Minutes of the Meeting of JGB Market Special Participants
(75th Round)

- Date: Thursday, March 22, 2018 (4:00 p.m. to 5:00 p.m.)
- Place: Special Conference Room 3, Ministry of Finance
- Gist of the Proceedings

1. Issuance amount of Inflation-Indexed Bonds in the April - June 2018 quarter

▸ The Financial Bureau gave the following explanation about the issuance amount of Inflation-Indexed Bonds in the April - June 2018 quarter:

・As regards Inflation-Indexed Bonds the JGB Issuance Plan for FY2018 says on page 3 that "the debt management office flexibly adjust issuance amounts taking into consideration opinions exchanged with JGB market participants, the market environment and investment demands" for making four issuances in the year (in May, August, November, and February) by the per-issuance amount of ¥400 billion. Therefore, today we would like to hear your opinions about the issuance amounts in the April - June 2018 quarter.

・For the January - March 2018 quarter, as shown on page 4, we conducted the auction for the issuance amount of ¥400 billion in February, and Buy-back Auctions in the amount of ¥20 billion, respectively. On page 5, we see that bonds were issued at lower prices than the market expected in the February auction as stock prices in foreign and domestic markets plummeted and investors sought to avert risk; however, it appears that purchases were made following the auction and we do not believe there are any particular problems with supply and demand. Auctions for Buy-backs and purchase operations by the Bank of Japan (BOJ) continue to produce stable results as the global inflation forecast moves closer to bottoming out (page 6).The secondary market has continued to be stable over the past months with the BEI around 0.5% as shown on page 7.

・In such circumstances, we asked for your opinions beforehand and found that many of you are concerned about the continuing limited expansion of the investor base for Inflation-Indexed Bonds, therefore being of the opinion that the debt

management office should desirably maintain for the April - June quarter the current issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions.

・In view of such a situation, as shown on page 8, we are considering issuing Inflation-Indexed Bonds in the April - June quarter in the amount of ¥400 billion in May and carrying out Buy-back Auctions in the amount of ¥20 billion in the even-numbered month of the even-numbered months (April and June), in the same amount as the January - March quarter.

・In addition, each March we discuss the reopening rule and the auction method for Inflation-Indexed Bonds during the next fiscal year. Our current thought is to reopen only one issue for a year via single-price auction, just as we did in FY2017.

・We consider the development of the Inflation-Indexed Bond market to be an important part of the JGB Management Policy and would therefore like to hear your opinions regarding the issuance amount and related matters for the April - June quarter.

▸ Summarized below are the views and opinions expressed by the attendees:

・We agree to the proposal. Since January, BEI has transitioned stably to a level of 50 bps. The timing of February's auction coincided with chaos in the stock market, which led to those bonds being issued when the BEI was around 52 bps; however, following that we witnessed purchases being made while the market was down, so it is being stably supported at the lower prices. We therefore see no problems with maintaining the current issuance amount of ¥400 billion. We would also like ¥20 billion Buy-back Auctions to be implemented in the even-numbered months, the same as they are now. Reopening one issue per year is the best approach considering market liquidity and the amount of bonds in the market. Based on the market's level of maturity, we would like auctions to continue to be held in the single-price format.

・We agree to the proposal. While the auction in February was sluggish, demand from investors to purchase at lower prices has subsequently increased. If even more bonds had been sold following the auctions, we might have needed to consider different ways of responding to that; however, in light of the present situation we would like to maintain the current issuance amount. We believe that a fixed issuance

amount for each bond is instrumental in improving liquidity, so the proposed format for reopening is good. In terms of moving away from issuing via the single-price auction format, we think that 40-Year Bonds should probably be first on the list.

