

## 2 JGB Issuance Plan for FY2021

### (1) Announcement of JGB Issuance Plan for FY2021

Japan has the worst fiscal conditions among major developed countries, including outstanding general JGBs estimated at about 990.3 trillion yen for the end of FY2021 and outstanding long-term central and local government debts at 1,212 trillion yen. It is getting more important for the Japanese government to adequately implement JGB Management Policy to secure the market's stable absorption of JGBs.

On December 21, 2020, the Japanese government publicly announced the JGB Issuance Plan for FY2021 in line with a Cabinet decision on the draft FY2021 government budget.

When developing the JGB Issuance Plan for FY2021 where JGB issues including Refunding Bonds will total 236.0 trillion yen, the government held careful dialogues with market participants through the Meeting of JGB Market Special Participants and some other dialogue sessions and has formulated JGB Issuance Plans for each bond issuance method, paying attention to investors' needs and market trends.

### (2) Overview of Discussions at Various Panels

The Advisory Council on Government Debt Management at its meeting in November 2020 started discussions for the development of the JGB Issuance Plan for FY2021. It then discussed the significance of JGB issuance based on a medium- to long-term demand trend and a medium- to long-term outlook on investors' JGB demand. Main opinions were as follows:

- In the future, the government must correct the average JGB maturity that has substantially been shortened by a sharp increase in short-term bond issues under supplementary budgets in FY2020 but should consider interest rate risks regarding super long-term issuances.
- Given that life insurance companies are expanding investment in super long-term bonds in anticipation of the introduction of an economic value-based solvency regulation, demand may increase for super long-term bonds to some extent.

At the Meeting of JGB Market Special Participants (primary dealers) and the Meeting of JGB Investors in November 2020, participants discussed details of the JGB Issuance Plan for FY2021. Main opinions were as follows:

- As regards T-Bills, the issuance amount should be gradually reduced basically because the size has been significantly increased and the volatility in the short-term market has been heightened depending on the auction results, despite the T-Bill market is generally stable, supported by the BOJ and collateral demand.
- Although the current interest rate level is low and the situation does not allow a full-fledged investment in light of cost of debts, the needs for super long-term bonds for life insurance companies are very strong from the perspective of ALM.

Based on discussions at these panels, the government has developed the JGB Issuance Plan for FY2021.

### (3) Scheduled Issuance Amount of JGBs

Ref: II Chapter 1 1(1)  
“JGBs by Legal Grounds  
of Issuance” (P38)

#### A. Breakdown by legal grounds

Under the FY2021 budget, the MOF plans to increase the JGB issuance amount by 82.5 trillion yen from the initial level for FY2020 to a very high level of 236.0 trillion yen.

A breakdown of the FY2021 JGB issues shows that Construction Bonds and Special Deficit-Financing Bonds issues to provide revenues for the General Account Budget have been increased by 11.0 trillion yen from the initial level for FY2020 to 43.6 trillion yen. Aiming at financing reconstruction projects for recovering from the Great East Japan Earthquake, Reconstruction Bonds are issued as bridging finance until Special Taxes for Reconstruction and other revenues are receivable to the government. In FY2021, the government is planning to issue Reconstruction Bonds worth 0.2 trillion yen, down 0.7 trillion yen from the initial level for the previous year. The FILP Bonds issuance amount is determined not only by the scale of new lending under the Fiscal Loan Program but also by the financial position of the overall Fiscal Loan Fund. The FY2021 FILP Bonds issuance amount is increased by 33.0 trillion yen from the initial level for the previous year to 45.0 trillion yen. Refunding Bonds are issued to refund the General Bonds that were issued in the past and are due to mature, accounting for a majority of total annual JGB issues. In FY2021, the Refunding Bonds issuance amount is planned to increase by 39.2 trillion yen from the initial level of the previous year to 147.2 trillion yen.

Fig. 1-9 JGB Issuance Plan for FY2021 (Breakdown by Legal Grounds) (①~③)

(Unit: billion yen)

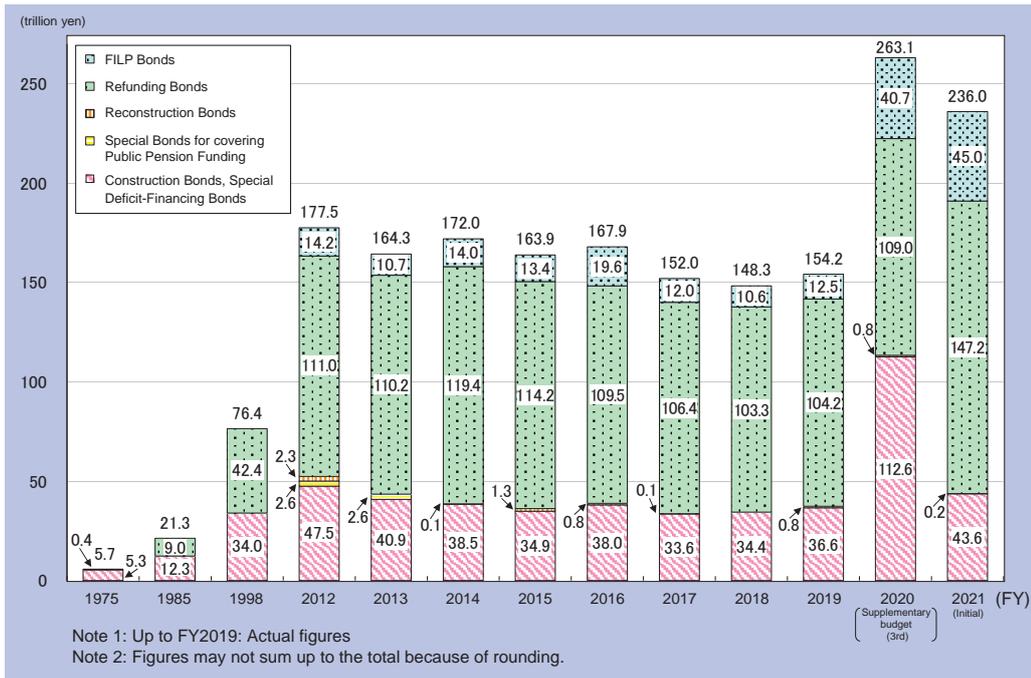
	FY2020 (Initial)	FY2020 (3rd Supplementary Budget)	FY2021 (Initial)		
	(a)	(b)	(c)	(c) – (a)	(c) – (b)
Newly-issued Bonds	32,556.2	112,553.9	43,597.0	11,040.8	▲ 68,956.9
Construction Bonds	7,110.0	22,596.0	6,341.0	▲ 769.0	▲ 16,255.0
Special Deficit-Financing Bonds	25,446.2	89,957.9	37,256.0	11,809.8	▲ 52,701.9
Reconstruction Bonds	924.1	782.4	218.3	▲ 705.8	▲ 564.1
FILP Bonds	12,000.0	40,700.0	45,000.0	33,000.0	4,300.0
Refunding Bonds	107,981.8	109,029.2	147,192.9	39,211.1	38,163.8
For matured Reconstruction Bonds	1,693.2	2,725.4	2,871.0	1,177.8	145.5
Total	153,462.1	263,065.5	236,008.2	82,546.1	▲ 27,057.3

