

**Minutes of the Advisory Council on Government Debt Management
(47th Round)**

1. Date: Friday, June 15, 2018 (9:30 a.m. to 11:30 a.m.)

2. Place: Ministry of Finance Special Conference Room 3

3. List of the Proceedings:

1. Current state of Japan's bond market and investment environment
(Kazuto Uchida, MUFG Bank)
2. Points of future discussion on debt management policies
3. Overseas IR activities
4. Trends in the debt management policies of major foreign countries

First, Member Uchida from MUFG Bank presented the current state of Japan's bond market and investment environment, after which the members exchanged opinions on those topics.

- Views expressed by the members have been summarized (by Financial Bureau) below.
- Given Japan's current position in the global economy, (i.e., the extent to which it is compelled to open its doors to the outside world), demand for the procurement of foreign currency is increasing. Under those circumstances, the reuse of JGBs as collateral has been positioned to be important, which also contributes to the efficient use of yen.
- Countries that suffer from a debt crisis fall into two main categories: internal-debt type and external-debt type. I believe that Japan is an internal-debt type. In the unlikely event that Japan faces a debt crisis, what do you think would be the exact difference between the Japan's case and the case of those external-debt type countries which previously dealt with debt crises? Also, which area should we focus on?
- Almost all cases of debt crisis begin with the country's current account falling to a negative balance, followed by the country transitioning to an external-debt type

as it plummets into crisis. Whereas, the case which occurred in England from 1945–48 is an example of debt crises by internal-debt type countries.

Domestically, this crisis experienced changes in the internal debt balance, sizable market fluctuations, and large swings in exchange rate caused by inflation—conditions which we must consider sufficiently.

- In the case of an internal-debt type, foreigners will continue to buy bonds as long as the currency is credible; the result, however, is that the country transitions to an external-debt type and its rating is eventually downgraded, creating the potential danger of a crisis. To what percentage can ownership by foreign investors proceed, without causing problems?
- Also, it might be fine while the current account surplus continues, but the structure of the current account will probably change. While banks also fulfill the role of supporting future industries through lending, which fields, such as AI and robots, do you think will help Japan keep its current account surplus?
- With 30% of its stock held by foreigners, the Japanese market is very susceptible to the investment trends of foreign investors. Meanwhile, I think one of our goals should be broadening the JGBs holdings by foreigners to around 20%, considering the situation that the current share is about 10%, which has a risk of destabilization if the transactions of domestic investors favor a single direction. More than the mere problem of the percentage, however, I expect that if foreign investors would simply recognize Japan's government bond as a global financial platform and treat it as collateral and an investment avenue for foreign-exchange reserves, we will be able to maintain a certain level of stability and durability.
- While the IoT and AI will become the primary focus as we enter this Fifth Industrial Revolution, I believe the point is the capital account. The yen's place on this global platform for the investment of financial assets is more important than which new industries will become our leading exports.
- The current monetary policies have led to long-term rates being essentially fixed. This situation is similar to a transition from a regulated interest rate with lost market functionality to a deregulated system, which is rare in the history.
- Regarding an exit of these monetary policies, there are some examples of flash crashes occurring in countries throughout the world; Japan also experienced the VaR shock, in which risk management and investment trends followed the same direction. We can see from those examples that procyclicality occurs easily. The

idea of the Ministry of Finance, the Bank of Japan, and market participants coordinating as a sort of Holy Trinity is going to be increasingly important in the future.

- As it was also stated in the past when interest rates rose, the diversification of JGBs holders is critical. We need to continue to discuss product design matters such as the floating-rate notes as well as the marketability of products to domestic, foreign, and individual buyers.

- I don't know when it will happen, but there is no past example of the market fluctuations that will ultimately result from the exit of monetary policies in Japan. It is important that the MOF, BOJ, and market participants proactively recognize each other's roles and responsibilities and work together to issue, circulate, and sell off government bonds. We must consider how to design such a system in advance to make this real.

- Dialogue with the market about government debt management policies began when interest rates sharply spiked as a result of the so-called Trust Fund Bureau Shock. Considering the current situation in which the monetary policies have returned us to a system of fixed long-term interest rate, what is the concern about the situation in comparison with the past?

- In the past, although the Japanese government bonds only affected a portion of domestic activity, I feel that matters regarding JGBs have now evolved into a very sensitive issue that includes foreign concerns as well.

