

Minutes of the Meeting of JGB Market Special Participants
(78th Round)

- Date: Tuesday, November 20, 2018 (4:00 p.m. to 4:45 p.m.)
- Place: Special Conference Room 3, Ministry of Finance
- Gist of the Proceedings

1. JGB Issuance Plan for FY2019

▶ The Financial Bureau gave the following explanation about the JGB Issuance Plan for FY2019.

(Discussions of the meeting of the Advisory Council on Government Debt Management (October 22) (i)(Explanation by the Financial Bureau))

▪ The Advisory Council on Government Debt Management, which held a meeting on October 22, is a forum for discussions about an issuance policy not for the immediate future but for a medium- to long-term policy. Before starting an exchange of opinions about the JGB Issuance Plan for the next fiscal year, we will inform you about the discussions held at the advisory council's meeting.

※ Regarding the debt management office's explanation at the Advisory Council on Government Debt Management, please refer to the minutes of the Advisory Council on Government Debt Management. (Attachment)

(Discussions of the meeting of the Advisory Council on Government Debt Management (October 22) (ii)(Summary of the day's discussions))

▪ Regarding the issuance amount per maturity, an attendee of the meeting expressed the view that issuance maturities should be reviewed and revised in the medium term in view of the fact that the average maturity of Japanese government bonds (JGBs) is deviating from the duration of investors' investment funds and has been longer compared with the average maturity of government bonds in other countries. On the other hand, another attendee suggested that attention should be paid to the possibility that the situation will change as a result of the large-scale Outright Purchases of JGBs by the Bank of Japan (BOJ) and a change in fund investment by the household sector due to the aging of society.

▪ With respect to the market's liquidity, an attendee expressed the view that the situation will improve if the BOJ takes action more proactively.

- Regarding the increase in the balance of the front-loading issuance of Refunding Bonds, many attendees requested the reduction of the balance. However, some attendees recognized the significance of keeping the balance at a certain level in light of the current monetary and fiscal situations.

▶ Summarized below are the views and opinions presented by the attendees:

- With respect to the long-term and super long-term zones, we believe that there is room for a decrease concerning 10-Year and 20-Year Bonds. For both maturities, the amount of the Outright Purchases of JGBs is large, and in our view, as a result, an unnecessary volatility is arising in the market and the market's price-discovery function is declining. In that sense, we expect that if the issuance amount is reduced, mainly for 10-Year and 20-Year Bonds, and if Outright Purchases of JGBs amount is reduced accordingly, the market's liquidity will be restored and its price-discovery function will be strengthened.

In the short-to-medium-term zones, there is room for a decrease with respect to both 2-Year and 5-Year Bonds. However, it may be better for the market if the issuance amount for 2-Year Bonds is kept at the current level, with priority given to the reduction of the issuance amount for 5-Year bonds, in order to give domestic investors with demand for collateral a wider range of options when overseas investors' demand is concentrated on T-Bills because of the widening of the negative margin of USD/JPY basis swap spreads.

- In light of the current market environment, it would be better to reduce the issuance amount for the medium-term, long-term, and super long-term zones in a well-balanced manner.

In the super long-term zone, if the current investor demand is taken into consideration, there is room for a decrease of around ¥100 billion per auction regarding 20-Year Bonds, rather than 30-Year and 40-Year Bonds.

In the medium-to-long-term zones, there is room for a decrease regarding all of 2-Year, 5-Year, and 10-year Bonds.

With respect to Liquidity Enhancement Auctions, we request the debt management office to maintain the current issuance amounts because there is stable demand in each zone.

- It is possible to reduce the issuance amounts of 5-Year, 10-Year, and 20-Year Bonds. As for the demand-supply condition, the important thing is a balance between a decrease in

the Outright Purchases of JGBs and a decline in the issuance amounts.

