

# Current status and outlook of JBA TIBOR

## (March 2021)



1

**JBA TIBOR will continue to be published as one of the major JPY interest rate benchmarks.**

JBA TIBOR will continue to be published as one of the major interest rate benchmarks in compliance with IOSCO's "Final Report on Principles for Financial Benchmarks".

It is expected to be more widely used as an alternative benchmark for JPY LIBOR, particularly in loans.

Refer to pages 6 and 8

2

**JBA TIBOR is calculated objectively based on JPY money market data.**

With the JBA TIBOR reform in July 2017, JBA TIBOR introduced "waterfall methodology" to increase objectivity of the calculation and determination processes based on JPY money market data.

Post reform, there have been no cases where submission rates were determined based on "expert judgment".

Refer to pages 3, 4 and 5

3

**JBA TIBOR aims to further enhance its transparency, robustness and reliability.**

JBA TIBOR aims to further enhance its transparency, robustness and reliability by solving any remaining issues.

Through these efforts, JBA TIBOR aims to be further recognized internationally and continue to be used widely in the markets.

Refer to page 7

# Explanatory document



# Background of JBA TIBOR reform ~ international initiatives ~

- JBA TIBOR was reformed as one of the major interest rate benchmarks in July 2017 (the “JBA TIBOR reform”) to enhance its transparency, robustness and reliability based on the following international initiatives:
  - “Final Report on Principles for Financial Benchmarks” published by IOSCO<sup>(\*1)</sup> in July 2013 (“IOSCO Principles”)
  - “Reforming Major Interest Rate Benchmarks” published by the FSB<sup>(\*2)</sup> in July 2014

## ■ Background of JBA TIBOR reform (International initiatives)

### ● IOSCO Principles

No.	Principles	No.	Principles
1	Overall Responsibility of the Administrator	11	Content of the Methodology
2	Oversight of Third Parties	12	Changes to the Methodology
3	Conflicts of Interest for Administrators	13	Transition
4	Control Framework for Administrators	14	Submitter Code of Conduct
5	Internal Oversight	15	Internal Controls over Data Collection
6	Benchmark Design	16	Complaints Procedures
7	Data Sufficiency	17	Audits
8	Hierarchy of Data Inputs	18	Audit Trail
9	Transparency of Benchmark Determinations	19	Cooperation with Regulatory Authorities
10	Periodic Review		

### ● FSB “Reforming Major Interest Rate Benchmarks”

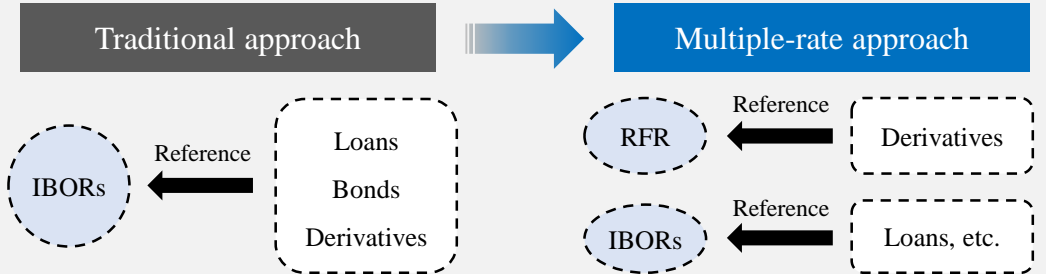
**◎ IBOR reform**

Reform existing major interest rate benchmarks (LIBOR, EURIBOR, TIBOR) to enhance transparency/robustness/reliability as a benchmark by eliminating the possibility of arbitrary judgment by reference banks as much as practicable.

• Development of a risk-free rates (RFR)

As for the major currencies (i.e. USD, EUR, GBP, JPY, CHF), it is necessary to develop a risk-free rate that does not include bank credit risk.

○ In addition to the above, the “multiple-rate approach” that uses each interest rate benchmark based on the nature of financial instruments or transactions was recommended.