- If anyone knows, please tell me why the debt ratio for each country on page 10 of the IMF data is peaking though the primary balance is negative.

- I suppose it is the continued expansion of the global economy, increases in nominal GDP over the potential growth rate and rising tax revenue that held down the debt outstanding ratio. But, we don't know whether the nominal growth rate will continue to rise or whether we can say that it is structurally improving.

Next, the Financial Bureau gave a presentation about points of future discussion on debt management policies, overseas IR activities, and trends in the debt management policies of major foreign countries. After the presentations, members

exchanged opinions on those topics.

- Below is a summary of the Financial Bureau's presentation.

Points of future discussion on debt management policies

- The first point concerns those areas related to the external environment that form the basis of our discussion: “the state of the economy and public finance”, “monetary policies”, and “financial regulations”.
 - The “state of the economy and public finance” includes future forecasts for domestic and foreign economies as well as the evaluation of initiatives for fiscal consolidation.
 - A variety of effects “monetary policies” such as the Bank of Japan’s QQE and yield curve control have on the bond market and investors’ asset management.
 - In addition to their effects on the behavior of investors, “financial regulations” also increase costs for market makers and impact the liquidity of the bond market. Awareness of this point is growing among the issuing agencies of national governments around the world.
- The second point is a central challenge for the bond issuance agency and related to bond issuance policies.
- Debt management policies ultimately aim to “ensuring the stable and smooth issuance of JGBs and minimizing medium- to long-term financing costs”; however, as we discussed at this council in October of last year, “minimizing medium- to long-term financing costs” requires us to issue bonds in a stable manner based on the demand for those longer time periods rather than to respond excessively to fluctuations in demand over the short term. In order to do so, it is imperative that we accurately ascertain the medium- and long-term investment trends of banks and life insurance companies (the major investors).
- Moreover, it is essential that we diversify the JGBs holders, which currently consists mostly of domestic institutional investors. By diversifying JGBs holders, transactions won’t become one-sided and the market will be able to be stabilized even if it begins fluctuating rapidly. Even in terms of preparation for the future, we’d like to promote the ownership of bonds by individual and foreign investors.

- Also, Because of the relatively small inflation-hedge needs, the investor holdings of inflation-indexed bonds have not been expanded sufficiently. However, considering the fact that inflation-indexed bonds comprise almost 20% of the total issuance, it is important that we also build a market for these bonds to prepare for times of significant market upheaval.
- The third point concerns the secondary market. An energetic secondary market is essential for minimizing issuance costs over the medium- to long-terms.
- Under this extended period of monetary easing by the BOJ, a decline in market liquidity could eliminate the biggest attraction of government bonds—that JGBs can be traded at a reasonable price at any time and any amount. This has been discussed at this council preciously. Furthermore, although the bond market has had a signaling function that reflects shift of economic conditions and fiscal discipline through changes of interest rates, it is concerned such function is declining in effectiveness.
- Additionally, we need to pay close attention to how the secondary market has been affected by the T+1 settlement system, which was introduced in May of this year as well as how the futures and repo markets (which are related to the two sides of the spot market) have been affected under this extended period of monetary easing.

Overseas IR activities

- In the context of “stable and smooth issuance” and “achieving a stable bond market,” the aim and policy of overseas investor relations (IR) activities is to promote JGBs holdings by foreign investors. The ratio of bonds owned by foreign investors is only a little greater than 10%; however, foreign investors claim a significant presence in the secondary market, holding over 30% share of the spot market trading and slightly less than 60% trading of the futures market. Foreign investors will therefore play a substantial role in achieving a “stable market”.
- Against a backdrop of abundant household wealth, the bulk of Japan’s debt is currently held by domestic investors. But, as the country’s society continues to age, the gap between household wealth and government debt is shrinking due to factors such as a lower savings rate. With government debt increasing, foreign investors might play a significant role in the “smooth and reliable issuing of

government bonds”.