- As for 30-Year and 40-Year Bonds, we request the debt management office to maintain the current issuance amounts because there is stable demand from investors with a long duration on the liabilities side and also because there has been an impact of the reduction in the current fiscal year.

On the other hand, regarding 20-Year Bonds, in our view, it is possible to reduce the issuance amount by ¥100 billion per auction. Regarding 10-Year Bonds, it is also possible to reduce the issuance amount by ¥100 billion per auction. However, as the yield on 10-Year Bonds is not only the monetary policy target but also a common benchmark interest rate, it would be better to keep the market size and the issuance size at a certain level. Therefore, over the coming several years, it would be better to avoid reducing the issuance amount per auction to less than ¥2 trillion.

With respect to the short-to-medium-term zones, investors' demand for 5-Year Bonds is not strong in the past several years, and thus, there is more room for a decrease in the issuance amount regarding 5-Year Bonds than regarding 2-Year Bonds because investment in 2-Year Bonds is made to meet demand for use as collateral in many cases. It is possible to reduce the issuance amount of 1-Year T-Bills.

- In the super long-term zone, there is demand from real-money investors, while there is no visible demand in the medium-term zone, where interest rates are negative, particularly for 5-Year Bonds. Therefore, there is sufficient room for a decrease in the medium-term zone. In the super long-term zone, there is demand for 30-Year and 40-Year Bonds, therefore if reduction is necessary, the issuance amount of 20-Year Bonds should be reduced. In any case, attention is focused on the reduction not only of the issuance amount but also of the amount of the Outright Purchases of JGBs.

As for 10-Year Bonds, whose yield is the monetary policy target, there is the risk of the timing of the reduction of the amount of the Outright Purchases of JGBs being delayed, so it may be better to lower the priority of reducing the issuance amount of 10-Year Bonds compared with 2-Year, 5-Year, and 20-Year Bonds.

With respect to Liquidity Enhancement Auctions, we request the debt management office to maintain the current issuance amount.

For Inflation-Indexed Bonds as well, ¥400 billion per auction is the right issuance amount. Therefore, if the demand-supply balance is disrupted, it may be better to respond by increasing the Buy-back amount.

- As for 30-Year and 40-Year Bonds, they are supported by investor demand, and the room for the BOJ to reduce the amount of Outright Purchases of JGBs if the issuance amount is reduced will be small, so we request the debt management office to maintain the current issuance amount.

It is possible to reduce the issuance amount of any bonds with shorter maturities, but in particular, investors' demand for 5-Year Bonds are the weakest at the current interest rate level. There are various opinions with respect to 10-Year Bonds because they are a deliverable issue for JGB futures and also because the yield is the monetary policy target, but there will be a room for a decrease if an issuance amount of ¥2 trillion per auction can be secured. With respect to 20-Year Bonds, the demand-supply balance is not quite unfavorable. However, as the BOJ's Outright Purchase ratio is high, there is ample room for a decrease in the issuance amount in light of the existence of room for a decrease in the amount of the BOJ's Outright Purchase operations.

With respect to 2-Year Bonds, as the demand-supply balance for T-Bills is prone to change, it would be better to maintain a certain issuance amount in light of the need for domestic investors to use 2-Year Bonds for the purpose of collateral. Even so, there is room for a decrease of around ¥100 billion per auction.

With respect to Liquidity Enhancement Auctions, we request the debt management office to maintain the current issuance amount or increase it depending on the situation. Regarding the Inflation-Indexed Bonds, the demand-supply condition is not favorable, but if the issuance amount is further reduced from the current level, it will become very small. Therefore, we would like to recommend that the current issuance amount should be maintained and that if the demand-supply balance needs to be adjusted, that the adjustment should be made through a change in the Buy-back amount.