・We agree to the proposal. As far as we can see, there was more demand for buying on cheaper price following the auctions, and we get the impression that bonds will be suitably purchased if their prices are low. If we take into account that the amount of bonds remaining in the market will decrease due to Buy-back Auctions and BOJ Outright Purchases following the auctions, it is difficult to imagine reopening more than a single issue per year. We would like the auctions to be held in the single-price format because that makes it easier to generate demand from foreign investors. We think that single-price auctions are also easier to participate in since morning prices and winning bids can differ significantly, as we saw in the February auctions.

・As current BEI is low and core CPI has recently risen to 0.9%, we feel a slight relaxing of supply and demand. We therefore wonder if increasing Buy-back amounts to ¥40 billion for each even-numbered month might be a good idea. However, this recent deterioration in demand-supply condition is not severe and we do not see any problems with maintaining the status quo as the proposal.

2. Liquidity Enhancement Auctions for the April - June 2018 quarter

▸The Financial Bureau provided the following explanations regarding the Liquidity Enhancement Auctions for the April - June 2018 quarter:

・As indicated on page 10, the FY2018 JGB Issuance Plan states the following about Liquidity Enhancement Auctions:
(1) While the operating assumption is that the total annual issuance amount will be ¥12.6 trillion(¥2.4 trillion for the 1 - 5 - remaining - year zone, ¥7.2 trillion for the 5 - 15.5 - remaining -year zone, and ¥3.0 trillion for the 15.5 - 39 - remaining - year zone),
(2) ultimately, “based on discussions with market participants, the issuance amount for each zone would be adjusted flexibly manner in response to the market environment and investment demands”.
Accordingly, we request you to discuss the issuance amount for each zone in the

April - June quarter.

・As shown on page 11, in the January - March quarter we issued ¥300 billion in January and March for the 1 - 5 - remaining - year zone, and ¥550 billion in each month for the 5 - 15.5 - remaining - year zone, and ¥400 billion in February for the 15.5 - 39 - remaining - year zone, as in the October - December quarter.

・Page 12 and after shows the results of the Liquidity Enhancement Auctions. Each zone exhibited stable results.
・When we heard opinions under these conditions about the Liquidity Enhancement Auctions for the April - June quarter from the JGB Market Special Participants in advance, there were many opinions that we should increase the issuance amounts in a balanced way for all zones, as stipulated in the FY2018 JGB Issuance Plan.

・In view of such a situation, we have prepared our proposal for each zone's issuance amount during the April - June quarter (see page 15). We are considering issuing ¥400 billion in May for the 1 - 5 - remaining - year zone, ¥600 billion each month for the 5 - 15.5 - remaining - year zone, and ¥500 billion in April and June for the 15.5 - 39 - remaining - year zone.

・Based on today's discussion, we will decide the issuance amount for each zone of the Liquidity Enhancement Auctions in the April - June quarter, and so we would like to ask for opinions.

▸ Summarized below are the views and opinions expressed by the attendees:

・We agree to the proposal. While demand for the 1 - 5 - remaining - year zone to maturity has increased somewhat due to short covering by securities companies, there are not any bonds experiencing a conspicuous tightening of demand-supply condition. We desire an issuance amount that is reflected by the market.

・Although the proposal is fine, our company feels that a larger increase—¥500 billion in the even-numbered months— for the 1 - 5 - remaining - years zone to maturity would be better; the longer than remaining 15.5 years to maturity zone could be issued in the amount of ¥500 billion in the even-numbered months, while the 5 - 15.5 - remaining - year zone to maturity could maintain its current monthly

level of ¥550 billion. What we are seeing from our over-the-counter transactions is that the demand-supply condition for the 1 - 5 - remaining - year zone to maturity is especially severe compared to the other maturities, which is currently causing a great deal of problems when market-making the zone. In addition, this zone produces particularly strong results in the Liquidity Enhancement Auctions. Naturally, we believe that it is necessary to increase issuance amounts for all of the zones, but increasing them in order of supply priority is desirable from the viewpoint of smoothing out the liquidity of the market.

