# 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 to redeem General Bonds, the redemption and the interest payments on FILP Bonds are 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		
JGBs		Special Deficit-Financing Bonds		
		Reconstruction 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 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 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 approved by the Diet, and the ceiling amount is provided under the general provisions of the General Account budget ().

<sup>→</sup> 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.

#### 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 (\*2).

Special Deficit-Financing Bond issuance must be made on 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.

The government may issue these Reconstruction Bonds within the amount as approved by the Diet. The ceiling amount is provided under the general provisions of the Special Account budget from FY2012 onwards.

#### d. 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. As for Reconstruction Bonds, Refunding Bonds are issued depending on the amount of the revenue from Special Taxes for Reconstruction and profit from sales of stocks in each year (🖘).

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

- 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.
- → 2 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)

Ref: Chapter 1 3 (1)
"Redemption System" (P79)

☞ 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 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.

Ref: Part I Column 4 (P28

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.

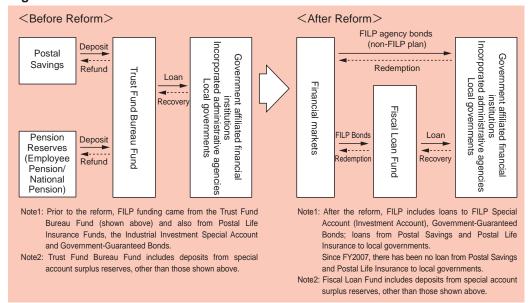
The adjustment includes the difference in the amount of issuance in the accounting adjustment term between the current and the previous fiscal years besides that of frontloading issuance of Refunding Bonds. In the accounting adjustment term, which means a period from April to June, some of Deficit-Financing or Reconstruction Bonds for the previous fiscal year can be issued

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

Along with the FY2001 reform of the FILP (Fiscal Investment and Loan Program), the government started issuance of the Fiscal Investment and Loan Program Bonds (so-called FILP Bonds) to raise funds for the investment of the Fiscal Loan Fund. As is the case with other types of government bonds, FILP Bonds are issued based on the credit of the government up to the amount approved by the Diet, and the ceiling amount is provided under the general provisions of the Special Account Budget (Article 62, paragraph (2) of the "Act on Special Accounts") ((1)). 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 Outline of FILP Reform



# (2) Types of JGBs

Government bonds are the securities issued by the central government. The central government pays the bondholders interests 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 FY2021 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

Ref: "FILP Report"

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

Also 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.

The lower limit of the coupon rate was reduced from 0.1% to 0.005% for issues to be placed from FY2021.

of issuance ( (2) 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 issued in and after 2013 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) and 15-Year Floating-Rate Bonds are JGBs with coupon rates that vary over time according to certain rules. New issuance has been put on hold for the 15-Year Floating-Rate Bonds, however.

Fig. 2-3 Types of JGBs

Moturity	Short	-term	Medium-term	Long-term		
Maturity	6-Month	1-Year	2-Year, 5-Year	10-Year		
Type of issue	Discour	t bonds	Coupon-be	aring bonds		
Min. face value unit	50,00	0 yen	50,00	00 yen		
Issuance method	Public offering BOJ Rollover		OTC	offering sales accepting subscriptions)		
Auction method		titive auction/ -style auction		titive auction/ -style auction		
Non-price Competitive Auction	Non-Price Competitive Auction I		Non-Price Com	titive Auction petitive Auction I petitive Auction II		
Transfer	Not restricted		Not res	stricted		
Frequency of issue (FY2021)	Twice a month	Monthly	Monthly each			

	;	Super long-term			Inflation-Indexed Bonds	Floating-Rate Bonds
Maturity	20-Year	30-Year	40-Year	3-Year Fixed-Rate, 5-Year Fixed-Rate, 10-Year Floating-Rate	10-Year	15-Year (☞⑤)
Type of issue			Coupon-b	earing bonds		
Min. face value unit		50,000 yen		10,000 yen	100,00	00 yen
Issuance method	Public offering			OTC sales (making offerings and accepting subscriptions)	Public offering	_
Auction method		titive auction/ -style auction	Yield-competitive auction/ Dutch-style auction	_	Price-competitive auction/ Dutch-style auction	_
Non-price Competitive Auction	Non-Price Competitive Auction I Non-Price Competitive Auction II		Non-Price Competitive Auction II	_	—( <b>©</b> 6)	_
Transfer	Not restricted			Restricted (\$\infty\$7)	Not restricted	Not restricted
Frequency of issue (FY2021)	Monthl	y each	6 times	Monthly each	4 times	_

#### (Reference) Inflation-Indexed Bonds

The Inflation-Indexed Bonds (JGBi) are bonds whose principals (and relevant interests) fluctuate 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 JGBi market has remained a key to address market environment changes after overcoming deflation and to diversify JGB products.

- → 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).
- 4 The indexation coefficient measures how much the CPI changed after an issue date.

