Minutes of the Meeting of JGB Market Special Participants
(80th Round)

・Date: Friday, March 22, 2019 (4:00 p.m. to 4:50 p.m.)
・Place: Special Conference Room 3, Ministry of Finance
・Gist of Proceedings

1. Issuance amount of Inflation-Indexed Bonds in the April - June 2019 quarter

▶The Financial Bureau gave the following explanation about the issuance amount of Inflation-Indexed Bonds in the April - June 2019 quarter:

・As regards Inflation-Indexed Bonds the JGB Issuance Plan for FY2019 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 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 2019 quarter.

・For the January - March 2019 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.

As shown on page 5, the result of February auction was comparable with those of past auctions, with the bid-to-cover ratio at 3.34, although there was a sense of caution due to a steep decline in the BEI at the end of last year.

As shown on page 6, Buy-back Auction and outright purchase of JGBs have produced results generally in line with the market rates since the beginning of this year, although the bid-to-cover ratio fluctuated at the end of last year because some investors rushed to sell the bonds.

As shown on page 7, in the secondary market, the BEI has remained flat after falling to 0.2% at the end of last year.

・In such circumstances, we asked for your opinions beforehand and found that as for the supply-demand trend after the auctions, while purchases have not been so active as to raise the BEI, there has not been an overwhelming sell-off, with some investors purchasing the bonds because they considered them to be undervalued, therefore being of the opinion that

the debt management office should desirably maintain a wait-and-see stance for the moment while keeping the April - June quarter the current issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions. Even so, some of you are concerned about the continuing limited expansion of the investor base for Inflation-Indexed Bonds and the future supply-demand trend.

・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 months (April and June), in the same amount as the January - March quarter., as stipulated in the proviso, we will keep a close watch on the market environment and other factors and take appropriate actions as the debt management office if an overwhelming sell-off continues, leading to a significant decline in liquidity, for example.

・In addition, each March we discuss the method of reopening and the auction method of 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 FY2018.

・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:

・At the end of last year, the BEI fell below 20 bps at some times, but since the beginning of this year, it has stayed very stable, between 20 bps and 25 bps. Recently, the BEI has remained stuck at around 25 bps and is unlikely to rise back to the previous level of 30 bps to 35 bps because there are many uncertainty factors, including the reduction of mobile phone fees and the introduction of education free of charge. However, as the most recent outright purchase of JGBs produced results stronger than the previous day's level, the supply-demand environment has not deteriorated. In addition, inquiries from foreign investors in particular have recently increased very much. Therefore, we have no objection to the current issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions.

・Amid the risk-off sentiment at the end of last year, the BEI underwent correction. However, at around 20 bps, there were over-the-counter purchases by investors who considered the

bond to be undervalued at that level. In addition, we have the sense that the number of investors willing to consider purchase has increased. The supply-demand balance is certainly somewhat unstable, but although there have been some corrections, JGBs have apparently been issued smoothly after all.

・We agree to the debt management office's proposal. As the expansion of the investor base has been limited, the liquidity has been insufficient, and in this situation, it is better to wait and see the market mature.

・We agree to the debt management office's proposal. One of the factors behind the low liquidity of the market for the Inflation-Indexed Bond compared with the market for other interest-bearing bonds is market makers' inability to take short positions due to the immaturity of the repo market. In particular, as market makers cannot take short positions even when the BEI is steadily declining, the BEI plunges suddenly in some cases. However, such a sudden plunge of the BEI is not so serious as to require a change in the issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions. If the market conditions deteriorate considerably due to a collapse of the fundamental supply-demand balance in the next fiscal year and later, the debt management office may consider changing the issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions. However, we do not think that a change is necessary in the current situation.

・We agree to the debt management office's proposal. Although the market situation has recently settled down, we would like the debt management office to continue to provide liquidity support by maintaining the current issuance amounts of Inflation-Indexed Bonds and of Buy-back Auctions because there are no new investors who are willing to consider holding them over the long term even when it appears to be undervalued, perhaps due to the weakness of the expectations for economic recovery.

・Although we basically agree to the debt management office's proposal, increasing the Buy-back amounts slightly may be a good idea. Among the reasons for that are the supply-demand balance, the constantly undervalued price, and an increase in the cumulative balance of issued bonds before the start of redemptions. It will be better for the debt management office to avoid reducing the issuance amount itself because doing so may be regarded as a step back from its commitment and also because there is still a substantial need for the current issues. However, as redemptions have not started, there is also a substantial demand for switching from outstanding issues to new ones tend to be undervalued due to their low

liquidity amid the unstable supply-demand balance. Therefore, one possible option that the debt management office may consider is to improve the supply-demand balance in the secondary market by increasing the buyback amount per auction to ¥25 or ¥30 billion, for example, as a way of sending a message.

