# 2 JGB Issuance Plan for FY2019

## (1) Announcement of JGB Issuance Plan for FY2019

Japan has the worst fiscal conditions among major developed countries, including outstanding general JGBs estimated at about 896.7 trillion yen for the end of FY2019 and outstanding long-term central and local government debts at 1,122 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, 2018, the Japanese government publicly announced the JGB Issuance Plan for FY2019 in line with a Cabinet decision on the draft FY2019 government budget.

When developing the JGB Issuance Plan for FY2019 where JGB issues including Refunding Bonds will total 148.7 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 October 2018 started discussions for the development of the JGB Issuance Plan for FY2019. It then discussed the significance of JGB issuance based on a medium- to long-term demand trend and a medium- to long-term view on investors' JGB demand.

- As for investors' JGB demand, it was pointed out that the government should hold down super long-term issues and increase medium- and short-term JGB issues based on changes in the duration of investors' funds for investment. It was also noted that investors' funds for investment could structurally change.
- The significance of keeping fiscal discipline was pointed out as the very low interest rate environment, which has contributed to holding down interest payments, is not destined to continue long.

At the Meeting of JGB Market Special Participants (primary dealers) and the Meeting of JGB Investors in November 2018, participants discussed details of the JGB Issuance Plan for FY2019. Main opinions were as follows:

- As for super long-term JGB issues, both JGB Market Special Participants and investors believe that the government should refrain from reducing 30- and 40-year issues that were cut in the current fiscal year since investor demands were observed, but may decrease 20-year issues that were not cut in the current fiscal year.
- As for the 10-Year or shorter zone, they roughly agree that issues in the zone could be reduced to some extent. However, they noted that the government should give consideration to 2-Year Bonds and Treasury Discount Bills for which demand is strong from foreign investors as well as Japanese banks, etc. that use these securities as collateral.
- As for Liquidity Enhancement Auctions, it is appropriate to maintain the present issuance level even amid a decrease in the total JGB issuance amount, given market conditions.

Based on discussions at these panels, the government has developed the JGB Issuance Plan for FY2019.

## (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 FY2019 budget, the MOF plans to issue JGBs worth 148.7 trillion yen, posting a decline of 1.2 trillion yen from the initial level for FY2018.

A breakdown of the FY2019 JGB issues shows that Construction Bonds and Special Deficit-Financing Bonds issues to provide revenues for the General Account Budget have been reduced by 1.0 trillion yen from the initial level for FY2018 to 32.7 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 FY2019, the government is planning to issue Reconstruction Bonds worth 0.9 trillion yen, down 0.0 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 FY2019 FILP Bonds issuance amount is set at 12.0 trillion yen, unchanged from the initial level for the previous year. 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 FY2019, the Refunding Bonds issuance amount is planned to decline by 0.1 trillion yen from the initial level of the previous year to 103.1 trillion yen.

The FY2019 JGB issuance amount, though falling from FY2018, is still very high.

**Fig.1-6 JGB Issuance Plan for FY2019 (Breakdown by Legal Grounds) (☞①～③)**

(Unit: billion yen)

