Minutes of the Meeting of JGB Market Special Participants
(77th Round)

・Date: Friday, September 21, 2018 (4:00 p.m. to 4:45 p.m.)
・Place: Special Conference Room 3, Ministry of Finance
・Gist of the Proceedings

1. Issuance amount of Inflation-Indexed Bonds in the October - December 2018 quarter

▸The Financial Bureau gave the following explanation about the issuance amount of Inflation-Indexed Bonds in the October - December 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 by the per-issuance amount of ¥400 billion. Therefore, today we would like to hear your opinions about the issuance amounts in the October - December 2018 quarter.

・For the July–September quarter, as shown on page 4, we conducted the auction for the issuance amount of ¥400 billion in August, and Buy-back Auctions in the amount of ¥20 billion in August, respectively. Page 5 shows that the bid-to-cover ratio for the August auctions was 3.12, which is a level comparable to that in past auctions. While we saw some wavering of the bid-to-cover ratio with regard to Buy-back Auctions and the Outright Purchase of JGBs, the results generally conformed to market yields (page 6). Regarding the secondary market, page 7 indicates that the BEI was temporarily 0.4% prior to the August auction, but it subsequently returned to its former level and is now transitioning by just under 0.5%.

・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; but since we are seeing trading with a BEI in the 0.4% to 0.6% range, many of you expressed a desire to maintain for the October - December quarter the current issuance amounts of Inflation-Indexed Bonds and Buy-back Auctions.

・In view of such a situation, as shown on page 8, we are considering issuing Inflation-Indexed Bonds in the October - December quarter in the amount of ¥400 billion and carrying out Buy-back Auctions in the amount of ¥20 billion in the even-numbered months of October and December, in the same amount as the July–September quarter. The wording of the provision is the same as before, but we would like to continue to closely follow market environment.

・The development of the market for Inflation-Indexed Bonds, is an important issue related to the Debt Management Policy. Therefore, we would like to hear your opinions on the direction of our policy related to the issuance amounts in the October - December quarter.

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

・We request to maintain the current issuance amount and Buy-back Auctions, as the proposal. In our over-the-counter (OTC) transaction, we are seeing some investors who buy strongly when the BEI is in the 40bps level first half.

・We agree to the proposal. For the auctions held in August, the BEI was significantly adjusted in advance, and strong demand from investors led to safe results with a BEI around 41 bps. Following that, we did see some selling on recovery as the BEI climbed to the 40bps level latter half, and we are not seeing any active purchasing amidst the recent reports that mobile bill will be reduced. However, the BEI is now transitioning stably at 40bps level. Considering our current OTC transaction volume and the fact that market liquidity is gradually improving, we request to maintain the current issuance amount for November and continue holding a single ¥20 billion Buy-back Auction in each even-numbered month.

・We agree to the proposal. Although the external environment is still severe and issuance continues to be a challenge with the auctions, some investors are sensing relatively cheap prices and beginning to make purchases. We see this as an opportunity to expand the investor base for Inflation-Indexed Bonds and think it best to sell new investors. While we cannot completely eliminate the instability of the market environment in the near future, we request to maintain the current issuance amount and Buy-back Auctions in order to promote market growth.

・We see no problems with the proposal. The majority of our OTC transactions involve range-bound trading through hedge funds and similar methods where we buy when the BEI is low and sell when it rises. We get the impression that this sort of activity has increased considerably in recent years, and based on the current balance of net issuance amount we do not see much problem with maintaining the present pacing of issuance and Buy-back Auctions.

・We ultimately think that the proposal is a good one. However, we do have serious concerns about future demand and supply. We are seeing situations in which activity is not connected to prices, and the balance between buyers and sellers has crumbled. Furthermore, despite the BOJ's forward guidance and announcements detailing its renewed commitment regarding inflation, we are beginning to see prices fall simply due to demand and supply. However, because the BEI is now transitioning in the 40bps level latter half, there is no need to immediately decrease the issuance amount or start holding Buy-back Auctions every month. Since the market for Inflation-Indexed Bonds has formed with the participation of foreign investors, who will be less willing to accept risk toward the end of the year, we may need to consider decreasing the issuance amount for the next fiscal year if the November auction is sluggish result.

・We have no major objections to the proposal, but we do have some concerns that the balance between demand and supply is beginning to collapse. As we do not really anticipate increases in new demand from end-investors, the net issuance amount is not all that large; however, we believe that poor demand and supply is keeping the BEI low as opposed to the demand and supply situation accurately reflecting the BEI. Amidst this spotty demand, we do not support decreasing the issuance amount. Maintaining the current issuance amount is best from the viewpoint of market growth. On the other hand, we wonder if it will not soon be necessary to adjust the net issuance amount by increasing Buy-back Auctions to ¥25 billion while still holding them in the even-numbered months.

