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< Review of the BOJ's JGB Purchases >

Pace of Increase in BOJ's Holding of JGBs Slowing

— Does the purchase limit risk still remain?

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The pace of increase in the outstanding long-term Japanese government bonds (JGBs) held by the Bank of Japan (BOJ) is slowing. The BOJ Governor Haruhiko Kuroda told the House of Representatives' Financial Affairs Committee Meeting on May 10 that the increase in the amount outstanding of its JGB holdings is "now at around 60 trillion yen per year." Since the BOJ announced in its latest monetary policy statement that it "will conduct purchases more or less in line with the current pace -- an annual pace of increase in the amount outstanding of its JGB holdings at about 80 trillion yen," Kuroda insisted again that its JGB purchase amount was merely a goal. In September 2016, the BOJ introduced new policy framework called "Quantitative and Qualitative Monetary Easing with Yield Curve Control (YCC)" and changed its operation target from "volume of monetary base" to "interest rate." As a consequence, the amount of the BOJ's JGB purchases became "dependent variable," endogenously determined by economic and financial market trends. In this report, we look at the BOJ's purchases of JGBs since September 2016.

Pace of Increase in JGB Holdings Slowed after YCC

At the end of March 2017, the outstanding JGBs held by the BOJ amounted to 367.7 trillion yen on a face value basis. Of these, 43.6 trillion yen of JGBs will be removed from the BOJ's balance sheet by the end of March 2018[3]. This means that if the BOJ intends to increase its JGB holdings strictly by 80 trillion yen by the end of FY2017, the BOJ will need to purchase JGBs exceeding 123 trillion yen by March 2018[4]. However, with the introduction of YCC in September 2016, the target in the BOJ's money market operations replaced "volume" with "interest rate." Prior to the introduction of YCC, the BOJ continued to announce that it would conduct operations so that "the monetary base will increase at an annual pace of about 80 trillion yen." With the introduction of YCC, however, the purchase

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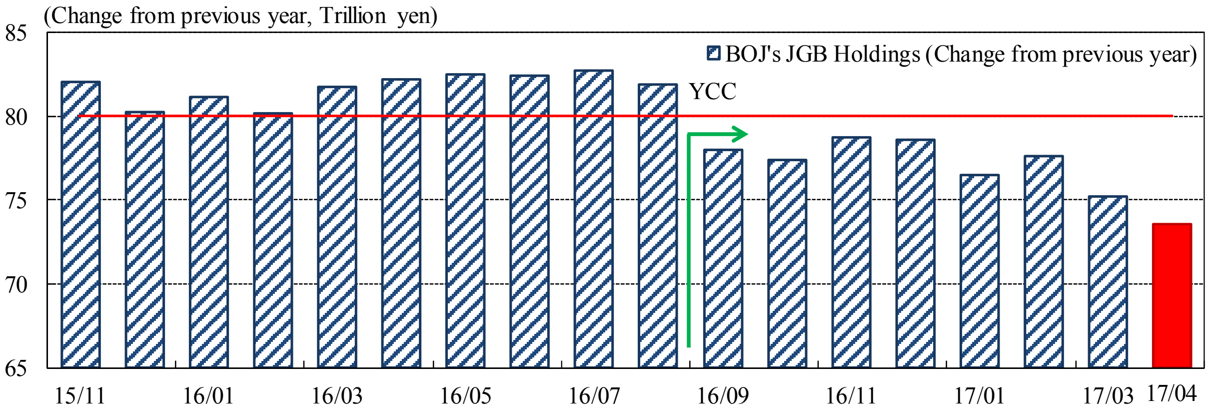
3 Compared with the end of March 2016, the amount of JGBs that will mature within one year has increased by over 5 trillion yen. At the end of March 2016, out of the 295.4 trillion yen of long-term JGBs held by the BOJ, 37.9 trillion yen reached maturity by end of March 2017 (all amounts are based on face value).
4 In addition to the long-term government bonds that have reached maturity, the fixed amount for those purchased by the BOJ at a higher price than the par value in the past (redemption loss) is also removed from the balance sheet every year. This is accounting treatment under the amortized cost method adopted by the BOJ.

amount became merely a goal in that the BOJ stated that it “will conduct purchases more or less in line with the current pace -- an annual pace of increase in the amount outstanding of its JGB holdings at about 80 trillion yen.” Figure 1 shows the increasing pace of JGBs held by the BOJ from the same month of the previous year. With the start of YCC, the pace has been slowing. If this pace continues, the annual increase will decline to around 60 trillion yen.