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

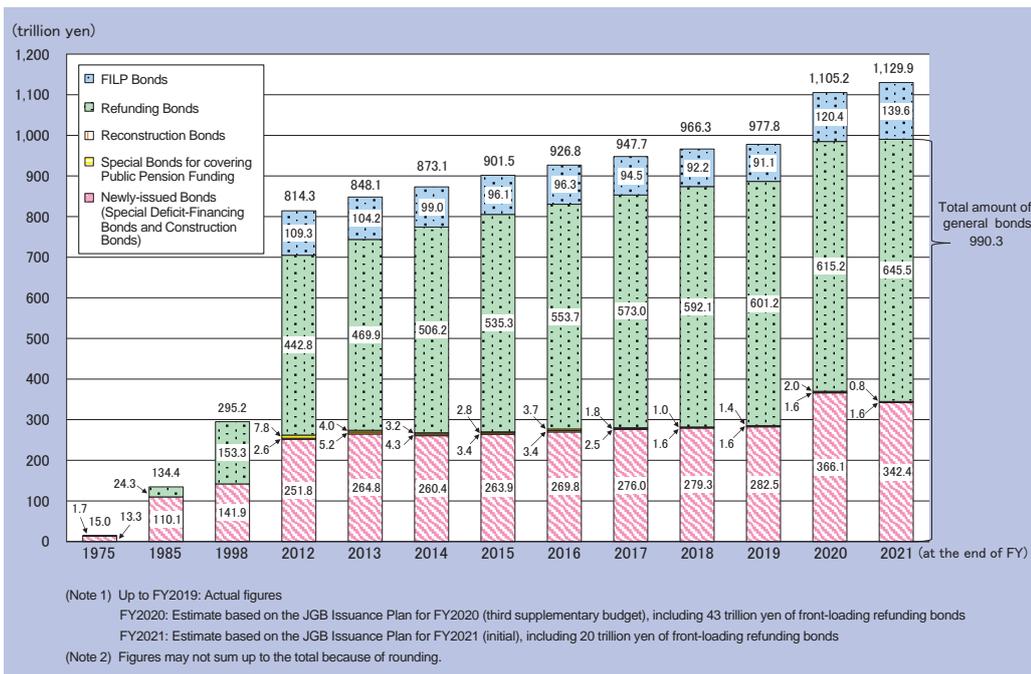
② Buy-backs from the market in FY2021 will be determined based on the MOF's discussion with market participants and market conditions.

③ The maximum amount of front-loading issuance of Refunding Bonds in FY2021 is 20 trillion yen.

**Fig. 1-10 Historical Changes in JGB Total Issuance Amount**



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



**B. Breakdown by Issuance Methods**

The FY2021 JGB issuance amount of 236.0 trillion yen required for the budget as mentioned in the previous section is categorized by three issuance methods: “JGB market issuance,” “Sales for Households” and “BOJ Rollover.”

Of the “JGB market issuance” accounting for most of the total JGB issuance, the calendar-based JGB Market Issuance amount (①) is set at 221.4 trillion yen, up 92.6 trillion yen from the initial level for FY2020.

The JGB issuance amount for Non-Price Competitive Auction II, etc., which has included the planned amount for Non-Price Competitive Auction II (②,③) and the revenue from JGB issuance at prices above par value since the supplementary budget for FY2017, is put at 8.2 trillion yen for FY2021.

Sales for Households, which widely fluctuates depending on interest rate and other trends, is cut by 0.7 trillion yen from the initial level for the previous year to 4.1 trillion yen, with current sales conditions taken into account.

“BOJ Rollover” is put at 2.2 trillion yen, unchanged from the initial level for the previous year, based on the total JGB issuance amount and market conditions.

Ref: II Chapter 1 1(3) “Methods of Issuance” (P43)

① The calendar-based JGB Market Issuance refers to the amount (par value) of JGBs planned to be regularly issued through scheduled auctions from April to next March.

② Non-Price Competitive Auction II (Ref: II Chapter 1 1 (3) “Methods of Issuance” (P43)).

