amount of past successful bids (Non-Price Competitive Auction I) and past bids as a whole (Non-Price Competitive Auction II).
- Entitlement to participate in Liquidity Enhancement Auctions:

  The Special Participants may participate in Liquidity Enhancement Auctions that are designed to maintain and enhance the liquidity of the JGB market.
- Entitlement to participate in Auctions for Buy-backs: The Special Participants may participate in Auctions for Buy-backs.
- Entitlement to apply for the separating and integrating STRIPS Bonds:

  The Special Participants may apply for the separation and integration of STRIPS Bonds.

Rate of bidding responsibility is calculated by the formula shown below (any fraction less than one rounded up to the nearest whole number).

Rate of bidding responsibility (%) = 100/n

"n" is the number of the Special Participants

The total amount of successful bids in JGB auctions (excludes successful bids from Non-Price Competitive Auction II and Liquidity Enhancement Auctions).

# C. History of the Scheme

- October 2004: JGB Market Special Participants Scheme was introduced, including designation of Special Participants, holding the first round of Meeting of JGB Market Special Participants and launch of Non-Price Competitive Auction II.
- April 2005: Non-Price Competitive Auction I was launched.
- January 2006: Interest Rate Swap Transactions started.
- March 2006: JGB syndicate underwriting system was abolished.
- April 2006: Liquidity Enhancement Auction was launched.
- January 2009: The maximum bid for Non-Price Competitive Auction II was raised from "10% of one's total successful bids" to "15%" (15%" (15%).
- April 2015: The maximum amount of bidding by each auction participant was reduced from "100% of the planned issuance amount" to "50% of the amount" and the minimum bidding responsibility amount was raised from "3% of the planned issuance amount" to "4% of the amount."
- July 2017: The maximum issuance amount for Non-Price Competitive Auction I was raised from "10% of the total planned issuance amount" to "20% of the amount" and the minimum bidding responsibility amount from "4% of the planned issuance amount" to "5% of the amount."
- January 2020: The maximum bid for Non-Price Competitive Auction II was lowered from "15% of one's total successful bids" to "10%" ( ()).
- April 2020: Non-Price Competitive Auction II for the Inflation-Indexed Bonds was canceled.
- March 2022: The bidding responsibility amount was changed from "at least 5% of the planned issuance amount" to "at least 100/n%."

The maximum amount of bidding would not exceed the amount obtained by multiplying the planned issuance amount by the Reference Bidding Coefficient for each Special Participant (amount less than 100 million yen shall be discarded).

# (5) Government Bond Administration

# A. Items the Bank of Japan handles

The government does not directly undertake the government bond-related administrative tasks, such as issuance and redemption, but entrusts the BOJ with most of those tasks based on Article 1, paragraph (2) of the "Act on National Government Bonds." Those administrative tasks entrusted to the BOJ are as follows ( ).

- Issuance: The BOJ accepts bids from bidders in auctions, notifies amounts of successful bids, collects payments, issues the securities, and receives and handles revenues.
- Redemption/interest payment: The BOJ pays a principal and interest on JGBs, and receives
  and handles funds to be used for redemption, and makes their disbursement.

The BOJ provides these government bond-related services through its head office and branches, and through agent financial institutions.

# B. The Bank of Japan government bond network system

The BOJ operates the Bank of Japan Financial Network System (BOJ-NET) JGB Services ( ( ) to efficiently and safely implement JGB issuance, redemption and other administrative tasks as explained above and the settlement of JGB transactions with its customer financial institutions. Banks, securities companies, money market brokers, insurance companies, etc. participate in the BOJ-NET JGB Services that implement JGB issuance, redemption and other administrative tasks online.

Under the "Act on Book-Entry Transfer of Corporate Bonds and Shares," at present, JGBs traded between financial institutions are paperless. JGB transfers are done in the form of transfers on accounts managed by the transfer institution (the BOJ) ( ).

The BOJ-NET JGB Services allow the following procedures to be completed online:

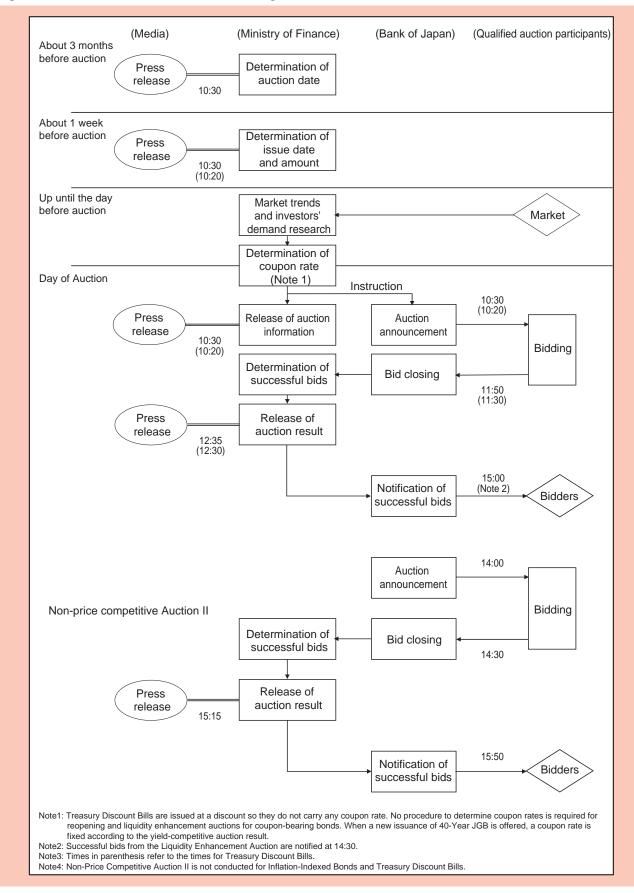
- Notification of offering (from the BOJ to auction participants)
- Bidding (from bidders to the BOJ)
- Aggregating bids and reporting to the MOF on their status
- Notification of accepted/allocated bids (from the BOJ to bidders)
- Issuance and payment (from the BOJ to successful bidders / from successful bidders to the BOJ)

◆① The BOJ-NET includes the BOJ-NET current account system as a fund settlement system and the BOJ-NET JGB Services as a JGB settlement system.

⇒ 2 JGBs for this mechanism are called Book-entry transfer JGBs, representing those whose ownership is determined by descriptions or records in book-entry accounts as provided by "the Act on Book-Entry Transfer of Corporate Bonds and Shares" (JGB certificates are not issued.).

# C. Auction Procedures for Public Offering Auction

Fig. 2-9 Auction Procedures for Public Offering Auction



# D. Shortening of Settlement Cycles in Primary JGB Market

In a manner to meet the shortening of the settlement cycle to T+1 for the secondary JGB market, the JGB settlement cycle (between auction and issue date)was shortened from T+2 to T+1 in principle for auctions as from May 1, 2018.

At the same time, the JGB settlement cycle for coupon-bearing bonds (5- to 30-year bonds) issued in massive redemption months (March, June, September and December) and a 2-year bonds issued every month were shortened.

# ① Coupon-bearing (5- to 30-year) JGB Issues in Massive Redemption Months

Although issue date of coupon-bearing (5- to 30-year) JGB in massive redemption months (March, June, September and December) had been unified into the 20th day of each month (the next business day if the 20th day fell on a holiday) irrespective of auction dates, settlement cycles were shortened to T+1, with their issuance set to come on the next business day of the auction, as from May 1, 2018.

# 2 Monthly 2-year JGB issue

Although issue date of the monthly 2-year JGB had been set at the 15th day (the next business day if the 15th day fell on a holiday) of a month after an auction month irrespective of the auction date, the issuance date was set at the first day (the next business day if the first day falls on a holiday) of a month after an auction month as from May 1, 2018. The interest payment and redemption dates were also changed to the first day of each month.

Ref: Chapterl 2(3)C "Shortening of settlement periods" (P52)



# **Secondary Market for Government Bonds**

Not only are government bonds a means for government financing, but they are also financial products traded on the ever-changing financial markets at the same time. For JGBs to be issued smoothly and fulfill their functions as indicators of bonds and interest rates, transparency and liquidity must be assured and secondary markets with reliable and efficient settlement must exist. This chapter outlines JGB market liquidity maintenance and enhancement initiatives, as well as how JGBs are traded on the market and how JGB transactions are settled.

# (1) JGB Market Liquidity Maintenance and Enhancement

If the JGB market is liquid enough to allow investors to freely trade in JGBs in line with their respective interest rate outlooks and investment strategies, it will contribute to holding down medium to long-term fundraising costs. Therefore, the government pays attention to the JGB market liquidity.

While liquidity is defined variously, with no strict definition existing, high liquidity is generally explained as allowing market participants to promptly buy or sell as much as they want at prices close to market prices. In order to assess JGB market liquidity, we must combine various indicators to analyze the market from a multifaceted perspective, instead of depending on a limited range of specific indicators.

The secondary JGB market consists of JGB Market Special Participants and other brokers, and various investors. The maintenance and enhancement of JGB market liquidity depends basically on the market's autonomous functions backed by transactions between such market participants. However, the government complements JGB market liquidity by adjusting issuance amounts, maturities, reopening and other matters.

Specifically, the government has taken the following measures to maintain and enhance JGB market liquidity:

- Conducting Liquidity Enhancement Auctions to add to past issues ( )
- Reopening past issues ( 2) to expand the volume of each issue

The government has also held the Meeting of JGB Market Special Participants and the Meeting of JGB Investors ((3)) to identify market conditions through exchange of opinions with market participants.

- Thef: Chapter 1 3(2) "Liquidity Enhancement Auctions" (P68).
- Ref: Chapter 1 1(3) Ab "Reopening rule" (P41).
- © Ref: Chapter 1 3(5) "Dialogue with Market Participants" (P72).

# (2) OTC Transactions and Transactions on the Stock Exchange

The secondary market for public and corporate bonds can be divided into over-the-counter transactions (OTC transactions), such as transactions that take place at securities companies, and stock exchange transactions that take place on the Stock Exchange. However, OTC transactions are the more common transaction method because it is difficult to trade on the Stock Exchange on the conditions that you desire. This is because of the variety of transactions and administrative procedures involved due to the large number of issues in public and corporate bonds, as well as the complexity of bond trading details.

In the OTC market, in principle, a price is concluded through a negotiation between the parties concerned. However, in order to ensure fair and smooth OTC bond transactions, Self-regulatory Regulations by the Japan Securities Dealers Association require each securities company to maintain the fairness of the transaction by acting at a proper price according to a set of internal rules ().

Currently, 2-Year, 5-Year, 10-Year, 20-Year, 30-Year and 40-Year JGBs are listed on the Stock Exchange in Tokyo and Nagoya, and their transaction volume is published.

Fig. 2-10 Case of the Tokyo Stock Exchange

	JGB Trading System					
	Trading Hours	12:30 pm - 2:00 pm				
	Trading Unit	JPY 50,000 in par value				
	Tick Size	JPY 0.01				
	Types of Orders	Limit orders only (Market orders are not available)				
ulars	Daily Price Limit	JPY 1				
Particulars	Trading Method	Orders are accepted only via Target (electronic document submission system of TSE)				
	Trade Execution	Individual auctions for each issue				
	Types of Trading and Settlement Dates	Regular transactions (T+1)				
	Settlement	Settlement through BOJ-NET				

(Source) Japan Exchange Group, Inc.

To improve the price announcement function of the OTC market, the Japan Securities Dealers Association publishes reference statistical prices [yields] for OTC bond transactions on every business day, based on the reports from its member securities companies and some other firms. As securities companies frequently trade with each other through brokers, such transaction price data are published by these brokers.

# (3) Improvements to the JGB Transaction Settlement System

As for the book-entry transfer system for JGB transactions on the secondary JGB market, the Bank of Japan is designated as the transfer institution under the "Act on Book-Entry Transfer of Corporate Bonds and Shares" and operates the system. The system uses book-entry transfer for JGB delivery accompanying JGB transactions between market participants. Practically, settlements are conducted through the BOJ-NET JGB Services in which many private financial institutions participate.

The MOF has developed the JGB transaction settlement system in cooperation with the BOJ and other stakeholders to improve the safety and efficiency of the JGB market. The following section reviews the deliberations concerning the JGB transaction settlement system to date.

# A. Improving and reconstructing BOJ-NET functions

In 1994, the BOJ-NET adopted Delivery-versus-Payment (DVP) settlement ( ), and in January 2001 changed from the Designated-time Net Settlement (DTNS) ( ) to Real-Time Gross Settlement (RTGS) ( ), to prevent the occurrence of any systemic risk event. The BOJ began to construct a new system (hereinafter referred to as the New BOJ-NET) in 2008 to further improve the safety and efficiency of the entire settlement system of Japan. The New BOJ-NET came into full operation in 2015. Its operation hours were extended until 21:00 in 2016.

# B. Establishment and propagation of the Fails Practice

"Fail" refers to a case of non-delivery of specific securities by the scheduled time due to reasons other than the creditworthiness of the relevant trade counterparty. "Fails Practice" refers to a market routine that prescribes general clerical procedures to be performed between the parties in a Fail instance and provides as a principle that a Fail event does not automatically imply default (()).

Fails Practice was introduced in January 2001, when the RTGS system for JGB settlement was adopted in Japan. Back then, a fair number of parties neither understood the need for Fails Practice nor had the clerical processing frameworks in place, preventing Fails Practice from becoming an established procedure. However, in connection with the collapse of the investment bank Lehman Brothers in September 2008, default contagion caused an unprecedented surge in Fail events. Subsequently, as a means for market participants to reduce Fail risk, avoiding new repurchase transactions altogether became increasingly widespread. Fails Practice was revised in November 2010 to introduce Fails Charge ( 2) and accelerate Cut-Off Time ( 3).

Ref: Chapter 1 1(5)B "The Bank of Japan government bond network system" (P46)

- DVP (Delivery-versus Payment) settlement of JGBs is a mechanism that prevents the occurrence of a situation in which "payment for securities is not received despite the delivery of the securities having been made" or where "securities are not delivered despite the payment of funds having been made," by making the delivery of securities and payment therefore conditional on each other.
- 2 The DTNS (Designated-Time Net Settlement) system is designed to hold and accumulate various orders received for book entry transfers (payment orders) until a certain time, and at that time, pay or receive only the difference between the total amount receivable and the total amount payable as of such time. Under this settlement method, one single payment default at the time of settlement will cause the settlement of any and all payment orders issued by all participating financial institutions to be suspended and reversed, and by extension, may cause systemic risk.
- ◆③ The RTGS (Real-Time Gross Settlement) system is a mechanism to transfer in real time the gross amount of each transfer order as received. By this method, settlement is affected by each transfer order. Any single payment default will only directly affect the counterparty (which mitigates any systemic risk).
- ◆①Specifically, in case of a Fail event, neither will the right of contract cancellation be exercised nor will a penalty for late payment be imposed, in principle. If the Fail duration is prolonged, Buy-In provisions, etc., are stipulated as a method of resolution. "Buy-In" means the purchase of the deliverable securities or identical securities by the recipient to resolve a Fail status that has continued for a certain period.
- → 2 "Fails Charge" means a payment imposed on the party that gives rise to a Fail event by failing to deliver. The Fails Charge was introduced for its conceivable power to reduce Fail frequency on the grounds of its compelling economic rationale, especially in a low-interest environment (For details refer to the relevant regulations including "The Japanese Government Securities Guidelines for Real Time Gross Settlement").
- ◆3 Cut-Off Time refers to a daily settlement closing time established among market participants that occurs before the end of JGB related operations on the BOJ-NET in order to identify "fail events," etc., ahead of the end of settlement for the day. Currently the Cut-Off Time is set at 14:00.

# C. Shortening of settlement periods

An increase in unsettled transactions through defaults and fails after the September 2008 global financial crisis prompted market participants to strongly perceive settlement risks, leading once again to the realization that shortening settlement periods would be indispensable for effectively reducing unsettled transactions. Based on this experience and deliberations at the Working Group on Shortening of JGB Settlement Cycle established as a subordinate organ of the Promotion Meeting for Reform of the Securities Clearing and Settlement (1), the standard settlement period for JGB transactions was shortened to T+2 on April 23, 2012, and to T+1 on May 1, 2018 (2).

# D. Establishing a clearing institution and expanding its use

Together with the change in January 2001 to JGB settlement by RTGS, Bilateral Netting ( ) was also introduced. Since outright transactions and repurchase transactions are being carried out constantly in the JGB market by multiple market participants, settling all transactions by individual counterparty would render clerical procedures complicated and highly inefficient, and also compel consideration of counterparty risk when making transactions. With regard to transactions contracted between market participants, this situation gave rise to the demand for an arrangement in which payments and JGB deliveries of JGB transactions are netted under the guarantee of settlement implementations by a clearing institution taking the position between parties ( ).

In October 2003, the Japan Government Bond Clearing Corporation (JGBCC (Japan Securities Clearing Corporation or JSCC at present) ((3)) was established as the Central Counterparty (CCP) for the JGB market. As a result, the relation of rights and obligations contracted between JGBCC participants was simplified to the effect that rights and obligations now exist between the JGBCC and each participant, with each party's counterparty risk now posed by the JGBCC instead of the transaction counterparty. Moreover, since participants and the JGBCC settle only the net balance of funds and identical JGB issues, the amounts of settlements, and funds and JGBs necessary for settlement, as well as their exposures during the day are significantly lower than before.

Later, clearing functions were improved through the enhancement of JGBCC governance and the participation in the JGBCC by trust banks that account for a large share of JGB transaction settlements.

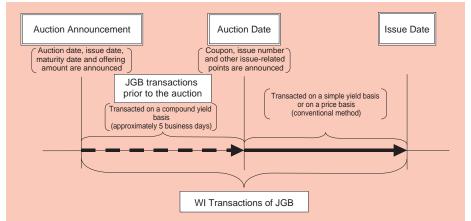
- **☞**1 The "Promotion Meeting for Reform of the Securities Clearing and Settlement" is established under the "Committee for Reform of Securities Clearing and Settlement System" which is hosted by the Japan Securities Dealers Association. Its purpose is to engage, from an overarching, cross-sectional perspective, in the progress management of the securities settlement system reform and in the discussion of topics that cut across products and industries.
- a JGB auction and issuance, T (auction date) +1 was also implemented for auctions from May 1, 2018, in principle (See Chapter 1 1(5)D "Shortening of Settlement Cycles in Primary JGB Market" (P48)).
- **☞**① Bilateral netting is a method for the settlement of the difference between the various JGB delivery obligations and JGB payment obligations of two counterparties in situations where both types of obligation exist, as opposed to requiring each counterparty to meet each separate obligation as it falls due at the same time. All obligations are netted on each individual JGB and fund for settlement purposes. This netting process serves to reduce settlement volumes across the market as a whole.
- The clearing institution comes between buyers and sellers to clear credit and debt relations established between numerous parties for securities and other transactions by replacing those relations with those between the clearing institution and sellers and those between the institution and buyers.
- On October 1, 2013, the JSCC merged with the JGBCC and took over the JGBCC's clearing services for over-thecounter JGB trading.

# (4) WI Transaction

A WI (When-Issued) transaction is a transaction made during a period between an auction announcement (in principle, a week before an auction date) and the previous day of its issuance. Besides a WI transaction during a period between an auction and the day of its issuance, one has become available prior to an auction date since February 2004.

A price of WI transactions functions as a predicted value of a bid price to be accepted because it reflects trends in the demand for a new issue prior to its auction. For the issuer, active WI transactions are considered to contribute to the efficiency of fundraising activities since they strengthen the linkage between the primary and secondary markets and reduce the uncertainty inherent in the auction process.





# (5) Bond Gensaki and Bond-Lending Transactions

# A. Bond Gensaki Transaction

Bond *Gensaki* Transactions are bond sales transactions in which the traded bonds are traded back in the opposite direction on a date and at a price specified in an agreement concluded in advance between the parties to the transaction.

Bond *Gensaki* Transactions were a principal fundraising means for financial institutions holding securities soon after the end of World War II. While new short-term financial products such as certificates of deposit (CDs), commercial paper (CP), and large-lot time deposits were widely accepted by investors later, however, Bond *Gensaki* Transactions have been replaced by Bond-Lending Transactions and other means because Bond *Gensaki* Transactions are subject to the securities transaction tax because they are classified as trading. Bond *Gensaki* Transactions were thus limited to those trading mainly in Treasury Bills and Financing Bills (today's Treasury Discount Bills) free from the securities transaction tax.

Following a recommendation from the "Sub-Council on the Internationalization of the Yen" under the Committee on Foreign Exchange and Other Transactions that Japan's repurchase market promote transaction formats consistent with global standards ((\*\*1)) and the abolition of the securities transaction tax in March 1999, a new Bond *Gensaki* Transaction format was introduced in April 2001 that incorporated risk management methods such as the use of a package settlement provision ((\*\*2)), margin call feature ((\*\*3)), and substitution ((\*\*4)).

Based on discussions at the Working Group on Shortening of JGB Settlement Cycle established in September 2009 (\$\infty\$5), T+1 was implemented as the standard settlement cycle

- "The internationalization of the yen for the 21st century—Japan's Response to Changes in Global Economic and Financial Environments," as replied to by the Council on Foreign Exchange and Other Transactions on April 20, 1999.
- one of the two counterparties to the transaction defaults on payment, all the debts and credits under the basic agreement between them are replaced by one single monetary debt and credit (each of which is obtained by terminating all individual transactions and then offsetting the resulting loss or profit against the total collateral).
- 3 If, while transactions are being conducted, any difference arises as between the market value of the bond in bondlending and the value of the collateral provided because of fluctuations in bond prices, this feature permits a counterparty to claim a collateral shortage at any time.
- → A feature whereby, during the transaction period, another bond of equal or higher market value can be used to substitute for the bond being sold or purchased, subject to the agreement of both parties and following a notification given by one counterparty to the other of such an intention to substitute.
- © Ref: Chapter 1 2(3) C "Shortening of settlement periods" (P52)

for JGB transactions on May 1, 2018. On this occasion, the settlement cycle for GC (General Collateral) repurchase transactions using unspecified bonds as collateral was shortened from T+1 to T+0, with new *Gensaki* transactions used for developing GC repos under the Subsequent Collateral Allocation Method, leading new *Gensaki* transactions to replace Bond-Lending Transactions.

Since November 2002, the BOJ has introduced JGB *Gensaki* operations using new *Gensaki* transactions in place of operations using the traditional Bond-Lending Transactions.

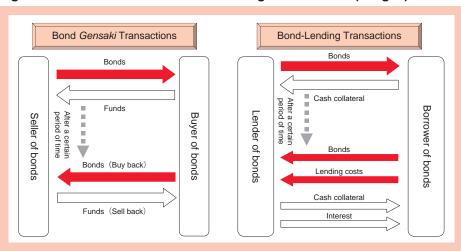
# **B. Bond-Lending Transaction**

Bond-Lending Transactions are Loan Transactions that one party (a lender) lends bonds to a second party (a borrower), and after a specified period, the borrower returns bonds of the same kind and in the same amount to the lender, thereby settling the lending transaction.

Bond-Lending Transactions were introduced in 1989 concurrent with the deregulation of the short-selling of bonds to promote the development of the secondary bond market. Bond-Lending Transactions were for the most part fully uncollateralized initially because regulations were imposed on interest on cash collateral to prevent competition with the Bond *Gensaki* Transactions and because collateralized Bond-Lending Transactions using non-cash collateral such as substitute securities were shunned by market participants due to complicated clerical work.

The collapse of the Barings Bank in February 1995 served as a fresh reminder of the risk associated with unsecured dealings. In order to mitigate credit risk, Bond-Lending Transactions underwent a review towards collateralization, modeled after the U.S. repurchase transactions. Risk management was reinforced by putting into place a package settlement provision and margin call features, and with the change to rolling settlement ( 1) of JGB transactions, the minimum limit for cash collateral was abolished along with the limit on interest. Beginning in April 1996, cash-secured Bond-Lending Transactions were initiated ( 2). Cash-secured Bond-Lending Transactions have actively been made for GC transactions and SC (Special Collateral) transactions to procure cash bonds required for unwinding short positions on bonds. In November 1997, they were included in the operations of the BOJ. Moreover, the JGBCC in May 2005 started settlement services including repo transaction settlements (such as obligation assumption and netting) and risk management, contributing to expanding repo transactions.

Fig. 2-12 Bond Gensaki and Bond-Lending Transactions (images)



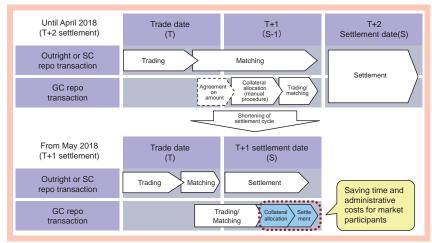
- Rolling settlement is a method to settle transactions sequentially, when it passed by the scheduled days. Before the change, settlements were concentrated on a specific day every month.
- Lending Transactions are called "Japanese Repurchase (Repo) Transactions." While global standard repo transactions are buying and selling transactions, Japan's repo transactions center on borrowing and lending transactions (particularly for cash-secured Bond-Lending Transactions) and are called Japanese Repo Transactions discriminated from global-standard repo transactions. They are also called "cash-secured repos" or "bond-lending repos."

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# C. GC Repos under Subsequent Collateral Allocation Method

When the standard JGB settlement cycle was shortened to T+1 on May 1, 2018, the settlement cycle for ordinary JGB transactions (hereinafter referred to as outright transactions) and SC repurchase transactions was shortened from T+2 to T+1. At the same time, JSCC introduced GC Repos under Subsequent Collateral Allocation Method (Subsequent Collateral Allocation Repos), making GC repo transactions available for the T+0 settlement cycle.

Fig. 2-13 Image of Shortening of JGB Settlement Cycle

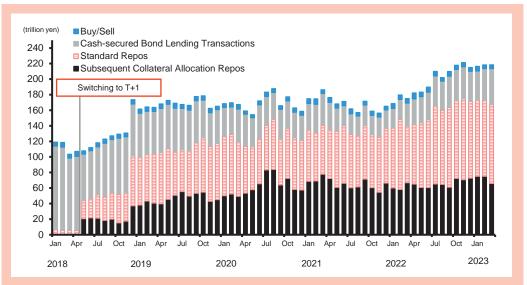


(Source) Prepared by the MOF based on the "Grand Design for Shortening of JGB Settlement Cycle (T+1)" published on November 26, 2014, by the Working Group on Shortening of JGB Settlement Cycle

GC repo transactions are frequently conducted by securities companies to raise funds to cover shortages after outright or SC repo transactions. GC repo transactions thus accompany outright or SC repo transactions. When the T+1 standard settlement cycle took effect for outright and SC repo transactions, therefore, how to accelerate post-trade procedures for GC repo transactions became a challenge. Then, the Subsequent Collateral Allocation Repos through new *Gensaki* transactions were introduced, based on precedent European and U.S. cases. Parties to a Subsequent Collateral Allocation Repo transaction designate the amount of funds to be delivered and a JGB basket (e.g., conditions for specifying the scope of JGBs for collateral allocation such as "Treasury Discount Bills" and "JGBs with maturity of less than 10 years or Treasury Discount Bills") before contracting, leaving JSCC to allocate the specific issue of JGBs for the transaction just before the settlement. In this way, market participants' administrative costs including the selection of JGB issues have been reduced, allowing the time for post-trade procedures to be shortened.

Transition from lending transactions (cash-secured repos) to the global standard of new *Gensaki* transactions (*Gensaki* repos including Subsequent Collateral Allocation Repos), as recommended upon the T+1 settlement cycle introduction, has made due progress. In the future, the globalization and vitalization of Japan's repo market, including the expansion of nonresidents' participation in the market, are expected to further improve the convenience of overall market participants.





Note: On a clearing value basis. *Gensaki* and cash-secured repos include both starts and ends. (Source) JSCC

# (6) STRIPS

STRIPS (Separate Trading of Registered Interest and Principal of Securities) are a type of coupon-bearing government bonds of which coupons and principal can be separated and traded respectively. These separated coupons and principal can be reconstructed into a whole security.

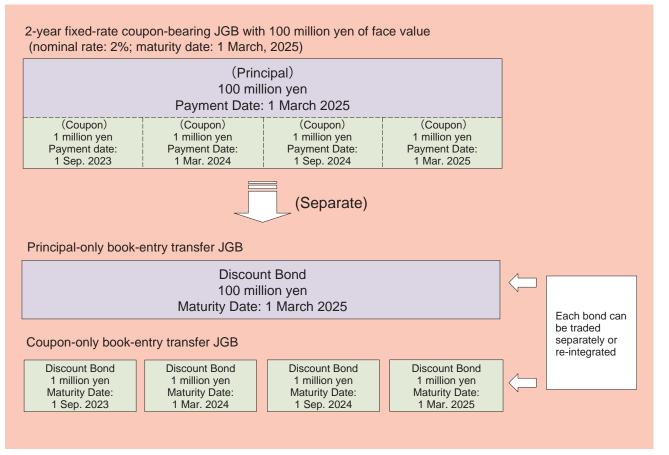
Since January 2003, it has been possible to strip JGBs (). The introduction of STRIPS is expected to make it possible to meet the needs of investors who want the separation of principal and interest components, and at the same time, to enhance arbitrage (interest rate adjustment) functions between discount bonds and coupon-bearing bonds, thus improving the efficiency of the JGB market.

The state of stripping of STRIPS is published at the MOF's web site on a regular basis.

All coupon-bearing bonds issued in January 2003 and thereafter except for 15-Year Floating-Rate Bonds, JGBs for Retail Investors, and 10-Year Inflation-Indexed Bonds are the "Strippable Book-entry Transfer Securities. (Bonds issued as the same issue as special deficit-financing bonds provided by the "Act on Book-Entry Transfer of Corporate Bonds and Shares" are excluded.)"

While no restrictions exist on holders of stripped JGBs, only the JGB Market Special Participants are allowed to apply for the separation and reconstruction of STRIPS.

Fig. 2-15 STRIPS - Conceptual Diagram



1

# (7) JGB Futures Trading

Futures trading means trading in a commodity or a financial asset at a price set at present on a particular future date.

JGB futures are used for hedging risks associated with JGB trading () and serve as a bond market trend indicator, playing a key role in leading the primary and secondary JGB markets to work smoothly.

# A. Outline of JGB futures trading

JGB futures trading is outlined in three parts here. The first part outlines JGB futures. While there are four types of JGB futures – 5-year, 10-year, mini 20-year and mini 10-year (Cash-Settled) (Fig. 2-17) – listed on the Osaka Exchange, 10-year JGB futures account for most of JGB futures trading volume. The 10-year JGB futures are listed on the Singapore Exchange as well as the Osaka Exchange.

The second part outlines the JGB futures system. For JGB futures trading, trading instruments, contract size, the last trading day ((), the delivery settlement date (()) and other trading terms and conditions are standardized on the premise that many unspecified market participants trade in JGB futures on securities exchanges. Particularly, trading instruments are not actually issued JGBs, but notional JGBs called "standardized instruments" (().

Any party can implement a massive futures transaction by paying margin money that is far less than the full transaction value. This is a feature of futures trading. Therefore, some investors proactively use JGB futures trading to leverage their investment positions.

The third part deals with how to settle JGB futures transactions. For settling a futures transaction, a party may at any time before the last trading day make an offsetting trade (long liquidation or short covering) for net settlement, or pay/receive the trading price and receive/deliver actual JGBs on the delivery settlement date. Offsetting trades are used for most futures trading.

For delivery settlement, actual JGBs designated as delivery-qualified issues ( (4) will be delivered in place of notional JGBs. As a standardized instrument and a delivery-qualified issue have different coupon rates and remaining maturities, a separately computed rate is used for adjusting a delivery price. This rate is called "conversion factor." Specifically, a delivery price is computed by multiplying a futures price and a conversion factor for a delivery-qualified issue together ( (5)).

While there are multiple delivery-qualified issues, the delivering party (or the futures seller) has the right to select an issue for delivery. An issue costing the delivering party least is called the cheapest issue. As the delivering party can minimize losses or maximize profits by selecting the cheapest issue for delivery, the cheapest issue is usually selected for delivery. Therefore, futures prices tend to be closely linked to prices of the cheapest issues.

Under the current market environment where a coupon on actual JGBs is lower than a 6% coupon on 10-year JGB futures, the cheapest among delivery-qualified issues is, in most cases, the one which has the shortest remaining maturity, at 7 years.

#### **B.** Investors in JGB futures

Various investors use JGB futures. For instance, primary dealers that play a central role in the primary and secondary JGB markets use futures to hedge interest rate risks for JGBs that they purchase in the markets. Given that futures trading is almost free from counterparty risks For instance, a dealer who bought cash long-term JGBs and sold futures can offset losses or gains on those JGBs because futures prices correlate with cash JGB prices. Investors including banks use highly liquid futures to hedge interest rate risks linked to bond investment portfolios.

- •1 The "last trading day" is set to come five trading days before the delivery settlement date (Fig. 2-17).
- •• 2 The "delivery settlement date" is the 20th of March, June, September and December (Fig. 2-17).
- ◆3 "Standardized instruments" mean notional JGBs for which the stock exchange standardizes interest rates, redemption dates, and some other factors. For 10-year JGB futures trading, the standardized instrument is a notional JGB issue that carries a coupon rate of 6% and is set to mature in 10 years.
- ◆ "Delivery-qualified issues" mean 10-Year Couponbearing JGBs with a remaining maturity of not less than 7 years but less than 11 years at the delivery settlement date in the case of 10-year JGB futures trading.
- ●⑤ If the futures price is 150 yen and the conversion factor for the delivery-qualified issue is 0.72, the delivery price comes to 108 yen (150 yen x 0.72).

because trading counterparties are creditworthy exchanges and clearing institutions and that investment positions can be leveraged, JGB futures are a convenient tool for investors seeking to earn trading gains through short-term JGB buying and selling. In recent years, pension funds and other investors known for a long-term bond investment have proactively used JGB futures to leverage their investment positions.

Among investors conducting short-term buying and selling, commodity trading advisors (CTAs) feature an especially great presence in the futures market. The CTA had originally meant a registered qualification required to provide advice about futures trading to clients in the United States. At present, however, the CTA refers to hedge funds investing mainly in futures or investment strategy of these funds. According to the Japan Exchange Group, foreign investors account for more than 60% of the JGB futures trading volume. The data does not provide a breakdown of foreign investors, but CTAs are believed to have accounted for a large part of them.

It is known that CTAs adopt an investment approach called "trend following". The approach represents an investment strategy that follows an uptrend or downtrend of asset prices. If CTAs identify an uptrend in Japan's bond market based on their standards or algorithms, for instance, they may buy long-term JGB futures. They may continue buying as far as the uptrend is sustained. When the uptrend is identified as ending, they may sell their holdings to lock in profits.

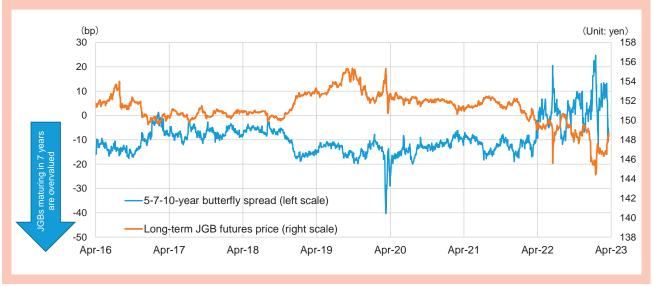
In this way, CTAs base their investment not on absolute yield levels but on a bond price fluctuation trend. Even under the BOJ's Quantitative and Qualitative Monetary Easing with Yield Curve Control, they may conduct active trading without considering yield levels once a trend is identified.

When CTAs and other investors intensify trading in JGB futures irrespective of absolute yield levels, JGBs maturing in seven years that are subject to arbitrage adjustment with futures may be undervalued or overvalued against other JGBs. The butterfly spread ( ), which indicates whether a yield on an issue with a certain maturity is relatively higher or lower on the yield curve, shows that JGBs maturing in seven years became undervalued (with the yield rising) between autumn 2016 and early 2017 and overvalued (with the yield falling) in late 2018. In these periods, CTAs and other investors might have activated their investment ( ). Since 2022, there has been an increase in the concentrated selling of futures, mainly by CTAs and other investors. On the other hand, JGBs with a remaining maturity of 7 years have become noticeably undervalued relative to long-term (10-Year) interest rates.

The 5-, 7- and 10-year butterfly spread is generally expressed as 7-year rate x 2 - (5-year rate + 10-year rate).

→2The great volatility seen in March 2020 might have been attributable to a market liquidity decline accompanying the spread of COVID-19.

Fig. 2-16 5-7-10-Year Butterfly Spread and Long-term JGB Futures



(Note) 5-7-10-year butterfly spread:  $2 \times 7$ -year yield – (5-year yield + 10-year yield) (Source) Bloomberg

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Fig. 2-17 Overview of JGB Futures Trading

	5-year JGB Futures	10-y	ear JGB Futures	min	i 20-year JGB Futures	mini 10-year JGB Futures (Cash-Settled)		
Opening Date	Feb. 16, 1996	(	Oct. 19, 1985		Apr. 7, 2014	Mar. 23, 2009		
Contract	Standardized 3%, 5-year JGB		andardized 6%, 10-year JGB		Standardized 3%, 20-year JGB	Price of standardized 6%, 10-year JGB		
Deliverable Grade	Interest-bearing 5-year JGBs with 4 years or more but less than 5.25 years.  Interest-bearing 10-year JGBs with 19 years 20-year JGBs with 7 years or more but less than 11 years.  Interest-bearing 20-year JGBs with 19 years 3 months or more but less than 21 years.				_			
Trading Hours	<morning session=""> Opening: 8:45 Regular session: 8:45-11:00 Closing: 11:02 <afternoon session=""> Opening: 12:30 Regular session: 12:30-15:00 Closing: 15:02 <night session=""> Opening: 15:30 Regular session: 15:30-5:55 (next day) Closing: 6:00 (next day) *1: If no trade is made at the opening, a shift to the regular session will be made. *2: If no trade is made at the closing, trade will not be executed.</night></afternoon></morning>							
Contract Month	3	3 months in	the March quarterly cy	ycle (Ma	arch, June, September an	d December)		
Last Trading Day	*6th business day prior to each delivery date (20th day of each contract month, move-down the date when it is not the business day). Trading for the new contract month begins on the business day following the last trading day.  *6th business day prior to each date of the 10-year JGB Future the same contract month. Trathen ew contract month begins on the business day following the last day of 10-year JGB Futures.  *Final settlement day is the 2nd day following the last trading day.							
Contract Unit	100 million y	en face val	ue	10	million yen face value	Multiply 100 thousand yen by the price of 10-year JGB Futures		
Tick Size		0.01 yen p	er 100-yen face value			0.005 yen		
Price Limits	(1) The price limit range shall be  5-year JGB  Normal  Expansion  * The price limits will be expanded to	Futures ± 2. ± 3. the expansion	10-year JGB Fut 00 yen 00 yen on of price limits (Only price	ce limits i		± 2.00 yen ± 3.00 yen , will be expanded.)		
THEO EITHE	(2) Immediately Executable Price			•	1 , ,			
	5-year JGB Futures 10-year JGB Futures mini 20-year JGB Futur			, , ,				
	Opening Auction					± 0.30 yen		
	Normal  Closing Auction ± 0.10	± 0.10 yen ± 0.90 yen			± 0.90 yen	± 0.10 yen ± 0.15 yen		
Circuit Breaker Rule (SCB)	In the case where there was a tr limit range, trading in all contract	ade, etc. in				Trading is suspended while 10- year JGB Futures is in SCB state.		
Strategy Trades		Th	e calendar spread trad	ding is a	vailable. (Note 2)			
J-NET Trading (Note 3)		Available	e (Tick size: 0.0001 ye	n, Minin	num trading unit: 1 unit)			
Final Settlement Method	Delivery of JGBs  Cash Settlement based on Final Settlement Price							
Delivery of Bonds	The delivery of issues is at the discretion of the seller of the futures contract.							
Margin	Calculated by using SPAN® (Note 4) (Margin offsetting with other JGB Futures and Options on JGB Futures contracts is allowed.)							
Give-up (Note 5)	Available							
Position Transfer (Note 6)			Avai	lable				
	Contract month: The nearest contract month of JGB Futures Target: Proprietaries and any customers whose amount of net position are no less than following volume							
Reporting of Large	5-year JGB F		10-year JGB Future	es n	nini 20-year JGB Futures	Nothing		
Positions	Reporting level 500 contracts 1,000 contracts 5,000 contracts					- Nothing		
	Measurement date: Every Friday (In the case that it is from the beginning of March, June, September and December to the last trading day of the contract, reporting has to be made every trading day.							

- (Note 1) From the viewpoint of preventing sudden price fluctuations, such as those caused by erroneous orders, trading is temporarily halted when an order bringing an
- execution outside of a set price range based on the last reference price is placed. This is called the Immediately Executable Price Range Rule.

  (Note 2) Calendar spread trading means a form of trading conducted by placing bids/offers based on the price difference (spread) between two different contract months (specifically, a nearer contract month and a farther contract month; for example, March and June) to establish opposite positions by making one sale and one purchase at the same time for the two contract months.
- (Note 3) J-NET Derivatives Trading refers to off-auction futures and options trading in the J-NET market which is independent of the auction market on the Osaka Exchange.
- (Note 4) The SPAN® (Standard Portfolio Analysis of Risk) system is a methodology that calculates risk-based margin developed by the Chicago Mercantile Exchange (CME). (Note 5) A give-up system enables a customer to entrust order-execution to a transaction participant and to entrust its settlement-related operations (payment/receipt of the difference at the time of settlement for futures trading, payment/receipt of options premium and margins, etc.) to other transaction participants.
- (Note 6) A Position Transfer System allows a transferring clearing participant (a transaction clearing participant who transfers unsettled positions) to transfer unsettled Futures/ Options positions to a transferee clearing participant (a transaction clearing participant who takes over unsettled positions from the transferring clearing participant), with prior JSCC approval.

# 3

# **Debt Management Systems**

# (1) Redemption System

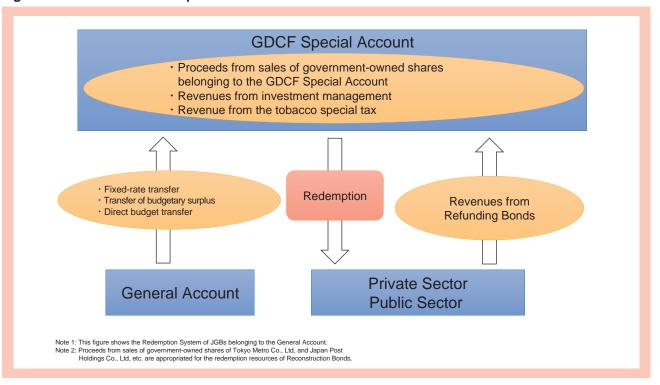
All the JGBs issued under the General Account and the Special Accounts of the national budget are redeemed through the Government Debt Consolidation Fund (GDCF).

To ensure stable redemption, redemption funds are transferred from each Account to the GDCF based on certain rules. In addition, revenues from Refunding Bonds, issued through the GDCF Special Account, are posted to the GDCF. Moreover, the proceeds from the sales of government-owned shares that belong to the GDCF Special Account are also transferred into the GDCF.

Simply put, fiscal resources for government bond redemption are all funneled through the GDCF – from reception and accumulation to disbursements.

This section explains applicable redemption methods and redemption resources for each JGB category with different legal grounds. Then, it also describes the GDCF Special Account.

# Fig. 2-18 Mechanism of Redemption



# A. Redemption Methods

When redeeming JGBs, redemption rules will be applicable as set forth in related legislations.

# a. 60-Year Redemption Rule (Construction Bonds and Special Deficit-Financing Bonds)

The 60-year redemption rule is applicable to redeeming Construction Bonds and Special Deficit-Financing Bonds so that these JGBs, including Refunding Bonds, will be entirely redeemed in a 60-year period ( ). Redemption of JGBs is financed with two revenue sources: cash from such sources as a fixed-rate transfer from the General Account and revenues from issuing Refunding Bonds in accordance with applicable rules. The 60-year redemption rule is maintained in this way. When redeeming Special Deficit-Financing Bonds, the government will "strive to redeem these bonds as soon as possible" as set forth in its governing law.

Fig. 2-19 will give you an idea about how the 60-year redemption rule works.

Suppose you issue 600 billion yen of debt in fixed-rate coupon-bearing 10-year bonds, at maturity (i.e., 10 years from now) you will redeem 100 billion yen of them in cash ( ) – equivalent to 1/6 of 600 billion yen – while issuing Refunding Bonds to cover the remaining 500 billion yen. Assuming that these Refunding Bonds will also be issued in fixed-rate coupon-bearing 10-year bonds, then you will redeem 100 billion yen in cash – 1/6 of the initial issue amount of 600 billion yen – in another 10 years, while issuing Refunding Bonds to cover the remaining 400 billion yen. Repeat this for four more times, then, you'll be able to complete the cash redemption in 60 years from the first issuance.

As shown in the figure below, because annual fixed-rate transfer is calculated based on the JGB outstanding amount at the beginning of the previous fiscal year, it decreases along with the decrease in the JGB outstanding amount. Therefore, fixed-rate transfer will be insufficient to finance bond redemption in cash. For this reason, bond redemption will also be complemented with a transfer of budgetary surplus, a direct budget transfer, and proceeds from sales of government- owned shares.

The rule stands on the fact that the average economic depreciation period of the assets purchased by the construction bonds is about 60 years. Deriving from this rule is the 1.6% ratio for fixed-rate transfer for each fiscal year, which is about equivalent to one-sixtieth.

The term "cash" redemption in this context means that bond redemption is not financed with issuing Refunding Bonds. From the viewpoint of individual bond holders, their JGBs will always be redeemed with cash at maturity.

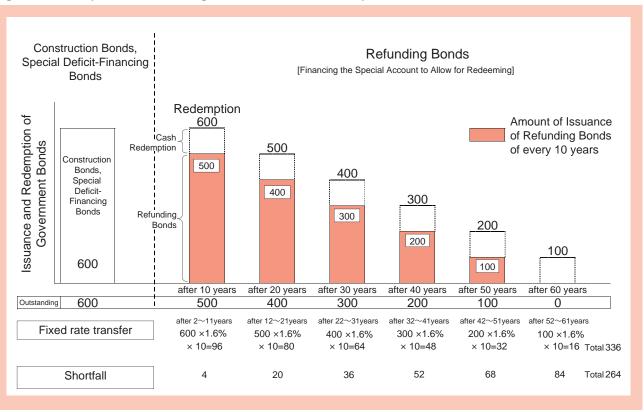


Fig. 2-19 Redemption via Refunding Bonds – "60-Year Redemption Rule"

#### **b.** Redemption Methods for Reconstruction Bonds

Reconstruction Bonds, including their Refunding Bonds, will be entirely redeemed in FY2037 at the latest. The 60-year redemption rule will not be applicable to the redemption of Reconstruction Bonds. This is because "Basic Guidelines for Reconstruction in response to the Great East Japan Earthquake" states that the financial resources for recovery and reconstruction shall "basically be borne by the entire current generation, collectively sharing the financial burden by solidarity and not be left as cost of future generations" and redemption of these bonds will surely be financed with certain revenue resources.