Fig.1 Pace of Increase of the BOJ’s JGB Holdings (Increase From the Previous Year)



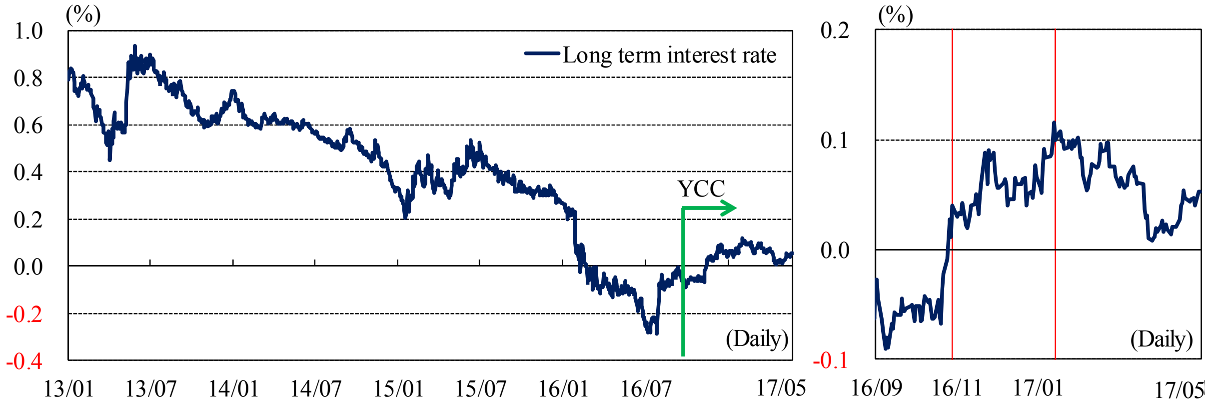
Source: Bank of Japan
Monthly

Is it possible for the BOJ, which already holds nearly 40% of the total amount issued, to continue JGB purchases of about 60 trillion yen annually? In the “Summary of Opinions at the Monetary Policy Meeting” for the 2017 April meeting, which was released on May 10, a policy board member stated the cautious opinion that “Unless the pace of JGB purchases is further decelerated, the sustainability and stability of the purchases will not be secured through the next year. The supply-demand conditions in the JGB market will tend to tighten further in terms of “flow,” as the gross amount of JGB issuance by the government is to be reduced, as well as in terms of “stock,” as the room for a further reduction in the JGB holdings by the private sector is narrowing.”

Reduction of JGB Purchase Amount Became Clear

Under YCC, the BOJ applies a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the BOJ along with purchasing JGBs so that 10-year JGB yields will remain at around zero percent. From the trend of 10-year JGB yields after the introduction of YCC as shown on the right side of figure 2, it seems that the BOJ assumes the range of minus 0.1% to plus 0.1% as “zero percent.” As 10-year JGB yields have been slightly above 0% in May, the reduction trend in the BOJ’s purchases of JGBs is becoming clearer.

