

Minutes of the Meeting of JGB Market Special Participants (82nd Round)

1. Date: Tuesday, September 24, 2019 (4 p.m. to 4:50 p.m.)
2. Special Conference Room 3, Ministry of Finance
3. Gist of Proceedings

1. Issuance amount of Inflation-Indexed Bonds in the October-December quarter 2019

▶ The Financial Bureau gave the following explanations about the issuance amount of Inflation-Indexed Bonds in the October-December quarter 2019:

• As shown on page 3, the JGB Issuance Plan for FY2019 announces issuance of Inflation-Indexed Bonds four times a year for the amount of ¥400 billion per each time while stating that “the issuance amount may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants”. Also, as shown on page 4, it is stipulated about Buy-Back Auction that “detailed methods will be determined by considering market circumstances based on discussions with market participants.” Therefore, we would like to hear your opinions about the amounts of issuance and Buy-Back in the October-December quarter at today’s meeting.

• In the July-September quarter, as shown on page 5, we conducted an auction of issuance for the amount of ¥400 billion and Buy-Back Auction for the amount of ¥20 billion in August.

As shown on page 6, the result of the auction of issuance in August was comparable with those of past auctions.

As shown on page 7, the Buy-Back Auction and Outright Purchase of JGBs by the Bank of Japan (BOJ) have resulted in generally similar level as the market rates.

• As shown on pages 8 and 9, the BEIs abroad has shown a stagnation in their move since last autumn as the trend of risk aversion was growing. In such situation, the BEI in Japan has declined steeply in the secondary market as well, particularly in August, since the previous Meeting of JGB Market Special Participants.

The details are provided on page 10. The BEI in the United States, in particular, has been moving in a downward trend. The BEI in Japan moved lower as well and stayed below 0.1% temporarily while it has recently recovered to 0.1% and above. Though the yields on nominal

bonds declined steeply in August, that on Inflation-Indexed Bonds did not necessarily follow the move.

- In such circumstances, we asked for opinions from market participants beforehand. Many of the opinions supported maintaining the current amount of issuance and increasing the amount of Buy-Back for improving the supply-demand balance for Inflation-Indexed Bonds.

- The development of the market for Inflation-Indexed Bond is an important goal of the debt management policy. Considering the recent market situation and the opinions from market participants, the Financial Bureau's proposal is presented on page 11 in order to improve the supply-demand balance for Inflation-Indexed Bonds.

- We are considering a maintenance of the amount of issuance at ¥400 billion in the October-December quarter and a conduct of Buy-Back for the amount of ¥20 billion in November, in addition to the usual Buy-Backs planed in October and December (even-numbered months).

- This is the overall explanation of the market situation for Inflation-Indexed Bonds and the proposal of the amounts of issuance and Buy-Back in the October-December quarter. We would like to hear your opinions once again as it will be decided following the discussion at today's meeting.

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

- We agree to the Financial Bureau's proposal. The supply-demand balance for Inflation-Indexed Bonds has been unstable globally, with the surrounding environment so pessimistic. The BEI is not functioning well as that for some issues turned negative at one time. It caused a functional decline in Inflation-Indexed Bonds for hedging purposes, making it difficult for securities companies to hold Inflation-Indexed Bonds. It would lead a vicious cycle in which market's liquidity declines, but the Financial Bureau's announcement of increasing the frequency and the amount of Buy-Back for recovery of the market's functions will promote a stable growth and a restoration of the market's functions. Therefore, the increase in the amount of Buy-Back at this time is a beneficial policy measure for the market.

- We agree to the Financial Bureau's proposal. On-the-run issue of Inflation-Indexed Bonds has

not been sold mainly because of the unbalanced supply and demand. However, the substantial amount of the BOJ's purchase of nominal 10-Year Bonds has weakened the function of Inflation-Indexed Bonds as hedging measures, resulting in the loss of the function of the entire market for Inflation-Indexed Bonds. Off-the-run issues are deteriorating markedly in terms of bid, offer and liquidity. Therefore, it is desirable to make adjustments through a change in the amount of Buy-Backs, rather than a change in the amount of issuance for improvement of the current situation.