・Some are of the opinion to maintain current issuance amounts for the 5 - 15.5 - remaining - year zone to maturity; however, the demand-supply condition has recently become quite tight for the cheapest issues in futures: those within the 7 - 10 - remaining - year zone to maturity. We would therefore like to maintain an issuance amount of ¥600 billion each month for the 5 - 15.5 - remaining - year zone to maturity. Increasing the issuance amounts for each zone in a balanced manner will help improve liquidity.

・We have no objections to the proposal. Opinions may be divided regarding the 1 - 5 - remaining - year zone to maturity, but we believe the proposal is best in terms of balancing the issuance amount for each zone.

・We see no problems with the proposal. We imagined a similar distribution when we discussed the issuance amounts for each maturity of interest-bearing bonds for the next fiscal year, and since we believe in particular that the decrease in 30-Year Bonds and 40-Year Bonds and the increase in the longer than remaining 15.5 years zone to maturity for the Liquidity Enhancement Auctions went hand in hand, the proposal is a good one. In terms of the demand-supply condition, the tightest zone is the 1 - 5 remaining - year zone to maturity followed by the 5 - 15.5 - remaining - year zone to maturity; to improve those, we prefer modifying the quota for each maturity in the JGB Issuance Plan rather than adjusting the issuance amounts for each zone in the Liquidity Enhancement Auctions.

3. Method of reopening and auction

▸ The Financial Bureau gave the following explanations about the reopening

method and auction:

・Shown on page 17 onwards are the plans that we formulated in consideration of your opinions we had heard in advance for carrying out the reopening method for FY2018.

・Since FY2015 we have kept reopening 10-Year Bonds in each case where the difference between the coupon rate of its new issue and its market yield on the auction date roughly is not wider than 30bps. Upon hearing your opinions in advance we learned that some of you suggest the bonds be reopened in principle for the purpose of securing its market balance per issue while, others indicate that in a circumstance where interest rates fluctuate to a great extent issuing a new 10-Year Bond and generating demand among investors will serve for a stable issuance of JGBs.

・In consideration of the investors who continue to support the current method, and from the viewpoint of ensuring the market balance of each issue and improving the liquidity of 10-Year Bonds (which are deliverables for futures transactions), we are thinking about maintaining the status quo for FY2018 and issuing by way of a reopening if the difference between the bond coupon rate and the market yield on the date of auction is within approximately 30 bps.

・Since the vast majority of you support the method system of reopening 20-Year Bonds, 30-Year Bonds, and 40-Year Bonds, we are considering four issues of 20-Year Bonds and 30-Year Bonds per year and one issue of 40-Year Bonds per year, just as was done in FY2017.

・As decided based on your discussions at the meeting in June of last year, we are planning to transition interest-bearing bonds (5-Year to 30-Year) with large redemption months (March, June, September, and December) to a T+1 settlement system, which means that 5-Year to 30-Year Bonds issued in June will be repaid in March. Therefore, if we reopen an issue four times per year, the relationship between the issue month and the redemption month will be as indicated by the underlined section in the document. We plan to issue a single time for four months of bonds (March, April, May, and June) then issue as normal starting in July with a single issue for three months of bonds.

・Regarding the auction method for 40-Year Bonds, some of you previously suggested that we should maintain the current single-yield (Dutch-style) method while others recommended transitioning to a multiple-price(conventional) method .

・Those who were in favor of maintaining the single-yield auction noted that the investor base for 40-Year Bonds is limited compared to 20-Year and 30-Year Bonds, which causes the supply and demand for those bonds to become biased due to seasonal changes and to be relatively low liquidity. Some also remarked that single-yield auction contributes to the stable issuance of these bonds because they are close to the yield curve.

・On the other hand, investors who desire a transition to multiple-price auctions stated that doing so would not present any problems because it has been ten years since we began issuing 40-Year Bonds and liquidity in secondary markets is more robust than it was initially. Some also pointed out that single-yield auctions create the risk of buying at an inflated price since they often produce strong results relative to actual market yields.

