

Minutes of the Meeting of JGB Investors
(70th Round)

- Date: Thursday, June 29, 2017 (1:25 p.m. to 2:35 p.m.)
- Place: Special Conference Room 3, Ministry of Finance
- Gist of the Proceedings

1. Issuance amount of Inflation-Indexed Bonds Issued in the July–September 2017 quarter

▶ The Financial Bureau gave the following explanation regarding the issuance amount of Inflation-Indexed Bonds over the July – September 2017 quarter:

- As described on page 2, the FY2017 JGB Issuance Plan for Inflation-Indexed Bonds calls for issuing ¥400 billion per auction, with issuances held four times annually, while the plan further stipulates that “The issuance amount may be adjusted in a flexible manner in response to market developments and investor demand, based on discussion with market participants. Today, we will hear opinions regarding the issuance amount for the July - September quarter and other related things.

- As covered on page 3, over the April – June quarter, we held an auction at ¥400 billion in April along with buy-backs worth ¥20 billion in April and June. The April auction, as shown on page 4, saw a bid-to-cover ratio increase of 3.63 times, reaching its high level over the last three and half years. Page 5 shows that the buy-back auctions and BOJ purchase operations also had a somewhat higher bid-to-cover ratio during this period as well, but the results are mostly stable.

As for the secondary market, displayed on page 6, declines in global inflation expectations have led the BEI to sit in the middle of the 0.4% range.

- At the hearing prior to this discussion, some expressed concern that the continued expansion of the investor base is restricted with regards to Inflation-Indexed Bonds, and that many thought it desirable to continue the current level of issuance amounts for Inflation-Indexed Bonds and buy-backs for the July – September quarter.

- In light of this situation, as shown on page 7, the issuance amount for July – September will be ¥400 billion, the same as April – June, and we are considering whether to hold a Buy-back auction for ¥20 billion in August.

Per the discussion at the Meeting of JGB Market Special Participant yesterday, there

were essentially no objections to this plan.

- We believe that market development for Inflation-Indexed Bonds is an important issue for JGB management policy. With that in mind, we would like to hear your opinions regarding the issuance amount for the July – September quarter.

- ▶ The resulting opinion is that there is no objection to the proposal for the issuance amount of inflation-indexed bonds for the July – September 2017 quarter.

2. Liquidity Enhancement Auctions for the July - September 2017 quarter

- ▶ The Financial Bureau gave the following explanation regarding the Liquidity Enhancement Auctions for the July - September 2017 quarter:

- Regarding the Liquidity Enhancement Auctions, the FY2017 JGB Issuance Plan aims to issue ¥10.8 trillion annually, as shown on page 9, with ¥1.2 trillion for the 1 - 5 - remaining - year zone, ¥6.6 trillion for the 5 - 15.5 - remaining - year zone, and ¥3 trillion for the 15.5 - 39 - remaining - year zone, ultimately while flexibly adjusting in response to the market environment and investment needs based on discussions with market participants.

Today, we would like to hear opinions regarding the issuance amount for each zone within the July - September quarter.

- As indicated on page 10, and in accordance with the targets displayed in the JGB Issuance Plan, in the April - June quarter we issued JGBs ¥200 billion in May for the 1 - 5 - remaining - year zone, and ¥550 billion in 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.

- Page 11 shows the results of the recent Liquidity Enhancement Auctions. While the results for the increased amount for the 5 - 15.5 - remaining - year zone and the 15.5 - 39 - remaining - year zone were generally stable, the 1 - 5 - remaining - year zone, with an unchanged issuance amount, continued high rate of bid-to cover ratios, demonstrating vigorous demand.

- When we heard opinions under these conditions about the Liquidity Enhancement Auctions for the July - September quarter from the JGB Market Special Participants, there were many requests to increase the amount for the 1 - 5 - remaining - year zone, as supply and demand is constrained and the market make-up is difficult for many issues, particularly

for the 1 - 5 - remaining - year zone.

Liquidity Enhancement Auctions are to issue JGBs for which liquidity shortfall, and aim for the maintenance and enhancement of liquidity with JGB markets. In that sense, we believe that it is necessary to make much of the opinions by the JGB Market Special Participants with entry qualifications for the auctions who are responsible for creating a market.