(Source) Partially edited in reference to the consultation document “Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks” published by the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks

\*1: The International Organization of Securities Commissions (IOSCO) is the international body that consists of the world’s securities supervisors and securities exchanges, etc.. It primarily engages in developing international rules pertaining to securities supervision (e.g. principles, guidelines).

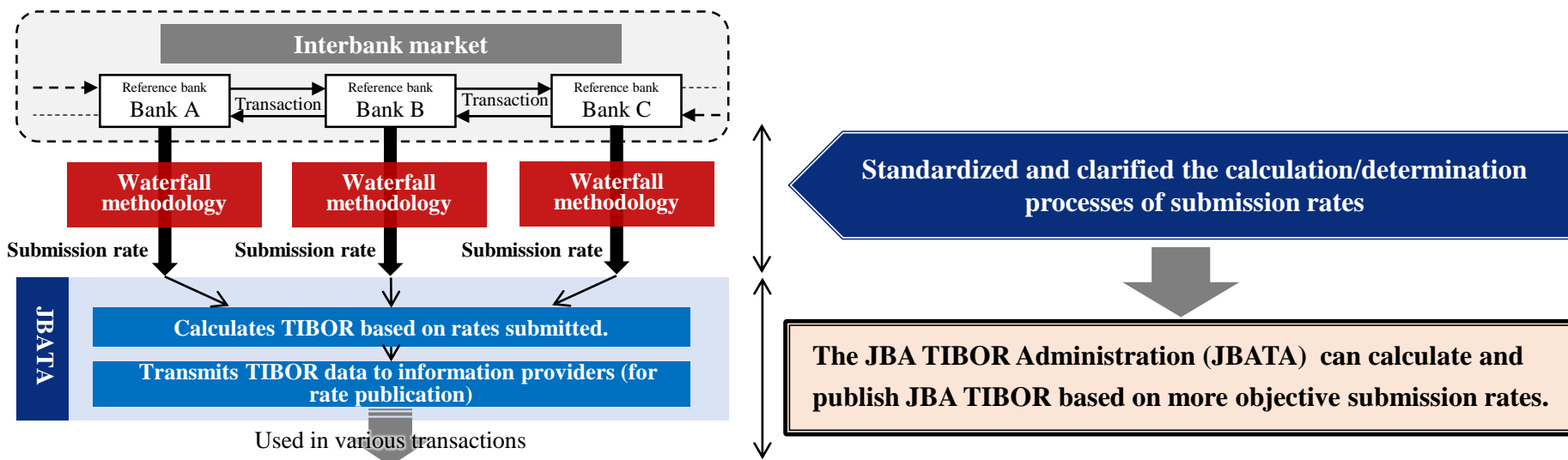
\*2: The Financial Stability Board (FSB) conducts activities to promote coordination among authorities addressing vulnerabilities of the financial system and ensuring its stability. Its members include the representative of the central bank, financial supervisors, the ministry of finance and major standard setters of major jurisdictions, the International Monetary Fund (IMF), the World Bank, the Bank for International Settlements (BIS) and the Organization for Economic Co-operation and Development (OECD).

- One of the key concepts under JBA TIBOR reform was to enhance the transparency and reliability of the JBA TIBOR calculation/determination processes in order to have JBA TIBOR be more anchored in actual transactions, as required by the FSB Report.

## ■ Overview of reform (standardization and clarification of the calculation/determination processes of submission rates)

- Before JBA TIBOR reform, the calculation and determination processes of (reference banks') submission rates were not clearly defined. This could have been raised as an issue that may lead to rate manipulation, such as enabling reference banks to arbitrarily adjust their submission rates in their calculation/determination processes.
- **JBA TIBOR reform introduced “waterfall methodology” (see next page for details) which standardized and clarified the calculation/determination processes of reference banks’ submission rates and realized a more objective process that removes any arbitrarily manipulated rates as much as practicable.**
- ✓ Under “waterfall methodology,” actual transaction data and other related data are referenced in the order of their prescribed priority when calculating and determining submission rates.