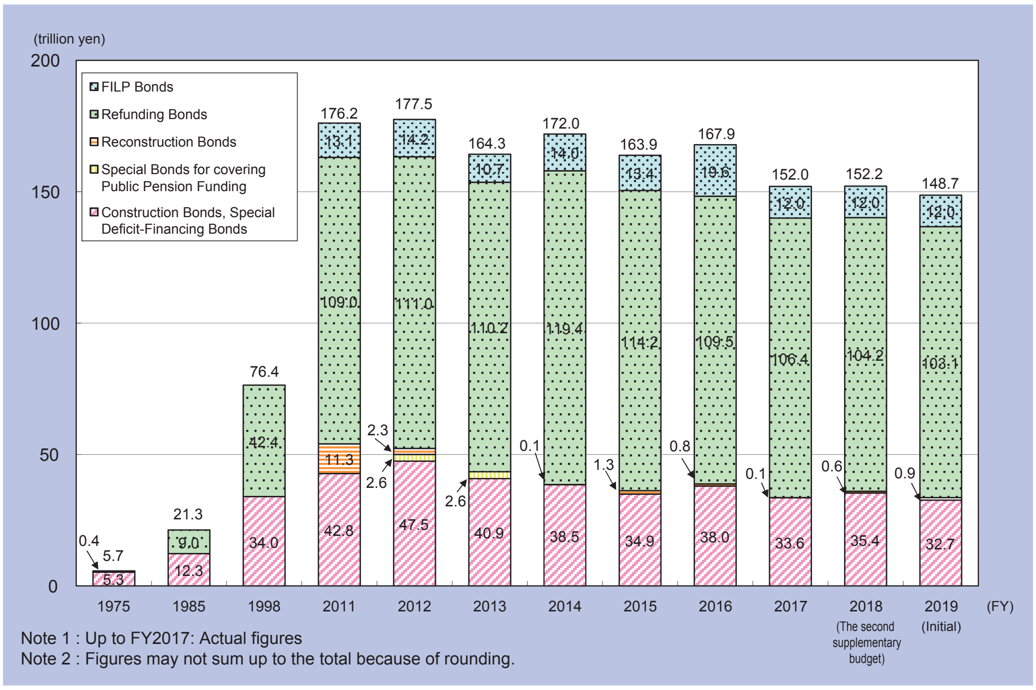
| | FY2018 (Initial) (a) | FY2019 (Initial) (b) | (b) - (a) |
|---|---|---|---|
| Newly-issued Bonds | 33,692.2 | 32,660.5 | ▲1,031.7 |
| Construction Bonds | 6,094.0 | 6,952.0 | 858.0 |
| Special Deficit-Financing Bonds | 27,598.2 | 25,708.5 | ▲1,889.7 |
| Reconstruction Bonds | 956.3 | 928.4 | ▲27.9 |
| FILP Bonds | 12,000.0 | 12,000.0 | — |
| Refunding Bonds | 103,237.1 | 103,140.4 | ▲96.7 |
| For matured Reconstruction Bonds | 1,858.7 | 1,808.0 | ▲50.7 |
| Total | 149,885.6 | 148,729.3 | ▲1,156.3 |

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

☞② The capacity for buy-back operations is up to approximately 1 trillion yen in FY2019. Details of buyback operations will be determined by considering market conditions based on a discussion with market participants.

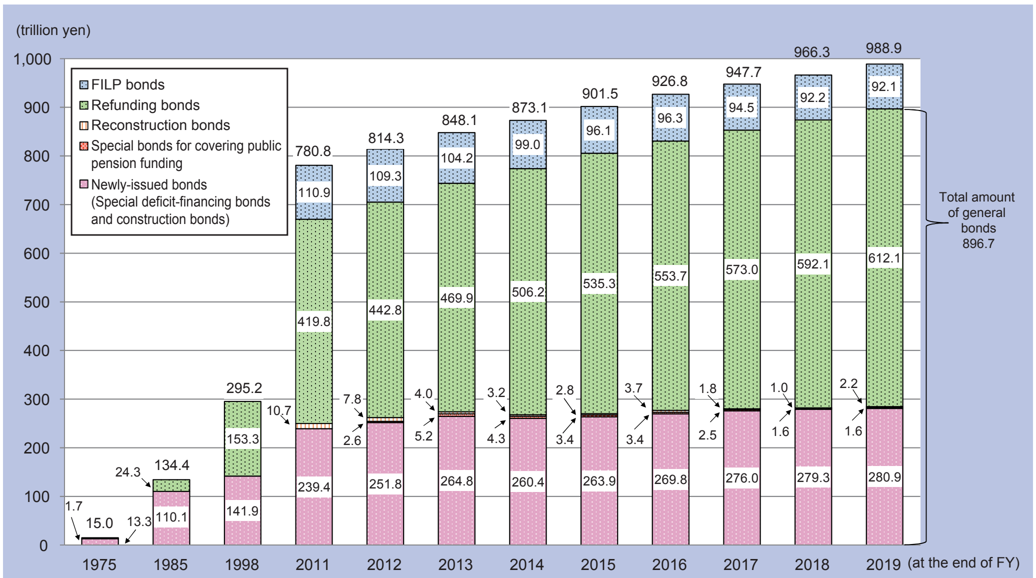
☞③ The maximum amount of front-loading issuance of Refunding Bonds in FY2019 is 53 trillion yen.