Specifically, a portion of Reconstruction Bonds (including Refunding Bonds for Reconstruction Bonds) to be redeemed in each fiscal year will be redeemed with cash to the extent of the amount transferred from the Special Account for Reconstruction from the Great East Japan Earthquake to the GDCF Special Account, financed by the revenues from Special Taxes for Reconstruction, etc. and profit from sales of government-owned shares, etc., while the remaining portion will be entirely covered with Refunding Bonds. The redemption of Reconstruction Bonds is planned to be finished by repeating cash-based redemption and Refunding Bond-based redemption every fiscal year by FY2037.

## c. Redemption Methods for GX Economy Transition Bonds

Considering that the target fiscal year for achieving carbon neutrality is FY2050, GX Economy Transition Bonds, including their Refunding Bonds, will be redeemed by FY2050.

Specifically, a portion of GX Economy Transition Bonds (including Refunding Bonds for GX Economy Transition Bonds) to be redeemed in each fiscal year will be redeemed with cash to the extent of the amount transferred from the Special Account for Energy

Measures to the GDCF Special Account, financed by the revenues from GX Surcharge (surcharge on fossil fuel supply) and GX-ETS (Emissions Trading Systems) Auction while the remaining portion will be entirely covered with Refunding Bonds. While repeating cash-based redemption and Refunding Bond-based redemption, GX Economy Transition Bonds are planned to be redeemed as a whole by FY2050.

## d. Other Redemption Methods for JGBs

General Bonds subject to redemption methods other than those above include Special Deficit-Financing Bonds issued by FY1984, Gulf Special Deficit-Financing Bonds issued in FY1990, Tax Cut Special Deficit-Financing Bonds issued between FY1994 and FY1996 and Special Bonds for Covering Public Pension Funding issued in FY2012 and FY2013. As Special Deficit-Financing Bonds were prohibited from being redeemed with refinancing in the past, the 60-year redemption rule was not applicable to Special Deficit-financing Bonds issued up until FY1984. For this reason, the 60-year redemption rule did not apply to JGBs redeemable by FY1984 ( ), but the rule becomes applicable to JGBs redeemable from FY1985 onward. In addition, Gulf Special Deficit-Financing Bonds got redeemed in 4 years ending in FY1994 as initially scheduled. Of Tax Cut Special Deficit-Financing Bonds, those set to be redeemed in 20 years ( ) were all redeemed by FY2017. Special Bonds for Covering Public Pension Funding and relevant Refunding Bonds will be redeemed by FY2033.

Unlike General Bonds that are redeemed with tax and other revenues, FILP Bonds are redeemed with such revenues as loan repayments to the Fiscal Loan Fund. In this case, the government transfers necessary redemption funds from the Fiscal Loan Fund Special Account to the GDCF Special Account every fiscal year to redeem FILP Bonds.

## **B. Redemption Resources**

Redemption resources for JGBs are set forth in applicable laws. This section explains financial resources used for cash-based redemption.

# a. Redemption Resources for Construction Bonds and Special Deficit-Financing Bonds

#### **① Transfer from the General Account**

For government bond redemption, there are three ways to transfer fiscal resources from the General Account to the GDCF Special Account.

# i. Fixed-rate transfer (1.6% of total government bonds outstanding as of the beginning of the previous fiscal year)

The fixed-rate transfer is based on Article 42, paragraph (1) of the "Act on Special Accounts." Specifically, the amount equal to 1.6% of total government bonds (outstanding in face value) at the beginning of the previous fiscal year is transferred from the General Account to the GDCF Special Account based on the 60-year redemption rule. Those subject to the fixed-rate transfer are limited to Public Bonds covered in the General Account (Construction Bonds, Special Deficit-Financing Bonds (excluding Special Bonds for Covering Public Pension Funding)), and Borrowings (excluding Temporary Borrowings, etc.) and their Refunding Bonds ().

All JGBs redeemable in FY1984 were redeemed by cash and the 60-year redemption rule was not applied even though they could be redeemed with refunding based on the

→ 2 Tax Cut Special Deficit-Financing Bonds were issued in line with special income tax reduction and other measures (excluding the abolition of special corporation and automobile consumption taxes) implemented between FY1994 and FY1996 and redeemed in 20 years from FY1998 to FY2017.

When calculating the outstanding amount of discount bonds, their issuance price is regarded as the face value (Article 42, paragraph (3) of the "Act on Special Accounts"). As to the difference between the issuance price and the face value (i.e., (the sum) equivalent to redemption profit), the difference divided by the number of years to maturity is additionally transferred to the GDCF Special Account every fiscal year (Article 42, paragraph (4) of the "Act on Special Accounts").

# ii. Transfer of a budgetary surplus (A minimum of half of the surplus in the General Account as a result of the settlement of the fiscal year)

Pursuant to Article 6, paragraph (1) of the "Public Finance Act," when surplus is generated in the General Account as a result of the settlement, at least half the surplus must be transferred to the GDCF Special Account within two years from the said fiscal year in which the surplus was generated ( ).

# iii. Direct budget transfer (A discretionary transfer specified by the General Account budget when necessary)

In addition to the above transfers, to ensure smooth redemption of government bonds, Article 42, paragraph (5) of the "Act on Special Accounts" prescribes that a discretionary transfer, which is specified by the budget can be made as needed from the General Account to the GDCF Special Account.

#### **2** Others

# i. Proceeds from government-owned shares belonging to the GDCF Special Account

Proceeds from sales and dividends of government-owned shares that belong to the GDCF Special Account shall be set aside as a resource for redemption of JGBs. A part of Nippon Telegraph and Telephone Corporation (NTT) shares and a part of shares of Japan Tobacco Inc. (JT), an equity stake in Teito Rapid Transit Authority () and a part of the shares of Japan Post Holdings Co., Ltd. were transferred to the GDCF Special Account as the JGB redemption resources in FY1985, FY1998 and FY2007, respectively. The MOF finished selling out NTT shares and JT shares (a portion held initially) in the GDCF Special Account in September 2005 and June 2004, respectively. Proceeds from the sale of shares currently belonging to the GDCF Special Account (including shares newly allocated to the GDCF Special Account in accordance with the "Reconstruction Funding Act") will be spent for redeeming Reconstruction Bonds.

#### ii. Proceeds from allocation

The surplus of the GDCF can be invested into JGBs or deposited in the Fiscal Loan Fund. The MOF pursues efficient allocation of these government bonds, while taking into account the need to secure adequate levels of liquidity in order to ensure smooth implementation of large-scale redemption and refunding. Proceeds from the allocation are credited to the GDCF Special Account to be included in its revenues.

# **b.** Redemption Resources for Reconstruction Bonds

## **1** Revenues from Special Taxes for Reconstruction

As tax measures to finance restoration and reconstruction from the Great East Japan Earthquake, the government created Special Taxes for Reconstruction that are additional income and corporation taxes for limited durations (Special Income Tax for Reconstruction and Special Corporation Tax for Reconstruction).

Specifically, the Special Income Tax for Reconstruction is a limited-duration measure from January 2013 to December 2037 to impose an additional 2.1% income tax. The Special Corporation Tax for Reconstruction is a limited-duration measure from FY2012 to FY2014 to impose an additional 10% corporation tax. However, the special corporation

The supplementary provisions of the "Reconstruction Funding Act" call for using such surplus primarily for redeeming Reconstruction Bonds from FY2011 to FY2015.

As Teito Rapid Transit Authority was privatized and renamed Tokyo Metro Co., Ltd. in April 2004, Tokyo Metro shares were distributed to the government free of charge in proportion to the government's equity stake in Teito Rapid Transit Authority. Therefore, the equity stake has been replaced with shares.

tax was terminated one year ahead of schedule under the FY2014 tax reform to encourage corporations to use their earnings for raising wages.

# 2 Non-tax Revenues

# i. Utilizing Reserves in the FILP Special Account

It was stipulated that from the reserves in the Fiscal Loan Fund Account of the FILP Special Account, an amount designated in the annual budget could be used for redeeming Reconstruction Bonds from FY2012 to FY2015, and from revenues from assets in the Investment Account of the FILP Special Account, an amount designated in the annual budget could be used for the same purpose from FY2016 to FY2022.

## ii. Proceeds from government-owned shares

Regarding JT shares (excluding the government's mandatory shareholding ((())), shares of Tokyo Metro Co., Ltd. ((()) and shares of Japan Post Holdings Co., Ltd. (excluding the government's mandatory shareholding ((())) belonging to the GDCF Special Account, proceeds generated from the sale of those shares no later than FY2027 will be spent for redeeming Reconstruction Bonds.

# **3 Utilizing Settlement Surplus**

The supplementary provisions of the "Reconstruction Funding Act" stipulate that, if settlement surplus in the General Account revenues and expenditures from FY2011 to FY2015 is utilized to finance redemption of Public Bonds or repayment of borrowings, the government is supposed to put a higher priority on the redemption of Reconstruction Bonds.

# c. Redemption Resources for GX Economy Transition Bonds

# ① GX Surcharge (surcharge on fossil fuel supply)

GX Surcharge (surcharge on fossil fuel supply), a type of carbon pricing, is scheduled to be introduced as one of the mechanisms to give business operators an incentive to start working on GX initiatives early.

Specifically, from FY2028, the GX Surcharge will be imposed on fossil fuel importers, etc. according to the amount of carbon dioxide that is derived from the fossil fuels they import. This income will then be used for the redemption of GX Economy Transition Bonds.

# 2 Revenues from GX-ETS (Emissions Trading Systems) Auction

Similar to the GX Surcharge, GX-ETS (Emissions Trading Systems), a type of carbon pricing, is also scheduled to be introduced.

Specifically, from FY2033, a portion of carbon dioxide emission quotas will be allocated to power generators through auction and a charge based on these quotas will be collected. This income will then be used for the redemption of GX Economy Transition Bonds.

#### d. Redemption Resources for Other JGBs

# ① Special Tobacco Tax Revenues

The government has created the Special Tobacco Tax in accordance with the "Act on Special Measures for Securing Necessary Financial Resources Incidental to Transfer of Debt to General Account" in order to cover a cost increase for the General Account to take

- According to the "Reconstruction Funding Act," the mandatory government's share-holding in JT has been reduced from "1/2 or more" of the total shares outstanding to "more than 1/3". As a result, during the period from February to March 2013, the government sold a portion that could be sold (1/6 of the shares outstanding). (The amount of net proceeds from the sale is approximately 973.4 billion yen.)
- **∞2** The government holds 53.4% of the total outstanding shares (as of the end of March 2023).
- The government sold out JP shares available for sale by selling a total of about 880 million shares (net proceeds at about 1,411 billion yen) in November and December 2015. a total of 1,060 million shares (net proceeds at about 1,398.5 billion yen) in September 2017 and a total of 1,300 million shares (net proceeds at about 1,086.7 billion yen) in June and October 2021. The government holds 34.3% of the total outstanding shares (as of the end of March 2023). The government is required to hold more than one-third of the total outstanding shares.

over the Japanese National Railway (JNR) Settlement Corporation's long-term debt and the National Forest Service's accumulated debt. Special Tobacco Tax revenues are directly transferred to the GDCF Special Account to repay principals and interests of the JNR Settlement Corporation's long-term debt and the National Forest Service's accumulated debt.

#### **2** Others

Among General Bonds, Special Bonds for Covering Public Pension Funding are set to be redeemed with a tax revenue increase through the implementation of the revised Consumption Tax Act from FY2014.

Among the other bonds, FILP Bonds are redeemed with the collection of Fiscal Loan receivable.

#### C. GDCF Special Account

The GDCF Special Account is an independent account created for the purpose of clarifying the status of the country's total debt management, centered on the government debt issued under the General Account. It is a special account for the payment of the principals and interests of JGBs, funded through fiscal transfers from the General Account and other special accounts. A portion of the funds transferred from each account in the form of the fixed-rate transfer, etc., to the GDCF Special Account is accumulated as the GDCF, which serves as a sinking fund to finance the redemption of JGBs.

#### a. Basic roles

To redeem Construction Bonds and Special Deficit-Financing Bonds, which account for most of JGBs, and their Refunding Bonds in accordance with the 60-year redemption rule, the GDCF temporarily accumulates resources for secure redemption. In addition, by making sure steady redemption, the fund also plays a role in maintaining market confidence in JGBs.

#### b. Secondary roles

The GDCF plays the secondary roles as follows.

#### ① Contributing to financing the National Treasury

The GDCF serves to smoothly finance the National Treasury by underwriting Financing Bills.

#### 2 Compensating for deficit in the General Account

The GDCF will compensate for deficits in the General Account by transferring some funds to the Account Settlement Adjustment Fund. If the GDCF transfers some funds to the Account Settlement Adjustment Fund, the funds will be transferred back to the GDCF from the General Account by the first fiscal year after the fiscal year including the day for the transfer, avoiding any JGB redemption resource shortage.

#### D. Recent Measures for GDCF Special Account

Recent measures for the GDCF Special Account are explained below:

#### a. Reducing GDCF Balance

The GDCF is annually accumulated in the GDCF Special Account under a certain framework to respond to lags of redemption and transfer such as fixed-rate transfer from the General Account (1.6% of the total JGBs outstanding at the beginning of the previous fiscal year). The GDCF balance had been maintained at approximately 10 trillion yen using an issuance amount of approximately one week () as a guide in order to prepare for operational risks and other emergencies (possibilities that Refunding Bonds cannot be issued due to reasons such as large-scale disasters or system failure) until FY2012. When formulating the FY2013 JGB Issuance Plan, the government was allowed to use temporary borrowings from the BOJ for covering operational risks and reduced the GDCF balance to 3 trillion yen, equivalent to the level required to prepare for accidental underbidding in JGB auctions, which cannot be covered by such borrowings, taking into account the maximum bid amount of coupon-bearing JGBs per auction, etc. The equivalent to the reduction was used for redeeming JGBs to hold down Refunding Bond issuance.

Maximum issuance amount of JGBs: 9.6 trillion yen per day, 9.9 trillion yen per week (both figures current as of September 2011).

Fig. 2-20 Changes in Outstanding Amount of GDCF

FY2020 (Actual))	FY2021 (Actual)	FY2022 (Estimate)		
3,005.0 billion yen	3,018.0 billion yen	3,004.2 billion yen		

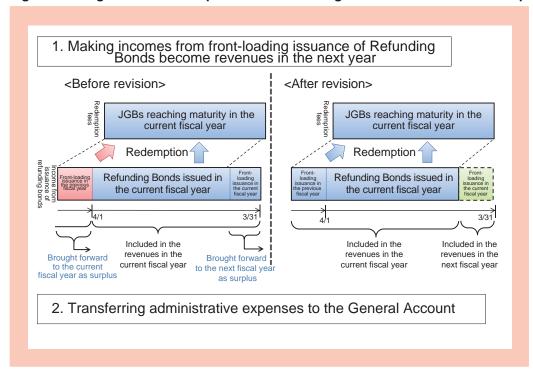
#### **b.** Revised Act on Special Accounts

Based on a report on special account reform (as compiled by the Administrative Reform Promotion Council on June 5, 2013), the government submitted to the Diet a bill to revise part of the "Act on Special Accounts" on October 25, 2013, and won its passage through the legislature on November 15, 2013. The revision allows the government:

- ① To book revenues from the front-loading issuance of Refunding Bonds for the next fiscal year rather than for the issuance year instead of booking such revenues for the issuance year and carrying them over as a surplus to the next fiscal year, and
- ② To transfer relevant administrative costs to the General Account from the FY2014 budget.

Ref: Chapter 1 1(1) A (Reference) Front-loading issuance of Refunding Bonds (P36)

Fig. 2-21 Changes in the GDCF Special Account Through the Revision of the Act on Special Account



#### (2) Liquidity Enhancement Auctions

Liquidity Enhancement Auctions reopen existing JGB issues, which have structural liquidity shortages or temporary liquidity shortages due to expanding demand, in order to facilitate JGB trading and correct JGB market distortions to maintain and improve JGB market liquidity and stabilize the JGB market for holding down the fundraising costs.

The yield-spread-competitive auction under the conventional method for JGB Market Special Participants alone is used for Liquidity Enhancement Auctions. In the auction, a bidder submits a bidding yield's spread with a standard yield (((a))) (a bidding yield-spread ((a))) and a bidding amount for each issue subjected to reopening. In principle, regardless of issues, the bidding amounts are allocated with priority placed on smaller bidding yield-spreads ((a)). Bids whose bidding amounts are allocated before the planned issuance amount is reached are successful (Fig. 2-22).

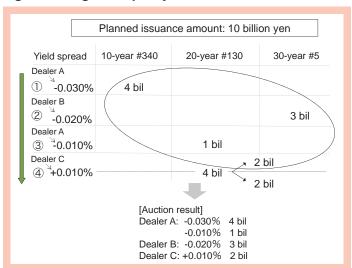


Fig. 2-22 Image of Liquidity Enhancement Auctions

Liquidity Enhancement Auctions were launched in April 2006 to issue 100 billion yen worth of bonds a month for small 20-Year Bond issues with 11-16 years remaining to maturity that structurally lacked liquidity. Later, the range of JGB issues, issuance amounts and frequency for Liquidity Enhancement Auctions have been gradually expanded to counter a remarkable decline in the JGB market's liquidity following the global financial crisis (Fig. 2-23). Subject to Liquidity Enhancement Auctions at present are all 2- to 40-Year JGB off-the-run issues ( ), which are divided into three zones by remaining maturity range – 1-5 years, 5-15.5 years, and 15.5-39 years.

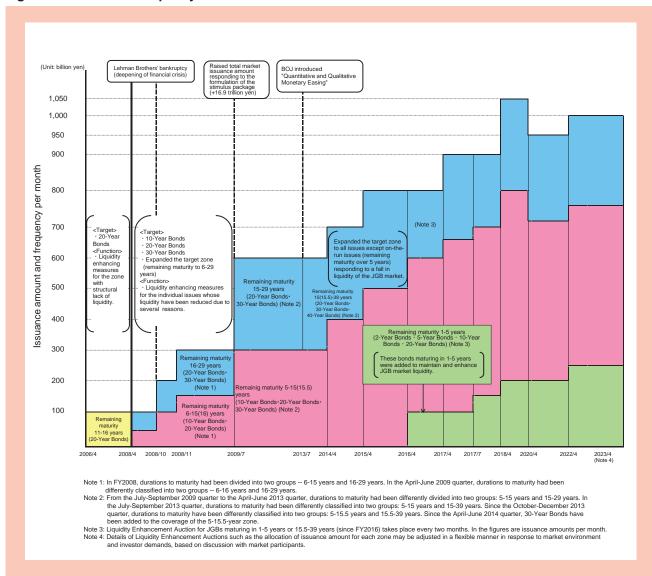
The FY2023 JGB Issuance Plan sets the same amount for Liquidity Enhancement Auctions at 12.0 trillion yen, from the previous year. Specifically, the plan sets the issuance amount through Liquidity Enhancement Auctions at 3.0 trillion yen for the remaining maturity of 1-5 years, 6.0 trillion yen for the remaining maturity of 5-15.5 years, and 3.0 trillion yen for the remaining maturity of 15.5-39 years, publishing planned zone-by-zone issuance amounts to improve the transparency of the auctions. Actual zone-by-zone issuance amounts will be adjusted flexibly in response to the market environment and investment needs, based on discussions with market participants.

For Liquidity Enhancement Auctions in the April-June 2023 quarter, the government

- Standard yield means the average simple yield cited in the Reference Statistical Prices [Yields] for OTC Bond Transactions published by the Japan Securities Dealers Association on the auction day.
- ≈ 2 A bidding yield-spread may be positive or negative. If a bidding yield is 1.030% against a standard yield of 1.000%, the bidding yield-spread is plus 0.030%. If a bidding yield is 0.970% against a standard yield of 1.000%, however, the bidding yield-spread is minus 0.030%.
- 3 If bidding yield-spreads are positive, priority is placed on smaller absolute values. If bidding yield-spreads are negative, however, priority is placed on larger absolute values.

However, for 2-Year Bonds, newly-issued bonds issued in the Auction month for Liquidity Enhancement Auctions are included. decided to issue 500 billion yen each month for 10-, 20- and 30-Year Bonds with 5-15.5 years remaining to maturity, 500 billion yen each in April and June for 20-, 30- and 40-Year Bonds with 15.5-39 years remaining to maturity, and 500 billion yen in May for 2-, 5-, 10- and 20-Year Bonds with 1-5 years remaining to maturity, based on discussions at the Meeting of JGB Market Special Participants and the Meeting of JGB Investors.

Fig. 2-23 Transition of Liquidity Enhancement Auctions



#### (3) Buy-back Program

Buy-back is defined as a scheme for the government as the issuer of JGBs to retire debt by purchasing existing bonds at a price agreed upon with the respective holders willing to take part in the deals prior to maturity of the bonds ( ).

For the Buy-back Program, the price-spread-competitive auction under the conventional method for JGB Market Special Participants is used with the government clarifying a planned Buy-back amount in advance. In the auction, a bidder submits a bidding price's spread with a standard price ((2)) (a bidding price-spread ((3))) and a bidding amount for the name and code of each target JGB issue. In principle, the bidding amounts are allocated with priority placed on a smaller bidding price-spread ((4)) until the Buy-back amount is reached.

In the past, the Buy-back program used to be implemented on very limited occasions: when JGBs were paid in kind to the government in accordance with the "Inheritance Tax Act" and when JGBs deposited with the government by an election candidate pursuant to the "Public Office Election Act" were confiscated due to the candidate's election loss. In recent years, however, the Buy-back program has been flexibly implemented to meet the MOF's specific purposes including leveling the concentration of JGB maturities and reducing the outstanding debt through transfers from the FILP Special Account.

Currently, the Buy-back program is used for Inflation-Indexed Bonds to improve the supplydemand balance and liquidity as market participants pointed out that a persistent supplydemand imbalance was seen and that liquidity premiums were expanding.

Since February 2020, Inflation-Indexed Bond supply and demand have remained unstable as JGB market liquidity has declined due to the global expansion of the COVID-19 outbreak. In response, an additional buy-back worth 300 billion yen was implemented in March 2020. From April 2020, a monthly Buy-back worth 50 billion yen was conducted. Inflation-Indexed Bond supply and demand remained unstable in early FY2021. As the improvement of the supply-demand relationship and a rise in the Break-Even-Inflation Rate through the Buy-backs and global price hikes were confirmed later, however, the monthly Buy-back was cut to 20 billion yen from January 2022.

While the government plans to implement JGB Buy-backs in FY2023 as necessary based on market scenes and discussions with market participants, many market participants continue to voice hopes to have Buy-backs continued for Inflation-Indexed Bonds. Considering that the development of the Inflation-Indexed Bond market is a key challenge for future JGB Management Policy, the government has set the planned Buy-back amount at 60 billion yen for the April-June quarter of 2023, based on market conditions.

- Pre-maturity redemption, same as a scheme to retire debt, differs from Buy-back in that the government reserves an option to redeem existing bonds at the face value. The Ministry of Finance has stated on its website its vow not to implement the pre-maturity redemption of JGBs.
- → ③ A bidding price-spread may be positive or negative. If a bidding price is 101.30 yen against a standard price of 101.00 yen, the bidding price-spread is plus 0.30 yen. If a bidding price is 100.70 yen against a standard price of 101.00 yen, however, the bidding price-spread is minus 0.30 yen.
- → If bidding price-spreads are positive, priority is placed on smaller absolute values. If bidding price-spreads are negative, however, priority is placed on larger absolute values.

Fig. 2-24 Mechanisms for Liquidity Enhancement Auctions and Buy-backs

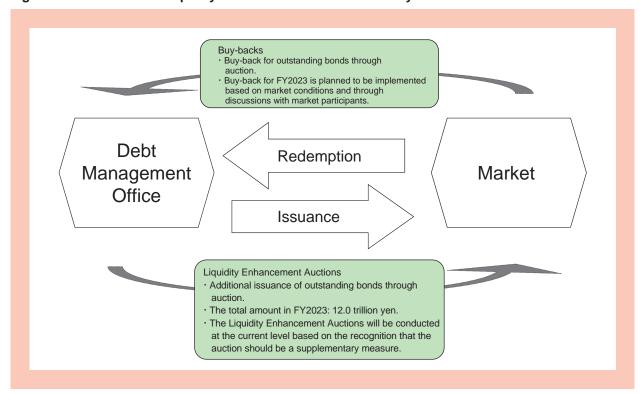
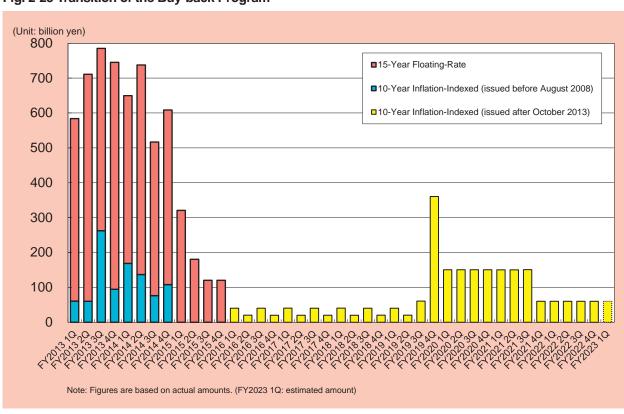


Fig. 2-25 Transition of the Buy-back Program



#### (4) Interest Rate Swap Transaction

An interest rate swap transaction is a transaction in which different types of interest payments (e.g. floating-rate and fixed-rate) are exchanged for a specific period of time.

Interest rate swap transaction in connection with JGBs became possible under the "Act for the Special Account for the GDCF," as amended in June 2002. In the "New Promotion of JGB Management Policy" (published in December 2003), it was stated that the government would utilize swap transactions (starting in FY2005) in order to control the duration of the outstanding JGBs, thereby managing interest rate risk.

In consideration of the above, the MOF has worked to upgrade the relevant systems, and entered into a master agreement with counterparties, most of which are JGB Market Special Participants, pursuant to the guidelines issued by the International Swaps and Derivatives Association, Inc. (ISDA). Since February 2006, swap transactions have been implemented. Transaction results are published on a semi-annual basis on the MOF website (in April and October).

No new transactions have been implemented since the second half of FY2009.

#### (5) Dialogue with Market Participants

In order to secure stable financing and to implement appropriate policies to enhance market liquidity of JGBs, the MOF Financial Bureau aims to promote dialogue with markets and boost confidence in Debt Management Policy through various forums including the following:

#### A. Study Group on Government Debt Management

The Ministry has hosted the Study Group on Government Debt Management to receive opinions and advice from experts with a high degree of insight on public debt management from the medium- to long-term perspective.

#### B. The Meeting of JGB Market Special Participants

Since the introduction of the JGB Market Special Participants scheme in October 2004, the MOF also has hosted the Meeting of JGB Market Special Participants to exchange opinions between members and the MOF concerning important topics relating to the bond market.

The MOF hosts the meeting every quarter to deal mainly with methods for implementing Liquidity Enhancement Auctions and Buy-backs, and JGB market trends. In addition, the MOF calls the meeting to receive opinions from market participants for formulating and revising an annual JGB Issuance Plan.

#### C. The Meeting of JGB Investors

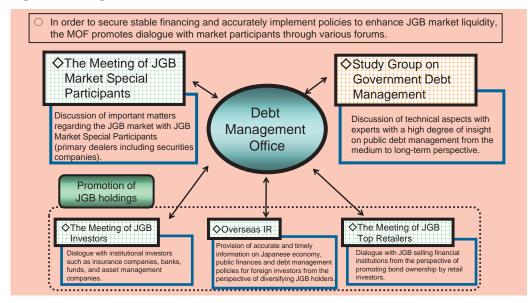
The MOF has hosted the Meeting of JGB Investors since April 2002, to directly and continually share ideas with JGB investors. This meeting consists of major institutional investors such as banks and life insurance companies.

Usually, the MOF convenes the meeting to receive opinions from investors for formulating and revising the annual JGB Issuance Plan.

#### D. The Meeting of JGB Top Retailers

From the perspective of promoting bond ownership by retail investors, since June 2007 the MOF has convened the meetings once or twice a year with top JGB retail brokers to evaluate the performance and efforts of financial institutions that are actively offering JGBs for retail investors. The meetings also allow for a mutual exchange of views and opinions between JGB selling agencies and the MOF on the further promotion of JGB sales to retail investors.

Fig. 2-26 Dialogue with the Markets



Chapter 1 Government Bonds (JGBs)



## **Taxation of Government Bonds**

Taxation of JGBs varies depending on the bondholder—e.g., resident individual, domestic

## The MOF does not provide tax consultations.

For more information on national taxes, please visit the website of the National Tax Agency at

https://www.nta.go.jp

#### (1) Individuals (Residents)

#### A. Coupon-bearing bonds

Interest, capital gains and profits from redemption on coupon-bearing bonds are subject to separate self-assessment taxation at a rate of 20% (15% income tax + 5% local tax) (>) and profit/loss offset among them and listed stocks, etc. is allowed.

With regards to interest, taxes are withheld when a coupon is paid.

Other tax breaks, known as "Maruyu" and "Tokubetsu-Maruyu" tax-free saving schemes which provide tax exemption on interest income from JGBs, are offered to individuals with disabilities and certain other types of individuals.

In addition to the income tax, a special income tax for reconstruction (2.1% of income tax in principle) is imposed from 2013 to 2037.

#### **B. T-Bills and STRIPS**

Capital gains and profits from redemption on T-Bills (Treasury Discount Bills) and STRIPS (principal-only book-entry transfer JGBs and coupon-only book-entry transfer JGBs) are subject to separate self-assessment taxation at a rate of 20% (15% income tax + 5% local tax) () and profit/loss offset among them and listed stocks, etc. is allowed.

At the time of redemption, tax on net profits on redemption is withheld.

❖In addition to the income tax, a special income tax for reconstruction (2.1% of income tax in principle) is imposed from 2013 to 2037.

Fig. 2-27 JGB Interest Taxation System (for individuals)

Category	Type of income	Taxation
Coupon-bearing bonds		<ul> <li>Separate self-assessment taxation         Withholding at source upon interest payment (it has two options as below)</li> <li>Not to file final tax return (tax payment is completed only by withholding.)</li> <li>To file final tax return as income gain, etc. on listed stocks, etc.</li> </ul>
	Interest (interest income)	<ul> <li>○ Tax exemption (only for the disabled, etc.)</li> <li>• Maruyu         (Non-taxable interest income from small-sum deposits of the disabled, etc.)         Maximum face value: ¥3.5 million     </li> <li>• Tokubetsu-Maruyu         (Non-taxable interest income from small-sum public bonds held by the disabled, etc.)         Maximum face value: ¥3.5 million     </li> </ul>
	Profits from redemption (capital gain)	○ Separate self-assessment taxation
	Profit from sale (capital gain)	Paid by declaration as taxation on capital gains, etc. on listed stocks, etc.
Discount Bonds	Profits from redemption (capital gain)	Separate self-assessment taxation     Withholding at source upon redemption
(T-Bills and STRIPS)	Profit from sale (capital gain)	Separate self-assessment taxation Paid by declaration as taxation on capital gains, etc. on listed stocks, etc.

Note 1: The tax rates on the income above are 15% income tax (special income tax for reconstruction (basically 2.1% of income tax) is imposed additionally from 2013 to 2037) and 5% local tax.

Note 2: It is able to offset profit/loss among the income above and income from listed stocks, etc.

#### (2) Domestic Corporations

#### A. Coupon-bearing bonds

Interest, capital gains and profits from redemption on coupon-bearing bonds are counted as profits, and are subject to corporate tax and the *houjinzei-wari* local tax (municipal tax multiplied by a certain rate) (Public Interest Incorporated Associations or Public Interest Incorporated Foundations may be exempt from tax).

With regards to interest, taxes are withheld when the interest is paid. Financial institutions such as banks, and financial instruments firms and domestic corporations capitalized at 100 million yen or more may be exempt from withholding tax imposed on the interest income.

#### **B. T-Bills and STRIPS**

Capital gains and profits from redemption on T-Bills and STRIPS (principal-only book-entry transfer JGBs and coupononly book-entry transfer JGBs) are counted as profits, and are subject to corporate tax and the *houjinzei-wari* local tax (municipal tax multiplied by a certain rate) (Public Interest Incorporated Associations or Public Interest Incorporated Foundations may be exempt from tax).

With regards to profits from redemption received by General Incorporated Associations or General Incorporated Foundations (excluding Public Interest Incorporated Associations or Public Interest Incorporated Foundations), etc., taxes are withheld at the time of redemption.

#### (3) Nonresident Individuals and Foreign Corporations Coupon-bearing bonds, T-Bills and STRIPS

Interest, etc. on book-entry transfer JGBs (interest on book-entry transfer JGBs or profits from redemption of T-Bills and STRIPS) held by nonresident individuals or foreign corporations without a permanent establishment in Japan are exempt from tax under certain conditions under the tax exemption scheme as described in (4) below. Aside from such tax exemption scheme, if there is a tax treaty in effect between Japan and the country of residence of the nonresident individuals or the country where the foreign corporation is located, and the tax rate on interest stipulated under the treaty is set lower than 15%, the withholding tax rate on the interest, etc. from book-entry transfer JGBs will be lowered to match the rate stipulated under the treaty, provided that the relevant procedures have been completed.

In addition, for coupon-bearing bonds held by foreign corporations with a permanent establishment in Japan, the income tax is withheld, but the income tax withheld will be deducted from their corporation tax.

# (4) Tax Exemption Scheme for Nonresident Individuals and Foreign Corporations

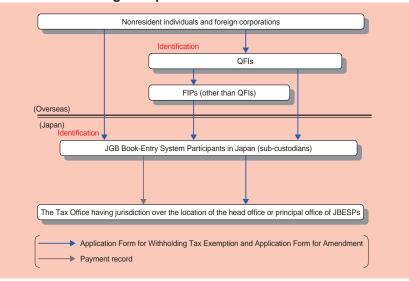
In order to secure smooth and stable financing at a time when large-scale JGB issuance is expected to continue, it is essential to have a deep, diverse investor base. Toward this goal, since September 1999, various tax schemes, including a tax exemption scheme for interest on book-entry transfer JGBs, have been introduced to enable nonresident individuals and foreign corporations to invest more easily in JGBs. Such schemes have been established with consideration given to fair and equitable taxation and are offered to nonresident individuals and foreign corporations under certain conditions.

#### A. Income Tax

Interest, etc. on JGBs (interest on JGBs or profits from redemption on T-Bills or STRIPS) held by nonresident individuals or foreign corporations (including trustees for Qualified Foreign Securities Investment Trusts and Foreign

Pension Trusts) without a permanent establishment in Japan in transfer accounts at a JGB Book-Entry System Participant in Japan (JBESP ( >>> )) or a Qualified Foreign Intermediary (QFI) are exempt from income tax, provided that certain requirements have been met.

Fig. 2-28 Overview of Tax Exemption Scheme for Nonresident Individuals and Foreign Corporations



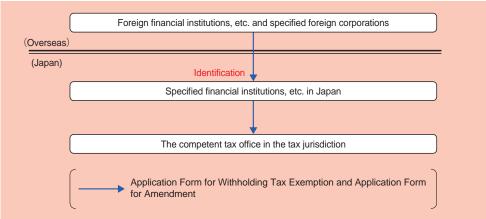
#### **B.** Corporation Tax

The corporation tax does not apply to interest, etc. on JGBs held by foreign corporations without a permanent establishment in Japan in transfer accounts at a QFI, etc.

#### C. Bond Gensaki Transactions and Securities Lending Transactions

Interest, etc. that foreign financial institutions, etc. ((()) receive from specified financial institutions, etc. ((()) in Japan on their Bond *Gensaki* Transactions or Securities Lending Transactions and that those specified foreign corporations ((()) receive from specified financial institutions in Japan on their Bond *Gensaki* Transactions are exempt from tax, provided that certain requirements are met.

Fig. 2-29 Overview of Tax Exemption Scheme for Nonresident Individuals and Foreign Corporations (Bond *Gensaki* Transactions)



Financial institutions or financial instruments firms in Japan acting as account management institutions for JGBs.

- Foreign financial institutions, etc. are foreign corporations that operate banking business, financial instruments business or insurance business, foreign clearing institutions, foreign central banks and international organizations.
- → ② Specified financial institutions, etc. are financial institutions and financial instruments firms, etc. that are subject to the "Act on Collective Liquidation of Specified Transaction Conducted by Financial Institutions, etc.," financial instruments transaction clearing institutions (clearing institutions in Japan) and the Bank of Japan.
- Specified foreign corporations are foreign corporations other than foreign financial institutions, etc. (However, they exclude foreign corporations in countries or regions that have no tax treaties with Japan and foreign affiliated persons. Foreign affiliated persons are those who directly or indirectly owned 50% or greater stakes by specified financial institutions, etc. or those who effectively controlled by specified financial institutions, etc.)

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Fig. 2-30 Recent Tax-Related Initiatives

Fig. 2-30 Recer	nt Tax-Related Initiatives
Fiscal Year	Tax Reform (Main Points)
	· Application of tax exemption to interest on coupon-bearing JGBs held by nonresident individuals or foreign
FY1999	corporations which are directly deposited in transfer accounts at JBESPs.
1 1 1000	• Exemption from tax for redemption profits arising from TBs/FBs (which are now collectively called "T-bills")
	held by foreign corporations which are directly deposited in transfer accounts at JBESPs.
FY2000	<ul> <li>Application of tax exemption for the accrued interest on JGBs that need to be paid back to the national treasury when the JGBs have been reopened (i.e. additional issuance of the existing JGBs).</li> </ul>
FY2001	<ul> <li>Expansion of the tax exemption to cover interest on coupon-bearing JGBs held by nonresident individuals or foreign corporations in transfer accounts with QFIs.</li> </ul>
FY2002	<ul> <li>Expansion of the tax exemption to cover the interest on JGBs held by non-juridical foreign investment trusts, provided that the investment trusts are publicly offered and are not offered in Japan.</li> <li>Application of tax exemption, under certain conditions, to interest generated from Bond <i>Gensaki</i> Transactions involving JGBs, which is received by foreign financial institutions (till March 31, 2004).</li> <li>Introduction of STRIPS related tax systems in light of the limitation that only corporations can hold principal-only book-entry transfer JGBs and coupon-only book-entry transfer JGBs.</li> <li>Adoption of the necessary tax related measures in conjunction with the transition to the new JGB book-entry transfer system.</li> </ul>
	· Application of withholding tax exemption to the interest on coupon-bearing JGBs held by non-financial
FY2003	domestic companies capitalized at 100 million yen or more.
1 12005	<ul> <li>Application of withholding tax exemption to the interest on coupon-bearing JGBs held by the Japan Government Bond Clearing Corporation.</li> </ul>
	· Expansion of tax exemption to cover redemption profits arising from TBs/FBs (which are now collectively
FY2004	called "T-bills") held in transfer accounts with QFIs by foreign corporations.
	• Extension of the applicable period of tax exemption on interest generated from Bond <i>Gensaki</i> Transactions which is received by foreign financial institutions by 2 years (till March 31, 2006).
	Expansion of eligible holders of Inflation-Indexed bonds to include foreign juridical persons, provided that they
	are not subject to income tax on interest income.
FY2005	<ul> <li>Relaxation/Simplification of the various procedural requirements to apply for beneficial tax treatment schemes related to JGBs held by nonresident individuals or foreign corporations, including: (i) simplification of the procedure required for notification from QFIs to JBESPs when the nonresident individuals or foreign corporations hold the JGBs in transfer accounts with QFIs and (ii) simplification of the procedures required</li> </ul>
	for application of tax exemption concerning the interest on coupon-bearing JGBs to those who have tax exemption concerning TBs/FBs (which are now collectively called "T-bills") under certain conditions.
FY2006	• Extension of the applicable period of tax exemption on interest generated from Bond <i>Gensaki</i> Transactions which is received by foreign financial institutions by 2 years (till March 31, 2008).
FY2008	<ul> <li>Tax exemption on interest generated from Bond Gensaki Transactions which is received by foreign financial institutions becomes a permanent measure.</li> </ul>
FY2010	<ul> <li>The book prepared for each investor by JBESPs upon receiving notice from QFIs can be omitted under certain conditions.</li> <li>Expansion of the scope of the Qualified Foreign Securities Investment Trusts.</li> </ul>
	· Procedures for applying tax-exemption measures on interest of book-entry transfer JGBs to Foreign
FY2011	Pension Trusts, partnerships and Trusts Taxable on Beneficiaries were refined.  · With respect to the Securities Lending Transactions using JGBs, tax exemption measures were applied on the interest, etc. received by foreign financial institutions, etc. as in the case of Bond Gensaki Transactions.
FY2012	<ul> <li>Submission, etc. of Application Form for Withholding Tax Exemption on interest, etc. of book-entry transfer JGBs pertaining to the trust property of Trusts Taxable on Beneficiaries were made possible to be performed by the trustees of the relevant trust.</li> </ul>
FY2013	<ul> <li>After January 2016, the taxation system for public and corporate bonds was changed to separate self- assessment taxation. Moreover, the extent of profit-loss offsetting for financial products was expanded to public and corporate bonds (integration of financial income taxes).</li> </ul>
FY2014	<ul> <li>Regarding the integration of financial income taxes to be implemented in January 2016, the scope of discount bills has been revised.</li> </ul>
FY2017	<ul> <li>Expansion of tax exemption to cover interest, etc. generated from Bond Gensaki Transactions using JGBs which is received by specified foreign corporations (till March 31, 2019).</li> </ul>
FY2019	· Extension of the applicable period of tax exemption on interest, etc. generated from Bond Gensaki
	Transactions using JGBs which is received by specified foreign corporations by 2 years (till March 31, 2021).
FY2021	<ul> <li>Extension of the applicable period of tax exemption on interest, etc. generated from Bond <i>Gensaki</i> Transactions using JGBs which is received by specified foreign corporations by 2 years (till March 31, 2023).</li> <li>Allowing an Application Form for Withholding Tax Exemption, etc. for special taxation measures for interest on book-entry transfer JGBs involving cross-border transactions to be filed electronically.</li> </ul>
FY2023	• Extension of the applicable period of tax exemption on interest, etc. generated from Bond <i>Gensaki</i> Transactions using JGBs which is received by specified foreign corporations by 3 years (till March 31, 2026).

# Chapter 2 Financing Bills, Borrowings, Government-Guaranteed Debt and Subsidy Bonds

In addition to issuing JGBs to finance fiscal expenditures as explained in Chapter 1, the central government also issues Financing Bills, has borrowings, and grants government guarantees. They have different features, but they are similar to JGBs in that they are part of the debt associated with financing the fiscal activities of the central government. The government also issues Subsidy Bonds in place of monetary payments. These debt instruments are outlined below:



## **Financing Bills**

The central government is able to issue Financing Bills (FBs) to finance the national treasury on a short-term basis or cope with temporary fund shortage in special accounts. As Treasury Financing Bills issued to finance the national treasury will address the cash position within a fiscal year, they will be redeemed with revenues in the same fiscal year.

#### (1) Legal Grounds of Financing Bills

The government may issue Financing Bills for the General Account or some Special Accounts within the parameters as approved by the Diet in accordance with the "Public Finance Act," "Act on Special Accounts," and some other legislation.

Fig. 2-31 Financing Bills by Legal Grounds of Issuance

Financing Bills	Legal grounds	Main purpose
Treasury Financing Bills	Article 7(1) of the Public Finance Act	Issued "when it is required to balance the National Treasury."
Fiscal Loan Fund Financing Bills	Article 9(1) of the Fiscal Loan Fund Act	Issued "when there is insufficient cash in the Fiscal Loan Fund"
Foreign Exchange Fund Financing Bills	Article 83 (1) of the Act on Special Accounts	Issued "when there are insufficient reserves in the Foreign Exchange Fund"
Petroleum Financing Bills	Article 94 (2) and 95(1) of the Act on Special Accounts	Issued "as necessary to provide revenue sources for purchase for national petroleum reserves etc." and "when there is insufficient cash for payment."
Nuclear Damage Liability Facilitation Financing Bills	Article 94 (4) and 95(1) of the Act on Special Accounts	Issued "as necessary to provide revenue sources for transfer for Special Account for the Government Debt Consolidation Fund etc." and "when there is insufficient cash for payment."
Food Financing Bills	Article 136 (1) and 137 (1) of the Act on Special Accounts	Issued "when revenue sources are required for the purchase of foodstuffs, agricultural products or imported livestock feed" and "when there is insufficient cash for payment."

<sup>(</sup>Note 1) Because these different bonds and Treasury Bills (mentioned later) are all issued as Treasury Discount Bills, there is no difference between them as financial instruments.

(Note 2) This table shows the types of Financing Bills which have been issued in the past.

#### (2) Status of Financing Bills in the Budget

The budget's general provisions set forth the upper limit of Financing Bills for that fiscal year. This upper limit requires approval at the Diet.

#### (3) Auction Methods, etc.

In principle, Financing Bills are issued to the market through public auction. In principle, 3-Month Financing Bills are issued every week, accounting for the largest share of Financing Bills ((\*)).

If some Financing Bills remain unsold through public auction, or if unexpected cash needs emerge, the Bank of Japan may exceptionally accept Financing Bills ( 2).

Since February 2009, the MOF has jointly issued Treasury Bills (TBs) and Financing Bills, under unified names of Treasury Discount Bills (T-Bills) and these have been circulated in the markets.

Fig. 2-32 Comparison of Treasury Bills and Financing Bills

	TBs	FBs			
Official name	Treasury Bills	Financing Bills			
Purpose of issue	To finance fiscal expenditures (the same as JGBs with other maturities)	To finance the National Treasury on short-term basis, or cover temporal fund shortage in a special accoun			
Manner of issue	Issued at a discount				
Maturities	6 months, 1 year	3 months, 6 months, 1 year			
Minimum face value	50,000 yen				
Method of issue	<ul> <li>In principle, by public auction (conventional, competitive price auction)</li> <li>Jointly issued by the name of "Treasury Discount Bills"</li> </ul>				
Transfer restrictions	Unrestricted				

#### (4) Outline of Cash Management of the National Treasury

The balance of the National Treasury may have temporary cash shortage or surplus caused by timing differences between daily receipts and payments. The adjustment means of treasury balance are the issuance of Financing Bills, temporary use of the treasury surplus, advanced redemption of Financing Bills possessed by the BOJ or the National Treasury, and reclassification to domestic designated deposit (interest-bearing deposits). The Financial Bureau of the MOF estimates receipts and payments of the National Treasury in order to secure smooth and stable financing and gives due consideration of impact on private financial markets.

Specifically, the MOF also strives to refrain from concentrated issuance in the market, through active temporary use of treasury surplus into special accounts facing a fund shortage as well as through active underwriting in the National Treasury.

- Also issued are 6-Month and 1-Year Financing Bills. Financing Bills maturing in about two months have also been issued.
- ▶ 2 In this case, Financing Bills accepted by the BOJ are redeemed as quickly as possible by the cash raised through the revenue of Financing Bills at public auction.

# 2

# **Borrowings**

Borrowings include two categories, one is "Borrowings" to meet annual government expenditure demand in a narrow sense and the other is "Temporary Borrowings" to cover temporary cash shortage. In fiscal-related legislations, the term "Borrowings" refers to the borrowings in a narrow sense, in principle.

