

Minutes of the Meeting of JGB Investors
(74th Round)

- Date: Friday, March 23, 2018 (10:30 a.m. to 11:30 a.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 don't believe there 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 invite investors to discuss the reopening rule and the issuance method for Inflation-Indexed Bonds during the next fiscal year. Our current thought is to reopen only one issue for the year via a 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.
- ▶ In addition to many responses stating that there were no objections to the Financial Bureau's plan regarding the issuance amount for Inflation-Indexed Bonds in the April - June 2018 quarter, some members expressed the following:
 - We agree to the proposal. We agree with continuing the Buy-back auctions because it will serve to improve the low liquidity of Inflation-Indexed Bonds. And since we must ensure that there is an outstanding amount of each bond in the market, we also agree with maintaining the current reopening rule.
 - The current balance between issuance and Buy-back auctions is suitable.
 - Since issuance continues to be stable, there is no particular need for any changes.
 - As the range of investors for Inflation-Indexed Bonds is limited, we would like auctions to continue to be held in the single-price format.

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), an increase of ¥1.8 trillion compared to the initial plan for 2017,

- (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.

▶ In addition to many responses stating that there were no objections to the Financial Bureau's plan regarding Liquidity Enhancement Auctions in the April - June 2018 quarter, some members expressed the following:

- We agree to the proposal. Based on the auction results, there were not any significant problems with the issuance amounts for each zone in the January - March quarter, and we therefore do not see a problem with dividing the increase in a balanced manner across all zones for the April - June quarter.

- We agree to the proposal. Due to the conspicuous tightening of repos caused by the increasing stock effect of large-scale BOJ Outright Purchases (particularly for the 5 -10 – remaining - year zone to maturity), we request the debt management office to increase the issuance amount to be reflected by the market.

- Just as the proposes, we request the debt management office to increase the issuance amount to be balanced across all zones, including the 5 -15.5 – remaining - year zone, which is the main investment target for our company.

- We have no objections to the proposal. Since liquidity has dried up, we would like increases in issuance amount carefully.

- While we have no objections to the proposal, recent trends in the SC repo market indicate that the demand-supply condition continues to be tight. We request the debt management office to continue your appropriate responses based on real-world conditions and dialogue with the market

- As the issuance of 30-Year Bonds and 40-Year Bonds will decrease, we request the debt management office to consider further increasing the issuance amount for the longer than remaining 15.5 years zone to maturity.

- The actuarial life table will be adjusted this April, and ALM mismatches for life-insurance companies are expected to grow. Since the duration of assets will have to be extended to match the duration of liabilities, we would like the debt management office to further increase the issuance amount for the longer than remaining 15.5

years zone to maturity.

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 current method 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 auctions 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.

▶ In addition to many responses stating that there were no objections to the Financial Bureau's plan regarding the reopening rule, some members expressed the following:

- The BOJ has the highest Outright Purchase rate of 10-Year Bonds, and once the fixed-rate purchase operation are implemented that rate will increase even more; therefore, in order to ensure the liquidity of the current bond, we would prefer that 10-Year Bonds are also reopened as a general rule.

- Because a single or double issue of 10-Year Bonds under the current monetary policies creates the extremely high likelihood of a squeeze, reopening as a general rule is better.

And because there are instances where prices fluctuate dramatically, we would like to maintain the single-yield method for 40-Year Bonds.

- Regarding the reopening rule for 20-Year, 30-Year, and 40-Year Bonds, we do recognize how extremely important it is from a liquidity viewpoint to increase the issue amount for each bond. But in cases where there is divergence from the interest-rate levels of market yield, we could consider issuing new bonds as is done with the 10-Year Bonds.

While the investor base for 40-Year Bonds is limited, we believe that the bonds have established themselves fairly well as the core of the super long-term zone in the ten years since they were first introduced. We therefore could consider transitioning to a multiple-price auction method when the timing is right. We feel that perhaps it is time to think about creating a JGB yield curve that matches the market yield, including 40-Year Bonds.

