2 What is Debt Management Policy?

(1) Overview

Under the FY2019 budget (April-March), the central government plans to issue JGBs worth 148.7 trillion yen, posting a decline of 1.2 trillion yen from the initial level for FY2018. Construction Bonds and Special Deficit-Financing Bonds to provide General Account revenues decline by 1.0 trillion yen from the initial level for the previous year to 32.7 trillion yen. On the other hand, JGBs outstanding at the end of FY2018 totaled as much as 966.3 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 1,103.4 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 38.1 trillion yen (The figures are at the end of FY2018).

The government's fundraising amount or flow has become enormous. Outstanding debts on stock basis 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." In Japan, based on the following basic goals for JGB Management Policy, the government carefully implements "communications with the market" through various meetings for the development and operation of the JGB Issuance Plan, tries to base JGB issuance fully on market needs and tackles the diversification of JGB holders:

(1) Ensuring the smooth and secure issuance of Japanese Government Bonds

(2) Minimizing medium- to long-term fundraising costs

Meanwhile, any excessive response to temporary or short-term changes in market demand could affect the market's transparency and predictability for market participants, leading to a rise in medium- to long-term fundraising costs. In Japan where massive government debt issuance is expected for the future, therefore, the government will try to issue JGBs more stably and transparently while identifying medium- to long-term demand trends.

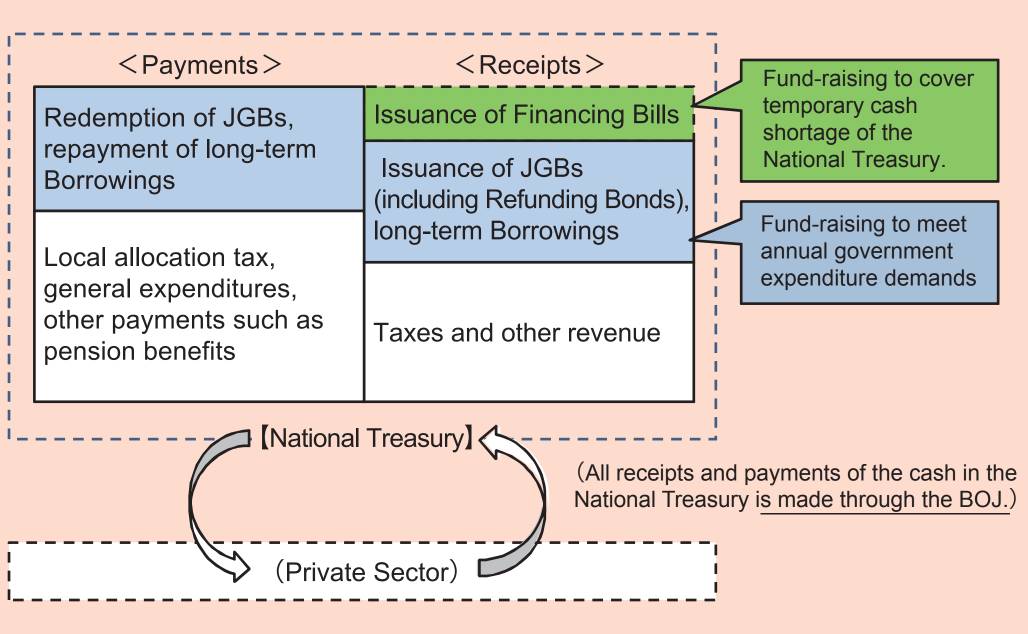
The "Guidelines for Public Debt Management," published by the International Monetary Fund and the World Bank in 2001, describes sovereign debt management as "the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding" and the objective of sovereign debt management as "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, 2019), 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

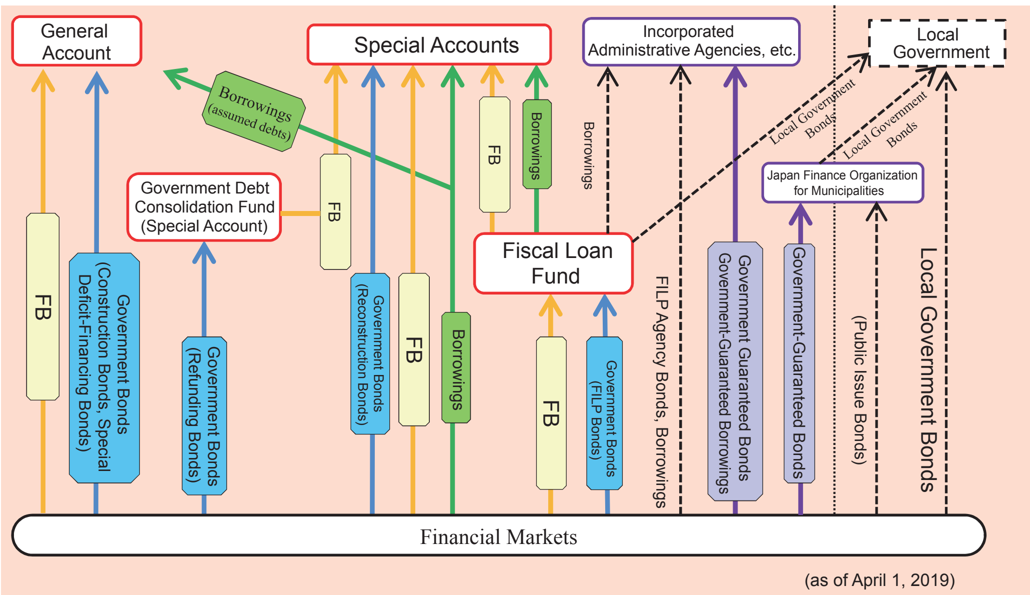
Government ministries, agencies or special accounts carry out a lot of fiscal activities every day. All the receipts and payments are made through the BOJ for their integrated handling in the National Treasury. As explained in section A, the government raises funds with JGBs and Borrowings to meet expenditure demand that cannot be covered by tax and other revenues. However, the government sees temporary cash shortages and surpluses due to lags of 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 the treasury surplus in the case of surplus ("Cash Management in the National Treasury") (☞).

