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Final Report on the Results of the Second Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks

November 2020

Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks

Contents

1. Introduction

The Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks (referred to simply as "Committee" hereinafter) published the "Second Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks"[1] (referred to simply as "second public consultation paper" hereinafter) to solicit comments on specific matters to be dealt with when fallbacks are triggered in cash products referencing Japanese yen (JPY) LIBOR from a wide range of relevant parties from August 7 to September 30, 2020. The purpose of this report is to present the results of the second public consultation, based on the responses received. The report also includes the results of deliberations by the Sub-Group on Loans on the spread adjustment methodology applicable to TIBOR as the replacement benchmark.

2. Results of the public consultation

(1) Overview

A total of 35 entities from a wide range of industries such as financial institutions, institutional investors, and non-financial corporates provided their comments on issues described in the second public consultation (Figure 2-1),[2] and most entities supported the recommendations by the Committee.

Figure 2-1: Overview of respondents[3]

Total	Banks	Securities Companies	Institutional Investors	Non-financial Corporates	Others
35	8	12	4	9	2

The remainder of this report describes the comments received on each issue and concludes by providing an overview and the next steps forward.

[1] For details, see the below link.
https://www.boj.or.jp/en/paym/market/jpy_cmte/cmt200807b.pdf

[2] For issues subject to public comments, see the link in footnote 1.

[3] Industry groups are classified according to the type of industry that the constituent companies are in. Those consisting of multiple industries are classified as "Others." Please also note that a comment from each industry group is regarded as one opinion regardless of the number of members in the group. In addition, respondents that did not provide answers to some of the questions are included in the number of respondents (the same applies to the remainder of the report).

(2) Fallbacks in loans

In the second consultation paper, the Committee recommended the adoption of the results of its deliberations on (i) replacement benchmarks and (ii) spread adjustment methodologies for fallbacks in loans referencing JPY LIBOR as shown below.[4,5]

(i) Replacement benchmarks

The Committee recommends the waterfall structure shown below as the replacement benchmark.

1st priority	Term Reference Rates
2nd priority	O/N RFR Compounding (Fixing in Arrears)
3rd priority	The alternate rate of interest that has been selected by the Lender [giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention]

As a result of the second public consultation, most of the respondents agreed with the recommendation by the Committee (Figure 2-2). On the other hand, those who had disagreed expressed views that (i) the rate in the third priority should be premised on the agreement of both the lender and the borrower in order to ensure fairness to both parties,[6] (ii) TIBOR should be included in the waterfall structure mainly due to its compatibility with the current administration and systems, and (iii) O/N RFR Compounding (Fixing in Arrears) should be made the first priority to ensure transparency in the rate-setting process. In addition, even some respondents that had agreed pointed out the importance of initiatives for enhancing the robustness of Term Reference Rates and administrative burdens for using O/N RFR Compounding (Fixing in Arrears).

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4 For details, see 2.(1) (p.6-) of the second public consultation paper.

5 The replacement benchmarks and spread adjustment methodologies for loans recommended in this report are those most favored by the Committee, assuming they are applied mainly to standard contracts. Therefore, the Committee shall not preclude contracting parties from concluding a contract with different content from that recommended here including those using TIBOR or a simple average of O/N RFR (Fixing in Arrears), and a single replacement benchmark. When applying the recommendation to actual transactions, it is necessary to take into consideration the characteristics of products and the feasibility for the parties included with respect to administration. In addition, see "3.(2) Spread adjustment methodology applicable to TIBOR in loans as the replacement benchmark" for the results of the deliberation by the Sub-Group on Loans on the issues and points to note.

6 The Committee shall not preclude contracting parties from concluding a contract in which the borrower would have the right to object to the lender's proposal(s) for the rate in the third priority. However, in that case, contracting parties should note a risk that the replacement benchmark would not be determined even when they reach the end of the waterfall structure.