- For 30-Year and 40-Year Bonds, there is demand, including potential demand, from end-investors, so it would be better not to reduce the issuance amount. Regarding other maturities, demand is weak in the medium-term zone, particularly for 5-Year Bonds, which carry a negative interest rate. Until the BOJ's Monetary Policy Meetings at the end of July, there was demand for 10-Year Bonds, which carry a positive interest rate, but almost no demand in the medium-term zone. However, we have the impression that since that meeting, the demand gap has been somewhat shrinking. In consideration of that point, it may be better to reduce the issuance amount bit by bit universally across all maturities.

- For 30-Year and 40-Year Bonds, the room for a decrease in the amount of the Outright Purchases of JGBs is shrinking, so we request the debt management office to maintain the

current issuance amount. It would also be better to maintain the current issuance amount of T-Bills, as demand from overseas investors is very strong. Priority should be given to the reduction of the issuance amounts of 5-Year and 20-Year Bonds among JGBs with other maturities. With respect to 10-Year and 2-Year Bonds, in our view, there is also ample room for a decrease of around ¥100 billion per auction.

- Regarding the reduction of the issuance amount, priority should be given to 5-Year, 10-Year, 20-Year and 2-Year Bonds in that order. Almost the only buyers of all these bonds are those who are purchasing them with an eye to the BOJ's Outright Purchase, while 30-Year and 40-Year Bonds and T-Bills are clearly in demand from end-investors. However, in our view, 2-Year Bonds should be given a lower reduction priority than bonds with other maturities, as this sector is prone to be affected by the tightening of the demand-supply balance of T-bill.

- With respect to 5-Year Bonds, the issuance amount is large compared with JGBs with other maturities, so in our view, a decrease of around ¥100 billion per auction will not have an impact on the market. In addition, in order to reduce the monetary policy's impact, it may be better to reduce the issuance amount for maturities for which the BOJ Outright Purchase ratio is high. In our view, it is possible to reduce the issuance amount of 5-Year and 10-Year Bonds as the BOJ Outright Purchase ratio for these JGBs is relatively high.

- In light of the situations of over-the-counter trading and auctions, we request a decrease in the issuance amounts of 5-Year and 2-Year Bonds. However, if the issuance amounts of those JGBs are reduced, the reduction of the issuance amount will be disproportionately concentrated in the medium-term zone. Therefore, we request a decrease in the issuance amount of 5-Year Bonds in the medium-term zone and in the amounts of 20-Year and 10-Year Bonds in the long-term and super long-term zones.

In our view, it is not necessary to reduce the issuance amounts of 30-Year and 40-year Bonds, as their issuance amounts were already reduced steeply in the current fiscal year. If the issuance amount of 40-Year Bonds is to be reduced, the debt management office may consider it an option to reduce the number of auctions per year for 40-Year Bonds to four and increase the issuance amount per auction from ¥400 billion to ¥500 billion, which will result in a decrease of ¥400 billion per year.

The current issuance amounts should be maintained with respect to the Liquidity Enhancement Auctions and Inflation-Indexed Bonds.

- At the recent interest rate levels, reducing the issuance amounts of 5-Year, 10-Year, and 20-Year Bonds will be appropriate. However, if consideration is given to a future phase of an interest-rate rise, the mismatch between the duration at issuance and the duration of liabilities is a problem. Therefore, from a medium- to long-term perspective, it would be better to reduce the issuance amounts of 20-Year, 30-Year, and 40-Year Bonds and increase the issuance amounts of JGBs with shorter maturities.

- With respect to the JGB Issuance Plan for the next fiscal year, in our view, it is possible to reduce the issuance amount in any sector. Even so, for 30-Year and 40-Year Bonds, the current issuance amounts should be maintained because they are expected to be in demand from domestic investors in a future phase of an interest-rate rise and also because their issuance amounts were reduced in the current fiscal year. In particular, if the issuance amount per auction of 40-Year Bonds, which is currently ¥400 billion per auction, is reduced further, volatility will be high at the time of auctions, which means that reducing the issuance amount will be difficult.