### Fig.1-7 Historical Changes in JGB Total Issuance Amount




Note 1 : Up to FY2017: Actual figures
Note 2 : Figures may not sum up to the total because of rounding.

### Fig.1-8 Historical Changes in Outstanding Amount of JGB




Note 1 : Up to FY2018: Actual Figures, FY2019: Estimate based on the JGB Issuance Plan for FY2019 (Initial), including 53 trillion yen of front-loading refunding bonds
Note 2 : Figures may not sum up to the total because of rounding.

## B. Breakdown by Issuance Methods

The FY2019 JGB issuance amount of 148.7 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 cut by 4.8 trillion yen from the initial level for the previous year to 129.4 trillion yen, with considerations given to an increase in Sales for Households.

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 8.6 trillion yen for FY2019.

Sales for Households, which widely fluctuates depending on interest rate and other trends, is set at 4.7 trillion yen, up 1.4 trillion yen from the initial level for FY2018, with current sales conditions taken into account.

“BOJ Rollover” is put at 2.2 trillion yen, down 0.3 trillion yen from the initial level for the previous year, based on the total JGB issuance amount and market conditions.

☞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 Non-Price Competitive Auction II is estimated to be 7% of the JGB Market Issuance (40-Year, 30-Year, 20-Year, 10-Year, 5-Year, 2-Year Bonds and 10-Year Inflation-Indexed Bonds) (since the supplementary budget for FY2018, results have been reflected).

**Fig.1-9 JGB Issuance Plan for FY2019 (Breakdown by Financing Method) (☞④,⑤)**

(Unit: billion yen)

| | FY2018 (Initial) | FY2019 (Initial) | |
|---|---|---|---|
| | (a) | (b) | (b) - (a) |
| JGB Market Issuance (Calendar Base) | 134,200.0 | 129,400.0 | ▲4,800.0 |
| Non-Price Competitive Auction II, and others | 8,500.0 | 8,564.0 | 64.0 |
| Adjustment between fiscal years | 1,385.6 | 3,865.3 | 2,479.7 |
| Subtotal (financed in the market) | 144,085.6 | 141,829.3 | ▲2,256.3 |
| Sales for Households | 3,300.0 | 4,700.0 | 1,400.0 |
| BOJ Rollover | 2,500.0 | 2,200.0 | ▲300.0 |
| Total | 149,885.6 | 148,729.3 | ▲1,156.3 |

☞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 front-loading issuance and deferred issuance in the accounting adjustment term. (Ref: II Chapter 1 1(1) “JGBs by Legal Grounds of Issuance” (P38))

## (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.

Maturity-by-maturity JGB issuance amounts in the FY2019 JGB Issuance Plan were reduced in a well-balanced manner for the super long-term (40-, 30- and 20-Year), long-term (10-Year) and short- to medium-term (5-, 2- and 1-Year) zones, with market needs taken into account.

Specifically, in the super long-term (40-, 30- and 20-Year) zone, 30- and 40-Year JGB issuance amounts were left unchanged after being cut under the FY2018 JGB Issuance Plan, while the 20-Year JGB issuance amount, which was kept unchanged under the previous plan, was reduced by 0.1 trillion yen per month or 1.2 trillion yen per year. As for the long-term (10-Year) and short- to medium-term (5-, 2- and 1-Year) zones, each of the 2-, 5- and 10-Year JGB issuance amounts was cut by 0.1 trillion yen per month or 1.2 trillion yen per year due to limited real demand for these securities under low interest rates (Fig. 1-10). As for 1-year issues, the government cut the monthly issuance amount by 0.2 trillion yen for Financing Bills issued for daily cash management of the National Treasury while refraining from reducing the issuance amount for Treasury Bills. Thus, the overall Treasury Discount Bill issuance amount for FY2019 was reduced by 2.4 trillion yen.