③ The issuance amount for Non-Price Competitive Auction II is put at 5.5% of the JGB Market Issuance amount for JGBs subject to the auction (40-Year, 30-Year, 20-Year, 10-Year, 5-Year and 2-Year Bonds) (Under the initial budget for FY2020, the percentage was set at 7%. After the 3rd supplementary budget for FY2020, the percentage was cut to 5.5%, with results reflected).

④ Figures may not sum up to total because of rounding.

⑤ “Adjustment between fiscal years” refers to leveling-off of issuance amount between fiscal years through frontloading issuance and deferred issuance in the accounting adjustment term. (Ref: II Chapter 1 1(1) “JGBs by Legal Grounds of Issuance” (P38)).

**Fig. 1-12 JGB Issuance Plan for FY2021 (Breakdown by Financing Methods) (④,⑤)**

(Unit: billion yen)

	FY2020 (Initial)	FY2020 (3rd supplementary Budget)	FY2021 (Initial)		
	(a)	(b)	(c)	(c) – (a)	(c) – (b)
JGB Market Issuance (Calendar Base)	128,800.0	212,300.0	221,400.0	92,600.0	9,100.0
Non-Price Competitive Auction II, etc.	7,988.4	7,738.0	8,230.0	241.6	492.0
Adjustment between fiscal years	9,673.7	37,627.5	78.2	▲ 9,595.5	▲ 37,549.3
Subtotal Financed in the Market	146,462.1	257,665.5	229,708.2	83,246.1	▲ 27,957.3
Sales for Households	4,800.0	3,200.0	4,100.0	▲ 700.0	900.0
BOJ Rollover	2,200.0	2,200.0	2,200.0	—	—
<b>Total</b>	<b>153,462.1</b>	<b>263,065.5</b>	<b>236,008.2</b>	<b>82,546.1</b>	<b>▲ 27,057.3</b>

#### (4) JGB Issuance Plan Based on Market Trends and Needs

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

The FY2021 JGB Issuance Plan increased the issuance amount for 40-Year Bonds in strong market demand from the level after the 3rd supplementary budget, while decreasing the issuance amount for 6-month bonds. As a result, the FY2021 calendar-based JGB market issuance amount is reduced from the annualized level (㉑) of total per-auction issuance amounts after increases under FY2020 supplementary budget.

As a result, the average maturity of outstanding JGBs (stock basis) at the end of FY2021 is estimated at nine years and one month.

Zones and each zone's issuance amount for Liquidity Enhancement Auctions, the issuance amount for Inflation-Indexed Bonds, etc. will be flexibly adjusted in response to the market environment and investment needs, based on discussions with market participants (Fig. 1-15).

㉑ The annualized level represents the annual total of per-auction amounts after increases (in July 2020) under the FY2020 supplementary budgets, which came to 225.2 trillion yen, up 12.9 trillion yen from the actual FY2020 issuance amount of 212.3 trillion after the 3rd supplementary budget.

㉒ In FY2021, 40-Year Bonds will be issued in May, July, September, November, January and March.

㉓ Treasury Bills (TBs) are jointly issued with Financing Bills (FBs), under unified names of Treasury Discount Bills (T-Bills).

㉔ 10-Year Inflation-Indexed Bonds will be issued in May, August, November and February. The size of 10-Year Inflation-Indexed Bonds issuance will be made flexibly, based on market conditions and discussion with market participants.

㉕ Zone-by-zone issuance amounts and other details of Liquidity Enhancement Auctions are flexibly adjusted in response to the market environment and investment needs based on discussions with market participants.

Fig. 1-13 Market Issuance Plan by JGB Types for FY2021 (㉒~㉕)

(Unit: trillion yen)

	FY2020 (Initial)		FY2020 (3rd Supplementary Budget)		FY2021 (Initial)			
	(per time)	(total ; a)	(per time)	(total ; b)	(per time)	(total ; c)	(c)-(a)	(c)-(b)
40-Year	0.5 × 6 times	3.0	0.5 × 6 times	3.0	0.6 × 6 times	3.6	0.6	0.6
30-Year	0.7 × 12 times	8.4	0.7 × 3 times 0.9 × 9 times	10.2	0.9 × 12 times	10.8	2.4	0.6
20-Year	0.9 × 12 times	10.8	0.9 × 3 times 1.2 × 9 times	13.5	1.2 × 12 times	14.4	3.6	0.9
10-Year	2.1 × 12 times	25.2	2.1 × 3 times 2.6 × 9 times	29.7	2.6 × 12 times	31.2	6.0	1.5
5-Year	1.9 × 12 times	22.8	1.9 × 3 times 2.5 × 9 times	28.2	2.5 × 12 times	30.0	7.2	1.8
2-Year	2.0 × 12 times	24.0	2.0 × 3 times 3.0 × 9 times	33.0	3.0 × 12 times	36.0	12.0	3.0
TBs		21.6		82.5		83.2	61.6	0.7
10-Year Inflation-Indexed	0.4 × 4 times	1.6	0.2 × 4 times	0.8	0.2 × 4 times	0.8	▲ 0.8	—
Liquidity Enhancement Auction		11.4		11.4		11.4	—	—
Total		128.8		212.3		221.4	92.6	9.1

Fig. 1-14 Planned TB issuance amounts by maturity

(Unit: trillion yen)