・While we recognize that the market for 40-Year Bonds has developed over the ten years since they were introduced, the investor base for these bonds is limited compared to bonds with other terms and their price fluctuations tend to be one-sided. In light of this current situation, we believe that achieving stable issuance by maintaining the current single-yield method is the best approach, as many of you noted. Page 18 therefore indicates our proposal for continuing with the single-yield auction for 40-Year Bonds in FY2018.

・Since we would like to make a final determination regarding the reopening rules as well as the auction method for 40-Year Bonds based on discussions at this meeting, we would like to hear your honest opinions regarding these matters.

▸ Summarized below are the views and opinions expressed by the attendees:

・We agree to the proposal. Regarding 10-Year Bonds, we request the debt management office to consider investors and maintain the current method rather than reopening as a general rule. This is preferable because setting coupons close to actual yields will generate more demand from investors in situations where interest

rates rise to a certain extent. We have no objections to the reopening rules for 20-Year Bonds, 30-Year Bonds, or 40-Year Bonds.

Regarding the auction method for 40-Year Bonds, we request the debt management office to stay with the single-yield method. The investor base for 40-Year Bonds is limited compared to 20-Year Bonds and 30-Year Bonds. And since investor demand for 40-Year Bonds has a seasonal aspect to it, the current single-yield auction method is better for achieving stable issuance.

・Basically, we agree to the proposal. As the amount of Outright Purchases of JGBs is expected to decrease, the current reopening rule for 10-Year Bonds can ensure a suitable market balance if interest rate fluctuations stay within their current range, and we therefore do not see any advantages in forcing a transition to reopening as a general rule at this time. The current method is also preferable because it can set coupons in accordance with actual yields in order to generate a certain level of investor demand amidst rising interest rates. We would also like a single annual issue of 40-Year Bonds since the issuance amount will decrease for the next fiscal year.

We request the debut management office to maintain the single-yield method for 40-Year Bonds. It is true that the market for 40-Year Bonds has developed over the ten years since they were introduced. Nevertheless, the stable issuance they enjoy at present is partially supported by low volatility, and since demand for this bond term varies significantly in practice according to season, maintaining the current auction method is preferable once we consider the stability of future consumption if volatility increases.

・Basically, we agree to the proposal. Regarding 10-Year Bonds, we feel that reopening them in such a way as to prevent the disparities between demand and supply among the different bond terms from growing too large is the better approach in the current situation where the majority of purchases are made by BOJ Outright Purchases. However, because the current method can virtually guarantee a reopening under the monetary policies presently in effect, maintaining the status quo seems better once we consider the possibility that large disparities between coupons and market yields may cause some investors to feel inconvenienced in future situations where interest rates increase. We do not see any particular problems with the conventional approach of reopening 20-Year Bonds, 30-Year Bonds, and 40-Year Bonds as a general rule.

We request the debt management office to continue using the single-yield auction method for 40-Year Bonds. Compared to 20-Year Bonds and 30-Year Bonds, the investor base for 40-Year Bonds has not expanded to an entirely sufficient degree, and we are seeing varying levels of demand at each auction. Given the circumstances, staying with the single-yield method is preferable for maintaining stable issuance.

・Basically, we agree to the proposal. Regarding the reopening rules for 10-Year Bonds, we feel that it is difficult to achieve a balance between market liquidity and the distribution of book value (an investor need) but that the current reopening rule provides a suitable compromise between the two. Of course, banks will find it difficult to invest if bonds are issued through reopening when their coupons and market yields differ by 30 bps or more. If by any chance the liquidity of the cheapest issue becomes insufficient, it should be possible to resolve that problem by strengthening the zone through Liquidity Enhancement Auctions.

Since we do not believe the current single-yield auction method for 40-Year Bonds has led to strong results that make it difficult for investors to participate, maintaining this auction method for the next fiscal year is fine.