### <JBA TIBOR reform>

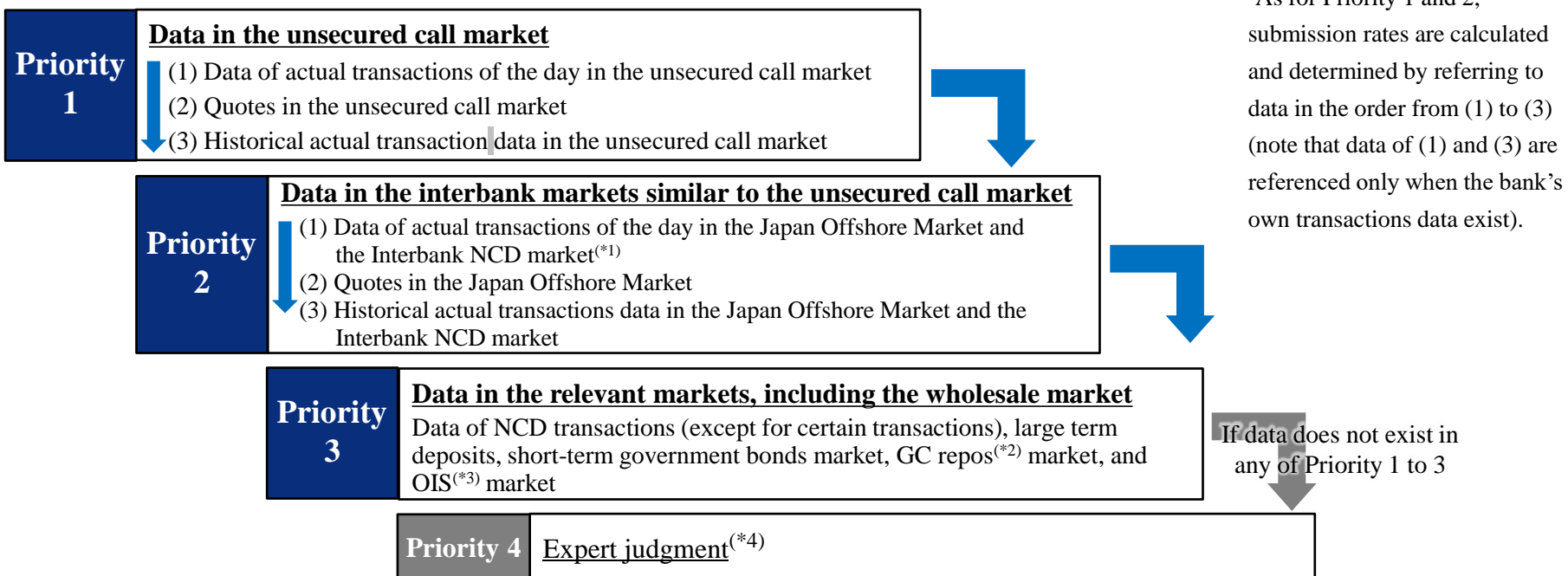


- “Waterfall methodology” defined by JBA TIBOR reform is as explained below.
- According to the post-reform inputs, there have been no cases where submission rates were determined based on “expert judgment” (i.e. Priority 4). All submission rates have been objectively calculated and published based on related data.

## ■ “Waterfall methodology” defined by JBA TIBOR reform

- JBA TIBOR reform standardized/clarified the processes so that submission rates are calculated/determined by referring to data in the order of the following Priority 1 to 3. Under this mechanism, only when data specified in Priority 1 to 3 does not exist, factors other than actual transactions data (i.e. Priority 4) may be taken into account.

### <Waterfall methodology> (regarding Japanese Yen TIBOR)



\*1 NCD stands for Negotiable Certificate of Deposit, can be traded before maturity and is traded in the money market.

\*2 “GC (General Collateral) repos” is one of the approaches to bond lending transactions collateralized by cash used mainly for funding without specifying the security.

\*3 OIS stands for Overnight Index Swap. In Japan, OIS transactions are executed by exchanging the unsecured overnight call rate over a certain period as a floating rate with a fixed rate.