- We agree to the Financial Bureau's proposal. There remain potential needs for on-the-run issue of Inflation-Indexed Bonds because the bid-to-cover ratio of the issuance auction in August stayed in the upper three times range and there is purchase in the secondary market in a small amount. However, little improvement can be seen in the situation of the secondary market, where neither buying nor selling has been possible at an opportune time. Therefore, the maintenance of the amount of issuance at the current level for meeting the needs of investors in the future and the increase in the amount of Buy-Back by ¥20 billion in consideration of the recent supply-demand condition will contribute to the improvement of liquidity by providing the chance of opportune selling.

- We agree to the Financial Bureau's proposal. The BEI has been declined lower than the value of the deflation protection option, which is imbedded in the Inflation-Indexed Bonds, leading to a substantial weakening of the functionality of this product. It has stabilized at the current level due to expectations of the market for an increase in the amount of Buy-Back and a decrease in the amount of issuance. However, if the Financial Bureau took no action, the BEI might rapidly decline below zero, particularly in December, when foreign investors, the main holders of the Inflation-Indexed Bonds, tend to close their positions. Therefore, taking some actions to improve the supply-demand balance in the form of conducting Buy-Back every month will be an appropriate response. It would be better to conduct a Buy-Back Auction for the amount of ¥20 billion every month than to decrease the amount of issuance because the reduction in the issuance amount would conflict with the aspect of developing the market for the Inflation-Indexed Bonds.

- We agree to the Financial Bureau's proposal. We appreciate the proposal as we have requested an increase in the amount of Buy-Back in the past meetings of JGB Market Special Participants. However, there is some doubt that the increase in the amount of Buy-Back is sufficient for stabilizing the market because some foreign investors were expecting a reduction in the issuance amount by ¥100 billion.

- We agree to the Financial Bureau's proposal. Domestic investors and institutional investors showed appetite for buying until the last fiscal year, with the BEI stayed at around 20bps. Since the beginning of this fiscal year, however, foreign investors have become the main buyer and purchase by domestic investors is declining steeply while it is unclear whether this is a result reflecting the price action. Therefore, we support conducting the Buy-Back Auction for the amount of ¥20 billion in November. In addition, we request the Financial Bureau to consider the possibility of further increase in the amount of Buy-Back to ¥30 billion or ¥40 billion each month if the supply-demand balance deteriorates again in the future.

- We agree to the Financial Bureau's proposal. The BEI has turned negative for some issues as a result of the yield inversion against nominal bonds caused by the recent decline in the liquidity of Inflation-Indexed Bonds, making it difficult for securities companies to price the bond. The needs for Inflation-Indexed Bonds are limited to that for replacement of issues in the recent market, with little new investors entering the market. It results in a large amount of off-the-run issues remaining in the market. Therefore, the valuation on those issues by securities companies has become low, and as a result of a decline in liquidity, the BEI has turned negative. It is expected that the liquidity of the market will be restored by the Financial Bureau's proposal at this time while we have been hoping for an increase in the amount of Buy-Back for each time in addition to the frequency.

- The supply-demand condition for Inflation-Indexed Bonds deteriorated significantly in August, when the interest rate on Inflation-Indexed Bonds did not follow the drop in interest rates on nominal bonds, resulting in a steep decline in the BEI. However, the market was not facing a strong selling pressure accompanied by orders with large lots as in the past. Instead, the interest rate on Inflation-Indexed Bonds did not follow the drop in interest rates on nominal bonds, staying in a certain range.

The supply-demand condition for on-the-run issues has not faced a substantial deterioration, supported by transactions conducted in light of the BEI level. However, there are some worries about that for off-the-run issues because the supply of new issues will continue though off-the-run issues have not reached their redemption yet. Therefore, while conducting Buy-Back Auction once every other month is sufficient for this moment, it may be appropriate to increase the frequency of Buy-Back in the future. Also, we agree to the proposal to increase the frequency of Buy-Back by one time in the amount of ¥20 billion, considering the fact that there are some issues with an unbalanced supply and demand, such as the 17th and 18th issues.