Figure 2-2: Opinions of respondents on the replacement benchmarks for loans

Agree	Disagree
27 respondents	3 respondents (2 non-financial corporates, 1 bank)

(ii) Spread adjustment methodologies

The Committee recommends the spread adjustment methodology for loans as shown below.*

Triggers	Permanent cessation triggers and pre-cessation triggers
Spread adjustments	Historical median approach over a five-year lookback period
Official spreads	Bloomberg-calculated ISDA fallback rates
How to supplement any lack of historical data of Term Reference Rates	Use O/N RFR Compounding (Fixing in Arrears)
Transition period	Not needed

* The Committee deems it appropriate to adopt the same methodology as that for O/N RFR Compounding (Fixing in Arrears) even in a case where Term Reference Rates are adopted as the replacement benchmark.

Almost all respondents agreed with the recommendation by the Committee with a view to maintaining consistency with other currencies and derivatives governed by the ISDA[7] Master Agreement (referred to simply as "ISDA derivatives" hereinafter) and to preventing the administrative work from becoming complicated. On the other hand, a respondent who had disagreed supported the forward approach[8] on the grounds that the historical median approach over a five-year lookback period entailed a risk of value transfer because average historical market conditions might not necessarily match market expectations for future market conditions (Figure 2-3).

Figure 2-3: Opinions of respondents on the spread adjustment methodology for loans

Agree	Disagree
29 respondents	1 respondent (non-financial corporate)

[7] ISDA stands for International Swaps and Derivatives Association.

[8] For details of the forward approach, see p.20 of Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks (referred to simply as "first public consultation paper" hereinafter).
https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt190702b.pdf

(3) Fallbacks in bonds

The Committee recommended the adoption of the results of its deliberations on (i) replacement benchmarks and (ii) spread adjustment methodologies for fallbacks in bonds referencing JPY LIBOR as shown below.[9,10]

(i) Replacement benchmarks

The Committee recommends the waterfall structure shown below as the replacement benchmark.

1st priority	Term Reference Rates
2nd priority	O/N RFR Compounding (Fixing in Arrears)
3rd priority	Rates recommended by the authority-related committee*
4th priority	ISDA Fallback Rate
5th priority	Rates selected by issuers

*This refers to committees recommended or convened by the central bank or the relevant authority.

Almost all respondents agreed with the recommendation by the Committee with a view to maintaining compatibility with the current administration and systems and consistency with global discussions. On the other hand, a respondent who had disagreed pointed out that O/N RFR Compounding (Fixing in Arrears) should be made the first priority to ensure transparency in the rate-setting process. In addition, similar to the comments made on loans, some respondents that had agreed pointed out the importance of initiatives for enhancing the robustness of Term Reference Rates and administrative burdens for using O/N RFR Compounding (Fixing in Arrears) (Figure 2-4).

Figure 2-4: Opinions of respondents on the replacement benchmarks for bonds

Agree	Disagree
30 respondents	1 respondent (non-financial corporate)

9 For details, see 2.(2) (p.10-) of the second public consultation paper.

10 It is assumed that the recommendation in this report will mainly be applied to straight bonds, but it may be appropriate in some cases of securitizations and structured bonds to decide fallbacks depending on the nature of the products. Therefore, the Committee shall not preclude contracting parties from concluding a contract with different content in bonds, including straight bonds, from that recommended here. When applying the recommendation to actual transactions, it is necessary to take into consideration the characteristics of products and the feasibility for the parties including the administration of the contract.

(ii) Spread adjustment methodologies

> The Committee recommends the same spread adjustment methodology for bonds as that for loans.

Almost all respondents agreed with the recommendation by the Committee with a view to maintaining consistency with other currencies and ISDA derivatives and to preventing the administrative work from becoming complicated. On the other hand, a respondent that had disagreed supported the forward approach with a view to preventing value transfer (Figure 2-5).

Figure 2-5: Opinions of respondents on the spread adjustment methodology for bonds

Agree	Disagree
30 respondents	1 respondent (non-financial corporate)

(4) Initiatives for enhancing the robustness of Term Reference Rates

In the second public consultation paper, the Committee deemed it essential to revitalize transactions of Japanese yen overnight index swaps (JPY OIS), the underlying transactions of Term Reference Rates. Respondents indicated the points including the following with regard to issues that market participants should address in order to revitalize JPY OIS transactions.