As for Liquidity Enhancement Auctions, we request the debt management office to increase the issuance amounts in the zone with 1-5 years remaining to maturity if possible. Regarding 5-Year Bonds in particular, there is a liquidity gap between the current and the other issues. Therefore, we request the debt management office to reduce the issuance amounts of the current issues of 5-Year and 2-Year Bonds and, in exchange, increase the issuance amount in the 1-5-remaining-year zone to maturity to ¥500 per auction, or more desirably ¥600 billion, if the auction frequency remains unchanged at once every other month.

2. Latest JGB market situation and outlook for future

- ▶ Summarized below are the views and opinions presented by the attendees:

- Because of Brexit-related news reports and a dovish comment by the FRB's vice chairman, overseas markets have recently shown volatile movements. We are paying particular attention to how the FRB will move, and in our view, the prospect of a halt to the FRB's raising of interest rates next year will affect life insurance companies' investment policy. If the risk-off trend continues and if the FRB indicates an intention to halt interest rate hikes, resulting in the start of a yen-appreciation phase, life insurance companies may shift to investment in open foreign bonds, rather than purchasing JGBs, which carry low

interest rates. Therefore, in our view, it may be still too early for the JGB yield curve to bull-flatten. However, unless yen-appreciation starts, life insurance companies will have to shift back to JGBs.

On the other hand, we expect that as a result of the BOJ reducing the amount as part of the flexibilization of its JGB's Outright Purchase, the market will move toward steepening and the recent bull-flattening market trend will be short-lived.

- After the BOJ tolerated the expansion of the range of long-term interest rates at the Monetary Policy Meeting at the end of July, interest rates rose temporarily, but recently, the interest rate level has been falling back. There is talk that in that process, the bond market's liquidity and functionality may be improving. In our view, it is a good sign that yen interest rates are starting to move almost in a way similar to the movement of US interest rates. However, even if US interest rates fall further, it will be difficult for yen interest rates to decline further. Therefore, although the bond market's liquidity and functionality improved temporarily, transactions are not yet being conducted at prices fully reflecting real demand. We expect that the market's attention will continue to focus on the BOJ's moves.

(Attachment)

Minutes of the Advisory Council on Government Debt Management (48th Round)

1. Date: Monday, October 22, 2018 (1:00 p.m. to 2:45 p.m.)

2. Place: Ministry of Finance Special Conference Room 3,

3. List of the Proceedings

1. Bank of Japan's monetary policy
2. Current debt management policy

1. Bank of Japan's monetary policy

First, Deputy Director-General Nakaone from the Bank of Japan (BOJ) explained the bank's monetary policy (Document 1), after which the members exchanged opinions on that topic.

- Views expressed by the members have been summarized (by the Financial Bureau) below.
 - Since the results of monetary policy do not easily extend to elderly people, effectiveness of such policy will be reduced as the population ages, which require further monetary easing. How is the BOJ going to address the demographic change?

Explanation from the BOJ:

- We are addressing the issue with an expectation of positive effects of complete exit from deflation on macroeconomic problems, including enhancement of growth potential.
- The policy revisions on July 31 expanded the fluctuation range for long-term interest rate. Since the revision happened after a period of fixed-rate environment, it will probably lead some speculative movements. When making future policy revisions, it will be more important than ever to engage in dialogue with the market.

- Furthermore, although the policy revisions on July 31 recovered the market to some extent, Quantitative and Qualitative Monetary Easing with Yield Curve Control is controlling long-term interest rate as they do to the policy rates, which contradicts the function of the market. From this perspective, it is very useful to hear an explanation today from the BOJ regarding this matter.
- While it is true that the policy revisions on July 31 did temporarily restore the function of the JGBs market, recent interest rate has shown little movement —not once has it reached the maximum range of $\pm 0.2\%$. This is because, in terms of stock, the BOJ now owns about 45% of JGBs.
- Meanwhile, the share of Treasury bonds holdings by the US Federal Reserve will soon fall below 10% because of the FRB's reduction of Treasury bonds holdings and increase of bonds issuance. Although the economic conditions of the US and Japan are different, the US has been broadening its maneuvering room for policy changes, as a preparation for the next economic peak.
- The current monetary policies of Japan are lacking flexibility compared to those in the US; how does the BOJ prepare for the various risks that may occur in the future?