・We have no objections to the proposal. As for 10-Year Bonds, there are some concerns about the liquidity of the cheapest futures issue; however, it is better to generate investor demand by modifying coupons in cases where interest-rate levels change dramatically. Maintaining the current reopening rules for 20-Year Bonds, 30-Year Bonds, and 40-Year Bonds is fine.

We agree with the idea of maintaining the single-yield method for 40-Year Bonds. While the liquidity of 40-Year Bonds has improved, we feel that the single-yield auction method is preferable under the current circumstances because the investor base for this bond term is still limited compared to 20-Year Bonds and 30-Year Bonds.

・We have no objections to the proposal of reopening rules.

We request the debt management office to continue with the single-yield auction method for 40-Year Bonds. We've been told that this method, which is the same used for US Treasury Bonds, is easier to understand and more familiar to foreign investors, who are growing increasingly aware of the super long-term zone.

・We prefer that 10-Year Bonds are reopened as a general rule because we feel that the demand-supply condition tightens the more the market undergoes large shifts. On the other hand, responding to the needs of investors is extremely important. In addition, increasing the amounts issued through Liquidity Enhancement Auctions is another option for dealing with the tight demand-supply condition, so continuing with the current reopening rule won't cause any problems.

Based on the market's current liquidity and transactions, we believe it may be possible to transition to a multiple-price auction method for 40-Year Bonds; but considering that their issuance amount will decrease for the next fiscal year, it is probably best to wait another year or so and see how the situation plays out. It will not hurt to verify that there is not any tightening of the demand-supply condition or other market stability problems before switching auction methods.

・We agree to the proposed reopening rules for 10-Year Bonds, 20-Year Bonds, 30-Year Bonds, and 40-Year Bonds.

Regarding the auction method for 40-Year Bonds, we agree the proposal because we believe that it is best to have the support of most market participants before making such changes. Still, we do think that it is about time to begin looking for a way to make the transition to multiple-price auctions. Under the current single-yield method, we have witnessed discontinuity in the prices that form before and after an auction; this has created a tendency among some investors to forgo participating in auctions and instead make their purchases on the secondary market. As a result, the prices before and after auction are becoming further discontinued, which is hindering expansion of the investor base. Although the traditional single-yield auction method gives us a sense of security, there is a chance that post-auction prices will fluctuate even more significantly if the disparity between auction results and market yields continues to grow. We would therefore like to transition to a multiple-price method sometime in the future to ensure smooth issuance that conforms to a variety of market conditions.

・We agree to the proposed reopening rules for 10-Year Bonds, 20-Year Bonds, 30-Year Bonds, and 40-Year Bonds.

As we have reached the ten-year mark since 40-Year Bonds were introduced, we think that it is time to transition to a multiple-price auction method for them. Investor demand for 40-Year Bonds might lag behind that for other bond terms, but it has gradually increased. And since the issuance amount for these bonds will

decrease next fiscal year, we predict that sufficiently stable issuance can be achieved even under a multiple-price method. Moreover, we are concerned that the single-yield method will lead to strong auction results that create market instability.

・We would like to switch to reopening 10-Year Bonds as a general rule. To be sure, it is not that we do not understand the assertion that investor demand can be generated by matching coupons to actual yields—we simply believe that securing market liquidity systematically through a triple issue is a better approach than one where a single-issue bond becomes the cheapest in the future. The BOJ's monetary policies are currently having an effect, and we have heard some say that the 0.1% coupons will not change; but since we have sufficient reason to believe that these policies will be amended in the second half of the upcoming fiscal year, it could be a good time to begin reopening as a general rule.

We think that auctions for 40-Year Bonds should transition from the single-yield method to the multiple-price method. Considering that the investor base for 40-Year Bonds has expanded significantly in the ten years since they were introduced as well as the fact that their issuance amount will decrease for the next fiscal year, we would like to make the switch at this time.

4. Latest JGB market situation and outlook for future

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

・While the FRB raised interest rates by 0.25% on March 21, they maintained its prediction for raising interest rate three times this year in dot chart. However, the opinions of those twelve committee members are starting to split, with half anticipating three increases this year and half anticipating four increases. We expect the strong possibility of a shift toward four times a year.