・We think that demand and supply will stabilize if the amounts of the Buy-back Auctions are increased a little more. While it is true that the BEI has transitioned stably after being adjusted for the August auction, our OTC transactions continues to see an overwhelming amount of selling, and we therefore request to hold Buy-back Auctions for ¥20 billion every month rather than in the even-numbered months, if

possible.

2. Liquidity Enhancement Auctions for the October - December 2018 quarter

▸ The Financial Bureau provided the following explanation regarding the Liquidity Enhancement Auctions for the October - December 2018 quarter:

・Regarding the Liquidity Enhancement Auctions, As shown on Page 10, the FY2018 JGB Issuance Plan stipulated that the total annual issuance amount of ¥12.6 trillion (¥2.4 trillion for 1 - 5 - remaining - year zone, ¥7.2 trillion for 5 - 15.5 - remaining - year zone, and ¥3.0 trillion for 15.5 - 39 - remaining - year zone) would be issued, and that "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". Today, we request you to discuss the issuance amount for each zone in the October - December quarter.

・As shown on page 11, in the July - September quarter we issued ¥400 billion in July and September for the 1 - 5 - remaining - year zone, and ¥600 billion in each month for the 5 - 15.5 - remaining - year zone, and ¥500 billion in August for the 15.5 - 39 - remaining - year zone, as in the FY2018 JGB Issuance Plan.

・Page 12 and after shows results of the latest Liquidity Enhancement Auctions. In general, results were stable.

・When we heard opinions under these conditions about the Liquidity Enhancement Auctions for the October - December quarter from the JGB Market Special Participants in advance, there were many opinions that maintaining the current issuance amount is appropriate.

・In view of such a situation, we have prepared our proposal for each zone's issuance amount during the October - December quarter (see page 15). We are considering issuing ¥400 billion in November for the 1 - 5 - remaining - year zone, ¥600 billion each month for the 5 - 15.5 - remaining - year zone, and ¥500 billion in October and December 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 October - December 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. The BOJ's current monetary policies have heightened the need for the Liquidity Enhancement Auctions in every zone, and auction results also show us that issuance amount is extremely balanced.

・We agree to the proposal. There was little difference between strong and weak results in the most recent auctions, and the current issuance amount corresponds to the overall demand-supply balance within the market. In addition, bonds with tight demand and supply as well as those which the BOJ owns a large percentage of are seen a lot more than those from the 5 - 15.5 - remaining - year zone, and we think there is good balance in the current state with the zones on each side having small issuance amounts and the middle zone having a large issuance amount.

・We agree to the proposal. We feel that demand from foreign investors for off-the-run bonds in the short-to-medium-term zones has faded somewhat compared to its previous level, which means that increasing the amount for the 1 - 5 - remaining - year zone is not necessary. The 5 - 15.5 - remaining - year zone is transitioning very stably and has solid demand, even considering its bid-to-cover ratio and tail. The auction results for the 15.5 - 39 - remaining - year zone were somewhat weak due to the market environment and the timing of the auction, but because this is the zone that attracts the most interest from end-investors, an issuance amount of ¥500 billion is appropriate.

3. Latest JGB market situation and outlook for future

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

・At the end of July, when the BOJ revised its monetary policies in an attempt to expand the fluctuation range of interest rates and improve market function, the market showed some excitement after being unexpectedly furnished with direct

injections—such as today when the BOJ reduced its Outright Purchases. However, because purchase volume continues to be large and the stock effect is coming into play, recovery is still limited to short-term.

Based on the forward guidance, it will probably be difficult to raise the target long-term interest rate before the consumption tax increase in October of next year. Within the market, some are of the opinion that the fluctuation range will expand again; but with long-term interest rates moving to 0%, the BOJ probably will not allow a range of 0.3% (even if 0.2% is possible). Based on these factors, it will be difficult to expand the fluctuation range further, which means that the upper limit will be around 0.2%.

Under that premise, the factor that can effect change (other than the BOJ reducing its Outright Purchases) is the long-term interest rate in the United States. But in the current framework, the BOJ will still prevent long-term interest rates for JGBs from rising above roughly 0.2%.

・Looking at foreign interest rates, we see a very different market than the one we saw in August during the summer slump, with long-term interest rates in the US surpassing 3% and those in Germany rising to around 0.5%. Regarding interest rate futures transactions, the probability of interest rate rises within the range of 2.75% to 3% at the end of 2019 has exceeded 50%, and the market predicts the cycle of interest rate rises continuing next year as well. But interest rate rises are barely factored in at all for 2020 and beyond. The upper limit of 3% for the Federal Funds Rate may become the benchmark for the time being. Under these conditions, the interest rate for 5-year US Treasury Bonds rose to 2.96% the other day, which we believe is approaching the maximum range assumed by most market participants.