- ☞ ⑤ Issuance of 15-Year Floating-Rate Bonds has been suspended since May 2008.
- © Non-Price Competitive Auction II of Inflation-Indexed Bonds has been suspended since May 2020.
- ⑦JGBs for Retail Investors can be transferred only to retail investors (including certain trust custodians).

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

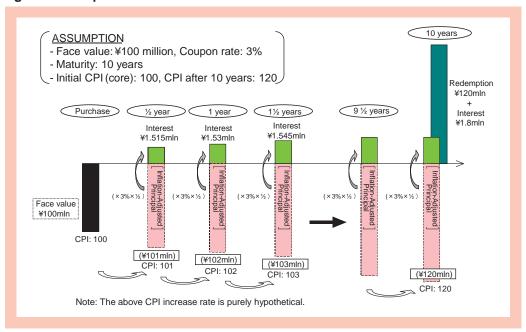
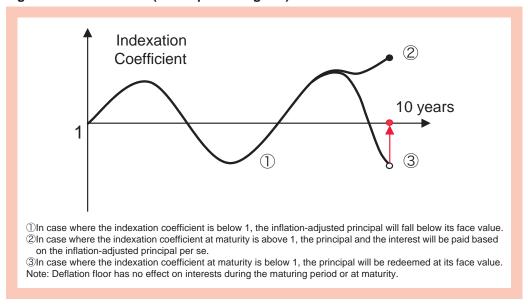


Fig. 2-5 Deflation Floor (Conceptual Diagram)



# (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/yield-competitive auction

Price/yield-competitive auction is a method in which each auction participant ((\*\*(1)))

No new 40-Year JGB coupon rate is given in advance as it is determined based on the result of first yield-competitive auction.

submits a bidding price (or yield) and bidding amount in response to the issue terms (e.g., issuance amount, maturity, coupon rate (\*\*\*2)) 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) (> 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 for 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 or JGBi 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 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 JGB 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 principal and interest payment dates and the coupon rate for the new issue are the same as those for the outstanding issue. 5-Year Bonds issues are subject to the rule ().

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.

- ❤ 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 principal and interest payment dates for 2-Year Bonds differ from auction to auction, 2-Year Bonds are not effectively subjected to the reopening rule (Ref: III Chapter 1 1(5) "Principal/ Coupon Payment Corresponding to Days of Issuance in FY2021" (P122)).

From the viewpoint of securing market supply of each issue, 10, 20, 30 and 40-year issues in FY2021 are subjected 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 2021 into the April 2021 issue, July, August and September issues into the July 2021 issue, October, November and December issues into the October 2021 issue, and January, February and March issues in 2022 into the January 2022 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).

#### 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 their handling and distribution by their handling institutions comprised of securities companies, banks, and other financial institutions as well as post offices (about 970 institutions). The handling institutions are commissioned by the government to accept purchase applications and to sell JGBs to retail investors. Handling institutions are paid a commission by the government corresponding to the handled issuance amounts.

#### 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 in subscription-based OTC sales of JGBs in a manner previously exclusive to post offices. This development allows retail investors to purchase JGBs via financial institutions with whom they are familiar, it also allows them to purchase JGBs in a manner that is essentially ongoing. 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 650 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 within a defined period, they are not required to purchase any unsold JGBs.

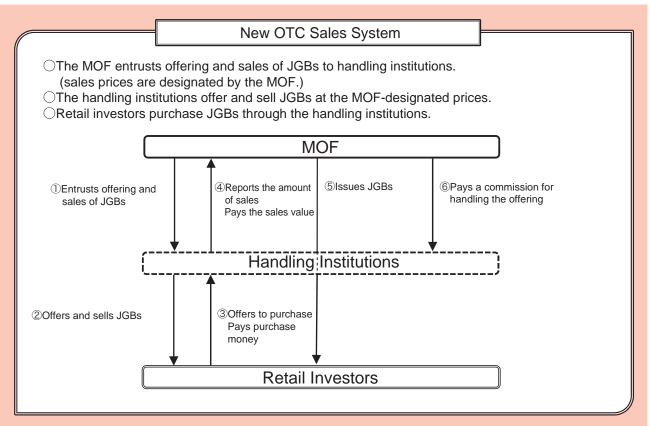
Ref: Part I, 3 (1) "JGB Holdings by Retail Inve tors" (P30)

→ 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.