With regard to the European Central Bank (ECB), the opinions of hawks and doves are beginning to converge. While the latter tends to approve of ending quantitative monetary easing within the year, the hawkish tone regarding the early termination of quantitative monetary easing has weakened amidst the recent strength of the euro. Therefore, there may be some movement toward exiting those policies.

As far as the BOJ's monetary policies are concerned, it is hard to imagine any immediate revisions being made. Since core CPI needs to continue to stay above 1%

for a certain period of time, making even minute policy adjustments would be difficult right now.

In such circumstances, there are fears that interest rates in the JGB market will move only within a narrow range and the investor base will fail to expand, as well as concerns that we will lose the ability to forecast market prices and the fiscal discipline.

・Although interest rates in the JGB market temporarily rose this February, they declined again by a strong yen and low stock prices as well as the opinion within the market that the possibility of monetary policy changes has declined due to the results of the conference about the BOJ governor and deputy governor posts. There is a growing perception that we may not expect significant changes in interest rates over the next year, either.

This summer, the government plans to indicate its road to fiscal consolidation, and there is an expectation that it will hold discussions sometime between now and the end of the year regarding a large-scale fiscal package to accompany the consumption tax increase. We should probably keep a close eye on whether these factors cause the demand-supply balance within the market to collapse.

The latest topic is the widening of the dollar LIBOR-OIS spread. Funding costs for the dollar continue to rise and the funding status of Japanese investors has not improved. As differences in interest rates among different currencies grow, the questions of how to control funding costs and how to choose investments continue to be very important.

・The yield curve has flattened recently, and we get the impression that more and more investors are feeling that they have to purchase longer-term bonds. Between now and the end of the fiscal year, JGBs with relatively high coupon rates that were purchased as investments in the past will be redeemed, and some investors are telling us that they will have to purchase longer-term bonds from the start to ensure their income gain. That creates the potential for the yield curve to flatten even further.

While it is possible that the long-term interest rate targets of the monetary policies will be revised if prices rise to some extent (even if that inflation doesn't reach 2%), investors will not generate earnings if they continue to adopt a wait-and-see approach out of concern over that, and we therefore believe that they will ultimately have no choice but to buy a certain amount of JGBs during the next fiscal year as

well.

Furthermore, if the government declares that the economy has overcome deflation, some within the BOJ might wonder whether maintaining the current monetary policies is the best approach, and we need to continue the investment with concerns over changes to the policy framework.

5. Explanations from the Financial Bureau

▸The Financial Bureau explained the treatment of standard yields and prices for Liquidity Enhancement Auctions and Buy-back Auctions.

・Liquidity Enhancement Auctions and Buy-back Auctions use the Reference Statistical Price［Yields］ for OTC Bond Transactions(statistics) published by the Japan Security Dealers Association for the date of the auction. At our meeting last September, there were some questions about the handling of situations when those statistics are not published. We have coordinated with the BOJ to reconsider the procedure for handling such situations.

・The BOJ released a statement clarifying how it handles its Outright Purchase of JGBs on March 15, and you can find the information related to the treatment of Liquidity Enhancement Auctions and Buy-back Auctions on page 20.

・First, if the statistics for all bonds being issued in the auction are unpublished, the values from the prior business day for each bond will be used.

If the statistics for some of the bonds being issued in the auction are unpublished, the values from the prior business day will be used in the case of Inflation-Indexed Bonds and Floating-Rate Bonds, while the values for other bonds will be estimated using the statistics published for other bonds on the same date.

That estimation method is as follows: Of the bonds that have the same redemption date as the unpublished bond, the one with the highest interest rate will be used (if there is no bond with the same redemption date, the bond with the closest redemption date that falls after the redemption date of the unpublished bond will be used). In these cases, the actual values to be used will be published the day of the auction on the Ministry of Finance website.