(i) Increasing cash products referencing O/N RFR Compounding (Fixing in Arrears)

Some respondents expressed the opinion that an increase in the number of cash products referencing O/N RFR Compounding (Fixing in Arrears) would revitalize transactions in the OIS market because OIS transactions were expected to be used as a means of hedging risks in cash products. In relation to this point, some respondents indicated that market participants should first proceed with preparations regarding the administration and systems for trading cash products referencing O/N RFR Compounding (Fixing in Arrears), and then engage in executing test transactions of OIS.

(ii) Encouraging market participants' proactive engagement in OIS transactions

There was an opinion that more market participants, including financial institutions and non-financial corporates, should first prepare the administration and systems for OIS transactions.

Specifically, some respondents indicated that they expected financial institutions -- sell-side entities -- to propose OIS transactions as alternative transactions for LIBOR swaps more actively to a wide range of customers including non-financial corporates.

On the other hand, some respondents indicated their expectations for non-financial corporates -- buy-side entities -- who were customers of financial institutions. They argued that a wide range of market participants, including non-financial corporates, should actively participate in the OIS market because there was a limit on what dealers, who were market makers, could do to revitalize the OIS market by simply submitting quote data. In this regard, some respondents requested assistance from the public sector in further developing market conventions.

(iii) Fostering an environment where dealers could submit quote data without discomfort

Some respondents expressed views on fostering an environment where dealers could submit quote data without discomfort. Specifically, their views were that (i) governance structures should be established mainly by QUICK Corp., which was assumed to be the benchmark administrator, in order to enhance transparency in Term Reference Rates, as they could be affected by the quote data submitted by dealers,[11] and that (ii) it was necessary to clarify the responsibility of dealers who submitted quote data because conflicts of interest could potentially arise, such as when dealers conducted both OIS transactions and transactions referencing Term Reference Rates.

(5) Summary of comments received

As a result of the consultation, most respondents supported the recommendations issued by the Committee in the second public consultation paper. In addition, the Committee received comments from a wide range of industries including non-financial corporates.

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[11] See the Box for the progress in the preparations for publishing production rates for Term Reference Rates, including the preparation for the development of the governance structures by QUICK Corp..

Financial institutions and non-financial corporates are expected to proceed with necessary preparations in accordance with the "Roadmap to Prepare for the Discontinuation of LIBOR"[12] while referencing this report.

The Committee will continue to examine the progress of interest rate benchmark reform and to provide support for market-wide initiatives toward enhancing the robustness of Term Reference Rates including those to enhance the liquidity of JPY OIS.

[12] See Figure 2-8 (p.17) of the second public consultation paper.

3. Other topics

(1) Developments surrounding the interest rate benchmark reform after the publication of the second public consultation paper

As for developments surrounding the interest rate benchmark reform in Japan after the publication of the second public consultation paper on August 7, 2020, the Accounting Standards Board of Japan (ASBJ) issued the PITF No. 40 for Practical Solution on the Treatment of Hedge Accounting for Financial Instruments that Reference LIBOR in September.[13] In addition, the Japan Syndication and Loan-trading Association (JSLA) released the sample fallback provisions for syndicated loans in October.[14]

As for global developments, in the United Kingdom, the Working Group on Sterling Risk-Free Reference Rates (RFRWG) released a recommendation on standard market conventions for sterling loans based on SONIA compounded in arrears in September 2020.[15] In October, the U.K. government introduced the Financial Services Bill to Parliament, which included amendments to the Benchmarks Regulation (BMR) providing the Financial Conduct Authority (FCA) with new and enhanced powers.[16] In November, the ICE Benchmark Administration (IBA) announced that it would consult on its intention to cease the publication of all GBP, EUR, CHF, and JPY LIBOR settings.[17] Alongside this statement , the FCA published consultations on its policy in relation to how it would use the proposed new power, based on the assumption that the amendments to Financial Services Bill would be passed in its current form.[18]

In the United States, in August 2020, the Alternative Reference Rates Committee (ARRC) released updated recommended contractual fallback language for new originations of U.S. dollar LIBOR denominated bilateral business loans.[19] In October, a bill that aimed to protect consumers and bring stability to the market by establishing an alternative recommended benchmark as a

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13 https://www.asb.or.jp/jp/accounting_standards/practical_solution/y2020/2020-0929.html (Available in Japanese only.)