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

	JGB	s for Retail Inve	stors		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	Mon	thly (12 times a	year)	Mon	thly (12 times a y	year)
Purchase units/purchase value limits	Minimum purch thousand yen u	nase of 10 thousa nits/No upper lin	and yen in 10 nit	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 10 (the same in th	0 yen of face val e redemption)	ue	Determined by MOF for each issue(possible to sell at any time on the market. However, the price may change when the bonds are sold before maturity.)		
Purchasers	Limi	ted to retail inves	stors	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	F	Present (0.05%)	)		Absent	
Redemption before maturity	redemption bef buy-back shall no principal los	r has elapsed s ore maturity due be possible at a ss risk). Deduct t diately preceding	to government ny time(there is the two interest	because the price at time of sale shall be the market price at that time, loss/profit shall occur or sale(there is a principal loss risk). Furthermore		
Introduction (1st issuance)	March, 2003	January, 2006	July, 2010		October, 2007	

Fig. 2-7 Flow of New OTC Sales



## 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 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.

(trillion yen) JGB Issuance Amount Planned for FY2021 (236.0)Bank of Japan Sales for Rollover Financed **Retail Investors** in the market **FILP** (2.2)**Bonds** (4.1)(45.0)(229.7)Non-price Adjustment **Public** Competitive between Offering Auction II and others fiscal years (221.4)(8.2)(0.1)40-year, 30-year, 20-year, 10-year, 40-year, 30-year, 20-year, 5-year, 2-year, 10-year, 5-year, 2-year

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

Treasury Discount Bills (1-year, 6-month). 10-year Inflation-Indexed Bonds, Liquidity Enhancement Auctions

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

# (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 abovementioned 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 5% of the planned issue amount) at reasonable prices.
- Purchasing responsibility:
   The Special Participants shall purchase at least a specified share of the planned total issue amount (0.5% for short-term zone; and 1% for the other zones) in each of the super long-
- amount (0.5% for short-term zone; and 1% for the other zones) in each of the super long-term, long-term, medium-term and short-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 separating and integrating STRIPS Bonds:

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

## 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: The government bond 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%" ( ()).
- 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.

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 interests 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) ( 2).

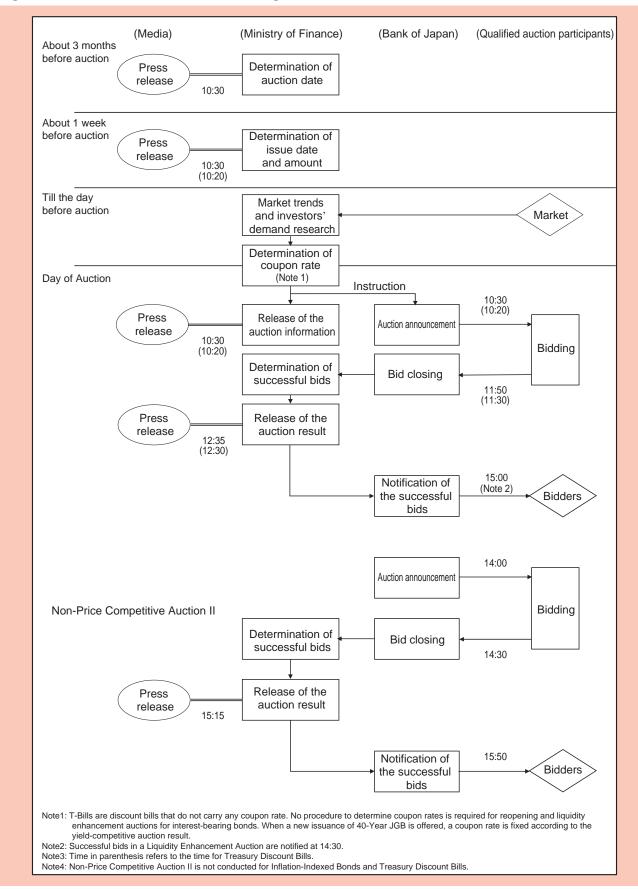
The BOJ-NET JGB Services allow the following procedures to be completed online:

- Notification of offering (from the BOJ to auction participants)
- Bidding (from bidders to the BOJ)
- Counting the number of bidding and reporting to the MOF on total bidding
- Notification of accepted/allocated bids (from the BOJ to bidders)
- ${}^{\textstyle \bullet}$  Issuance and payment (from the BOJ to purchasers / from purchasers 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

## 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 (), Japan shortened the settlement cycle (between auction and issuance dates) from T+2 to T+1 in principle for auctions as from May 1, 2018.

At the same time, Japan shortened settlement cycles for coupon-bearing issues (5- to 30-year issues) coming in massive JGB redemption months (March, June, September and December) and a 2-year issue every month.

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

For coupon-bearing (5- to 30-year) JGB issues coming in massive JGB redemption months (March, June, September and December) for which issuance dates 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

For a 2-year JGB issue coming every month for which an issuance date 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. Interest payment and redemption dates were also changed to the first day of each month.

Ref: Chapter 1 2(3)C "Shortening of settlement periods" (P66)

# **Column 5** Debt Management Policies in Foreign Countries

# **1** Debt Management Policies, Issuance Plans

In Japan, the basic objectives of the debt management policy are set as: (1) ensuring the smooth and secure issuance of Japanese Government Bonds and (2) minimizing medium- to long-term fundraising costs. In line with these objectives, the government carefully pays attention to market conditions 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 unique characteristics.