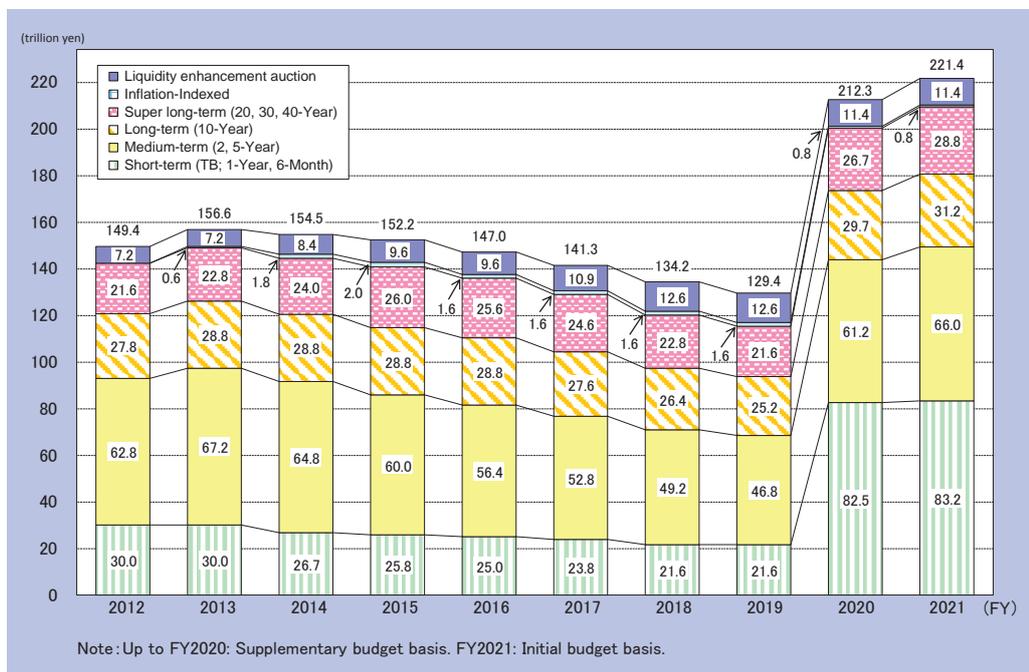
	FY2020 (Initial)		FY2020 (3rd Supplementary Budget)		FY2021 (Initial)			
	(a)		(b)		(c)	(c)-(a)	(c)-(b)	
TBs (1-Year)	1.8 × 12 times	21.6	1.8 × 3 times 3.5 × 9 times	36.9	3.5 × 12 times	42.0	20.4	5.1
TBs (6-Month)		—		45.6		41.2	41.2	▲ 4.4

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

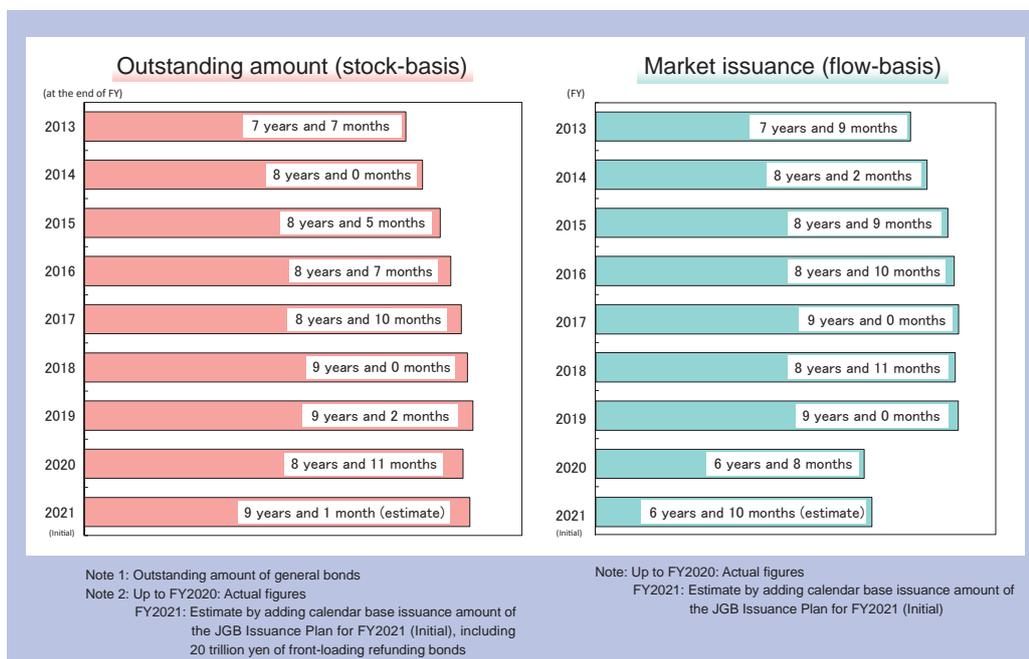
(Unit: trillion yen)

	FY2020 (Initial)	FY2020 (3rd Supplementary Budget)	FY2021 (Initial)		
	(a)	(b)	(c)	(c)-(a)	(c)-(b)
15.5-39 Year	3.0	3.0	3.0	—	—
5-15.5 Year	6.0	6.0	6.0	—	—
1-5 Year	2.4	2.4	2.4	—	—
<b>Total</b>	<b>11.4</b>	<b>11.4</b>	<b>11.4</b>	<b>—</b>	<b>—</b>

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



**Fig. 1-17 Average Maturity of JGBs**



## Column 3 Increases in FY2020 JGB Issuance and Future Outlook

### ① COVID-19 Response and Revisions to JGB Issuance Plan

Since early 2020, COVID-19 has rapidly spread mainly in urban regions in Japan and has gone rampant across the world, exerting enormous impacts on Japanese and other economies, and plunging the world economy into the worst postwar crisis. To prevent the Japanese economy from returning to a deflationary situation, to break away from deflation, revitalize the economy and thereby to secure a path to fiscal consolidation, the government formulated the Emergency Economic Measures for Response to COVID-19 (hereinafter referred to as the Emergency Economic Measures) on April 20, 2020. In response to the Emergency Economic Measures, the government formulated the 1st supplementary budget for FY2020 and the 2nd one to enhance the 1st one. Based on these supplementary budgets, the government revised the FY2020 JGB Issuance Plan on April 20 and May 27, 2020, increasing JGB issuance from July.