- Capital from foreign investors tends to move quickly and adopt the similar position. To achieve market stability, it is important that we provide accurate and timely information about Japan to overseas investors through our overseas IR activities.
- Compared to ten years ago, the share of government bonds held by foreign investors is now larger. Bonds in the short-term zone are the main factor of that increase, with ownership rates last year surpassing 60% for the first time.
- T-Bill ownership by foreign investors is mainly a way of dollar investment by currency swap transactions. Therefore, from the viewpoint of smooth and reliable issuing T-Bills, we must pay attention to changes in the currency-swap and other market environments.
- For our foreign IR activities in 2017, we visited 131 investors in eighteen countries. That was also the first year that we began visiting locations in Tokyo in addition to the ones abroad. We gathered information about the systems and functionality at each site and even managed to build some new relationships in Tokyo.
- Through our foreign IR activities, we learned that many foreign investors feel JGBs are unattractive in a low volatility environment with low interest rates; we also discovered that their investments are focused on short-term zones that utilize mechanisms such as dollar-yen basis swaps. Due to the favorable state of the Japanese economy, some investors who restrict their investments to outlets with a certain rating have continued to buy JGBs regardless of whether the bonds meet their investment criteria. These are the sorts of investors that we need to conscientiously interact with in the future.
- We should continue to focus our IR activities on investors who are expected to hold JGBs over the long term, building close and lasting relationships with them. At the same time, we will aim to periodically keep contacting major investments firms (regardless of their current ownership status) to revitalize the market and ensure future buyers.
- An important job of overseas IR activities is to properly communicate information about Japan. While investment decisions are based on numerical criteria such as interest rates, foreign investors are deeply interested in information about the Japanese government and economy. At present, however, this sort of critical knowledge is not being sufficiently conveyed to investors abroad, even though it has the potential to sway investment decisions. One goal

of overseas IR activities is to use the fiduciary relationship between the issuance agency and investors to communicate accurate information about Japan. We would like to continue to engage in IR activities not only within group settings such as international conferences but also with individual investors.

Trends in the debt management policies of major foreign countries

- Under the current global environment of low interest rates, a lot of major countries are extending the average maturity of their bonds.
- However, there is a trade-off between risk and cost, so extending the average maturity is not the only solution. Some countries (the US and Germany, for example) are reconsidering the extension of their bond maturity and are instead stabilizing the maturity standard at the current average maturity.
- Also, it is widely recognized among most debt-management bureaus that quantitative easing policies as well as the tightening of financial regulations following the 2008 Financial Crisis have reduced market liquidity. They are implementing a wide range of policies aimed at improving the liquidity situation.

- The basic goals of the United States when administering its debt-management policies are to “issue debt in a regular and predictable pattern” and to “finance government borrowing needs at the lowest cost over time.” In addition to decreased revenue due to large-scale tax cuts and expenditure increases in areas such as defense spending and infrastructure investment, the fact that the Federal Reserve Board is reinvesting less of its maturing bonds leads us to anticipate large increases in the amount of procurement from the market.
- The forward guidance published in November of last year states that to deal with an increase in projected borrowing needs, issuance increase should be focused on 2-, 3-, and 5-year sector, both cost and risk taken into account. In addition, the United States is preparing to increase the amount of 2-year floating-rate notes and T-Bills to maintain the market at its current average maturity.

- Next is England, where there are also concerns over declining liquidity under the quantitative easing implemented by the Bank of England. The scope of a single bid has decreased there to reduce the burden on primary dealers who suffered from the balance sheet costs brought by the financial regulations. A major feature of England is that it has the longest average maturity among developed

countries. This is because defined benefit pension plans operating by funding methods have a big presence in the country and the mainstream instruments are life annuities, which makes liability durations long. Also, because of the liability driven investment strategy adopted as investment principle, demand for 50-year bonds is high among British investors. Also, index-linked bonds comprise roughly 20% of the total issuance due to the strong need for inflation hedging by investors.

- However, England might look to revisit its policies thus far as it (like Japan) undergoes a shift from defined benefit to defined contribution plans and it has mounting concerns that inflation proceedings will increase the amount of government bonds linked to inflation index.
- In Germany, too, there are worries of declining liquidity under the European Central Bank's bond purchasing. Just as England moved to increase its short-term zone offerings, Germany is reducing the scope of a single bid while also introducing measures such as reopening the short-term zone. While increasing the short-term zone, the issuance of 30-year bond is also increased, which keep the transition of its average maturity in a stable manner.
- There are also concerns about the decline of market liquidity in France. As with Japan, France has taken proactive steps such as reopening newly issued bonds and additional issuance of existing bonds. The average maturity is being extended by the issuance of 50-year bonds in 2017 and 2018.
- Finally, Canada has formulated a medium-term debt strategy for the next 10 years, besides the annual debt management strategies. As with the United States, Canada is attempting to improve the balance between cost and risk by increasing the issuance of 2-, 3-, and 5-year bonds since FY2011. On the other hand, Canada started issuing 50-year bonds in 2014 at irregular intervals while its issuance in February in 2018 was shelved, which made the average maturity remain stable as it transitions.
 - Views expressed by the members have been summarized (by Financial Bureau) below.
- Although the financial regulations currently implemented have not caused any

