

## Result of a Periodic Review of the JBA TIBOR Operational Framework

JBA TIBOR Administration (“JBATA”) (the Chairperson: Satoshi INOUE) conducted a periodic review of the JBA TIBOR operational framework pursuant to the Article 48(1) of the JBA TIBOR Operational Rules as described below.<sup>1</sup> As a result of the periodic review, JBATA has concluded that it is not necessary to change the JBA TIBOR operational framework based on its evaluation that structural changes of the JBA TIBOR’s underlying markets have not been observed and transparency of current JBA TIBOR calculation and determination processes have been maintained. JBATA will continue to be committed to comply with the IOSCO Principles and enhance the transparency, robustness and reliability of JBA TIBOR.

## 1. Underlying markets of JBA TIBOR

The conditions of the underlying markets (i.e. the Japan unsecured call market in the case of Japanese yen TIBOR and the Japan Offshore market in the case of Euroyen TIBOR; the same shall apply hereinafter) and other relevant markets of JBA TIBOR are as described below. The percentage of the transactions executed by reference banks in the JBA TIBOR underlying markets is approximately 30% to 50%. Note that the figures shown below are estimates calculated based on, among other things, published statistical data solely for the purposes of the JBATA’s assessment and consideration. Therefore, JBATA is not liable for any loss or damage arising indirectly or directly from the use of these figures.

(1) Estimated market size of the Japan unsecured call market (Overall) Approx. JPY40.1 tril.<sup>2</sup>

(Term rates) Approx. JPY15.1 tril.

(Overnight rates) Approx. JPY31.0 tril.

Estimated share of transactions executed by reference banks Approx. 36%

(Calculated by including overnight rates. The denominator is deposit-taking institutions.)

<sup>1</sup> JBATA has decided on the permanent cessation of all tenors of Euroyen TIBOR at the end of December 2024, as a result of discussions in accordance with the Article 51 of the JBA TIBOR Operational Rules considering the prolonged downsizing of the Japan Offshore Market and low percentage of submission rate determined by the data of the market. Therefore, JBATA plans to conduct periodic review only for Japanese Yen TIBOR from the next time.

<sup>2</sup> Estimated from the funding side based on the “Trend in the Money Market in Japan - Tokyo Money Market Survey (August 2023)” published by the Bank of Japan. The estimated market size of “(Overall)” represents the sum of transactions via brokers and transactions through direct dealing with unaffiliated banks, whereas the size of “(Term rates)” and “(Overnight rate)” includes intragroup transactions. Therefore, the sum of the “(Term rates)” and the “(Overnight rate)” does not match the “(Overall).” Furthermore, JBATA does not calculate and publish the overnight JBA TIBOR tenor, therefore, the “(Overnight rate)” transactions are not referenced in most cases. The “(Term rates)” also include various terms that do not necessarily correspond to the given TIBOR tenors.

- (2) Estimated market size of the Japan Offshore market (Financing side) Approx. JPY0.6 tril.<sup>3</sup>  
(Funding side) Approx. JPY0.6 tril.

Estimated share of transactions executed by reference banks Approx. 50%

(Calculated by including overnight rates.)

- (3) Estimated market size of NCD transactions Approx. JPY28.5 tril.<sup>4</sup>  
(4) Estimated market size of large-account, time deposit transactions (Approx. JPY34.8 tril.)<sup>5</sup>

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<sup>3</sup> Estimated based on the “Balance of Offshore Account (end of July 2023)” published by the Ministry of Finance Japan. In light of feature of the Japan Offshore market, the market size was estimated from both the financing side (Total Assets/ Deposits and Call Loans/ Denominated in JPY) and the funding side (Total Liabilities/ Deposits and Call Money/ Denominated in JPY)

<sup>4</sup> Estimated based on statistics related to the “Deposits and Loan Market (January 2023 to November 2023)” published by the Bank of Japan.