Explanation from the BOJ:

- We agree with that the monetary policies have inflexibility. However, we, the BOJ, believe that the most important goal of the BOJ is to achieve the price stability target of 2%. The shortest way to achieve the goal is to maintain a positive supply-demand gap. We therefore take measures within the scope premised by the goal, though we are searching for options that obstruct the market as little as possible.
- Some say that introducing negative interest rates while the bank spread is extremely narrow will force regional banks to take on further risks to increase their profits, resulting in a sort of moral hazard. What are the BOJ's thoughts on this?

Explanation from the BOJ:

- As noted in April's financial systems report, our analysis presents that financial institutions are increasing their lending to middle-risk businesses to ensure profits under the strengthened pressure of shrinking profit margins from lending. Although, proper risk management is critical when lending money to businesses with relatively high risk, our analysis shows that it is not necessarily being conducted.
- The policy revisions on July 31 did in fact restore the function of the bond market to some extent. However, even though the BOJ announced that they have expanded the fluctuation range for long-term interest rate to $\pm 0.2\%$, many people only acknowledge the revision as raising of interest rate. That makes us feel that there is a gap between the operation of the BOJ's monetary policies and the way in which they are interpreted. It is needed to be explained more that this is a hybrid policy for expanding the fluctuation range in both directions.

2. Current debt management policies

Next, the Financial Bureau explained the current debt management policies (Document 2), after which members exchanged opinions on that topic.

- Below is a summary of the Financial Bureau's presentation.

(Basic approach)

- In order to achieve stable and smooth issuance and minimize financing costs, we have to issue bonds based on market demands. However, excessive response to temporary demands may harm the predictability for market participants, which may raise financing costs, with the investors requiring certain risk premium.
- Since continuous issuance of large amount of bonds is expected in Japan, it is particularly important to aim for stable issuance by ascertaining trends in demand over the medium and long terms.

(Current bond issuance and future forecasts)

- As a result of lengthening of weighted average maturity of JGB issues in recent years,

both the amount of Refunding Bonds issuance and the total JGB issuance have decreased, despite an increase in the outstanding amount. In addition, although the supplementary budget for FY2018 contains a 700 billion yen increase in Construction Bonds and an equivalent increase in the total JGB issuance amount (revenue for this fiscal year), calendar-based market issuance remains unchanged because the amount of front-loading Refunding Bonds for the next fiscal year has been simultaneously reduced by 700 billion yen.

- Under the recent low-interest circumstances, we have decreased the issuance amount of short- and medium-term bonds and increased the issuance amount of super long-term bonds. While this has remarkably increased the outstanding amount of super long-term bonds due to its small amount of redemption, the outstanding amount of medium-term bonds was decreased.
- This has steadily lengthened the weighted average maturity of JGBs in terms of both stock and flow. With the exception of England, where investment in super long-term bonds is popular due to pensions, JGBs now have the longest average maturity of any major nation. The approaches for weighted average maturity is different from country to country. The US and Germany have enacted policies to stabilize their current levels of weighted average maturity, rather than attempt to lengthen it even further. On the other hand, England and France are continuing with efforts to lengthen the weighted average maturity of their bonds.
- Future estimates of JGB issuance amount shows that the issuance amount of Refunding Bonds in the next fiscal year is expected to be 101.3 trillion yen, which is roughly the same amount as this year. It will transit in a stable way around 100 trillion yen in the following years as well. Also, assuming the distribution ratio of issuance amount in each term continues as FY2018, the average maturity will be lengthened steadily because while medium-term bonds are redeemed, the net supply of super long-term bonds is maintained at a large scale.

