Daiwa Securities

Daiwa's View

One- or two-tiered current account structure

- Short-term money market functioning is key
- Decision depends on whether BOJ views arbitrage transactions between private banks as big or small

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Speech by BOJ Deputy Governor Shinichi Uchida

In his speech on 8 February, when BOJ Deputy Governor Shinichi Uchida explained that the uncollateralized call rate would rise when interest rates were hiked, he made reference to the structure before the elimination of the negative interest rate policy (NIRP)—i.e., the one-tier structure—as the current account deposit structure when NIRP is eliminated. Some appear to think that this explanation suggested a transition to the one-tier structure.

◆ **BOJ Deputy Governor Shinichi Uchida (8 Feb 2024)**

The first question is how to set the short-term policy interest rate if the Bank terminates its negative interest rate policy. Before introducing this policy, the Bank applied a 0.1 percent interest rate to the excess reserves in current accounts held by financial institutions at the Bank. The uncollateralized call rate in the money market hovered in the range of 0 to 0.1 percent as a result of arbitrage transactions between financial institutions that held the accounts and those who did not. If the Bank were to bring this situation back, this would mean a 0.1 percentage point interest rate hike, since the current uncollateralized call rate is in the range of minus 0.1 to 0 percent. **Let me point out that this issue is associated primarily with how to maintain the functioning of the money market.** With respect to the impact on the economy, a more critical issue is the subsequent path of the short-term policy interest rate.

As explained by Deputy Governor Uchida himself, in terms of the impact on the economy, the issue of how to set the tiered structure can be said to be less important than the future rate hike path. However, it is still an important issue for financial institutions, and is attracting much interest. In this report, we conduct an unbiased comparison of the differences between the one-tier structure and the two-tier structure, referring to cases at overseas central banks that terminated NIRP ahead of the BOJ.

Functioning of short-term money market

As mentioned in the speech by Deputy Governor Uchida, the issue of how to maintain the functioning of the short-term money market is very important when comparing the differences between the one-tier structure and the two-tier structure. A decline in fund liquidity at financial institutions creates concerns about the negative impact on the real economy, in addition to the financial market. Cases at overseas central banks appear to be informative when discussing this issue, so in this report we look at examples at the Swiss National Bank (SNB) and the ECB. While both central banks have eliminated NIRP ahead of the BOJ, they are following different paths with respect to the current account deposit structure.

Swiss National Bank case: Maintained two-tiered structure

First, let's review the current account structure adopted by Switzerland's central bank. The SNB has maintained its tiered structure even after raising its policy rate into positive territory. The rule for this tiered structure is, "SNB policy rate is applied to deposits equal to 25 times the minimum reserves. The policy rate minus 50bp is applied to reserves held in excess of the standard."

In a paper entitled "Return to positive interest rates: Why reserve tiering?[1]," the SNB explained why it maintained its tiered structure after raising its policy rate into positive territory in the following manner:

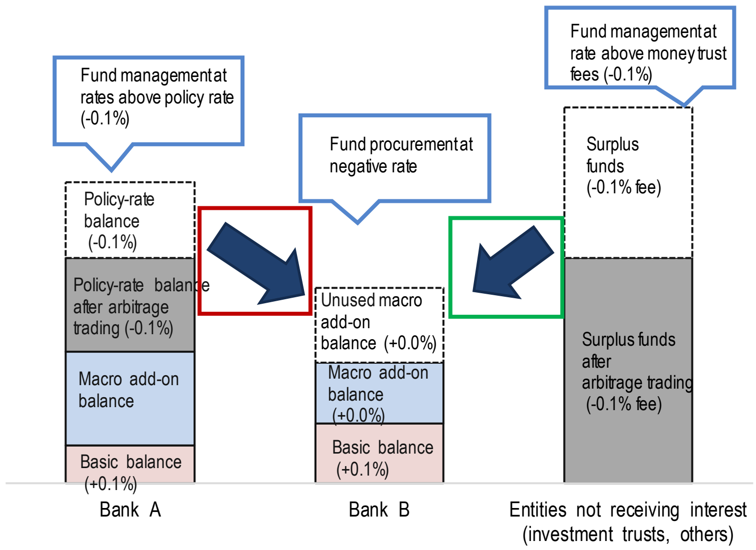
"Reserve tiering thus creates an incentive for interbank trading, and thereby supports activity in the interbank money market."

This can be easily understood by imagining Japan's current account structure. Under a central bank's quantitative easing program, private banks are unlikely to have reserve shortages. Difficulties trading in the short-term money market due to excesses and deficiencies are also unlikely.

