Post LIBOR_2021.10.07

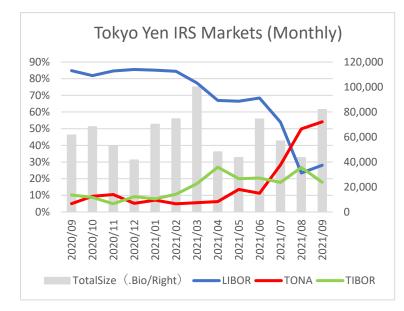
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We will report on what progress has been made in the past month with regard to Post-LIBOR through "Progress toward Post-LIBOR" in Tokyo Yen IRS markets and "Movements of TORF, which is Term Japanese Yen RFR". In addition, we will consider "Japanese Yen's lack of progress in the use of Term-RFR (: TORF)".

Progress toward Post-LIBOR

On July 26, 2021, the Study Committee on Japanese Yen Interest Rate benchmarks (hereinafter referred to as the "Study Committee") released a statement on "TONA First¹". In the statement, it was clearly stated that the end of July 2021 would be the date when the quotations in Yen IRS markets would be shifted from Yen LIBOR to TONA basis, and that the suspension of all Yen LIBOR swap transactions in the interbank market would be expected from the following August.

The graph below shows the percentages of Yen LIBOR swaps (Blue line), TONA swaps (Red line), TIBOR swaps (Green line), and the face value of transactions (Gray bars, Unit: billion yen) in Tokyo Yen IRS markets.²



By August, the trading volume of TONA swaps had increased to 50% of the total market volume, but in

September, it was a little sluggish. This is probably due to the fact that the "end of September 2021 as a guideline for the timing of the suspension of new trading of interest rate swap products in the interbank market³" has attracted attention, leading to an increase in rush trading of Yen LIBOR swaps in customer transactions and a relative slowdown in the trading ratio of TONA swaps.

¹ Reference to: <u>https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt210726b.pdf</u>

 $^{^2}$ Based on data from JSCC (Japan Securities Clearing Corporation). The total of Yen LIBOR swap, TONA swap and TIBOR swap (: sum of Euroyen TIBOR and Japanese Yen TIBOR) is "1", and the percentage (%) of each is shown in the graph.

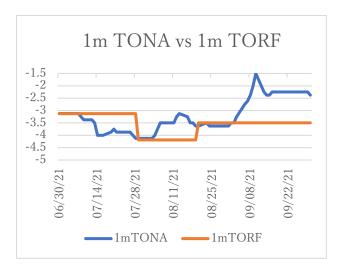
³ Reference to: <u>https://www.boj.or.jp/en/paym/market/jpy_cmte/cmt210326b.pdf</u>

On September 28, 2021, the Study Committee released the statement of "Cessation of the initiation of new interest rate swaps referencing JPY LIBOR⁴", which reaffirmed the announcement of March 26, 2021, and stated that it "expects that new trading in the interbank market will be suspended by the end of September at the latest.

Movement of TORF, which is Term Japanese Yen RFR

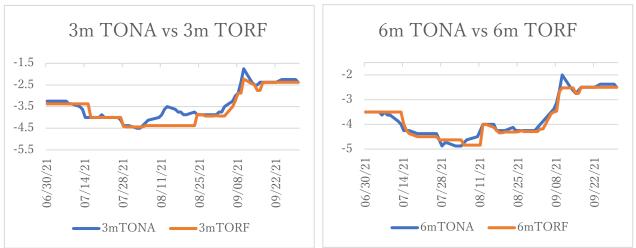
There are three types of TORF: 1-month, 3-month, and 6-month. The TORF reference interest rate for each tenor is calculated based on the actual trading data and quote data for 1-month, 3-month, and 6-month at TONA swap market. In other words, for TORF to be a reliable interest rate benchmark, it needs robust TONA swap data backed by real transactions.

These three graphs show the 1-month, 3-month, and 6-month TORF (: Red line) and the TONA swap quote



(: Blue line) over the same period from June 30, 2021 to September 30, 2021. TORFs (: Red line) often lag behind the TONA swap quotes (: Blue line).

Although TORFs have been calculated and published with the confirm values since April 26, 2021, liquidity in the short-end TONA swap market needs to increase further in order to be widely used in Derivatives, Lending, and Bonds sectors.