Further, 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 but 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 similar to that of Japan. On the other hand, the U.S. determines and publishes necessary issuance amounts not on a fiscal year basis but on a quarterly basis, complying with the upper debt limit specified by law. In addition, the timing of information disclosure during the period from the announcement of a planned issuance amount to an actual auction for the issue also varies from country to country (Figs. c5-1 and c5-2).

Fig. c5-1 Debt Management Policies in Japan and Foreign Countries

	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	Ensuring stable smooth issuance of JGBs     Minimizing mediumto-long term financing costs      To finance government borrowing needs at the lowest cost over time accounting a regular and predictable pattern      To issue debt in a regular and predictable pattern      the location costs the government borrowing needs at the lowest cost over time accounting accounting the location costs.		To minimise, 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.	Raising 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.	· 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.

(Sources) Relevant countries' debt management authorities

Fig. c5-2 Announcement Time of Issuance Amount and Auction Date in Japan and Foreign Countries

	Japan	U.S.	U.K.	Germany	France
In previous fiscal year	Total issuance amount  Issues  Planned auction amount		Total issuance amount  Scheduled auction date	Total issuance amount  Issues  Planned auction amount  Scheduled auction date	Total issuance amount  Scheduled auction date
Quarterly basis	* Auction date of each month is announced 3 months before.	Planned auction amount  Total issuance amount (*2)  Issues  Scheduled auction date	Scheduled auction date (*3)	Planned auction amount (*1)  Scheduled auction date (*3)	
Approximately one week before	Planned auction amount (*1)	Planned auction amount	Planned auction amount		Planned auction amount

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.

# 2 Impacts of Government Debt Issuances Growing Due to the COVID-19 Expansion

As the Novel Coronavirus (COVID-19) expansion 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.

Specifically, FY2020 government bond issuance plans were unusually changed four times in the U.K., one time in Germany and three times in France in addition to the regularly changes. The U.S. and Germany increased discount bond auctions substantially, while the U.K. expanded coupon-bearing bond auctions sharply (Fig. c5-3). Germany also introduced 7- and 15-year government bonds and 12-month discount bonds. Various measures were thus taken in line with government bond issuance expansion.

Fig. c5-3 Changes in the numbers of auctions in foreign countries (from 2019 to 2020)

		Jap	oan	U.	S.	U.	K.	Gern	nany	Fra	nce
		Coupon- Bearing Bonds	Discount Bonds								
	2019	94	74	98	227	46 (5)	153	62 (0)	18	33 (1)	161
	2020	94	83	105	398	147 (6)	156	75 (3)	56	37 (3)	168

Note: Numbers in parentheses are those of syndication issues included into total numbers. Numbers for Japan include Liquidity Enhancement Auctions. The multiple stock auctions to simultaneously sell multiple issues is counted as an independent one.

Note 2: Planned quarterly amounts financed from the market.

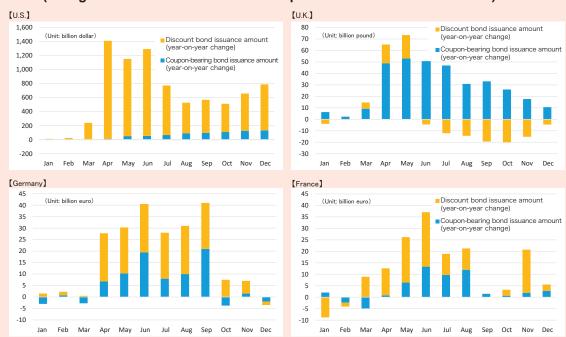
Note 3: Scheduled auction date is announced again every quarter.

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

<sup>(</sup>Sources) Calculated by Ministry of Finance based on the data of relevant countries' debt management authorities

Comparison of monthly coupon-bearing and discount bond issuance amounts in 2019 and 2020 shows sudden rises in discount bond issuance amounts from March or April 2020 in the U.S., Germany and France, indicating that these countries used discount bonds to raise funds in the early stage of the COVID-19 pandemic.

Fig. c5-4 Government Bond Issuance Changes Accompanying COVID-19 Expansion in Foreign Countries (Change in issuance amount in 2020 compared to issuance amount in 2019)