2. Liquidity Enhancement Auctions in the October-December quarter 2019

▶ The Financial Bureau provided the following explanations regarding the Liquidity Enhancement Auctions in the October-December quarter 2019:

• As shown on page 13, the FY2019 JGB Issuance Plan states the following about Liquidity Enhancement Auctions:

(1) While the operating assumption is that the total annual amount of issuance will be ¥12.6 trillion (¥2.4 trillion for the remaining maturity of 1-5 years zone, ¥7.2 trillion for the remaining maturity of 5-15.5 years zone, and ¥3.0 trillion for the remaining maturity of 15.5-39 years zone)

(2) “The issuance amount and its allocation among each zone may be adjusted in a flexible manner in response to market circumstances and demands of investors, which will be determined based on discussions with market participants.”

Accordingly, we would like to hear your opinions about the amount of issuance for each zone in the October-December quarter.

• As shown on page 14, in the July-September quarter, we issued JGBs worth ¥400 billion in July and September (odd-numbered month) for the remaining maturity of 1-5 years zone and ¥600 billion in each month for the remaining maturity of 5-15.5 years zone, and ¥500 billion in August (even-numbered month) for the remaining maturity of 15.5-39 years zone, as stipulated under the JGB Issuance Plan for FY2019.

• Pages 15 to 17 show the results of the recent Liquidity Enhancement Auctions. The results have been generally stable in each zone.

• When we heard opinions from market participants under these conditions about the Liquidity Enhancement Auctions in the October-December quarter in advance, there were many opinions that it is appropriate to maintain the current amount of issuance because there has been no major change in the supply-demand conditions in each zone.

• As shown on page 18, in view of this situation, we have prepared our proposal for the amount of issuance for each zone in the October-December quarter. We are considering issuing ¥400 billion in November (odd-numbered month) for the remaining maturity of 1-5 years zone, ¥600 billion in each month for the remaining maturity of 5-15.5 years zone, and ¥500 billion in October

and December (even-numbered months) for the remaining maturity of 15.5-39 years zone, as we did in the July-September quarter.

- Following today's discussion, we will decide the amount of issuance for each zone of the Liquidity Enhancement Auctions in the October-December quarter. We would like to ask for opinions.

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

- We agree to the Financial Bureau's proposal. There are market needs in all three sectors. Although the bid-to-cover ratio has remained low in the remaining maturity of 15.5-39 years zone, fundamental needs are recognized. We hope that the allocation of the amount of issuance remains unchanged.

- We agree to the Financial Bureau's proposal. There are reasonable needs in all three sectors. There is a possibility that the bid-to-cover ratio in the remaining maturity of 15.5-39 years zone will be changed to some extent because the needs for earning positive yields will be stronger, given the interest rates in the zone with remaining maturity of 15.5 years or less are turning negative. On the other hand, the results of auctions for the super-long term zone might become volatile to some extent for a short period of time because the concerns over an excessive interest rate fall in the super-long term zone expressed by the BOJ Governor Kuroda recently made the market participants explore the level at which the interest rates in the zone stabilize. However, it is appropriate to maintain the amount of issuance at the current level as the potential needs have remained unchanged.

- We agree to the Financial Bureau's proposal. The Liquidity Enhancement Auction for the zones with longer remaining maturities are gradually becoming recognized by investors each time the auction was held. Some investors are actually starting to purchase bonds using the auction. It is appropriate to maintain the current amount of issuance.

- We agree to the Financial Bureau's proposal for the October-December quarter. However, the bid-to-cover ratio in the remaining maturities of 5-15.5 years zone has apparently fallen from the three-time range to two-time range because interest rates have recently been negative in this zone. In addition, the needs of bonds with remaining maturities of 15.5 year and longer for duration

extension, which is mainly from life insurance companies, tend to concentrate on on-the-run issues. Therefore, there is more room for a reduction in the amount of issuance for the Liquidity Enhancement Auctions in the remaining maturities of 5-15.5 years zone and 15.5-39 years zone in the next fiscal year.