Borrowings in a narrow sense basically mature beyond the fiscal year for their provision, while Temporary Borrowings must be redeemed within the fiscal year for their provision. Temporary Borrowings and borrowings redeemed within one year are called "short-term borrowings," while other borrowings in a narrow sense are referred to as "long-term borrowings."

#### (1) Legal Grounds of Borrowings

The General Account and each special account carry out borrowings within the limit of the amount approved by the Diet pursuant to the "Public Finance Act" and the "Act on Special Accounts."

#### (2) Status of Borrowings in the Budget

The maximum amount that each special account can "borrow" or "temporarily borrow" for every fiscal year must be provided under the general budget provisions, which is subject to Diet approval each fiscal year.

#### (3) Source of Borrowings

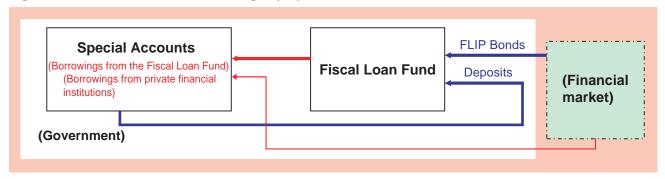
Borrowings of each special account are made from the Fiscal Loan Fund and private financial institutions. At the end of March 2023, the General Account and 6 special accounts had outstanding borrowings from the Fiscal Loan Fund, and 4 special accounts had outstanding borrowings from private financial institutions.

While borrowings from private financial institutions constitute part of the government debt to the private sector, borrowings from the Fiscal Loan Fund are the government debt within the government ( ).

Ref: Chapter 1 1(1) B "FILP Bonds" (P37) See the MOF website. "FILP" (Explanation of Framework)

The Fiscal Loan Fund issues FILP Bonds or uses deposits from special accounts, etc., in order to make loans to these special accounts.

Fig. 2-33 Flow Related to the Borrowings by Special Accounts from the Fiscal Loan Fund



#### (4) Borrowings from the Private Sector

The Special Account for Allotment of Local Allocation Tax and Local Transfer Tax (the Special Account for Local Allocation Tax), the Special Account for the National Forest Debt Management, the Special Account for Energy Policy and the Special Account for Stable Supply of Food carry out borrowings from private financial institutions by public auctions.

#### A. Special Account for Local Allocation Tax

The Special Account for Local Allocation Tax had borrowed loans to finance local government budget deficits and used them for part of the Local Allocation Tax for the relevant fiscal year. Since July 2000, the Special Account has been borrowing partly from private financial institutions. However, from FY2007, it decided to stop borrowing additional funds. It now borrows only to repay outstanding debt.

Borrowings by the Special Account had been designed to cover the forest environment transfer tax during a transitional period to the creation of the forest environment transfer tax. In FY2020, however, the government decided to use the reserves for interest rate volatility at the Japan Finance Organization for Municipalities, instead of the borrowings by the Special Account for Local Allocation Tax, for the coverage and to take in no new borrowings. The borrowings regarding the forest environment transfer tax were repaid in FY2020.

#### **B. Special Account for the National Forest Debt Management**

The Special Account for National Forest Service has undergone certain reforms in FY1998 enforcing the "Special Measure Act for the Reform of the National Forest Service." In that fiscal year, the Special Account switched its borrowing source from the Fiscal Loan Fund to private financial institutions.

To ensure that such borrowings are made in a fair, equitable and transparent manner, in FY2003 the Special Account switched from the previous practice of using syndicated loans to obtaining loans by public auctions.

Pursuant to the "Law concerning Partial Revision, etc. of Laws, etc. including the Law on Management and Operation of the National Forests to Enhance the Public Interest Functions of National Forests" which came into effect in April 2013, the Special Account for National Forest Service was abolished, whereupon obligations relating to borrowings attributed to the Account were transferred to the Special Account for the National Forest Debt Management. Borrowings of the Special Account for the National Forest Debt Management from private financial institutions are to be used to repay the outstanding debt. No new additional borrowings are being made.

#### C. Special Account for Energy Policy

Japan National Oil Corporation (JNOC) was abolished in accordance with the "Reorganization and Rationalization Plan for Special Public Institutions." The state oil reserves that had until that point been taken care of by JNOC came under the direct control and management of the government in the form of the Special Accounts for Petroleum and the More Sophisticated Structure of Demand and Supply of Energy Policies (the Special Account for Petroleum) (
①). In line with the transfer, the Special Account for Petroleum began to borrow to finance its costs and expenses related to the construction of stockpiling facilities.

State petroleum reserves came under direct state supervision in April 2003, and the responsibility for the stockpiling facilities was transferred in February 2004. Pursuant to the "Act on Special Accounts" that took effect in April 2007, the Special Account for Petroleum was abolished, whereupon the rights and obligations attributed to the Account were transferred to the Special Account for Energy Policy.

Borrowings of the Special Account for Energy Policy from private financial institutions are to be used to repay the outstanding debt. No new additional borrowings are being made.

The government has borrowed funds in the Nuclear Damage Liability Facilitation Account since February 2012 to cover the redemption of JGBs granted to the Nuclear Damage Compensation and Decommissioning Facilitation Corporation ( 2).

#### D. Special Account for Stable Supply of Food

The Special Account for Stable Supply of Food (the Fishery Mutual Relief Association Insurance Account) is an account in order to perform separate accounting for the income and expenditures on each fishery mutual relief associations' insurance business. It was formed when the Special Account for Fishing Vessel Reinsurance and Fishery Mutual Relief Association Insurance (the Fishery Mutual Relief Association Insurance Account) which was established under the partial revision of the "Act on Compensation of Fishery Disaster" in August 1967 was integrated with the Special Account for Stable Supply of Food in April 2014. The fishery mutual relief association system aims to contribute to securing fishery reproduction and to a stability of fishery management by compensating small and medium sized fishing operators for their losses when their catch amount decreases due to poor catches. It is a mutual relief association that utilizes an insurance framework based on the spirit of mutual relief for small and medium sized fishing operators' damage, instead of direct providing of the government's relief.

In September 2022, the Fishery Mutual Relief Association Insurance Account borrowed from private financial institutions due to a shortage of financial resources to pay for insurance claims that were caused by record poor catches in recent years.

#### (5) Borrowing through Public Auction on Private-sector Borrowings

For borrowings from private sectors, the government employs the interest rate competitive bidding or noncompetitive bidding process (only for the Special Account for Local Allocation Tax) in which the government will accept biddings that offer lower interest rates until the borrowing amount reaches the scheduled fundraising amount. Bidding participants are private financial institutions, including major city banks and regional banks. A total of 120 private financial institutions participate in the bidding program as of March 31, 2023.

The Nuclear Damage Compensation Facilitation Corporation was reorganized into the Nuclear Damage Compensation and Decommissioning Facilitation Corporation as a revision to the Nuclear Damage Compensation Facilitation Corporation Act that took effect in August 2014.



#### **Government-Guaranteed Debt**

Incorporated administrative agencies run businesses for public purposes as government agencies. The government guarantees their debt within the maximum amount provided in the budget to make it easier for them to raise funds. As is the case with JGBs, the government works to ensure smooth and stable fundraising and to make sure that the given terms and conditions are favorable and appropriate as government-guaranteed debt.

#### (1) Legal Ground of Government Guarantee

In principle, government guarantees for corporate debt are prohibited under Article 3 of the "Act on Restrictions on Financial Assistance by Government to Corporations." Exceptions are only made by specific acts under cases where the following conditions are satisfied:

- i) Conducting businesses for highly public purposes as agencies for the government.
- ii) Their financial accounting and administration are under governmental supervision, and thus the use of guaranteed debt borrowing and repayment schedules are thoroughly monitored.

When guarantees are given, appropriate supervisions including checking financial condition are exercised at the ministries and agencies that hold jurisdiction over the relevant agencies.

#### (2) Features of Government-Guaranteed Debt

Government-guaranteed debt is broadly divided into Government-Guaranteed Bonds and Borrowings. Government-Guaranteed Bonds are divided into domestic and foreign bonds. Raising funds through Government-Guaranteed Borrowings generally has the advantage of flexibility in meeting temporary demands for funds, but also has a defect in liquidity of the secondary market as compared to Government-Guaranteed Bonds.

#### (3) Treatment in the Budget and Examination Process

#### A. Treatment in the budget

#### a. The maximum amount of government guarantee

There are cases in which the government is permitted to guarantee debt based on specific acts, as mentioned above. These acts also provide that the government must receive Diet approval for the maximum amount of government guarantee. Therefore, the maximum amount for individual corporations is provided under the general provisions of the General Account budget, which is subjected to Diet approval in each fiscal year.

#### b. Provision in the FILP Plan

The maximum amount of government-guaranteed debt is specified in the budget as stated above. The government guarantees for those agencies that are eligible for FILP lending or specified by cabinet orders, when the guarantee term is 5 years or longer, shall be reported in the FILP Plan based on Article 5, paragraph (2), item(iii) of the Act for the Special Measures on the Long-Term Management of the Fiscal Loan Fund.

Ref: See the MOF website. "FILP" (FILP Plan of each fiscal year)

#### B. Examination of Government-Guaranteed Bonds and Borrowings

Every fiscal year, the MOF plans the issuance amount of Government-Guaranteed Bonds and the maturity structure of the following fiscal year taking account of market trends, and announces them together with the JGB Issuance Plan (For FY2023, the scheduled issuances are tabulated below). Furthermore, whenever an agency raises funds through issuance of Government-Guaranteed Bonds or Borrowings, the MOF examines whether or not interest rates and prices in each case are appropriate for the guaranteed debt.

Fig. 2-34 Breakdown of the Planned Issuance Amount for FY2023 of Government-Guaranteed Bonds

(Unit: billion yen)

	FY2022	FY2022 (2nd		FY2023 (Initial)		(Critic Dillion year)
Maturity	(Initial)	Revised)		(IIIIIai)		Main Issuer
		(p)	(c)	(c)-(a)	(c)-(p)	
40-year	20.0	20.0	10.0	-10.0	-10.0	Development Bank of Japan Inc. (DBJ)
30-year	-	-	10.0	10.0	10.0	Organization for Promoting Urban Development
20-year	145.0	165.0	175.0	30.0	10.0	Japan Expressway Holding and Debt Repayment Agency(JEHDRA), Japan Housing Finance Agency(JHFA), etc.
15-year	65.0	65.0	80.0	15.0	15.0	JEHDRA, JHFA
12-year	80.0	80.0	40.0	-40.0	-40.0	JHFA
10-year	122.5	122.5	134.5	12.0	12.0	Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development, DBJ, etc.
9-year	-	-	50.0	50.0	50.0	Private Finance Initiative Promotion Corporation of Japan
7-year	80.0	80.0	280.0	200.0	200.0	JEHDRA, DBJ
5-year	140.0	140.0	1,003.0	863.0	863.0	JEHDRA, JHFA
4-year	150.0	150.0	80.0	-70.0	-70.0	Japan Finance Organization for Municipalities
3-year	-	-	100.0	100.0	100.0	Nuclear Damage Compensation and Decommissioning Facilitation Corporation(NDF)
2-year	350.0	350.0	230.0	-120.0	-120.0	NDF, Deposit Insurance Corporation of Japan
Subtotal	1,152.5	1,172.5	2,192.5	1,040.0	1,020.0	
Foreign Bonds	2,174.0	1,774.0	2,290.5	116.5	516.5	Japan Bank for International Cooperation, Japan International Cooperation Agency, etc.
Total	3,326.5	2,946.5	4,483.0	1,156.5	1,536.5	

Note 1: Apart from the plan shown above, the Japan Finance Corporation (JFC) and Development Bank of Japan Inc. (DBJ) plan further issuances (with maturity of less than 5 years) depending on the progress of projects. The maximum amounts of these further issuances are 100 billion yen for JFC and DBJ, respectively.

Note 2: The maturity and issuance amount may be modified depending on aspects such as the progress of projects during FY2023.

Fig. 2-35 Breakdown of the Planned Issuance Amount for FY2023 of Government-Guaranteed Bonds by Issuers and Maturities

(Unit: billion yen)

Issuer	40-year	30-year	20-year	15-year	12-year	10-year	9-year	7-year	5-year	4-year	3-year	2-year	Subtotal (Note 1)	Foreign Bonds	Total
Japan Bank for International Cooperation													-	1,845.0	1,845.0
Japan International Cooperation Agency													-	225.5	225.5
Japan Expressway Holding and Debt Repayment Agency			120.0	40.0				200.0	893.0				1,253.0		1,253.0
Japan Housing Finance Agency			30.0	40.0	40.0				110.0				220.0		220.0
Development Bank of Japan Inc.	10.0					40.0		80.0					130.0	220.0	350.0
Deposit Insurance Corporation of Japan												80.0	80.0		80.0
Nuclear Damage Compensation and Decommissioning Facilitation Corporation											100.0	150.0	250.0		250.0
Private Finance Initiative Promotion Corporation of Japan							50.0						50.0		50.0
Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development						57.5							57.5		57.5
Fund Corporation for the Overseas Development of Japan's ICT and Postal Services Inc.						20.9							20.9		20.9
Organization for Promoting Urban Development		10.0	25.0										35.0		35.0
Central Japan International Airport Co.,Ltd.						16.1							16.1		16.1
Japan Finance Organization for Municipalities										80.0			80.0		80.0
Total	10.0	10.0	175.0	80.0	40.0	134.5	50.0	280.0	1,003.0	80.0	100.0	230.0	2,192.5	2,290.5	4,483.0

Note 1: Apart from the plan shown above, the Japan Finance Corporation (JFC) and Development Bank of Japan Inc. (DBJ) plan further issuances (maturity less than 5 years) depending on the progress of projects. The maximum amounts of these further issuances are 100 billion yen for JFC and DBJ, respectively.

Note 2: The maturity and issuance amount may be modified depending on aspects such as the progress of projects during FY2023.



## **Subsidy Bonds**

Subsidy Bonds are the government bonds issued in place of the provision of cash. Accordingly, issuance of Subsidy Bonds does not generate revenues ().

Subsidy Bonds include (narrowly defined) Subsidy Bonds issued by the government in place of monetary payments including condolence money and benefits and Subscription/Contribution Bonds issued for subscriptions or contributions to international organizations such as the International Monetary Fund.

#### (1) Subsidy Bonds (narrowly defined)

Subsidy Bonds are currently issued to the bereaved families of the war dead or those who suffered physical or spiritual damage in World War II and those who were repatriated after the war, in lieu of monetary payments such as condolence money and benefits.

The first such government bonds were issued to the bereaved families of the war dead and others based on the "Act on Relief of War Victims and Survivors" (Act No.127, 1952) established in 1952. Since then, a total of 47 types of Subsidy Bonds have been issued under relevant special laws by the end of FY2022. The number of such bond issues totals 19.69 million, worth 4,447.9 billion yen. Subsidy Bonds outstanding at the end of FY2022 totaled 121.6 billion yen.

In the context of leveling fiscal spending, redemption of these bonds is made over a period of several years on an installment payment basis ( ).

#### (2) Subscription/Contribution Bonds

Subscription/Contribution Bonds ( ) are a kind of Subsidy Bonds, and are issued to pay the subscription or contribution in whole or in part to international institutions, in lieu of the amount to be paid in the currency. Thus, these bonds are non-interest bearing, nontransferable, and payable on demand (whenever the institution concerned needs the currency and requests for encashment, the cash should be paid to the institution).

As of the end of FY2022, there are a total of 19 outstanding issues of subscription or contribution bonds issued to 13 institutions, including the IMF. As prescribed in the articles of agreement for each institution, using government bonds to make a payment to an international institution is permitted only when the institution concerned does not require the currency for the time being for the conduct of its operations.

Domestically, the Accession Measures Act for each international institution provides a legal base for the issuance of these Subscription/Contribution Bonds.

Subscription/Contribution Bonds, Government Bonds issued to the Development Bank of Japan for crisis response operations and Government Bonds issued to the Nuclear Damage Compensation and Decommissioning Facilitation Corporation are also issued by the government in place of the provision of cash and do not generate revenues. Therefore, they are treated as widely defined Subsidy Bonds in addition to narrowly defined Subsidy Bonds in (1).

- Also, given the purpose for issuance and the nature that the recipients of redemption money are limited, Subsidy Bonds are offered as name bonds, and in principle their transfer and attachment are prohibited.
- → While the difference between "subscription" and "contribution" paid to international institutions is not very clear, the former is used if all of the following requirements (1) to (3) are met, otherwise the latter is used.
- Funds necessary for institutions with independent articles of agreement to perform their primary operations set forth in their articles of agreement are provided.
- (2) The purpose of providing the funds is to participate in the management of the institution concerned and voting rights commensurate with the amount of funds paid are granted.
- (3) In cases including withdrawal from the institution concerned, the right to distribution of property commensurate with funds paid until then is granted.

#### (3) Others

#### A. Government Bonds issued to Development Bank of Japan

Government Bonds issued to the Development Bank of Japan (DBJ) are government bonds issued/provided for the purpose of strengthening the financial foundations of the DBJ to facilitate the implementation of crisis response operations carried out by the DBJ; these bonds are non-interest bearing, non-transferable, and payable on demand (whenever the DBJ needs to reinforce its financial foundation and requests for encashment, the cash should be paid to the DBJ).

# **B.** Government Bonds issued to Nuclear Damage Compensation and Decommissioning Facilitation Corporation

Government Bonds issued to the Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF) are issued/provided to raise funds for the NDF to cover special financial assistance. These bonds are non-interest bearing, non-transferable, and payable on demand (whenever the NDF needs to subsidize funds for a nuclear energy firm to pay damages compensation and requests the encashment of these bonds, the cash should be paid to the NDF). It should be noted that these bonds are redeemed with cash at the expense of the Special Account for Energy Policy (Nuclear Damage Liability Facilitation Account).

# **Chapter 3 Other Public Debt**

In addition to the bonds or borrowings explained in chapter 1 and 2 such as Construction Bonds, there are other categories of Public Debt, such as Public Pensions, Local Government Bonds (LGBs), and the debt of Incorporated Administrative Agencies, etc. Although these debt categories are subject to governance frameworks which are different from those used for JGBs and Borrowings by the central government, and none of these debt categories relate to fundraising in connection with fiscal activities of the central government, these are considered to be potentially influential factors on the country's debt management principles. The following section will specifically discuss LGBs and the debt of Incorporated Administrative Agencies, etc.



## **Local Government Bonds (LGBs)**

#### (1) Basic Scheme of LGBs

#### A. Basic scheme

LGBs are issued by local governments to cover part of their expenditures and constitute their debt.

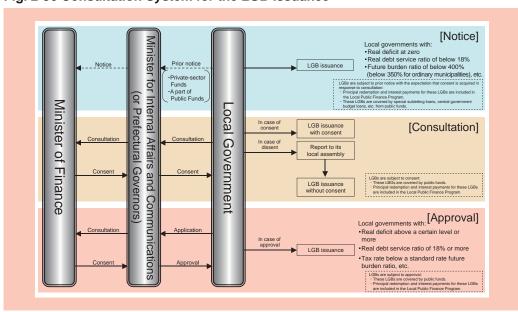
While, in principle, LGBs can only be issued as resources for construction expenses, etc. as stipulated in Article 5 of the "Local Government Finance Act," there are exceptions such as extraordinary financial countermeasures bonds ( ), etc.

When a local government intends to issue LGBs, it needs to consult with the Minister for Internal Affairs and Communications or its prefectural governor and obtain his/her consent. If the Minister is planning to grant his/her consent in the consultation process, he/she needs to consult with the Minister of Finance in advance.

Local governments which satisfy certain requirements are able to issue their LGBs financed with private funds, etc. from FY2012 and with a part of public funds from FY2016 by giving prior notice to the Minister for Internal Affairs and Communications or prefectural governor.

❤ Until FY2000, shortages in ordinary revenue appearing in the Local Public Finance Program has been covered by the borrowings of the Special Account for Local Allocation Tax. From FY2001, extraordinary financial countermeasures bonds, a type of LGBs, were introduced as a new bond to cover shortfall.

Fig. 2-36 Consultation System for the LGB Issuance



#### **B.** Classification of LGBs

The planned issuance amount of LGBs for the following fiscal year is announced by the central government in the LGB Program at the time of determination of a government budget draft for the following fiscal year. According to the LGB Program, the following tables show the breakdown by funding resources, project types and accounts.

#### a. Breakdown by funding resource

Fig. 2-37 Breakdown by Funding Resources of LGBs

Local Government Bonds		Fiscal Loan Funds
	Public Funds	Japan Finance Organization for Municipalities (JFM) Funds
	Private Funds	Public Offering Funds
	Filvate Fullus	Private Placement Funds

LGBs can be classified by the funding resources: Public Funds (Fiscal Loan Funds and Japan Finance Organization for Municipalities Funds) and Private Funds (Public Offering Funds and Private Placement Funds). The LGB Program provides the planned issuance amount for each group.

From the viewpoint of encouraging local governments' self-reliant fiscal operations, local governments should basically employ LGBs to raise private funds, while public funds should play complementary roles.

#### b. Breakdown by project type

As for project types financed with LGBs, General Account Bonds are covering public works, disaster restoration projects, education/welfare facilities development projects, depopulation and remote region projects, and some other projects. On the other hand, Municipal Enterprise Bonds are financing water-supply projects, transportation projects, hospital and elderly care service projects, and sewage projects. The LGB Program sets forth the budgeted LGB amount for each project type.

#### c. Breakdown by accounts issuing LGBs

LGBs can be classified by the following two accounts: ordinary account (\*) and public enterprise account.

An outlook on annual revenues and expenditures for the following year appearing in the Local Public Finance Program is submitted to the Diet. The LGB issuance amount appearing in the Local Public Finance Program covers only ordinary accounts, excluding public enterprise accounts. Ref: Ministry of Interna Affairs and Communica tions website (Local Bond Program and Local Public Finance Program)

→ Japan Finance Organization for Municipalities Funds are financed by funds raised by the Japan Finance Organization for Municipalities through bond issuances. The Japan Finance Organization for Municipalities was established through investments from all prefectures and municipalities, and provides local governments with long-term, low-interest financing for their municipal bonds.

The ordinary account is an account category used uniformly for local public finance statistics, combining the general account and special accounts excluding municipal enterprise accounts and eliminating moves between relevant accounts.

#### (2) LGB Program

The FY2023 LGB Program has been designed to secure local bond funds required for steadily promoting measures implemented urgently by local governments to prevent and reduce disasters, the adequate management of public facilities, local decarbonization and the vitalization of local communities, totaling 9,499.4 billion yen (compared with 10,181.4 billion yen in FY2022).

#### A. Loans to Local Government by Public Funds

As for the funds for LGBs, public funds totaling 4,065.7billion yen (compared with 4,372.8 billion yen in FY2022) are planned for promoting the development of infrastructure linked closely to local residents' livelihood ( ).

Loans using public funds are made by way of loans on deeds.

#### B. Local Funds Offered by Private Sectors, etc.

#### a. Public Offering Funds

Public Offering Funds mean the funds that local governments will raise by issuing their security certificates through markets. Local governments are urged to take greater responsibility for their administrative and fiscal management in line with the promotion of decentralization.

#### 1 Joint-LGBs, etc.

#### i. Joint-LGBs

In FY2003, local governments started offering Joint-LGBs to reduce costs and to secure stable financing by increasing the lot size of issuance. "Joint-LGBs" are issued every month under the name of local governments, and the bonds are the joint debt of local governments based on Article 5-7 of the "Local Government Finance Act."

#### ii. Citizen Participatory-type Public Offering LGBs

Since March 2002, apart from "Nationwide Public Offering LGBs," "Citizen Participatory-type Public Offering LGBs" have been issued. This is not only to diversify financing methods of public offerings targeting individual investors but also to encourage the residents' participation in local government.

#### 2 Method of issuing Public Offering LGBs

The method of issuance includes "issuance for offering/underwriting by a syndicate composed of financial institutions and securities companies ("Underwriting Syndicate")," "issuance for offering/underwriting led by the lead manager," and "issuance for offering/underwriting by auction." Issuance terms were discussed and deliberated on from April 2002, and were set out in two tables: one for Tokyo Metropolitan Government Bonds, and the other for other local government bonds. In 2004 and 2006, the method for determining the appropriate terms was revised, and now each local government issuer decides on the terms of each issue separately and independently.

The breakdown consists of 2,423.8 billion yen in Fiscal Loan Funds (FY2022: 2,626.4 billion yen) and 1,641.9 billion yen in Japan Finance Organization for Municipalities Funds (FY2022: 1,746.4 billion yen).

Ref: See the website below http://www.kyodohakko.jp/ http://www.chihousai.or.jp/ (Japanese version only) (Public Offering Funds)