\*4 Each reference bank's Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks exercises expert judgment and submits rates. This is retained at the lowest level of the waterfall methodology (Priority 4) so that users will be able to appropriately capture prevailing rates in the money market even when an unpredictable event occurs (e.g. rapid financial market turmoil due to large disaster) and data in Priority 1 to 3 are not available.

- JBATA evaluates whether JBA TIBOR's compliance with the IOSCO Principles has been achieved.
- JBATA will contemplate and address the remaining issues to further enhance JBA TIBOR's transparency, robustness and reliability.

## ■ JBA TIBOR's compliance with the IOSCO Principles

No.	Principles	No.	Principles
1	Overall Responsibility of the Administrator	11	Content of the Methodology
2	Oversight of Third Parties	12	Changes to the Methodology
3	Conflicts of Interest for Administrators	13	Transition
4	Control Framework for Administrators	14	Submitter Code of Conduct
5	Internal Oversight	15 <sup>(*)</sup>	Internal Controls over Data Collection
6	Benchmark Design	16	Complaints Procedures
7	Data Sufficiency	17	Audits
8	Hierarchy of Data Inputs	18	Audit Trail
9	Transparency of Benchmark Determinations	19	Cooperation with Regulatory Authorities
10	Periodic Review		◎ : Assessed as fully complied. ○ : Assessed as complied but some issues are left.

## ■ Some remaining issues

### Issue 1: Actions to address “Long-term shrinking trend of the Japan Offshore Market” (related to Principle 7)

Principle 7	JBATA's recognition
<p><b>Data Sufficiency</b></p> <p>The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark.</p>	<p>Complied (with some remaining issues)</p> <p><b>The lack of an active underlying market will make it difficult for Euroyen TIBOR to determine submission rates</b> on the basis of the data in the Japan Offshore Market.</p>

While the balance of transactions in the Japan unsecured call market (i.e. the underlying market of Japanese Yen TIBOR) has reached JPY25.9 trillion, the balance of transactions for deposits and calls denominated in Japanese yen in the Japan Offshore Market (i.e. the underlying market of Euroyen TIBOR) is only JPY0.5 trillion, and its market size will continue to shrink in the long term. (Figures are as of the end of July 2020).

### Issue 2: Actions to address “Consideration of appropriate alternative benchmarks in the event of JBA TIBOR's permanent cessation.(related to Principle 13)

Principle 13	JBATA's recognition
<p><b>Transition</b></p> <p>Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark. Administrators' written policies and procedures to address the possibility of Benchmark cessation could include the criteria to guide the selection of a credible, alternative Benchmark, if determined to be reasonable and appropriate by the Administrator.</p>	<p>Complied (with some remaining issues)</p> <p>The written policies and procedures to address transition were published in March 2020. <b>Consideration of appropriate alternative benchmarks of JBA TIBOR (fallback rates) has not completed.</b></p>

JBATA will contemplate and address the remaining issues to further **enhance JBA TIBOR's transparency, robustness and reliability** (see page 7 for detailed actions).

\* This principle is determined not to be applicable to our assessment.

- JBATA seeks to solve some issues in fully complying with the IOSCO Principles.
- JBA TIBOR will further enhance its transparency, robustness and reliability in pursuit of an internationally recognized and widely used benchmark in the markets.

## ■ Issue 1: Actions to address “Long-term shrinking trend of the Japan Offshore Market” (related to Principle 7)

Principle 7	JBATA’s recognition	Progress of JBATA’s actions
<p><b><u>Data Sufficiency</u></b></p> <p>The data used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark.</p>	<p>Complied (with some remaining issues)</p> <p><b><u>The lack of an active underlying market will make it difficult for Euroyen TIBOR to determine submission rates</u></b> on the basis of the data in the Japan Offshore Market.</p>	<p>JBATA published the 1st Consultative Document <i>Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR</i> in October 2018, and announced in May 2019 that it will, as a result of the consultation, contemplate further actions while deeming “retaining Japanese Yen TIBOR and discontinuing Euroyen TIBOR” as the most likely option of all.</p>