However, under the present BOJ current account structure, a certain degree of liquidity is ensured in the short-term money market due to the two types of arbitrage transactions (red square: arbitrage transactions between private banks using difference in interest rates applied to current accounts; green square: arbitrage transactions by institutions not eligible to participate in the BOJ's complementary deposit facility) shown in the chart below. The arbitrage transactions brought about by the tiered structure are those between private banks.

By keeping a tiered structure, the SNB seems to be maintaining arbitrage transactions among private banks while, supporting interbank money market activities.

Chart 1: Trading Incentives Under Three-tiered Structure



Source: BOJ materials compiled by Daiwa.

[1] Return to positive interest rates: Why reserve tiering? (2022)

ECB case: Abolished tiered structure

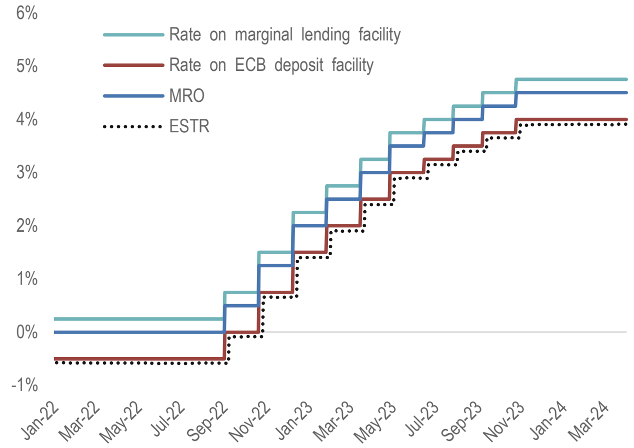
Meanwhile, the European Central Bank (ECB) abolished its multi-tiered structure and returned to a one-tier structure after ending its NIRP. The minutes for the ECB's Governing Council meeting at that time explained the decision in the following manner.

◆ **Account of monetary policy meeting of ECB Governing Council (8 Sep 2022)**

Mr Lane proposed that the two-tier system for the remuneration of excess reserves be suspended by setting the multiplier to zero. With a positive deposit facility rate, the two-tier system was no longer necessary, as its role was to support the bank-based transmission of monetary policy when the deposit facility rate was negative.

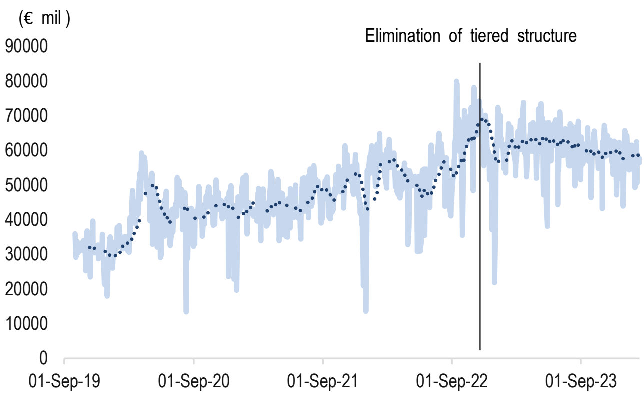
The question here is whether the functioning of the short-term money market can be maintained even if the arbitrage transactions between private banks, which the SNB has tried to maintain, is lost. Looking at developments in Eurozone short-term money markets after abolishing the tiered structure, the ESTR (short-term interest rate benchmark for Eurozone) has consistently remained at a level slightly below the deposit facility rate and transaction balances have not declined even after ending the tiered structure.

Chart 2: Eurozone Short-term Rates



Source: ECB, Bloomberg; compiled by Daiwa.

Chart 3: ESTR Transaction Balance



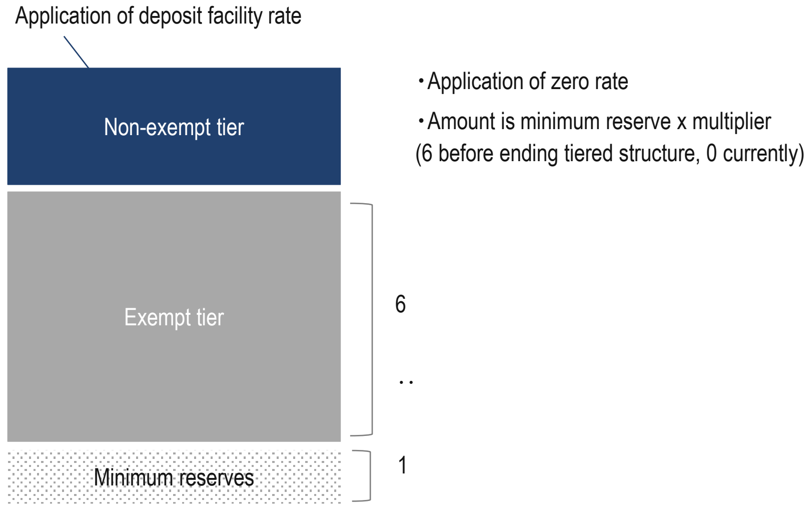
Source: ECB; compiled by Daiwa.
Note: Dot line shows 30-buisness day moving average.