problems with the activities of market makers, I question whether regulations designed based on the present state of affairs will truly function well in future times of stress. We must pay attention to the negative effects of such regulations.

- While plans are underway to implement a net stable funding ratio (NSFR), Europe is now considering easing the regulations in light of its effects on the bond market. Also, some in the United States have also told us that they believe easing is necessary. I would like to provide information, analyzing the effects of regulations from the viewpoint of market participants.
- Although the need for inflation hedging is limited in the current market, the global economic climate may cause future demand for inflation-indexed bonds to increase as Western countries continue to normalize their monetary policies. Since we cannot abruptly increase the issuance of such products, I would like us to support the development of the market as a market maker now on.
- In addition to increasing the procyclicality of the market, financial regulations related to government bonds can also affect liquidity through their impact on the costs of traders. Europe's Economic and Financial Affairs Council (ECOFIN) is currently deliberating NSFR and has indicated its concerns that the bond market liquidity may be affected negatively through the repo market if high-quality liquid assets are too narrowly defined. Although the core issue in Japan is the credibility of public finance itself, we do need to pay attention to the framework necessary to maintain market liquidity.

- At this current stage, we should consider how to develop JGBs for retail investors. We should deliberate the floating-rate notes, setting aside the discussion about 2-year floating-rate notes like the one issued in the United States.
- Frankly speaking, the current market environment has demonstrated that Japanese government bonds are difficult for investors to deal with. Whereas, as financial regulations have definitely increased the need for high-quality liquid assets (HQLA), I do expect there to be a certain level of demand. We should use the overseas IR activities as opportunities to hear how investors feel JGBs are positioned within the balance of the global economy.

- The three key points are (1) structural changes due to an aging society, (2) the way of addressing market fluctuation, and (3) strategies for the exit of monetary

policies. While the financial assets of Japanese individuals will reach a total of two quadrillion yen in the future, the bulk of that will be held by senior citizens. We need to consider bonds based on the needs of that age group. Because the duration of liabilities such as pensions will be extended as society ages, we can also consider extending the bonds maturity to fit those changes.

- We need to discuss the product design of floating-rate notes in preparation for the eventual rise in interest rates at the exit of monetary policies. Also, the BOJ is currently taking the risk of interest rates rise, and there is a chance that the BOJ's financial conditions will cause the market to fluctuate as monetary policies are finishing. Japan's credibility depends on its ability to indicate how the MOF, the BOJ, and market participants will coordinate to handle that issue.
- Looking at the environment surrounding the market over the medium- to long-term, there are three points of change: (1) environmental changes in the bond market due to the normalization of monetary policies in Europe and the United States, (2) the prospect of reaching the exit of monetary policies in Japan, and (3) structural challenges caused by an aging society. To deal with those changes, we have to prepare for the future through policies that consider the situation both domestically and abroad.
- The fundamental problem is the fiscal discipline. While I won't argue against the idea that the absence of signals from the market allows the fiscal discipline to be loosened, I doubt whether the discipline would be tightened even if there was such a signal. Rather, considering that it is too late to respond after recognizing the signal, the true issue is whether credibility in public finance can be maintained before interest rate rise as a result of the exit of monetary policy.
- Since life-insurance companies have liabilities with a long duration and are primarily targeting investments in the ultra-long-term zone, I hope the market for that zone will be developed continuously.
- The life-insurance industry sees the aging of Japan's society as a direct influence on itself. As operation of yen-based saving-type is difficult given the current interest rates, the investment policy is shifting toward those based on foreign currency. While we intend to carefully explain these foreign-based savings instruments when recommending them to the elderly to avoid misunderstandings, once the interest rates rise a little more, it is desirable to return to a situation where some more reliable yen-based products can be

offered.