Fig.2 10-Year JGB Yields



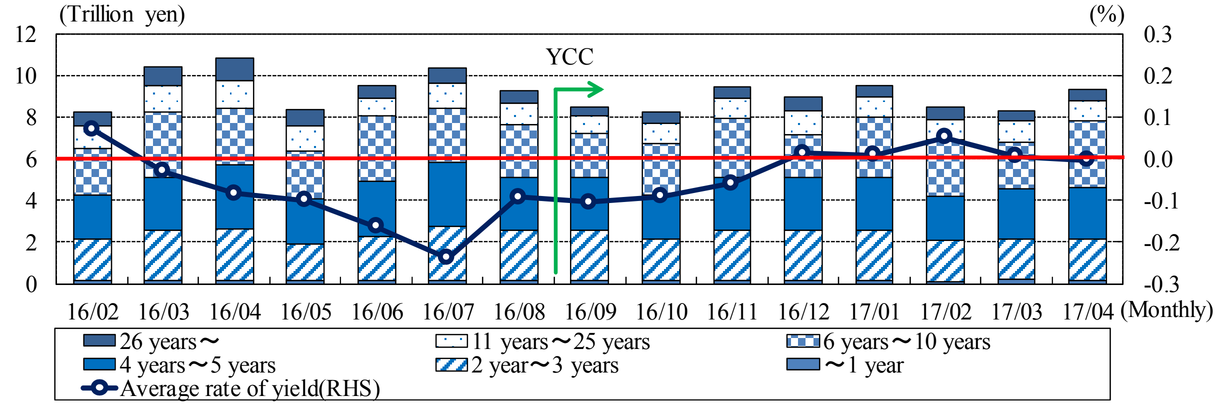
Note: Data is until May 23, 2017. The red vertical lines in the figure on the right show the dates when the BOJ conducted "fixed-rate" bond-buying operations (November 17, 2016 and February 3, 2017).
Source: Bloomberg

Figure 3 shows the breakdown of JGBs on a purchase price basis since February 2016, just after the introduction of the negative interest rate policy[5]. The cumulative JGB purchase amount from October 2016 to April 2017 decreased by about 5 trillion yen compared to the cumulative amount for the 7 months from March 2016 to September, before the introduction of YCC. The purchase of 3-5 year JGBs is mainly decreasing. Under YCC, the guideline for the average remaining maturity of the BOJ's JGB purchases is abolished, while JGBs with a wide range of maturities are eligible for purchase.

Looking at the monthly weighted average yield of JGBs purchased by the BOJ, it can be seen that it was negative from March 2016 to November 2016 (the black line in figure 3). Under the negative interest rate policy, the average yield was also negative. During this period, the BOJ purchased JGBs with negative interest rates from financial institutions and others. At the same time, it imposed a negative interest rate on the Policy-Rate Balances in the current account of the BOJ. However, since the average yield of JGBs purchased by the BOJ was below minus 0.2 percent in July 2016, for example, it is likely that a loss occurred in the BOJ's purchases under the negative interest rate. Although the monthly weighted average yield of JGBs purchased by the BOJ became positive at the end of 2016 and remained positive for a while, it became negative again to minus 0.003% in April, along with the decline of the long-term interest rate.

[5] The BOJ named its negative interest rate policy "Quantitative and Qualitative Monetary Easing with Negative Interest Rate."

Fig.3 Cumulative Amount of JGB Purchases Decreased by 5 Trillion Yen after YCC



Note: The amount is shown on a purchase price basis. For details, see Samikawa et.al (2017).
The figure excludes floating rate bonds and inflation-indexed bonds.
Source: Bank of Japan "Japanese Government Bonds Held by the Bank of Japan," "Operations,"
The Japan Securities Dealers Association "Reference Statistical Prices (Yields) for OTC Bond Transactions/Rating Matrix"

"Inflation-Overshooting Commitment" is Exceptional Forward Guidance

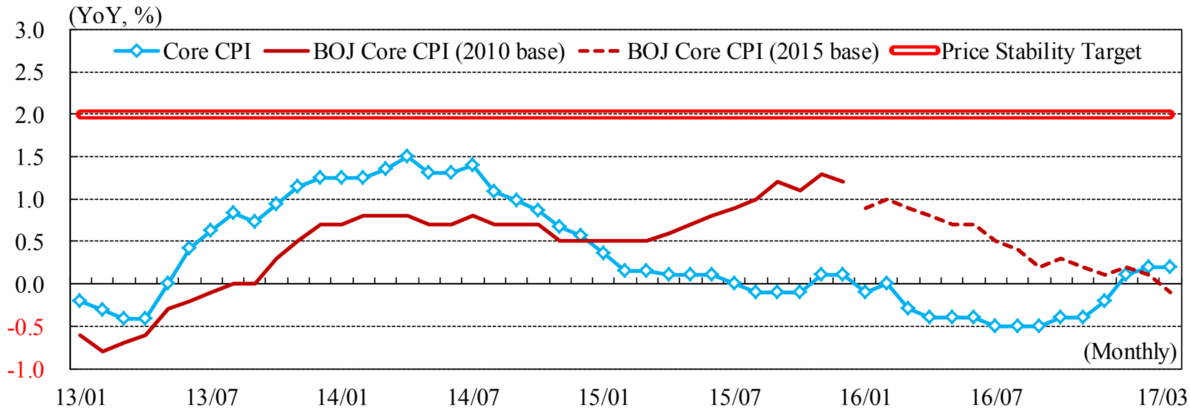
Since the publication of the "Comprehensive Assessment" in September 2016, the BOJ continues to state that Japan's economy is no longer in deflation, which is commonly defined as a sustained decline. However, with either the CPI core rate (all items less fresh food) or with the BOJ's CPI core rate (all items less fresh food and energy), achieving the target of 2% is still a milestone (Figure 4).