(Investor trends)

- Since FY2013, when the Quantitative and Qualitative Monetary Easing policy began, the amount of outstanding bonds held by banks has decreased significantly. However, that decrease in outstanding amount has begun to stall. As the BOJ analyses, banks have identified a need to maintain a certain amount of JGBs for collateral and other purposes, which makes it critical to fully understand their investment trends when considering future supply and demand for the medium- and long-term zones.

- Life insurance companies have been increasing their holdings since 2008, lengthening the duration of their assets by replacing their medium-and long-term bonds with super long-term bonds. However, for the past two or three years, the increase of outstanding amount of super long-term bonds held by these companies have slowed down, who had supported an overall rise in outstanding amount for those super long-bonds. It was because continuing matching the duration of their assets with liabilities under the low interest rate circumstances will fix the negative spread, which means that lengthening of the duration of their assets may resume if interest rates rise. On the other hand, the Financial Services Agency has pointed out that revenue from insurance premiums may decrease and new insurance needs may appear as population demographics shift in the future. Because such transitions in insurance demand will have a certain impact on the liability duration of life insurance companies, it is imperative to understand how the liability of these companies will change in the future, both qualitatively and quantitatively.
- Our analysis of potential funding sources for JGBs across the entire market indicates that indirect finance comprises a large part of the financial sector, with relatively large amount of short-duration funds, in Japan. It results in the duration of potential funding sources being 6.2 years, shorter than the 8.7 years of the US. While potential funding sources are merely funds that have the potential to be invested in JGBs and should not be directly compared to JGBs duration, it is important to note that the weighted average maturity of JGBs is lengthened even though Japan has more short-duration funds than the US.

(Current liquidity of the JGB market)

- JGBs transaction volume and turnover ratio seem to show a slight recover in terms of JGB market liquidity recently, though investors' activity had been continuously declining. Although investors generally rated the market as low-functioning on the survey by the BOJ, there has been some recent improvement there as well.
- Yet liquidity from a micro point of view, the transaction availability of individual bonds remains low. The GC-SC spread rose significantly in March of last year. While it abated temporarily, it has recently begun increasing again. The amounts of bid accepted for the Securities lending Facility by the BOJ are also increasing lately.
- While one reason for this tightening of supply-demand balance for specific bonds is that market supply is mainly current bonds (such as 5-Year Bonds and 10-Year Bonds), the BOJ's purchases include off-the-run bonds other than these, which results in supply-

demand imbalance for some specific bonds. Liquidity Enhancement Auctions, which issue additional bonds according to those off-the-run needs, will therefore continue to play a major role.

(Issuance plan estimates)

- By comparing actual results to the estimates made at the time the JGB Issuance Plan was formulated, we see that the amount of funds raised will be more than required if economic measures are taken during the fiscal year as in FY2016. However, even though such measures are not taken, tax revenue may be higher than the initial expectation and annual expenditures may go unused due to the conservative estimates made at formulating the plan, and in many cases the requisite funding will actually be less. With regard to the financing methods, it should be noted that bonds are issued based on the actual sales by “Non-price-competitive auction II” and “Sales for households,” which means the totals listed in the plan are merely estimates. Since those estimates are also made in a conservative way, the actual issuance amount tends to exceed the initial estimates. In order to keep the predictability in the market, calendar-based market issuance should not be reduced. Rather, issuance should be conducted as outlined in the plan, which means that funding surpluses occur easily.
 - This has led the issuance amount for front-loading Refunding Bonds to climb from 28.8 trillion yen at the end of 2014 to 49.4 trillion yen at the end of the last fiscal year, an increase of about 20 trillion yen over a three-year period. While we are working on making the estimates more refined in terms of issuance amount by financing method, we also need to utilize front-loading Refunding Bonds to control calendar-based market issuance to some extent.
- Views expressed by the members have been summarized (by the Financial bureau) below.
- From a prudence point of view, we need to observe how the weighted average maturity of government bonds is being lengthened compared to the liability duration of financial institutions and life insurance companies. Further analysis and examination are needed because small and medium financial institutions and regional banks may be affected if the current state of JGB issuance continues.
 - Front-loading Refunding Bonds were originally issued as a buffer that preserved a