- Therefore, as shown on page 12, we are considering issuing ¥300 billion in July and September for the 1 - 5 - remaining - year zone, ¥550 billion each month for the 5 - 15.5 - remaining - year zone, and ¥400 billion in August for the 15.5 - 39 - remaining - year zone.

Though there was debate over this proposal during yesterday's Meeting of JGB Market Special Participants, a majority of participants agreed to it.

- In addition, as indicated from page 13 onward, we are reconsidering the selection rule for target issuances in Liquidity Enhancement Auctions from the July - September quarter onward. Under the current rule, current issuances as of the first day of the month of the auction were removed from the bidding targets, so, for example, in the Liquidity Enhancement Auction in March for the 1 - 5 - remaining - year zone, the 130th of 5 - Year Bonds, which had tight supply and demand, was removed from the bidding targets.

- Moving forward, we are thinking that we would like to end the issuing of new bonds on the first day of the month of the auction and that we would like to include issuances that could not be issued outside of the Liquidity Enhancement Auctions as subjects in the Liquidity Enhancement Auctions, even if they are current issuances.

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

- ▶ The following opinions were given, in addition to having no objection to the proposal regarding the Liquidity Enhancement Auctions for the July - September 2017 quarter.

- We agree to the proposal. We understand that this is a proposal in accordance with the purpose of the Liquidity Enhancement Auctions, which are to provide additional issuances where liquidity is lacking.

- We agree to the proposal. When we think about original purpose of the Liquidity Enhancement Auctions, changing issuances from the 15.5 - 39 - remaining - year zone to

the supply-and-demand-constrained 1 - 5 - remaining - year zone is reasonable.

- We have no objection to the proposal. Recently, short-to-medium-term zones have some slightly volatile movements, and the repo market continues to be tight.

- We have no objection to the proposal. Our company has not made the 1 - 5 - remaining - year zone an investment target due to its large negative interest rate, but we are considering to make it an investment target if the negative range becomes shallow.

- Even after reviewing the issuance amount for each zone for the April - June quarter, the bid-to-cover ratios for the Liquidity Enhancement Auctions have not changed much, and we do not feel a strong need for review, but we have no objection to the proposal. The effect of transferring issuances amounts by about ¥100 billion may be limited.

- From the viewpoint of our company's operations, maintaining the current issuance amount for each zone would be ideal, but, due to the tight supply and demand balance for the 1 - 5 - remaining - year zone and problems with market making, we can understand the need to increase the amount, and so we have no objection to the proposal. We request the debt management office to adjust issuance amount, flexibly, reflecting the market environment and investment needs for the October - December quarter.

- Speaking from an investor's perspective, we request to increase the 15.5 - 39 - remaining - year zone and to decrease the 1 - 5 - remaining - year zone, but if many participants were expressing the opinion in the Meeting of JGB Market Special Participants yesterday that an increase is necessary for the 1 - 5 - remaining - year zone from the view of market makers, we believe the proposal is appropriate. However, recently, short-to-medium-term zones' interest rates are going up, and we cannot be certain that the current supply and demand environment will continue. For the October - December quarter, the debt management office should continue to consider reviewing the issuance amounts for each zone based on an exchange of opinions with market participants.

- Basically we can understand the proposal. We believe the yield curve is approaching the "consistent yield curve" mentioned by the BOJ, but the amount of liquidity in the market for the short-to-medium-term zones is low. However, trading in the super long-term zone is also not vigorous, and liquidity is extremely limited. From the October - December quarter onward, we request the debt management office to consider increasing the amount of the 15.5 - 39 - remaining - year zone as necessary based on interest rate levels and liquidity.

- We can understand the proposal when considering the original purpose of the Liquidity

Enhancement Auctions, so we have no intention of opposing it. However, while there are potential investment needs for life and damage insurance companies in the super long-term zone, purchases are not proceeding because interest rate level do not match. Under these circumstances, in the long term, we believe it is undesirable to reduce the issuance amount for the super long-term zone.