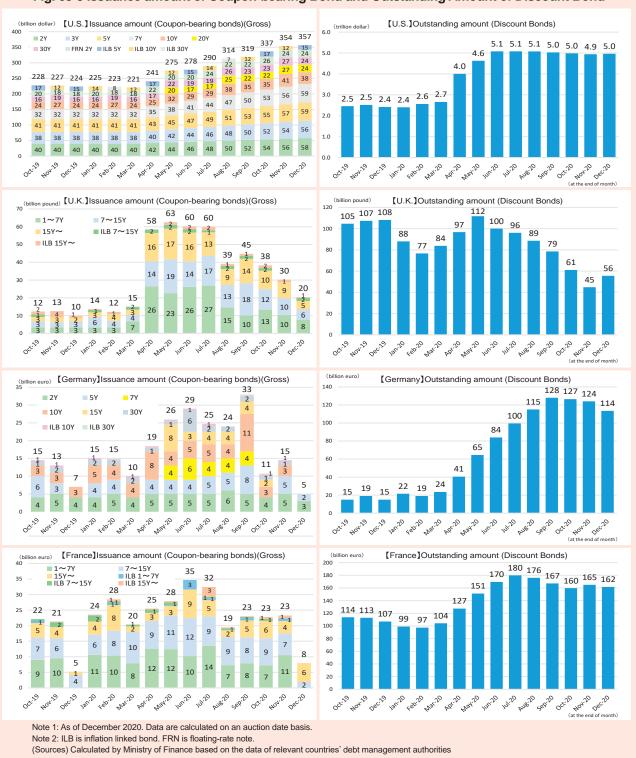
Note 1: As of December 2020. Data are calculated on an auction date basis.

Note 2: Coupon-bearing bond include Inflation-Indexed Bonds and Floating-Rate Bonds (for the U.S. alone).

(Sources) Calculated by Ministry of Finance based on the data of relevant countries' debt management authorities

Changes in coupon-bearing bond issuance amounts by maturity and in outstanding balances of discount bonds indicate that foreign countries took different approaches from March 2020 when COVID-19 expansion began (Fig. c5-5).

Fig. c5-5 Issuance amount of Coupon-bearing Bond and Outstanding Amount of Discount Bond



The U.S. gradually increased coupon-bearing bond issuance amounts from March to December 2020. For instance, 2-, 3- and 5-year issues were increased each by \$2 billion per month, 7-year issue by \$3 billion per month, and 10-year or longer issues gradually. Discount bond issuances were rapidly expanded within a short period of time, leading the outstanding balance of discount bonds to grow by \$2 trillion in three months to the end of June.

The U.K. increased coupon-bearing bond issuances for all maturities with a focus on the 1- to 7-year zone. Their total monthly issuance amount rose sharply from 15.0 billion pounds in March 2020 to 58.5 billion pounds in April. The monthly coupon-bearing bond issuance amount was maintained until July, while changes in the outstanding balance of discount bonds were not as large as that of coupon-bearing bonds.

Germany in March 2020 revised its government bond issuance plan published in December 2019 to increase coupon-bearing bond issuances in the April-June quarter and introduce 12-month discount bonds in addition to 3-, 5- and 6-month bonds ever issued. It revised the plan again in April to introduce 7- and 15-year coupon-bearing bonds and 9- and 11-month discount bonds in May. As a result, coupon-bearing bond issuances increased mainly in the 7- to 15-year zone, with changes limited for 2- and 5-year issues. The outstanding balance of discount bonds gradually increased from April and peaked in September, in contrast to the U.S. balance that rose rapidly within a short period of time.

In France, coupon-bearing bond issuances gradually grew from March 2020, but those from August fell back to levels before COVID-19 spread. The outstanding balance of discount bonds gradually increased from April and peaked in July, indicating a trend similar to the German one.

## **3** Bond Types and Issuance Methods

Methods of issuing 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 (nonmarketable bonds).

Marketable bonds are normally offered mainly through the public auction method which uses both competitive and noncompetitive auctions. As for competitive auctions, notable is the fact that the U.K., Germany and France employ the multiple price (conventional) method (Note 1) for almost all maturities as is the case of Japan while the U.S. employs the single price (Dutch-style) method for all maturities (Note 2). In addition, the U.K. and France use the syndication method almost every year. Germany used the syndication method in May 2020 for the first time in five years.

Note 1: Auction method by which each winning bidder purchases the security at one's bidding price (or yield).

Note 2: Auction method by which all winning bidders pay the lowest accepted bid price regardless of their original bid prices (or yields).

Fig. c5-6 Bond Types and Issuance Methods in Japan and Foreign countries

	Japan	U.S.	U.K.	Germany	France
Short-term	Approx. 2-month, 3-month, 6-month, 1-year (Note 2)	4-week, 8-week, 13-week, 26-week, 52-week, CMB (Note 3)	1-month, 3-month, 6-month, 12-month	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	1∼7-year	2-year, 5-year, 7-year (Note 4)	2∼8-year
Long-term	10-year	10-year	7~15-year	10-year	0 - 50
Super Long-term	20-year, 30-year, 40-year	20-year, 30-year (Note 4)	15∼55-year	15-year, 30-year (Note 4)	8 ∼ 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)	·Inflation-Indexed Bonds (5-year, 10-year,30-year) · Green Bonds (5-year, 10-year) (Note 5)	·Inflation-Indexed Bonds (2 ~ 30-year) · Green Bonds (18 ~ 23year) (Note 6)
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 7)	Multiple price (conventional) method (Note 7)	Multiple price (conventional) method (Note 7)

Note 1: As of March 2021

Note 7: The U.K., Germany and France used syndication 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-type bonds), issued in Japan, the U.S. and the U.K. The U.K. features unique non-marketable bonds that cannot be seen in other countries, including Premium Bonds that offer a monthly prize draw instead of earning interest. Meanwhile, Germany and France issued government bonds for retail investors in the past but have discontinued the issuance.

