

Example of the spread adjustment methodology using the "historical median approach over a 5-year lookback period" applicable to TIBOR as the replacement benchmark for loans^{1,2,3}

1. Definitions

Items	Definitions
Publication date	The date on which IBOR data are published* ¹
Tenor	Tenors for each IBOR are as follows.* ² JPY LIBOR: Spot Next (S/N), 1 week, 1 month, 2 months, 3 months, 6 months, and 12 months TIBOR: 1 week, 1 month, 3 months, 6 months, and 12 months
Day count	JPY LIBOR: 360 days TIBOR: 365 days
Median period	Number of days on which LIBOR data are published during the period from the median period start date to the median period end date
Median period start date	The median period start date is the date 5 years prior to the median period end date. If there are no JPY LIBOR data on the date corresponding to the one that is 5-years prior to the median period end date due to a holiday, the most recent date that has JPY LIBOR data would be the median period start date.
Median period end date	2 business days prior to the spread adjustment fixing date (GMT)* ³
Spread adjustment fixing date	The earlier of* ⁴ : (i) the date that the administrator of the benchmark or the regulator with authority over the administrator issues a public statement announcing that the administrator has ceased or will cease to provide the benchmark, and there is no successor administrator (ii) the date that the regulator with authority over the administrator of the benchmark announces that the benchmark is no longer representative

¹ This document assumes TIBOR data to be Japanese Yen TIBOR.

² As for the results of the sub-group's deliberations and points to note regarding the case where TIBOR is adopted as the replacement benchmark for loans, see 3.(2) of "Final Report on the Results of the Second Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks".

³ The Sub-Group on Loans shall not preclude contracting parties from selecting different methodologies from that indicated in this document.

- *1: The effective date of JPY LIBOR will be 2 business days after the publication date (GMT), and the effective date of TIBOR will be 2 business days after the publication date (JST).
- *2: This document assumes the case where there is a TIBOR tenor corresponding to a LIBOR tenor.⁴
- *3: Regarding the data range for which LIBOR data are used when calculating the median, it would be an option to select the date that is "tenor + 2 business days" before the spread adjustment fixing date as the median period end date, so that the range would match that of the ISDA spread as closely as possible.
- *4: The date assumes a case where permanent cessation triggers and pre-cessation triggers are introduced in fallback provisions.

2. Spread adjustment methodology

(i) Formula for determining the spread adjustment on the spread adjustment fixing date⁵

$$SA_f = \text{Median} \left(\left\{ u \in MP_f \mid LIBOR_{f,u} - \frac{Daycount_L}{Daycount_T} \times TIBOR_{f,u} \right\} \right) \dots (A)$$

(ii) Notation

Notation	Details	Notation	Details
SA_f	Spread adjustment for tenor of f	$LIBOR_{f,u}$	JPY LIBOR data for tenor of f on u
$Median$	—	$TIBOR_{f,u}$	TIBOR data for tenor of f on u
MP_f	Median period for tenor of f	$Daycount_L$	Day count used for LIBOR(360)
u	LIBOR publication date belonging to MP_f^*	$Daycount_T$	Day count used for TIBOR (365)

* If TIBOR data are not available on the LIBOR publication date due to a holiday, TIBOR data on the most recent publication date will be used.

(iii) Units of figures

(a) $\frac{Daycount_L}{Daycount_T} \times TIBOR_{f,u}$ in (A) are rounded to five decimal places.

(b) SA_f in (A) are rounded to five decimal places.

Reference: Calculation methodology for the replacement rate (Symbol: R)⁶

$$R_f = \frac{Daycount_L}{Daycount_T} \times TIBOR_f + SA_f \quad \left(\frac{Daycount_L}{Daycount_T} \times TIBOR_f \text{ are rounded to five decimal places, the same manner as in 2.(iii)(a) } \right)$$

⁴ If there is no TIBOR tenor corresponding to the LIBOR tenor (S/N and 2 months), it would be an option, for example, to use linear interpolation between the adjacent tenors (for a tenor of 2 months) or to adopt O/N RFR Compounding (Fixing in Arrears) instead of TIBOR as the replacement benchmark, as long as the parties concerned agree.

⁵ With regard to the ISDA spread, once the spread adjustment is fixed on the spread adjustment fixing date, it will not be calculated again.

⁶ As for $TIBOR_f$ as the replacement benchmark, TIBOR data from 2 business days before the effective date for the replacement rate (JST) are used. On the other hand, as for SA_f , as shown in 2.(i), the data fixed on the spread adjustment fixing date are used.