stable JGBs issuance amount and maintained market function in cases where there were swings in issuance amount due to the effects of economic measures or fluctuating tax revenue caused by business cycles.

- While they have now reached a scale that is difficult to justify under that reason alone, we have to recognize that this is due to the current unique financial and fiscal state. The critical thing is that, while interest payment costs are kept at a low level at present by this unconventional monetary easing, the process of exiting those policies may conversely lead a tremendous shock to the market. A buffer is important to prepare for such an event. Moreover, while our aging population is experiencing a decline in birth rates that is unprecedented even among developed countries, our tax system is not suited for these demographic changes and no progress has been made on social security reform, which means that we need a sizable buffer from a public finance point of view as well.
- There is a risk that an inverted discussion might be raised that being able to issue such amount of front-loading bonds means there is a room for increases in annual expenditures, which is concerned. It is therefore imperative that we accurately explain to the public the significance and necessity of front-loading Refunding Bonds and prevent it from leading increases in annual expenditures.
- While it is important to carefully observe discrete trends in demand from banks and life insurance companies, who are the main investors of JGBs, it was difficult to ascertain the current situation from a macro point of view. The information on page 16 is therefore very meaningful. Because the expansion of a gap between assets and liability duration will have future effects over the long term, it is essential to keep in mind the state of affairs described by these preliminary calculations when considering the issuance plan for the next fiscal year.
- Although it is true that the buffer of front-loading Refunding Bonds is needed, 50 trillion yen is too much, which should be reduced to a more reasonable amount.
- While there has been a slight shift toward improvement in the liquidity of the JGB market, the GC-SC spread is still wide when respective JGBs issuance is considered. What is the BOJ's idea about the tightened supply-demand balance for particular bond issues when conducting its purchase operations?

Explanation from the BOJ:

- As you've noted, even though liquidity has improved on the macro level, there are still some shortages of respective bonds, particularly those are scarce in the market. The BOJ has been addressing those issues by Securities Lending Facilities, by which financial institutions can purchase bonds from the BOJ, while their efforts for procurement is premised.
- I suppose that the fragmentation of the JGBs market has been proceeding further than before between short to medium-term zone, where the holding share of banks is large, and long to super-long-term, where life insurance companies and a part of pensions are the major investors. This fragmentation is also needed to be taken into account when formulating issuance plans in the future.
- (Regarding page 16 of Document 2) While the weighted average maturity of Japanese government bonds is longer than the asset duration of financial institutions, the opposite situation is true in the United States. This implies that the structure of Japan's financial sector is vulnerable to rising interest rates, which is consistent with previous assessments. Moreover, with its large amount of JGBs purchase, the BOJ is the one that carries the most risk of the situation suddenly shifting and interest rates rising.
- The recent ultra-low-interest environment has enabled the substantial amount of front-loading Refunding Bonds issuance. However, it should be recognized that such blessed circumstances will not continue forever and fiscal discipline is needed to be taken into account when considering this.
- The weighted average maturity of JGBs has now exceeded eight years, which surpasses other developed nations except the UK and could even reach ten years in the future. One of the challenges is how to adjust the weighted average maturity to be matched to the global standard. The only way is to increase the amount of short to medium-term bonds issuance while decreasing that of super-long-term bonds since adjustment by buy-back operation in a large scale is difficult.
- I believe the stock effect of the BOJ's policy has had a considerable impact on the market liquidity.