☞ The term "revenue" shall refer to all the income in one fiscal year and the term "income" shall mean received funds that serve as the source of payment to meet the demands arising on 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.

(3) Debts with Public Characteristics

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

Fig.2 Public Debts (Conceptional Diagram) (☞①〜③)



☞① The shaded area represents government debts.

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

☞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 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	1 Trends of JGB Market in FY2018 P10 2 JGB Issuance Plan for FY2019 P16 3 Diversification of JGB Investor Base P24	Chapter 1 1 Primary Market for Government Bonds P38 2 Secondary Market for Government Bonds P61 3 Debt Management Systems P73 4 Taxation of Government Bonds P91	Chapter 1 1 Primary Market for Government Bonds P114 2 Secondary Market for Government Bonds P125 3 Debt Management Systems P142
		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

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 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.

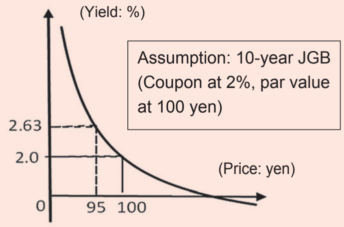
Fig.c1-1 Calculating yield

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

(Before tax, simple interest, %)

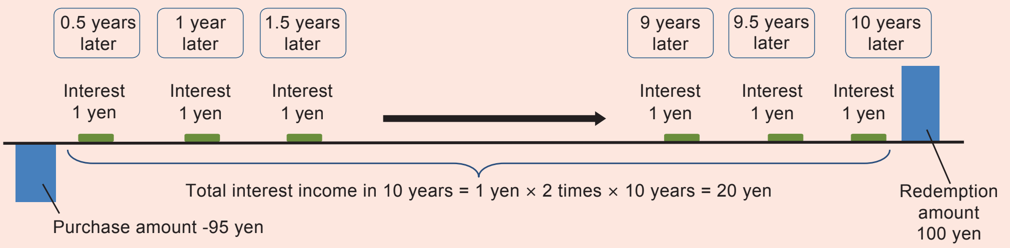
The annual interest income in (1) is fixed by the coupon determined upon issuance and will remain unchanged until redemption. However, the purchase price in (2) fluctuates depending on the purchase timing. Therefore, the JGB yield fluctuates. The right graph indicates the relationship between the JGB 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



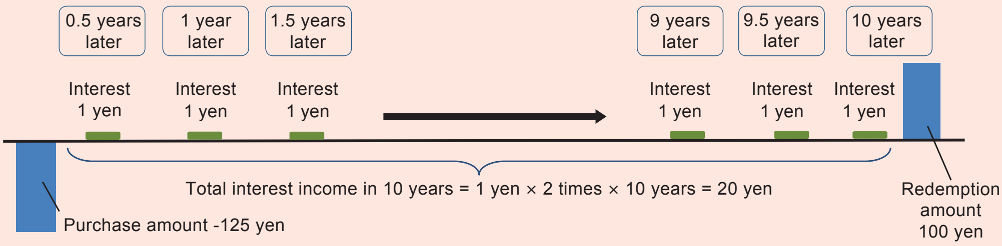
The figure below (Fig.c1-3) shows a cash flow indicating fund receipts and payments from purchasing to redemption for a 10-year JGB (with a coupon at 2% and a par value at 100 yen). If an investor buys the 10-year JGB at a price of 95 yen and holds it until its redemption, for example, the investor will get a total investment return of 25 yen including 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 about 2.63% with the interest income of 2 yen and the capital gain of 0.5 yen.

Fig.c1-3 Bond investment cash flow (When 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, the combination of an interest income (20 yen) and the gap (-25 yen) between the par value and purchase price will bring about a loss (-5 yen). On an annual basis, the combination of an annual interest income (2 yen) and the annual capital loss (-2.5 yen) brings about a yield (simple interest) of about -0.40%.

Fig.c1-4 Bond investment cash flow (When 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 until 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.

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