14 https://www.jsla.org/ud0401.php (Available in Japanese only.)

15 https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/statement-on-behalf-of-rfrwg-recommendations-for-sonia-loan-market-conventions.pdf?la=en&hash=074583D7080993CE84B6A381B554BEFD6594C076

16 https://publications.parliament.uk/pa/bills/cbill/58-01/0200/200200.pdf

17 https://ir.theice.com/press/news-details/2020/ICE-Benchmark-Administration-to-Consult-On-Its-Intention-to-Cease-the-Publication-of-GBP-EUR-CHF-and-JPY-LIBOR/default.aspx

18 https://www.fca.org.uk/news/statements/fca-consults-on-new-benchmark-powers

19 https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC-Updated-Hardwired-Fallback-Language-Bilateral-Business-Loans.pdf

fallback in existing contracts that referenced LIBOR was introduced in the New York state Senate.[20]

Globally, the International Accounting Standards Board (IASB) finalized the amendments for Phase 2 which addressed the issues of the benchmark replacement in August 2020.[21] Additionally, in October, the ISDA launched the IBOR Fallbacks Supplement to amend the 2006 ISDA Definitions and IBOR Fallbacks Protocol for legacy contracts referencing LIBOR that incorporate the amended 2006 ISDA Definitions.[22] In relation to the ISDA's statement, the Financial Stability Board (FSB) issued a statement that it would strongly encourage widespread and early adherence to the Protocol.[23]

(2) Spread adjustment methodology applicable to TIBOR in loans as the replacement benchmark

In the second public consultation paper, regarding the case where TIBOR is adopted as the replacement benchmark in loans,[24] it was pointed out that, if the "historical median approach over a five-year lookback period" was selected as a spread adjustment methodology, the difference between the spread calculated by the historical median approach and the spread calculated based on derivative markets[25] would be a critical issue.

In the continuous discussions in the Sub-Group on Loans, the issues associated with the economic value transfer were raised once again in the case of selecting the "historical median approach over a five-year lookback period" as a spread adjustment methodology.[26] The sub-group subsequently decided not to ask the Committee to issue a recommendation on the spread adjustment methodology when choosing TIBOR as the replacement benchmark.

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[20] https://www.nysenate.gov/newsroom/press-releases/kevin-thomas/senator-kevin-thomas-introduces-bill-protect-businesses-and

[21] https://www.ifrs.org/news-and-events/2020/08/iasb-completes-response-to-ibor-reform/

[22] https://www.isda.org/2020/10/23/isda-launches-ibor-fallbacks-supplement-and-protocol/
In response to statements including that issued by the ISDA, the Committee updated "Roadmap to Prepare for the Discontinuation of LIBOR" (Figure 2-8 of the second public consultation paper) as shown in Appendix 1.

[23] https://www.fsb.org/wp-content/uploads/R091020-2.pdf

[24] It is necessary to take into account that discussions on fallbacks to replacement rate based on RFRs are currently being held globally, and that there would be issues specific to fallbacks to interbank offered rates (IBORs) when adopting them as replacement benchmarks.

[25] For example, the LIBOR/TIBOR basis swap market is assumed.

[26] The sub-group also deliberated on the use of the forward approach as a spread adjustment methodology. At that time, it deemed the adoption of the approach as difficult due mainly to the lack of consistency with global discussions, the complexity of the calculation associated with the approach, and uncertainty over future developments. The Committee shall not preclude contracting parties from selecting the forward approach based on an agreement between contracting parties. In addition, a member proposed using the forward approach with reference to the discussions on the transition in advance held in the RFRWG.

However, taking into account both demand for TIBOR as the replacement benchmark and ensuring a wider range of benchmark options for entities that attach particular importance to compatibility with the current administration and systems and to consideration for developing administrative systems, the Committee decided to publish the results of the sub-group's deliberations as follows.