When considering bonds consumption over next five years, for example, we must

not lose sight of foreign investors. As Italy has been evaluated by the market based on the fiscal discipline of EU, I suppose some benchmarks are needed for assessing the progress of Japan's macroeconomic policy.

- The outstanding amount of front-loading Refunding Bonds are now approaching 50 trillion yen, which is quite a considerable amount. In addition to a decrease in Special Deficit-Financing Bonds and Fiscal Investment and Loan Program (FILP) Bonds due to unused annual expenditures, that large amount include above-par issuances as well as increases from initial estimates for JGBs for Retail Investors and Non-price-competitive auction II. The Financial Bureau is involved in a number of recent initiatives regarding the latter, but we can't say the same about the former. Shouldn't we devise a scheme that can eliminate both of these through matched orders, like with Buy-back operations for example?
- Although the outstanding amount of front-loading Refunding Bonds is 50 trillion yen, which seems large compared to the flow-based issuance amount, the amount might not necessarily be too large if compared to the stock-based outstanding amount.

Explanation from the Financial Bureau:

- Since it is impossible to decrease front-loading Refunding Bonds in a short time, this is a problem that will take time to resolve. It is also important to note that our goal with front-loading Refunding Bonds is to systematically even out the issuance amount for the current and next fiscal years.
- As the BOJ's monetary policies are designed to target interest rates, it is inevitable that liquidity decrease to some extent. In addition to that, another factor lowering liquidity is the lack of established practices of fails in settlements. Also, while trades which remove distortion of the yield curve by borrowing of bonds from federal banks without limits, it is the impression we get from JGBs. I suppose that more flexible lending by the BOJ will improve liquidity.
- Fiscal discipline is retreating amidst these low interest rates, as evidenced by the target year for fiscal consolidation being postponed from 2020 to 2025 as well as the fact that achievement of primary balance surplus was positioned to be the same level goal as

stable reduction of government debt outstanding. I hope that the existence of front-loading Refunding Bonds does not lead a weakened fiscal discipline.

- It was explained that the “regular and predictable issuance of bonds” is the goal of the US. However, it is rather a principal than a goal. This strategy, adopted in the mid-1970s and still in place today reflects the lesson that tactical issuance of bonds does not lead to reductions in costs. It is also the optimal way to ensure stable market liquidity. While in Japan, the MOF has been expanding Liquidity Enhancement Auctions as the BOJ’s massive JGB purchase operations continue, it is better to be based on the general principle of “regular and predictable.”

- If we examine supply and demand for life insurance companies over long term, it is clear that the working age population will decline. On the other hand, the number of 65 or older will increase with life expectancy extending to 85 or 90 years. This will create demand for asset management with a duration of 20 to 30 years. For instance, demand for annuities, health insurance, and long-term care insurance is being enhanced while demand for conventionally sold products like term insurance with death benefits decreases. Those new needs are currently being met by insurance denominated in foreign currencies. However, such situation will change if the interest rate for 30-Year Bonds increases.

- (Regarding page 16 of Document 2) There is a significant gap between deposits and loans at depository institutions, which account for a big part of the potential capital for JGBs investment as a whole. However, we should note that the share held by life insurance companies may increase over the medium and long term by meeting the demand generated by aging population.

- By considering the integrated balance sheet of BOJ and the government, duration of the government sector’s liability is shortened. Therefore, it can be said that BOJ is bearing interest rate risk.

- To determine the optimal level for front-loading Refunding Bonds, we should consider the burden that they will place on future generations.

- Fiscal discipline will be stabilized by adopting an approach in which tax rates are modified according to the outstanding amount of JGBs. We need to look at annual revenue and expenditures through the lens of a simultaneous equation.

- Regarding the effects that rising interest rates will have on the management of regional banks, the merger issue as well as the decisions of the Japan Fair Trade Commission regarding it are also important. It is worth watching because it may affect demand structure of the JGB market.