As a result, the average maturity of outstanding JGBs (stock basis) at the end of FY2019 is estimated at nine years and two months.

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. 1-11).

**Fig.1-10 Market Issuance Plan by JGB Types for FY2019 (☞①～④)**

(Unit: trillion yen)

| | FY2018 (Initial) (per time) | | | FY2018 (Initial) (total ; a) | FY2019 (Initial) (per time) | | | FY2019 (Initial) (total ; b) | (b) − (a) |
|---|---|---|---|---|---|---|---|---|---|
| 40-Year (☞①) | 0.4 | × | 6times | 2.4 | 0.4 | × | 6times | 2.4 | — |
| 30-Year | 0.7 | × | 12times | 8.4 | 0.7 | × | 12times | 8.4 | — |
| 20-Year | 1.0 | × | 12times | 12.0 | 0.9 | × | 12times | 10.8 | ▲1.2 |
| 10-Year | 2.2 | × | 12times | 26.4 | 2.1 | × | 12times | 25.2 | ▲1.2 |
| 5-Year | 2.0 | × | 12times | 24.0 | 1.9 | × | 12times | 22.8 | ▲1.2 |
| 2-Year | 2.1 | × | 12times | 25.2 | 2.0 | × | 12times | 24.0 | ▲1.2 |
| TBs(1-Year) (☞②) | 1.8 | × | 12times | 21.6 | 1.8 | × | 12times | 21.6 | — |
| 10-Year Inflation Indexed (☞③) | 0.4 | × | 4times | 1.6 | 0.4 | × | 4times | 1.6 | — |
| Liquidity Enhancement Auction (☞④) | | | | 12.6 | | | | 12.6 | — |
| Total | | | | 134.2 | | | | 129.4 | ▲4.8 |

☞① In FY2019, 40-Year Bonds will be issued in May, July, September, November, January and March.

☞② The total issuance of T-Bills, combining Treasury Bills (TB) and Financing Bills(FB), is planned at 1.9 trillion yen per issue.

☞③ 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.

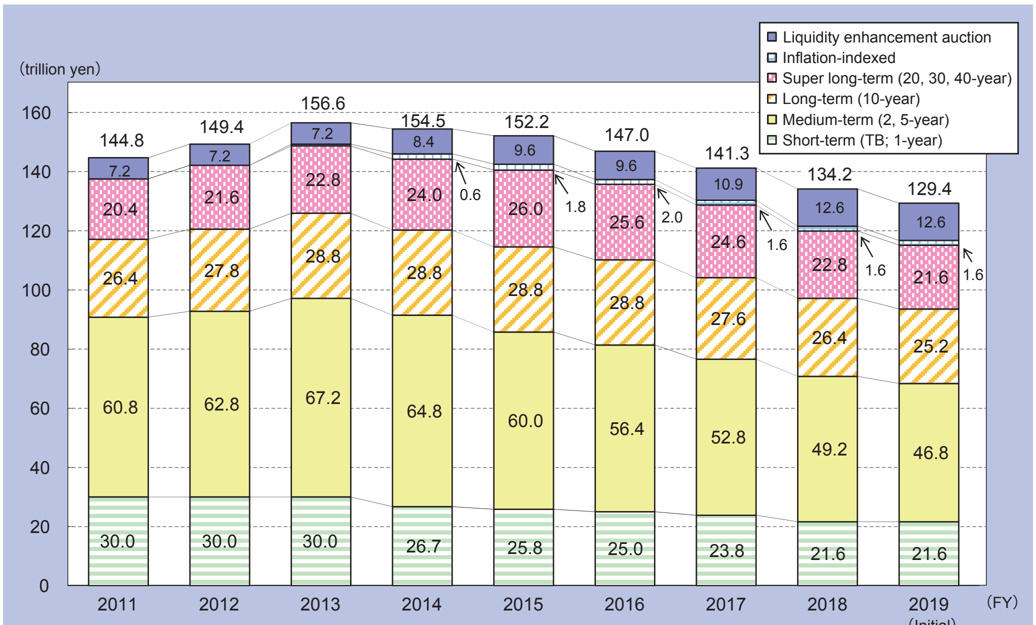
☞④ Zone-by-zone issuance amounts and other details of Liquidity Enhancement Auctions are flexibly adjusted in response to the market environment and investment needs based on discussions with market participants.