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

Note: For Japanese government bonds for retail investors, see "Fig. 2-6 Comparison of JGBs for Retail Investors and New Over-The-Counter (OTC) Sales System" (P46).

Green Bonds in Fig. c5-6 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 15 countries (as of March 2021), 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 balance of outstanding government Green Bonds was the highest in the world. Germany issued Green Bonds worth 6.5 billion euros in September 2020 and those worth 5 billion euros in November 2020. No government Green Bonds have been issued in the U.S., China and Japan as of March 2021.

When government Green Bonds are issued, measures should be taken to prevent such debt issue from being

Note 2: Approx. 2- and 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: The U.S. issued a 20-year issue in May 2020 for the first time in 34 years since 1986. Germany issued 7- and 15-year issues in May 2020 for the first time ever. Note 5: Germany placed two Green Bond issues. The first came on September 2, 2020, as a 10-year issue that was worth 6.5 billion euros was set to mature on

August 15, 2030. The second came on November 4, 2020, as a 5-year issue that was worth 5 billion euros was set to mature on October 10, 2025.

Note 6: France placed two Green Bond issues. The first came on January 24, 2017, as a 22-year issue that was set to mature on June 25, 2039, has been reopened annually to total 28.87 billion euros. The second came on March 16, 2021, as a 23-year issue that was worth 7 billion euros was set to mature on June 25, 2044.

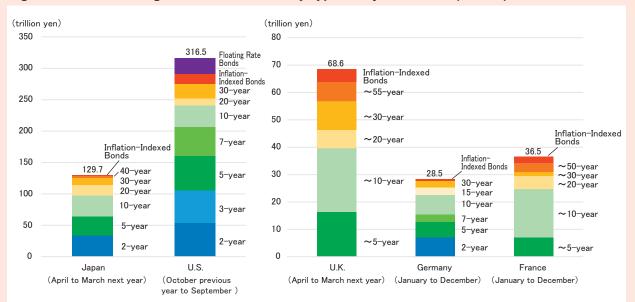
criticized as "green wash." If government Green Bonds are to be issued separately from other government bonds, it will have to be cautiously considered that their liquidity could decline to cause a rise in fundraising costs or national burden. Taking note of these points, the government will closely watch domestic and foreign trends.

# Medium to Long-Term Bond Issuance Broken down by Type

In Japan, the government issues coupon-bearing bonds with a maturity of up to 40 years in consideration of market trends, investor needs, etc. As shown by the examples of foreign countries, 5-year or shorter bonds account for about 40 to 50% of all government bonds in the U.S. and Germany while longer bonds account for about 70% of all such bonds in the U.K. and France. Maturity mixes thus vary widely from country to country. In addition, it is notable that the U.K. and France specify no maturity and divide maturities into rough categories in a flexible

As for Inflation-Indexed Bonds in Japan, the authorities adjust the issuance amount flexibly in response to the market environment and investment needs based on dialogue with market participants. In the U.K. and France among foreign countries, Inflation-Indexed Bonds account for a relatively large share of around 7% of their total government bond issuance amounts (Fig. c5-7).

Fig. c5-7 Medium to Long-Term Bond Issuance by Type in Major Countries (FY2020)



Note 1: Foreign currencies are converted into yen using the following exchange rates: 1USD =103.25yen, 1GBP=141.13yen and 1EUR=126.18yen (as of December 31, 2020).

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

Note 3: Liquidity Enhancement Auctions are included for Japan. Green Bonds are included for Germany and France. Syndicated auctions are included for the U.K., Germany and France,

Note 4: The U.S. issued 20-year government bonds in May 2020 for the first time in 34 years (since 1986). Germany issued 7- and 15-year government bonds in May 2020 for the first time ever

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

# **5** Liquidity Maintenance/Enhancement Measures

Japan has adopted reopening for 20- and 30-Year JGB each into four issues and 40-Year and Inflation-Indexed JGB each into one issue annually in principle and for 10-Year JGB into four issues annually unless yields fluctuate wildly (the gap between the market yield and the coupon on a new issue exceeds 30 basis points). Japan has thus tried to maintain and enhance liquidity by securing a sufficient outstanding value for each issue. Through liquidity enhancement auctions, Japan also reopens issues that have structural liquidity shortages or temporary liquidity shortages due to 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. c5-8).

