

## 2 What is Debt Management Policy?

### (1) Overview

Under the FY2018 budget (April-March), the central government plans to issue JGBs worth 149.9 trillion yen, posting a decline of 4.1 trillion yen from the initial level for FY2017. Construction Bonds and Special Deficit-Financing Bonds to provide General Account revenues decline by 0.7 trillion yen from the initial level for the previous year to 33.7 trillion yen. On the other hand, JGBs outstanding at the end of FY2017 totaled as much as 947.7 trillion yen.

The government raises funds with Financing Bills and Borrowings as well as JGBs. If including Financing Bills and Borrowings, outstanding government debts except government-guaranteed debt came to 1,087.8 trillion yen. Moreover, the government gives guarantees to Incorporated Administrative Agencies in order for them to carry out funding to implement public projects, and the government-guaranteed debt totals 39.7 trillion yen (The figures are at the end of FY2017).

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

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." Based on the following basic goals for JGB Management Policy, the Japanese government tackles the development of the JGB Issuance Plan, communications with the market through various meetings and the diversification of JGB holders:

- (1) Ensuring the stable and smooth issuance of Japanese Government Bonds
- (2) Minimizing medium- to long-term financing costs

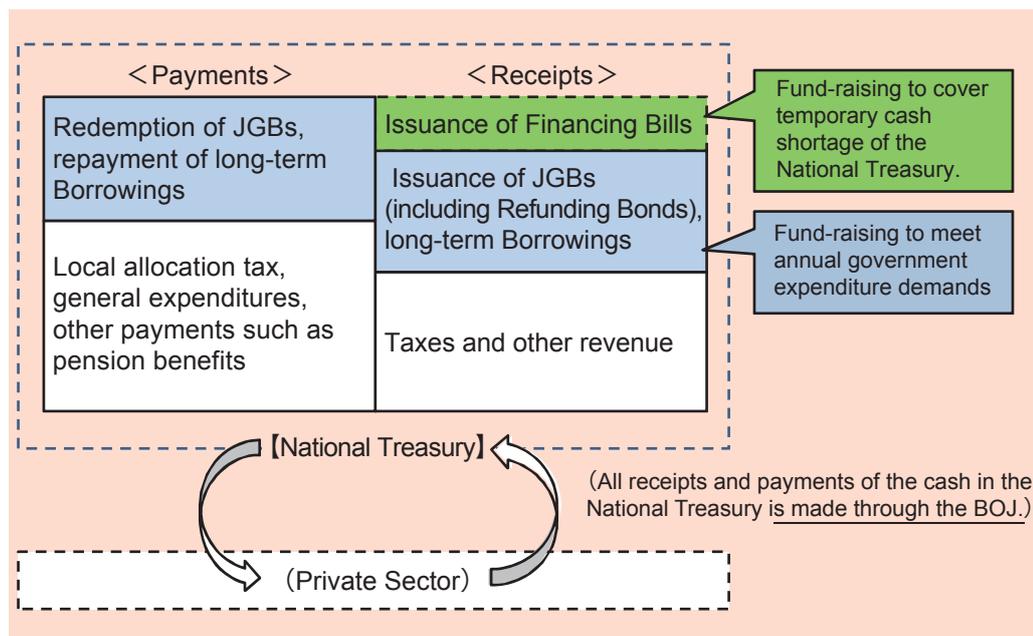
The "Guidelines for Public Debt Management," published by the International Monetary Fund and the World Bank in 2001, describes sovereign debt management as "the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding" and the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

## (2) Framework of “Government Funding Activities”

Government expenditures in a year should basically be covered by tax and other revenues in the year. To satisfy expenditure demand that cannot be covered by such revenues, however, 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, 2018), and all receipts and payments in these accounts are managed through the Bank of Japan (BOJ). As follows, the government smoothly implements spending under the budget by using JGBs and Borrowings to satisfy 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.

### 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 books funds raised through JGBs and Borrowings as revenues. The government smoothly implements budget spending by raising funds in this way as necessary.

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

### B. Financing Bills to cover temporary cash shortage of the National Treasury

Government ministries, agencies or special accounts carry out a lot of fiscal activities every



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

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

		Topics Inside This Report (for details, see Contents)			
		I	II (Framework)	III (Appendices)	
Public Debts	Government Debts	General Bonds	<ul style="list-style-type: none"> <li>■ 1 Trends of JGB Market in FY2017 P10</li> <li>■ 2 JGB Issuance Plan for FY2018 P14</li> <li>■ 3 Diversification of JGB Investor Base P24</li> </ul>	<ul style="list-style-type: none"> <li>◆ Chapter 1 ■ 1 Primary Market for Government Bonds P34</li> <li>■ 2 Secondary Market for Government Bonds P60</li> <li>■ 3 Debt Management Systems P73</li> <li>■ 4 Taxation of Government Bonds P91</li> </ul>	<ul style="list-style-type: none"> <li>◆ Chapter 1 ■ 1 Primary Market for Government Bonds P114</li> <li>■ 2 Secondary Market for Government Bonds P125</li> <li>■ 3 Debt Management Systems P142</li> </ul>
		FILP Bonds			
		Financing Bills		◆ Chapter 2 ■ 1 Financing Bills P97	◆ Chapter 2 ■ 1 Financing Bills P155
		Borrowings		◆ Chapter 2 ■ 2 Borrowings P99	◆ Chapter 2 ■ 2 Borrowings P157
		Government-Guaranteed Debt		◆ Chapter 2 ■ 3 Government-Guaranteed Debt P102	◆ Chapter 2 ■ 3 Government-Guaranteed Debt P161
		Subsidy Bonds		◆ Chapter 2 ■ 4 Subsidy Bonds P105	
	Other Public Debts	Local Government Bonds		◆ Chapter 3 ■ 1 Local Government Bonds P107	◆ Chapter 3 ■ 1 Local Government Bonds P166
		Debt of Incorporated Administrative Agencies, etc.		◆ Chapter 3 ■ 2 Debt of Incorporated Administrative Agencies, etc. P111	◆ Chapter 3 ■ 2 Debt of Incorporated Administrative Agencies, etc. P169