Fig. 2-38 Planned Issuance of Public Offering LGBs in FY2023

```
Total
             about 6.3 trillion yen (about 6.6 trillion yen)
           Nationwide Public Offering LGB about 6.3 trillion yen (about 6.6 trillion yen)
                                about 3.2 trillion yen (about 3.4 trillion yen)
                                                 about 1.2 trillion yen (about 1.2 trillion yen)
                                                       about 2.0 trillion yen (about 2.2 trillion yen)
                               · Independent-type
                   Medium-term (5-years etc.)
                                                       about 1.0 trillion yen (about 1.2 trillion yen)
                   Super Long-term (20 or 30-years etc.)
                                       about 0.7 trillion yen (about 1.1 trillion yen)
                   Flexible issues about 1.4 trillion yen (about 0.9 trillion yen)
           Citizen Participatory-type Public Offering LGB about 0.02 trillion yen (about 0.02 trillion yen)
 Note 1: Figures may not sum up to the total because of rounding.
 Note 2: The amount of planned issuance may be changed
 Note 3: The joint issuance includes the amount planned for issue under joint issuance (Green Bonds).
 Note 4: Flexible issues include LGB issues for which maturities are yet to be fixed.
 Note 5: () refers to the planned issuance of public offering LGB in FY2022.
 (Source) Ministry of Internal Affairs and Communications
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#### **b. Private Placement Funds**

Private Placement Funds are funds based on borrowings from financial institutions and the several mutual aid associations which have business transactions with the local governments.

The bonds financed through the Private Placement Funds are called "Private Placement Bonds," and this is financed either by deed borrowings or by actual issuance of the bonds.



## Debt of Incorporated Administrative Agencies, etc.

#### (1) Debt of Incorporated Administrative Agencies, etc.

The debt of "Incorporated Administrative Agencies, etc." includes government-guaranteed debt, borrowings from the General Account, the Fiscal Loan Fund, and other Special Accounts. Their debt also includes FILP Agency Bonds, etc., as means of financing from the private sector.

"Incorporated Administrative Agencies, etc." refer to Incorporated Administrative Agencies ((), public corporations ((), and authorized organizations (()). All of these are corporations that are engaged in public policy implementation under governmental supervision.

#### A. Financing from the central government

#### a. Borrowing from Fiscal Loan Fund

Some projects of "Incorporated Administrative Agencies, etc." are financed by FILP to flexibly cope with national demand or socioeconomic changes. In line with FILP reform efforts, FILP-target projects are further focused and made more efficient. The organizations that utilize FILP are called FILP Agencies.

#### b. Other Borrowings from the central government

There are also interest-free loans from the General Account and Special Accounts to "Incorporated Administrative Agencies, etc."

#### **B.** Financing from the private sector

As a result of the FILP reform, FILP Agency Bonds, which are not guaranteed by the government and are publicly offered, have been introduced as a new financial method for FILP Agencies to raise funds independently. It is thought that FILP Agencies promote information disclosure and improve their business operational efficiency by FILP Agency Bonds issuing. Some kinds of "Incorporated Administrative Agencies, etc." such as the Japan Finance Corporation (JFC), etc., need Diet authorization to issue bonds. Furthermore, an approval from the Competent Minister is required in general for a FILP Agency to issue bonds or make long-term borrowings. The Competent Minister can give their approval only after consulting with the Minister of Finance.

- Incorporated Administrative Agencies generally refer to corporate bodies established pursuant to stipulations in Article 2, paragraph (1) of the "Act on General Rules for Incorporated Administrative Agencies": "A corporation, incorporated pursuant to the provisions of this Act and the relevant Individual Act as an agency managed under the medium-term objectives, a national research and development agency or an agency engaged in administrative execution, for the purpose of effectively and efficiently conducting, from among the processes and services that need to be implemented securely from a public perspective, such as the stability of the lives of the people, society and the economy, and that do not need to be implemented directly by the State itself, those affairs that may not necessarily be implemented properly if entrusted to private entities or that need to be conducted monopolistically by a single entity." Here, the "Individual Acts" refer to laws that provide for matters concerning the name, purpose, and scope of operations, etc. of the respective incorporated administrative agencies.
- 2 Public corporations generally refer to "the corporations established directly by law, or the corporations required by a special law to be established by a special procedure (excluding Incorporated Administrative Agencies)" as stipulated in Article 4, paragraph (1), item (viii) of "Act for Establishment of the Ministry of Internal Affairs and Communications." In this case, "established through special measures" refers to establishment conducted by government appointed commissioners.
- Authorized organizations generally refer to "corporate bodies established independently by an interested party from the private sector, the establishment of which requires approval by the Competent Minister, based on the special acts due to the public nature of their activities" (Source: "Legal Terms Dictionary," Legislative Terminology Research Forum Edition).

# (2) Financial Conditions of Incorporated Administrative Agencies, etc.

"Incorporated Administrative Agencies, etc." disclose information on their financial conditions in various forms.

Incorporated Administrative Agencies compile financial statements, which are based on corporate accounting principles as a general rule, pursuant to the provisions of order of the competent ministry, in accordance with the "Act on General Rules for Incorporated Administrative Agencies." The financial statements are audited by an auditor and an accounting auditor and are approved by the Competent Minister before their disclosure (). Government supervision of Incorporated Administrative Agencies has shifted its focus from ex-ante control to ex-post check in order to strengthen their independence. The financial statements of Incorporated Administrative Agencies contribute not only to better understanding of how these agencies conduct businesses but also to appropriate evaluations of their business results.

Each public corporation and authorized organization also compile financial statements in accordance with the Act under which it was established, receives approval from the Competent Minister, and discloses this information. Each institution compiles and discloses an "administrative cost analysis statement," etc., based on corporate accounting principles to fulfill its accountability to explain the future burden on taxpayers.

The financial statements of major "Incorporated Administrative Agencies, etc." in which the government has invested are attached to the budget submitted to the Diet as reference materials as stipulated in Article 28 of the "Public Finance Act."

Auditing by an accounting auditor is not required for an Incorporated Administrative Agency whose operational size, including its capital amount, fails to reach the standards provided by Cabinet Order (Article 39, paragraph (1) of the "Act on General Rules for Incorporated Administrative Agencies.").

# Chapter 4 Debt Management in Foreign Countries 1 Debt Management Policies in Foreign Countries

# **Chapter 4 Debt Management in Foreign Countries**



# **Debt Management Policies in Foreign Countries**

#### (1) Debt Management Policy Frameworks

In Japan, the basic objectives of the debt management policy are set as: (1) To ensure the smooth and secure issuance of Japanese Government Bonds and (2) To minimize medium to long term fundraising costs. In line with these objectives, the government carefully communicates with the markets and makes efforts to manage JGBs based on investor needs and market trends. Basically, foreign countries also take almost the same stance on their debt management policies, but they have their own unique characteristics.

Furthermore, the JGB Issuance Plan is established in line with annual budget formulation, and an annual planned issuance amount for each maturity and other data are published in Japan, however, methods for publishing such data also vary from country to country. At the end of each fiscal year, Germany publishes the total government bond issue amount and its breakdown by maturity for the following fiscal year. This method is considered to be similar to that of Japan. On the other hand, the U.S. determines and publishes necessary issuance amount not on a fiscal year basis but on a quarterly basis, complying with the debt limit specified by law. In addition, the timing of information disclosure about the period from the announcement of a planned issuance amount to an actual auction for the issue also varies (Figs. 2-39) and 2-40).

Fig. 2-39 Debt Management Policies

	Japan	U.S.	U.K.	Germany	France
Debt Management Office	Financial Bureau, Ministry of Finance	Department of the Treasury, Office of Debt Management Department of the Treasury, Bureau of the Fiscal Service	HM Treasury, UK Debt Management Office (DMO)	Bundes ministerium der Finanzen, Bundesrepublik Deutschland - Finanzagentur GmbH (German Finance Agency)	Ministère de l'Économie et des Finances, Direction générale du Trésor, Agence France Trésor (AFT)
The Objective of Debt Management Policy	To ensure stable smooth issuance of JGBs To minimize medium to long term financing costs	To finance government borrowing needs at the lowest cost over time To issue debt in a regular and predictable pattern	To minimize, over the long term, the costs of meeting the government's financing needs, taking into account risk, while ensuring that debt management policy is consistent with the aims of monetary policy.	To keep interest costs as low as possible across a number of years and market phases while limiting the interest rate risks resulting from the portfolio structure.	To raise sufficient funds on the markets to finance the State by keeping the debt burden to taxpayers down to a minimum under optimum conditions of security.
Fiscal Year	April to March next year	October previous year to September	April to March next year	January to December	January to December
Issuance Plan	Announcement of total JGB issuance amount for the next fiscal year, breakdowns by maturity, and frequency of issuance, etc. in late-December each year (This may change according to the market environment, etc., based on dialogue with market participants).	Announcement of planned issuance amounts by maturity, auction schedule, etc. on a quarterly basis (February, May, August and November).	Announcement of total issuance amount for the next fiscal year, breakdowns by maturity, etc. in March each year.     Announcement of specific details of issues and auction schedule on a quarterly basis.	· Announcement of planned issuance amounts by maturity, auction schedule, new issue/reopening, etc. for the next fiscal year in December each year. Thereafter, announcement of auction schedule again on a quarterly basis.	Announcement of total issuance amount for the next fiscal year in December each year.     Specific issuance amounts are determined at a meeting with PD held in the week preceding the issuance date.

(Source) Relevant countries' debt management authorities

U.S. U.K. Japan Germany France Total issuance amount Total issuance amount Total issuance amount Total issuance amount In previous Scheduled auction date Scheduled auction date fiscal year Planned auction amount Planned auction amount Scheduled auction date Planned auction amount (Note 1) Scheduled auction date Scheduled auction date (Note 3) In previous Scheduled auction date (Note 3) \* Auction date of each month quarter is announced 3 months Planned auction amount before. Scheduled auction date Approximately Planned auction amount Planned auction amount one week Planned auction amount before

Fig. 2-40 Announcement Time, Issuance Amount and Auction Date

#### (2) Bond Types and Issuance Methods

Types of government bonds adopted in various foreign countries are divided into two types: offering to the market through auctions or other means (marketable bonds) and offering to retail investors without going through the market (non-marketable bonds).

Marketable bonds are normally offered mainly through the public auction method, which uses both competitive and non-competitive auctions. In the case of competitive auctions, it should be noted that the U.K., Germany and France employ the multiple price (conventional) method ( ) for almost all maturities, as is the case for Japan, while the U.S. employs the single price (Dutch style) method ( ) for all maturities. In addition, the U.K. and France use the syndication method. Germany used the syndication method in 2020 for the first time in five years and has continued to use it after 2021.

- 1) Auction method by which each winning bidder purchases the security at their bidding price (or yield).
- 2Auction method by which all winning bidders pay the lowest accepted bidding price regardless of their original bid prices (or yields).

Note 1: As for issuance lots per auction announced in the previous fiscal year, the fixed amounts are announced one week before in Japan and again every quarter in Germany.

Note 2: Planned quarterly amounts financed from the market.

Note 3: Scheduled auction date is announced again every quarter.

<sup>(</sup>Source) Relevant countries' debt management authorities

Fig. 2-41 Marketable Bond Types and Issuance Methods

	Japan	U.S.	U.K.	Germany	France
Short-term	3-month,6-month, 1-year(Note 2)	4-week, 8-week, 13-week, 17-week, 26-week,52-week, CMB(Note 3)	1-month, 3-month, 6-month, 12-month(Note 4)	3-month, 5-month, 6-month, 9-month, 11-month, 12-month	Less than or equal to 1-year
Medium-term	2-year, 5-year	2-year, 3-year, 5-year, 7-year	Over 1 ~ 7-year	2-year, 5-year, 7-year (Note 5)	2 ~ 8.5-year
Long-term	10-year	10-year	Over 7 ~15-year	10-year	0 0 5 . 50
Super Long-term	20-year, 30-year, 40-year	20-year, 30-year (Note 5)	Over 15 ~ 55-year	15-year, 30-year (Note 5)	Over 8.5 ~ 50-year
Others	Inflation-Indexed Bonds (10-year)	·Inflation-Indexed Bonds(5-year, 10-year,30-year) ·Floating-Rate Bonds(2-year)	·Inflation-Indexed Bonds (5 ~ 55-year) ·Green Bonds (12-year, 32-year)	·Inflation-Indexed Bonds(5-year, 10-year,30-year)(Note 6) ·Green Bonds (5-year, 10-year, 30-year)	· Inflation-Indexed Bonds (2 ~ 30-year) · Green Bonds (15 ~ 23-year) (Note 7)
Issuance Method	Multiple price(conventional) method (40-year, Inflation- Indexed Bonds: single price/yield (Dutch-style) method)	Single price(Dutch- style) method	Multiple price(conventional) method (Inflation-Indexed Bonds: single price (Dutch-style) method) (Note 8)	Multiple price(conventional) method (Note 8)	Multiple price(conventional) method (Note 8)

Note 1: As of March 2023.

Note 2: 3-month issues are limited to Financing Bills.

Note 3: CMBs (Cash Management Bills) are issued according to short-term cash flow needs.

Note 4: 12-month issues are institutionally made available for issuance but have never been issued.

Note 5: The U.S. issued a 20-year issue in May 2020 for the first time in 34 years since 1986. Germany issued 7-year and 15-year issues in May 2020 for the first time ever.

Note 6: Although 5-Year Bonds can be issued under the system, there have been no issuances since 2015.

Note 7: In May 2022, France issued green bonds with the characteristics of inflation-indexed bonds.

Note 8: The U.K., Germany and France use the syndication method for issuing some bonds

(Source) Relevant countries' debt management authorities

Representative non-marketable bonds are bonds for holdings only by households and other retail investors (savings bonds), issued in Japan, the U.S. and the U.K. The U.K. features unique non-marketable bonds, including Premium Bonds that offer a monthly prize draw instead of earning interest, as well as Green Savings Bonds (fixed-interest 3-year bonds). Germany and France issued government bonds for retail investors in the past but have discontinued the issuance.

The U.K. and France are characterized by issuing coupon-bearing marketable government bonds with flexible maturities set in rough ranges instead of setting specific maturities.

The U.S. issues a large amount of non-marketable bonds intended for government accounts including government entities and pension funds, which account for about 20% of its entire government debt outstanding.

Ref: Chapter 1 1(3) B "JGBs and sales system for Retail Investors" (P41)

#### (Reference) Green Bonds

Green bonds in Fig. 2-41 are issued by business corporations, local governments and other entities to raise funds for renewable energy and other projects that contribute to resolving global warming and other environmental problems. The global green bond market, including Japanese issues, has grown at the initiative of the private sector. Government green bonds have been issued in 27 countries (as of March 2023), including France and other European countries, since Poland became the first country to issue such bonds in 2016. France initiated a government green bond issue worth 7 billion euros in January 2017 and has reopened the issue multiple times annually. Its amount of outstanding issued government green bonds is the highest in the world. No government green bonds have been issued in the U.S., China and Japan as of March 2023.

Ref: I, 2 Box 4, "GX Economy Transition Bonds" (P25)

#### (3) Liquidity Maintenance/Enhancement Measures

Countries use various methods to maintain and enhance the liquidity of government bond markets. In Japan, from the perspective of ensuring sufficient issuance volume per issue, 20-Year Bonds and 30-Year Bonds are reopened in four issues per year, 40-Year Bonds and Inflation-Indexed Bonds are in principle reopened in one issue per year, and 10-Year Bonds are reopened in four issues per year, except for when interest rates fluctuate significantly (when the divergence between the coupon rate of the previous bond and the prevailing market yield exceeds approximately 0.30%). Through Liquidity Enhancement Auctions, Japan also reopens issues that have structural liquidity shortages or temporary liquidity shortages caused by expanding demand.

Among foreign countries, the U.S. and Germany have adopted reopening for on-the-run issues (excluding 7-year or shorter issues in the U.S.) in principle. In the U.K. and France, the debt management authorities discretionarily reopen any issues whether they are on- or off-the-run (Fig. 2-42).

In Germany, meanwhile, the authority withholds a certain nominal volume at each auction and gradually releases to the secondary market or uses them for the repo market in consideration of market conditions.

Fig. 2-42 Reopening Issuances

	Japan	U.S.	U.K.	Germany	France
	∙5-year (Note 1)	·10-year	·Medium-term	·2-year	·Medium-term
	·10-year (Note 2)	·20-year	(Over 1 ~ 7-year)	·5-year (Note 3)	(2 ~ 8.5-year)
	·20-year	·30-year	·Long-term	·7-year	·Long-term,
	·30-year	·Floating-Rate Bonds	(Over 7 ~ 15-year)	·10-year (Note 3)	Super Long-term
Doononing	·40-year	(2-year)	(Note 3)	·15-year	(Over 8.5 ~ 50-year)
Reopening	·Inflation-Indexed Bonds	·Inflation-Indexed Bonds	·Super Long-term	·30-year (Note 3)	(Note 3)
	(10-year)	(5-year, 10-year,	(Over 15 ~ 55-year)	·Inflation-Indexed Bonds	·Inflation-Indexed Bonds
		30-year)	(Note 3)	(5-year, 10-year,	(2 ~ 30-year) (Note 3)
			·Inflation-Indexed Bonds	30-year)	
			(5 ~ 55-year)		
	· 2-year	· 2-year			
\\/\!\		· 3-year			
Without reopening		· 5-year	_	_	_
		·7-year			

Note 1: If the redemption date and coupon rate of newly issued JGBs are the same as those of JGBs that have already been issued, then, in principle, the JGBs will be reopened as JGBs of the same issue as the JGBs that have already been issued.

Note 2: Reopening issuance of 4 issues per year unless interest rates fluctuate significantly (if JGBs with the same redemption date are issued and the difference between the coupon rate of the previous bond and the actual market yield on the auction date exceeds approximately 0.30%).

Note 3: Green Bonds are included.

(Source) Relevant countries' debt management authorities

#### (4) Primary Dealer System

Primary dealers (PDs) originally referred to government-certified dealers. In the U.S., candidates for PD designation are examined beforehand for their market-making capabilities, financial conditions, government bonds auction participation records, etc. Companies designated as PDs are entitled to directly trade with the Federal Reserve Bank of New York when it conducts open market operations and to participate in periodic meetings with the authorities for the exchange of opinions. At the same time, they are obliged to bid for government bonds in auctions, to conduct marketmaking services, and to provide information to the authorities. In this way, companies with special qualifications and responsibilities in regard to government bond markets are designated as PDs to ensure that government bond market liquidity, efficiency, and stability are maintained and improved. Such a system is generally called the PD system. Nowadays, various countries have similar PD systems, including Japan's JGB Market Special Participants Scheme. But

PDs' responsibilities and qualifications vary from country to country as shown below (Fig. 2-43).

Fig. 2-43 Primary Dealer System

		Japan	U.S.	U.K.	Germany (Note 1)	France
	Name	JGB Market Special Participants	Primary Dealers	Gilt-edged Market Makers (GEMMs)	Bietergruppe Bundesemissionen (Bund Issues Auction Group)	Spécialistes en Valeurs du Trésor (SVT)
Intro	oduction time	2004	1960	1986	1990	1987
	oer of members of April 2023)	20 companies	25 companies	17 companies	32 companies	15 companies
	Bidding	Participation in all auctions At least 100/n% of the planned issuance amount ""n" refers to the number of JGB Market Special Participants.	Participation in all auctions     Total planned issuance amount/the number of PDs	Participation in all auctions 5% or more of total issuance amount over a rolling 6-month period	_	Participation in all auctions
Responsibilities	Purchasing	<short-term> 0.5% or more of total successful bids for the preceding two quarters <excluding short-term=""> 1% or more of total successful bids for the preceding two quarters</excluding></short-term>	_	2% or more of total issuance amount in each sector over a rolling 6-month period	0.05% or more of total issuance amount for a year	2% or more of total issuance amount of each sector (short-term, medium-term, long-term and super long-term, and inflation-indexed bonds) for the preceding year (Note 2)
	Market making	Providing sufficient liquidity to the JGB secondary market	Maintain a share of Treasury market making activity of at least 0.25%.	Having a 2% or more share in the secondary market	_	Having a 2% or more share in the secondary market for the preceding year
	Information provision	Report to the MOF	Report to the New York Fed	Report to the DMO	_	Report to the AFT
Qualifications	Exclusive participation in auction	Non-Price Competitive Auction I (Up to 20% of total issuance amount) Non-Price Competitive Auction II (Up to 10% of total amounts of bids accepted in the competitive auction and Non-Price Competitive Auction I) Liquidity Enhancement Auction Buy-back Auctions, etc.	_	· Competitive Auctions · Buy-back Auctions · Syndication, etc.	·Competitive Auctions ·Non-Competitive Auctions, etc.	· Competitive Auctions ·Non-Competitive Auctions (Up to 25% of amounts of bids accepted in the competitive auction) · Syndication, etc.
	Regular meeting, etc.	Meeting with the MOF (About 5 times a year)	· Meeting with the New York Fed (annually) · Meeting with the U.S. Department of the Treasury (quarterly)	· Meeting with the HM Treasury (annually) · Meeting with the DMO (quarterly)	_	Meeting with the AFT (periodically)

Note 1: Germany's "Bund Issues Auction Group" is similar to the primary dealer system in other countries in that only the group members are allowed to participate in government bond auctions. However, the only required qualification for a Bund Issues Auction Group member is a registered office in a member state of the European Union, the European Economic Area or Switzerland, though required to purchase a certain part of each issue, is free from any obligation to make bids in auctions or have consultations with the authorities. Therefore, the German group is viewed as different from the PD system in other countries.

Note 2: Conditions other than those in the table for France's bidding responsibilities include "2% or more of the total issuance amount over the last one year for three of four sectors (short-term, medium-term, long-term and super long-term, and inflation-indexed bonds) and the average for the four sectors at 3% or more of the total issuance amount over the last one year.

(Source) Relevant countries' debt management authorities

# 2

# **Debt Management Status in Foreign Countries**

#### (1) Government Bond Issuance Trends

As the spread of the novel coronavirus (COVID-19) has exerted huge impacts on the world economy since 2020, foreign countries have come up with economic assistance, etc. Subsequently, they have been forced to raise more funds by changing government bond issuance plans and increasing government bond issuances substantially from the previous year. Since 2021, however, government bond issuances have been falling back to levels before the spread of COVID-19 thanks to economic policy normalization, etc. (Figs. 2-44 and 2-45).

Fig. 2-44 Issuance Amount of Coupon-bearing Bonds and Discount Bonds



Note 1: As of December 2022.

Note 2: Data for the U.K. is calculated on a revenue basis while data for the other countries is calculated on a nominal value basis.

Note 3: Green bonds and syndicated issues are included for the U.K., Germany and France.

Note 4: "Other issuance" of issuance amount of discount bonds for the U.K. refers to discount bonds issued bilaterally between the DMO and eligible investors at the request of those investors.

Note 5: "IIB" is inflation-indexed bonds. "FR Bond" is floating-rate bonds.

(Source) Calculated by the Ministry of Finance based on the data of relevant countries' debt management authorities on an auction date basis

Coupon-bearing bond issuances in foreign countries as of the end of 2022 indicate that 5-year or shorter issues accounted for some 50% of the total issuances in the U.S. and Germany while longer issues command around 70-80% of the total in the U.K. and France. The maturity mix thus varies from country to country.

Fig. 2-45 Outstanding Amount of Coupon-bearing Bonds and Discount Bonds



Note 1: As of December 2022.

Note 2: "Coupon-Bearing Bonds" for these graphs are 1-year or longer bonds, excluding inflation-indexed bonds and floating-rate bonds while including green bonds. (Source) Calculated by the Ministry of Finance based on the data of relevant countries' debt management authorities and central banks

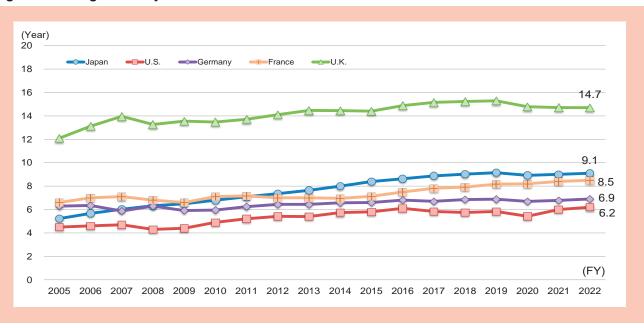
In Japan, the MOF flexibly adjusts Inflation-Indexed Bond issuance amounts according to the market environment, etc., based on dialogue with market participants. In foreign countries, inflation-indexed bonds are issued as necessary. Particularly in the U.K. and France, inflation-indexed bond issuances account for some 10% of the total coupon-bearing bond issuance amounts, making inflation-indexed bond a relatively large share of financing.

#### (2) Average Maturity

The "stock-based average maturity" is viewed as an important benchmark for assessing refunding risks. The stock-based average maturity is an indicator of overall outstanding government bonds, computed by weighted-averaging remaining maturities for outstanding government bonds.

Comparison between stock-based average maturities for government bonds in selected countries indicates that the average stands at as high as about 15 years in the U.K. with super long-term issues accounting for a large share of all government bonds, the averages range from 5 to 9 years in the U.S., Germany and France. In Japan, the average bottomed out at 4.9 years at the end of FY2003 and continued to lengthen after that, reaching 9.2 years at the end of FY2019 (Fig. 2-46). Although the Japanese average fell back to 8.9 years at the end of FY2020 as Japan increased mainly short- to medium-term bond issues due to the spread of COVID-19 in FY2020, the average extended to 9.1 years at the end of FY2022 due to the cut in short-term issues.





Note 1: Data for Japan represents the average weighted maturity of outstanding General Bonds including Treasury Bills and excluding Financing Bills.

Data for other countries includes short-term (one-year and shorter) bills. However, data for the U.K. excludes short-term bills for cash management purposes.

Note 2: Data is calculated on a stock basis. Non-marketable bonds are excluded.

Note 3: Data for each year is as of March next year for Japan alone and as of December for other countries.

(Source) OECD, Relevant countries' debt management authorities

In addition, the following indicator is also useful for identifying more specific refunding needs. Fig. 2-47 indicates the proportions of outstanding bonds that are scheduled to be refunded or mature within 1 year and 3 years.

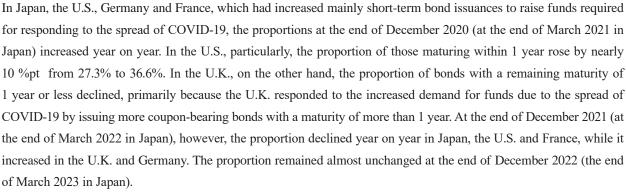
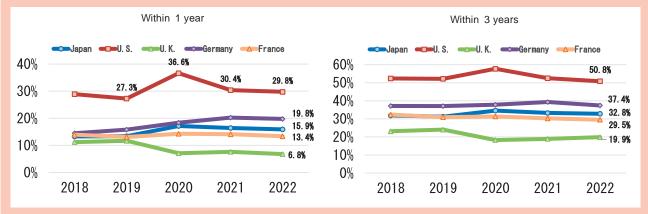


Fig. 2-47 Proportion of Outstanding with Remaining Maturity Within 1 Year and 3 Years

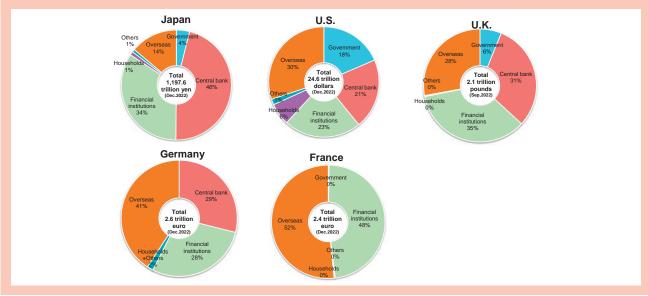


Note 1: Data for each year is as of March next year for Japan alone and as of December for other countries Note 2: Data is calculated on a stock basis. Non marketable bonds are excluded (Sources) The Ministry of Finance, Japan, calculated by the Ministry of Finance based on Bloomberg for the others

#### (3) Breakdown by Government Bond Holders

According to a breakdown of government bonds by holder category published in each country, the foreign ownership of JGBs, though rising now, was limited to around 14% at the end of December 2022. On the other hand, the foreign ownership of government bonds is higher in foreign countries, standing at around 30% in the U.S. and around 40-50% in Germany and France (Fig. 2-48).

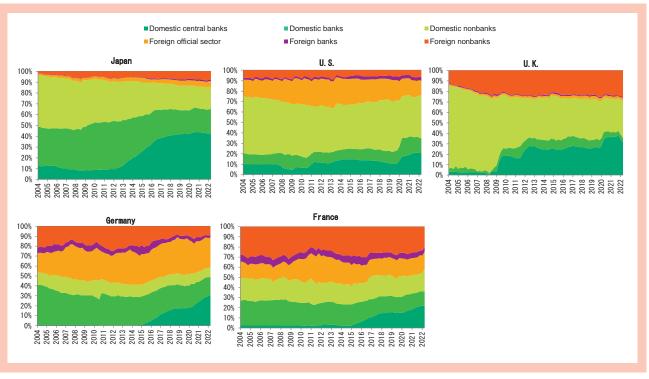
Fig. 2-48 Breakdown of Government Bonds by Holder Category



Note: Japanese government bonds include Fiscal Investment and Loan Program Bonds and Treasury Discount Bills (T-Bills), Data for the U.S. excludes holdings by government-controlled public institutions, trust funds, etc., but includes non-marketable government bonds held by the Federal Government Employee Retirement Funds, etc. In Germany and France, the total covers municipal bonds (the central bank's share in France is not made available)

Among other data, a working paper of the International Monetary Fund (IMF) in 2012 analyzed the estimated breakdown of government bond holdings based on data from debt management authorities, the Bank for International Settlements, and other sources. Specifically, the study divided government bond holders into six sectors (domestic central banks, domestic banks, domestic nonbanks, foreign official sector, foreign banks, and foreign nonbanks) and estimated their respective shares of government bond holdings (Fig. 2-49). The estimated breakdown has been updated and published on the IMF website every quarter.

Fig. 2-49 Breakdown of Government Bonds by Holder Category



Note 1: As of June 2022.

Note 2: Domestic banks are depository corporations residing in the country (IFS definition). Foreign banks are BIS reporting banks residing outside the country. Foreign official sector includes foreign central bank holdings as foreign exchange reserves, SMP holdings of foreign central banks, and foreign official loans. Foreign nonbanks and domestic nonbanks are imputed from external and total debt.

(Source) Serkan Arslanalp and Takahiro Tsuda, 2012, "Tracking Global Demand for Advanced Economy Sovereign Debt", IMF Working Paper, WP/12/284

# 3

## Collaboration and Cooperation with Foreign Countries

Debt management authorities can exchange information through international conferences sponsored by international organizations. These conferences include the OECD (Organization for Economic Cooperation and Development) Working Party on Public Debt Management, the OECD Global Forum on Public Debt Management, the IMF Public Debt Management Forum, the World Bank Government Borrowers Forum, and the ADB (Asian Development Bank) Regional Public Debt Management Forum.

We have proactively attended these international conferences, giving presentations on Japan's debt management policies and sharing information on debt management policies with foreign counterparts.

# $\mathbf{III}$

# Appendices

This part contains supplementary information which was not covered in previous parts of this brochure.

# Chapter 1 Government Bonds (JGBs)



## **Primary Market for Government Bonds**

### (1) Issuance Amount of Government Bonds

					nce Amour	nt				Bond	JGB Out	standing	(A)	National Debt	(B)
FY	Subtotal			GX Economy Transition	Special Bonds for covering Public	Reconstruction	FILP	Refunding	Total	Dependency	General Bonds Outstanding	FILP Bonds	GDP	Service (Initial)	General Account
(Unit)	(billion yen)	Construction Bonds	Special Deficit- Financing Bonds	Bonds	Pension Funding	Bonds	Bonds	Bonds	(billion yen)	Ratio		Outstanding		(B)	Total
		(billion yen)	(billion yen)	(billion yen)	(billion yen)	(billion yen)	(billion yen)	(billion yen)	, , ,	(%)	(billion yen)	(billion yen)	(%)	(billion yen)	(%)
1947 ~ 64					In t	he period of	balanced b	udget, JGBs	were not is:	sued.					
65	197.2	_	197.2	_	_	-	-	_	197.2	5.3	200.0	_	0.6	22.0	0.6
66	665.6	665.6	-	_	_	_	_	_	665.6	14.9	875.0	_	2.2	48.9	1.1
67	709.4	709.4	_	_	_	_	_	_	709.4	13.9	1,595.0	_	3.4	115.3	2.3
68 69	462.1 412.6	462.1 412.6	_						462.1 412.6	7.8 6.0	2,054.4 2,463.4	_	3.7	201.3 278.8	3.5 4.1
70	347.2	347.2	-	_	_	-	_	_	347.2	4.2	2,811.2	_	3.7	290.9	3.7
71	1,187.1	1,187.1	-	-	_	-	_	-	1,187.1	12.4	3,952.1	-	4.8	319.3	3.4
72 73	1,950.0 1,766.2	1,950.0 1,766.2			_			595.8	1,950.0 2,362.0	16.3 12.0	5,818.6 7,550.4	_	6.0	455.4 704.5	4.0
74	2,160.0	2,160.0	_	_	_	_	_	635.8	2,795.8	11.3	9,658.4	_	7.0	862.2	5.0
75	5,280.5	3,190.0	2,090.5	_	_	_	_	415.6	5,696.1	25.3	14,973.1	-	9.8	1,039.4	4.9
76	7,198.2	3,725.0	3,473.2	_	_	_	_	371.2	7,569.4	29.4	22,076.7	-	12.9	1,664.7	6.9
77 78	9,561.2 10,674.0	5,028.0 6,330.0	4,533.3 4,344.0	_	_			312.8 632.6	9,874.1 11,306.6	32.9 31.3	31,902.4 42,615.8		16.8 20.4	2,348.7 3,222.7	8.2 9.4
79	13,472.0	7,133.0	6,339.0	_	_	_	_	- 032.0	13,472.0	34.7	56,251.3	_	25.0	4,078.4	10.6
80	14,170.2	6,955.0	7,215.2	-	_	-	_	290.3	14,460.5	32.6	70,509.8	-	28.4	5,310.4	12.5
81	12,899.9	7,039.9	5,860.0	_	_	_	_	895.2	13,795.1	27.5	82,273.4	_	31.1	6,654.2	14.2
82 83	14,044.7 13,486.3	7,036.0 6,809.9	7,008.7 6,676.5					3,272.7 4,514.5	17,317.5 18,000.9	29.7 26.6	96,482.2 109,694.7		34.9 38.0	7,829.9 8,192.5	15.8 16.3
84	12,781.3	6,409.9	6,371.4	_	_	_	_	5,360.3	18,141.7	24.8	121,693.6	_	39.5	9,155.1	18.1
85	12,308.0	6,303.0	6,005.0	-	_	_	-	8,957.3	21,265.3	23.2	134,431.4	-	40.7	10,224.2	19.5
86	11,254.9	6,248.9	5,006.0	_	_	_	_	11,488.6	22,743.5	21.0	145,126.7	_	42.4	11,319.5	20.9
87 88	9,418.1 7,152.5	6,880.0 6,196.0	2,538.2 956.5					15,449.0 13,946.1	24,867.2	16.3 11.6	151,809.3 156,780.3		41.9 40.4	11,333.5 11,512.0	20.9
89	6,638.5	6,430.0	208.5	_	_	-	-	15,079.8	21,718.3	10.1	160,910.0	-	38.7	11,664.9	19.3
90	7,312.0	6,343.2	(968.9)	_	_	_	_	18,653.2	25,965.2	9.2	166,337.9	_	36.8	14,288.6	21.6
91 92	6,730.0 9,536.0	6,730.0 9,536.0		_		_		18,875.7 21,496.9	25,605.7 31,032.9	9.5	171,647.3 178,368.1	_	36.2 36.9	16,036.0 16,447.3	22.8 22.8
93	16,174.0	16,174.0	_	_	_	_	_	21,490.9	37,986.9	21.5	192,539.3	_	39.9	15,442.3	21.3
94	16,490.0	12,345.7	<3,333.7>	-	-	-	_	22,881.7	39,371.7	17.9	206,604.6	-	40.4	14,360.2	19.6
34	04.047.0	10.110.1	[810.6]					05.070.7	40.000.0	04.0	005 404 7		40.0	40.004.0	40.0
95	21,247.0	16,440.1	<2,851.1> 1,955.8	_	_	_	_	25,376.7	46,623.8	24.2	225,184.7	_	42.9	13,221.3	18.6
00	21,748.3	10,707.0	<1,879.6>	_	_	-	_	26,552.4	48,300.7	25.2	244,658.1	_	45.4	16,375.2	21.8
96			9,161.7												
97	18,458.0	9,940.0	8,518.0	_		_		31,432.0	49,890.0	23.5	257,987.5		47.6	16,802.3	21.7
98 99	34,000.0 37,513.6	17,050.0 13,166.0	16,950.0 24,347.6		_	_	_	42,431.0 40,084.4	76,431.0 77,597.9	40.3 42.1	295,249.1 331,668.7	_	55.2 62.5	17,262.8 19,831.9	22.2
00	33,004.0	11,138.0	21,866.0	_	_	_	_	53,269.7	86,273.7	36.9	367,554.7	_	68.4	21,965.3	25.8
01	30,000.0	9,076.0	20,924.0	_	_	_	43,883.1	59,329.6	133,212.7	35.4	392,434.1	43,760.5	74.4	17,170.5	20.8
02 03	34,968.0 35,345.0	9,148.0 6,693.0	25,820.0 28,652.0			_	31,843.5 28,508.6	69,615.5 74,948.9	136,427.1 138,802.5	41.8 42.9	421,099.1 456,973.6	75,564.4 91,849.0	80.4 86.8	16,671.2 16,798.1	20.5
03	35,490.0	8,704.0	26,786.0	_	_	_	40,129.7	84,450.5	160,070.2	41.8	499,013.7	121,553.2	94.2	17,568.6	21.4
05	31,269.0	7,762.0	23,507.0	_	_	_	28,249.4	105,519.5	165,037.9	36.6	526,927.9	139,353.2	98.7	18,442.2	22.4
06	27,470.0	6,415.0	21,055.0		_	_	25,559.5	108,120.6	161,150.2	33.7	531,701.5	138,906.1	99.0	18,761.6	23.5
07 08	25,382.0 33,168.0	6,044.0 6,975.0	19,338.0 26,193.0	_	_	_	16,769.6 8,600.0	99,189.4 93,909.5	141,341.0 135,677.5	31.0 39.2	541,458.4 545,935.6	139,754.3	100.6 105.8	20,998.8	25.3 24.3
09	51,955.0	15,011.0	36,944.0	_	_	-	9,410.0	90,480.3	151,845.3	51.5	593,971.7	122,225.3	119.4	20,243.7	22.9
10	42,303.0	7,603.0	34,700.0	_	_	_	8,400.0	100,835.5	151,538.5	44.4	636,311.7	118,191.8	126.0	20,649.1	22.4
