Daiwa's View

Two methods combined in funds-supplying operations against pooled collateral

- Aim of enhanced scheme confirmed by results of 5-year pooled collateral operations

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Two methods combined in funds-supplying operations against pooled collateral

Increase in issuance of 40-year JGBs gained considerable support

On 23 January, the BOJ offered the 5-year funds-supplying operations against pooled collateral that were announced in advance on 18 January when the January Monetary Policy Meeting (MPM) was held. The amount offered was Y1tn, the same as with the 2-year funds-supplying operations against pooled collateral conducted on 4 January. While the bid amount and successful rates had been the focus of attention, the bids totaled Y3.1tn, with a pro-rata rate and average successful rate of 0.110% and 0.145%, respectively. The 5-year yield, which had gained since the early morning, declined slightly after the auction results were announced. The tail appears to have been somewhat long, but the results confirmed the existence of potential demand worth Y2.1tn, in addition to the accepted amount in yesterday's operations.

Results of 5-year funds supplying operations against pooled collateral on 23 Jan

Auction method	Multiple-rate competitive auction
Duration	5 years
Amount offered	Y1000bn
Amounts of competitive bid	Y3,129bn
Amounts of successful bid	Y1,000.3bn
Pro-rata rate	0.110%
Average successful rate	0.145%
On-the-run 5-year JGB yield	0.160%
5-year OIS yield	0.375%

As already reported, the BOJ decided to enhance funds-supplying operations against pooled collateral at the January MPM. Governor Kuroda commented about this change in his press conference, stating that the central bank assumed that users of these operations would implement arbitrage activities in the swap market and other markets. The 10-year JGB yield has been declining substantially since the January meeting. However, a surprising change has appeared in the 8-/9-year sectors of the JGB and OIS markets, rather than the 10-year JGB sector. In this report, we summarize the impact of arbitrage activities via the use of pooled collateral operations based on yesterday's auction results, as well.

Press Conference by BOJ Governor Haruhiko Kuroda (18 Jan 2023)

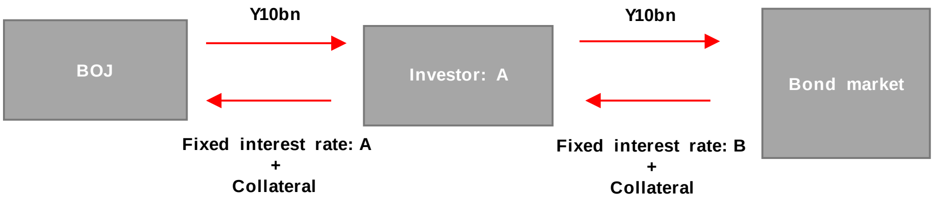
Question: I have a question about the funds-supplying operations against pooled collateral that the BOJ decided to enhance today. Was the aim of the enhancement to promote a decline in yields in non-JGB markets, for example, in the swap market?

Answer: The point of the latest decision on the enhancement of the pooled collateral operations is to enable us to supply funds more flexibly as a tool to promote the formation of a yield curve consistent with the policy for financial market operations. Because the financial institutions availing themselves of these operations can expect them to work in markets outside of the cash market via conducting swaps as noted as well as various other arbitrage activities, we think the operations will be able to pull longer-dated yields lower without directly impacting the supply-demand of cash JGBs.

First, arbitrage transactions using the recently enhanced pooled-collateral operations capture the spread between the interest rate on loans provided by the BOJ and the return on investments. More specifically, we can easily envision the following two patterns.

○ When procuring new collateral
By procuring eligible collateral from the bond market that matches the maturity of the pooled-collateral operations, arbitrage trading is possible as long as the interest rate on loans from the BOJ are less than interest payments from the bond holdings.

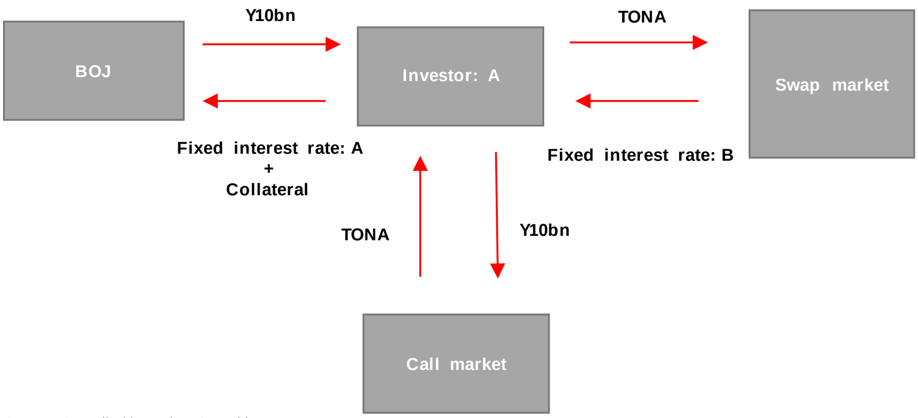
Arbitrage Transactions Using Pooled-collateral Operations (Pattern ①)



Source: Compiled by Daiwa Securities.

○ When there is surplus eligible collateral
Also, when there is surplus eligible collateral, arbitrage transactions can be carried out through the following method without raising new collateral. In this case, for example, as long as fixed interest rate A is less than fixed interest rate B in the chart below, an arbitrage transaction using the receipt of swaps is possible.

Arbitrage Transactions Using Pooled-collateral Operations (Pattern ②)



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Taking into consideration the above methods and the results of the most-recent pooled-collateral operation (with 5-year loan durations), we can probably point out the following as pooled-collateral operation effects for each of these methods.