4. Latest JGB market situation and outlook for future investments

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

- Since we anticipate the low volatility of yen interest rates to continue, the investment policy for the next fiscal year is to invest in stocks as well as foreign and domestic bonds in a balanced manner while flexibly adjusting allocation as necessary.

If interest rates for the short- and medium-term zones return to positive, for example, we intend to invest in JGBs including those zones; but given the balance sheet problems that security companies are facing, there is some doubt whether the market liquidity we saw previously can be maintained.

The presence of foreign investors is gradually becoming more felt in the bond market, and we believe that taking a long-term view and ensuring the stability and continuity of the market is critical, as this will also affect the ratings of both JGBs and Japanese financial institutions. To accomplish that, it is imperative that we increase the consumption tax as planned and remain resolute in the initiatives toward fiscal consolidation.

- Bonds were originally desirable as a hedge for portfolios with an increasing proportion of stocks, because they had an opposite correlation to stock trends. But because the volatility of yen interest rates is currently low, they have almost entirely lost their hedging function. Our company has been investing in foreign bonds to achieve hedging, but we have concerns that these investments may become one-sided toward a particular currency, such as Eurobonds.

Bonds in the short- and medium-term zones are essential as collateral for financing and derivative transactions, but because collateral costs have increased under the current negative interest rates, we are making our investments while keeping such costs in mind.

- In consideration of ALM, our policy for the next fiscal year is to invest minimally in short- and medium-term JGBs, which we will have to replace with other investments such as corporate bonds.

As the current administration of the United States (specifically its protectionist policies and intention to devalue the dollar) creates a strong yen and lowers stock prices, yen interest rates are being pressured downward. While investors are hoping that the yield curve steepens, we feel that these overseas trends create a lot of chances to push it in the opposite direction.

- Some JGBs that we invested in previously will be redeemed during the next fiscal year; but given the current market conditions, we will not be able to sufficiently reinvest in these bonds and it will therefore be difficult to sustain our JGB ownership levels. We are dealing with this by using a portion of the redeemed funds to purchase municipal or other general bonds or to buy JGBs with long maturity

terms, but we would like interest rates to rise a little more before making our investments.

- With foreign investments, there is some uncertainty whether we will see returns on our invested capital once we include the costs of foreign exchange hedging, whereas yen bonds have the advantage of reliable redemption at par value if they are held until maturity.

In terms of future investments, we would like to make periodic purchases of JGBs with a focus on the long-term and super long-term zones, although that will depend on the relative profitability of such investments.

- Since the prospects for changes to Japan's monetary policies are uncertain, we have no choice but to curtail our investment in JGBs and instead continue allocating funds toward hedged foreign bonds. Because rising hedge costs are making it difficult to earn profits with US Treasury bonds, we are investing in European bonds and credit instruments.

As the JGBs we purchased in the past are redeemed, we are investing in areas such as FILP Agency Bonds to maintain collateral, but we have not been able to invest an amount that corresponds to those redemptions. We have been unable to invest in yen bonds sufficiently past few years, and we would like interest rates in the yen market to normalize so that we can increase our investment opportunities and train our personnel as well.

- We will be able to invest in the short- and medium-term zones if their interest rates return to positive, but given the present market environment it is difficult for us to invest in any of the zones.

We believe that many investors will have no choice but to allocate their funds to JGBs with fairly long maturities during the next fiscal year, and there are fears that the yield curve will flatten even further. Since our company cannot really invest in JGBs with long maturities, our investment policy will be to continue diversifying our investments through foreign funds and other avenues.

- Our company needs to invest in the short- and medium-term zones because our debt duration is relatively short, but due to the negative interest rates in those JGB zones we have no choice but to focus our purchases in areas such as government-guaranteed bonds, municipal bonds, FILP Agency Bonds, and corporate bonds. And

while we are also purchasing hedged foreign bonds, liquidity considerations compel us to invest a certain amount in yen bonds as well.