In Germany, meanwhile, the authority reserves part of each debt issuance amount and gradually sells such reserves or uses them for the repo market in consideration of secondary market conditions. Countries implement various measures to maintain and enhance government bond market liquidity.

Fig. c5-8 Reopening Issuances in Foreign Countries

	Japan	U.S.	U.K.	Germany	France
Reopening	· 5-year (Note 1) · 10-year (Note 2) · 20-year · 30-year · 40-year · Inflation-Indexed Bonds (10-year)	· 10-year · 20-year · 30-year · Floating Rate Bonds (2-year) · Inflation-Indexed Bonds (5-year, 10-year, 30-year)	· Medium-term     (1 ~ 7-year)     · Long-term     (7 ~ 15-year)     · Super Long-term     (15 ~ 55-year)     · Inflation-Indexed Bonds     (5 ~ 55-year)	· 2-year · 5-year · 7-year · 10-year · 15-year · 30-year · Inflation-Indexed Bonds (5-year, 10-year, 30-year)	· Medium-term (2~8-year) · Long-term, Super Long-term (8~50-year) (Note 3) · Inflation-Indexed Bonds (2~30-year)
Without reopening	· 2-year	· 2-year · 3-year · 5-year · 7-year	_	_	_

Note1: Reopening issuance only in case nominal coupon is the same as that of previous issue.

Note2: "Reopening method in principle" except in case of significant change in market environments.

Note3: Green Bonds are included.

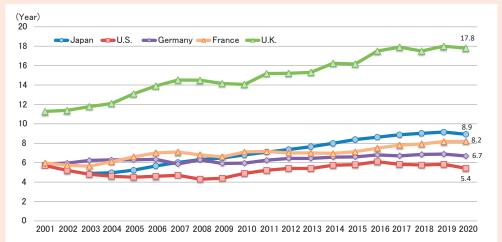
(Source) Relevant countries' debt management authorities

# **6** Average Maturity

The "stock-base average maturity" is viewed as an important benchmark for assessing refunding risks.

Comparison between stock-based average maturities for government bonds in Japan and major foreign countries indicates that the averages range from five to eight years in the U.S., Germany and France (the average stands at as high as about 18 years in the U.K. with super long-term issues accounting for a large share of all government bonds), while the Japanese average bottomed out at 4.9 years at the end of FY2003 and lengthened to 9.2 years at the end of FY2019. As Japan increased mainly short- to medium-term bond issues due to the COVID-19 expansion in FY2020, the Japanese average came to 8.9 years at the end of FY2020 (Fig. c5-9).

Fig. c5-9 Average Maturity



Note 1: Data for Japan represent the average weighted maturity of outstanding General Bonds including Treasury Bills and excluding Financing Bills. Data for other countries include short-term (one-year and shorter) bills.

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

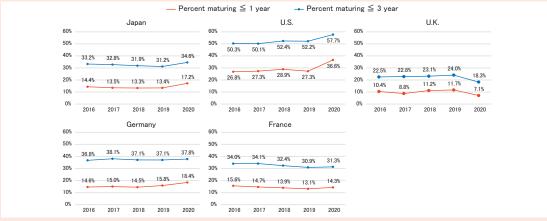
Note 3: Data for each year are as of March next year for Japan alone and as of December for other countries

(Source) OECD, Ministry of Finance

The stock-base average maturity is an indicator of overall outstanding government bonds, computed by weighted-averaging remaining maturities for outstanding government bonds. On the other hand, the following indicator is useful for identifying more specific refunding needs. Fig. c5-10 indicates the proportions for outstanding bonds that are scheduled to be refunded or mature within one year and three years.

In the U.S., Germany and France that increased mainly short-term bond issuances to raise funds required for responding to the COVID-19 spread, the proportions at the end of December 2020 increased year on year. In the U.S., particularly, the proportion for those maturing within one year rose by nearly 10 percentage points from 27.3% to 36.6%. In the U.K. that increased more-than-one-year coupon-bearing bond issuances in response to the COVID-19 spread, however, the proportion for those maturing within one year declined.

Fig. c5-10 Proportion of outstanding with remaining maturity within 1 year and 3 years



Note 1: Data for each year are as of December

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

(Sources) Japan: Ministry of Finance, The other counties: Calculated by Ministry of Finance based on the data of Bloomberg

# **7** Breakdown by Government Bond Holders

According to a breakdown of government bonds by holder category published in each country, a significantly large portion of JGBs are held by Japanese domestic investors including financial institutions. Although the percentage of JGBs held by foreign investors has been on an uptrend recently, it now stands at approximately 13%. In other major countries, however, foreign ownership of government bonds is higher, including approximately 30% in the U.S. and approximately 50% in Germany and France (Fig. c5-11).