## ■ Issue 2: Actions to address “Consideration of appropriate alternative benchmarks in the event of permanent cessation of JBA TIBOR publication” (related to Principle 13)

Principle 13	JBATA’s recognition	Progress of JBATA’s actions
<p><b><u>Transition</u></b></p> <p>Administrators should have clear written policies and procedures, to address the need for possible cessation of a Benchmark. Administrators’ written policies and procedures to address the possibility of Benchmark cessation could include the criteria to guide the selection of a credible, alternative Benchmark, if determined to be reasonable and appropriate by the Administrator.</p>	<p>Complied (with some remaining issues)</p> <p><b><u>Consideration of appropriate alternative benchmarks of JBA TIBOR (fallback rates) has not completed.</u></b></p>	<p>From the perspective of further enhancing the benchmark’s transparency, robustness and reliability, JBATA plans to publish a public consultation regarding the alternative interest benchmarks when JBA TIBOR is permanently ceased.</p>



JBATA is working on some issues related to the IOSCO Principles to enhance the **transparency, robustness and reliability of JBA TIBOR** so that it will be further recognized internationally and continue to be used widely in the markets.



- JBA TIBOR has a certain level of support by market participants as one of the major alternative benchmarks for “JPY IBOR”, particularly in loans.
- After the cessation of JPY LIBOR, JBA TIBOR is expected to be more widely used in the loan market.

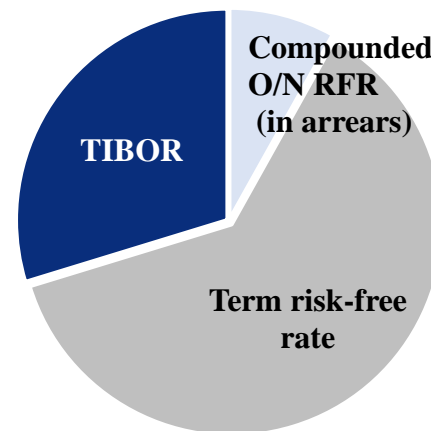
## ■ JBA TIBOR as an alternative benchmark for JPY LIBOR

○ **As a result of discussions** at the “Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks (secretariat: Bank of Japan)”, **there is a certain level of support for JBA TIBOR as an alternative benchmark for JPY LIBOR, particularly in loans** because it provides cash flow certainty as it is fixed in advance, and it has basic characteristics similar to those of JPY LIBOR.

### <Major alternative benchmarks for JPY LIBOR>

	Compounded O/N RFR (fixing in arrears)	Term risk-free rate (TORF)	TIBOR
<b>Underlying Rate</b>	Unsecured overnight call rate	JPY OIS (using unsecured overnight call rate)	TIBOR
<b>Fixing (advance/arrears)</b>	In arrears (Immediately before the interest payment date)	In advance (At the time when the interest rate starts to apply)	<b>In advance</b> (At the time when the interest rate starts to apply)
<b>Availability (as of April, 2021)</b>	Available * There are issues in terms of operational systems.	(Production rates are planned to be published on 26 April 2021.)	<b>Available</b> * Some currencies do not have IBOR benchmarks, such as USD and GBP.

### <Preference of alternative benchmarks in loans>



(Multiple choices allowed, 37 in total)

JBA TIBOR is expected to be more widely used as an alternative benchmark for JPY LIBOR. JBATA will continue to address the remaining issues with a view to further enhancing JBA TIBOR’s transparency, robustness and reliability.

(Note 1) The table and diagram above are created in reference to, among other things, the “Final Report on the Results of the Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks.”

(Note 2) When selecting Japanese Yen TIBOR as an alternative benchmark for LIBOR according to the fallback provisions and applying the “historical median approach over a five-year lookback period” for “spread adjustments” to adjust the differences between these two rates, considerations need to be agreed between the parties in advance. For details, see the *Final Report on the Results of the Second Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks*.