・We request the debt management office to conduct Buy-back Auctions each month. Although purchases have been increasing because of a decline in the BEI, it is better to conduct Buy-back Auctions in the amount of ¥20 billion each month in order to maintain a good supply-demand balance before the start of redemptions. We have no particular objection to the debt management office's proposal with respect to other matters.

・At the previous Meeting of JGB Market Special Participants, I commented that the debt management office should conduct Buy-back Auctions each month if the BEI declines. Over the three months since that meeting, the price declined to a level not consistent with the nature of the bond due to principal guarantee, with the BEI falling below 20 bps temporarily. In Buy-back Auctions and outright purchase of JGBs, too, the bid-to-cover ratio was higher than the ratio for other interest-bearing bonds. It will be better to maintain the current issuance amount because the reduction of the amount could be regarded as a weakening of the debt management office's commitment. However, it will be better to conduct Buy-back Auctions each month.

2. Liquidity Enhancement Auctions for the April - June 2019 quarter

▸The Financial Bureau provided the following explanations regarding the Liquidity Enhancement Auctions for the April - June 2019 quarter:

・As indicated on page 10, the FY2019 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 JGBs worth ¥400 billion in January and March (odd-numbered months) for the 1 - 5 - remaining - year zone, ¥600 billion in each month for the 5 - 15.5 - remaining - year zone , and ¥500 billion in February (even-numbered month) for the 15.5 - 39 - remaining - year zone, as in the October - December quarter, as stipulated under the FY2018 JGB Issuance Plan .

・Page 12 and after shows the results of the Liquidity Enhancement Auctions. The results of the auctions for the 1 - 5 - remaining - year zone that was conducted today have not yet been reflected in the annex. However, although the tail was somewhat long in some auctions for the 15.5 - 39 - remaining - year zone, the auction results until now have been generally stable.

・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 it is appropriate to maintain the current issuance amount.

・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 (odd-numbered months) 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 (even-numbered month) 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 debt management office's proposal. As the results of Liquidity Enhancement Auctions have generally been stable, we do not think that it is necessary to make any change for the moment. Amid the continued low liquidity due to the effects of outright purchase of JGBs, it is necessary to take into consideration the effects of a decrease in the issuance amount in the next fiscal year. Therefore, we would like the debt management office to continue giving consideration to the liquidity of the market.

・With respect to the April-June quarter, we agree to the debt management office's proposal. However, the bid-to-cover ratio in recent auctions for the 15.5 - 39 - remaining - year zone was around 2 both when interest rates were high and when they were low, and the tail was somewhat long. Therefore, demand from investors may be weakening. Given that while the issuance amount is planned to be reduced for the 2-Year to 20-Year Bonds in April and later, it is planned to be kept unchanged for the 30-Year and 40-Year Bonds, so it is appropriate to make no change in the April-June quarter. However, in July and later, it may become necessary to consider reducing the amount somewhat for the 15.5 - 39 - remaining - year zone and increasing the amount for the 1 - 5 - remaining - year zone somewhat while watching the situation.

・We agree to the debt management office's proposal. The tail is slightly long for the 15.5 - 39 - remaining - year zone and the bid-to-cover ratio is low in some cases. However, it will be better to change the issuance amount after examining the effects of the reduction of the issuance amount in the next fiscal year. Depending on how interest rates will change, investors' demand may be stimulated. In addition, as we have the sense that investors' awareness about Liquidity Enhancement Auctions for the 15.5 - 39 - remaining - year zone is growing, it will be better to maintain the current issuance amount for a while.

・We agree to the debt management office's proposal. We feel that the overall balance is good in the current situation, in which consideration is being given to some maturities for which the proportion of Bank of Japan(BOJ)'s holdings is large and in which the issuance amount for the 5 - 15.5 - remaining - year zone is larger than the issuance amounts for the 1 - 5 - remaining - year zone and the 15.5 - 39 - remaining - year zone. If we are to make some suggestion or other, the debt management office may consider increasing the issuance amount for the 1 - 5 - remaining - year zone if the issuance amount per zone is to be changed, because demand has grown at some times for bonds with the 1 - 5 - remaining - year zone, for which the issuance amount is small.

3. Methods of reopening and auction methods of fixed-rate JGB issues

▸The Financial Bureau gave the following explanations about methods of reopening and auction methods of fixed-rate JGB issues:

・Shown on page 17 onwards are the plans that we formulated in consideration of your

opinions we had heard in advance for carrying out methods of reopening and auction methods of fixed-rate JGB issues for FY2019.