- Yen-denominated bonds with durations over 20 years cannot be found outside of JGBs, so we have to purchase a certain amount of JGBs even if their interest rates are low. Meanwhile, we are focusing our investments in areas of the short-term zone such as hedged foreign bonds and the riskier corporate bonds.

If interest rates increase, we intend to expand our investments into JGBs from the viewpoint of ALM, but with these interest-rate levels we find it difficult to allocate additional funds to JGBs for the next fiscal year. We plan to adjust our debt duration by selling short-term JGBs and replacing them with longer maturities.

- Since all of our company's debt is denominated in yen, moving forward we need to systematically incorporate JGBs from the super long-term zone in order to extend the duration of our assets to match the duration of our debt.

And considering the current trends in fiscal policy, we feel that rising volatility in the JGB market has destabilized it and made predicting the future difficult.

- We face a difficult situation in that we may be unable to sufficiently reinvest the funds from redeemed high-yield JGBs because the yields for these bonds have declined in the meantime.

As institutional investors, we feel that the only way to activate the yen bond market is to engage in direct dialogue with the issuing body and do the legwork needed to find yen-based investment vehicles.

Our company has also invested considerable amounts in hedged foreign bonds, but the profitability of major bonds such as US treasury and Eurobonds has dwindled as of late. We must therefore think about diversifying by increasing our investments in foreign currency or expanding our investment targets, and the professionalization of all our assets amidst these low interest rates is an administrative challenge we face.

- Our reinvestment of redeemed funds depends on the circumstances, but the funds from our redeemed JGBs will be used to purchase hedged foreign bonds or even open (non-hedged) foreign bonds in some cases. We have also decided to spread our reinvestments across other areas such as futures and derivatives.

- We think that it will continue to be a challenging environment over the short term for investors in yen-denominated bonds. This is true for JGBs but is now also the case for hedged foreign bonds—US treasury in particular are becoming difficult to purchase due to hedging costs being driven up by rising short-term interest rates and a flattening of the yield curve in the United States. And because the correlation between the exchange rate and the Japan-US interest rate gap has disintegrated, sticking with open foreign bonds will be problematic as well.

As foreign investments become trickier, we believe that it may be possible for some investors to return to JGBs, but interest rates are not currently at a level that makes outright purchases feasible. Our company is adopting a policy of reducing our duration risk in favor of risk that is based on relative value.

- Since last year, our company has had to exercise some level of control over our yen balance sheet. However, due to the expansion of the tax-exemption measures for repo transactions in April of last year, the size of our balance sheet has gradually recovered, and we have even increased the number of securities companies that we do business with.

The greatest risk factor is a downgrading of JGBs. While we use domestic repo transactions for a third of our entire balance sheet, the other two-thirds uses the London market. If JGBs are downgraded, repo transactions within the London market will become exceedingly difficult.

- The potential BOJ leadership changes have been a major topic within the JGB market over the past several months. But since Governor Kuroda will ultimately remain in his post with Executive Director Amamiya filling the Deputy Governor position, expectations for changes in monetary policy have fallen dramatically. When considering our investments for the next fiscal year, it is therefore necessary to think about how we will increase our returns under the assumption that market prices will remain static. Our company will more actively invest in the super long-term zone (where there are still earning opportunities due to roll-down returns) and in credit for the short- and medium-term zones, where JGB yields are negative. However, the spreads of ordinary corporate bonds have lost their former profitability due to BOJ buying operations. We therefore feel it necessary to increase the yield of our portfolio by taking on the risk of investing in other areas, such as subordinated debt.

- Under the BOJ's policies for controlling the yield curve, the fluctuation range for interest rates has narrowed and the voice of the market has become difficult to hear. While the government is working to finalize a new fiscal consolidation plan between now and this summer, we feel that it should communicate information about the danger of a financial slump and related matters via discussions such as today.