Fig. c5-11 Breakdown of government bonds by holder category



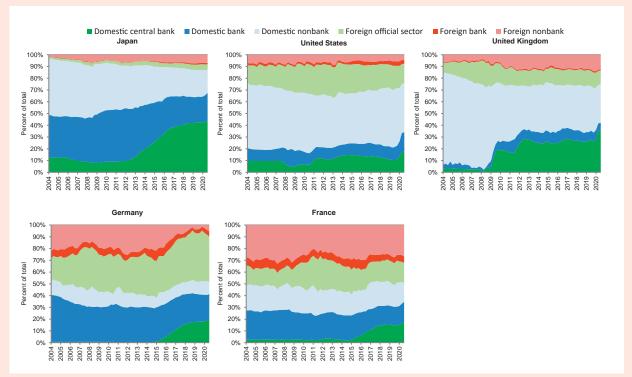
Note: Japanese government bonds include Fiscal Investment and Loan Program Bonds and Treasury Discount Bills (T-Bills). Data for the U.S exclude holdings by government-controlled public institutions, trust funds, etc. but include non-marketable government bonds held by the Federal Government Employee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

(Sources) Japan: Bank of Japan, U.S.: Federal Reserve Board, U.K.: Office for National Statistics, UK Debt Management Office, Germany: Deutsche Bundesbank, France: Banque de France

Other data on holders of government bonds in foreign counties include a study introduced by a working paper of the IMF (International Monetary Fund) in 2012. The study provided estimated breakdowns of government bonds, etc. by holder based on data from national 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, the foreign official sector, foreign banks and foreign nonbanks) and estimated their respective shares of government bond holdings. The estimated breakdowns have been updated and published on the IMF website every quarter.

According to data as of September 2020 (Fig. c5-12), the three foreign sectors held some 20-30% of government bonds in the U.S. and the U.K. and approximately 50% of such bonds in Germany and France in the eurozone.

Fig. c5-12 Breakdown of government bonds by holder category



(Note) Domestic banks are depository corporations residing in the country (IFS definition). Foreign banks are BIS reporting banks residing outside the country. Foreign official 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.

(Sources) Serkan Arslanalp and Takahiro Tsuda, "Tracking Global Demand for Advanced Economy Sovereign Debt", IMF Working Paper, WP/12/284 (Although the working paper and the updated charts on the IMF website included outstanding sovereign debt as a percentage of GDP, such percentage has been deleted by the Ministry of Finance since this column focuses on the breakdown of government bonds by holder.)

# **8** Primary Dealer System

Primary dealers ("PDs") originally referred to government-certified dealers in the U.S. 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 exchange opinions by participating in periodic meetings with the authorities. At the same time, candidates for PD designation are examined beforehand for their ability to provide market-making services, financial conditions, auction participation records, etc. and after the designation, certain obligations, such as bidding for government bonds, market making and providing information to the authorities, are placed on PDs. In this way, under a certain system, companies with special responsibilities and qualifications in regard to government bond markets are designated as PDs to ensure that the liquidity, efficiency and stability of government bond markets are maintained and improved. Such system is generally called the Primary Dealer System.

Nowadays, various countries have similar systems in place, including Japan's JGB Market Special Participant Scheme. However, PDs' responsibilities and qualifications vary from country to country as shown below (Fig. c5-13).

Fig. c5-13 Primary	Dealer S	vstem
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		Japan	U.S.	U.K.	Germany (Note 1)	France
	Name	JGB Market Special Participants	Primary Dealers	Gilt-edged Market Makers (GEMMs)	Bund Issues Auction Group	Spécialistes en Valeurs du Trésor (SVT)
Intro	oduction time	2004	1960	1986	1990	1987
	per of members of March 2021)	21 companies	24 companies	18 companies	33 companies	15 companies
Bidding	Bidding	Participation in all auctions     5% of total planned issuance amount	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 planned issuance amount <excluding short-term=""> 1% or more of the said amount</excluding></short-term>	_	2% or more of total issuance amount over a rolling 6-month period	0.05% or more of total issuance amount	2% or more of total issuance amount (Note 2)
ies	Market making	Providing sufficient liquidity to the JGB secondary market	Maintain a share of Treasury market making activity of at least 0.25 percent.	Having a 2% or more share in the secondary market	_	Having a 2% or more share in the secondary market
	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     Buy-back 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 U.S.     Department of the     Treasury (quarterly)	Meeting with the HM Treasury (annually)     Meeting with 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 debt auctions. However, the only required qualification for a Bund Issues Auction Group member is a financial institution based in the European Union, and each member, 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 group in other countries.

# **10** Cooperation between Debt Management Authorities

National 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 IMF Public Debt Management Forum, the World Bank Government Borrowers Forum and the ADB (Asian Development Bank) Regional Public Debt Management Forum.

The Japanese debt management authorities have proactively attended these international conferences. At these conferences, Japanese debt management authority officials have given presentations on Japan's debt management policies and proactively shared information and opinions with their foreign counterparts on debt management policies. Japan has also served as a member of the steering committee for the OECD Working Party on Public Debt Management.

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."

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