- We request a slight increase in the amount of issuance in the remaining maturities of 1-5 years zone. Instead, a reduction in the amount of issuance in the remaining maturities of 5-15.5 years zone might be an option. The supply-demand balance for the cheapest-to-deliver issue is unlikely to be excessively tight. Though such situation was worried before, it has not been seen until now. Furthermore, the cheapest-to-deliver issue alone have sometimes been even undervalued due to the various measures adopted by the BOJ. Also, undervalued issues, instead of issues for which short positions were held, were supplied in each auctions as shown on the results of auctions. While issues with remaining maturities of 5 years and around were issued when selling pressure is stronger in the market, issues with that of 7 years and around, which are used for delivery in futures trading, and issues with that of 7 to 10 years were issued when buying pressure is stronger. Therefore, we request an increase in the amount of issuance in the remaining maturities of 1-5 years zone because the needs for short covering is stronger in that zone.

- We request a reduction in the amount of issuance in the remaining maturities of 5-15.5 years zone and an increase in the remaining maturities of 1-5 years zone. It is appropriate to reduce the amount of issuance in the remaining maturities of 5-15.5 years zone because demand for that zone from both securities companies and investors is expected to have declined from the previous level. The BOJ has been implementing measures such as excluding the cheapest-to-deliver issues and around from the outright purchase operations. Also, interest rates are mostly negative in the remaining maturities of 15 years and less zone. On the other hand, an increase in the amount of issuance in the remaining maturities of 1-5 years zone is necessary due to the demand from foreign investors and cumulative effects of the BOJ's purchases growing in the medium-term zone. Specifically, we propose a reduction of ¥100 billion in the remaining maturities of 5-15.5 years zone each month and an increase of ¥200 billion in the remaining maturities of 1-5 years zone.

3. Latest JGB market situation and outlook for future investments

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

• Affected by the course of the U.S.-China trade negotiations, the long-term interest rate declined to -0.295% on September 4, almost reaching the low record of -0.3%. The interest rate on 20-Year Bond also fell to 0.015%, approaching the lowest level since July 2016. However, interest rates have been increasing steeply recently, following a rise in the interest rates abroad. Unfortunately, it is hard to predict the course of the U.S.-China trade negotiations, with persistent concerns in the market that there is always a possibility of a sudden reversal of their positions in the middle of negotiations proceeding successfully. However, I suppose that President Trump, whose ultimate goal is winning re-election as a president, would explore a point of compromise while emphasizing his victory in the negotiations with China because of the expected negative impact of concerns over the economic conditions in his support base and regions. In fact, the only presidents who failed to win re-election are Jimmy Carter and George H.W. Bush in the postwar United States, and the sluggishness of the economy was the greatest factor behind it.

On the other hand, while Japan is not facing a downturn in the economy, the fundamentals are deteriorating in Europe, especially in Germany, judging from the weak economic indicators released recently. Germany, that has an export-oriented economy, is highly likely to record negative growth for two consecutive quarters amid the emerging concerns over the global economy, which is strengthening expectations for monetary easing by the European Central Bank (ECB). The economic conditions in the United States, considering its fundamentals, have not been damaged substantially though the long-term interest rate has shown volatile movements, rising to 1.9% after falling to the 1.4% range, due to the effects of the U.S.-China trade negotiations. The median projection of the real GDP growth rate by the Federal Reserve Board (FRB) was 2.2%, with the consensus among Japanese research institutions being the lower 2% range. Although this forecast is lower than the growth rate recorded last year, the growth rate is expected to surpass the potential growth rate of 1.9% estimated by the FRB itself, which casts doubt on the stance of FRB as a central bank, which has cut the interest rate by 50 bps and is inclined to reduce it in the future. While disinflation in the United States is caused by structural factors, such as globalization and digitalization, the continuation of further cut by the FRB will eventually strengthen concerns over inflation. In that case, there is a risk of steep hike in the interest rates in the long-term and super long-term zones.

In addition, it might be possible that FRB Chair Powell demonstrates the FRB's pride as the central bank and refuse to reduce interest rates under pressure from President Trump. However, interest rates are expected to rise in this case too as it is not in line with the expectation of the market.

The movements in the market in September that the interest rates on JGBs increased following

the rise in the interest rates in the U.S. was a precursor of such movements discussed above. The presence of foreign investors, in the aspect of supply-demand balance, are continuously large in the market, growing in the long-term zone as well as short-term zone. Furthermore, in the aspect of trading trend, foreign investors have become the largest buying group in the super long-term zone. The globally low interest rate environment has been causing the hunting for yield. However, their quick move may contribute to increase the volatility substantially, which make us maintain vigilance.