### Fig.1-11 Issuance Amounts by Zones for Liquidity Enhancement Auctions

(Unit: trillion yen)

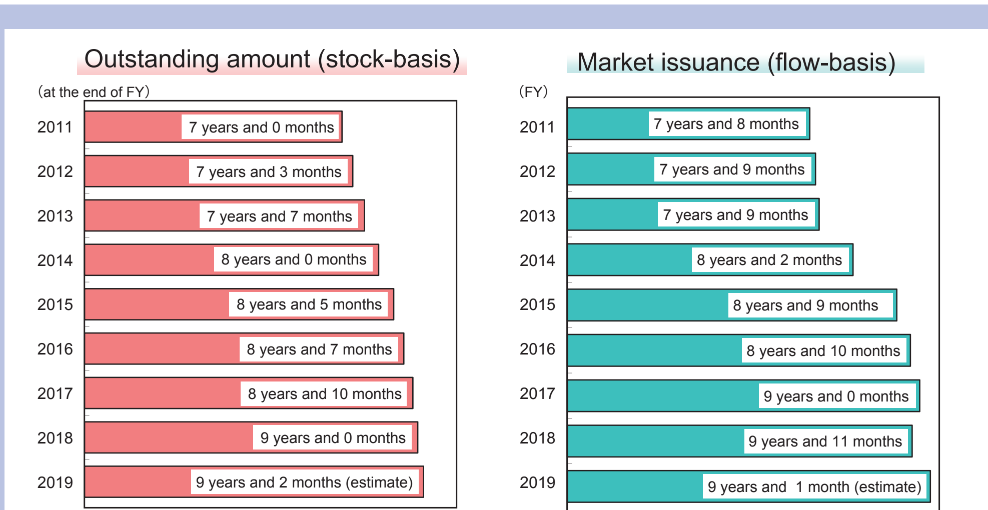
| | FY2018 (Estimate) | FY2019 (Initial) | Compared to FY2018 (Estimate) |
|---|---|---|---|
| Remaining maturities of 15.5-39 years | 3.0 | 3.0 | — |
| Remaining maturities of 5-15.5 year | 7.2 | 7.2 | — |
| Remaining maturities of 1-5 years | 2.4 | 2.4 | — |
| Total | 12.6 | 12.6 | — |

### Fig.1-12 Historical Changes in JGB Market Issuance by JGB Types




Note: Up to FY2018: Supplementary budget basis

### Fig.1-13 Average Maturity of JGBs




Note 1: Outstanding amount of general bonds
Note 2: Up to FY2018: Actual figure
FY2019: Estimate by adding calendar base issuance amount of the JGB Issuance Plan for FY2019 (Initial), including 53 trillion yen of front-loading refunding bonds

Note: Up to FY2018: Actual figure
FY2019: Estimate by adding calendar base issuance amount of the JGB Issuance Plan for FY2019 (Initial)

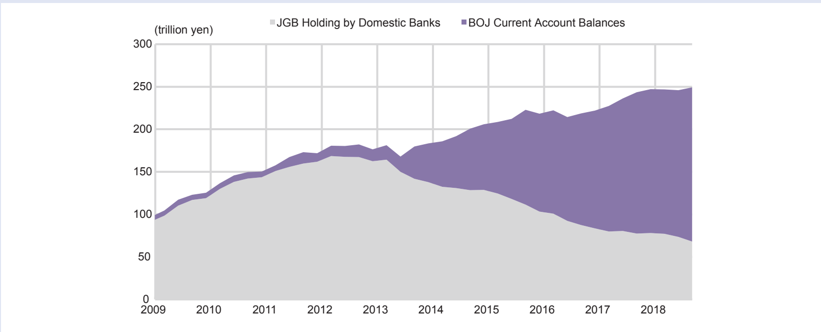
# Column 3 Investor Demand Trends
## (Trends of Financial Resources for Investment in JGBs and Their Durations)