11 12	42,798.0	8,368.0 11,429.0	34,430.0 36,036.0		2 594 2	11,250.0	13,100.0	109,020.0	176,168.0 177,530.3	42.5	669,867.4	110,912.2	134.0 141.2	21,549.1	23.3
13	47,465.0 40,851.0	7,014.0	33,837.0	_	2,584.2 2,603.5	2,303.3	14,220.0 10,700.0		164,311.4	48.9 40.8	705,007.2 743,867.6			21,944.2 22,241.5	24.3
14	38,492.9	6,577.0	31,915.9	_	_	120.0	14,000.0	119,372.8	171,985.7	39.0	774,083.1	98,991.0	147.9	23,270.2	24.3
15	34,918.3	6,479.0	28,439.3	_	_	1,320.0	13,400.0	114,230.8		35.5	805,418.2	96,115.5	148.9	23,450.7	24.3
16 17	38,034.6 33,554.6	8,901.4 7,281.8	29,133.2 26,272.8		_	790.9 76.8	19,600.0 12,000.0	109,479.8		39.0 34.2	830,573.3 853,178.9	96,250.9 94,525.9	152.4 153.5	23,612.1 23,528.5	24.4
18	34,395.4	8,097.2	26,272.8	_	_	70.0	10,630.0	100,362.0		34.8	874,043.4	92,245.6	157.0	23,302.0	23.8
19	36,581.9	9,143.7	27,438.2	_	_	810.0	12,550.0	104,238.3	154,180.1	36.1	886,694.5	91,090.1	159.2	23,508.2	23.2
20	108,553.9	22,596.0	85,957.9	_	_	722.4	39,075.1	108,503.9		73.5	946,646.8	118,645.0	176.1	23,351.5	22.7
21 22	57,655.0 62,478.9	9,168.0 8,727.0	48,487.0 53,751.9			40.0	10,144.6 16,500.0	142,850.2	210,689.7	39.9 44.9	991,411.1	104,624.2	180.1 186.1	23,758.8 24,339.3	22.3 22.6
23	35,623.0	6,558.0	29,065.0	506.1	_	99.8	12,000.0		205,780.3		1,068,021.3		186.7	25,250.3	22.1

Note 6: JGB Outstanding at the end of each fiscal year is calculated on a nominal basis, up to FY2021; actual, FY2022; 2nd supplementary budget, FY2023; initial

Note 1: Figures may not sum up to the total because of rounding.

Note 2: Issuance Amount is calculated on a revenue basis, up to FY2021; actual, FY2022; 2nd supplementary budget, FY2023; initial The figures in ( ) indicate Ad-hoc Deficit-Financing Bonds, < > are Special Deficit-Financing Bonds for Offset tax cuts, [ ] are Special Deficit-Financing Bonds for Earthquake.

Note 3: Reconstruction Bonds are issued under the General Account in FY2011 and under the Special Account for Reconstruction from the Great East Japan Earthquake from

FY2012 onward.

Note 4: The figure of Special Deficit-Financing Bonds in FY1965 includes Revenue Supplementary Bonds issued at the time of supplementary budget for reasons of

Note 5: Bond Dependency Ratio is the issuance amount of (Construction Bonds+Special Deficit-Financing Bonds)/general account total, up to FY2021; actual, FY2022; 2nd supplementary budget, FY2023; initial.

Note 7: JGB Outstanding/GDP is calculated on a nominal basis, actual GDP for years up to FY2021 and estimated GDP for FY2022 and FY2023 in the "Fiscal 2023 Economic Outlook and Basic Stance for Economic and Fiscal Management" (Cabinet Decision on January 23, 2023).

Note.8: National Debt Service and National Debt Service/General Account Total are on an initial budget basis for all years. FY2019 and FY2020 data cover extraordinary and special measures.

## (2) Historical Changes in JGB Market Issuance by JGB Type

(Unit: billion yen, %)

Ш

	FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu	
		Share																		
40-Year	-		_	_	-	1	99.9	0.1	601.9	0.6	1,100.0	0.8	1,198.7	0.8	1,598.9	1.1	1,597.5	1.1	1,597.8	1.0
30-Year	1,998.3	1.7	1,998.7	1.7	2,299.2	2.0	2,397.4	2.2	2,898.7	2.7	3,995.5	2.9	4,795.1	3.4	5,593.9	3.9	5,593.1	3.7	6,791.8	4.3
20-Year	7,190.4	6.1	8,390.4	7.1	9,595.0	8.5	9,590.4	8.7	10,091.7	9.5	12,597.7	9.2	13,190.1	9.2	13,189.9	9.1	14,389.8	9.6	14,389.4	9.2
15-Year CMT	7,194.2	6.1	8,794.2	7.4	5,389.1	4.8	3,396.7	3.1	599.6	0.6	_	_	_	_	_	_	_	_	_	_
10-Year	22,800.0	19.4	22,800.0	19.3	22,799.0	20.2	22,792.5	20.8	22,657.7	21.4	24,992.5	18.2	26,389.9	18.5	26,388.5	18.2	27,788.4	18.6	28,789.7	18.4
10-Year JGBi	799.2	0.7	1,998.5	1.7	2,498.9	2.2	2,997.5	2.7	1,499.3	1.4	_	_	_	_	_	_	_	_	599.4	0.4
5-Year	23,987.6	20.4	23,988.5	20.3	23,992.3	21.2	23,989.0	21.9	22,962.9	21.7	27,190.0	19.8	28,790.0	20.2	29,188.1	20.2	30,387.8	20.3	32,388.6	20.7
2-Year	20,384.4	17.3	20,388.0	17.2	20,390.6	18.1	20,389.7	18.6	21,316.3	20.1	28,389.2	20.7	31,189.0	21.8	31,594.4	21.8	32,388.7	21.7	34,790.5	22.2
Subtotal	84,354.1	71.6	88,358.3	74.7	86,964.1	77.0	85,653.1	78.1	82,628.1	78.0	98,264.9	71.5	105,552.8	73.9	107,553.7	74.3	112,145.4	75.1	119,347.2	76.2
TB total	33,395.9	28.4	29,910.7	25.3	24,799.5	22.0	22,795.9	20.8	20,999.7	19.8	32,899.3	23.9	29,999.2	21.0	29,999.0	20.7	29,999.1	20.1	29,999.4	19.2
TB1Y	19,998.6	17.0	17,911.0	15.1	16,799.8	14.9	16,798.5	15.3	17,999.7	17.0	27,399.3	19.9	29,999.2	21.0	29,999.0	20.7	29,999.1	20.1	29,999.4	19.2
TB6M	13,397.3	11.4	11,999.7	10.1	7,999.7	7.1	5,997.4	5.5	3,000.0	2.8	5,500.0	4.0	_	_	_	_	_	_	_	_
Liquidity Enhancement Auction	-	-	-	_	1,196.3	1.1	1,195.9	1.1	2,295.2	2.2	6,286.2	4.6	7,190.6	5.0	7,182.0	5.0	7,181.6	4.8	7,187.8	4.6
Total	117,750.0	100.0	118,269.0	100.0	112,959.9	100.0	109,644.9	100.0	105,923.0	100.0	137,450.4	100.0	142,742.6	100.0	144,734.7	100.0	149,326.0	100.0	156,534.4	100.0

	FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Actu		FY20 (Initia	
		Share		Share																
40-Year	1,598.0	1.0	1,998.3	1.3	2,797.1	1.9	2,997.0	2.1	2,396.1	1.8	2,397.4	1.9	2,997.3	1.4	3,596.3	1.8	4,198.0	2.1	4,200.0	2.2
30-Year	7,991.4	5.2	9,591.0	6.3	9,592.1	6.5	9,589.3	6.8	8,389.0	6.3	8,390.7	6.5	10,189.4	4.8	10,788.6	5.3	10,792.3	5.4	10,800.0	5.7
20-Year	14,388.8	9.3	14,388.5	9.5	13,189.8	9.0	11,988.6	8.5	11,988.4	8.9	10,790.4	8.3	13,489.5	6.4	14,388.9	7.0	14,392.7	7.1	14,400.0	7.6
15-Year CMT	-	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	-	_	-	_
10-Year	28,791.8	18.6	28,791.8	18.9	28,791.5	19.6	27,589.7	19.5	26,388.1	19.7	25,191.9	19.5	29,690.6	14.1	31,189.2	15.2	32,389.5	16.1	32,400.0	17.0
10-Year JGBi	1,799.5	1.2	1,999.5	1.3	1,599.7	1.1	1,598.3	1.1	1,598.3	1.2	1,598.6	1.2	799.3	0.4	799.1	0.4	949.6	0.5	1,000.0	0.5
5-Year	32,390.3	21.0	29,990.3	19.7	28,791.6	19.6	26,389.9	18.7	23,989.7	17.9	22,790.1	17.6	28,191.9	13.4	29,990.1	14.6	29,990.9	14.9	30,000.0	15.8
2-Year	32,392.4	21.0	29,991.1	19.7	27,591.8	18.8	26,391.2	18.7	25,192.5	18.8	23,993.7	18.6	32,992.1	15.7	35,990.2	17.6	33,891.7	16.8	34,800.0	18.3
Subtotal	119,352.2	77.3	116,750.5	76.7	112,353.6	76.5	106,544.0	75.5	99,942.1	74.5	95,152.8	73.6	118,350.1	56.2	126,742.4	61.8	126,604.7	62.8	127,600.0	67.1
TB total	26,700.0	17.3	25,800.0	17.0	25,000.0	17.0	23,800.0	16.9	21,600.0	16.1	21,600.0	16.7	80,899.1	38.4	66,899.2	32.6	63,099.7	31.3	50,700.0	26.6
TB1Y	26,700.0	17.3	25,800.0	17.0	25,000.0	17.0	23,800.0	16.9	21,600.0	16.1	21,600.0	16.7	36,899.7	17.5	41,299.5	20.1	41,999.7	20.8	42,000.0	22.1
TB6M	_	_	_	_	_	_	_	_	_	_		_	43,999.4	20.9	25,599.7	12.5	21,100.0	10.5	8,700.0	4.6
Liquidity Enhancement Auction	8,383.4	5.4	9,579.8	6.3	9,579.2	6.5	10,865.4	7.7	12,567.1	9.4	12,566.6	9.7	11,365.0	5.4	11,361.0	5.5	11,976.4	5.9	12,000.0	6.3
Total	154,435.6	100.0	152,130.3	100.0	146,932.8	100.0	141,209.4	100.0	134,109.2	100.0	129,319.4	100.0	210,614.2	100.0	205,002.6	100.0	201,680.8	100.0	190,300.0	100.0

Note 1: Figures may not sum up to the total because of rounding. Figures are calculated on a nominal basis. Note 2: Figures include the amount of issuance to a syndicate until FY2005.

## (3) Auction Results for JGBs and T-Bills in FY2022

### 40-Year

Appendices

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Competitive Bids (billion yen)	Bids Accepted (billion yen)	Lowest Price (yen)	Lowest Price (%)	Competitive Auction II (billion yen)
15	5.26.22	5.27.22	3.20.62	1.0	700	1,689.2	699.2	97.74	1.070	43.3
15	7.26.22	7.27.22	3.20.62	1.0	700	1,893.1	699.9	89.43	1.345	69.0
15	9.27.22	9.28.22	3.20.62	1.0	700	1,652.9	699.5	84.61	1.520	31.0
15	11.25.22	11.28.22	3.20.62	1.0	700	1,647.5	699.7	83.06	1.580	24.9
15	1.26.23	1.27.23	3.20.62	1.0	700	1,787.6	699.8	81.95	1.625	54.5
15	3.28.23	3.29.23	3.20.62	1.0	700	1,885.5	699.9	86.23	1.465	69.3

### 30-Year

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-Price Competitive Auction I (billion yen)	Non-Price Competitive Auction II (billion yen)
74	4.7.22	4.8.22	3.20.52	1.0	900	2,226.7	730.3	100.25	0.989	100.15	0.993	169.0	88.3
74	5.12.22	5.13.22	3.20.52	1.0	900	2,227.5	723.4	99.64	1.015	99.40	1.026	175.8	62.3
74	6.7.22	6.8.22	3.20.52	1.0	900	2,260.8	726.5	98.88	1.049	98.75	1.055	172.4	51.0
75	7.7.22	7.8.22	6.20.52	1.3	900	2,346.7	723.1	101.43	1.234	101.30	1.240	175.8	50.5
75	8.9.22	8.10.22	6.20.52	1.3	900	2,139.6	724.7	104.04	1.119	103.85	1.127	174.7	82.6
75	9.6.22	9.7.22	6.20.52	1.3	900	2,374.8	724.4	101.41	1.235	101.30	1.240	174.7	0.0
76	10.12.22	10.13.22	9.20.52	1.4	900	2,094.5	725.6	98.32	1.480	98.00	1.496	174.1	24.8
76	11.9.22	11.10.22	9.20.52	1.4	900	2,388.5	727.7	96.71	1.561	96.60	1.567	172.0	88.3
76	12.6.22	12.7.22	9.20.52	1.4	900	2,184.4	728.0	98.32	1.481	98.15	1.489	171.6	0.0
77	1.11.23	1.12.23	12.20.52	1.6	900	2,271.9	731.8	99.00	1.649	98.90	1.654	167.6	89.0
77	2.7.23	2.8.23	12.20.52	1.6	900	2,421.6	728.7	101.15	1.543	101.00	1.551	170.9	0.0
77	3.7.23	3.8.23	12.20.52	1.6	900	2,195.8	732.6	103.84	1.416	103.65	1.425	166.9	14.4

### 20-Year

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-Price Competitive Auction I (billion yen)	Non-Price Competitive Auction II (billion yen)
180	4.14.22	4.15.22	3.20.42	0.8	1,200	3,022.6	974.4	101.31	0.724	101.00	0.742	225.2	0.0
180	5.20.22	5.23.22	3.20.42	0.8	1,200	3,630.6	964.3	100.74	0.757	100.70	0.759	234.6	89.6
180	6.23.22	6.24.22	3.20.42	0.8	1,200	3,281.7	970.5	98.23	0.905	98.10	0.913	228.9	99.6
181	7.14.22	7.15.22	6.20.42	0.9	1,200	3,533.0	972.7	99.95	0.902	99.85	0.908	226.6	71.9
181	8.18.22	8.19.22	6.20.42	0.9	1,200	3,170.6	966.1	102.55	0.752	102.50	0.755	233.2	4.1
181	9.15.22	9.16.22	6.20.42	0.9	1,200	2,467.8	984.7	100.09	0.894	99.25	0.945	215.1	0.0
182	10.18.22	10.19.22	9.20.42	1.1	1,200	3,174.3	972.7	99.62	1.123	99.45	1.133	226.5	75.1
182	11.17.22	11.18.22	9.20.42	1.1	1,200	2,918.1	961.6	101.16	1.029	101.00	1.039	237.9	0.0
182	12.15.22	12.16.22	9.20.42	1.1	1,200	2,854.1	983.1	100.18	1.088	99.95	1.103	216.6	0.0
183	1.19.23	1.20.23	12.20.42	1.4	1,200	3,260.9	969.1	100.92	1.341	100.90	1.342	229.9	97.5
183	2.21.23	2.22.23	12.20.42	1.4	1,200	2,996.2	982.9	101.48	1.306	101.35	1.314	216.2	52.1
183	3.16.23	3.17.23	12.20.42	1.4	1,200	2,781.7	977.4	105.22	1.079	104.55	1.118	222.5	85.7

### 10-Year

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-competitive (billion yen)	Non-Price Competitive Auction I (billion yen)	Non-Price Competitive Auction II (billion yen)
366	4.5.22	4.6.22	3.20.32	0.2	2,700	7,860.0	2,176.9	99.99	0.201	99.97	0.203	0.325	522.1	0.0
366	5.10.22	5.11.22	3.20.32	0.2	2,700	12,569.1	2,188.7	99.56	0.245	99.53	0.248	0.285	510.3	0.0
366	6.2.22	6.3.22	3.20.32	0.2	2,700	10,667.5	2,195.1	99.62	0.239	99.60	0.241	0.405	503.6	234.6
367	7.5.22	7.6.22	6.20.32	0.2	2,700	11,011.1	2,182.2	99.53	0.248	99.51	0.250	0.395	516.1	20.6
367	8.2.22	8.3.22	6.20.32	0.2	2,700	6,601.2	2,188.5	100.31	0.168	100.25	0.174	0.285	510.8	0.0
367	9.1.22	9.2.22	6.20.32	0.2	2,700	8,784.7	2,188.7	99.66	0.235	99.62	0.239	0.460	510.0	1.0
368	10.4.22	10.5.22	9.20.32	0.2	2,700	12,184.0	2,194.7	99.53	0.248	99.51	0.250	0.315	503.7	167.8
368	11.1.22	11.2.22	9.20.32	0.2	2,700	11,431.8	2,180.5	99.53	0.248	99.52	0.249	0.286	518.1	48.1
368	12.1.22	12.2.22	9.20.32	0.2	2,700	13,735.3	2,278.4	99.52	0.250	99.52	0.250	0.435	420.4	168.6
369	1.5.23	1.6.23	12.20.32	0.5	2,700	10,451.8	2,193.8	100.00	0.500	100.00	0.500	0.315	504.9	21.8
369	2.2.23	2.3.23	12.20.32	0.5	2,700	10,413.2	2,258.2	100.14	0.485	100.04	0.495	0.301	440.9	0.0
369	3.2.23	3.3.23	12.20.32	0.5	2,700	16,959.4	2,246.2	100.00	0.500	100.00	0.500	0.455	452.4	43.3

### 10-Year Inflation-Indexed Bonds

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Lowest Price (yen)	Yield at the Lowest Price (%)
27	5.16.22	5.17.22	3.10.32	0.005	200	722.9	199.8	107.60	▲ 0.715
27	8.4.22	8.5.22	3.10.32	0.005	250	830.7	250.0	107.35	▲ 0.708
27	11.7.22	11.8.22	3.10.32	0.005	250	820.2	249.8	107.40	▲ 0.733
27	2.9.23	2.10.23	3.10.32	0.005	250	764.3	250.0	101.65	▲ 0.173

### 5-Year

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-competitive (billion yen)	Non-Price Competitive Auction I (billion yen)	Non-Price Competitive Auction II (billion yen)
151	4.12.22	4.13.22	3.20.27	0.005	2,500	7,328.5	2,027.9	99.89	0.027	99.88	0.029	0.000	471.3	83.8
151	5.18.22	5.19.22	3.20.27	0.005	2,500	6,873.8	2,020.3	99.94	0.017	99.93	0.019	0.500	478.4	78.0
152	6.21.22	6.22.22	3.20.27	0.1	2,500	6,396.3	2,020.7	100.08	0.083	100.05	0.089	0.000	478.4	245.0
153	7.12.22	7.13.22	6.20.27	0.005	2,500	7,916.5	2,021.0	99.83	0.039	99.83	0.039	0.000	478.4	248.9
153	8.16.22	8.17.22	6.20.27	0.005	2,500	6,885.8	2,025.9	100.06	▲ 0.007	100.04	▲ 0.003	0.000	473.2	244.6
153	9.13.22	9.14.22	6.20.27	0.005	2,500	7,668.5	2,024.7	99.83	0.040	99.82	0.042	1.000	473.2	249.1
154	10.14.22	10.17.22	9.20.27	0.1	2,500	8,108.9	2,031.0	100.09	0.081	100.08	0.083	0.000	468.3	15.2
154	11.15.22	11.16.22	9.20.27	0.1	2,500	6,712.9	2,030.8	100.19	0.060	100.17	0.064	0.000	468.5	0.0
154	12.8.22	12.9.22	9.20.27	0.1	2,500	7,268.5	2,030.9	99.90	0.121	99.88	0.125	0.000	468.5	0.0
155	1.13.23	1.16.23	12.20.27	0.3	2,500	7,438.7	2,031.6	99.55	0.393	99.52	0.399	0.005	467.8	249.1
156	2.16.23	2.17.23	12.20.27	0.2	2,500	8,084.3	2,032.9	99.92	0.216	99.92	0.216	0.000	466.2	249.1
156	3.14.23	3.15.23	12.20.27	0.2	2,500	6,629.6	2,033.3	100.37	0.121	100.32	0.132	0.000	466.2	217.0

### 2-Year

Issue Number	Auction Date	Issue Date	Maturity Date	Nominal Coupon (%)	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-competitive (billion yen)	Non-Price Competitive Auction I (billion yen)	Non-Price Competitive Auction II (billion yen)
436	4.27.22	5.2.22	5.1.24	0.005	2,800	9,802.1	2,258.4	100.118	▲ 0.054	100.110	▲ 0.050	0.000	540.8	0.0
437	5.31.22	6.1.22	6.1.24	0.005	2,800	12,282.7	2,263.7	100.127	▲ 0.058	100.120	▲ 0.054	0.000	535.2	275.7
438	6.28.22	7.1.22	7.1.24	0.005	2,800	8,985.0	2,355.8	100.109	▲ 0.049	100.100	▲ 0.044	0.000	443.3	0.0
439	7.28.22	8.1.22	8.1.24	0.005	2,800	9,809.5	2,264.2	100.159	▲ 0.074	100.155	▲ 0.072	0.000	535.2	223.4
440	8.30.22	9.1.22	9.1.24	0.005	2,800	8,200.3	2,270.3	100.177	▲ 0.083	100.170	▲ 0.079	0.000	529.0	191.2
441	9.29.22	10.3.22	10.1.24	0.005	2,800	10,775.7	2,254.8	100.103	▲ 0.046	100.095	▲ 0.042	0.000	544.6	174.5
442	10.27.22	11.1.22	11.1.24	0.005	2,800	9,434.4	2,270.4	100.074	▲ 0.031	100.065	▲ 0.027	0.000	529.0	154.1
443	11.29.22	12.1.22	12.1.24	0.005	2,800	9,272.6	2,301.9	100.070	▲ 0.029	100.060	▲ 0.024	0.000	497.5	163.6
444	12.27.22	1.4.23	1.1.25	0.005	2,900	9,173.3	2,427.7	99.924	0.043	99.900	0.055	0.000	471.8	161.4
445	1.31.23	2.1.23	2.1.25	0.005	2,900	8,788.0	2,358.1	100.029	▲ 0.009	100.025	▲ 0.007	0.000	541.3	90.7
446	2.28.23	3.1.23	3.1.25	0.005	2,900	9,595.8	2,333.8	100.065	▲ 0.027	100.060	▲ 0.024	0.000	565.5	80.4
447	3.30.23	4.3.23	4.1.25	0.005	2,900	9,252.0	2,377.2	100.136	▲ 0.063	100.125	▲ 0.057	0.000	522.1	0.0

### T-Bills

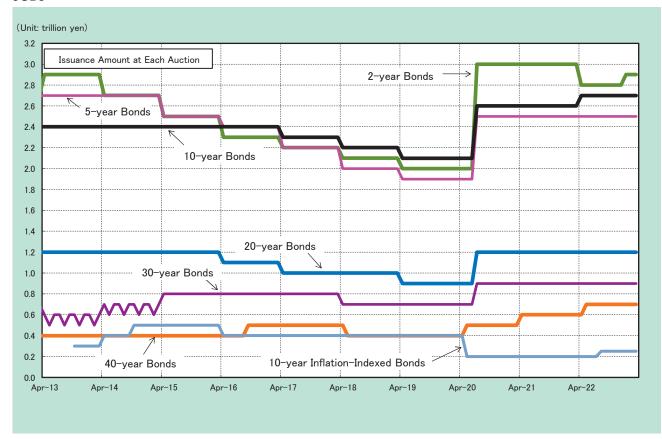
T-Bil	15						·				
Issue Number	Auction Date	Issue Date	Maturity Date	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-Price Competitive Auction I (billion yen)
1070	4.1.22	4.4.22	7.11.22	5,700.0	16,534.70	4,620.41	100.0263	▲ 0.0979	100.0250	▲ 0.0930	1,079.50
1071	4.7.22	4.11.22	10.11.22	3,400.0	13,729.10	2,756.27	100.049	▲ 0.0976	100.048	▲ 0.0956	643.70
1072	4.8.22	4.11.22	7.19.22	5,900.0	20,067.05	4,782.16	100.0332	▲ 0.1223	100.0320	▲ 0.1179	1,117.80
1073	4.15.22	4.18.22	7.25.22	5,900.0	11,653.95	4,782.14	100.0303	▲ 0.1128	100.0270	▲ 0.1005	1,117.80
1074	4.19.22	4.20.22	4.20.23	3,500.0	8,742.40	2,837.18	100.079	▲ 0.0789	100.066	▲ 0.0659	662.80
1075	4.21.22	4.25.22	10.25.22	3,400.0	11,995.70	2,756.26	100.046	▲ 0.0917	100.046	▲ 0.0917	643.70
1076	4.22.22	4.25.22	8.1.22	5,900.0	18,617.75	4,782.17	100.0320	▲ 0.1191	100.0315	▲ 0.1172	1,117.80
1077	5.6.22	5.9.22	8.8.22	5,900.0	11,930.65	4,771.45	100.0335	▲ 0.1343	100.0290	▲ 0.1162	1,128.50
1078	5.9.22	5.10.22	11.10.22	3,200.0	9,270.00	2,588.34	100.054	▲ 0.1070	100.046	▲ 0.0912	611.60
1079	5.13.22	5.16.22	8.15.22	5,900.0	15,415.60	4,771.40	100.0304	▲ 0.1218	100.0285	▲ 0.1142	1,128.60
1080	5.19.22	5.20.22	5.22.23	3,500.0	13,762.50	2,830.79	100.089	▲ 0.0884	100.081	▲ 0.0804	669.20
1081	5.20.22	5.23.22	8.22.22	5,900.0	13,446.70	4,771.38	100.0302	▲ 0.1210	100.0290	▲ 0.1162	1,128.60
1082	5.24.22	5.25.22	11.25.22	3,200.0	11,873.40	2,588.36	100.056	▲ 0.1110	100.054	▲ 0.1070	611.60
1083	5.27.22	5.30.22	8.29.22	5,900.0	12,353.70	4,771.35	100.0262	▲ 0.1050	100.0245	▲ 0.0982	1,128.60
1084	6.3.22	6.6.22	9.5.22	5,900.0	12,782.60	4,771.33	100.0237	▲ 0.0950	100.0220	▲ 0.0882	1,128.60
1085	6.9.22	6.10.22	12.12.22	2,800.0	11,108.80	2,264.85	100.048	▲ 0.0946	100.044	▲ 0.0867	535.10
1086	6.10.22	6.13.22	9.12.22	5,600.0	17,395.70	4,528.93	100.0235	▲ 0.0942	100.0220	▲ 0.0882	1,071.00
1087	6.14.22	6.16.22	12.16.22	2,800.0	8,883.10	2,264.84	100.050	▲ 0.0996	100.045	▲ 0.0897	535.10
1088	6.15.22	6.20.22	6.20.23	3,500.0	9,646.00	2,839.89	100.095	▲ 0.0949	100.091	▲ 0.0909	660.10
1089	6.16.22	6.20.22	9.20.22	5,600.0	16,014.90	4,528.98	100.0373	▲ 0.1479	100.0330	▲ 0.1308	1,071.00
1090	6.24.22	6.27.22	9.26.22	5,600.0	12,976.40	4,528.99	100.0458	▲ 0.1836	100.0360	▲ 0.1443	1,071.00
1091	7.1.22	7.4.22	10.3.22	5,600.0	15,319.50	4,528.98	100.0334	▲ 0.1339	100.0305	▲ 0.1222	1,071.00
1092	7.7.22	7.11.22	1.10.23	2,400.0	10,042.50	1,941.57	100.085	▲ 0.1693	100.081	▲ 0.1614	458.40
1093	7.8.22	7.11.22	10.11.22	5,600.0	12,886.80	4,528.94	100.0358	▲ 0.1419	100.0340	▲ 0.1348	1,071.00
1094	7.15.22	7.19.22	10.17.22	5,600.0	12,761.60	4,528.92	100.0342	▲ 0.1386	100.0325	▲ 0.1317	1,071.00
1095	7.19.22	7.20.22	7.20.23	3,500.0	10,263.70	2,830.79	100.131	▲ 0.1308	100.131	▲ 0.1308	669.20
1096	7.20.22	7.25.22	1.25.23	2,400.0	8,279.40	1,941.30	100.107	▲ 0.2120	100.092	▲ 0.1823	458.70
1097	7.22.22	7.25.22	10.24.22	5,600.0	12,580.50	4,528.74	100.0381	▲ 0.1527	100.0360	▲ 0.1443	1,071.22
1098	7.29.22	8.1.22	10.31.22	5,600.0	11,362.40	4,537.77	100.0354	▲ 0.1419	100.0330	▲ 0.1323	1,062.20

Appendices

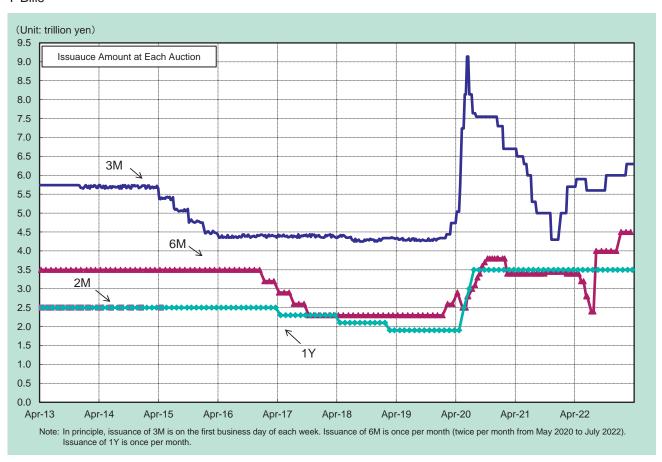
Issue Number	Auction Date	Issue Date	Maturity Date	Offering Amount (billion yen)	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Price (yen)	Yield at the Average Price (%)	Lowest Price (yen)	Yield at the Lowest Price (%)	Non-Price Competitive Auction I (billion yen)
1099	8.5.22	8.8.22	11.7.22	5,600.0	12,273.80	4,540.02	100.0324	▲ 0.1299	100.0300	▲ 0.1202	1,059.90
1100	8.9.22	8.10.22	2.10.23	4,000.0	12,872.00	3,254.87	100.089	▲ 0.1763	100.070	▲ 0.1387	745.10
1101	8.12.22	8.15.22	11.14.22	5,600.0	17,957.20	4,540.04	100.0281	▲ 0.1126	100.0260	▲ 0.1042	1,059.90
1102	8.18.22	8.22.22	8.21.23	3,500.0	9,770.00	2,838.28	100.131	▲ 0.1311	100.131	▲ 0.1311	661.70
1103	8.19.22	8.22.22	11.21.22	5,600.0	11,840.10	4,540.02	100.0323	▲ 0.1295	100.0290	▲ 0.1162	1,059.90
1104	8.26.22	8.29.22	11.28.22	5,600.0	13,382.50	4,566.96	100.0283	▲ 0.1134	100.0265	▲ 0.1062	1,033.00
1105	9.2.22	9.5.22	12.5.22	5,600.0	14,706.40	4,540.05	100.0274	▲ 0.1098	100.0265	▲ 0.1062	1,059.90
1106	9.8.22	9.12.22	3.10.23	4,000.0	11,910.50	3,242.85	100.095	▲ 0.1935	100.077	▲ 0.1568	757.10
1107	9.9.22	9.12.22	12.12.22	5,600.0	13,388.50	4,540.01	100.0288	▲ 0.1154	100.0275	▲ 0.1102	1,059.90
1108	9.15.22	9.20.22	9.20.23	3,500.0	9,906.00	2,837.78	100.144	▲ 0.1437	100.134	▲ 0.1338	662.20
1109	9.16.22	9.20.22	12.19.22	5,600.0	13,366.20	4,540.05	100.0291	▲ 0.1179	100.0280	▲ 0.1135	1,059.90
1110	9.21.22	9.26.22	1.6.23	5,600.0	12,724.10	4,540.07	100.0535	▲ 0.1913	100.0480	▲ 0.1716	1,059.90
1111	9.30.22	10.3.22	1.11.23	5,600.0	14,467.90	4,560.07	100.0638	▲ 0.2327	100.0565	▲ 0.2061	1,039.90
1112	10.6.22	10.11.22	4.10.23	4,000.0	12,875.90	3,242.89	100.085	▲ 0.1712	100.079	▲ 0.1591	757.10
1113	10.7.22	10.11.22	1.16.23	6,000.0	11,969.00	4,864.57	100.0505	▲ 0.1899	100.0425	▲ 0.1598	1,135.40
1114	10.14.22	10.17.22	1.23.23	6,000.0	14,794.20	4,864.07	100.0406	▲ 0.1511	100.0365	▲ 0.1358	1,135.90
1115	10.19.22	10.20.22	10.20.23	3,500.0	7,702.10	2,948.26	100.110	▲ 0.1098	100.102	▲ 0.1018	551.70
1116	10.21.22	10.24.22	1.30.23	6,000.0	14,768.00	4,864.53	100.0401	▲ 0.1492	100.0365	▲ 0.1358	1,135.40
1117	10.27.22	10.31.22	2.6.23	6,000.0	12,532.00	4,864.25	100.0371	▲ 0.1381	100.0340	▲ 0.1265	1,135.70
1118	11.4.22	11.7.22	2.13.23	6,000.0	15,088.50	4,875.90	100.0316	▲ 0.1176	100.0290	▲ 0.1079	1,124.00
1119	11.9.22	11.10.22	5.10.23	4,000.0	12,183.40	3,324.56	100.057	▲ 0.1148	100.050	▲ 0.1007	675.40
1120	11.11.22	11.14.22	2.20.23	6,000.0	17,587.40	4,875.93	100.0299	▲ 0.1113	100.0285	▲ 0.1061	1,124.00
1121	11.17.22	11.21.22	11.20.23	3,500.0	10,889.80	2,876.47	100.100	▲ 0.1001	100.097	▲ 0.0971	623.50
1122	11.18.22	11.21.22	2.27.23	6,000.0	18,317.10	4,875.94	100.0313	▲ 0.1165	100.0300	▲ 0.1117	1,124.00
1123	11.25.22	11.28.22	3.6.23	6,000.0	20,487.10	4,831.47	100.0352	▲ 0.1310	100.0350	▲ 0.1303	1,168.50
1124	12.2.22	12.5.22	3.13.23	6,000.0	15,844.30	4,872.96	100.0446	▲ 0.1660	100.0390	▲ 0.1451	1,127.00
1125	12.8.22	12.12.22	6.12.23	4,000.0	13,417.00	3,264.98	100.066	▲ 0.1322	100.058	▲ 0.1162	735.00
1126	12.9.22	12.12.22	3.20.23	6,000.0	16,951.20	4,873.00	100.0459	▲ 0.1708	100.0425	▲ 0.1582	1,127.00
1127	12.16.22	12.19.22	3.27.23	6,000.0	10,886.70	4,872.99	100.0481	▲ 0.1790	100.0355	▲ 0.1321	1,127.00
1128	12.19.22	12.20.22	12.20.23	3,500.0	7,922.80	2,927.39	100.065	▲ 0.0649	100.045	▲ 0.0449	572.60
1129	1.5.23	1.6.23	4.4.23	6,000.0	14,322.20	4,872.96	100.0291	▲ 0.1206	100.0250	▲ 0.1036	1,127.00
1130	1.6.23	1.10.23	7.10.23	4,500.0	14,906.10	3,697.79	100.050	▲ 0.1007	100.034	▲ 0.0685	802.20
1131	1.11.23	1.12.23	4.10.23	6,000.0	14,314.80	4,872.95	100.0282	▲ 0.1169	100.0255	▲ 0.1057	1,127.00
1132	1.13.23	1.16.23	4.17.23	6,000.0	15,795.70	4,877.37	100.0320	▲ 0.1283	100.0295	▲ 0.1182	1,122.60
1133	1.19.23	1.20.23	1.22.24	3,500.0	12,497.00	2,842.96	100.062	▲ 0.0616	100.032	▲ 0.0318	657.00
1134	1.20.23	1.23.23	4.24.23	6,000.0	13,254.00	4,872.96	100.0397	▲ 0.1591	100.0360	▲ 0.1443	1,127.00
1135	1.27.23	1.30.23	5.8.23	6,000.0	14,199.50	4,872.96	100.0416	▲ 0.1548	100.0380	▲ 0.1414	1,127.00
1136	2.3.23	2.6.23	5.15.23	6,000.0	16,066.90	4,880.92	100.0427	▲ 0.1589	100.0400	▲ 0.1489	1,119.00
1137	2.9.23	2.10.23	8.10.23	4,500.0	15,397.80	3,691.46	100.066	▲ 0.1330	100.057	▲ 0.1148	808.50
1138	2.10.23	2.13.23	5.22.23	6,300.0	15,445.10	5,136.53	100.0443	▲ 0.1649	100.0415	▲ 0.1545	1,163.40
1139	2.16.23	2.20.23	2.20.24	3,500.0	10,868.10	2,847.68	100.096	▲ 0.0959	100.086	▲ 0.0859	652.30
1140	2.17.23	2.20.23	5.29.23	6,300.0	16,529.10	5,125.14	100.0410	▲ 0.1526	100.0365	▲ 0.1358	1,174.80
1141	2.24.23	2.27.23	6.5.23	6,300.0	18,336.40	5,125.13	100.0381	▲ 0.1418	100.0350	▲ 0.1303	1,174.80
1142	3.3.23	3.6.23	6.12.23	6,300.0	18,689.40	5,068.89	100.0496	▲ 0.1846	100.0495	▲ 0.1842	1,231.10
1143	3.8.23	3.10.23	9.11.23	4,500.0	12,291.50	3,660.97	100.081	▲ 0.1596	100.074	▲ 0.1458	839.00
1144	3.9.23	3.13.23	6.19.23	6,300.0	13,697.60	5,125.18	100.0532	▲ 0.1980	100.0435	▲ 0.1619	1,174.80
1145	3.16.23	3.20.23	3.21.24	3,500.0	10,925.00	2,847.67	100.126	▲ 0.1251	100.112	▲ 0.1112	652.30
1146	3.17.23	3.20.23	6.26.23	6,300.0	16,852.00	5,125.19	100.0655	▲ 0.2437	100.0595	▲ 0.2214	1,174.80
1147	3.24.23	3.27.23	7.3.23	6,300.0	14,520.40	5,125.18	100.0616	▲ 0.2292	100.0595	▲ 0.2214	1,174.80

### (4) Issuance Amount of JGBs and T-Bills Offered to the Market at Each Auction

### **JGBs**



### T-Bills



## (5) Principal/Coupon Payment Corresponding to Days of Issuance in FY2023

### 5, 10, 20, 30-Year Bonds

Month of Issuance	Initial Coupon Payment Month	Coupon Payment Months	Month of Redemption	Maturity
April	September	March, September	March	Maturity – 1 month
May	September	March, September	March	Maturity – 2 months
June	September	March, September	March	Maturity – 3 months
July	December	June, December	June	Maturity – 1 month
August	December	June, December	June	Maturity – 2 months
September	December	June, December	June	Maturity – 3 months
October	March	March, September	September	Maturity – 1 month
November	March	March, September	September	Maturity – 2 months
December	March	March, September	September	Maturity – 3 months
January	June	June, December	December	Maturity – 1 month
February	June	June, December	December	Maturity – 2 months
March	June	June, December	December	Maturity – 3 months

Note 1: The coupon payment date and the redemption date are the twentieth of the month.

Note 2: Issuance shall occur on T+1 (day of auction + 1 business day).

### 2-Year Bonds

Month of Issuance	Initial Coupon Payment Month	Coupon Payment Months	Month of Redemption	Maturity
April	October	April, October	April	As for term
May	November	May, November	May	As for term
June	December	June, December	June	As for term
July	January	January, July	July	As for term
August	February	February, August	August	As for term
September	March	March, September	September	As for term
October	April	April, October	October	As for term
November	May	May, November	November	As for term
December	June	June, December	December	As for term
January	July	January, July	January	As for term
February	August	February, August	February	As for term
March	September	March, September	March	As for term

Note 1: The coupon payment date and redemption date are the first of the month.

Note 2: With regard to establishing the day of issuance, as a rule, issuance shall occur on the first of the month.

### 40-Year Bonds

Month of Issuance	Initial Coupon Payment Month	Coupon Payment Months	Month of Redemption	Maturity
May	September	March, September	March	Maturity – 2 months
July	September	March, September	March	Maturity – 4 months
September	March	March, September	March	Maturity – 6 months
November	March	March, September	March	Maturity – 8 months
January	March	March, September	March	Maturity – 10 months
March	September	March, September	March	Maturity – 12 months

Note 1: The coupon payment date and redemption date are the twentieth of the month. Note 2: Issuance shall occur on T+1 (day of auction + 1 business day).

### 10-Year Inflation-Indexed Bonds

Month of	Issuance	Initial Coupon Payment Month	Coupon Payment Months	Month of Redemption	Maturity
Ma	ay	September	March, September	March	Maturity – 2 months
Aug	just	September	March, September	March	Maturity – 5 months
Nove	mber	March	March, September	March	Maturity – 8 months
Febr	uary	March	March, September	March	Maturity – 11 months

Note 1: The coupon payment date and redemption date are the tenth of the month.

Note 2: Issuance shall occur on T+1 (day of auction + 1 business day).

## (6) Successful Bids Share for JGBs by Investor Type in FY2022

(Unit: billion yen, %)

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		Securities Companies	Domestic	Foreign	Banks	Domestic	Foreign	Insurance Companies	Short-Term Credit/ Securities Finance Companies	Others	Total for FY2022
	2-Year	14,206.7	10,048.1	4,158.6	13,424.5	13,424.5	0.0	0.0	0.0	0.0	27,631.2
	Share	51.4	36.4	15.1	48.6	48.6	0.0	0.0	0.0	0.0	100.0
	5-Year	23,309.9	14,777.0	8,532.9	1,021.1	1,021.1	0.0	0.0	0.0	0.0	24,331.0
	Share	95.8	60.7	35.1	4.2	4.2	0.0	0.0	0.0	0.0	100.0
	10-Year	23,539.0	12,591.0	10,948.0	2,932.9	2,932.9	0.0	0.0	0.0	0.0	26,471.9
	Share	88.9	47.6	41.4	11.1	11.1	0.0	0.0	0.0	0.0	100.0
	20-Year	8,448.9	4,861.4	3,587.5	3,230.6	3,230.6	0.0	0.0	0.0	0.0	11,679.5
	Share	72.3	41.6	30.7	27.7	27.7	0.0	0.0	0.0	0.0	100.0
	30-Year	8,467.9	4,949.3	3,518.6	240.5	240.5	0.0	18.4	0.0	0.0	8,726.8
	Share	97.0	56.7	40.3	2.8	2.8	0.0	0.2	0.0	0.0	100.0
	40-Year	4,191.5	2,061.2	2,130.3	6.5	6.5	0.0	0.0	0.0	0.0	4,198.0
	Share	99.8	49.1	50.7	0.2	0.2	0.0	0.0	0.0	0.0	100.0
1	0-Year JGBi	574.6	302.7	271.9	375.0	375.0	0.0	0.0	0.0	0.0	949.6
	Share	60.5	31.9	28.6	39.5	39.5	0.0	0.0	0.0	0.0	100.0
	T-Bills	265,099.1	157,150.7	107,948.5	46,355.2	46,055.6	299.5	0.0	7,732.1	189.2	319,375.6
	Share	83.0	49.2	33.8	14.5	14.4	0.1	0.0	2.4	0.1	100.0

Note 1: Figures may not sum up to the total because of rounding. Figures are calculated on a nominal basis.

Note 2: Figures are the total of price-/yield-competitive auctions.

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### (7) Issuance of JGBs for Retail Investors

28.1 ( 0.05%) 249.7 14.5 (0.06%) 207.1 ( 0.42%) 26.2 ( 0.05%) 26.2 33.3 (0.12%) 33.3 41.5 ( 0.14%) 128.6 ( 0.30%) 296.6 ( 0.57%) 466.8 (0.14%) 91.7 94.3 (0.12%) 94.3 666.1 (0.51%) 893.0 89.0 ( 0.11%) 137.9 (0.24%) 107.9 (0.10%) 107.9 34.1 (0.10%) 34.1 67.1 ( 0.08%) 77.9 ( 0.15%) 625.3 ( 0.43%) 770.3 Feb-14 44.8 (0.09%) 62.1 (0.17%) 235.5 (0.48%) 342.4 36.5 (0.08%) 36.8 (0.15%) 166.2 (0.40%) 239.5 Apr-14 46.9 (0.07%) 52.3 (0.14%) 265.7 (0.40%) 364.9 43.7 (0.08%) 64.6 ( 0.15%) 210.0 ( 0.42%) 318.4 157.1 27.7 (0.08%) 33.1 (0.14%) 96.3 (0.40%) 37.0 (0.07%) 53.8 (0.14%) 256.2 (0.40%) 347.0 35.8 ( 0.06%) 65.4 ( 0.12%) 169.3 ( 0.37%) 270.5 25.8 ( 0.06%) 29.0 ( 0.10%) 125.0 ( 0.34%) 179.8 25.0 (0.06%) 42.0 (0.12%) 163.3 ( 0.34%) 230.3 Nov-14 24.8 ( 0.05%) 53.9 (0.11%) 142.8 ( 0.34%) 221.5 17.4 : (0.05%) 14.8 : ( 0.08%) 63.4 : (0.29%) 95.7 30.4 (0.05%) 9.6 (0.05%) 139.1 ( 0.31%) 179.0 41.8 ( 0.05%) 10.3 ( 0.05%) 92.4 (0.20%) 144.5 Mar-15 90.8 (0.20%) 29.2 (0.05%) 4.0 (0.05%) 124.1 27.5 ( 0.05%) 11.8 ( 0.05%) 135.5 ( 0.26%) 174.8 183.7 40.7 : (0.05%) 15.2 (0.05%) 127.8 (0.24%) 20.5 ( 0.05%) 11.1 ( 0.08%) 114.9 ( 0.28%) 146.6 8.2 (0.05%) 159.3 (0.30%) 196.3 28.7 (0.05%) 19.2 ( 0.05%) 31.1 (0.09%) 175.3 (0.34%) 225.5 Sep-15 20.2 ( 0.05%) 7.2 ( 0.05%) 132.6 ( 0.26%) 160.1 19.3 (0.05%) 9.2 (0.05%) 131.0 (0.28%) 159.5 Nov-15 21.8 ( 0.05%) 12.9 (0.05%) 147.6 (0.22%) 182.3 Dec-15 14.5 ( 0.05%) 3.7 (0.05%) 54.7 (0.21%) 72.9 21.7 ( 0.05%) 14.3 ( 0.05%) 189.0 ( 0.21%) 225.1 15.3 ( 0.05%) 12.3 (0.05%) 149.0 (0.17%) 176.5 31.1 ( 0.05%) 165.9 ( 0.05%) 233.5 36.5 ( 0.05%) 41.8 ( 0.05%) 111.7 ( 0.05%) 246.7 (0.05%) 400.3 30.2 ( 0.05%) 85.1 ( 0.05%) 159.6 ( 0.05%) 274.9 31.4 (0.05%) (0.05%)210.4 45.3 ( 0.05%) 100.0 ( 0.05%) 165.3 ( 0.05%) 310.5 187.5 ( 0.05%) Aug-16 39.6 (0.05%) 93.9 (0.05%) 320.9 43.0 (0.05%) 43.6 ( 0.05%) 82.6 (0.05%) 169.2 42.8 ( 0.05%) 94.9 ( 0.05%) 205.8 ( 0.05%) 343.4 43.4 ( 0.05%) 68.8 ( 0.05%) 84.3 ( 0.05%) 196.4 47.6 (0.05%) 38.4 (0.05%) 105.3 (0.05%) 191.3 69.8 ( 0.05%) 181.6 (0.05%) 382.8 (0.05%) 634.2 52.3 (0.05%) 170.0 (0.05%) 350.4 (0.05%) 572.7 46.7 ( 0.05%) 207.6 (0.05%) 677.2 (0.06%) 46.0 (0.05%) 19.9 ( 0.05%) 203.0 137.1 ( 0.05%) May-17 40.8 (0.05%) 24.0 (0.05%) 124.6 (0.05%) 189.4 38.4 ( 0.05%) 11.0 (0.05%) 184.0 (0.05%) 233 4 325.6 49.4 (0.05%) 33.4 (0.05%) 242.8 (0.05%) 44.3 ( 0.05%) 32.5 ( 0.05%) 274.3 ( 0.05%) 351.0 9.5 (0.05%) 159.4 ( 0.05%) 211.5 42.6 (0.05%) 43.8 (0.05%) 17.5 (0.05%) 290.3 (0.05%) 351.6 41.3 ( 0.05%) 17.6 ( 0.05%) 218.7 ( 0.05%) 277.6 47.2 (0.05%) (0.05%)66.5 ( 0.05%) 20.0 (0.05%) 281.9 (0.05%) 368.5 41.9 ( 0.05%) 15.8 ( 0.05%) 278.3 (0.05%) 336.0 36.2 ( 0.05%) 12.6 ( 0.05%) 284.5 ( 0.06%) 333.4 55.1 ( 0.05%) 347.4 ( 0.05%) 14.3 (0.05%) 416.9 35.3 ( 0.05%) 15.8 ( 0.05%) 312.4 ( 0.05%) 363.5 Jun-18 46.6 ( 0.05%) 17.6 (0.05%) 297.2 (0.05%) 361.3 46.6 ( 0.05%) 23.6 ( 0.05%) 356.3 ( 0.05%) 426.5 (0.05%) 393.7 37.9 (0.05%) 11.1 ( 0.05%) 313.4 ( 0.09%) 362.4 372.8 25.6 (0.05%) 12.0 (0.05%) 335.1 (0.07%) 27.3 (0.05%) 15.8 ( 0.05%) 351.7 ( 0.09%) 394.8 24.5 ( 0.05%) 8.3 (0.05%) 259.0 ( 0.09%) 291.8 37.7 ( 0.05%) 14.3 ( 0.05%) 310.7 ( 0.05%) 362.7 Feb-19 38.5 (0.05%) 15.2 ( 0.05%) 308.5 ( 0.05%) 362.2 27.7 ( 0.05%) 36.0 (0.05%) 520.5 (0.05%) 584.2 37.4 : (0.05%) 31.5 (0.05%) 369.0 (0.05%) 437 8 32.9 ( 0.05%) 14.5 ( 0.05%) 282.1 ( 0.05%) 329.6 45.1 (0.05%) 16.8 (0.05%) 309.5 ( 0.05%) 371.4 (Unit: billion yen)

	3-Year Fixed-Rate	5-Year Fixed-Rate	10-Year Floating-Rate	
Month of issue	(interest rate)	(interest rate)	,	Total
Jul-19	57.9 ( 0.05%)	20.7 ( 0.05%)	356.6 ( 0.05%)	435.2
Aug-19	61.5 ( 0.05%)	19.8 ( 0.05%)	372.2 ( 0.05%)	453.5
Sep-19	59.4 ( 0.05%)	21.7 (0.05%)	335.4 ( 0.05%)	416.6
Oct-19	59.4 ( 0.05%)	20.1 (0.05%)	374.8 ( 0.05%)	454.3
Nov-19	50.0 (0.05%)	19.1 (0.05%)	257.4 ( 0.05%)	326.5
Dec-19	63.5 ( 0.05%)	22.5 ( 0.05%)	435.2 ( 0.05%)	521.1
Jan-20	93.4 (0.05%)	30.4 (0.05%)	502.3 ( 0.05%)	626.1
Feb-20	60.4 ( 0.05%)	16.5 ( 0.05%)	354.1 ( 0.05%)	431.0
Mar-20	54.4 ( 0.05%)	18.0 (0.05%)	372.9 ( 0.05%)	445.3
Apr-20	57.5 ( 0.05%)	20.9 ( 0.05%)	541.6 ( 0.05%)	620.0
May-20	28.6 ( 0.05%)	5.4 ( 0.05%)	22.3 ( 0.05%)	56.3
Jun-20	30.1 ( 0.05%)	7.7 ( 0.05%)	28.5 ( 0.05%)	66.2
Jul-20	57.0 ( 0.05%)	13.2 ( 0.05%)	37.2 (0.05%)	107.4
Aug-20	73.0 ( 0.05%)	14.1 ( 0.05%)	48.2 ( 0.05%)	135.3
Sep-20	77.5 ( 0.05%)	15.4 ( 0.05%)	59.8 ( 0.05%)	152.7
Oct-20	92.9 ( 0.05%)	25.4 ( 0.05%)	256.5 ( 0.05%)	374.8
Nov-20	60.4 ( 0.05%)	21.1 ( 0.05%)	294.4 ( 0.05%)	375.9
Dec-20	49.6 ( 0.05%)	14.1 ( 0.05%)	206.7 ( 0.05%)	270.4
Jan-21	68.9 ( 0.05%)	30.9 ( 0.05%)	218.0 ( 0.05%)	317.7
Feb-21	47.6 ( 0.05%)	18.6 ( 0.05%)	181.8 ( 0.05%)	248.0
Mar-21	49.4 ( 0.05%)	19.0 ( 0.05%)	235.8 ( 0.05%)	304.2
Apr-21	58.2 ( 0.05%)	13.8 ( 0.05%)	281.8 ( 0.09%)	353.8
May-21	48.0 ( 0.05%)	19.2 ( 0.05%)	259.7 ( 0.08%)	326.9
Jun-21	33.7 ( 0.05%)	12.9 ( 0.05%)	145.5 ( 0.05%)	192.1
Jul-21	46.3 ( 0.05%)	16.6 ( 0.05%)	166.7 ( 0.05%)	229.6
Aug-21	45.0 ( 0.05%)	17.9 ( 0.05%)	141.8 ( 0.05%)	204.6
Sep-21	54.1 ( 0.05%)	25.2 ( 0.05%)	100.5 ( 0.05%)	179.8
Oct-21	58.8 ( 0.05%)	28.4 ( 0.05%)	139.4 ( 0.05%)	226.6
Nov-21	37.6 ( 0.05%)	17.7 ( 0.05%)	124.9 ( 0.05%)	180.2
Dec-21	34.7 ( 0.05%)	12.9 ( 0.05%)	144.0 ( 0.07%)	191.6
Jan-22	46.5 ( 0.05%)	21.5 ( 0.05%)	254.8 ( 0.05%)	322.8
Feb-22	31.6 ( 0.05%)	24.8 ( 0.05%)	204.5 ( 0.07%)	261.0
Mar-22	28.5 ( 0.05%)	19.3 ( 0.05%)	255.9 ( 0.11%)	303.8
Apr-22	35.3 (0.05%)	19.1 (0.05%)	289.1 ( 0.12%)	343.6
May-22	40.1 ( 0.05%)	14.1 (0.05%)	239.6 ( 0.13%)	293.8
Jun-22 Jul-22	40.9 ( 0.05%) 52.3 ( 0.05%)	12.1 ( 0.05%) 15.8 ( 0.05%)	233.3 ( 0.17%) 258.9 ( 0.16%)	286.3 327.0
Jui-22 Aug-22	52.3 ( 0.05%) 44.1 ( 0.05%)	15.8 ( 0.05%) 13.5 ( 0.05%)	258.9 ( 0.16%) 258.8 ( 0.17%)	316.5
Aug-22 Sep-22	( /	,	,	245.7
Oct-22	52.9 ( 0.05%) 42.2 ( 0.05%)	17.5 ( 0.05%) 14.3 ( 0.05%)	175.2 ( 0.11%) 244.5 ( 0.16%)	301.0
Nov-22	40.0 (0.05%)	11.0 (0.05%)	172.4 (0.17%)	223.5
Dec-22	37.4 (0.05%)	96.0 (0.05%)	128.2 (0.17%)	175.1
Jan-23	33.9 (0.05%)	25.6 (0.07%)	150.2 (0.17%)	209.8
Feb-23	15.1 (0.05%)	53.9 (0.18%)	307.8 (0.33%)	376.9
Mar-23	16.7 (0.05%)	51.1 (0.15%)	251.5 ( 0.32%)	319.3
Iviai-23	10.7 (0.05%)	31.1 (0.15%)	201.0 (0.02%)	318.3

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(Unit:	billion	yer
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(Unit: billion yer					
	3-Year Fixed-Rate	5-Year Fixed-Rate	10-Year Floating-Rate	Total	
FY2002	ı	ı	383.5	383.5	
FY2003	I	1	2,967.1	2,967.1	
FY2004	1	-	6,821.0	6,821.0	
FY2005	1	1,128.5	6,142.7	7,271.2	
FY2006	_	4,162.7	2,975.6	7,138.3	
FY2007	_	3,617.7	1,044.0	4,661.7	
FY2008	_	2,051.9	241.0	2,292.9	
FY2009	_	1,193.9	165.9	1,359.8	
FY2010	462.0	422.1	143.7	1,027.8	
FY2011	1,059.0	756.5	1,117.8	2,933.4	
issued in FY2012	169.7	97.3	240.6	507.6	
FY2012	361.0	204.2	1,111.2	1,676.4	
issued in FY2013	87.6	14.5	207.1	309.3	
FY2013	606.9	443.3	1,989.7	3,039.9	
FY2014	385.4	432.8	1,814.4	2,632.6	
FY2015	285.8	168.1	1,682.8	2,136.7	
FY2016	533.9	1,251.0	2,770.7	4,555.6	
FY2017	538.5	226.8	2,684.0	3,449.3	
FY2018	461.0	196.0	4,035.7	4,692.7	
FY2019	675.3	251.6	4,321.5	5,248.4	
FY2020	692.6	205.7	2,130.7	3,029.0	
FY2021	523.1	230.2	2,219.5	2,972.8	
FY2022	451.1	257.5	2,709.8	3,418.4	

Note 1: From January 2012 to June 2013, JGBs for Retail Investors have been issued as Reconstruction Bonds.

Note 2: JGBs for Retail Investors issued from April to June 2012 were posted under revenues in FY2011, and those issued from April to June 2013 were posted under revenues in FY2012, because Reconstruction Bonds are accepted to be issued between accounting adjustment term.

Note 3: Amounts of 10-Year Floating-Rate JGBs issued for FY2011 and FY2012 include those of Reconstruction Supporters' Bonds for Retail Investors.

## (8) Issuance by the Bank of Japan Rollover

(Unit: billion yen)

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FY	Amount of Rollover
FY2013	11,699.8
FY2014	11,099.8
FY2015	10,399.9
FY2016	7,999.9
FY2017	3,000.0
FY2018	2,500.0
FY2019	2,200.0
FY2020	2,200.0
FY2021	2,200.0
FY2022	2,200.0
FY2023	2,000.0

Note: Figures are calculated on a revenue basis. Up to FY2022; Actual, FY2023; Initial.

## (9) Front-Loading Issuance of Refunding Bonds

		(Unit: billion yen)
	Maximum Amount of Issuance (Face Value)	Issuance Amount (Revenue Basis)
FY2013 (Issued in FY2012)	12,000.0	11,360.7
FY2014 (Issued in FY2013)	28,000.0 (initial plan: 20,000.0)	23,275.8
FY2015 (Issued in FY2014)	29,000.0 (initial plan: 25,000.0)	28,834.1
FY2016 (Issued in FY2015)	44,000.0 (initial plan: 32,000.0)	42,250.9
FY2017 (Issued in FY2016)	56,000.0 (initial plan: 48,000.0)	45,104.6
FY2018 (Issued in FY2017)	56,000.0	49,440.7
FY2019 (Issued in FY2018)	55,000.0	52,463.1
FY2020 (Issued in FY2019)	53,000.0	45,082.7
FY2021 (Issued in FY2020)	43,000.0	9,372.6
FY2022 (Issued in FY2021)	20,000.0	15,135.8
FY2023 (Issued in FY2022)	20,000.0	15,498.8
FY2024 (Issued in FY2023)	25,000.0	_

Note: Refunding Bonds issued in order to refinance JGBs that will mature in FY X are basically issued in FY X, but they can be issued in FY X-1 within an upper limit authorized by the General Rules for the Special Account Budget of FY X-1. This kind of issuance is called Front-Loading Issuance of Refunding Bonds.

## (10) List of Commissions for Issuing JGBs, etc.

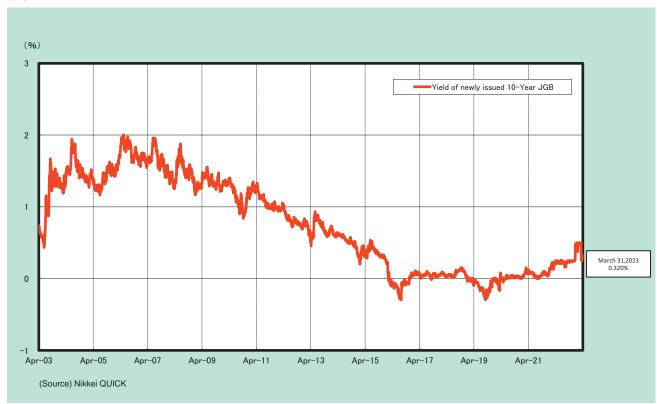
Catego	ories	Calculation Formula	Payable to	
	10-Year	0.20 yen per 100 yen nominal par		
Bond Sales Fee (New OTC Sales JGBs)	5-Year	0.15 yen per 100 yen nominal par	Handling Institutions	
	2-Year	0.10 yen per 100 yen nominal par		
Bond Sales Fee	10-Year Floating Rate	0.14 yen per 100 yen nominal par		
(JGBs for Retail	5-Year Fixed Rate	0.11 yen per 100 yen nominal par	Handling Institutions	
Investors)	3-Year Fixed Rate	0.08 yen per 100 yen nominal par		
Bond Issuance Fee		Necessary fee amount permitted by the Minister of Finance	Bank of Japan	
Management Fee (JGBs for Retail Investor	rs)	Principal receivable at interest payment × 2/10,000 Except for JGBs held at a self-account (except for trust account)	Handling Institutions	
Interest Payment Fee		Principal receivable at interest payment × 0.006/1,000 Except for JGBs held at a self-account (except for trust account)	BOJ Agents, etc.	
Redemption Fee	Treasury Bills Financing Bills	Redemption proceeds receivable × 0.9/1,000,000 However, the following upper limit is applicable to fees per JGB category Self-account: 10,000 yen; and customer account: 15,000 yen	BOJ Agents, etc.	
	Except for Above	Principal receivable × 0.006/1,000 Except for JGBs held at a self-account (except for trust account)		
Premature Redemption (JGBs for Retail Investor		JGB purchase amount payable × 0.9/1,000	Handling Institutions	
Subsidy JGBs Delivery Fee		357 yen per JGB certificate	BOJ Agents, etc.	