Later, the Japanese economy rebounded thanks to the effects of policies under the abovementioned supplementary budgets. Given that Japan had to pay attention to the COVID-19 pandemic's downside risks to Japanese and other economies, however, the government formulated the "Comprehensive Economic Measures to Secure People's Lives and Livelihoods toward Relief and Hope" (hereinafter referred to as the Comprehensive Economic Measures) on December 8, 2020. Based on the 3rd supplementary budget for FY2020 formulated in response to the Comprehensive Economic Measures, the government revised the FY2020 JGB Issuance Plan on December 15, 2020.

### ② Unprecedented Total JGB Issuance and Calendar Base Market Issuance Amounts

The 1st and 2nd supplementary budgets formulated in the spring of 2020 raised the total JGB issuance amount planned for FY2020 by 99.8 trillion yen from the initial level to 253.3 trillion yen. In response, the calendar base market issuance was increased by 83.5 trillion yen to 212.3 trillion yen. After a careful dialogue with market participants through the Meeting of JGB Market Special Participants, etc., the government substantially increased short-term bond issuance while expanding a wide range of issues in consideration of the market's JGB absorption capacity, etc.

When revising the FY2020 JGB Issuance Plan in line with the 3rd supplementary budget, the government responded to an increase of 22.4 trillion yen in Newly-Issued Bonds and implemented (i) a cut in FILP Bonds through the utilization of deposits from FILP agencies, etc. and (ii) the utilization of the adjustment between fiscal years (front-loading issuance) to prevent a further increase in the market issuance amount from the record high. As a result, the government avoided any further increase in the calendar base market issuance amount while expanding the total JGB issuance amount. For details of the revised FY2020 JGB Issuance Plan, see Fig. c3-1 and Fig. c3-2.

(Fig. c3-1) JGB Issuance Plan for FY2020

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

	Initial	2nd Supplementary Budget	3rd Supplementary Budget				Initial	2nd Supplementary Budget	3rd Supplementary Budget		
	(a)	(b)	(c)	(c)-(a)	(c)-(b)		(a)	(b)	(c)	(c)-(a)	(c)-(b)
Newly-issued Bonds	32,556.2	90,158.9	112,553.9	79,997.7	22,395.0	JGB Market Issuance (Calendar Base)	128,800.0	212,300.0	212,300.0	83,500.0	—
Construction Bonds	7,110.0	18,738.0	22,596.0	15,486.0	3,858.0	Non-Price Competitive Auction II, etc.	7,988.4	10,062.0	7,738.0	▲ 250.4	▲ 2,324.0
Special Deficit-Financing Bonds	25,446.2	71,420.9	89,957.9	64,511.7	18,537.0	Adjustment between fiscal years	9,673.7	23,902.8	37,627.5	27,953.8	13,724.7
Reconstruction Bonds	924.1	924.1	782.4	▲ 141.7	▲ 141.7	Subtotal Financed in the Market	146,462.1	246,264.8	257,665.5	111,203.4	11,400.7
FILP Bonds	12,000.0	54,200.0	40,700.0	28,700.0	▲ 13,500.0	Sales for Households	4,800.0	4,800.0	3,200.0	▲ 1,600.0	▲ 1,600.0
Refunding Bonds	107,981.8	107,981.8	109,029.2	1,047.4	1,047.4	BOJ Rollover	2,200.0	2,200.0	2,200.0	—	—
For matured Reconstruction Bonds	1,693.2	1,693.2	2,725.4	1,032.3	1,032.3	Total	153,462.1	253,264.8	263,065.5	109,603.4	9,800.7
Total	153,462.1	253,264.8	263,065.5	109,603.4	9,800.7						

- Buy-back program in FY2020 is planned to be implemented based on market conditions and through discussions with market participants.
- The maximum amount of front-loading issuance of Refunding Bonds in FY2020 is 43 trillion yen.

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

(Note 2) "JGB Market Issuance (Calendar Base)" refers to JGBs issued at face value by scheduled auctions from April to next March (normal auctions).

(Note 3) "Non-price competitive auction II is an additional issuance for JGB Market Special Participants after the normal auction (the amount assignable to each Market Special Participant does not exceed 10% of the amount awarded to it in the normal auction), and the price for the additional issuance is equal to the weighted average accepted price in the normal auction.

The amount of the non-price competitive auction II of the Initial Plan and the plan associated with the 2nd Supplementary Budget for FY2020 is calculated by multiplying the amount of "JGB Market Issuance (Calendar Base)" (40-Year, 30-Year, 20-Year, 10-Year, 5-Year and 2-Year Bonds) by 7% (the amount reflects the impact of reduction in the maximum issuance amount). The amount of the plan associated with the 3rd Supplementary Budget is calculated by multiplying the amount of "JGB Market Issuance(Calendar Base)" by 5.5% (the amount reflects its actual revenue).

(Note 4) "Adjustment between fiscal years" refers to leveling-off of the issuance amount between fiscal years through front-loading issuance and deferred issuance in the accounting adjustment term.