Lastly, in addition to 50-year bonds issued as corporate bonds, the issuance of 50-year bonds and 100-year bonds is under consideration in the United States. I understand that the 40-Year Bond is in the process of development with the yield-based Dutch style used for the auction. Also, in light of the situation in Japan, issuance of bonds with a longer maturity is no longer necessary and the development of the bond market is not necessarily the main theme. However, the JGBs are sometimes likened to "Polaris of the bond market". I request the Financial Bureau to consider the issuance of 50-year bonds for the development of the bond market as a whole though it may be difficult to implement soon.

- Amid the steep decline of the interest rate, some countries are starting issuance of government bonds in a substantial amount for implementing fiscal policy while some companies began issuing corporate bonds for conducting share repurchase and embarking on a new business. Germany, for instance, was considering additional fiscal expenditure, as some media have reported since mid-August, and the corporate bond market in the U.S. recorded its largest amount of issuance on a weekly basis in early September. With BOJ Governor Kuroda making comment concurrently in early September, the moves of taking advantage of the low interest rate environment is a precursor of an increase in global interest rates, which makes it difficult for interest rate to decline easily for a while.

Since the interview with BOJ Governor Kuroda was reported on September 6, the yield curve has bear steepened significantly in the JGB market. The interest rate on 20-Year Bonds, which had temporarily fallen close to zero, increased to 0.2%. The announcement effect by BOJ is actually powerful though it is difficult for the BOJ alone to raise interest rates, without implementing sales operations, because the amount of the Outright Purchase of JGBs recently has declined to only ¥90 billion per month in the remaining maturities of 25 years or longer zone. It has been straightly reflected in the steepening of the yield curve, with the interest rates on 30-Year and 40-Year Bonds rising. In this situation, such trend is unlikely to be reversed unless it is recognized by the market that all measures have implemented, including reduction in the amount

of the BOJ's Outright Purchases of JGBs in the super long-term zone entirely to zero. However, depending on the demand from end investors in the second half starting in October, the recent rapid hike of interest rate may turn moderate.

In addition, while companies are issuing a large amount of corporate bonds and issuance of 50-year and 100-year bonds is being discussed in the United States given the low interest rate environment, it would make the market more interesting if the Financial Bureau considered issuing JGBs with longer maturities, though we understand that its introduction in the next fiscal year is difficult.

- Among the factors that have caused interest rates to fall since the beginning of the year is a global downward shift in the forecast of policy interest rates, which forms the basis of other interest rates. The FRB and the ECB led this shift while the BOJ's decision whether it will follow them has been attracting the attention of market participants. However, the declining pressure of interest rate caused by this factor is more or less ending, judging from the dot chart recently published by the FRB, which indicates that there will be interest rate cut by the FRB only one time at most by the end of the year. Therefore, unless recession occurs, the level of interest rate is expected to remain flat basically. The risk factor for the immediate future is a fading expectations for monetary easing, but further examination of the trend in the fundamentals is required from now on though remarks made by President Trump in his Twitter posts have been drawing the biggest attention in the market until now.

On the other hand, another factor that caused a decline of interest rates was the shrinkage of risk premium, which is a continuous theme. As neither the ECB nor the BOJ shows the path to exiting the negative interest rate situation, funds supplied into the market have to move toward a zone where a positive yield or spread remains, which does not allow interest rates in Japan alone to steepen in this globalized world.

After all, high volatility, with interest rates moving upward or downward, will continue for a while because there will not be a significant change in the low interest rate environment in the medium to long term while interest rates may rise in the short term as a result of a fading of existing expectations for monetary easing.