## Column 1 JGB Yields

A 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 JGB issuance authorities (MOF) presets a coupon and a maturity for a JGB issue before issuing it. While the JGB par value (an amount that a JGB holder would receive upon redemption) remains unchanged, a JGB price at which market participants buy fluctuates depending on supply and demand conditions. 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. An annual percentage rate of return on a JGB based on a price for trading is a JGB yield.

In 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.

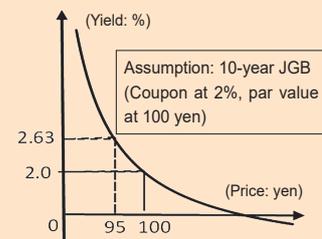
**Fig.c1-1 Calculating yield**

$$\text{Yield} = \frac{\text{(1) Annual interest income (yen)} + \frac{\text{(2) Par value (100 yen) - Purchase price (yen)}}{\text{Maturity (years)}}}{\text{Purchase price (yen)}} \times 100$$

(Before tax, simple interest, %)

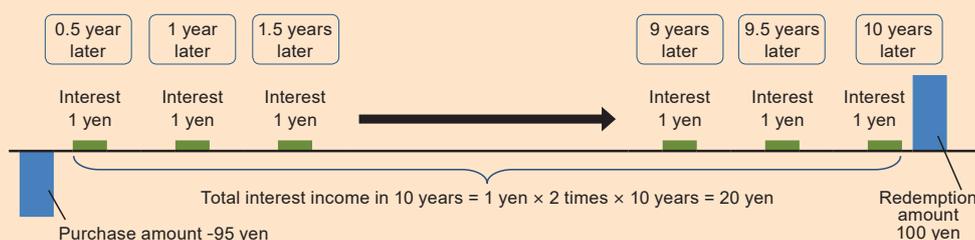
The annual interest income in (1) is fixed by the coupon determined upon issuance and will remain unchanged until redemption. However, the purchase price in (2) fluctuates depending on the purchase timing. Therefore, the JGB yield fluctuates. The right graph indicates the relationship between the JGB price and yield in the above equation for a 10-year JGB (with a par value of 100 yen) with a 2% coupon. 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%).

**Fig.c1-2 Relationship between yield and price**



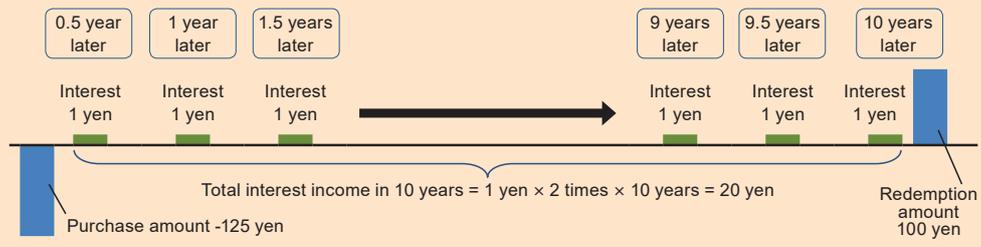
The figure below shows a cash flow indicating fund receipts and payments from purchasing to redemption for a 10-year JGB (with a coupon at 2% and a par value at 100 yen). If an investor buys the 10-year JGB at a price of 95 yen and holds it until its redemption, for example, the investor will get a total investment return of 25 yen including an interest income of 20 yen and a gap of 5 yen between the par value and the purchase price. An annual yield (simple interest) comes to about 2.63% covering an interest income of 2 yen and a capital gain of 0.5 yen.

**Fig.c1-3 Bond investment cash flow (An investor buys the 10-year JGB (with a coupon at 2% and a par value at 100 yen) at a price of 95 yen.)**



In recent years, JGB yields in the short- to medium-term zone have become negative. If an investor buys the 10-year JGB at a price of 125 yen and holds it until its redemption, for example, a combination of an interest income (20 yen) and a gap (-25 yen) between the par value and purchase price will bring about a loss (-5 yen). On an annual basis, a combination of an annual interest income (2 yen) and an annual capital loss (-2.5 yen) brings about a yield (simple interest) of about -0.40%.

**Fig.c1-4 Bond investment cash flow (An investor buys the 10-year JGB (with a coupon at 2% and a par value at 100 yen) at a price of 125 yen.)**



If an investor buys a JGB with a negative yield and holds it under its redemption, a combination of the interest income and 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. The yield takes the form of “simple interest” as described above or “compound interest” reflecting the reinvestment of interest the income.