One reason that transaction balances did not decline very much is that, from the beginning, arbitrage transactions among private banks were not very active in the Eurozone.

In a March 2023 speech, ECB executive board member Isabel Schnabel said that as of the end of 2022, ESTR transactions involving non-banks accounted for nearly 90% of all unsecured money market transactions. She also indicated that only a few transactions take place between banks within the Eurozone. As a result, transactions using the tiered structure had only a limited impact on ESTR.

Also, in September 2019, the ECB introduced its two-tiered structure along with its decision to move its interest rate deeper into negative territory (Chart 4). However, the amount of excess reserves exempt from the negative interest rate was automatically set as "six times the banks' minimum reserve requirement." As a result, there was no mechanism in the Eurozone to escape the application of negative interest rates depending on the operations of individual banks (in the case of Japan, expansion of the maximum macro add-on balance using operations, others), which limited the room for arbitrage transaction among private banks.

Chart 4: Eurozone Reserve Structure Before Ending Tiered Structure



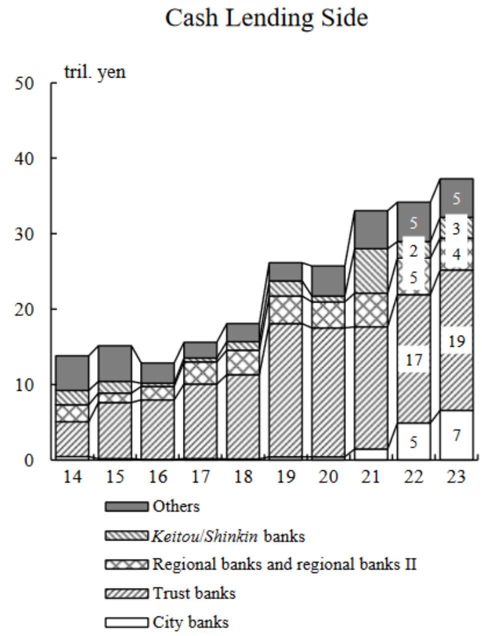
Source: ECB; compiled by Daiwa.

To summarize, the lack of an environment for active arbitrage transactions among private banks in the Eurozone may have also contributed to the maintenance of ESTR transaction balances after ending the tiered structure. As such, can that case be applied to Japan as well?

Call market trends in Japan

When looking at call market transaction balances by investor type in Japan from the fund management side, we can see that the balance managed by trust banks has been consistently large, even before the introduction of NIRP. Most of the transactions by trust banks appear to be arbitrage transactions with counterparties not eligible to participate in the BOJ's complementary deposit facility.

Chart 5: Balance of Uncollateralized Overnight Call Market Transactions by Investor Type (lender)



Source: Reprinted from BOJ materials.

If only investment balances by trust banks are regarded as arbitrage transactions involving counterparties not eligible to participate in the BOJ's complementary deposit facility, the balance of uncollateralized overnight call market transactions will remain above the level before the introduction of NIRP, even if arbitrage transactions among private banks decline. If the BOJ determines that the functioning of the short-term money market will be maintained through arbitrage transactions involving counterparties not eligible to participate in the BOJ's complementary deposit facility, there would no longer be any reason to adopt a two-tiered current account structure. Indeed, the Bank could probably adopt a one-tier structure, which was the structure before the introduction of NIRP.

On the other hand, if after ending NIRP, the BOJ wants to maintain the balance of uncollateralized overnight call market transactions at the same level as before ending NIRP, it would probably adopt a two-tiered current account structure.

On that point, the ECB in September 2022 released a paper in which its tiered structure was abolished. This paper noted that such a policy exit must be carefully assessed when "financial market activity is, to a large extent, driven by reserve redistribution within the banking system."

◆ ECB Occasional Paper Series (Sep 2022)

Fourth, tiering systems can be exited when they have served their purposes or when they cease to fulfil the conditions that warranted them. … The side effects of such exits need, however, to be carefully assessed. This is the case, for instance, for the effects on money market activity and its ability to support transaction-based reference rates if that activity was, to a large extent, driven by reserve redistribution within the banking system to fill up the exempt tier.

If this approach is followed for the Japanese market, the BOJ's assessment will depend on whether it views the existence of arbitrage transactions among private banks to be large or small. In both cases, the BOJ will adopt the structure that it believes will ensure adequate liquidity.

While this discussion has focused on liquidity, we assume that actual policy decisions will be made after considering a variety of factors, including the operational costs and financial burdens for the BOJ in relation to the tiered current account structure.

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