- While we are not opposed to the proposal, we would like to state that, as an institutional investor, we hope to maintain the current issuance amount. We invest primarily on JGBs based on the characteristics of liabilities, and we actively utilize the 15.5 - 39 - remaining - year zone in the Liquidity Enhancement Auctions. If the medium-term zone price structures return to normal, we would like to request reviews on the issuance amounts for each zone.

- One of the causes for the tight supply and demand in the medium-term zone is the needs of foreign investors involved in dollar-yen basis swaps, but, recently, diversification in domestic investors' dollar procurement methods has slowed dollar demand in the basis market, with the tightening of spreads ongoing. This is a structural change, and we expect that, demand and supply balance will not be likely to become tight, and feel that increasing medium-term zone at this point would be a backward-looking adjustment.

3. Shortening of Settlement Cycle related to the coupon-bearing issues (5-30 year issues) in massive JGB redemption months and the monthly 2-year issue

- ▶ The Financial Bureau provided the following explanation regarding the shortening of settlement cycle related to the coupon-bearing issues (5-30 year issues) in massive JGB redemption months and the monthly 2-year issue

- As explained during the previous meeting, we have been looking into shortening of settlement cycle in order to reduce the settlement risk in the coupon-bearing issues (5-30 year issues) in massive JGB redemption months (March / June / September / December) and the monthly 2-year issue, for which the period from auction to issuance are long.

Since this issue is a problem that could have a significant impact on the systems of the market participants, we have listened carefully to opinions from many areas as conducting a survey with the assistance of the Japan Securities Dealers Association. And now we have summarized this our proposal as explained on page 17.

- First, we are considering enacting the plan at the same time as the T+1 change in the

secondary market planned for May 1, 2018.

Therefore, the coupon-bearing issues (5-30 year issues) in massive JGB redemption months will be implemented in June 2018, and the monthly 2-year issue will be from May 2018.

- Additionally, in terms of how this will be implemented, the first step is that the coupon-bearing issues (5-30 year issues) in massive JGB redemption months will be no longer be issued on the 20th day (or next business day, if that day should be on the weekend) of the auction month, regardless of auction date. Instead, this will change to T+1. In accordance, this means that the issuance amount for the massive redemption months of March, June, September, and December will be redeemed in the same month as prior-month and two-months-prior bonds, and that we will extend the redemption date by three months from the amount issued in the following month (April, July, October, and January) and issue new bonds. This is a result of hearing from many participants in the market that issuing new bonds at T+1 for the interest payments and redemptions undertaken in March, June, September, and December would require large-scale revisions of the system in relation to initial interest payments.

- Second, the monthly 2-year issue are currently issued on the 15th day of the following month, regardless of the date of the auction, but the issuance date will now be the 1st day of the month following the auction. Additionally, the dates for interest payments and redemption will be changed to the 1st as well. This is to prevent the confusion that may arise from simply converting 2-year issue auctioned at the end of the month to a T+1 structure, which could result in the bond being issued either within the same month or in the following month, depending on the date of the auction. As such, we retained following-month issuance while attempting to shorten the settlement period as much as possible.

- We would like to arrive at a final decision regarding this issue based on the discussion today, and so we would like to ask for your opinions once more.

- As we have already explained, in line with changing to T+1 for issuing government bonds, we are changing the timetable for auctions. The changes to the timetable announced in November of last year are reproduced on page 26, so please check it in a little bit.

- ▶ The following opinions were given, in addition to having no objection to the proposal regarding the shortening of the settlement period for the issuance of the coupon-bearing issues in massive JGB redemption months.

- This proposal's implementation period takes our company's circumstances into account, so we have no problems with the proposal.

- We agree with the proposal. We have confirmed that our company's system can adapt to it without any problems.

- We have no issues with the proposal. We request the debt management office to confirm the situation of the system reform by market participants moving forward.

- Regarding issuing 2-year bonds on the 1st, there are additional system reforms that will result from dealing with the proposal at our company, but there is sufficient time until the plan is implemented, therefore I have no issues with the proposal.