<sup>5</sup> Estimated based on the “Amounts Outstanding of Deposits by Depositor (semi-annual research <for domestic banks>) (end of September 2023)” published by the Bank of Japan (Transactions for corporate entities only)

2. Levels of the waterfall methodology for calculating/determining submission rates of JBA TIBOR

The following tables are levels of waterfall methodology for calculating/determining submission rates from January 4 to December 29, 2023 (246 business days in total). During the period, there was no rate submission using the expert judgement by reference bank in both Japanese Yen TIBOR and Euroyen TIBOR.

(1) Japanese Yen TIBOR (15 reference banks)

Tenor Level		1W	1M	3M	6M	12M
		<b>1st Level</b>	74.9%	95.3%	98.0%	94.2%
1-1	2.2%	0.7%	0.4%	0.0%	—	
1-2	—	—	—	—	—	
1-3	70.2%	94.4%	97.6%	94.1%	73.0%	
1-4	2.4%	0.1%	—	0.1%	—	
<b>2nd Level</b>	<b>0.3%</b>	<b>2.1%</b>	—	<b>4.4%</b>	<b>26.1%</b>	
2-1	—	—	—	—	—	
2-2	—	—	—	—	—	
2-3	0.3%	2.1%	—	4.4%	26.1%	
2-4	—	—	—	—	—	
<b>3rd Level</b>	<b>24.8%</b>	<b>2.6%</b>	<b>2.0%</b>	<b>1.4%</b>	<b>0.9%</b>	
<b>4th Level</b>	—	—	—	—	—	

(2) Euroyen TIBOR (14 reference banks)

Tenor Level		1W	1M	3M	6M	12M
		<b>1st Level</b>	<b>35.1%</b>	<b>68.6%</b>	<b>90.8%</b>	<b>98.6%</b>
1-1	—	—	—	—	—	
1-2	—	—	—	—	—	
1-3	35.1%	68.6%	90.8%	98.6%	99.0%	
1-4	—	—	—	—	—	
<b>2nd Level</b>	<b>39.1%</b>	<b>28.7%</b>	<b>7.2%</b>	—	—	
2-1	1.4%	0.3%	—	—	—	
2-2	—	—	—	—	—	
2-3	35.7%	28.3%	7.2%	—	—	
2-4	1.9%	0.1%	—	—	—	
<b>3rd Level</b>	<b>25.8%</b>	<b>2.7%</b>	<b>2.0%</b>	<b>1.4%</b>	<b>1.0%</b>	
<b>4th Level</b>	—	—	—	—	—	

(Overview of the calculation and determination process for submission rates in Japanese Yen TIBOR)

<p>1st Level Data of the Japan unsecured call market</p>	<p>1-1: Actual transaction data on the Japan unsecured call market on the relevant business day 1-2: Committed quotes in the Japan unsecured call market 1-3: Indicative quotes in the Japan unsecured call market 1-4: Actual transaction data on the Japan unsecured call market on the previous business days, etc. * Reference banks determine their submission rates in the order of 1-1 to 1 - 4 (in the case where there is no available data for 1st Level, move to 2nd Level).</p>
<p>2nd Level Data of the inter-bank market which is similar to the Japan unsecured call market</p>	<p>2-1: Actual transaction data on the Japan Offshore market and Interbank NCD market on the relevant business day 2-2: Committed quotes in the Japan Offshore market 2-3: Indicative quotes in the Japan Offshore market 2-4: Actual transaction data on the Japan Offshore market and Interbank NCD market on the previous business days, etc. *Reference banks determine their submission rates in the order of 2-1 to 2-4 (in the case where there is no data available for 2nd Level, move to 3rd Level ).</p>
<p>3rd Level Data of the relevant market including the whole sale market</p>	<p>• Actual transaction data on the NCD market (excluding the interbank NCD market), large term deposits, quotes in the short-term government bonds market, the GC repos market and the OIS market *There is no hierarchy among the markets in the level.</p>
<p>4th Level</p>	<p>• Only in the instance where there is no data available for 1st Level, 2nd Level and 3rd Level, a reference bank may determine their submission rates considering other factors (e.g. expert judgment).</p>

\* In the calculation and determination process of submission rate for Euroyen TIBOR, “Japan unsecured call market” in the 1st Level is replaced by “Japan Offshore market”, “Japan Offshore market” in the 2nd Level is replaced by “Japan unsecured call market”.