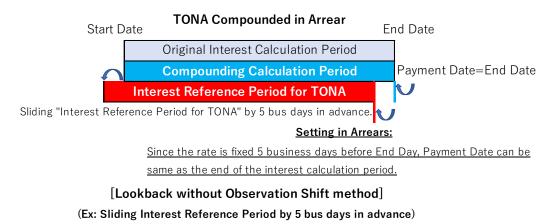


⁴ Reference to: <u>https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt210928c.pdf</u>

Japanese Yen's lack of progress in the use of Term-RFR (: TORF)

TORF is the 1st alternative interest rate benchmark to Yen LIBOR for "Lending" and "Bonds", but we have yet to hear of it being used as a reference rate. At present, "Compounded TONA", which is the 2nd alternative interest rate benchmark to Yen LIBOR, is often used in the "Lookback without Observation Shift Method", which is a case where the interest rate reference period is being slid in advance.

I introduced this in the Post LIBOR_2021.09.01, but I would like to briefly explain it again. In this method, the interest reference period for compounding TONA is being slid in advance, while the compounding calculation period matches the number of days in the original interest calculation period. In the case where the interest reference period is being slid "in advance by 5 business days", Compounded TONA is fixed 5 business days prior to the end of the period, so the interest can be received and paid on the end of the interest calculation period.



By the way, I believe that there are other reasons why the use of Term RFR has not progressed in Japan.

Some of the world's major currencies do not have IBORs that can be referenced other than LIBOR, while others have IBORs that can be referenced other than LIBOR. Therefore, having or not having IBORs will change the approach to RFRs.

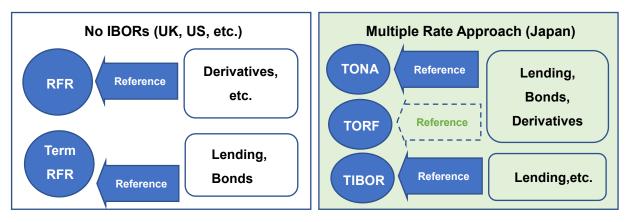
Since the U.S. Dollar, British Pound and Swiss Franc do not have IBORs to refer to other than LIBOR, they inevitably had to move to RFRs. And it is thought that the use of Term-RFR and RFR was made differently in the areas of Lending, Bonds, and Derivatives. On the other hand, a limited number of currencies, including Japanese Yen, Euro, Australian Dollar, and Hong Kong Dollar, have IBORs that can be referenced in addition to LIBOR, and therefore are being considered based on "Multiple Rate Approach".

"Multiple Rate Approach" refers to the use of interest rate benchmarks for IBORs and RFRs based on the nature of financial instruments and transactions such as Lending, Bonds and Derivatives.

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The lower left figure is an image of the UK, US, etc., which do not have IBORs to refer to other than LIBOR.

In the U.K. and U.S., which do not have IBORs, Term-SONIA and Term-SOFR are officially published as "Term-RFR". These are not reference rates intended to be traded in the interbank market, but are supposed to be limited to end-users for Lending and Bond hedging transactions.⁵ And "RFR", SONIA and SOFR, are mainly used in the field of Derivatives.



In contrast, the upper right figure shows an image of Japan, which has IBORs that can be referenced in addition to LIBOR. In Japan, Multiple Rate Approach, which uses the JBA TIBOR and RFR based on the nature of financial instruments and transactions such as Lending, Bonds, and Derivatives, is under consideration.

Although Compounded TONA (setting in arrears) is mainly used in the field of Derivatives, it can also be used for Lending and Bonds by utilizing the "Lookback without Observation Shift Method" which I mentioned earlier, as it enables the payment of interest on the last day of the interest calculation period. In addition, since Japan already has the JBA TIBOR, which has a successful track record in "Lending," etc., there is no particular need to rush to use TORF, a Term Japanese Yen RFR. Therefore, compared to the U.K. and U.S., which do not have IBORs, there is less urgency to use Term-RFR in Japan.

The environment mentioned above would be one of the reasons why the use of Term-RFRs has not progressed in Japan.

The end.

⁵ Re Term-SOFR: https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/ARRC-Scope-of-Use-FAQ.pdf Re Term-SONIA: https://fmsb.com/wp-content/uploads/2021/07/Standard-on-use-of-Term-SONIA-reference-rates_FINAL.pdf

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