4. Latest JGB market situation and outlook for future investments

▶ The following is a summary of opinions expressed by the attendees:

- Although there are materials suggesting future interest rate increases, primarily centered around US interest rates, such as FRB rate increases and reduced balance sheets, there are concerns around the feasibility of implementation and timing. As such, we invested in US bonds from the position of expecting US interest rates to significantly increase at the start of the year. Moving forward, we will invest in US bonds when US interest rates appear to rise again, but we are currently watching the situation.

With regards to Japanese government bonds, while yields in the short-term zones are showing upward, it is necessary to consider retaining them as collateral.

- Against the background of the Bank of Japan's monetary policy, Japanese government bonds continue to have limited price fluctuation. At the current level of interest rates, investment must be focused within the range of the amount of necessary collateral for the short-to-medium-term zone, and full-scale investment in the long-term and super-long-term zones must continue to be suspended. Also, regarding investment in foreign bonds, the majority have taken the view that short-term interest rates will go up, so we must be cautious.

Under these circumstances, as the presence of overseas investors has increased in recent years, we would like to express our concerns about Japan's fiscal consolidation once more. While the debate around the primary balance is ongoing, we are in a situation that requires an earnest explanation of a concrete path towards the fiscal consolidation. We believe that

continuing to demonstrate a stance of maintaining fiscal discipline, including discussions about increasing the consumption tax, will become extremely important from a long-term perspective.

- As our company primarily invests in -shorter than remaining 20 years to maturity bonds with positive yields, the current low level of interest rates continues to be extremely challenging. Under these circumstances, we reduce cash by investing in shorter than remaining 10 years to maturity government-guaranteed bonds and local government bonds, and balance overall investments by earning yields with mutual funds while making minimal investments in super-long-term bonds based on our capital situation and portfolio balance.

We hope for domestic yields to recover, but, until then, we would like to think of some measure to secure yields.

- Since we cannot get carry or capital by domestic bonds, the sense that they are basically a means of collateral or cash reduction is growing stronger. On the other hand, we would like to pursue earnings while aiming for risk diversification using foreign bonds, domestic and foreign stocks, mutual funds, and other funds. However, the market becomes an unhealthy shape, so it is possible that something will cause market prices to crash. When they do crash while maintaining the reserves to reincorporate them into our portfolio, we would like to operate not to cut our losses and let it end.

- In Japan, monetary policy is powerfully effective, and volatility is suppressed low. However, currently, the FRB and other central banks, like those of England and Canada, have started to become more hawkish, so, moving forward, we will need to be careful as hawkish dispatches from these central banks may make it easier for markets to fluctuate. These central banks have provided ample money for several years, which has been invested into all kinds of assets, and so we will need to pay very close attention to the effect of rewind on markets.

- The conversion from monetary easing by the ECB and BOE, in addition to the FRB, which has already started to raise rates, has become a topic of discussion in the market, and the Bank of Japan is also taking an interest in exit strategies. However, so long as the 2% price stability target remains distant, we believe the likelihood of the Bank of Japan referencing an early exit is low and that they are likely to continue the current monetary easing until they achieve their target.

Therefore, movements in overseas interest rates that carefully examine US and European monetary policy will be closely followed as short-term materials. For example, at the last

FOMC, the FRB suggested the possibility of raising interest rates once more during this year and beginning an early balance sheet reduction, but the expected inflation rate is also declining in the United States due to the current, low CPI. If inflation trends are the cause of these structural problems, like flattening Phillips curves, then it is possible to think that the momentum of long-term US interest rates is weak within a rate increase by the FRB. As such, it is difficult for long-term interest rates in Japan to deviate from the current narrow range, and low volatility is expected to continue.

Regardless, it is an extremely difficult investment environment, but we would like to follow it in a detailed manner, without guessing, and address it flexibly.

- Reinvestment of redeemed funds is our company's major investment activity, and core investment will not move away from yen bonds. Hedged foreign bonds are an important alternative to JGBs, but with interest rates now falling in the US and around the world, it also becomes difficult to rely on this method. On the contrary, Japanese long-term interest rates are not attractive at absolute levels, but, since their levels begin to become comparable to the levels of hedged foreign bonds in relative terms, we are watching the situation with Japanese government bonds and incorporating them.