Subsidy JGBs Redemption Fee  Interest Payment Fee Principal/Interest Payment Fee Redemption Amount Payment Fee		378 yen per interest coupon or attached coupon	BOJ Agents, etc.	
Subsidy JGBs Buy-Back	Redemption Fee	1,282 yen per JGB certificate	BOJ Agents, etc.	

Note: The fees given above do not include consumption tax. Actual fees may include the tax.

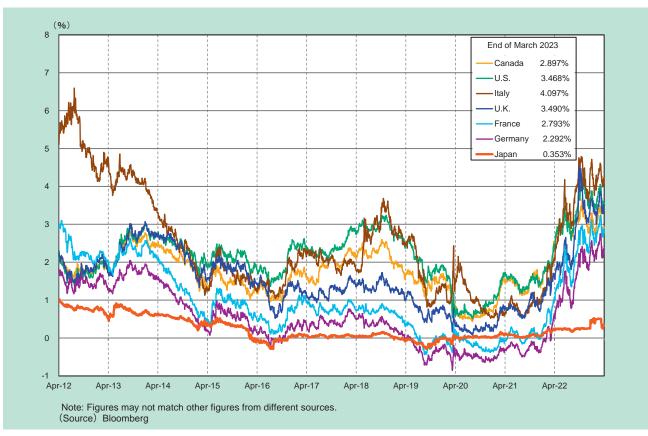
# 2

# **Secondary Market for Government Bonds**

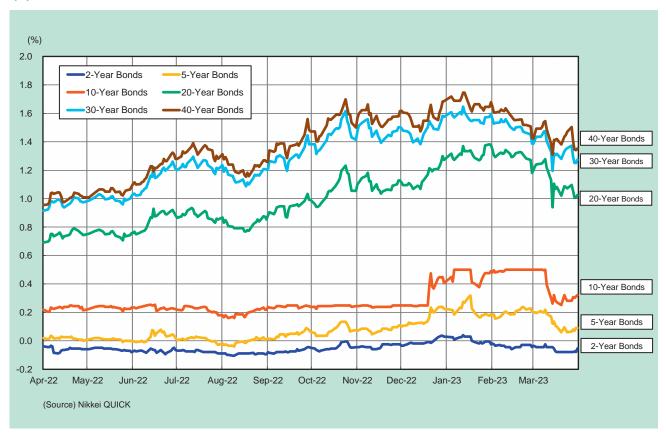
## (1) 10-Year JGB Yield



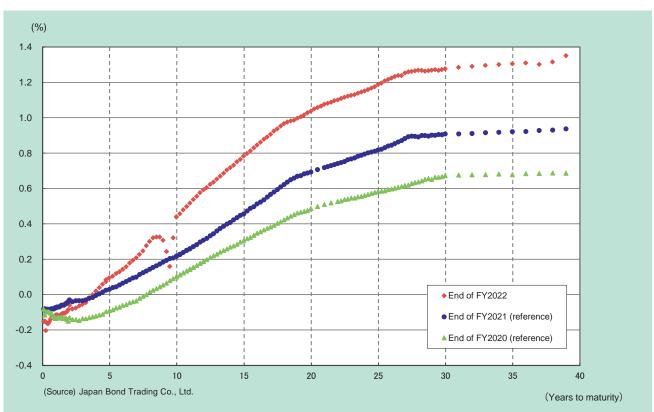
## (2) 10-Year Government Bonds Yields



## (3) Yields of JGBs in FY2022

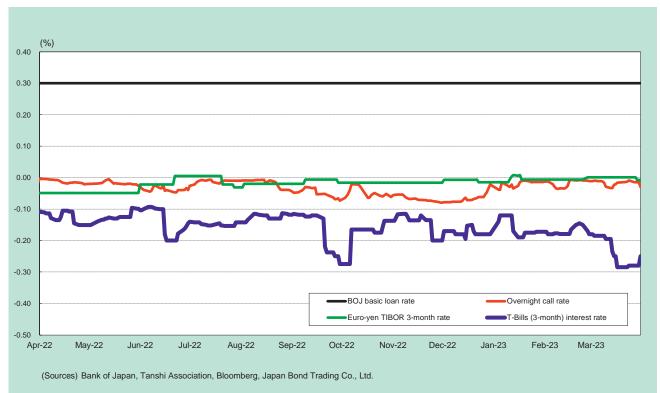


## (4) JGB Yield Curves



 $\mathbf{III}$ 

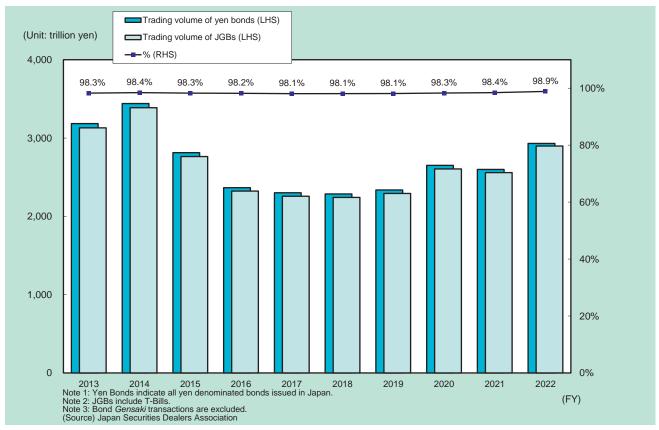
## (5) Various Rates in the Short-term Financial Market in FY2022



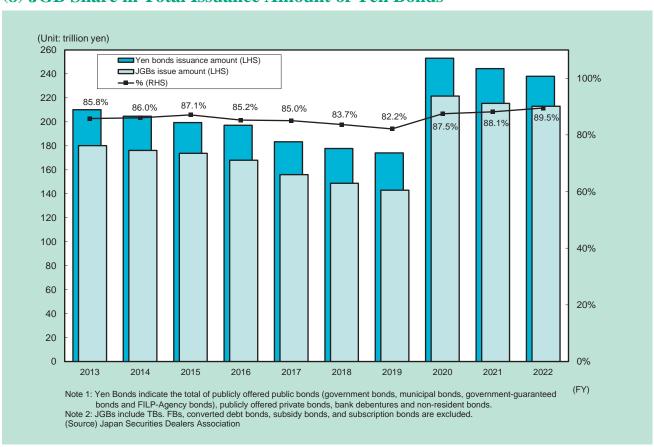
## (6) Break-Even-Inflation (BEI) Rate



## (7) JGB Share in Total Trading Volume of Yen Bonds

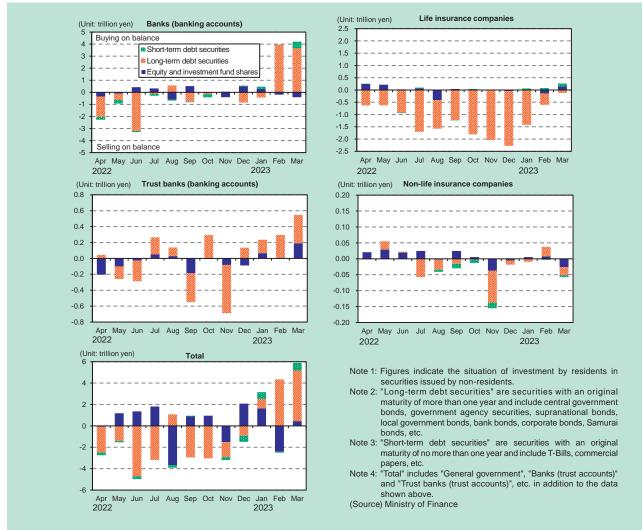


### (8) JGB Share in Total Issuance Amount of Yen Bonds

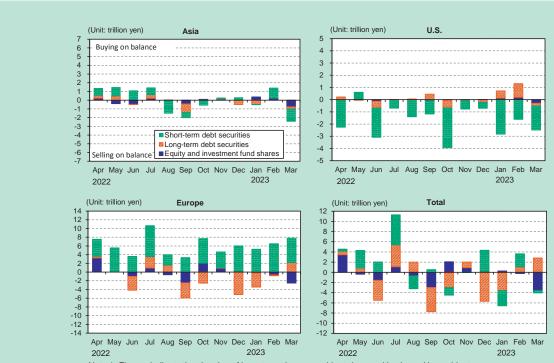


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### (9) Portfolio Investment Assets in FY2022



## (10) Portfolio Investment Liabilities in FY2022



Note 1: Figures indicate the situation of investment by non-residents in securities issued by residents.

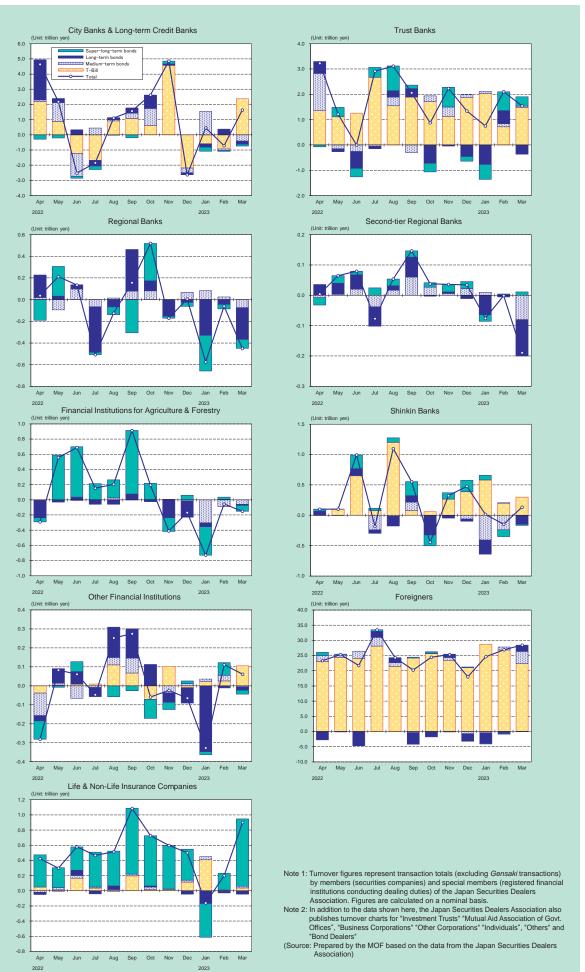
Note 2: "Long-term debt securities" are securities with an original maturity of more than one year and include central government bonds, government agency securities, supranational bonds, local government bonds, bank bonds, corporate bonds, and Samurai bonds, etc.

Note 3: "Short-term debt securities" are securities with an original maturity of no more than one year and include T-Bills, commercial papers, etc.

Note 4: "Total" includes "Central and South America", "Oceania" and "Middle East", etc. in addition to the data shown above.

(Sources) Ministry of Finance, Bank of Japan

## (11) Trends in JGB Transactions (by investor type) in FY2022



## (12) Trading Volume of Yen Bonds

(Unit: trillion yen)

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	Yen Bonds	JGBs				
		JGDS	Super long-term Bonds	Long-term Bonds	Medium-term Bonds	Short-term Bonds
FY2013	3,184.7	3,129.5	342.0	690.9	767.9	1,328.6
FY2014	3,440.1	3,386.7	413.5	698.4	999.9	1,274.9
FY2015	2,812.6	2,764.0	372.9	641.5	723.9	1,025.7
FY2016	2,365.5	2,322.8	389.1	471.5	696.2	766.0
FY2017	2,301.2	2,257.1	435.3	498.1	567.1	756.6
FY2018	2,285.4	2,242.0	459.3	525.1	495.9	761.7
FY2019	2,335.9	2,292.6	439.8	499.4	560.6	792.9
FY2020	2,650.4	2,605.6	429.1	441.7	454.9	1,279.9
FY2021	2,599.4	2,559.0	469.7	517.9	461.3	1,110.0
FY2022	2,931.3	2,898.1	504.1	689.3	527.3	1,177.5

Note: Bond *Gensaki* transactions are excluded. (Source) Japan Securities Dealers Association

## (13) Trading Volume of JGB Futures

(Unit: trillion yen)

	Trading Volume	10-Year JGB Futures	20-Year JGB Futures	Open Interest (End of FY)	10-Year JGB Futures	20-Year JGB Futures
FY2013	857.0	856.9	_	10.3	10.3	_
FY2014	904.9	903.9	0.6	8.7	8.7	0.0
FY2015	849.7	849.1	0.3	7.2	7.2	0.0
FY2016	700.0	699.9	0.0	8.0	8.0	0.0
FY2017	880.7	880.7	0.0	11.7	11.7	0.0
FY2018	1,023.5	1,023.4	0.0	11.1	11.1	0.0
FY2019	955.3	955.3	0.0	6.9	6.9	_
FY2020	712.7	712.7	_	7.7	7.7	_
FY2021	813.2	813.2	_	8.9	8.9	_
FY2022	788.7	788.7	0.0	15.7	15.7	_

Note: Trading in 20-year JGB Futures had been suspended due to little demand but was re-launched based on JGB market conditions and discussions with investors in April 2014. (Source) Japan Securities Clearing Corporation

## (14) Trading Volume of Bond Gensaki

(Unit: trillion yen)

		Trading Volume		Outstanding	(End of FY)
	Yen Bonds (excluding JGB baskets)	JGBs	JGB Baskets	Transactions other than Subsequent Collateral Allocation Repos (Standard Repos, etc.)	Subsequent Collateral Allocation Repos
FY2013	6,275.4	6,238.0	_	26.4	_
FY2014	7,064.3	7,004.9	-	30.8	_
FY2015	7,582.8	7,486.9	_	30.5	_
FY2016	6,918.4	6,887.5	-	33.4	_
FY2017	7,622.2	7,579.0	_	40.2	_
FY2018	13,575.8	13,537.7	3,112.7	101.6	14.8
FY2019	17,259.1	17,222.5	6,450.2	133.6	22.7
FY2020	18,843.3	18,837.1	9,085.0	120.6	27.8
FY2021	22,791.3	22,777.5	10,326.1	155.9	22.6
FY2022	34,591.9	34,579.9	10,929.3	192.6	22.0

Note 1: The Outstanding at the end of fiscal year is the total outstanding of securities companies and financial institutions for dealing. Note 2: JGB Baskets and Subsequent Collateral Allocation Repos are traded price base (otherwise nominal). (Source) Japan Securities Dealers Association Ш

## (15) Trading Volume of Bond-Lending

(Unit: trillion yen)

	Lending			Borrowings		
	Lending	With Collateral	Without Collateral	Bollowings	With Collateral	Without Collateral
FY2013	6,965.7	6,946.1	19.5	5,271.8	5,186.7	85.1
FY2014	8,347.4	8,328.5	18.8	6,616.5	6,547.9	68.5
FY2015	8,228.7	8,213.1	15.6	5,809.2	5,736.5	72.7
FY2016	8,547.9	8,535.8	12.1	5,966.5	5,893.2	73.3
FY2017	8,548.4	8,442.5	105.9	5,627.7	5,557.3	70.5
FY2018	5,622.5	5,291.4	331.1	3,601.8	3,518.8	83.0
FY2019	3,090.5	2,781.8	308.7	2,003.5	1,921.6	81.9
FY2020	2,782.6	2,371.9	410.7	1,476.7	1,403.0	73.7
FY2021	2,107.1	1,749.3	357.7	1,305.4	1,233.6	71.8
FY2022	3,011.7	2,587.9	423.8	1,928.9	1,849.7	79.2

Note: Trading volume is the total of contracts by all members of Japan Securities Dealers Association. (Source) Japan Securities Dealers Association

## (16) Trading Volume of JGBs Option by OTC

(Unit: trillion yen)

	Total	Call Options		Put O	ptions
		Bid	Offer	Bid	Offer
FY2013	114.3	39.9	22.3	24.6	27.5
FY2014	102.3	41.5	18.2	19.9	22.6
FY2015	65.8	32.8	9.1	11.3	12.6
FY2016	68.9	26.8	11.8	15.0	15.3
FY2017	97.9	31.2	20.6	22.6	23.6
FY2018	119.6	35.3	28.9	29.9	25.5
FY2019	131.8	36.1	31.7	33.2	30.8
FY2020	81.0	25.1	18.2	18.8	18.8
FY2021	81.4	25.4	18.0	18.4	19.5
FY2022	142.4	39.2	33.1	33.5	36.7

Note 1: Trading volume is the total of transactions by securities companies and dealings by financial institutions. Note 2: Trading volume is on a nominal basis (Source) Japan Securities Dealers Association

## (17) Trading Volume of JGB Futures Options

(Unit: trillion yen)

	Trading Volume			Open Interest		
	Trading volume	Call	Put	(End of FY)	Call	Put
FY2013	145.0	49.7	95.3	2.2	0.4	1.8
FY2014	118.7	33.1	85.5	1.4	0.2	1.2
FY2015	102.5	31.3	71.2	0.9	0.2	0.7
FY2016	92.5	28.0	64.5	1.4	0.2	1.2
FY2017	86.2	30.2	56.1	1.6	0.5	1.1
FY2018	70.9	25.7	45.2	0.9	0.3	0.6
FY2019	64.4	31.1	33.4	0.0	0.0	0.0
FY2020	24.6	11.7	12.9	0.1	0.0	0.1
FY2021	16.0	7.5	8.5	0.1	0.1	0.0
FY2022	7.6	3.1	4.4	0.1	0.0	0.1

(Source) Japan Exchange Group, Inc.

## (18) Outstanding Amount of STRIPS-Principal-Only Book-entry Transfer JGBs

(Unit: billion yen)

													(	morr yerry
	40-Yea	r Bonds	30-Yea	Bonds	20-Year	Bonds	10-Yea	r Bonds	5-Year	Bonds	2-Year	Bonds	To	tal
FY2013	39.3	(8,493.4)	143.1	(53,274.0)	23.8	(139,142.0)	152.5	(299,174.5)	24.6	(153,383.2)	_	(70,172.0)	383.3	(723,639.1)
FY2014	39.6	(10,445.5)	143.3	(64,211.4)	24.5	(157,000.2)	138.5	(298,055.7)	16.6	(158,260.0)	_	(69,152.9)	362.6	(757,125.7)
FY2015	49.6	(13,133.4)	146.4	(76,987.9)	23.9	(174,841.3)	119.3	(301,008.5)	12.1	(160,806.5)	_	(63,932.8)	351.3	(790,710.4)
FY2016	49.6	(16,597.6)	146.4	(88,628.2)	20.7	(192,056.6)	94.4	(302,813.6)	6.5	(160,409.4)	_	(60,419.9)	317.5	(820,925.1)
FY2017	49.6	(20,283.7)	146.4	(100,696.1)	20.6	(208,335.0)	66.4	(308,203.8)	3.6	(156,681.3)	_	(57,975.4)	286.7	(852,175.2)
FY2018	49.6	(23,191.4)	146.4	(111,350.1)	20.6	(226,008.7)	46.1	(314,323.3)	1.2	(147,403.4)	_	(55,436.4)	263.9	(877,713.3)
FY2019	49.7	(26,504.6)	146.4	(121,641.1)	20.6	(243,077.3)	23.0	(313,956.3)	0.4	(138,030.0)	_	(52,360.6)	240.0	(895,569.8)
FY2020	49.7	(30,453.0)	146.4	(133,637.9)	20.6	(261,715.0)	13.9	(316,538.4)	_	(135,198.7)	_	(60,130.9)	230.6	(937,673.9)
FY2021	49.9	(35,098.5)	146.4	(146,955.0)	20.6	(281,354.0)	6.0	(320,319.2)	_	(136,099.3)	_	(71,542.0)	222.8	(991,368.0)
FY2022	50.2	(40,240.8)	146.4	(160,036.2)	20.4	(296,896.8)	3.5	(323,874.0)	_	(138,002.0)	_	(73,629.5)	220.4	(1,032,679.4)

<Key> Outstanding Amount of Principal-Only Book-entry Transfer JGBs at the end of each period (Outstanding amount of JGBs qualified for STRIPS) Note: Figures may not sum up to the total because of rounding.

## (19) Japan's Sovereign Rating by Major Credit Rating Agencies

(Long-term debt denominated in home currency on May. 15, 2023)

Moody's	S&P	Fitch	R&I	JCR
Nov. 17, 98 Aaa	Feb. 22, 01 AAA	Jun. 29, 00 AAA	Dec. 21, 11 AAA	Oct. 31, 00 AAA
Sep. 8, 00 Aa1	Nov. 27, 01 AA+	Nov. 26, 01 AA+	AA+	AA+
≥ Aa2∧ ►	Apr. 15, 02 AAA Apr. 27, 01 Jan. 27, 11	∣ ≽ AA	AA	AA
Aa3 Jun. 30, 08	→ AA-	May 22, 12 AA—	AA-	AA-
May 31, 02 A1	A+ Sep. 16, 15	Apr. 27, 15 A +	A+	A+
A2 Oct. 11, 07	A	A A	A	A
A3	A-	A-	A-	A-
Baa1	BBB+	BBB+	BBB+	BBB+
Baa2	BBB	BBB	BBB	BBB
Baa3	BBB-	BBB-	BBB-	BBB-

### [Outlook]

Stable (Dec. 1, 2014)	Stable (Jun. 9, 2020)	Stable (Mar. 25, 2022)	Stable (Aug. 30, 2018)	Stable (Aug. 9, 2018)
Stable (Dec. 1, 2014)	Stable (Juli. 9, 2020)	Stable (Mai. 25, 2022)	Stable (Aug. 30, 2016)	Stable (Aug. 9, 2016)

## (20) List of Sovereign Ratings by Major Credit Rating Agencies

(Long-term debt denominated in home currency on May. 15, 2023)

	Moody's	S&P	Fitch	R&I	JCR
	<u> </u>				
Aaa/AAA	U.S. Germany Canada	Germany Canada	U.S. Germany	U.S. U.K. Germany France	Japan U.S. U.K. Germany France Canada
Aa1/AA+		U.S.	Canada	Japan	Korea
Aa2/AA	France Korea	U.K. France (↓) Korea			Spain China
Aa3/AA-	U.K. (↓) Ireland	Ireland (↑)	Korea Ireland U.K. (↓) France	China Korea Ireland	
A1/A+	Japan China	Japan China	China		
A2/A		Spain	Japan	Spain	Italy Portugal
A3/A-			Spain		
Baa1/BBB+	Spain	Portugal	Portugal	Italy	
Baa2/BBB	Portugal	Italy	Italy	Portugal	
Baa3/BBB-	Italy (↓)				
Ba1/BB+		Greece (↑)	Greece	Greece	
Ba2/BB					
Ba3/BB-	Greece (↑)				
B1/B+					
B2/B					
B3/B-					
Caa1/CCC+					
Caa2/CCC					
Caa3/CCC-					
Ca/CC					
С					
SD/RD					
" ( ↑) "shows that the outlo	ook is positive.				

<sup>&</sup>quot; (  $\uparrow$  ) "shows that the outlook is positive. " (  $\downarrow$  ) "shows that the outlook is negative.

# 3

# **Debt Management Systems**

## (1) Revenues and Expenditures for the Special Account for the GDCF (FY2023 Initial Budget)

### Revenues

(Unit: million yen)

			(Unit	: million yen)
		FY2022 (Initial)	FY2023 (Initial)	Changes
		(A)	(B)	(B) - (A)
Gra	ants from Other Accounts	92,333,090	81,324,198	<b>1</b> 1,008,892
	Grant from the General Account	24,338,491	25,249,411	910,921
	Grants from Special Accounts	67,994,600	56,074,787	<b>1</b> 1,919,813
	Local Allocation Tax and Local Transfer Tax	30,183,195	29,669,495	▲ 513,700
	Forex fund	496,252	489,591	▲ 6,661
	FILP	22,591,732	11,439,807	<b>1</b> 1,151,925
	Energy Projects	12,671,641	12,398,902	▲ 272,739
	Labor Insurance	52	374	322
	Pension	1,452,416	1,446,668	▲ 5,748
	Stable Food Supply	211,319	252,051	40,732
	Administration of National Forestry Management Debt	354,649	344,014	▲ 10,634
	Motor Vehicles Safety	33,343	33,885	542
Grant the G	from the Special Account for Reconstruction from reat East Japan Earthquake or Other Accounts	20,369	15,587	<b>▲</b> 4,782
	Grant from Special Accounts	20,369	15,587	<b>▲</b> 4,782
	Reconstruction from the Great East Japan Earthquake	20,369	15,587	<b>▲</b> 4,782
Grar	nt from GX Promotion and Other Accounts	_	607	607
	Grant from Special Accounts	_	607	607
	Energy Projects	_	607	607
Tax	(	112,600	112,800	200
Re	venues from JGBs	152,940,382	157,551,331	4,610,949
	Revenues from JGBs	149,081,480	153,121,222	4,039,742
	Revenues from Reconstruction-related Refunding Public Bonds	3,858,902	3,326,663	▲ 532,239
	Revenues from GX Economy Transition - related Refunding Public Bonds	_	1,103,446	1,103,446
Reve from t	nues from Equity Sale Related to Reconstruction he Great East Japan Earthquake	172,108	200,245	28,137
	lend Income Related to Reconstruction the Great East Japan Earthquake	3,972	5,440	1,468
	Tokyo Metro	3,972	3,972	_
	Japan Post	_	1,468	1,468
Inv	estment Income	29,864	29,281	▲ 583
	Interest Income	29,864	29,280	▲ 584
	Sales/Redemption Profit	0	1	1
	stment Income Related to Reconstruction the Great East Japan Earthquake	122	145	23
	Interest Income	122	145	23
Mis	scellaneous Income	178,954	234,040	55,085
	Accrued Interest Receivable	177,849	232,935	55,085
	Miscellaneous Income	1,105	1,105	_
	ellaneous Income Related to Reconstruction the Great East Japan Earthquake	21	22	1
	Accrued Interest Receivable	21	22	1
To	tal	245,791,483	239,473,695	▲ 6,317,788

## Expenditures

(Unit: million yen)

	(Unit: million yen)				
	FY2022(Initial) (A)	FY2023 (Initial) (B)	Changes (B) - (A)		
Government Debt Consolidation Expenditures	241,735,989	234,821,541	▲ 6,914,448		
Certificate, etc., Production Cost	23	7	<b>▲</b> 17		
JGB Handling Fees	20,393	23,403	3,011		
Compensations, Redemptions, and Refunds	823	823	_		
Currency Exchange Gap Compensations	0	0	0		
Sales/Redemption Gap Compensations	29,000	29,000	_		
Debt Redemption Expenses	231,897,311	224,745,556	<b>▲</b> 7,151,755		
Public Bonds, etc., Redemption	186,492,904	180,090,502	▲ 6,402,402		
Financed with the General Account	164,567,465	169,290,122	4,722,657		
Financed with Special Accounts	21,925,439	10,800,380	<b>1</b> 1,125,059		
Borrowings Redemption	40,909,807	40,339,954	▲ 569,853		
Financed with the General Account	588,197	587,449	<b>▲</b> 748		
Financed with Special Accounts	40,321,610	39,752,506	▲ 569,105		
Financing Bills Redemption	4,494,600	4,315,100	▲ 179,500		
Interest and Discount Expenses	9,788,439	10,022,751	234,312		
Interests on Public Bonds, etc.	9,122,752	9,377,219	254,467		
Financed with the General Account	8,465,485	8,746,695	281,210		
Financed with Special Accounts	657,267	630,524	▲ 26,743		
Interests on Borrowings	95,913	81,972	▲ 13,941		
Financed with the General Account	12,475	11,593	▲ 882		
Financed with Special Accounts	83,438	70,379	▲ 13,059		
Interests on Financing Bills	569,775	563,561	▲ 6,214		
Financed with the General Account	60,000	60,000	_		
Financed with Special Accounts	509,775	503,561	▲ 6,214		
Reconstruction Bonds Consolidation Expenditures	4,055,494	3,548,101	▲ 507,393		
JGB Handling Fees	162	68	▲ 94		
Equity Sale Fees	4,174	4,007	<b>▲</b> 167		
Sales/Redemption Gap Compensations	121	144	23		
Debt Redemption Expenses	4,030,808	3,528,340	▲ 502,468		
Public Bonds, etc., Redemption	4,030,808	3,528,340	▲ 502,468		
Financed with Special Accounts	4,030,808	3,528,340	▲ 502,468		
Interest and Discount Expenses	20,229	15,541	<b>▲</b> 4,688		
Interests on Public Bonds, etc.	19,904	15,241	<b>▲</b> 4,663		
Financed with Special Accounts	19,904	15,241	<b>▲</b> 4,663		
Interests on Borrowings	325	300	▲ 25		
Financed with Special Accounts GX Economy Transition Bonds Consolidation Expenditures	325	1 104 053	<b>▲</b> 25		
		1,104,053	1,104,053		
JGB Handling Fees  Debt Redemption Expenses	_	1,103,446	1,103,446		
Public Bonds, etc., Redemption	_	1,103,446	1,103,446		
Financed with Special Accounts	_	1,103,446	1,103,446		
Interest and Discount Expenses	_	600	600		
Interests on Public Bonds, etc.	_	600	600		
Financed with Special Accounts	_	600	600		
Total	245,791,483	239,473,695	<b>▲</b> 6,317,788		
Note 1: "Financed with the General	Account" in the				

Note 1: "Financed with the General Account" in the "Government Debt Consolidation Expenditures" and "Financed with Special Accounts" in the "Re-construction Bonds Consolidation Expenditures" and "Financed with Special Accounts" in the "GX Economy Transition Bonds Consolidation Expenditures"include GD-CF's original revenue.

# (2) Payment Status of Debt Redemption Expenses and Interest, Discount Expenses and so on for Each Account (FY2023 Initial Budget, FY2021 Settlement of Accounts)

The GDCF Special Account centrally conducts accounting for redemption and interest payments for public bonds and borrowings, using fiscal transfers from the General Account and other special accounts.

### A FY2023 Initial Budget

(Unit: million yen)

_							Y
			Debt Redemption Expenses	Interest and Discount Expenses	Others	Total	Remarks
Gr	ants	from Other Accounts	71,624,054	9,676,747	23,398	81,324,198	
	Grant from the General Account		16,756,068	8,472,283	21,060	25,249,411	The redemption and interest of public bonds and borrowings, Treasury Financing Bill discount expenses, etc.
	Gr	ants from Special Accounts	54,867,986	1,204,463	2,338	56,074,787	
		Local Allocation Tax and Local Transfer Tax	29,612,295	57,200	-	29,669,495	The redemption and interest of borrowings, and the interest of temporary borrowings
		Forex Fund	_	488,819	771	489,591	The discount expense of Foreign Exchange Fund Financing Bills, etc.
		FILP	10,800,380	637,877	1,550	11,439,807	The redemption and interest of FILP Bonds, the discount expenses of Fiscal Loan Fund Financing Bills, etc
		Energy Projects	12,389,691	9,196	15	12,398,902	The redemption and interest of borrowings, the redemption and discount expense of Petroleum Financing Bills and Nuclear Damage Liability Facilitation Financing Bills, etc.
		Labor Insurance	_	374	_	374	The interest of temporary borrowings
		Pension	1,440,920	5,748	_	1,446,668	The redemption and interest of borrowings, and the interest of temporary borrowings
		Stable Food Supply	250,634	1,416	1	252,051	The redemption and interest of borrowings, the redemption and discount expense of Food Financing Bills, etc
		Administration of National Forestry Management Debt	342,801	1,213	_	344,014	The redemption and interest of borrowings, and the interest of temporary borrowings
		Motor Vehicles Safety	31,265	2,620	_	33,885	The redemption and interest of borrowings, and the interest of temporary borrowings
Re	con	from the Special Account for struction from the Great East Earthquake or Other accounts	_	15,519	68	15,587	
	Gr	ant from Special Accounts	-	15,519	68	15,587	
		Reconstruction from the Great East Japan Earthquake	_	15,519	68	15,587	The interest of reconstruction bonds, the interest of temporary borrowings, etc.
Gra	Grant from GX Promotion and Other Accounts		-	600	7	607	
	Gr	ant from Special Accounts	_	600	7	607	
		Energy Projects	-	600	7	607	The interest of borrowings, and the interest of temporary borrowings, etc

Note: Figures may not sum up to the total because of rounding.

### B FY2021 Settlement of Accounts

(Unit: million yen)

		Debt Redemption Expenses	Interest and Discount Expenses	Others	Total	Remarks
Gra	ants from Other Accounts	84,398,768	7,823,276	15,135	92,237,179	
	Grant from the General Account	17,380,491	7,193,825	14,055	24,588,371	The redemption and interest of public bonds and borrowings, etc.
	Grants from Special Accounts	67,018,277	629,451	1,080	67,648,808	
	Local Allocation Tax and Local Transfer Tax	31,173,776	364	-	31,174,141	The redemption and interest of borrowings and the interest of temporary borrowings
	Forex Fund	_	_	258	258	JGB handling fees
	FILP	24,151,677	627,903	815	24,780,395	The redemption and interest of FILP Bonds, etc.
	Energy Projects	9,732,127	545	7	9,732,678	The redemption of Government Bonds issued to Nuclear Damage Compensation and Decommissioning Facilitation Corporation, the redemption and interest of borrowings, the redemption of Petroleum Financing Bills, etc.
	Pension	1,446,630	100	_	1,446,730	The redemption and interest of borrowings, and the interest of temporary borrowings
	Stable Food Supply	120,957	164	0	121,122	The redemption and interest of borrowings, the redemption of Food Financing Bills, etc.
	Administration of National Forestry Management Debt	360,299	13	_	360,312	The redemption and interest of borrowings
	Motor Vehicles Safety	32,810	362	_	33,173	The redemption and interest of borrowings
Re	ant from the Special Account for construction from the Great East pan Earthquake or Other accounts	246,002	4,957	57	251,016	
	Grant from Special Accounts	246,002	4,957	57	251,016	
	Reconstruction from the Great East Japan Earthquake	246,002	4,957	57	251,016	The interest of Reconstruction Bonds, etc.

Note: Figures may not sum up to the total because of rounding.

### (3) Transfer of Redemption Sources, Redemption Amount, Outstanding Amount and Refunding Amount of the GDCF (FY2023 Initial Budget)

(Unit: billion yen)

			(Unit: billion yen)
	FY2021 (Actual)	FY2022 (Forecast)	FY2023 (Forecast)
<transfer financial="" for="" of="" redemption="" resources=""></transfer>			
JGBs	42,989.2	34,612.8	27,448.9
(Financial Resources for Reconstruction Bond Redemption)	(1,390.7)	(248.0)	(201.7)
(Financial Resources for GX Economy Transition Bonds Redemption)	(-)	(-)	(-)
General Account	17,050.6	16,444.3	16,446.6
Special Accounts	24,793.7	18,162.5	10,800.4
(Financial Resources for Reconstruction Bond Redemption)	(246.0)	(243.1)	(-)
(Financial Resources for GX Economy Transition Bonds Redemption)	(-)	(-)	(-)
Revenue from the sales of shares	(1,086.7)	_	196.2
(Financial Resources for Reconstruction Bond Redemption)	(1,086.7)	(-)	(196.2)
Investment revenue, etc.	58.2	6.0	5.7
(Financial Resources for Reconstruction Bond Redemption)	(57.9)	(5.0)	(5.4)
(Financial Resources for GX Economy Transition Bonds Redemption)	(-)	(-)	(-)
Borrowings	41,523.6	40,641.2	40,062.0
General Account	329.9	319.6	309.5
Special Accounts	41,193.7	40,321.6	39,752.5
Total	84,512.8	75,254.0	67,510.9
<redemption amount=""></redemption>			
JGBs	42,976.2	34,626.7	27,449.6
General Bonds	16,661.7	15,993.8	16,074.1
Subscription/ Contribution Bonds	772.1	465.4	373.4
FILP Bonds	24,151.7	17,919.4	10,800.4
Reconstruction Bonds	1,390.7	248.0	201.7
GX Economy Transition Bonds	_	_	_
Borrowings	41,523.6	40,641.2	40,062.0
Total	84,499.7	75,267.8	67,511.5
Outstanding Balance of GDCF at the End of FY	3,018.0	3,004.2	3,003.5
(Financial Resources for Reconstruction Bond Redemption)	(-)	(-)	(-)
(Financial Resources for GX Economy Transition Bonds Redemption)	(-)	(-)	(-)
(Reference)			
Refunding Bonds as Stipulated in Article 47(1) of the Act on Special Accounts	15,135.8	20,000.0	25,000.0
Outstanding Balance of GDCF at the End of FY Incl. Refunding		00.004.0	
Bonds as Stipulated in Article 47(1) of the Act on Special Accounts	18,153.8	23,004.2	28,003.5
Refunding Amount of JGBs	142,850.2	148,487.2	157,551.3
(Refunding amount of Reconstruction Bonds)	(2,695.0)	(3,621.7)	(3,326.7)
(D. ( )   D. ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	(2,000.0)	(3,32117)	(0,020.1)

<sup>(</sup>Refunding amount of GX Economy Transition Bonds)

Note 1: Expenses associated with share sales have been deducted from the revenue from share sales.

## (4) GDCF Investment in JGBs

(Unit: trillion yen)

(11,034)

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Treasury Discount Bills	17.2	17.1	_	_	_	_	_	_	_	_
Gensaki, etc.	8.9	14.4	0.1	0.3	0.3	0.2	0.6	0.2	0.1	0.1
Total	26.1	31.5	0.1	0.3	0.3	0.2	0.6	0.2	0.1	0.1

Note: Figures may not sum up to the total because of rounding.

Note 2: Investment revenue etc. includes dividend revenue and carry-over from the previous year.

Note 3: Outstanding balance of GDCF at the end of FY does not include Refunding Bonds as stipulated in Article 47(1) of the Act on Special Accounts.

Note 4: Refunding Bonds as stipulated in Article 47(1) of the Act on Special Accounts for FY2022(Forecast) and FY2023(Forecast) are the limit of general provisions concerning the Budget.

Note 5: Figures may not sum up to the total because of rounding.

## (5) Budgetary Surplus of the Special Account of the GDCF

(Unit: billion yen)

	Budgeton, Cumbus	
	Budgetary Surplus	Outstanding Balance of GDCF
FY 2017	3,093.2	3,007.4
FY 2018	3,076.4	3,005.9
FY 2019	3,091.8	3,020.0
FY 2020	3,052.2	3,005.0
FY 2021	3,078.7	3,018.0
FY 2022	3,004.2	3,004.2
FY 2023	3,003.5	3,003.5

Note: Data for FY2022 and FY2023 is based on the initial budget for FY2023.

## (6) Results of Liquidity Enhancement Auctions in FY2022

	355th	356th	357th	358th	359th	360th	361st	362nd	363rd	364th	365th	366th
Auction Date	4/19/22	4/21/22	5/6/22	5/24/22	6/9/22	6/14/22	7/20/22	7/22/22	8/23/22	8/25/22	9/8/22	9/21/22
Amount of Competitive Bids (billion yen)	2,318.4	1,020.5	2,203.4	2,155.6	3,072.7	974.7	1,725.4	1,827.6	1,809.9	1,199.4	2,443.9	1,572.3
Amount of Bids Accepted (billion yen)	498.5	499.9	498.7	497.7	499.4	499.3	497.9	499.3	498.7	499.2	499.1	499.6
Average Accepted Spread (%)	▲ 0.009	▲ 0.009	0.005	▲ 0.007	▲ 0.006	0.084	▲ 0.004	▲ 0.027	▲ 0.003	0.029	▲ 0.018	0.008
Highest Accepted Spread	▲ 0.008	0.019	0.007	▲ 0.007	▲ 0.003	0.099	▲ 0.002	▲ 0.026	▲ 0.002	0.034	▲ 0.016	0.010

	367th	368th	369th	370th	371st	372nd	373rd	374th	375th	376th	377th	378th
Auction Date	10/6/22	10/25/22	11/11/22	11/22/22	12/13/22	12/21/22	1/17/23	1/24/23	2/13/23	2/24/23	3/9/23	3/23/23
Amount of Competitive Bids (billion yen)	3,188.6	1,444.8	1,963.4	2,692.7	2,741.7	1,441.5	2,334.9	2,071.9	1,496.9	1,716.1	1,599.2	1,646.1
Amount of Bids Accepted (billion yen)	498.9	498.8	499.6	499.5	498.9	499.5	499.8	499.3	498.3	498.3	499.0	499.2
Average Accepted Spread (%)	0.001	0.060	▲ 0.047	▲ 0.005	▲ 0.003	0.022	▲ 0.002	▲ 0.004	▲ 0.005	▲ 0.019	▲ 0.003	▲ 0.037
Highest Accepted Spread (%)	0.003	0.067	▲ 0.035	▲ 0.003	▲ 0.001	0.027	0.001	▲ 0.001	▲ 0.003	▲ 0.017	0.000	▲ 0.031

## (7) Buy-back Results in FY2022

### Inflation-Indexed Bonds

Auction Date	Amount of Bids Received (billion yen)	Amount of Bids Accepted (billion yen)	Average Accepted Spread (yen)	Highest Accepted Spread (yen)
4/13/22	127.5	20.1	▲ 0.500	▲ 0.50
5/11/22	142.6	20.1	▲ 0.504	▲ 0.50
6/6/22	118.6	20.0	▲ 0.486	▲ 0.40
7/8/22	95.2	20.0	▲ 0.271	▲ 0.17
8/19/22	114.3	20.0	▲ 0.440	▲ 0.40
9/16/22	123.2	20.0	▲ 0.510	▲ 0.51
10/19/22	148.4	20.0	▲ 0.675	▲ 0.55
11/2/22	121.1	20.1	▲ 0.361	▲ 0.20
12/7/22	99.2	20.0	▲ 0.268	▲ 0.19
1/6/23	85.7	20.0	▲ 0.463	▲ 0.25
2/20/23	104.7	20.1	▲ 0.500	▲ 0.50
3/6/23	74.3	20.0	▲ 0.120	0.37

## (8) Buy-back Results

(On nominal basis, billion yen)

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
From the Market	2,512.6	741.4	120.2	120.4	120.5	481.0	601.6	510.9	240.4
From Bank of Japan	200.0	_	_	_	_	_	_	_	_
Total	2,712.6	741.4	120.2	120.4	120.5	481.0	601.6	510.9	240.4

Note: Figures may not sum up to the total because of rounding.

## (9) Various Meetings

### A. Study Group on Government Debt Management

### <Members>

IWASHITA Mari	Chief Market Economist, Fixed Income, Currency and Commodities(FICC) Research Dept, Daiwa Securities Co., Ltd.
KAMEDA Keigo	Professor, School of Policy Studies, Kwansei Gakuin University
KOEDA Junko	Professor, Faculty of Political Science and Economics, Waseda University
MORITA Chotaro	Senior Fellow, Financial Market and Economic Research, SMBC Nikko Securities Inc.
SAMIKAWA Ikuko	Director, Financial Research, Principal Economist, Japan Center for Economic Research
SHINO Junnosuke	Associate Professor, Faculty of International Research and Education, Waseda University
TAKIZAWA Miho	Professor, Faculty of Economics, Gakushuin University
TOMURA Hajime	Professor, Faculty of Political Science and Economics, Waseda University
UEYAMA Takahiro	Executive Officer, Head of Fixed Income Group, Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

(9 members) (Alphabetical order) (As of June 2, 2023)

Date	Content
June 13, 2022 (1st Round) *In-person conference/ Online conference	· Current status and issues regarding JGB issuance
November 10, 2022 (2nd Round)	<ul> <li>Current status and issues regarding JGB issuance</li> <li>Trends in the Yen interest rate market: spillover of global upward pressure on interest rates</li> <li>Cost-at-Risk analysis</li> </ul>
Jun 2, 2023 (3rd Round) *In-person conference/ Online conference	Stable absorption of JGBs     Natural interest rate and long-term yield

### **B** The Meeting of JGB Market Special Participants

### <Members>

Barclays Securities Japan Limited

BNP Paribas Securities (Japan) Limited

BofA Securities Japan Co., Ltd.

Citigroup Global Markets Japan Inc.

Credit Agricole Securities Asia B.V.

Credit Suisse Securities (Japan) Limited

Daiwa Securities Co. Ltd.

Deutsche Securities Inc.

Goldman Sachs Japan Co., Ltd.

JPMorgan Securities Japan Co., Ltd.

Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

Mizuho Bank, Ltd.

Mizuho Securities Co., Ltd.

Morgan Stanley MUFG Securities Co., Ltd.

Nomura Securities Co., Ltd.

Okasan Securities Co., Ltd.

SMBC Nikko Securities Inc.

Societe Generale Securities Japan Limited

Sumitomo Mitsui Banking Corporation

Tokai Tokyo Securities Co., Ltd.

(20 companies) (Alphabetical order) (As of May 26, 2021)

Date	Content
June 15, 2022 (99th Round) *Held in writing	<ul> <li>Issuance size of Inflation-Indexed Bonds in the July-September 2022 quarter</li> <li>Issuance size of Liquidity Enhancement Auctions in the July-September 2022 quarter</li> <li>Latest JGB market situation and outlook in the future</li> </ul>
September 28, 2022 (100th Round)	<ul> <li>Issuance size of Inflation-Indexed Bonds in the October-December 2022 quarter</li> <li>Issuance size of Liquidity Enhancement Auctions in the October-December 2022 quarter</li> <li>Latest JGB market situation and outlook in the future</li> </ul>
October 25, 2022 (101st Round)	JGB Issuance Plan for the Second Supplementary Budget for FY2022
December 2, 2022 (102nd Round)	<ul> <li>Issuance size of Inflation-Indexed Bonds in the January-March 2023 quarter</li> <li>Issuance size of Liquidity Enhancement Auctions in the January-March 2023 quarter</li> <li>Current status and issues for the formulation of the JGB Issuance Plan for FY2023</li> <li>Latest JGB market situation and outlook in the future</li> </ul>
March 22, 2023 (103rd Round)	<ul> <li>Reopening rule and auction methods of fixed coupon-bearing bonds in FY2023</li> <li>Issuance size of Inflation-Indexed Bonds in the April-June 2023 quarter</li> <li>Issuance size of Liquidity Enhancement Auctions in the April-June 2023 quarter</li> <li>GX Economy Transition Bonds</li> <li>Latest JGB market situation and outlook in the future</li> </ul>

### **C** The Meeting of JGB Investors

### <Members>

### 1. Investors

Capula Investment Management LLP

Japan Post Bank Co., Ltd.

Japan Post Insurance Co., Ltd.

Mizuho Bank, Ltd.

National Mutual Insurance Federation of Agricultural Cooperatives

Nippon Life Insurance Company

Pension Fund Association

PGIM Japan Co., Ltd.

Shinkin Central Bank

Sumitomo Mitsui Trust Asset Management Co., Ltd.

Sumitomo Mitsui Trust Bank, Limited

The Chiba Bank, Ltd.

The Norinchukin Bank

THE TOCHIGI BANK, LTD.

Tokio Marine & Nichido Fire Insurance Co., Ltd.

(15 companies) (Alphabetical order)

### 2. Academics

### KOHYAMA Hiroyuki

- Professor, The University of Tokyo Graduate Schools for Law and Politics TOMITA Toshiki

- Guest Scholar, Nomura Institute of Capital Markets Research

### (Chairperson)YOSHINO Naoyuki

- Professional Emeritus, Faculty of Economics, Keio University Tokyo Japan
- Director of Financial Research Center, Financial Services Agency
- Special Professor, Tokyo Metropolitan University

(3 members) (Alphabetical order) (As of May 12, 2023)

Date	Content
October 25, 2022 (89th Round)	JGB Issuance Plan for the Second Supplementary Budget for FY2022
December 2, 2022 (90th Round)	· Current status and issues for the formulation of the JGB Issuance Plan for FY2023
March 22, 2023 (91st Round)	<ul> <li>Reopening rule and auction methods of fixed coupon-bearing bonds in FY2023</li> <li>Issuance size of Inflation-Indexed Bonds in the April-June 2023 quarter</li> <li>Issuance size of Liquidity Enhancement Auctions in the April-June 2023 quarter</li> <li>Latest JGB market situation and outlook for future investments</li> <li>GX Economy Transition Bonds</li> </ul>

### **D** The Meeting of JGB Top Retailers

### <Members>

Chuo Labour Bank

Daiwa Securities Co. Ltd.

JA-MIYAZAKICHUOU

Japan Post Bank Co., Ltd.

Johoku Shinkin Bank

Mizuho Bank, Ltd.

Mizuho Securities Co., Ltd.

MUFG Bank, Ltd.

Nomura Securities Co., Ltd.

North Pacific Bank, Ltd.

SMBC Nikko Securities Inc.

Sumitomo Mitsui Banking Corporation

Sumitomo Mitsui Trust Bank, Limited

The Chugoku Bank, Ltd.

The Hachijuni Bank, Ltd.

The Hokkaido Bank, Ltd.

The Seiwa Credit Cooperative

The Tama Shinkin Bank

Tomato Bank, Ltd.

(19 companies)

(Alphabetical order)

(As of June 8, 2023)

Date	Content	
February 19, 2018 (17th Round)	<ul> <li>Explanation from the Financial Bureau regarding trends vis-à-vis the sale of JGBs for Retail Investors, recent investment behavior of Retail Investors, and advertisement of JGBs for Retail Investors</li> <li>Exchange of opinions with regard to each content</li> </ul>	
May 30, 2019 (18th Round)	<ul> <li>Explanation from the Financial Bureau regarding trends vis-à-vis the sale of JGBs for Retail Investors and advertisement of JGBs for Retail Investors</li> <li>Exchange of opinions with regard to each content</li> </ul>	
June 10, 2020 (19th Round) *Teleconference	<ul> <li>Explanation from the Financial Bureau regarding trends vis-à-vis the sale of JGBs for Retail Investors, advertisement of JGBs for Retail Investors and the promotion of stable long-term holdings of JGBs for Retail Investors</li> <li>Exchange of opinions with regard to each content</li> </ul>	
June 7, 2021 (20th Round) *Online meeting	<ul> <li>Explanation from the Financial Bureau regarding trends vis-à-vis the sale of JGBs for Retail Investors, initiative cases by handling institutions for the sale of JGBs for Retail Investors, enhancement of cooperation between the Financial Bureau and handling institutions and advertisement of JGBs for Retail Investors</li> <li>Explanation from handling institutions regarding their efforts at selling JGBs for Retail Investors</li> <li>Exchange of opinions with regard to each content</li> </ul>	
June 8, 2022 (21st Round) *Online meeting	<ul> <li>Explanation from the Financial Bureau regarding trends vis-à-vis the sale of JGBs for Retail Investors, advertisement of JGBs for Retail Investors, initiative cases by handling institutions for the sale of JGBs for Retail Investors, cautions on handling JGBs for Retail Investors, and initiative policy for FY2022</li> <li>Explanation from handling institutions regarding their efforts at selling JGBs for Retail Investors</li> <li>Exchange of opinions with regard to each content</li> </ul>	

## (10) History of Postwar Debt Management Policy

FY	Debt Management Policy	Fiscal Policy, etc.
47 ~ 64		
65	66.1 Launch of underwriting Syndicate (7-year)	The issuance of Revenue-Financing Bonds in the
66	66.3 Launch of underwriting by Trust Funds Bureau	supplementary budget (Start of issuance of bonds) Introduction of Construction Bonds
67		introduction of Construction Bonds
68	68.4 Introduction of "Tokubetsu-Maruyu" tax free saving schemes 68.5 Formation of Redemption system	
69	0.5 Tolliation of reachiption system	
70		
71 72	72.1 Extension of term-to-maturity for JGBs (7 years → 10 years)	Nixon Shock
73		First year of the welfare era
74		1973 energy crisis
75	77.4 Laurah af austin fan diagouth bande (Furan)	Launch of issuance of Special Deficit-Financing Bonds
76 77	77.1 Launch of auction for discount bonds (5-year) 77.4 Launch of securitization of JGBs acquired by financial institutions	
78	78.6 Launch of auction for medium-term bonds (3-year)	Proactive fiscal management for 7% growth promised at Bonn summit
79	79.6 Launch of auction for medium-term bonds (2-year) 80.1 Launch of sales for Fund of medium-term JGBs	1979 energy crisis Locomotive theory
13	80.2 Creation of the Book-Entry Transfer System	Setting of the goal (fiscal year 1984) to grow out of dependence on Special Deficit-Financing Bonds
80	80.6 Launch of auction for medium-term bonds (4-year)	The first step toward fiscal reconstruction
81 82	81.9 Direct issuance of 6-Year Bonds 83.2 Direct issuance of 15-Year Floating-Rate JGB	The global depression Setting of "Zero-Ceiling"
83	83.4 Launch of handling for offering of JGBs by financial institutions	Setting of "Minus-Ceiling" Setting of the goal (fiscal year 1990) to grow out of dependence on
	83.9 Direct issuance of 20-Year Bonds	Special Deficit-Financing Bonds
84	84.6 Launch of dealing of JGBs by financial institutions  85.6 Amendment of the law for the Act on GDCF Special Account	
	Launch of issuance of short-term bonds     and Refunding Bonds (front-loading )	
85	② Reversion of former NTT stocks etc. to the Account  85.10 Launch of transactions for JGB futures	
	86.2 Launch of auction for short-term bonds	
86	86.10 Launch of underwriting Syndicate (20-year) 87.9 Launch of auction for Fixed-rate bonds (20-year)	
87	87.11 Introduction of system for underwriting auction of 10-Year Bonds	
88 89	88.4 Launch of handling for offering of JGBs in post offices  89.4 Introduction of partial auction system for 10-Year Bonds by Syndicate	Introduction of consumption tax (3%)
90	90.10 Extension to the ratio of bids by Syndicate	Growing out of dependence on Special Deficit-Financing Bonds
91	(10-Year Bonds; 40% → 60%)  91.4 Same-day-announcement of auction results for 10-Year Bonds	Issuance of Ad-hoc Deficit-Financing Bonds
92	92.4 Tax exemption on profit from redemption for TB and FB owned by foreign corporations	
93	94.1 Extension of scope for "Maruyu" tax free saving schemes (3.5 million yen)	
94	94.2 Launch of auction for Fixed-rate bonds (6-year)	Issuance of tax reduction-related Special Deficit-Financing Bonds
94		Issuance of Special Deficit-Financing Bonds for Earthquake  Re-issuance of Special Deficit-Financing Bonds
	96.4 Introduction of auction for 20-Year Bonds in each quarter of the year	Setting of the goal for fiscal consolidation
96	96.4 Launch of the Japanese version of cash-secured bond lending transactions	(Grow out of dependence on Special Deficit-Financing Bonds by fiscal year 2005)
97		Approval of the special treatment law regarding the promotion of fiscal reconstruction
	98.4 Launch of the non-competitive auction for medium-term JGBs	Consumption tax hike from 3% → 5%
98	<ul> <li>99.1 Abolishment of the article pre-maturity redemption</li> <li>99.3 Launch of prior announcement of auction schedules and amounts of issuance</li> </ul>	Approval of the stop-law for the special treatment law regarding the promotion of fiscal reconstruction
99	99.4 Launch of auction for T-Bill (1-year) 99.9 Launch of auction for Fixed-rate bonds (30-year)	Reduction for income tax and corporate tax
33	00.2 Introduction of Fixed-rate bonds (5-year)	
00	00.6 Launch of auction for 15-Year Floating-Rate Bonds 00.9 Launch of the Meeting of JGB Market	
00	00.11 Launch of auction for discount bonds (3-year) 01.3 Introduction of the immediate reopening rule	
01	01.4 Introduction of new Gensaki transactions	Formation of the Koizumi Cabinet