- According to a financial planner, the three main expenses in life are child education costs, home loans, and living expenses after retirement. Can we not, for example, gather some of the capital of the wealthy class by issuing bonds with additional interest rates for post-retirement individuals?
- In the next five to ten years, the Chinese yuan will probably join the dollar, euro, and yen as one of the world's major currencies. If confidence in JGBs drops during that period, investments may begin to shift from the yen to the yuan.
- We heard in the presentation the MOF is trying to increase JGBs holdings by foreign investors to prevent transactions from becoming one-directional. However, our challenge is determining why domestic investors move in the same direction and how we can create diverse investor behavior within Japan itself.
- The BOJ is capitalized the government, and I wonder if the effect of bond price fluctuations on the bank's financial affairs is ultimately canceled out between BOJ and the Financial Bureau.

- According to the efficient-market hypothesis, bond prices should be determined not by supply and demand but by fundamentals; in reality, however, friction exists in the market and some are engaging in arbitrage transactions. I suppose the extent to which these arbitrage traders can afford to take risks will influence the size of the shift at the time of market shock.
- I am concerned about the outflow of talent in the bond market. It is important to maintain an environment where transactional skills, such as those related to investment strategies based on yield curves can be developed and protected.

- Transaction among traders at Japan Bond Trading Co. have failed to establish transactions involving newly issued 10-year bonds five times this year, with two of those times occurring just this week. The reasons for this year's sudden increase in the failure to establish transaction are as follows.
 - Under the continued quantitative and qualitative monetary easing, the BOJ is purchasing large amount of bonds. As of last December, 43% of coupon-bearing bonds were owned by the BOJ.

- The yield curve control policy has kept interest rates stagnant. Since interest rates are not changing, there isn't any need for speculative dealing or hedging.
 - The settlement time for bond transactions has been shortened (to T+1). This will allow newly issued bonds to immediately be sold to the BOJ, which was not possible under the previous system which inserted a certain interval of time between bidding and issuing.
- Although we won't face any immediate problems if this sort of transactions between traders decline, there is the potential for chaos if the BOJ stops purchasing bonds. As QQE and YCC policies continue, we must ensure that hidden dangers aren't lurking beneath the surface.
 - The most ideal situation in terms of debt management policies would be to not issue any bonds. Yet if we just look at the "Basic Policies for the Economic and Fiscal Management and Reform" of this year, we see that they are based on a philosophy of raising taxes but also increasing annual expenditures so as not to allow the business climate to stall. This approach cannot lead to fiscal consolidation and will not help us achieve structural reforms or long-term economic growth.
 - Of the basic policies aimed at curbing spending, there are the new drug pricing revisions that consider cost versus effectiveness. However, the speed is far too slow.
 - Only about 1% of JGBs is owned by retail investors, compared to roughly 10% for other countries. While this is due to our low interest rates, there are also two structural reasons for the difference. The first is that our market is focused on indirect financing where institutional investors like private financial institutions and insurance companies invest capital that is entrusted to them. The second issue concerns the mechanism of retail investors holdings of JGBs. One idea is to create something that can drive the personal consumption of bonds, similar to what the individual retirement account (IRA) does in the United States.
 - There is a chance that the discussions that take place in times of market fluctuation between the Holy Trinity of the MOF, BOJ, and market participants will ultimately exclude individual investors. Household financial assets currently total about 1.8 quadrillion yen. In terms of money flow, our activities

promoting bond ownership need to target individual investors who are in possession of a large capital surplus; we also need to ensure that individual investors fully understand our debt management policies.

- The present low-interest situation occurs as the bonds are converted into the BOJ's current account with the liability duration shortened. If a reversal of this occurs, the result will be similar to the situation where procurement is conducted by floating-rate notes linked with a short-term interest rate because additional interest must be paid on the excess reserves. In the end, isn't the very idea that public finance costs will decrease a fictional one? If the fiscal discipline is loosened by the current low interest rate, isn't it the biggest cost?

→ (Explanation from the Financial Bureau)

- Several members pointed out some new products, including bonds for retail investors. When considering a new product, we must consider things such as:
 - if there is enough demand over the medium- to long-term to sustain continued issuing
 - If it will not cause the issuance agency to incur excessive costs or risk?