On the other hand, We are concerned that the Bank of Japan's yield curve control works well and that volatility is decreasing. This is fine now since external environments are comparably stable at the moment, but should a major event occur and investors suddenly need to buy and sell in large amounts, a lack of liquidity in the secondary market will likely have a major impact. The greatest risk is a change in Bank of Japan's monetary policy. We currently believe it will not move for now, but we are concerned that something may occur around the end of the fiscal year.

- There are a variety of movements overseas, but, domestically, the Bank of Japan's yield curve control holds the market steady. We invest primarily in the super-long-term zone with a focus on market liquidity, volatility, and interest rate levels, but the investment environment for interest rate levels continues to be extremely challenging. Recently, many investors have joined the 20-year bond market aiming for the carry/roll-down effect, so the carry effect is diminishing. Additionally, the increase in investors who do not hold until maturity raises concerns about the risk of a sudden change in market prices is increasing.

- One development that has recently garnered attention is the increase in interest rates in not only the United States, but Europe as well. Under the circumstances, it seems remarkable that only Japan is unable to move.

Additionally, while short-to-mid-term interest rates have risen recently, it is concerning that interest rates fluctuate much more readily now due to the movements of overseas

investors. As the attractiveness of Japanese government bonds declines, liquidity is also gradually decreasing along with the decrease of participants in the market, which means we may be unable to withstand a shock should one occur.

Even then, our company's debt is a fixed interest rate type, so our investment stance regarding Japanese government bonds would not be significantly changed.

- While time has passed since the introduction of yield curve control, long-term investment based on the view of interest rates trend becomes difficult, and thus short-term investment increases. Should the FRB's rate increases or asset reductions continue, this may lead toward a pursuit of higher yields in a variety of forms. The main scenario for US interest rates will be that the interest rates gradually go up and yield curve becomes bear flattener, but it is necessary to continue the investment considering the possibility that interest rates might go down contrary to the main scenario.

- Since March, the Bank of Japan has greatly reduced the purchase amount for the remaining 1 – 5 years zone, so if we look at shorter than remaining 10 years to maturity, the yield curve flattens, and the distortion of the curve disappears, reducing opportunities for earnings. Looking at the yield curve as a whole, the remaining 20 years to maturity zone has narrow margins for investment, leading to slightly overheated situation where investors are concentrating. Our company's operational stance is to direct capital towards the overseas market, where volatility is becoming more likely as the ECB and BOE, following the FRB, are aware of the shift away from monetary easing policies. This will likely mean restricted operations related to the Japanese government bond market until an investment opportunity appears.

- The interest rates in the super-long-term zone are behind kept low, and this does not fit with the final investors' point of view, but, for our company, we will continue to invest in Japanese government bonds regardless of the interest rate level, as they are necessary for us to purchase from an ALM perspective.

It has been 10 years since the Paribas shock, and 20 years since the Asian financial crisis, and so it is about time to pay attention to risk taking. As the yield curve flattens, the difference in interest rates will not become a source of earnings, so there is a chance that excessive investment using leverage will increase, and will require caution.

- There is a possibility that volatility will increase as various countries continue towards a reduction in monetary easing. The key in that sort of situation is what investment actions people choose to take.

- Yen interest rate fluctuations are disappearing due to the Bank of Japan's yield curve controls, so we are proceeding with diversified investment, which includes foreign bonds and funds. Moving forward, we will continue to diversify investment while considering the risks of increasing volatility and domestic liquidity due to trends in overseas interest rates.

- The Bank of Japan's monetary policies have been extended beyond expectations, and, with the low current level of interest rates and volatility ongoing, places for Japanese traders to participate in the market are disappearing. With only short-term trading possible based on short-term supply and demand predictions, experienced traders leave the market while not knowing other ways of trading, so younger generations are not being educated, creating significant gaps in quality and availability of human resources, including young operators, compared to places like Singapore and Hong Kong. We feel that the deterioration of the human infrastructure to support the market is the greatest cost of prolonging low interest rates.