・Since FY2015 we have kept reopening 10-Year Bonds in each case where the difference between a market yield on an auction day for a new issue and the coupon rate of an earlier issue with the same maturity date 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 FY2019 and issuing by way of a reopening if the difference between a market yield on an auction day for a new issue and the coupon rate of an earlier issue with the same maturity date is within approximately 30 bps.

・Since the vast majority of you support the method of reopening of 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 FY2018.

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

・Those who were in favor of maintaining the single-yield auctions noted that the investor base for 40-Year Bonds is limited compared to 20-Year and 30-Year Bonds, etc., 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 the investor base for 40-Year Bonds is diversifying, which causes to enhance liquidity. 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 investor base for 40-Year bonds is limited compared to bonds with other terms and their price fluctuations tend to be large because they are close to the yield curve, while the market for 40-Year Bonds has developed since they were introduced and the investor base for 40-Year Bonds is diversifying. 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 FY2019.

・Since we would like to make a final determination regarding methods of reopening and auction methods of fixed-rate JGB issues 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 have no objection to the debt management office's proposal. Different methods of reopening and auction methods have their respective merits and demerits, but we do not think that there is no particular serious problem with the current methods of reopening of the 10-Year Bond and auction method of 40-Year Bond.

・Regarding the method of reopening of 10-Year Bond, it is desirable that there be a large number of issues from the viewpoint of diversifying book value. However, as the supply-demand balance is liable to tighten due to outright purchase of JGBs, it is desirable to maintain the current method from the viewpoint of securing liquidity per issue. With respect to the auction method of 40-Year Bond, it is desirable to maintain the current single-yield method in order to avoid the possibility of being forced to purchase the bond at an overvalued level because the expansion of the investor base is considered to remain limited and also because there is uncertainty over the market yield in some cases due to concerns over the low liquidity compared with other maturities.

・We agree entirely to the debt management office's proposal. Regarding the method of reopening of 10-Year Bond, it is highly likely that the need for current issues will grow very much in a phase of interest rate rise because the balance of bonds held by investors has declined considerably under the BOJ's monetary policy. In this situation, as we believe that it is very important to maintain the liquidity of current issues by reopening the bond, we

strongly request the debt management office to maintain the current method. Concerning the auction method of 40-Year Bond, in consideration of the fact that the current market consensus has not incorporated the multiple-price method, it will be better to maintain the single-yield method in the next fiscal year, although shifting to the multiple-price method may be a future option.

・We agree to the debt management office's proposal. However, concerning 40-Year Bond, we recognize that the investor base has been expanding little by little and the market has been becoming more mature compared with a few years ago. Therefore, one possible option is considering shifting to the multiple-price method in the next fiscal year but one or later in view of the situation while maintaining the single-yield method in the next fiscal year.

・Regarding 10-Year Bond, the general methods of reopening should be adopted. It may be important to maintain the issuance amount per issue because the small market balance of the cheapest issues has recently become a problem. Regarding 20-Year and 30-Year Bonds, we have no objection to the debt management office's proposal. With respect to the auction methods of 40-Year Bond, liquidity has already increased sufficiently and there is demand from a very broad range of customers. Therefore, no problem is likely to arise if a shift to the multiple-price method is made as in the case of interest-bearing bonds with shorter than remaining 30 years to maturity.

・Regarding the method of reopening of 10-Year to 40-Year Bonds, we agree to the debt management office's proposal. With respect to 10-Year Bond, given the current levels of interest rates and volatility, the issuance of four issues per year will virtually be the norm under the current method. However, if interest rates rise steeply, demand for new issues is expected to grow. Therefore, it is desirable to maintain the current method, under which the bond is issued as a new issue if the difference between a market yield on an auction day for a new issue and the coupon rate of an earlier issue with the same maturity date is wider than 30 bps. Regarding the auction methods of 40-Year Bond, now may be the time to shift to the multiple-price method because the market for 40-Year Bond has matured sufficiently and also because we have the sense that investors willing to invest in 40-Year Bond have increased in the past several years.

・With respect to the method of reopening of 10-Year Bond, the difference between a market yield on an auction day for a new issue and the coupon rate of an earlier issue with the same maturity date is realistically unlikely to become as wide as 30 bps because interest rates are

not assumed to change much under the BOJ's current monetary policy. However, market making will become difficult if it remains uncertain until the auction day whether the bond will be reopened or issued as a new issue even though the supply-demand balance tightens due to the concentration of purchases on current issues when the market has moved considerably in the future, resulting in a difference of wider than 30 bps. Therefore, it will be better that the general method of reopening be ensured as an established method regarding 10-Year Bond as well.