The current BOJ's "inflation-overshooting commitment" can be described as a forward guidance based on the observed value of the consumer price inflation rate, not on the inflation outlook. To put it another way, it is a backward-looking commitment, not a forward-looking commitment. In Japan, people's expectation formation is likely to be dragged in the past; this is called "adaptive" expectation formation. The mechanism of formation of inflation expectations in Japan tends to be heavily influenced by the course of the past inflation rate. Kuroda said in a speech on March 24, "Considering that it takes some time for monetary policy to have an impact on economic activity and prices, it is exceptional for a central bank to make such a strong commitment that is based on the observed CPI[6]."

While Kuroda is making a strong commitment, he also has sent a message stating that the BOJ will not face difficulties buying JGBs in the near future. The reason behind this message seems to be that if long-term interest rates rise sharply due to confusion in the market, for instance, the BOJ's JGB purchases will be approaching the limit. For similar reasons, Kuroda maintains a cautious stance about concrete discussions on the exit as "too early."

[6] Professor Kenneth Rogoff of Harvard University, ex chief-economist at the IMF, said in his recent book *The Curse of Cash*, "The main practical problem with both types of forward guidance is that it is hard for the central bank to credibly make promises in a world where there is regular turnover of policy board members, not to mention of the politicians who ultimately oversee central banks."

Fig.4 Year-on-Year Rate of Increase in CPIs---Still a Long Way to Exceed the 2% Target



Source: Ministry of Internal Affairs and Communications "Consumer Price Index"
Bank of Japan "Measures of Underlying Inflation"

The First Step of the Exit Strategy - Kuroda Clarified the Conditions for Starting the Discussions

At a press conference on April 27, Kuroda said, "I think that the realization of the 'Price Stability Target' of 2% will be the beginning of the discussions about the exit." In terms of clarifying the conditions for starting the exit discussions, it seems that Kuroda's remarks can be regarded as the first step of the exit strategy. Under the current inflation-overshooting commitment, the BOJ insists that it "will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI inflation rate (all items less fresh food) exceeds the price stability target of 2% and stays above the target in a stable manner." The discussion on the exit is likely to be put off until then. Details of exit strategies are ahead, such as whether the BOJ should raise the policy rate first or start shrinking its balance sheet first, judged based on the economic situation at the time. From a number of remarks made by Kuroda, it appears that he does not intend to make the financial market volatile unnecessarily.

On approaching the exit, discussions about the future loss incurred by the BOJ, the independence of the central bank, communication strategies on how to convey the fact to the markets and the public, and monetary policy rules for normalizing interest rates and balance sheets could heat up. Representative Seiji Maehara of the Democratic Party of Japan said at the House of Representatives' Financial Affairs Committee Meeting on May 10 that based on the BOJ's data, "the average remaining maturity for the long-term JGBs held by the BOJ is now 7.44 years and their weighted average yield is 0.415%." When the interest rate on the current account of the BOJ exceeds 0.415% in the process of the normalization of interest rates, the BOJ is likely to suffer a loss. Kuroda answered in the Committee that the assessment loss caused by the BOJ's holding JGBs would be about 23 trillion yen if the interest rate rose by 1 percentage point. Although this is not directly reflected in its income statement as a loss, it is highly significant for the BOJ to inform the public about the scale of future losses in advance.

The 2017 Financial Research Team of JCER is going to analyze the exit strategy in Japan while examining the exit strategy of the Federal Reserve Board (FRB).

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