	01.10 Alteration of announcement of auction calendar (announce next 3 months)  02.4 Launch of the Meeting of JGB Investors	Launching of issuance of FILP Bonds
	02.5 Raising of the ratio of auction for underwriting Syndicate (From 60% to 75%; applied since May, 2002)	
02	02.5 Reduction of the fee of underwriting Syndicate (From 0.63 yen to 0.39 yen; applied since May, 2002)	
OΖ	03.1 Introduction of a new Book-Entry Transfer System	
	03.1 Introduction of STRIPS 03.2 Launch of the auction for Buy-back	
	03.3 Introduction of JGBs for Retail Investors 03.5 Raising of the ratio of competitive auction in Syndicate	
	(From 75% to 80%; applied since May, 2003)	
03	03.12 Approximation of "Forthcoming Development of Dobt Management Policy"	
03	03.12 Announcement of "Forthcoming Development of Debt Management Policy" 04.2 Launch of WI transactions	The state of the s
03		
03	04.2 Launch of WI transactions 04.3 Introduction of 10-Year Inflation-Indexed Bonds 04.5 Raising of the ratio of competitive auction in Syndicate (From 80% to 85%; applied since May, 2004)	
03	04.2 Launch of WI transactions 04.3 Introduction of 10-Year Inflation-Indexed Bonds  04.5 Raising of the ratio of competitive auction in Syndicate (From 80% to 85%; applied since May, 2004)  04.5 Reduction of the fee of underwriting Syndicate (From 0.39 yen to 0.23 yen; applied since May, 2004)	
03	04.2 Launch of WI transactions 04.3 Introduction of 10-Year Inflation-Indexed Bonds 04.5 Raising of the ratio of competitive auction in Syndicate (From 80% to 85%; applied since May, 2004) 04.5 Reduction of the fee of underwriting Syndicate (From 0.39 yen to 0.23 yen; applied since May, 2004) 04.7 Reinforcement of Debt Management System (Establishment of Deputy Director-General and Special	
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	04.2 Launch of WI transactions 04.3 Introduction of 10-Year Inflation-Indexed Bonds 04.5 Raising of the ratio of competitive auction in Syndicate (From 80% to 85%; applied since May, 2004) 04.5 Reduction of the fee of underwriting Syndicate (From 0.39 yen to 0.23 yen; applied since May, 2004) 04.7 Reinforcement of Debt Management System (Establishment of Deputy Director-General and Special Officer for Analysis on Debt Market Separation of the Debt Management Division into two Appointment of non-government persons etc. 04.10 Introduction of JGB Market Special Participants Scheme	

Appendices

FY		Debt Management Policy	Fiscal Policy, etc.
		Launch of the Non-Price Competitive Auction I	
	05.4	Raising of the ratio of competitive auction in Syndicate (From 85% to 90%; applied since April, 2005)	
05	05.7	Revision of rules related to auctions  (Introduction of bid limitation for auction of bonds and FB)	
05		Alteration of auction system for 15-Year Floating-Rate Bonds (conventional method)	
	06.1 06.1	Introduction of new type of JGBs for Retail Investors (fixed-rate)  Extension of targets of Auction for Buy-back (for all brands)	
	06.3	Abolishment of the government bond for underwriting Syndicate  Launch of Liquidity Enhancement Auctions	Formation of the Abe Cabinet
06		Re-opening issuance in principle of 10-Year Inflation-Indexed Bonds	Formation of the Abe Cabinet
		and 30-Year Bonds Introduction of FB (6-Month) (transferred from TB (6-Month))	
	07.4	Execution of law regarding Special Accounts (legislation of rules of swaption transaction, etc.)	Formation of the Fukuda Cabinet
		Alteration of auction system for 30-Year Bonds (conventional method) Launch of the Meeting of JGB Top Retailers	
07		Announcement of re-opening issuance in principle of 15-Year Floating-Rate Bonds	
		Introduction of the New Over-The-Counter (OTC) Sales System Launch of auction for fixed-rate bonds (40-year)	
	08.4	Introduction of Special Liquidity Enhancement Auctions	Global financial crisis
		Setting of the issuance date of coupon-bearing bonds as T (auction date) + 3, in principle	Formation of the Aso Cabinet
	08.4	Extension of scope for Liquidity Enhancement Auctions (Coupon-bearing bonds from 6-year to 29-year except for 10-Year	
		Inflation-Indexed Bonds and 15-Year Floating-Rate Bonds) Launch of Buy-back of STRIPS	
08		Reduction in planned issuance amount of 15-Year Floating-Rate Bonds (four times per year → twice per year)	
		Reduction in planned issuance amount of 10-Year Inflation-Indexed Bonds (Suspension of issuance)	
		Reduction in planned issuance amount of 10-Year Inflation-Indexed Bonds and 15-Year Floating-Rate Bonds (Suspension of issuance; Feb, 2009) etc.	
	09.1	Raising of the Bidding upper limit for Non-Price Competitive Auction II from "10% of the amount in the normal auction " to "15%"	
		Launch of issuance of T-Bills by the integration of TB and FB  Extension of total amount of Buy-back from the market (3 → 4 trillion yen)	Formation of the <i>Hatoyama</i> Cabinet
		(Centering on 10-Year Inflation-Indexed Bonds and 15-Year Floating-Rate Bonds) Extension of scope for Liquidity Enhancement Auctions	
09		(Coupon-bearing bonds from 5-year to 29-year) Reduction in amount of Buy-back for 10-Year Inflation-Indexed Bonds and	
0.5	10.1	15-Year Floating-Rate Bonds (In terms of a change from response to the financial crisis to ordinary support)	
	10.3	Announcement of real interest rate (constant maturity basis) based on the daily JGB prices in the secondary market on the MOF website	
	10.7	Issuance of JGBs for Retail Investors (3-year) since July (offered in June),	Formation of the Kan Cabinet
10	10.12	2010 Execution of Buy-back with reduced resources from Government Debt	
	11.7	Consollidation Fund(GDCF) Revisions to Rate-Setting Formula for JGBs for Retail Investors	Formation of the <i>Noda</i> Cabinet
11	12.1	(10-Year Floating Rate) Substance of Reconstruction Bonds for Retail Investors since	Issuance of Reconstruction Bonds
	12.4	January, 2012 (offered in December, 2011)  Issuance of Reconstruction Supporters' Bonds for Retail Investors since	Formation of the Abe Cabinet
40		April, 2012 (offered in March, 2012) Setting of the issuance date for JGB and T-Bill as T (auction date) + 2, in	Issuance of Special Bonds for covering Public Pension Funding
12	13.1	principle Announcement of reduction of the Issuance of Refunding Bonds by using the	gg
	13.7	GDCF Extension of scope for Liquidity Enhancement Auctions	
		(Coupon-bearing bonds from 5- to 39-year bonds) Resumption of issuance for Inflation-Indexed Bonds	
13		Launch of the monthly offering and issuance of JGBs for retail investors	
		(10-Year Floating Rate and 5-Year Fixed Rate) Announcement of re-opening issuance in principle for 20-Year Bonds	
14		Announcement regarding allowing Retail Investors to hold JGBi from January 2015 Launch of purchase of JGBi by Retail Investors through direct negotiation	Consumption tax hike from 5% to 8%
15	15.4	Reduction of the Bidding upper limit for auction participants from "planned issuance amount" to "half of planned issuance amount"	
15	15.4	Raising of the minimum bidding responsibility amount for JGB market Special Participants from 3% of the planned issue amount to 4%	
16	16.4	Extension of scope for Liquidity Enhancement Auctions (Coupon-bearing bonds from 1- to 39-year bonds)	
	16.4	Launch Buy-back of Inflation-Indexed Bonds Raising of the upper issue limit for Non-Price Competitive	
17	17.7	Auction I from "10% of the planned issue amount" to "20%"	
	17.7	Raising of the minimum bidding responsibility amount for JGB market Special Participants from 4% of the planned issue amount to 5%	
18	18.5 20.1	Setting of the issuance date of JGB and T-Bill as T (auction date) + 1, in principle Reduction of the Bidding upper limit for Non-Price Competitive	Consumption tax hike from 8% to 10%
19	20.3	Auction II from "15% of the amount in the normal auction" to "10%" Buy-back of Inflation-Indexed Bonds worth 300 billion yen	Implementation of the reduced tax rate system for consumption tax Spread of COVID-19
	20.4 20.4	Suspension of Non-Price Competitive Auction II for Inflation-Indexed Bonds Raising the Buy-back of Inflation-Indexed Bonds from 20 billion yen to 50 billion yen	Formation of the Suga Cabinet
20		per buy-back Revision of the fee system for JGBs for Retail Investors (Introduction of a	
		management fee)	Formation of the Vieland California
	21.4	Reduction of the lower limit for a coupon on interest-bearing JGBs from 0.1% to 0.005%	Formation of the Kishida Cabinet
21	21.6 22.1	Termination of the Advisory Council on Government Debt Management Reduction of Buy-back of Inflation-Indexed Bonds from 50 billion yen to 20 billion	
	22.3	yen per buy-back Change of the minimum bidding responsibility amount for JGB Market Special	
		Participants from "5% of the planned issue amount" to "100/n(*)%" *n is the number of the Special Participants	
22	22.6	Commencement of Study Group on Government Debt Management	

### (11) Government Bond-related Legal Systems

### A. Legal basis of issuance

All JGBs are issued in accordance with applicable laws. Depending on legal grounds, JGBs are categorized into JGBs (Construction Bonds, Special Deficit-Financing Bonds, Reconstructions Bonds, GX Economy Transition Bonds, Refunding Bonds, and Fiscal Investment and Loan Program (FILP) Bonds), Financing Bills for financing temporary cash shortage of the national treasury, and Subsidy Bonds granted in place of cash payments.

According to Article 85 of the Japanese Constitution, the Diet approval is necessary when the central government intends to assume new liabilities.

### a. Public Finance Act, Art. 4(1), Proviso (Construction Bonds)

Proviso to Art. 4(1) of the "Public Finance Act" permits, as an exception, the ability to issue bonds and take out loans within amounts that correspond to public works expenditure, capital subscriptions, and lending. These expenditures, which are not consumptive, contribute to the asset formation of the state, normally with long-term benefits. Therefore, with regard to this type of expenditure, financial resources can be procured through public debt issuance or borrowing, and the understanding is that future generations can be required to share in the burden of debt service.

In other words, Art. 4(1) of the "Public Finance Act" rests on the concept of an equitable sharing of the financial burden across the generations, and is interpreted to stipulate a principle of sound fiscal policy such that public debt issuance and/or borrowing are permitted, limited to public works expenditure, etc.

However, debt and loan amounts must be within the scope allowed for by Diet approval, with the issuance ceiling amount provided in the general provisions of the general account budget.

Furthermore, Art. 4(2) provides that when this ceiling amount is put to a parliamentary vote, the government is obliged to submit to the Diet a redemption plan that shows the redemption amount for each fiscal year, the redemption method and the redemption periods.

### b. Special Law for Special Deficit-Financing Bonds (Special Deficit-Financing Bonds)

A special law for Special Deficit-Financing Bonds legislated in each fiscal year and the "Act on Special Provisions concerning Issuance of Government Bonds to Secure Revenue Resources Necessary for Fiscal Management" provide for "issuance in addition to the public debt issued pursuant to the proviso of Art. 4(1) of the Public Finance Act." The purpose of this provision is to limit the issuance of Special Deficit-Financing Bonds to cases where, despite the issuance of Construction Bonds, a revenue shortfall is expected to arise.

These laws provide merely the authority to issue Special Deficit-Financing Bonds, but leave it to the general provisions of the general account budget to stipulate a specific issuance ceiling. The reason for this structure is that the applicable ceilings for the issuance of public debt each fiscal year are decided within the balance of total income and expenditure for the fiscal year in question. In this sense, since the ceiling amount for JGBs is inseparably linked to budgeted income and expenditure, it is considered most appropriate to have these matters stipulated in the general provisions of the general account budget and to hold a parliamentary debate and obtain a decision as part of wider income and expenditure considerations.

Moreover, as with Construction Bonds, when the issuance ceiling for Special Deficit-Financing Bonds requires Diet approval, a redemption plan must be submitted to the Diet for reference during the deliberations.

Issuance of Special Deficit-Financing Bonds is an exceptional measure. Actual issuance must be within the scope allowed for by Diet approval, must be made with consideration for the state of income sources such as tax revenues, and must be kept as low as possible. In this context, the government is allowed to issue Special Deficit-Financing Bonds even during the accounting adjustment term. Specifically, the government is allowed to issue Special Deficit-Financing Bonds until the end of June in the next fiscal year, in order to adjust the issue amount of Special Deficit-Financing Bonds until the end of May in the next fiscal year: the deadline for collecting the tax revenue for the fiscal year.

In addition, the government must strive to expeditiously reduce Special Deficit-Financing Bonds.

# c. Act on Special Measures concerning the securing of financial resources to execute measures necessary for recovery from the Great East Japan Earthquake, Art. 69(1) and (4) (Reconstruction Bonds)

Reconstruction Bonds are JGBs issued for raising necessary financial resources to cover reconstruction from the Great East Japan Earthquake from FY2011 to FY2025 in accordance with Paragraphs 1 and 4, Article 69 of the "Act on Special Measures concerning the securing of financial resources to execute measures necessary for recovery from the Great East Japan Earthquake." Reconstruction Bonds were issued as a general account item in FY2011, but the government issued these bonds from FY2012 onward under the Special Account for Reconstruction from the Great East Japan Earthquake.

As with Construction Bonds and Special Deficit-Financing Bonds, Reconstruction Bonds may be issued within the upper limit as approved by the Diet and the ceiling amount is provided under the general provisions of the general account budget with regard to FY2011 and under the general provisions of the special account budget with regard to FY2012 and beyond. In addition, as with Special Deficit-Financing Bonds, the accounting adjustment term issuance system is provided.

Reconstruction Bonds, including their Refunding Bonds, will be redeemed by FY2037. Redemption of these bonds will be financed with revenues generated from the Special Taxes for Reconstruction, etc. from FY2012 to FY2037.

# d. Act on Promoting Transition to the Decarbonized Growth Economic Structure Art. 7 (1) (GX Economy Transition Bonds)

Based on the provisions of Article 7(1) of the "Act on Promoting Transition to the Decarbonized Growth Economic Structure" GX Economy Transition Bonds are JGBs that will be issued only for each fiscal year from FY2023 to FY2032 in order to secure financial resources for the costs required for measures related to promoting a smooth transition to a decarbonized growth and economic structure.

As with Construction Bonds, Special Deficit-Financing Bonds, and Reconstructions Bonds, GX Economy Transition Bonds can be issued within the amount approved by the Diet, and the issuance ceiling is stipulated in the general provisions of the special account budget. In addition, as with Special Deficit-Financing Bonds, the accounting adjustment term issuance system is provided.

GX Economy Transition Bonds and their Refunding Bonds will be redeemed with revenues from GX-Surcharge (Surcharge on fossil fuel supply) for companies such as fossil fuel importers and GX-ETS(Emissions Trading System) by FY2050.

### e. Act on Special Accounts, Art. 46(1) and Art. 47(1) (Refunding Bonds)

Art. 46(1) of the "Act on Special Accounts" allows the government to issue Refunding Bonds up to the amount necessary for JGB adjustment or redemption without Diet approval of the issuance ceiling or submission of a redemption plan. The reason is that, unlike new financial resource bonds such as Construction Bonds and Special Deficit-Financing Bonds, the issuance of Refunding Bonds does not entail an increase in the outstanding debt balance. Besides, since circumstances will require that the issuance of Refunding Bonds must occur promptly and flexibly in accordance with financial market conditions, the time constraints associated with the issuance of Refunding Bonds do not allow for procedures such as the advance submission of redemption plans or advance Diet approval of issuance ceiling.

In addition, in order to enable flexible issuance in response to financial conditions, Art. 47(1) allows front-loaded issuance of Refunding Bonds. However, this front-loading is restricted to the ceiling amount stipulated in the general provisions of the special account budget approved in advance by the Diet.

### f. Act on Special Accounts, Art. 62(1) (Fiscal Investment and Loan Program Bonds)

Along with the 2001 reform of the FILP, Art. 62(1) of the "Act on Special Accounts" permits the issuance of Fiscal Investment and Loan Program Bonds (FILP Bonds), which are charged to the Fiscal Loan Fund account, in order to finance the Fiscal Loan Fund operations. According to Paragraph 2 of the same Article of the said Act, as the central government issues FILP Bonds backed by its credibility, an approval from the Diet is necessary on the bond issuance upper limit in a similar manner to other JGBs. Art. 62(3) stipulates that the expenditure schedule

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must be accompanied by a redemption plan.

### g. Others (Financing Bills, etc.)

Financing Bills are issued in accordance with Article 7 of the "Public Finance Act" or the "Act on Special Accounts", etc. Subsidy Bonds are issued in line with their respective condolence money allowance legislations, and specific legislations, such as the Act on Nuclear Damage Compensation and Decommissioning Facilitation Corporation.

#### **B.** Other laws

#### a. Act on National Government Bonds (Basic matters of JGBs)

The "Act on National Government Bonds" defines basic matters of JGBs. The "Act on National Government Bonds" stipulates, among others, the following matters:

- · Matters related to bond issuance such as the conditions of JGB issuance, and necessary matters concerning debt service, securities certificates and registration are determined by the Minister of Finance
- ·Clerical tasks concerning JGBs are performed by the Bank of Japan
- · Matters concerning the registration of JGBs
- · Matters concerning restrictions on the transfer of JGBs
- ·Remedies in cases of the destruction or loss of JGB certificates
- ·Matters concerning the extinctive prescription of JGBs

In relation to matters not stipulated in this law, the Civil Code and the Commercial Code, as well as general rules such as transaction conventions, are applicable.

Specific procedures for the issuance and redemption of JGBs are stipulated in the "Rules Concerning National Government Bonds"; the "Ordinance of the Ministry of Finance on Issuance, etc. of National Government Bonds"; the "Rules for the Handling of National Government Bonds in the Bank of Japan"; and the "Ordinance of the Ministry of Finance Concerning Special Handling Procedures of the Bank of Japan for the Payment, etc., of Principal and Interest of National Government Bonds" among others.

### b. Act on Special Accounts, Art. 38 through 49 (Redemption of JGBs, etc.)

The redemption of JGBs (payment of principal) and the payment of interest occur through the GDCF established by the "Act on Special Accounts"

With regard to the GDCF, this act stipulates the following, among other matters.

- · Matters concerning the establishment of the GDCF for the redemption of JGBs including borrowings
- · Matters concerning redemption resources and transfer methods
- · Matters concerning the issuance of JGBs (Refunding Bonds) for JGB consolidation and/or redemption
- · Matters concerning the successive carry-over of debt redemption cost.

# Chapter 2 Financing Bills, Borrowings and Government-Guaranteed Debt

1 Financing Bills (FBs)

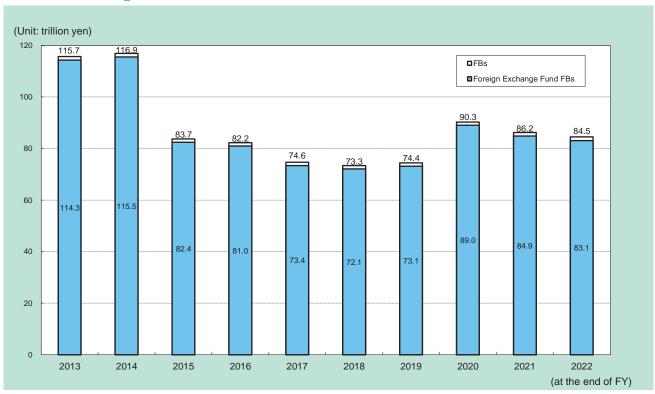
#### (1) Outstanding Amount of FBs-Breakdown by the Types (as of the end of FY2022)

Jnit: billion yen

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	Treasury FBs	Fiscal Loan Fund FBs	Foreign Exchange Fund FBs	Petroleum FBs	Nuclear Damage Liability Facilitation Fund FBs	Food FBs	Total
Outstanding as of the End of FY2022	_	_	83,104.9	1,160.4	_	234.0	84,499.3
Maximum Issuance Amount in FY2022	20,000.0	15,000.0	195,000.0	1,488.3	3,079.6	244.5	234,812.4
Maximum Issuance Amount in FY2023	20,000.0	15,000.0	195,000.0	2,035.3	2,850.8	361.5	235,247.6

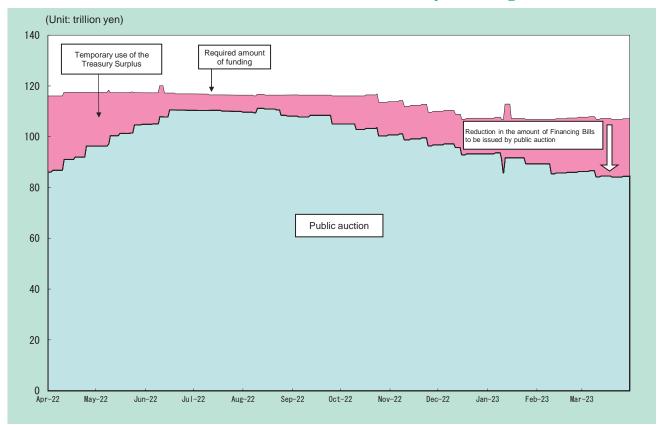
Note 1: FY2022: supplementary budget, FY2023: initial budget. Note 2: Figures may not sum up to the total because of rounding.

#### (2) Outstanding Amount of FBs

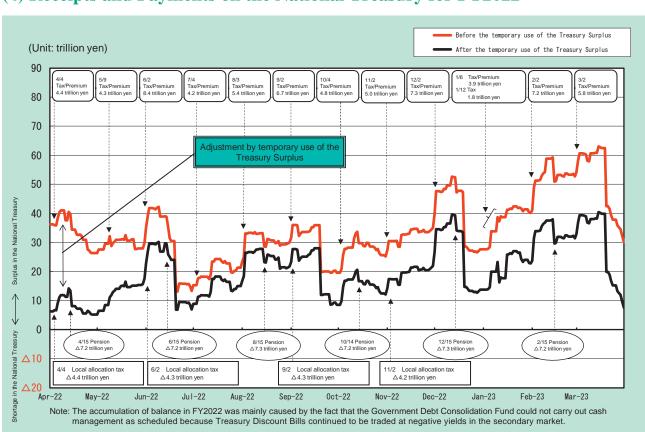


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#### (3) Issuance Amount of FBs in FY2022-Breakdown by Funding Resources



#### (4) Receipts and Payments on the National Treasury for FY2022



## **Borrowings**

#### (1) Outstanding Amount of Borrowings



#### (2) Outstanding Amount of Borrowings-Breakdown by the Types of Account (as of the end of FY2022)

(Unit: billion yen)

	Name of Assessed	End of	End of	Condition					
	Name of Account	FY2021	FY2022	Fig. 11 F	Creditor	011			
				Fiscal Loan Fund	Financial Institutions	Others			
General Acc	count 1)	8,819.5	8,231.3	8,189.9	_	41.4			
	Former Temporary Military Expenditure	41.4	41.4	_	_	41.4			
	Allotment of Local Allocation Tax and Local Transfer Tax	8,758.2	8,174.3	8,174.3	_	_			
	Former National Centers for Advanced and Specialized Medical Care	19.8	15.5	15.5	_	_			
SA for Allotme	ent of Local Allocation Tax and Local Transfer Tax	30,112.3	29,612.3	5,566.9	24,045.4	_			
SA for Ener	gy Policy	8,333.1	8,511.0	91.2	8,419.8	_			
SA for Pens	sion	1,440.9	1,436.7	1,436.7	_	_			
SA for Stab	le Food Supply	24.0	29.8	19.3	10.5	_			
SA for Natio	onal Forest Debt Management	1,143.8	1,125.0	24.2	1,100.9	_			
SA for Moto	r Vehicle Safety	554.9	670.6	536.5	_	2)134.1			
	Total	50,428.5	49,616.7	15,864.6	33,576.6	175.5			

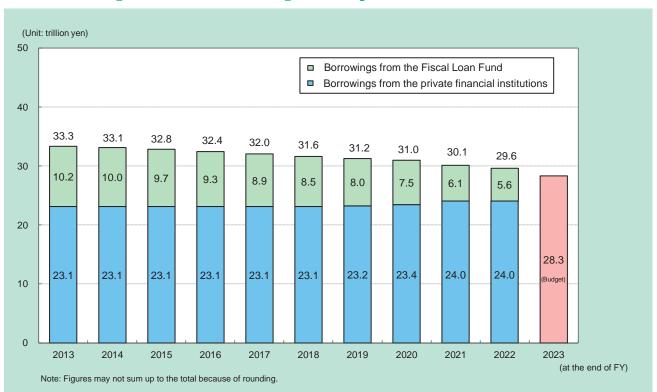
Note 1: For breakdown of the General Account, "Former Temporary Military Expenditure" (41.4) arise from the former Special Account for Temporary Military Expenditure. For "Allotment of Local Allocation Tax and Local Transfer Tax" (8,174.3) and "Former National Centers for Advanced and Specialized Medical Care" (15.5), part of the debt of "Special Account for Allotment of Local Allocation Tax and Local Transfer Tax" (April 2007), and part of the debt of "Special Account for National Centers for Advanced and Specialized Medical Care" (April 2010) were attributed to the General Account, respectively.

Note 2: These loans were made from local governments.

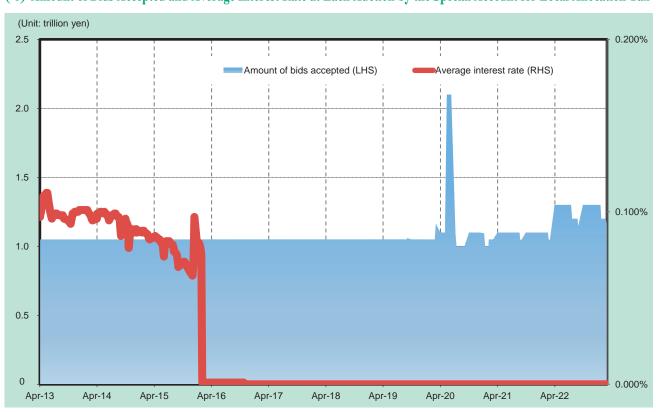
Note 3: Figures may not sum up to the total because of rounding

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#### (3) Outstanding Amount of Borrowings of the Special Account for Local Allocation Tax



#### (4) Amount of Bids Accepted and Average Interest Rate at Each Auction by the Special Account for Local Allocation Tax



## (5) Auction Results of the Borrowings of the Special Account for Local Allocation Tax in FY2022

Auction Date	Borrowing Date	Maturity Date	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Interest Rate	Highest Interest Rate
4/1/22	4/8/22	10/11/22	44,971.0	1,300.036	0.000%	0.000%
4/5/22	4/15/22	10/14/22	47,009.6	1,300.020	0.000%	0.000%
4/12/22	4/22/22	10/24/22	50,038.6	1,300.011	0.000%	0.000%
4/21/22	5/9/22	11/2/22	48,940.6	1,300.041	0.000%	0.000%
4/26/22	5/13/22	11/14/22	49,545.9	1,300.064	0.000%	0.000%
5/10/22	5/18/22	11/18/22	51,436.3	1,300.021	0.000%	0.000%
5/19/22	5/31/22	11/30/22	49,659.7	1,300.066	0.000%	0.000%
5/24/22	6/2/22	12/2/22	50,556.4	1,300.000	0.000%	0.000%
6/2/22	6/10/22	12/9/22	50,397.4	1,300.022	0.000%	0.000%
6/7/22	6/17/22	12/15/22	47,592.6	1,300.028	0.000%	0.000%
7/6/22	7/20/22	1/19/23	47,458.1	1,300.011	0.000%	0.000%
7/13/22	7/27/22	1/25/23	44,747.3	1,300.010	0.000%	0.000%
7/15/22	7/29/22	1/30/23	39,177.9	1,300.041	0.000%	0.000%
7/22/22	8/2/22	2/2/23	40,781.5	1,200.010	0.000%	0.000%
7/28/22	8/10/22	2/8/23	39,178.1	1,200.009	0.000%	0.000%
8/5/22	8/19/22	2/15/23	39,802.0	1,200.030	0.000%	0.000%
8/23/22	8/31/22	2/28/23	36,260.9	1,200.018	0.000%	0.000%
8/25/22	9/2/22	3/6/23	36,911.6	1,200.033	0.000%	0.000%
8/30/22	9/9/22	3/10/23	36,334.0	1,145.013	0.000%	0.000%
9/29/22	10/11/22	4/11/23	41,690.1	1,300.028	0.000%	0.000%
10/4/22	10/14/22	4/14/23	41,050.4	1,300.021	0.000%	0.000%
10/12/22	10/24/22	4/24/23	44,838.9	1,300.019	0.000%	0.000%
10/25/22	11/2/22	5/2/23	41,617.5	1,300.000	0.000%	0.000%
11/1/22	11/14/22	5/17/23	42,601.7	1,300.050	0.000%	0.000%
11/8/22	11/18/22	5/23/23	41,843.9	1,300.029	0.000%	0.000%
11/17/22	11/30/22	5/31/23	42,658.8	1,300.027	0.000%	0.000%
11/22/22	12/2/22	6/2/23	42,816.1	1,300.004	0.000%	0.000%
12/1/22	12/9/22	6/9/23	46,568.8	1,300.026	0.000%	0.000%
12/6/22	12/15/22	6/15/23	46,133.1	1,300.006	0.000%	0.000%
1/11/23	1/19/23	7/18/23	38,589.9	1,300.025	0.000%	0.000%
1/17/23	1/25/23	7/25/23	35,669.4	1,300.019	0.000%	0.000%
1/19/23	1/30/23	7/31/23	41,034.0	1,300.003	0.000%	0.000%
1/24/23	2/2/23	8/4/23	41,760.6	1,200.017	0.000%	0.000%
1/31/23	2/8/23	8/8/23	40,286.6	1,200.035	0.000%	0.000%
2/3/23	2/15/23	8/15/23	41,579.5	1,200.017	0.000%	0.000%
2/16/23	2/28/23	8/31/23	44,741.0	1,200.030	0.000%	0.000%
2/21/23	3/6/23	9/4/23	40,220.9	1,200.016	0.000%	0.000%
3/1/23	3/10/23	9/8/23	41,741.0	1,145.000	0.000%	0.000%

#### (6) Auction Results of the Borrowings of the Special Account for the National Forest Debt Management in FY2022

Auction Date	Borrowing Date	Maturity Date	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Interest Rate	Highest Interest Rate
5/17/22	5/25/22	5/25/27	378.7	63.100	0.000%	0.000%
8/17/22	8/25/22	8/25/27	424.5	96.099	0.000%	0.000%
11/15/22	11/25/22	11/25/27	436.6	79.299	0.000%	0.000%
2/14/23	2/27/23	2/25/28	424.9	96.200	0.050%	0.050%

### (7) Auction Results of the Borrowings of the Special Account for Energy Policy in FY2022

Auction Date	Borrowing Date	Maturity Date	Amount of Competitive Bids (billion yen)	Amount of Bids Accepted (billion yen)	Average Interest Rate	Highest Interest Rate
4/7/22	4/20/22	4/20/23	21,483.2	799.979	0.000%	0.000%
5/12/22	5/20/22	5/22/23	19,833.7	799.986	0.000%	0.000%
6/9/22	6/20/22	6/20/23	21,895.6	799.996	0.000%	0.000%
7/8/22	7/20/22	7/20/23	20,661.9	779.981	0.000%	0.000%
8/9/22	8/22/22	8/21/23	15,357.5	669.988	0.000%	0.000%
9/8/22	9/20/22	9/20/23	12,435.0	549.994	0.000%	0.000%
10/6/22	10/20/22	10/20/23	15,124.7	649.980	0.000%	0.000%
11/10/22	11/21/22	11/20/23	14,494.5	649.999	0.000%	0.000%
12/8/22	12/20/22	12/20/23	14,850.6	679.981	0.000%	0.000%
1/13/23	1/20/23	1/22/24	14,173.1	639.982	0.000%	0.000%
2/7/23	2/20/23	2/20/24	16,416.9	639.976	0.000%	0.000%
3/9/23	3/20/23	3/21/24	21,037.5	759.980	0.000%	0.000%

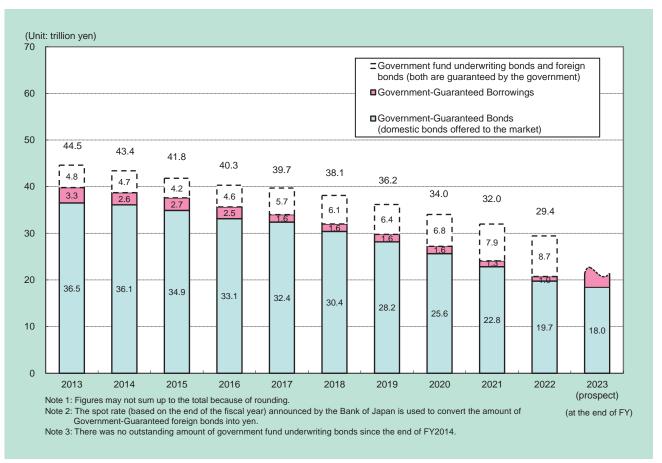
#### (8) Auction Results of the Borrowings of the Special Account for Stable Supply of Food in FY2022

Auction Date	Borrowing Date	Maturity Date	Amount of Competitive Bids (billion yen)		Average Interest Rate	Highest Interest Rate
9/13/22	9/22/22	9/22/27	35.1	11.700	0.000%	0.000%



## **Government-Guaranteed Debt**

#### (1) Changes in the Outstanding Amount of Government-Guaranteed Debt



#### (2) Changes in the Issuance Amount of Government-Guaranteed Domestic Bonds Offered to the Market

(Unit: billion yen)

(Oint.											(Offic. Diff	ion yen)			
	40-Year Bonds	30-Year Bonds	20-Year Bonds	15-Year Bonds	12-Year Bonds	10-Year Bonds	9-Year Bonds	8-Year Bonds	7-Year Bonds	6-Year Bonds	5-Year Bonds	4-Year Bonds	3-Year Bonds	2-Year Bonds	Total (Note)
FY2013	_	90.0	360.0	_	_	2,779.7	_	200.0	_	420.0	_	610.0	_	600.0	5,059.7
FY2014	_	120.0	400.0	_	_	2,005.7	_	_	_	414.0	_	550.0	_	730.0	4,219.7
FY2015	20.0	120.0	400.0	_	_	1,443.6	_	112.0	_	250.0	_	200.0	_	600.0	3,145.6
FY2016	40.0	160.0	400.0	I	I	746.9	I	120.0	I	370.0	_	440.0	I	830.0	3,106.9
FY2017	70.0	240.0	400.0	-	_	1,351.4	-	_	_	165.0	_	630.0	200.0	900.0	3,956.4
FY2018	100.0	280.0	402.0	1	1	754.1	13.0	1	1	155.0	_	550.0	100.0	750.0	3,104.1
FY2019	110.0	300.0	15.0	1	1	272.9	1	50.0	90.0	45.0	_	220.0	150.0	550.0	1,802.9
FY2020	70.0	_	92.0	-	-	127.3	-	-	90.0	_	_	510.0	250.0	280.0	1,419.3
FY2021	5.0	60.0	83.2	-	80.0	31.0	-	-	20.0	_	160.0	310.0	100.0	280.0	1,129.2
FY2022	10.0	_	160.0	65.0	80.0	43.1	1	_	_	_	90.0	150.0	_	350.0	948.1
FY2023 (Plan)	10.0	10.0	175.0	80.0	40.0	134.5	50.0	_	280.0	_	1,003.0	80.0	100.0	230.0	2,192.5

Note: Apart from the plan shown above, Japan Finance Corporation (JFC) and Development Bank of Japan Inc. (DBJ) plan further issuances (maturity less than 5 years) depending on the progress of projects. The maximum amounts of these further issuances are 100 billion yen for JFC and DBJ, respectively.

#### (3) Breakdown of the Government-Guaranteed Debt by Agencies

#### **A Government-Guaranteed Domestic Bonds**

Outstanding Outstanding Redemption (FY2022) **JFC** 735.0 180.0 555.0 JEHDRA 13,671.5 120.0 1,876.0 11,915.5 220.0 240.0 460.0 New Kansai International Airport Co., Ltd. 247.1 43.0 204.1 1,315.0 30.0 240.0 1,105.0 DICJ 1,480.0 200.0 610.0 1,070.0 800.0 300.0 300.0 800.0 PFIPCJ 0.88 88.0 JOIN 5.0 5.0 **JICT** 10.0 10.0 20.0 Organization for Promoting Urban Development 95.8 20.0 115.8 **CJIAC** 154.5 23.1 23.1 154.5 JFM 4,010.0 755.0 3,255.0 22,826.9 948.1 4,027.1 19,747.9

(0)	ilit. billion yen)
Planned Issuance (FY2023)	Planned Redemption (FY2023)
_	120.0
1,253.0	1,936.0
220.0	_
_	44.0
130.0	240.0
80.0	500.0
250.0	250.0
50.0	_
57.5	_
20.9	_
35.0	10.0
16.1	16.7
80.0	780.0
2,192.5	3,896.7

(Unit: hillion ven)

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#### **B** Government-Guaranteed Borrowings

	Outstanding (End of FY2021)	Borrowings (FY2022)	Repayment (FY2022)	Outstanding (End of FY2022)
FPF	202.2	68.9	97.3	173.8
JOGMEC	476.4	574.7	476.4	574.7
DICJ	25.5	16.0	25.5	16.0
BSPC	180.0	_	180.0	_
JIC	150.0	_	150.0	_
NDF	200.0	200.0	200.0	200.0
CREB	14.6	11.7	14.6	11.7
Organization for Promoting Urban Development	5.5	_	0.3	5.2
Total	1,254.2	871.3	1,144.1	981.4

Note 1: Figures may not sum up to the total because of rounding.

Note 2: Apart from the plan shown above, JFC and DBJ plan further issuances (maturity less than 5 years) depending on the progress of projects in FY2023. The maximum amounts of these further issuances are 100 billion yen for JFC and DBJ, respectively.

Note 3: Calculation are on a nominal value basis.

#### (4) Issuance Calendar of Government-Guaranteed Domestic Bonds by Agencies in FY2022

10-Year Bonds Offering Price (yen), Issuance Amount (billion yen)

	FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
DBJ Inc.	40.0						20.0							20.0
JOIN	58.9											5.0		5.0
JICT	15.5									10.0				10.0
CJIAC	8.1												8.1	8.1
Nominal Coupon							0.344%			0.504%		0.695%	0.700%	
Offering Price							100.00			100.00		100.00	100.00	
Yield							0.344%			0.504%		0.695%	0.700%	

#### 40-Year Bonds

		FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
		10.0			10.0										10.0
DBJ Inc.	Nominal Coupon				1.245%										
	Offering Price				100.00										
	Yield				1.245%										
		10.0													-
Organization for Promoting Urban Development	Nominal Coupon														
	Offering Price														
	Yield														

#### 20-Year Bonds

		FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
		120.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	120.0
JEHDRA	Nominal Coupon		0.740%	0.751%	0.772%	0.899%	0.809%	0.932%	1.072%	1.079%	1.140%	1.370%	1.325%	1.259%	
JEHUKA	Offering Price		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	Yield		0.740%	0.751%	0.772%	0.899%	0.809%	0.932%	1.072%	1.079%	1.140%	1.370%	1.325%	1.259%	
		20.0												20.0	20.0
JHFA	Nominal Coupon													1.223%	
JIIFA	Offering Price													100.00	
	Yield													1.223%	
		25.0									10.0			10.0	20.0
Organization for Promoting Urban Development	Nominal Coupon										1.121%			1.183%	
	Offering Price										100.00			100.00	
	Yield										1.121%			1.183%	

#### 15-Year Bonds

			FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
			65.0			25.0			20.0			20.0				65.0
	JHFA	Nominal Coupon				0.675%			0.667%			0.845%				
		Offering Price				100.00			100.00			100.00				
		Yield				0.675%			0.667%			0.845%				

#### 12-Year Bonds

12 Tour Borido															
		FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
		80.0						30.0			30.0		20.0		80.0
JHFA	Nominal Coupon							0.415%			0.614%		0.831%		
JIFA	Offering Price							100.00			100.00		100.00		
	Yield							0.415%			0.614%		0.831%		

#### 7-Year Bonds

	1-10ai Dollas															
			FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
			80.0													_
	DBJ Inc.	Nominal Coupon														
		Offering Price														
		Yield														

#### 5-Year Bonds

		FY2022 (Planned)	Apr.	May	Jun.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
		75.0			50.0							25.0		75.0
JHFA	Nominal Coupon				0.001%							0.203%		
JПГА	Offering Price				100.20							100.00		
	Yield				-0.039%							0.203%		
		50.0												_
PFIPCJ	Nominal Coupon													
FT IF GS	Offering Price													
	Yield													
		15.0											15.0	15.0
CJIAC	Nominal Coupon												0.260%	
CUIAC	Offering Price												100.00	
	Yield												0.260%	

#### 4-Year Bonds

			FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
			150.0		150.0											150.0
NII	NDE	Nominal Coupon			0.001%											
NDF	DΓ	Offering Price			100.036											
		Yield			-0.007%											

#### 2-Year Bonds

		FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
		200.0		120.0		80.0									200.0
DICJ	Nominal Coupon			0.001%		0.001%									
DICJ	Offering Price			100.12		100.15									
	Yield			-0.059%		-0.074%									
		150.0							150.0						150.0
NDF -	Nominal Coupon								0.001%						
	Offering Price								100.014						
	Yield								-0.005%						

	FY2022 (Planned)	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY2022 Total
Subtotal of 10-Year Bonds	122.5						20.0			10.0		5.0	8.1	43.1
Subtotal of 40-Year Bonds	20.0			10.0										10.0
Subtotal of 20-Year Bonds	165.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	20.0	10.0	10.0	40.0	160.0
Subtotal of 15-Year Bonds	65.0			25.0			20.0			20.0				65.0
Subtotal of 12-Year Bonds	80.0						30.0			30.0		20.0		80.0
Subtotal of 7-Year Bonds	80.0													_
Subtotal of 5-Year Bonds	140.0			50.0								25.0	15.0	90.0
Subtotal of 4-Year Bonds	150.0		150.0											150.0
Subtotal of 2-Year Bonds	350.0		120.0		80.0			150.0						350.0
Total	1,172.5	10.0	280.0	95.0	90.0	10.0	80.0	160.0	10.0	80.0	10.0	60.0	63.1	948.1

Note: Calculation are on a nominal value basis.

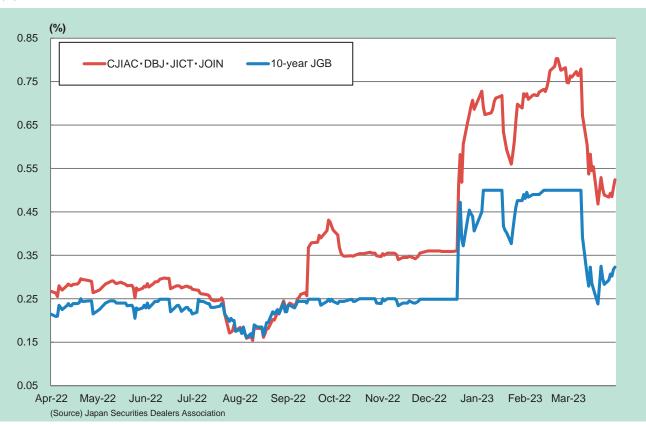
#### (5) Outstanding Amount of Government-Guaranteed Foreign Bonds -Breakdown by Denomination and by Agencies (as of the end of FY2022)

	US \$	Euro €	UK £	JPY ¥	Total <conversion accounting="" and="" by="" expenditure="" government="" in="" jpy="" rate=""> (billion yen)</conversion>
JBIC	43,800	2,000	250		5,023.2
JICA	3,480				375.8
DBJ Inc.	13,150	700		175.0	1,684.8
Total	60,430	2,700	250	175.0	7,083.8

(Reference) Government Expenditure and Accounting Rate (FY2022)	US \$ 1 = ¥108	€1= ¥128	£ 1 = ¥147
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Note 1: Figures may not sum up to the total because of rounding.

#### (6) Yields of 10-Year Government-Guaranteed Bonds in FY2022



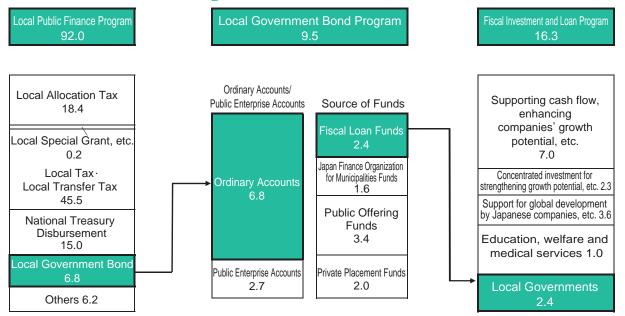
Note 2: "Government Expenditure Rate" is the foreign exchanged rate specified by Article 11-2(4) of the Government Expenditure Regulations of the Ministry of Finance. "Government Accounting Rate" is the foreign exchanged rate specified by Article 14 and 16 of the Government Accounting Regulations of the Ministry of Finance.

## **Chapter 3 Other Public Debt**



## **Local Government Bonds (LGBs)**

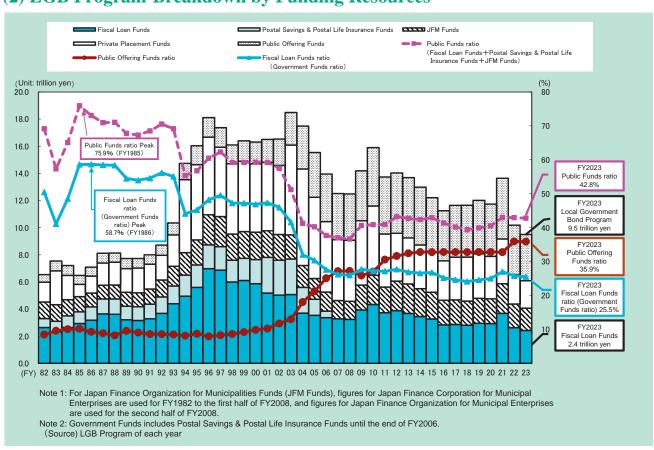
#### (1) Overview of LGB Program in FY2023



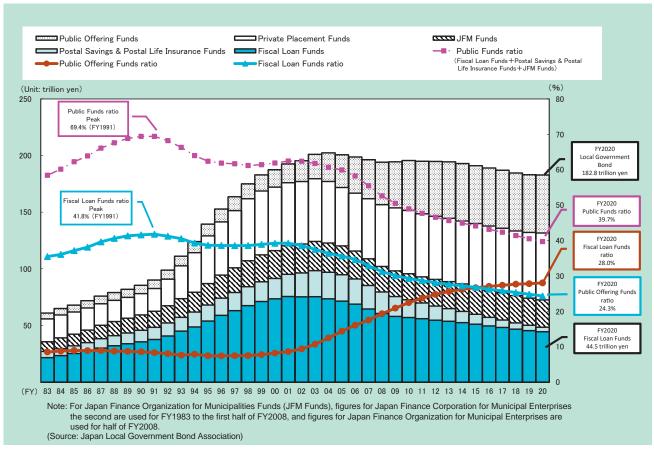
Note: Figures may not sum up to total because of rounding.

#### (Unit: trillion yen)

#### (2) LGB Program-Breakdown by Funding Resources



### (3) Outstanding Amount of LGB Program-Breakdown by Funding Resources



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#### (4) Issuance Conditions of Public Offering LGBs in FY2022

				ering LGBs				Reference	
		Joint-LGBs		Bonds	Tokyo			Bs (Long te )-Year Bon	
	Nominal Coupon	Offering Price		Nominal Coupon	Tokyo Offering Price	Yield to Subscribers	Nominal Coupon	Average Price	
	(%)	(yen)	(%)	(%)	(yen)	(%)	(%)	(yen)	(%)
2022 April	0.299	100.00	0.299	0.289	100.00	0.289	0.2	99.99	0.201
May	0.304	100.00	0.304	0.294	100.00	0.294	0.2	99.56	0.245
June	0.309	100.00	0.309	0.304	100.00	0.304	0.2	99.62	0.239
July	0.364	100.00	0.364	0.344	100.00	0.344	0.2	99.53	0.248
August	0.315	100.00	0.315	0.275	100.00	0.275	0.2	100.31	0.168
September	0.369	100.00	0.369	0.369	100.00	0.369	0.2	99.66	0.235
October	0.444	100.00	0.444	0.439	100.00	0.439	0.2	99.53	0.248
November	0.449	100.00	0.449	0.429	100.00	0.429	0.2	99.53	0.248
December	0.554	100.00	0.554	0.529	100.00	0.529	0.2	99.52	0.250
2023 January	0.800	100.00	0.800	0.794	100.00	0.794	0.5	100.00	0.500
February	0.740	100.00	0.740	0.740	100.00	0.740	0.5	100.14	0.485
March	0.750	100.00	0.750	0.740	100.00	0.740	0.5	100.00	0.500

(Sources) Ministry of Finance, Japan Local Government Bond Association

## (5) Issuance Amount of Public Offering LGBs

(Unit: billion yen)

			Nationwide	e Public Offe	ring LGBs			Citizen Participatory-
	10-Year Independent-Type	Bonds Joint-Type	2 or 3-Year Bonds	5-Year Bonds	6 or 7-Year Bonds	12,15,18,20,25 or 30- Year Bonds	Total	Type Public Offering LGBs
FY2012	2,616.0	1,515.0	70.0	1,230.0	90.0	853.0	6,374.0	202.8
FY2013	2,873.0	1,517.0	135.0	1,258.0	101.0	984.0	6,868.0	186.4
FY2014	2,693.0	1,474.0	116.0	1,212.0	70.0	1,204.0	6,769.0	174.6
FY2015	2,710.0	1,421.0	60.0	1,171.0	60.0	1,211.0	6,633.0	148.6
FY2016	2,579.0	1,204.0	_	1,010.0	_	1,429.0	6,222.0	37.3