① <u>In the case of the variable-rate method, the interest rate on loans (fixed-rate A), which is determined by bidding, is more likely to be set at a lower rate</u> (this is because the current pooled-collateral operation has a tail, as well as the fact that the average bid rate was lower than the market's 5-year yield). Here the determined interest rate on loans is also the arbitrage transactions viewpoint. ② In the case of the fixed-rate method, <u>as arbitrage transactions proceed, the market interest rate (fixed-rate B) will move closer to the interest rate on loans set by the BOJ</u>.

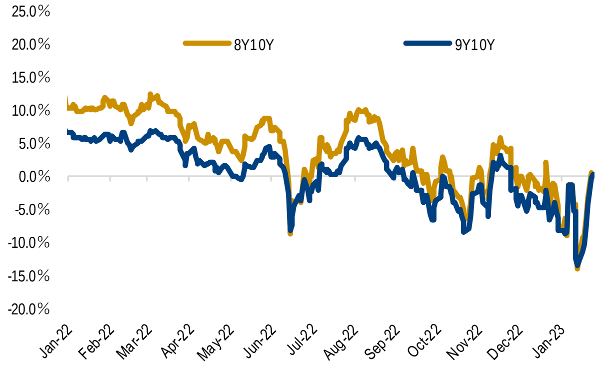
With the enhancement of its pooled-collateral operations, the BOJ can now conduct both of these methods for up to the 10-year maturity without any restrictions. In other words, participants must be aware of both of the above two methods. <u>For that reason, these two effects (① lower interest rates on loans and ② market interest rates moving closer to interest rate on loans) will simultaneously be demonstrated like an announcement, which in turn will have the effect of holding down market interest rates at lower levels</u>.

Also, one possible strength of the pooled-collateral operations is that these declines in market interest rates could extend to eligible collateral overall. In other words, lower interest rates through arbitrage transactions could spill over to municipal bonds and some corporate bonds, in addition to JGBs with the same maturity as the loan duration mentioned above. Of course, this would be expected to contribute to an improvement in market functionality, which was the basis for the policy revision at the BOJ's December Monetary Policy meeting. Actually, since the January meeting, the inversion of the 10-year JGB yield spreads versus the 8-year and 9-year maturities was eliminated, while the implied repo rate rose.

◆ **Minutes of MPM on 19-20 Dec 2022**

Many members noted that there was a distortion in the price formation of 10-year bonds, and that the functioning of bond markets had deteriorated, particularly in terms of relative relationships among interest rates of bonds with different maturities and arbitrage relationships between spot and futures markets. … On this point, a few members noted that the November *Bond Market Survey* showed a further decline in the DI for the degree of bond market functioning. As background to this, these members pointed to factors such as reduced representativeness of 10-year JGB yields, higher volatility, and deterioration in hedging function. One of these members commented that there was a view that prospects for interest rates had not converged at the time of issuance of corporate bonds, and that this had led to a decline in investor appetite for purchasing and to wider spreads.

8yr/10yr Spread, 9yr/10yr Spread



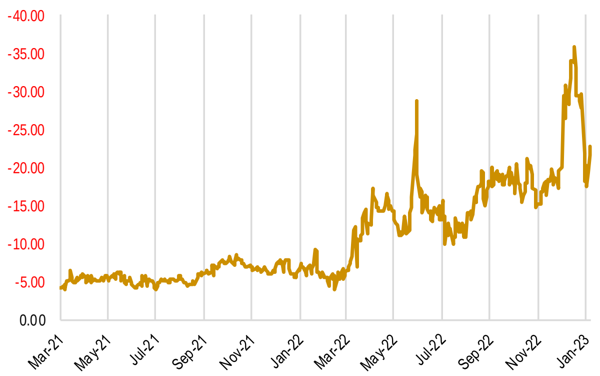
Source: Bloomberg; compiled by Daiwa Securities.

CTD Implied Repo Rate

Source: Bloomberg; compiled by Daiwa Securities.
Note: Effective rate for long basis transactions in which delivery-eligible issues are bought and futures are sold (theoretical value = 0).

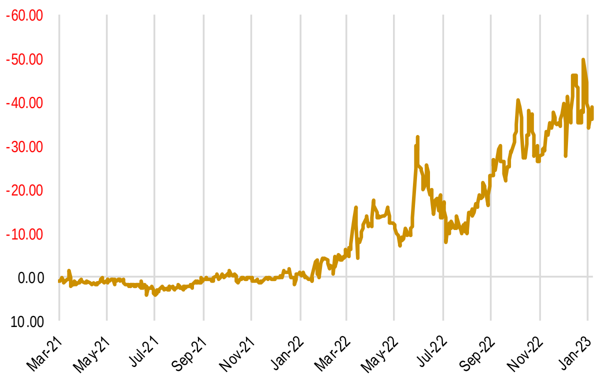
As for the decline in interest rates close to the 10-year JGB yield, we believe that a large portion of that decline was due to the announcement effect. If we compare the swap spread between the 5-year zone (pooled-collateral operations set loan duration at five years) and the 10-year zone, we can see that while the rise for the 5-year zone since December was mostly erased, there has been only a partial pullback for the 10-year zone. However, the 10-year swap rate is now viewed as at the generally appropriate level expected once the BOJ's yield curve control (YCC) policy is eliminated under a new governor, and the pooled-collateral operation announcement effect has been reasonably effective. Holding down swaps even more forcefully is possible, but that would probably depend on whether the pooled-collateral operations set longer loan durations.

5yr Swap Spread



Source: Bloomberg; compiled by Daiwa Securities.

10yr Swap Spread



Source: Bloomberg; compiled by Daiwa Securities.

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