With respect to 20-Year and 30-Year Bonds, we have no objection to the debt management office's proposal. Regarding 40-Year Bond, the auction may be shifted to the multiple-price method because liquidity has increased over the period of more than 10 years since its first issuance and also because the investor base has matured so much that there seems to be no room left for a further expansion.

4. Latest JGB market situation and outlook for future

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

・Since the BOJ revised its monetary policy on July 31 last year, concerns have arisen over a possible interest rate rise, and in October, U.S. interest rates rose. As a result, investors suspended investment in long-term JGBs. However, around the end of last year, consciousness about a possible recession started to grow globally, resulting in the downtrend in interest rates. Since the beginning of this year, consciousness over a possible recession has grown further globally, and in addition, activities typical of a fiscal year end have emerged. As a result, our impression is that since around February, investors who had suspended investment started purchasing long-term JGBs considerably. Moreover, following the results of the latest FOMC, the yield on 10-Year Bond fell to minus 0.075%, and as a result, the yield curve instantly bull-flattened.

As for the next fiscal year, many market participants expect that a sustainable interest rate rise is unlikely. If it is assumed that interest rates will remain flat or decline further, the market's mood may be becoming such that investors are feeling that from the beginning of the fiscal year, they must increase the outstanding balance by investing in longer-term bonds with higher interest rates. If investors accelerate moves to increase the outstanding balance from the beginning of the fiscal year, that could cause interest rates to fall further.

・As is clear from "International Transactions in Securities," purchases by foreign investors

have increased in the JGB market since November last year. Apparently, new purchases by real-money investors are contributing to the current decline in interest rates. Looking at the past trend in purchases and sales by foreign investors, purchases decreased or even net sales were recorded in the super long-term zone in a phase of interest rate rise, while purchases expanded rapidly in a phase of interest rate decline. This indicates that some foreign investors react vividly to interest rate movements, following the market trend. If many such foreign investors participate in the market amid a lack of expectations for higher interest rates, we must be cautious about the risk that interest rates could fall faster than expected. Conversely, if some interest rate-raising factor emerges, it is possible that sales will grow rapidly, resulting in volatile interest rate movements. However, given that the FRB has ruled out the possibility of raising interest rates this year and that market players rather expect that the FRB's next move will be an interest rate cut, we recognize that a rapid rise in interest rates is unlikely.

・As consciousness is growing that central banks in various countries, including the FRB, have started to step back from an exit strategy, the current situation is such that not only yen interest rates but interest rates in general are unlikely to rise. I assume that until the results of the latest FOMC became public, many market participants were expecting, due to hopes for contributions from China's fiscal stimulus, that the economy would recover through the second half of the year and that interest rates would rise slightly. However, now that the FRB has made clear that it will not implement any interest rate hike this year, there is a strong consciousness that globally, long-term interest rates will not rise. Concerning JGBs, as foreign investors can earn sufficient income by converting dollars into yen, their demand for JGBs has recently been growing. On the other hand, the situation for domestic investors is not such that they can earn sufficient interest income from JGBs with any maturity. Therefore, we are concerned that excessive risk-taking could cause problems related to the stability of the financial system.

5. Explanations from the Financial Bureau(preparations for 10-day Golden Week holiday)

▸ The Financial Bureau gave the following explanations about the preparations for 10-day Golden Week holiday.

・As a result of the enforcement of the law that designates the date of the enthronement of

his imperial highness the crown prince, May 1, there will be a 10-day holiday period, from April 27 to May 6. Regarding the preparations for 10-day Golden Week holiday, the government is required to establish a liaison council involving relevant ministries and agencies and to do its utmost to make sure that the people's lives will not be inconvenienced.

・In view of 10-day Golden Week holiday, we have made adjustments regarding the schedule of auctions in April, such as arranging for the auction of super long-term bonds, for which the interest rate risk is large, to be held by the middle of the month.

During 10-day Golden Week holiday, our understanding is that the JGB futures market and the inter-dealer market will remain closed and that in principle, trading in JGBs will not be conducted. Also, we assume that individual primary dealers are already considering what to do regarding risk management and customer relationships in relation to 10-day Golden Week holiday. We would like them to make necessary preparations.

・From the viewpoint of business contingency planning for the possibility of a major market move or a natural disaster during 10-day Golden Week holiday, we would like individual primary dealers to register their contact information with us at a later date so that communication can be maintained during the period as necessary. We appreciate your cooperation.