**(Fig. c3-2) Market Issuance Plan by JGB Types for FY2020**

(Unit: trillion yen)

	Initial		1st Supplementary Budget		2nd and 3rd Supplementary Budget			
	(per time)	(total ; a)	(per time)	(total ; b)	(per time)	(total ; c)	(c)-(a)	(c)-(b)
40-Year	0.5 × 6 times	3.0	0.5 × 6 times	3.0	0.5 × 6 times	3.0	—	—
30-Year	0.7 × 12 times	8.4	0.7 × 3 times 0.8 × 9 times	9.3	0.7 × 3 times 0.9 × 9 times	10.2	1.8	0.9
20-Year	0.9 × 12 times	10.8	0.9 × 3 times 1.0 × 9 times	11.7	0.9 × 3 times 1.2 × 9 times	13.5	2.7	1.8
10-Year	2.1 × 12 times	25.2	2.1 × 3 times 2.3 × 9 times	27.0	2.1 × 3 times 2.6 × 9 times	29.7	4.5	2.7
5-Year	1.9 × 12 times	22.8	1.9 × 3 times 2.1 × 9 times	24.6	1.9 × 3 times 2.5 × 9 times	28.2	5.4	3.6
2-Year	2.0 × 12 times	24.0	2.0 × 3 times 2.4 × 9 times	27.6	2.0 × 3 times 3.0 × 9 times	33.0	9.0	5.4
TBs		21.6		37.0		82.5	60.9	45.5
10-Year Inflation-indexed	0.4 × 4 times	1.6	0.3 × 4 times	1.2	0.2 × 4 times	0.8	▲ 0.8	▲ 0.4
Liquidity enhancement auction		11.4		11.4		11.4	—	—
<b>Total</b>		<b>128.8</b>		<b>152.8</b>		<b>212.3</b>	<b>83.5</b>	<b>59.5</b>

**Fig.1 Issuance Amounts for TBs (FY2020)**

	Initial		1st Supplementary Budget		2nd and 3rd Supplementary Budget			
	(a)	(b)	(c)	(c)-(a)	(c)-(b)	(c)-(b)		
TBs (1-Year)	1.8 × 12 times	21.6	1.8 × 3 times 2.4 × 9 times	27.0	1.8 × 3 times 3.5 × 9 times	36.9	15.3	9.9
TBs (6-Month)	—	10.0	—	10.0	—	45.6	45.6	35.6

**Fig.2 Issuance Amounts by Zones for Liquidity Enhancement Auctions (FY2020)**

	Initial		1st Supplementary Budget		2nd and 3rd Supplementary Budget		
	(a)	(b)	(c)	(c)-(a)	(c)-(b)	(c)-(b)	
15.5-39 Year	3.0	3.0	3.0	—	—	—	
5-15.5 Year	6.0	6.0	6.0	—	—	—	
1-5 Year	2.4	2.4	2.4	—	—	—	

(Note 1) The issuance amount of the latter half of the fiscal year can be changed based on discussions with market participants in response to market circumstances and issuance conditions.

(Note 2) The 40-Year bond will be issued in May, July, September, November, January and March.

(Note 3) Treasury Bills (TBs) are jointly issued with Financing Bills (FBs) , under unified names of Treasury Discount Bills (T-Bills) .The maturity of TBs, its issuance amount, and the number of auctions may be adjusted in a flexible manner in response to market circumstances and demands of investors, while the maturity and the issuance amount on the table (Figure 1) are set as a basic plan.

(Note 4) The 10-Year inflation-indexed bond is planned to be issued in May, August, November and February. The issuance amount may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.

(Note 5) The issuance amount of liquidity enhancement auction and its allocation among each zone may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants, while the issuance amount and zones on the table (Figure2) are set as a basic plan.

(Note 6) The floor of the nominal rate on coupon-bearing JGBs is planned to lower (0.1% → 0.005%) from April 2021.

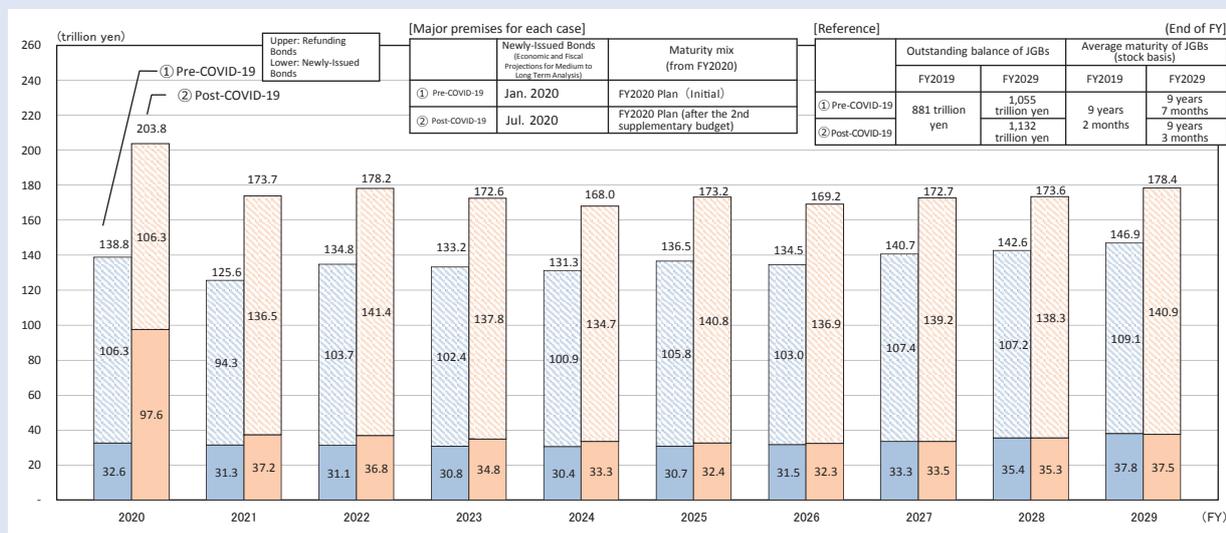
### 3 Outlook on Future JGB Issuance Amount

Fig. c3-3 and Fig. c3-4 are documents submitted by the Ministry of Finance at a meeting of the Advisory Council on Government Debt Management on November 4, 2020. Fig. c3-3 (② Post-COVID-19) estimates future JGB issuance amounts (excluding FILP and Reconstruction Bonds) under some premises, including data (Difference between Expenditures and Revenues) in the Economic and Fiscal Projections for Medium to Long Term Analysis (published by the Cabinet Office in July 2020) and the retention of the JGB maturity mix in the FY2020 JGB Issuance Plan (after the 2nd supplementary budget) for years from FY2021. As short-term and other JGB issues increased substantially in FY2020 in response to the COVID-19 pandemic are redeemed and refunded from FY2021 with the maturity mix in the FY2020 JGB Issuance Plan (after the 2nd supplementary budget) retained, the JGB issuance amount is projected to stay high with Refunding Bond issuance failing to be held down.

