JBA TIBOR reform

1. About JBATIBOR

A market in which financial instruments with short maturities (e.g. less than a year) are traded is generally defined as a "Short-term Money Market". Short-term Money Markets consist of two types based on market participants:

- the "Interbank Market" where financial institutions (e.g. Banks) participate; and
- the "Open Market" where various types of entities such as operating companies can trade.

JBA TIBOR¹ is a benchmark which reflects prevailing rates on the interbank market as of 11:00 a.m. each business day and is composed of two benchmarks:

- · Japanese Yen TIBOR which reflects prevailing rates on the unsecured call market²; and
- Euroyen TIBOR which reflects prevailing rates on the Japan offshore market³.

To calculate JBA TIBOR rate, JBA TIBOR Administration (JBATA) aggregates prevailing market rates submitted by several financial institutions designated by JBATA ("reference banks") which determine their rate in accordance with JBA TIBOR definition² and related rules. JBATA calculates and publishes JBA TIBOR rates by excluding the top two and the bottom two of the submitted rates and averaging the remaining rates.

2. JBA TIBOR reform

To comply with the "Principles for Financial Benchmarks (19 principles)" published by the International Organization of Securities Commissions (IOSCO), an international body comprising of supervisory authorities across the world, to prevent the manipulation of foreign benchmarks, JBATA has been considering JBA TIBOR reform to ensure JBA TIBOR is anchored more in actual transactions and to enhance reliability and transparency of JBA TIBOR in addition to the enhancement of governance surrounding JBA TIBOR calculation and publication since establishment of JBATA in April 1, 2014.

Based on the result of the consideration, JBATA has implemented the following JBA TIBOR reform on July 24, 2017.

 $<\!{\rm Concept}$ of JBA TIBOR reform >

- To minimize impacts on the existing financial transactions or instruments referring to JBA TIBOR, the definition and name were not changed, ensuring consistency and continuity as a benchmark.
- While ensuring consistency and continuity as a benchmark, JBATA standardized and clarified reference banks' calculation/determination process to be more anchored in actual transaction data.

- $^{\rm 2}~$ Definition of JBA TIBOR is as follows
 - Japanese Yen TIBOR: rates which reference banks deem as prevailing market rates, assuming transactions between prime banks on the unsecured call market as of 11:00 a.m."

 $^{^1}$ Rates with 6 different tenors (1 week, 1 month, 2month, 3month, 6month, 12 months) are published (as of July 24, 2017) $\ .$

 $^{^2}$ "Unsecured call market" is a market where financial institutions such as banks lend and borrow money to adjust their short-term funding.

³ "Japan offshore market" is a market where yen funding transactions are traded between financial institutions (e.g. Banks) and non-residents.

[•] Euroyen TIBOR: "rates which reference banks deem as prevailing market rates, assuming transactions between prime banks on the Japan Offshore Market as of 11:00 a.m."

<Issues on JBA TIBOR and overview of JBA TIBOR reform>

Transparency is not sufficient because details of the calculation and determination process on JBA TIBOR were not published. Anchoring rates in actual transactions is not enough because the method of referring to relevant market data was not published.

① JBATA standardized and clarified the reference banks' calculation/determination process and published the process on its website.

② JBATA introduced a data hierarchy with the highest priority placed on interbank market data and lower priority of other relevant market data, achieving a benchmark anchored more in actual transactions.

Level 1	① Actual transaction data for the unsecured call market on the
Data of the unsecured call	business day.
market	② Quotes in the unsecured call market
	$\ensuremath{\textcircled{3}}$ Actual transaction data for the unsecured call market for the
	three previous business days
	Reference banks determine their submission rate in the order of
	1 to 3 (in the case where there is no available data for Level 1,
	move to Level 2 described below)
Level 2	1 Actual transaction data for the Japan offshore market and
Data of the inter-bank market	Interbank NCD ³ market on the relevant business day
which is similar to the	② Quotes in the Japan offshore market
unsecured call market	$\ensuremath{\textcircled{3}}$ Actual transaction data for the Japan offshore market and
	Interbank NCD market for the three previous business days.
	Reference banks determine their submission rate in the order of
	1 to 3 (in the case where there is no data available for Level 2,
	move to Level 3 described below) .
Level 3	\cdot Actual transaction data for the NCD market (excluding the
Data of the relevant market	interbank NCD market), large term deposits, quotes in the
including the whole sale	short-term government bonds market, the $\mathrm{GC}\ \mathrm{repos}^4$ market and
market	the OIS market ⁵
	%There is no hierarchy among the markets in the same level.
_	\cdot Only in the instance where there is no data available for Level 1, 2
	and 3, a reference bank may determine the rate considering
	other factors (e.g. expert judgment).

<Market data hierarchy in Japanese Yen TIBOR>

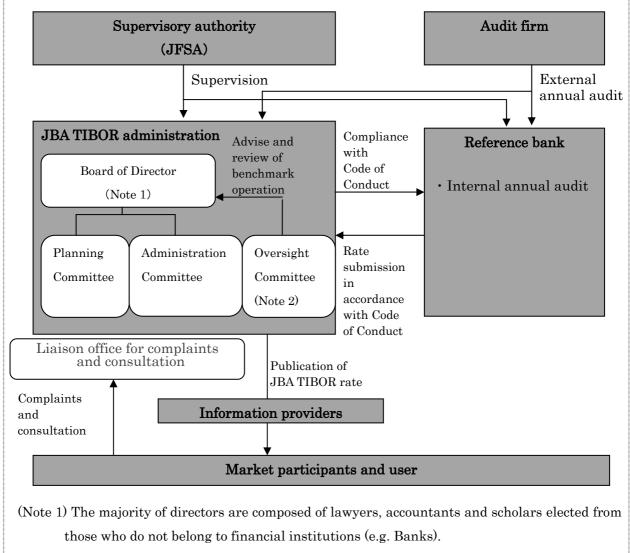
³ Certificate of deposit which is transferable to a third party (Negotiable Certificate of Deposit)

⁴ A type of bond lending transaction collateralized by cash which does not designate a particular bond (General Collateral)

⁵ A market for the transaction which exchanges an overnight unsecured call rate and a fixed interest rate in a certain period (OIS : Overnight Index Swap)

(Reference : Enhancement of governance over JBA TIBOR calculation and publication)

- On April 1, 2014, JBATA commenced the calculation of JBA TIBOR and publication operations transferred from the Japan Banker's Association.
- With the transfer of operations, JBATA enhanced its governance framework over JBA TIBOR calculation and publication as described below and was designated as a specified financial benchmark administrator pursuant to the Financial Instruments and Exchange Act (the "Act") in May, 2015. JBATA is supervised by the JFSA under the Act.



(Note 2) All members of the Oversight Committee are composed of lawyers, accountants and scholars.