Yet despite this trend of rising interest rates overseas, interest rates for 10-year JGBs have barely moved (in the neighborhood of 0.1%), demonstrating that the effects of foreign markets are quite limited. Just today, the day after the auction for 20-Year Bonds, a surprising reduction in BOJ Outright Purchases of JGBs with longer than remaining 25 years to maturity led to an interest rate increase, which once again reminds us of the dramatic ways in which the market responds to the BOJ's Outright Purchases. It is evident that we still face many challenges in returning the market to a point where prices that are linked to foreign interest rates can form naturally.

Upcoming events include next week's announcement of whether the BOJ will decrease its Outright Purchases in the super long-term zone; the publishing of

Outright Purchases of JGBs in October at the end of this month; and the Meeting on Market Operations, which is scheduled for next month. We hope that the BOJ will provide even more support so that the market can return to one in which prices form more naturally.

・Examining market prices over the past month, we get the impression that the market really only sees the activity of the BOJ. This suggests that the loss of market function is largely a reaction to today's reduction in BOJ Outright Purchases operations rather than the effects of something like an earthquake disaster.

If interest rates do not rise to a level that is considered fair, we cannot expect market function to be restored, but it is important that we consider the economic climates of other countries when tightening our monetary policies. Additionally, the fact that yen interest rates did not respond at all when foreign interest rates rose early this week shows that forward guidance is actually effective.

As we head into the next fiscal year, the JGB issuance plan will continue to be discussed. But even if the consumption tax does increase, we think that the budget deficit will likely expand. While the low interest rates created by monetary policies and the increase of the tax revenue by economic booms are considered to be the perfect combination, we must remember that they will only worsen in the future.

・If we work to strengthen the market's price-discovery function by expanding the range of long-term interest rates under the BOJ's yield curve control policies, we can expect volatility to gradually rise moving forward. But at this point in time, there is still very little movement in areas where prices have stagnated. Thus, the price-discovery function remains stuck in a weak state as the BOJ's forceful operations continue.

On the other hand, we cannot say that the revisions to BOJ's monetary policies at the end of July had no effect. In reality, the volume of transactions between dealers increased compared to June, which we think shows that the revisions are slowly working. We hear a lot of people say that there is no liquidity because they do not see any transactions in units of 0.005%, but we witness a lot of transactions in units of 0.001%.

If the BOJ slowly reduces its Outright Purchases and allows a large number of bonds to appear on the market, we believe that market function and liquidity will gradually improve, which means that we must continue examining the situation with a slightly long term point of view.

・In terms of improving the price-discovery function and liquidity of the market, we think that the BOJ is not only Outright Purchases frequently but also with a tremendous Outright Purchase ratio, and buying is high from both the stock and flow points of view. If the BOJ was more flexible with its operations, market participants would have no choice but to become aware of price levels within the market itself rather than merely observe the activities of the BOJ. And if the BOJ would slightly reduce the frequency of its Outright Purchases, we should see the market's arbitrage function return to form and investors become more active as they hedge, buy on reaction, and sell on rally. In order to preserve these hopeful outcomes, we request the debt management office and the BOJ to express their continued commitment toward initiatives that restore market function.

・Interest rates moved somewhat in the week or two following the Monetary Policy Meeting at the end of July. But since the week of the mid August, interest rates for 10-Year Bonds have reached an equilibrium around 0.1% and market prices have fallen to a point that is essentially the same as before the policy revisions. These changes did not live up to the market's expectations. We are still only halfway to achieving price formation that reflects global fundamentals; but in looking to apply Outright Purchases flexibly in the future, we hope that the functions of the market will improve little by little as the implicit rules governing the frequency, zones, and other details of BOJ's Outright Purchases are gradually eliminated, even if we are still under the yield curve control policies.

・Ever since the BOJ implemented its additional ¥400 billion of Outright Purchases following the Monetary Policy Meeting at the end of July, there has been very little fluctuation in prices as we struggle with a level of 0.1% for 10-Year Bonds, and we have not seen much over-the-counter trading from investors. Futures volatility has also declined, and although trading volume has increased slightly, we get the impression that there has not been much change from June (prior to the policy revisions) through the first half of July.

But on the other hand, market prices showed some signs of life today when the BOJ chose to reduce its Outright Purchases for the super long-term zone at a surprising time, the day after the auction for 20-Year Bonds. Scheduled between now and the end of the month are BOJ Outright Purchases for 10-Year Bonds as well as the Outright Purchases following the 40-Year Bond auction, but this is not a situation where the BOJ can conduct all of the Outright Purchase of JGBs the same

as before. And since we are waiting for the announcement the Outright Purchase of JGBs at the end of the month, we may see a little more improvement in market function starting in October.

If interest rates can increase further for the 10-Year Bond auction next month, there is a chance that coupons will be 0.2% for the first time in a long while, which we think would be good for increasing investor activity.