Fig. c3-4 indicates a Cost-at-Risk analysis (hereinafter referred to as the “CaR analysis”) to quantitatively analyze interest payments (cost) and fluctuations in interest payments (risk), or an annual average interest rate fluctuation risk accompanying refunding, etc., over the next 10 years. According to the CaR analysis, the increase in the issuance amount mainly for short-term bonds, which feature a lower fundraising cost than long-term bonds but will mature in the next year, will lead to a moderate rise of 0.12 trillion yen in annual average interest payments (cost) from the pre-COVID-19 level and a sharp increase of 0.72 trillion yen in the annual average interest rate fluctuation risk accompanying refunding, etc.

The Ministry of Finance refers to dialogue with market participants and such analyses when formulating the annual JGB Issuance Plan. The reduction of the total JGB issuance amount through fiscal consolidation efforts and the curtailment of the refunding bond issuance amount through a cut in short-term bond issuance would be important for holding down JGB issuance and interest rate hike risks accompanying refunding over the medium to long term.

**(Fig. c3-3) Estimated JGB issuance amounts (excluding FILP and Reconstruction Bonds) based on the Cabinet Office’s Economic and Fiscal Projections for Medium to Long Term Analysis (Document for the 53rd meeting of the Advisory Council on Government Debt Management (November 4, 2020))**

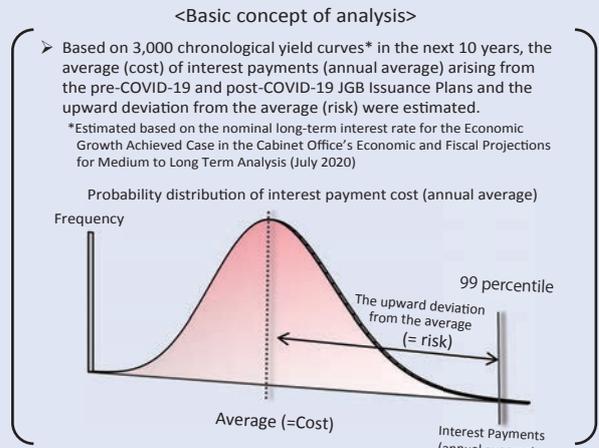
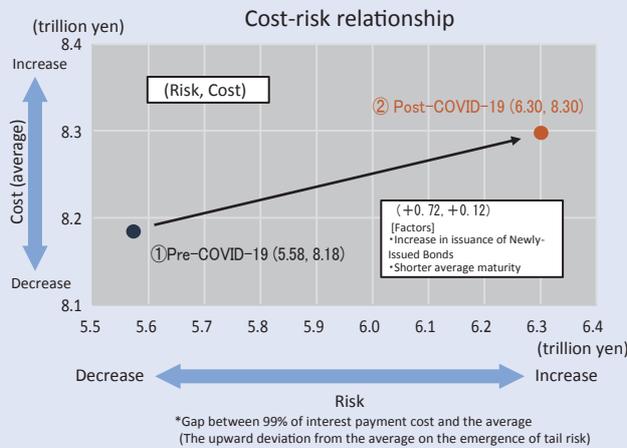


**[Other major premises]**

- Newly-Issued Bonds: Data for the Economic Growth Achieved Case in the Cabinet Office’s Economic and Fiscal Projections for Medium to Long Term Analysis (submitted to the Council on Economic and Fiscal Policy in July 2020)
- Refunding Bonds: Estimated with consideration given to the utilization of surplus funds in the Special Account of Government Debt Consolidation Fund

(Note) The maturity mix for a gap of 7.4 trillion yen between 97.6 trillion yen for post-COVID-19 Newly-Issued Bonds issued in FY2020 and 90.2 trillion yen in the FY2020 JGB Issuance Plan (after the 2nd supplementary budget) was estimated based on the maturity mix for the increase in the calendar base market issuance amount (from the initial level to the revised level after the 2nd supplementary budget).

**(Fig. c3-4) Cost at Risk analysis regarding response to COVID-19 (JGB issuance expansion)**  
 (Document for the 53rd meeting of the Advisory Council on Government Debt Management (November 4, 2020))



[Assumptions]

- Target bonds: General Bonds (excluding the Special Bonds for Covering Public Pension Funding and the Reconstruction Bonds)
- Analysis period: 10 years from FY2020
- Interest rates: A total of 3,000 interest rate paths generated by the probabilistic interest rate model (the HJM model [Note 1]) were adjusted as follows for each case.
  - [10-year JGB yield] The averages at each time point is identical to the relevant nominal long-term interest rate level for the Economic Growth Achieved Case in the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis.
  - [Other JGB yields] The averages at each time point are identical to the relevant estimates based on a simple linear regression model [Note 2] and the relevant nominal long-term interest rate level for the Economic Growth Achieved Case in the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis.
- (Note 1) The HJM model generated interest rate paths based on the current yield curve as the standard and volatility over the past 20 years (the current yield curve is as of the end of September 2020).
- (Note 2) The simple linear regression model was estimated from 10-year and other JGB yields in the past 20 years.
- Others: The premises here are the same as those for "Estimated JGB issuance amounts (excluding FILP and Reconstruction Bonds) based on the Cabinet Office's Economic and Fiscal Projections for Medium to Long Term Analysis" on the previous page.