- Although the fundamental factors of the low interest rate environment and low growth have not changed, since the interview with BOJ Governor Kuroda reported on September 6, the market has had difficulty identifying the yield curve the BOJ envisions under the current monetary policy. It has caused a serious lack of liquidity, which is of great concern. As a securities company, which

is in a position to provide liquidity to investors, the role of providing sufficient liquidity is hardly filled continuously. In addition, amid the heightened uncertainty, the highly volatile market environment will last for a while. On the other hand, the accommodative monetary situation is expected to continue as the ECB has decided to lower interest rates deeper below zero and to resume the quantitative easing policy, and there are expectations for the FRB to stop shrinking the balance sheet earlier than planned and start expanding it in the future. However, the current situation is somewhat different from an environment in which the amount of funds in zones with negative yields increases. The form of cooperation between monetary and fiscal policies deserves attention in the future.

- The background of the recent global interest rate decline was the enhanced expectations for additional monetary easing by the central banks in Japan, the United States and EU for the series of monetary policy meetings in September. In addition to the significant recurrence of the uncertainty over the U.S.-China trade negotiations following the U.S. announcement of additional tariffs against China in August, the fact that the effects of the additional tariffs already imposed were starting to appear was contributing to the enhancement of the expectations.

On the other hand, there was a phase when the excessive interest rate decline was temporarily rolled back around the series of events. Besides expectations for progress in the U.S.-China trade negotiations, this was partly a reflection of the view that monetary policy has reached its limitations, rather than a disappointment at a lack of aggressiveness in the easing measures taken by the central banks compared with the market's expectations.

While the ECB and the FRB implemented additional monetary easing and interest rate cuts, the BOJ refrained from further monetary easing, not following their policy courses. However, our interpretation, in light of its statement, is that the BOJ has moved further toward implementing additional monetary easing, including lowering interest rates deeper below zero, at or after the next Monetary Policy Meeting in October. While it is expected that adequate countermeasure against the negative side effects will be introduced when further monetary easing is implemented, as has been already discussed, the environment that requires purchases of certain amount of JGBs will continue regardless of the deepness of the negative interest rates from the viewpoints of meeting needs for ALM purposes, including the necessity of collateral management, and preparation for a further decline of interest rates.

However, a further decline in the interest rate will be limited because the evaluation of monetary policy is gradually changing globally in the long term and the BOJ has also shown clear stance of preventing interest rates from declining in the super long-term zone.

• Although the reduction in the amount of the BOJ's Outright Purchases of JGBs has changed the yield curve significantly and eased the balance between supply and demand, the fundamental problem of the lack of JGBs necessary for maintaining liquidity in the market has remained, keeping the liquidity unstable. In addition, shrinkage of domestic investor base and growing influence of foreign investors under the low interest rate environment has brought about the situation in which the direction of the market is determined by one-sided information. As a securities company, the low liquidity is recognized as a serious problem. It is expected that the highly volatile market situation will continue until the confusion of information, including on the reduction in the amount of the BOJ's Outright Purchases of JGBs, settled down.

The issuance of the 50-year bond, which is difficult to handle, requires a close investigation to confirm strong demands existing in the market before starting consideration. While it is possible to issue bonds to particular customers in a one-to-one relationship in the case of corporate bonds, the situation is different in the case of government bonds, where continuous issuance over the long term is important. The market is not likely to be settled until redemption of the bonds starts, as in the case of FILP Agency Bonds and Inflation-Indexed Bonds. Now that 10 years have passed since the first issuance of the 40-Year Bond, the market is starting to settle down. The bond has formed a continuous yield curve with the 30-Year Bond. Therefore, it is crucial to identify the needs for 50-year bond from the viewpoint of feasibility of continuous issuance for 10 years at shortest for the stable growth of the market. Also, a shift of investors purchasing the 40-Year Bond to the 50-year bond alone would not lead to the growth of the market. Instead, development of new investment on the 50-year bond, with the purchasing amount of the 40-Year Bond maintained, is essential. An investigation on that point is also required for consideration of issuing the bonds.

▶ The Financial Bureau made comments as following regarding the issuance of the 50-year bond: "As was mentioned by the attendees, it is highly doubtful whether there are such strong needs in the market that enables a stable and long term issuance of the bond. In addition, the amount of issuance in the super long-term zone in Japan is the largest among developed countries, and the weighted average maturity is the longest among them as well except for the United Kingdom. Under these circumstances, the development of the market for the 40-Year Bond should be prioritized. Therefore, the issuance of the 50-year bond is not even under consideration."

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