### ❶ Demand trend by investor category

In October 2018, the Ministry of Finance convened a meeting of the Advisory Council on Government Debt Management, launching discussions towards the development of the FY2019 JGB Issuance Plan. At the meeting, the MOF explained the significance of JGB issuance based on a medium- to long-term JGB demand trend and a medium- to long-term JGB supply and demand outlook. The following focuses on the trend of investors' JGB demand.

Banks are a major investor source for medium- to long-term JGBs. Since the Bank of Japan launched quantitative and qualitative monetary easing in FY2013, banks have substantially reduced JGB holdings. This is because interest rate drops have made it difficult for banks to gain profit on JGB holdings. As it was pointed out that banks are required to hold some JGBs to be used as collateral, the reduction has decelerated.

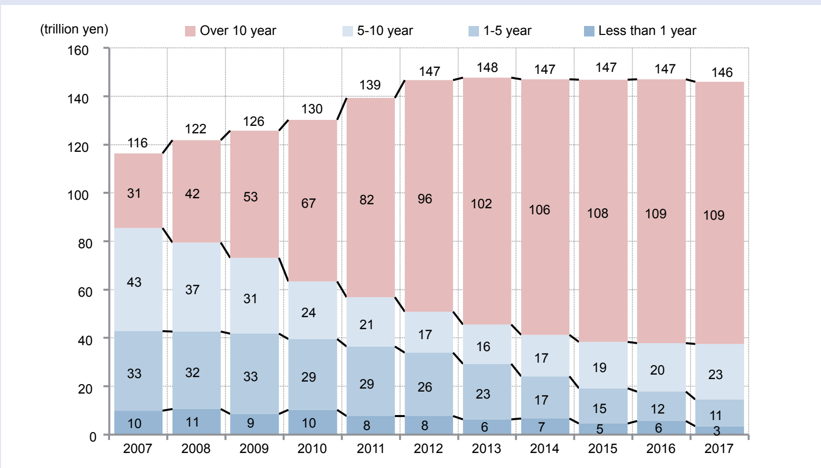
**Fig.c3-1 Domestic Banks' BOJ Current Account Balances and JGB Holdings**




Note 1: "Domestic banks" includes "City banks," "Regional banks" and "Second-tier regional banks."
Note 2: Figures are quarterly averages. The figure for the 3rd Quarter of 2018 is based on July and August data.
(Sources) Bank of Japan "Financial Institutions' Accounts," "BOJ Current Account Balances by Sector"

Life insurance companies are a major investor source for super long-term JGBs. In recent years, life insurance companies, while increasing JGB holdings, have switched JGB holdings from medium- to long-term issues to super long-term issues to extend asset durations and match asset and liability durations. In the past few years, however, their JGB holdings expansion has come to a pause. This is because matching asset and liability durations under the present low interest rate environment could lead yields on JGB holdings to remain below promised yields on insurance products with profit margins locked to negative.