## Column 4 Front-loading Refunding Bonds to level calendar-base market issuance

Article 47, paragraph (1) of the Act on Special Accounts, allows Refunding Bond issuance to be front-loaded up to the limit approved by the Diet to adjust or redeem JGBs in the next fiscal year.

The front-loading issuance of Refunding Bonds can level annual JGB issuance. If it is expected that Refunding Bond issuance would increase in response to the concentration of JGB redemption at maturity in a fiscal year, some part of the expected Refunding Bond issuance may be front-loaded to level annual JGB issuance. In this regard, the so-called FY2008 problem is cited. The problem refers to concentrated bond redemption at maturity in FY2008 resulting from the large-scale 10-year JGB issuance mainly for economic stimulus purposes in FY1998. If without any special countermeasure, Refunding Bond issuance would have steeply increased in the year to deteriorate the JGB supply-demand balance. To address the problem, the authorities leveled annual JGB issuance by buying back JGBs redeemable at maturity in FY2008 and sharply increasing Refunding Bond issuance from FY2004 to front-load some of the FY2005-2008 Refunding Bond issuance year by year to level the annual JGB issuance amount.

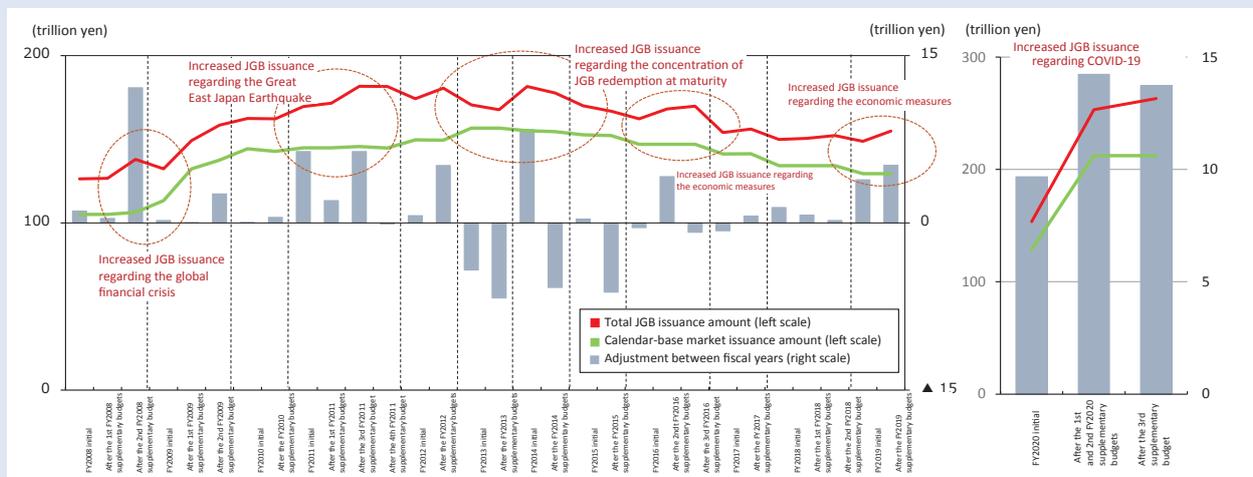
The front-loading issuance of Refunding Bonds can also moderate fluctuations in market issuance and the impact of steep fiscal spending increases or decreases in the midst of a fiscal year on the market. When a supplementary budget is formulated to increase or decrease fund demand, the calendar base market issuance amount must be revised. If Refunding Bonds to be issued in a fiscal year are scheduled to be front-loaded in the previous year, however, they may be replaced with Construction and Special Deficit-Financing Bonds, etc. required in the previous year (some revenues in the fiscal year may be treated as those in the previous year) to meet a sudden rise in fundraising demand in the previous year, allowing the calendar base market issuance amount to remain unchanged.

In this way, the authorities have tried to level the calendar base market issuance amount and ease the impact on the market of sudden rises in JGB issuance under supplementary budgets responding to emergency situations such as the COVID-19 crisis, financial crises and natural disasters. When the FY2020 JGB Issuance Plan was revised in response to the 3rd supplementary budget for FY2020, the authorities utilized the front-loading issuance of Refunding Bonds, etc. to avoid an increase in the market issuance despite a rise in the total JGB issuance amount.

In the future, the authorities will take advantage of such functions of the front-loading issuance of Refunding Bonds to conduct stable debt management policy.

(Note) The gap between the front-loading issuance amount in the previous fiscal year and that in the current fiscal year is treated as "adjustment between fiscal years."

(Fig. c4-1) Front-loading issuance of Refunding Bonds, etc. (adjustment between fiscal years) to level calendar base market issuance amount



<Front-loading issuance amount>  
\*In parentheses are the limits.

FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
5.3 (20.0)	8.1 (12.0)	17.0 (20.0)	9.6 (12.0)	11.4 (12.0)	23.3 (28.0)	28.8 (29.0)	42.3 (44.0)	45.1 (56.0)	49.4 (56.0)	52.5 (55.0)	45.1 (53.0)	9.4 (43.0)	(20.0)

(Note 1) "Front-loading issuance of Refunding Bonds in FY X" represents FY X+1 Refunding Bonds to be front-loaded in FY X.

(Note 2) "Adjustment between fiscal years" refers to leveling-off of the issuance amount between fiscal years through front-loading issuance and deferred issuance in the accounting adjustment term.