FY2017	2,241.0	1,206.0	_	1,060.0	_	1,586.0	6,093.0	18.2
FY2018	2,348.0	1,207.0	_	1,074.0	_	1,672.0	6,301.0	20.9
FY2019	2,373.0	1,237.0	_	1,168.0	_	1,667.0	6,445.0	15.3
FY2020	2,738.0	1,206.0	_	1,356.0	_	1,685.0	6,985.0	16.3
FY2021	2,648.0	1,375.0	_	1,430.0	_	1,747.0	7,200.0	15.6
FY2022	2,036.5	1,200.0	20.0	1,377.5	_	861.8	5,495.8	18.2

Note 1: 2-Year Bonds were not issued in FY2022. Note 2: 3-Year Bonds were not issued in FY2012 and FY2015. Note 3: 6-Year Bonds were not issued in FY2014 and FY2015.

Note 4: 12-Year Bonds were not issued in FY2016-FY2022.

Note 5: 18-Year Bonds were not issued in FY2012-FY2013 and FY2015-FY2022.

Note 6: 25-Year Bonds were not issued in FY2012-FY2015 and FY2022. (Sources) Ministry of Finance, Japan Local Government Bond Association

Chapter 3 Other Public Debt



## Debt of Incorporated Administrative Agencies, etc.

#### (1) FY2023 FILP Plan

) F 1 2023 F 1L1 T lan					Jnit: billion yen
Section	Fiscal Loan	Industrial Investment	Government Guarantee	Total Amount of FILP Financing	(Reference) Own Funds, etc
<special accounts=""></special>					
Special Account for Stable Supply of Food	0.8	_	_	0.8	10.3
Special Account for Energy Measures	8.3	_	_	8.3	1,529.2
Special Account for Motor Vehicles Safety	118.5	_	_	118.5	64.
<government financial="" institutions=""></government>					
Japan Finance Corporation	6,068.7	28.8	_	6,097.5	(290.0 2,638.0
The Okinawa Development Finance Corporation	199.4	7.0	_	206.4	(10.4
Japan Bank for International Cooperation	981.0	90.0	901.0	1,972.0	(20. 678.0
Japan International Cooperation Agency (Incorporated Administrative Agency)	1,043.1	_	225.5	1,268.6	(80. 625.
Incorporated Administrative Agencies, etc.>					
National Federation of Land Improvement Associations	1.3	_	_	1.3	1.7
The Promotion and Mutual Aid Corporation for Private Schools of Japan	27.2	_	_	27.2	30.3
Japan Student Services Organization (Incorporated Administrative Agency)	588.1	-	_	588.1	(120.6
Welfare And Medical Service Agency (Incorporated Administrative Agency)	264.2	_	_	264.2	(20.0
National Hospital Organization (Incorporated Administrative Agency)	28.6	-	_	28.6	7.4
National Center for Child Health and Development (National Research and Development Agency)	0.9	_	_	0.9	_
National Center for Geriatrics and Gerontology (National Research and Development Agency)	0.2	_	_	0.2	_
National Institution for Academic Degrees and Quality Enhancement of Higher Education (Incorporated Administrative Agency)	75.8	_	_	75.8	(5.0 4.6
Japan Railway Construction, Transport and Technology Agency (Incorporated Administrative Agency)	43.9	1.2	_	45.1	(53.0 193.7
Japan Housing Finance Agency (Incorporated Administrative Agency)	30.7	_	220.0	250.7	(2,174. 2,190.9
Urban Renaissance Agency (Incorporated Administrative Agency)	500.0	_	_	500.0	(110. 885.6
Japan Expressway Holding and Debt Repayment Agency (Incorporated Administrative Agency)	_	_	1,253.0	1,253.0	(390. 2,621.
Japan Water Agency (Incorporated Administrative Agency)	0.4	-	_	0.4	(10. 128.6
Forest Research and Management Organization (National Research and Development Agency)	4.6	_	_	4.6	27.
Japan Organization for Metals and Energy Security (Incorporated Administrative Agency)	0.4	139.2	_	139.6	80.3
<local governments=""></local>	0.400.0			0.400.0	7.07-
Local Governments	2,423.8	_	_	2,423.8	7,075.6
<special corporations=""></special>					
Japan Green Investment Corp. for Carbon Neutrality	200.0	40.0	250.0	40.0	20.0 (640.
Development Bank of Japan Inc.  Organization for Promoting Urban Development	300.0	40.0	350.0 35.0	690.0 35.0	1,790.0
					(9.7
Central Japan International Airport Co., Ltd.	_	_	16.1	16.1	15.
Private Finance Initiative Promotion Corporation of Japan	_	_	50.0	50.0	30.0
Cool Japan Fund Inc.	_	8.0	_	8.0	20.0
Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development	_	51.2	57.5	108.7	5.1
Fund Corporation for the Overseas Development of Japan's ICT and Postal Services Inc.	_	24.4	20.9	45.3	_
Total	12,709.9	429.8	3,129.0	16,268.7	(3,932.2

Note 1: Figures are based on the initial plan of FY2023.

Note 2: For "(Reference) Own Funds, etc.", figures in () are the amounts procured by the issuance of FILP agency bonds, public bonds without Government Guarantees issued by individual incorporated administrative agencies, etc. in private financial markets.

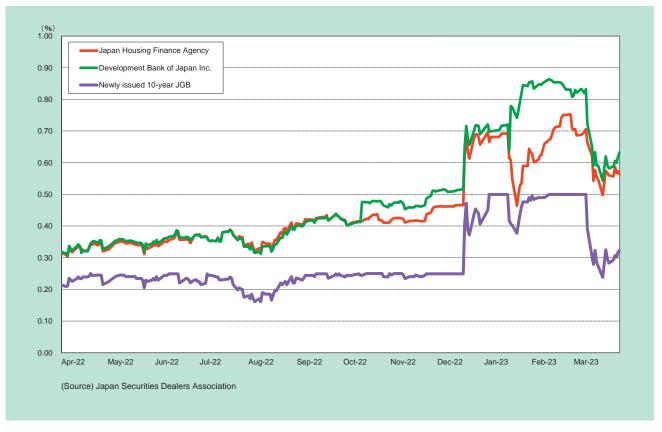
## (2) Planned and Actual Issuance Amount of FILP Agency Bonds

(Unit: billion yen)

			Am	ount	(Unit: billion yen)
	Section	FY2	021	FY2022	FY2023
		Planned Issuance	Results	Planned Issuance	Planned Issuance
Japa	an Finance Corporation	290.0	50.0	290.0	290.0
	Micro Business and Individual Operations	170.0	30.0	170.0	170.0
	Small and Medium Enterprise Operations	100.0	10.0	100.0	100.0
	Agriculture, Forestry, Fisheries and Food Business Operations	20.0	10.0	20.0	20.0
The	Okinawa Development Finance Corporation	10.0	10.0	10.0	10.0
Japa	an Bank for International Cooperation	20.0	_	20.0	20.0
	an International Cooperation Agency orporated Administrative Agency)	140.0	60.0	80.0	80.0
Japa	an Housing Finance Agency orporated Administrative Agency)	2,644.0	2,026.0	2,357.2	2,174.5
	Including Straight Bonds	460.0	505.0	520.0	388.5
	Asset Backed Securities	2,184.0	1,521.0	1,837.2	1,786.0
	an Renaissance Agency proprorated Administrative Agency)	110.0	90.0	110.0	110.0
Japa	an Water Agency proprated Administrative Agency)	5.0	5.0	7.0	10.0
Japan	Railway Construction, Transport and Technology Agency porated Administrative Agency)	82.0	82.0	80.0	53.0
Welf	fare And Medical Service Agency orporated Administrative Agency)	20.0	20.0	20.0	20.0
	an Science and Technology Agency	_	_	20.0	Out of FILP Plan
Qua	onal Institution for Academic Degrees and lity Enhancement of Higher Education orporated Administrative Agency)	5.0	5.0	5.0	5.0
Japa (Inco	an Student Services Organization orporated Administrative Agency)	120.0	120.0	120.0	120.0
Japar	n Expressway Holding and Debt Repayment Agency rporated Administrative Agency)	200.0	200.0	200.0	390.0
	tral Japan International Airport Co., Ltd.	4.7	10.0	5.0	9.7
Dev	elopment Bank of Japan Inc.	620.0	558.1	630.0	640.0
	Total 【Number of Agencies】	4,270.7 【14】	3,236.1 【13】	3,954.2 【15】	3,932.2 【14】
	Including Straight Bonds	2,086.7	1,715.1	2,117.0	2,146.2
	Asset Backed Securities	2,184.0	1,521.0	1,837.2	1,786.0

Note: Amounts are calculated on a nominal value basis (Revised amounts).

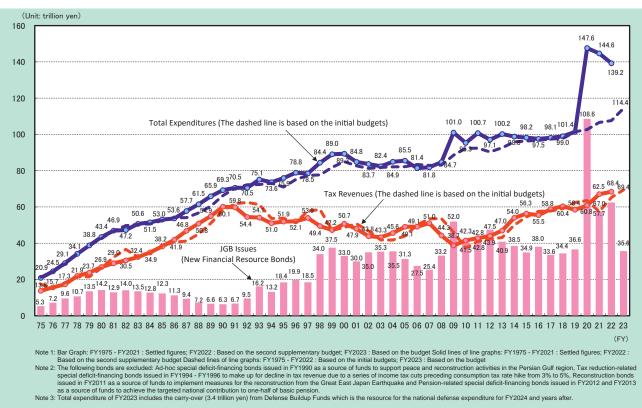
## (3) Yields of 10-Year FILP Agency Bonds in FY2022



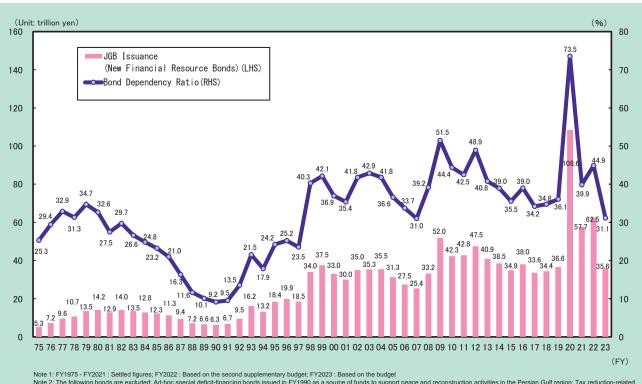
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## [Supplement] Fiscal Conditions and Debt Outstandings

#### (1) Trend in General Account Tax Revenues, Total Expenditures and Government Bond Issues



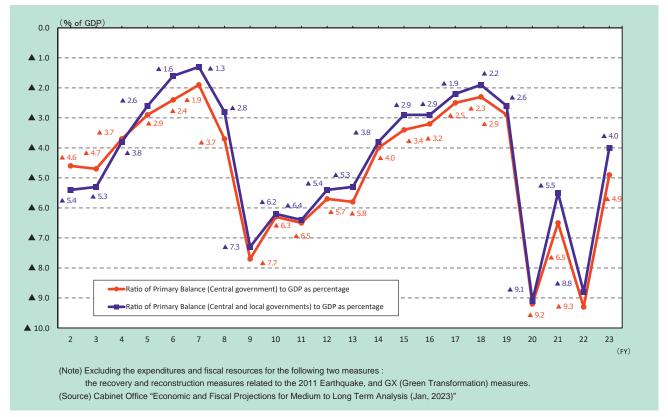
### (2) Government Bond Issuance and Bond Dependency Ratio



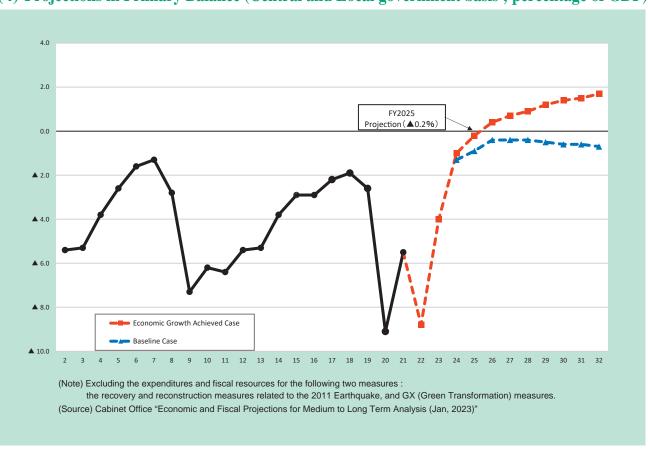
Note 1: FY1975 - FY2021 : Settled figures; FY2022 : Based on the second supplementary budget; FY2023 : Based on the budget
Note 2: The following bonds are excluded: Ad-hoc special deficit-financing bonds issued in FY1990 as a source of funds to support peace and reconstruction activities in the Persian Gulf region; Tax reduction-rele special deficit-financing bonds issued in FY1994-96 to make up for a decline in tax revenue due a series of income tax cuts preceding consumption tax rate hike from 3% to 5%; Reconstruction bonds issued in FY2011 as a source of funds to implement measures for the reconstruction from the Great East Japan Earthquake, and; Pension-related special deficit-financing bonds issued in FY2012 and FY2013 as a source of funds to achieve the targeted national contribution to one-half of basic pension.

Note 3: Bond dependency ratio is calculated as the ratio of bond issuance to general account expenditures.

#### (3) Changes in Ratio of Primary Balance to GDP



#### (4) Projections in Primary Balance (Central and Local government basis; percentage of GDP)



#### (5) Government Debt-related Expenditures in the General Account-Breakdown by Categories (FY2023)

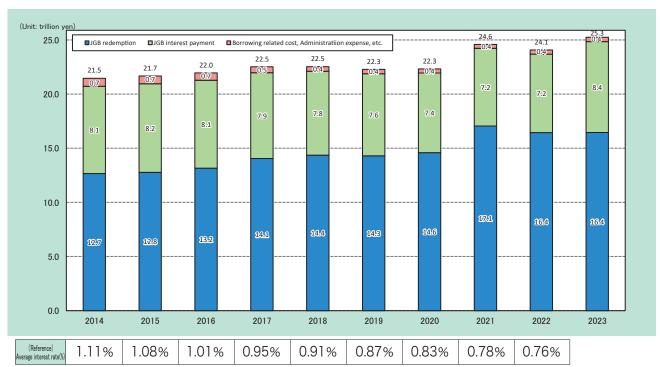
(Unit: billion yen)

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	Category	FY2022 (Initial)	FY2023 (Initial)	Changes
De	bt Redemption Expenses	16,073.3	16,756.1	682.8
	JGB Redemption	15,753.7	16,446.6	692.8
	Transfer Fund by the 60-Year Redemption Rule	14,982.5	15,722.8	740.3
	Transfer Fund Equivalent to Income from Special Account for Social Infrastructure Improvement	43.2	36.5	<b>▲</b> 6.7
	Transfer Fund by the Budget	728.1	687.3	<b>▲</b> 40.8
	Borrowing Redemption	319.6	309.5	▲10.1
	Transfer Fund by the 60-Year Redemption Rule	149.5	140.1	▲9.3
	Transfer Fund by the Budget	170.1	169.4	▲0.7
Int	erest Payment and Discount Expenses	8,247.2	8,472.3	225.0
	JGB Interest Payment	8,174.8	8,400.7	225.9
	Borrowing Interest Payment	12.5	11.6	▲0.9
	Financing Bills Discount Expense	60.0	60.0	_
Ad	ministration Expense	18.7	22.0	3.3
	Total	24,339.3	25,250.3	911.1

Note 1: Figures may not sum up to the total because of rounding.

## (6) Historical Changes in Government Debt-related Expenditures



Note 1: Figures may not sum up to the total because of rounding.

Note 2: FY2014-FY2021: settlement, FY2022: 2nd supplementary budget, FY2023: initial budget.

Note 3: Average coupon is the weighted average of the nominal rate on coupon-bearing JGBs.

#### (7) Projection of the FY2023 Budget Impact on Following Years' Expenditure and Revenue

#### [CASE 1] [Case of 3.0% nominal economic growth rate]

(Unit: trillion yen)

			FY2022	FY2023	FY2024	FY2025	FY2026
	1	Central Debt Service Cost	24.3	25.3	26.8	28.4	29.8
		② Interest Payment	8.2	8.5	9.2	10.3	11.5
	3	Social Security-Related Expenditure	36.3	36.9	37.5	38.2	38.7
Expenditure	4	Local Allocation Tax Grants, etc.	15.9	16.4	17.8	18.7	19.3
	(5)	Others	31.1	35.8	27.7	27.9	27.8
	6	Total	107.6	114.4	109.9	113.2	115.6
		Primary Balance Expenditure	83.7	89.5	83.4	85.2	86.1
	® Tax Revenue		65.2	69.4	71.8	75.0	77.4
Tax Revenue, etc.	9	Other Revenues	5.4	9.3	5.8	5.8	5.8
	10	Total	70.7	78.8	77.6	80.8	83.2
① Difference	of B	alance (6-0)	36.9	35.6	32.3	32.5	32.3

Reference: According to this calculation, the budget deficit of the general national account is 21.3 trillion yen in FY2022, 19.2 trillion yen in FY2023, 15.1 trillion yen in FY2024, and 14.7 trillion yen in FY2025, and 14.4 trillion yen in FY2026. The primary balance deficit of the general national account is 13.0 trillion yen in FY2022, 10.8 trillion yen in FY2023, 5.9 trillion yen in FY2024, and 4.4 trillion yen in FY2025, and 2.9 trillion yen in FY2026. The government's fiscal consolidation target is to achieve a primary balance surplus of the central and local governments.

Note: The figures in the table above are the following:

- -FY2022: Initial budget
- -FY2023: Draft budget
- -FY2024-FY2026: Projections based on the systems and policies underlying the FY2023 budget
- a) Figures are mechanically estimated, and they are not prejudicial to any future budget discussions.
- b) As for " (5) Others," the contingency fund for countermeasures against novel coronavirus infections of 5 trillion yen was appropriated in FY2022, and the contingency fund for COVID-19 and measures to address soaring crude oil and commodity prices of 4 trillion yen and the contingency fund for economic emergency (including the impact from the Ukraine crisis) of 1 trillion yen are appropriated in FY2023, but these funds are not incorporated in the estimates for FY2024 onwards.
- c) As for " (5) Others" and " (9) Other Revenues," 3.4 trillion yen for the carry-over from Defense Buildup Funds is included in FY2023 In this estimation, the required expenses and financial resources stipulated in the "Defense Buildup Plan" are mechanically fixed at the budget of FY2023 from FY2024 onwards, except for the carry-over from the Defense Buildup Funds.
- d) " Trimary Balance Expenditure" is obtained by subtracting the costs of interest payment and debt redemption (excluding subsidy bond redemption) from the total expenditure.

#### [CASE 2] [Case of 1.5% nominal economic growth rate]

(Unit: trillion yen)

			FY2022	FY2023	FY2024	FY2025	FY2026
	1	Central Debt Service Cost	24.3	25.3	26.8	28.2	29.3
		② Interest Payment	8.2	8.5	9.2	10.1	10.9
	③ Social Security-Related Expenditure		36.3	36.9	37.5	38.1	38.5
Expenditure	④ Local Allocation Tax Grants, etc.		15.9	16.4	17.5	18.1	18.4
	⑤	Others	31.1	35.8	27.7	27.8	27.6
	⑥ Total		107.6	114.4	109.5	112.2	113.8
		⑦ Primary Balance Expenditure	83.7	89.5	83.1	84.4	84.9
	8	Tax Revenue	65.2	69.4	70.6	72.6	73.8
Tax Revenue, etc.	9	Other Revenues	5.4	9.3	5.8	5.8	5.8
	10	Total	70.7	78.8	76.4	78.4	79.6
① Difference	of B	alance (⑥-⑩)	36.9	35.6	33.1	33.8	34.2

Reference: According to this calculation, the budget deficit of the general national account is 21.3 trillion yen in FY2022, 19.2 trillion yen in FY2023, 15.8 trillion yen in FY2024, and 16.1 trillion yen in FY2025, and 16.3 trillion yen in FY2026. The primary balance deficit of the general national account is 13.0 trillion yen in FY2022, 10.8 trillion yen in FY2023, 6.7 trillion yen in FY2024, and 6.0 trillion yen in FY2025, and 5.3 trillion yen in FY2026. The government's fiscal consolidation target is to achieve a primary balance surplus of the central and local governments.

Note: The figures in the table above are the following:

- -FY2022: Initial budget
- -FY2023: Draft budget
- -FY2024-FY2026: Projections based on the systems and policies underlying the FY2023 budget
- a) Figures are mechanically estimated, and they are not prejudicial to any future budget discussions.
- b) As for "⑤ Others," the contingency fund for countermeasures against novel coronavirus infections of 5 trillion yen was appropriated in FY2022, and the contingency fund for COVID-19 and measures to address soaring crude oil and commodity prices of 4 trillion yen and the contingency fund for economic emergency (including the impact from the Ukraine crisis) of 1 trillion yen are appropriated in FY2023, but these funds are not incorporated in the estimates for FY2024 onwards.
- c) As for "⑤ Others" and "⑨ Other Revenues," 3.4 trillion yen for the carry-over from Defense Buildup Funds is included in FY2023. In this estimation, the required expenses and financial resources stipulated in the "Defense Buildup Plan" are mechanically fixed at the budget of FY2023 from FY2024 onwards, except for the carry-over from the Defense Buildup Funds.
- d) " Primary Balance Expenditure" is obtained by subtracting the costs of interest payment and debt redemption (excluding subsidy bond redemption) from the total expenditure.

## [Reference] Projections of various assumptions of interest rates (Sensitivity analyses based on [CASE 1])

- Changes in Central Debt Service Cost for various assumptions of interest rates

(unit: trillion yen), ( ) for the amount of Debt Service Cost

interest rate (Range of Change from [CASE 1])	FY2023	FY2024	FY2025	FY2026
+ 2%	+ 0.0	+ 1.5	+ 4.0	+ 7.2
	( 25.3 )	( 28.3 )	( 32.4 )	( 37.0 )
+ 1%	+ 0.0	+ 0.7	+ 2.0	+ 3.6
	( 25.3 )	( 27.6 )	( 30.4 )	( 33.4 )
- 1%	+ 0.0 ( 25.3 )	<b>▲</b> 0.7 ( 26.1 )	<b>▲</b> 2.0 ( 26.5 )	<b>▲</b> 3.2 ( 26.6 )

Note: The interest rate in [CASE 1] is based on the FY2023 budget, and the interest rates from FY2024 onwards are calculated reflecting implied forward rates(, which are the projections of interest rates factored into the market).

#### (8) Cash-flow Projections of the GDCF

(Unit: billion yen)

	JGB Outstanding at the end of FY	Interest Payments, etc.	Redemption Amount	Issuance of Refunding Bonds
FY2023	10,614,800	86,100	1,695,000	1,531,200
FY2024	10,775,400	93,600	1,473,800	1,301,800
FY2025	10,932,400	104,700	1,523,300	1,346,300
FY2026	11,086,700	116,500	1,478,800	1,299,600
FY2027	11,237,800	128,500	1,507,900	1,325,700
FY2028	11,385,500	138,700	1,532,400	1,347,000
FY2029	11,530,600	147,500	1,488,000	1,300,200
FY2030	11,673,400	155,400	1,511,800	1,321,800
FY2031	11,813,900	163,300	1,542,300	1,350,100
FY2032	11,952,200	171,000	1,563,700	1,369,300

Note 1: This calculation is based on the same assumptions as in "Case 1" of the "Projection of the FY2023 Budget impact on Following Years' Expenditure and Revenue". From FY2027 onwards, it is assumed that the amount of newly issued bonds is equal to the "① Difference of Balance" in FY2026 in the projection with the same interest rates as those in FY2026.

Note 3: "Issuance of Refunding Bonds" includes revenues from the Refunding Bonds that are qualified to be issued in the previous fiscal year.

Note 5: This calculation does not assume surpluses to occur.

Note 6: Figures may not sum up to the total because figures of 10 billion yen or more are rounded to the nearest billion.

Note 7: The above data is subject to changes for different assumptions.

Balance" in FY2026 in the projection, with the same interest rates as those in FY2026.

Note 2: This calculation covers JGBs related to the fixed-rate transfers from the General Account and to the transfers equivalent to the gap between issuance-price and face value. The Special Bonds for covering Public Pension Funding are included, while the Reconstruction Bonds and the GX Economy Transition Bonds are excluded.

Note 4: "Interest Payments, etc" includes interests on public bonds etc., government bonds office handling costs and revenues from Special Tobacco Tax (, which are brought into the Special Account for Government Bonds Consolidation Funds).

## (9) Changes in the Outstanding Amount of JGBs, Financing Bills, Borrowings and Government-Guaranteed Debt

(Unit: billion yen)

										(Offic.	Dillion yen
	Category	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
	vernment Bonds Bs)	853,763.6	881,484.7	910,809.7	934,900.2	959,141.3	976,803.5	987,588.6	1,074,159.6	1,104,680.0	1,136,383.0
	General Bonds Reconstruction Bonds)	743,867.6 (9,013.5)	774,083.1 (8,279.5)	805,418.2 (5,945.6)	830,573.3 (6,721.3)	853,178.9 (5,481.3)	874,043.4 (5,376.3)	886,694.5 (5,858.5)	946,646.8 (6,784.5)	991,411.1 (5,430.3)	1,027,097.3 (5,179.2)
	Long-term (10 years or more)	497,452.0	532,992.6	574,789.9	610,823.0	642,401.2	674,899.5	699,182.6	714,746.2	748,116.2	778,266.5
	Medium-term (from 2 to 5 years)	204,708.2	203,289.9	194,434.2	186,776.4	183,981.6	175,047.9	163,714.6	159,198.0	174,198.3	183,533.2
	Short-term (one year or less)	41,707.4	37,800.6	36,194.1	32,974.0	26,796.2	24,096.1	23,797.4	72,702.6	69,096.6	65,297.6
F	FILP Bonds	104,210.4	98,991.0	96,115.5	96,250.9	94,525.9	92,245.6	91,090.1	118,645.0	104,624.2	100,836.1
	Long-term (10 years or more)	80,546.4	71,341.2	62,811.7	58,692.3	60,631.8	61,600.2	61,627.4	69,131.1	68,438.0	70,182.4
	Medium-term (from 2 to 5 years)	23,664.0	27,649.8	33,303.8	37,558.7	33,894.1	30,645.5	29,462.7	39,121.7	36,186.2	30,653.7
	Short-term (one year or less)	_	_	_	_	_	_	_	10,392.1	_	_
5	Subsidy Bonds	174.6	135.5	134.2	209.4	194.1	144.0	87.0	110.4	151.1	121.6
	Subscription / Contribution Bonds	2,510.0	2,681.8	4,761.2	4,627.7	4,444.1	4,342.3	4,215.0	3,771.8	3,904.1	4,230.7
	Government Bonds issued to Development Bank of Japan	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7	1,324.7
N	overnment Bonds issued to uclear Damage Compensation and ecommissioning Facilitation Corporation	1,313.0	4,268.7	3,056.0	1,914.2	5,473.6	4,703.4	4,177.4	3,660.9	3,264.9	2,772.6
Т	overnment Bonds converted from he Japan Expressway Holding and lebt Repayment Agency Bonds	363.3	_		-				_	_	_
Boı	rowings	55,504.7	54,984.1	54,807.5	54,420.0	54,022.8	53,201.8	52,532.5	52,004.8	50,428.5	49,616.7
	Long-term (over one year)	16,458.2	15,687.6	14,861.0	14,032.9	13,218.5	12,526.3	11,851.8	11,234.5	10,645.5	10,147.9
	Short-term (one year or less)	39,046.5	39,296.5	39,946.5	40,387.0	40,804.3	40,675.5	40,680.7	40,770.3	39,783.0	39,468.8
Fin	ancing Bills	115,688.4	116,888.3	83,748.9	82,239.2	74,648.9	73,349.0	74,418.8	90,299.0	86,198.9	84,499.3
	Total	1,024,956.8	1,053,357.2	1,049,366.1	1,071,559.4	1,087,813.0	1,103,354.3	1,114,540.0	1,216,463.4	1,241,307.4	1,270,499.0

Category	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Government- Guaranteed Debt	44,532.6	43,398.4	41,780.6	40,283.2	39,711.7	38,108.7	36,171.0	34,019.9	31,966.2	29,402.3

Note: Figures may not sum up to the total because of rounding.

#### (10) Long-term Debt Outstanding of Central and Local Governments

(Unit: trillion yen)

Ш

		FY1998 <actual></actual>	FY2003 <actual></actual>	FY2008 <actual></actual>	FY2013 <actual></actual>	FY2014 <actual></actual>	FY2015 <actual></actual>		FY2017 <actual></actual>	FY2018 <actual></actual>	FY2019 <actual></actual>	FY2020 <actual></actual>	FY2021 <actual></actual>	FY2022 <estimated></estimated>	FY2023 <budget></budget>
1	Central Government	390 (387)	493 (484)	573 (568)	770 (747)	800 (772)	834 (792)	859 (815)	881 (832)	901 (850)	914 (870)	973 (964)	1,017 (1,002)	1,068 (1,048)	1,097 (1,072)
	General Bonds	295 (293)	457 (448)	546 (541)	744 (721)	774 (746)	805 (764)	831 (786)	853 (805)	874 (823)	887 (843)	947 (937)	991 (976)	1,043 (1,023)	1,068 (1,043)
	Percentage of GDP	55% (55%)	87% (85%)	106% (105%)	145% (141%)	148% (142%)	149% (141%)	152% (144%)	154% (145%)	157% (148%)	159% (151%)	176% (174%)	180% (177%)	186% (183%)	187% (182%)
	ocal Governments	163	198	197	201	201	199	197	196	194	192	192	191	188	183
	Percentage of GDP	30%	38%	38%	39%	38%	37%	36%	35%	35%	35%	36%	35%	34%	32%
	Total	553 (550)	692 (683)	770 (765)	972 (949)	1001 (972)	1,033 (991)	1,056 (1012)	1,077 (1028)	1,095 (1044)	1106 (1062)	1,165 (1,156)	1,208 (1,193)	1,257 (1,237)	1,280 (1,255)
	Percentage of GDP	103% (103%)	131% (130%)	149% (148%)	190% (185%)	191% (186%)	191% (183%)	194% (186%)	194% (185%)	197% (188%)	199% (191%)	217% (215%)	219% (217%)	224% (221%)	224% (219%)

(end of FY)

- Note 1: GDP in FY1998 FY2021: actual figures, FY2022 and FY2023: FY2023 Economic Outlook (Cabinet Office)
- Note 2: Central Government Debt in FY1998 FY2021; actual figures. FY2022; based on the second supplementary budget, FY2023; based on the budget Local Government Debt in FY1998 - FY2021: actual figures, FY2022-FY2023: Local Government Debt Plan etc.
- Note 3: Government general bonds includes Reconstruction Bonds as a source of funds to implement the measures for the reconstruction from the Great East Japan Earthquake, Pension-related Special Deficit-Financing Bonds as a source of funds to achieve the targeted national contribution to one-half basic pension and GX Economy Transition Bonds.
- Note 4: FY1990 FY2021: Figures in parentheses do not include the amount of front-loading issuance of refunding bonds. FY2022 FY2023: Figures in parentheses do not include the maximum amount of front-loading issuance of refunding bonds.
- Note 5: The borrowings in the special account for local allocation and local transfer tax are divided into each figure of the central government and local governments in accordance with their shares of redemption. The outstanding amount of the borrowing incurred by the central government was transferred to the general account at the beginning of FY2007, so that the outstanding borrowing in the special account since the end of FY2007 is equal to the debt of the local governments (approx. 28 trillion yen at the end of FY2023).
- Note 6: In addition to the above, outstanding government bond in the special account for fiscal investment and loan program at the end of FY2023 is approximately 104 trillion yen.

#### (Reference) Debt Outstanding in various statistics

(Unit: trillion yen) Debt outstanding of general Long-term debt outstanding of Debt outstanding which central and local government of which interest payments government (central government, local governments and social Long-term debt outstanding shows the overview of the of central and local central government's government incurred through and redemption funds are mainly covered by tax security funds) based on the financing activities such as raising funds from markets. universal standard (SNA) to contribute to international general policy expenditure revenues. comparison Excluding the expenditure and fiscal resources for recovery 1.441 (1.416) and reconstruction measures Debt of social security funds: 22 FILP (Fiscal Investment and and Green Transformation(GX) oan Program) Bonds: 104 Local governments debt: 1,280 (1,255) measures 1,235 (1,210) 182 1,242 (1,217) Debt of incorporated FB (Financing Bill): 212 administrative agencies: 22 Local bonds, etc.: 183 Local bonds: 138 Treasury Discount Bills: 155 Borrowings, etc.: 57 orrowings in the Special Account for Central Local Allocation Tax: 28 Borrowings in the General uding 28 trillion yen in Borrowings, etc.: 81 government Borrowings, etc.: 29 debt ncluding 30 trillion yen in borrowings in the Special Account for Local Allocation Tax Government general bonds Government general bonds Government general bonds: 1,068 (1,043) Central government 1,068 (1,043) 1,068 (1,043) securities: 964 ②Long-term debt outstanding 4 General government gross of central and local central and local governments borrowings outstanding debt <End of FY2023 : Estimate> <End of FY2023 : Estimate> <End of FY2023 : Estimate> <End of FY2021 Actual> [Office for Econometric Analysis, CAO] arch Institute, CAO 1 [Budget Bureau, MOF] [Financial Bureau, MOF]

- "Special Account for Local Allocation Tax" refers to "Special Account for Local Allocation Tax and Local Transfer Tax".

  The figures in parentheses do not include the issuance limit of advance refunding bonds for refinancing in the following fiscal year (25 trillion yen).

  "Government general bonds at the end of FY2023" includes Reconstruction Bonds (around 4.9 trillion yen).

  Borrowings in the Special Account for Local Allocation Tax are partly transferred to general account (the borrowings in the general account in①).

  "Local bonds, etc." in ② includes local bonds, borrowings in the Special Account for Local Allocation Tax, and local public corporation bonds (charged to
- "Borrowings, etc." in ② and ③ = borrowings + government subscription bonds, etc. "Borrowings, etc." in ② do not include the outstanding borrowings in the Special Account for Local Allocation Tax (around 28 trillion yen) for which local governments bear the burden for redemption.
  "Central government securities" in ④ include government bonds, government compensation bonds and government bonds converted. Note 6:
- The borrowings, etc. in ⓐ includes government subscription bonds, etc.

  Note 8: The central government securities and the local government bonds/securities included in the debt of local governments in ④ are at current market value. Note 9: The figures in ①, ②, and ③ are based on the budget for FY2023 and the local government debt plan etc.

**Appendices** 

#### (11) Breakdown of the Outstanding Amount of General Bonds by Remaining Years to Maturity



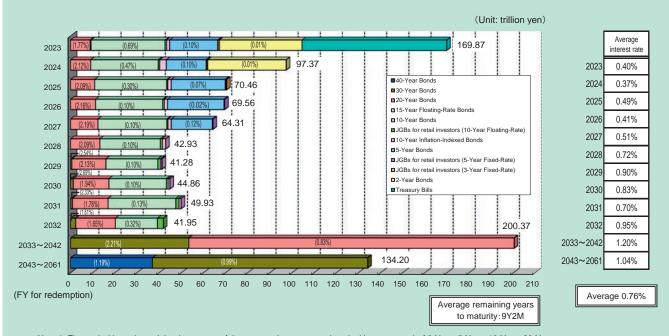
#### (12) Term-to-maturity Structure of General Bonds (FY2023 Initial Budget Basis)

(Unit: billion yen)

			(Onit: billion yen)
FY	Maturity Redemption	FY	Maturity Redemption
2024	149,188.7	2044	10,079.2
2025	109,345.2	2045	11,395.4
2026	70,447.2	2046	9,667.4
2027	70,601.7	2047	11,666.4
2028	73,529.5	2048	10,326.6
2029	41,278.7	2049	10,163.7
2030	45,335.4	2050	12,648.5
2031	49,778.2	2051	13,060.1
2032	44,114.5	2052	11,766.4
2033	58,048.2	2053	13,508.3
2034	23,062.2	2054	2,462.3
2035	21,769.0	2055	3,225.9
2036	20,518.7	2056	3,069.2
2037	20,336.1	2057	2,078.5
2038	19,097.1	2058	2,497.6
2039	17,870.6	2059	3,768.8
2040	21,340.5	2060	4,022.9
2041	22,593.1	2061	3,118.3
2042	20,188.1	2062	2,075.5
2043	24,351.7	2063	4,626.1
_		Total	1,068,021.3

Note: Figures may not sum up to the total because of rounding.

#### (13) Breakdown of the Outstanding Amount of General Bonds by Maturity Types and Their Average Interest Rate at the end of FY2022



Note 1: Figures in ( ) are the weighted averages of the average interest rates (nominal interest rates) of 2-Year, 5-Year, 10-Year, 20-Year, 30-Year, and 40-Year bonds.

Note 2: In order to hold down medium-to-long term costs, it is insufficient to have a structure of maturity that simply lowers the costs of interest at the issuance. When deciding the issuance amount by maturity, various factors need to be taken into consideration including market needs and trends, the relationship among funding costs, risks of interest rate fluctuations, refunding costs, and future redemption environments.

#### (14) Outstanding Interest Rate Weighted Average, Interest Payment of General Bonds and Average Years to Maturity

(Unit: trillion yen)

	Outstanding amount of General Bonds	Interest rate weighted average	Interest payments of General Account	Average years to maturity
FY2013	743.9	1.15 %	8.1	7Y7M
FY2014	774.1	1.11 %	8.3	8Y0M
FY2015	805.4	1.08 %	8.3	8Y5M
FY2016	830.6	1.01 %	8.2	8Y7M
FY2017	853.2	0.95 %	7.9	8Y10M
FY2018	874.0	0.91 %	7.8	9Y0M
FY2019	886.7	0.87 %	7.6	9Y2M
FY2020	946.6	0.83 %	7.4	8Y11M
FY2021	991.4	0.78 %	7.2	9Y0M
FY2022	1,027.1	0.76 %	7.3	9Y2M
FY2023	1,068.0	_	8.5	_

Note: In FY2022, the outstanding amount of General Bonds, interest rate weighted average and average years to maturity are settlement. Interest payments of General Account are the 2nd supplementary budget.

In FY2023, outstanding amount of General Bonds and interest payments of General Account are the initial budget.

 $\mathbf{III}$ 

#### (15) Outstanding Amount of JGBs and T-Bills (Breakdown by Holder)

(Unit: billion yen, %)

Holders	End of FY2013		End of FY2014		End of F	End of FY2015		Y2016	End of F	Y2017
		Share		Share		Share		Share		Share
General Government (excl. Public Pensions)	23,579.5	2.4	21,443.8	2.1	4,213.8	0.4	3,915.5	0.4	3,678.3	0.3
Public Pensions	70,524.3	7.0	56,849.9	5.4	52,444.9	4.9	46,924.2	4.3	43,771.4	4.0
Fiscal Loan Fund	600.0	0.1	3,056.6	0.3	0.5	0.0	1.0	0.0	1.0	0.0
Bank of Japan	201,060.5	20.0	274,606.7	26.3	364,415.5	33.8	427,342.9	39.4	459,028.1	41.8
Banks, etc.	356,190.1	35.5	319,549.0	30.6	265,923.1	24.6	219,538.1	20.3	202,341.9	18.4
Life and Non-life Insurance, etc.	196,703.4	19.6	204,337.1	19.6	220,885.9	20.5	214,159.2	19.8	214,578.0	19.6
Pension Funds	33,468.1	3.3	32,536.1	3.1	32,666.7	3.0	29,960.4	2.8	29,846.3	2.7
Overseas	82,630.9	8.2	98,623.3	9.5	110,933.1	10.3	116,727.6	10.8	120,191.5	11.0
Households	20,032.1	2.0	15,840.6	1.5	12,373.2	1.1	12,527.3	1.2	12,382.5	1.1
Others	18,159.0	1.8	16,773.6	1.6	15,290.9	1.4	12,596.8	1.2	11,516.5	1.0
Total	1,002,947.9	100.0	1,043,616.7	100.0	1,079,147.6	100.0	1,083,693.0	100.0	1,097,335.5	100.0

Holders	End of FY2018		End of FY2019		2019 End of FY		End of F	End of FY2021		2022
		Share		Share		Share		Share		Share
General Government (excl. Public Pensions)	3,245.8	0.3	3,124.4	0.3	2,370.8	0.2	2,126.7	0.2	1,774.4	0.1
Public Pensions	42,212.4	3.8	37,497.7	3.3	39,698.4	3.3	45,293.0	3.7	44,550.1	3.7
Fiscal Loan Fund	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank of Japan	485,989.8	43.2	499,362.0	44.2	541,596.6	44.4	530,547.1	43.3	554,647.6	46.3
Banks, etc.	177,581.9	15.8	171,365.5	15.2	202,433.3	16.6	212,510.9	17.3	175,161.1	14.6
Life and Non-life Insurance, etc.	219,340.9	19.5	220,223.8	19.5	219,498.8	18.0	216,179.7	17.6	203,092.3	17.0
Pension Funds	29,433.1	2.6	29,346.7	2.6	29,495.1	2.4	30,339.0	2.5	29,767.9	2.5
Overseas	143,392.0	12.7	145,652.7	12.9	160,922.9	13.2	166,604.5	13.6	165,821.7	13.8
Households	13,258.6	1.2	13,852.5	1.2	13,256.1	1.1	12,550.3	1.0	12,670.6	1.1
Others	11,067.4	1.0	10,206.6	0.9	9,240.1	0.8	8,926.2	0.7	10,111.0	0.8
Total	1,125,522.4	100.0	1,130,632.4	100.0	1,218,512.1	100.0	1,225,077.4	100.0	1,197,596.7	100.0

Note 1: Figures are as of the end of the fiscal year, values up to FY2021 are revised values, and those for 2022 are preliminary values. Note 2: "JGBs" includes "FILP Bonds."

(Source) Bank of Japan "Flow of Funds Accounts Statistics."

Note 3: "Banks, etc." includes "Japan Post Bank", "Securities investment trust" and "Securities companies."

Note 4: "Life and Non-life Insurance, etc." includes "Japan Post Insurance."

Note 5: "Others" consists of "Nonfinancial corporations" and "Private nonprofit institutions serving households."

Note 6: Since February 2009, TBs and FBs have been jointly issued as T-Bills.

Note 7: In the Flow of Funds Accounts, JGBs are recorded at market value, and T-Bills are recorded at face value. Figures in financial statements are different in basis from those in the Flow of Funds Accounts due to a difference in evaluation methods by holding purpose (book value or market value).

Ш

#### (16) Balance Sheet of Japanese Government (General Account and Special Accounts) (as of the end of FY2021)

(Unit: million yen)

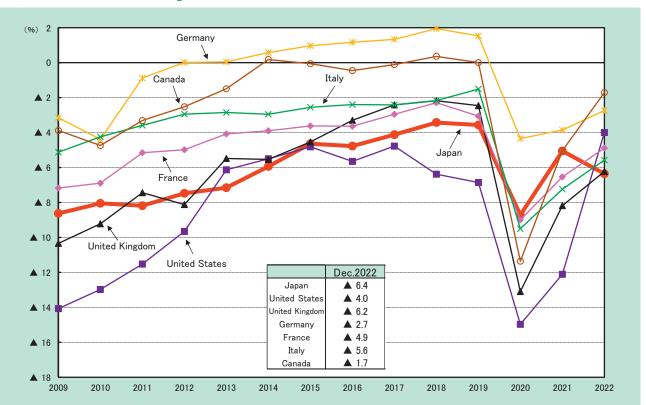
						(Onit. million yen)
		FY2020 (As of March 31, 2021)	FY2021 (As of March 31, 2022)		FY2020 (As of March 31, 2021)	FY2021 (As of March 31, 2022)
<asse< td=""><td>ets&gt;</td><td>(r.o o, maron o i, 2021)</td><td>(10 01 maion 01, 2022)</td><td><liabilities></liabilities></td><td>(r.o.o. maron o 1, 2021)</td><td>(10 01 maron 01, <u>2022</u>)</td></asse<>	ets>	(r.o o, maron o i, 2021)	(10 01 maion 01, 2022)	<liabilities></liabilities>	(r.o.o. maron o 1, 2021)	(10 01 maron 01, <u>2022</u> )
Cash and Deposits		69,463,685	48,260,028	Accounts Payable	10,710,654	10,689,779
Securities		119,683,572	123,506,116	Reserves Claims	311,398	303,472
Invent	tories	4,107,889	4,172,756	Accrued Liabilities	1,119,229	1,079,843
Accou	ınts Receivable	6,800,275	6,053,239	Money in Custody	1,362,732	1,485,157
Accru	ed Income	578,822	599,642	Advance Received	58,690	70,332
	ed Insurance Premiums led Reinsurance Premiums)	5,292,084	4,933,462	Deferred Revenues	662,346	658,565
	id Expenses	3,661,400	3,265,355	Prepaid Insurance Premiums (Prepaid Reinsurance Premiums)	29,534	31,520
Loans	;	120,092,838	123,206,471	Provision for Bonuses 343,186		315,130
Mone	y in Trust	112,553,157	113,708,958	Financing Bills	92,778,100	88,321,707
Other	Credits	5,156,604	10,675,735	Government Bonds	1,083,931,301	1,113,967,605
Allov	wance for Doubtful Accounts	▲ 1,612,957	▲ 1,479,047	Borrowings	32,862,555	33,553,777
Tangi	ble Fixed Assets	191,271,659	193,368,498	Money on Deposit	7,070,137	10,425,847
	ational Property, excluding operty for Public Use	32,521,019	32,766,123	Insurance Liabilities	9,495,717	9,318,370
	Land	19,439,784	19,238,347	Deposit Reserved for the Public Pension	121,797,947	122,276,744
	Unfilled Timber	3,263,869	3,624,759	Provision for Retirement Benefits	5,715,759	5,503,393
	Buildings	3,412,176	3,385,158	Other Liabilities	7,705,062	12,971,464
	Structures	2,588,138	2,523,303			
	Machinery and Equipment	0	0			
	Ships	1,588,827	1,556,127			
	Aircraft	1,057,296	1,141,126			
	Construction in Progress	1,170,927	1,297,301			
Pr	operty for Public Use	154,075,248	156,085,881			
	Property for Public Use (Land)	40,250,440	40,408,096			
	Property for Public Use (Facilities)	113,392,496	115,251,334			
	Construction in Progress	432,311	426,449			
G	oods	4,653,965	4,508,762			
Other Tangible Assets 21,425		7,731	Total Liabilities	1,375,954,353	1,410,972,710	
Intangible Fixed Assets 353,117		380,452	<difference ass<="" between="" td=""><td>ets and Liabilities</td><td>s&gt;</td></difference>	ets and Liabilities	s>	
Investments in Capital 83,38		83,388,788	93,290,389	Difference Between Assets and Liabilities	▲ 655,163,414	▲ 687,030,650
Total Assets 720,790,938 723,942,060		723,942,060	Total Liabilities and Difference Between Assets and Liabilities	720,790,938	723,942,060	

Note 1: Cash and Deposits (48.3trillion yen at the end of FY2021) take into account receipts and disbursements of cash during the "accounting adjustment term" (As of the end of FY2021, the actual balance of government deposits in the Treasury was 13.0 trillion yen and foreign currency deposits was 12.8 trillion yen).

Note 2: Assets held by the government are used largely for direct public purposes such as public property, and not to for sale or exchange into cash.

Note 3: Government bonds in the liabilities (1,114.0 trillion yen at the end of FY2021) include government bond balances such as for in Special Accounts for Fiscal Investment and Loan Programs besides general bonds (1,000.7trillion yen) that will be the future burden of the public, and cancel out bonds internally held by the government.

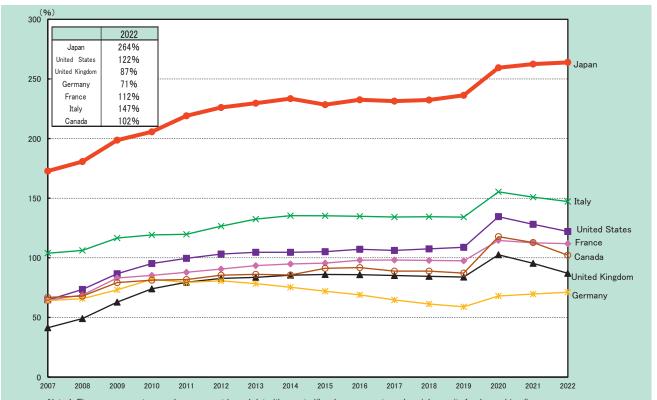
## (17) International Comparison of General Government Fiscal Balance to GDP



Note 1: Figures represent general government-based data (the central/local governments and social security funds combined), except for Japan and U.S., where the figures of the social security funds are excluded.

Note 2: The 2021-2022 figures for Japan and 2022 figures for other countries are estimated figures. (Source) OECD "Economic Outlook 112" (November 2022)

#### (18) International Comparison of General Government Gross Debt to GDP



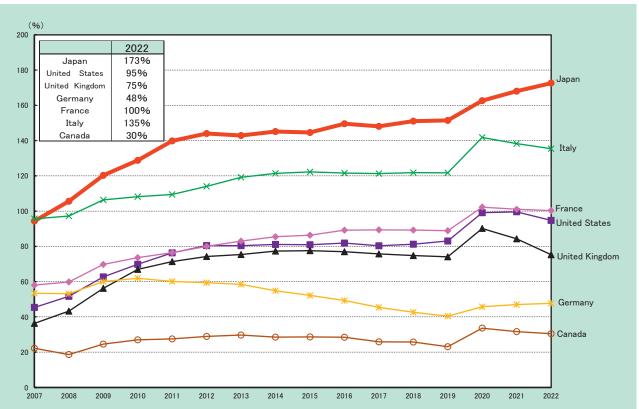
Note 1: Figures represent general government-based data (the central/local governments and social security funds combined).

Note 2: The 2021-2022 figures for Japan and the 2022 figures for the other countries are estimated figures.

Note 3: The gross debts for 2023 are estimated as follows; Japan: 261.1%, U.S.: 122.9%, U.K.: 79.9%, Germany: 68.3%, France: 112.5%, Italy: 147.1%, and Canada: 98.7%. However, it should be noted that Japan's figure does not reflect the expected increase in outstanding gross debt as a result of the second supplementary budget for FY2022 and the budget for FY2023.

(Source) IMF "World Economic Outlook" (October 2022).

#### (19) International Comparison of General Government Net Debt to GDP



Note 1: Figures represent the general government-based data (the central/local governments and social security funds combined).

Note 2: The 2021-2022 figures for Japan and the 2022 figures for the other countries are estimated figures. Net debts for 2023 are estimated as follows; Japan: 172.4%, U.S.: 96.9%, U.K.: 68.5%, Germany: 47.8%, France: 101.1%, Italy: 135.6%, and Canada: 30.3%. However, it should be noted that the Japan's figure does not reflect the expected increase in outstanding net debt as a result of the second supplementary budget for FY2022 and the budget for FY2023.

(Source) IMF "World Economic Outlook" (October 2022).

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## **Debt Management Report 2023**

The Government Debt Management and the State of Public Debts

Financial Bureau, Ministry of Finance, JAPAN

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