**Fig.c3-2 Fiscal Year-end JGB holdings by Life Insurance Companies**

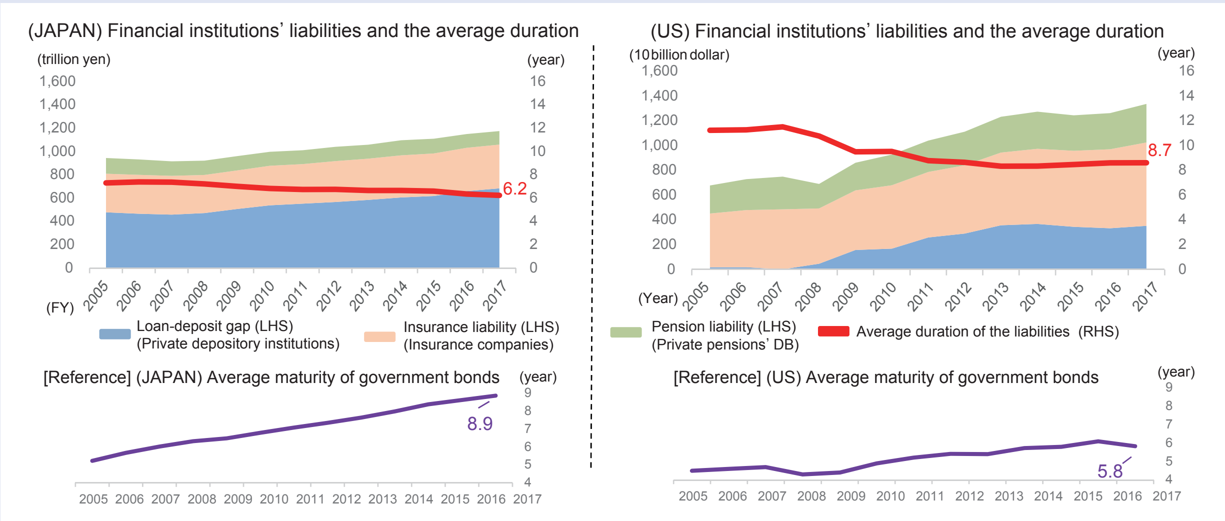



(Sources) Companies' disclosures (All member companies of the Life Insurance Association of Japan)

### ❷ Trends of financial resources for investment and their durations (Japan-U.S. comparison)

Coming next is an analysis on overall market financial resources for investment in government debt issues and their durations. Fig. c3-3 compares Japanese and U.S. durations of financial resources for investment in government debt issues at depository institutions, life insurance companies and pension funds. Weighted average durations of the three investor categories have been computed to automatically calculate the duration of their overall financial resources available for investment in government debt issues. Such financial resources are a loan-deposit gap at depository institutions, insurance liability at life insurance companies and private sector defined-benefit pension plan liability at pension funds.

**Fig.c3-3 Trends of Financial Resources for Investment in Government Debt Issues and Their Durations (Japan-U.S. Comparison)**




Note 1: The loan-deposit gap is calculated as the difference between loans and deposits of private depository institutions.
Note 2: Assumed durations (years):
Loan-deposit gap: 0.5 (the MOF's estimation based on the disclosures from major private depository institutions in Japan and the U.S.)
Insurance liability: 14.0 in Japan, 11.3 in the U.S. (cf. BOJ "International comparison of insurance companies", 2017 (in Japanese))
Private sector defined-benefit pension plan liability: 15 in Japan, 12 in the U.S. (The U.S. figure is from TBAC (FY2017 2Q). The MOF assumes Japan's figure considering
TBAC estimates (12 in the U.S. and 20 in the U.K.)
Note 3: The average durations of government debt issues are on a stock basis. Data for Japan represent the average duration of outstanding General Bonds.
Data for the U.S. include short-term (one-year and shorter) bills.
(Sources) BOJ "Flow of Funds," FRB "Financial Accounts of the United States," OECD

As the indirect financing sector's weight is great in Japan, with depository institutions accounting for a large share of financial resources available for investment in government debt issues, the average duration of such financial resources in Japan is shorter than in the U.S. The U.S. average duration has shortened on the expansion of the loan-deposit gap since the financial crisis. Recently, however, it has remained flat.

Financial resources for investment in government debt issues are those with potential to be invested in such securities. They may not necessarily be invested in such securities. Therefore, the average duration of financial resources for investment in government debt issues cannot be simply compared with that of government debt issues. In Japan, which has more short-term financial resources than the U.S. for investment in such securities, the average duration of government bonds subject to investment of these financial resources is longer than in the U.S., indicating the possibility that investors are potentially carrying interest rate risks.

Government debt issuance authorities are required to analyze and identify the trend of each investor category's demand and the whole picture of investors' demand, anticipate a medium- to long-term trend of demand, and try to stably issue government bonds.