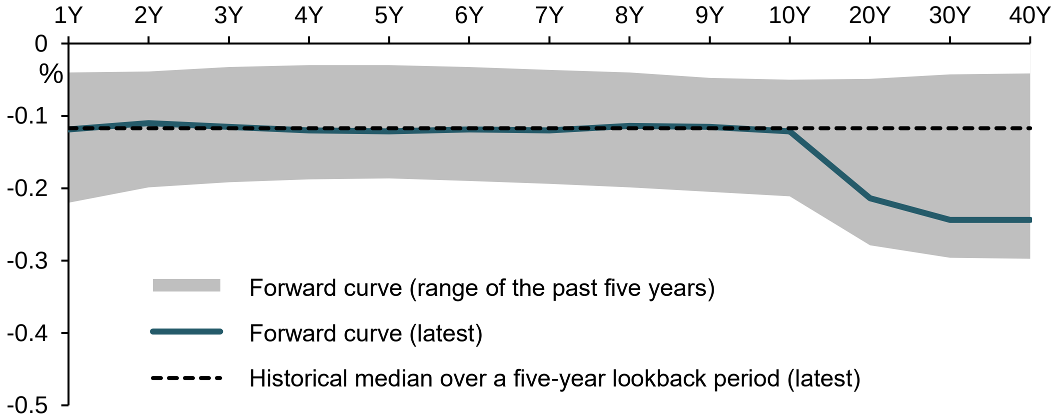
(i) Issues associated with the economic value transfer

The sub-group concluded that the use of the "historical median approach over a five-year lookback period" might not necessarily minimize the variation in the economic value of rates.

a. Difference between the spread calculated by the "historical median approach over a five-year lookback period" and the spread calculated based on the forward curves

Based on the latest market developments, a difference between the spread calculated by the "historical median approach over a five-year lookback period" and the spread calculated based on the forward curves[27] might arise, about plus or minus 10 basis points at the greatest for shorter tenors. Such a difference might widen as the maturities become longer (Figure 3-1).

Figure 3-1: Difference between the spread calculated by the "historical median approach over a five-year lookback period" and the spread calculated based on the forward curves



Note: The latest data are as at the end of June 2020.

- Forward curves are based on the mid-price in the basis swap market.
- "Forward curves (range of the past five years)" shows the range of the maximum and minimum values for the past five years in each maturity.
- Once fixed, the historical median over a five-year lookback period will not be calculated again. "Historical median over a five-year lookback period (latest)" shows the latest value for the purposes of comparison with the forward curves.

Source: Bloomberg.

[27] See footnote 25.

b. Cost of transactions to hedge risks

In a case where the borrower has a need for derivative transactions either currently or in the future for the purpose of hedging interest rate risk, both the lender and the borrower should understand and confirm the following points: (i) even if the "historical median approach over a five-year lookback period" for TIBOR as the replacement benchmark is adopted for loans, a different fallback methodology that utilizes spreads based on the pricing reflecting current market conditions may be applied for derivative transactions and (ii) in the case of adopting the "historical median approach over a five-year lookback period" for the pricing of both loans and derivative transactions, emphasizing the economic hedge relationship, either the lender or the borrower would have to bear the additional cost to adopt such an approach.

(ii) Specific examples of the points that both the lender and the borrower should understand and confirm

In the case of using the "historical median approach over a five-year lookback period" as the spread adjustment methodology for TIBOR as the replacement benchmark, there may be conduct risk if the lender does not at least explain the points described in 3.(2)(i) to the borrower sufficiently. With regard to this, the sub-group deliberated and published specific examples of the points that both the lender and the borrower should understand and confirm (see Appendix 2).

(iii) Calculation methodology

The sub-group concluded that it was necessary to deliberate and publish the methodology with a view to avoiding the situation in which the calculated spread adjustments would vary among financial institutions and to establishing the minimum standards for using TIBOR as the replacement benchmark, although it would not be realistic to have a separate publishing entity for the spread adjustments for TIBOR based on the "historical median approach over a five-year lookback period."[28,29]

[28] The Committee determined not to select a separate publishing entity mainly because there are little advantages in becoming a publishing entity and the spread adjustment methodologies applicable to TIBOR would not be recommended by the Committee.

[29] For an example of methodologies deliberated in the sub-group, see the below link.
https://www.boj.or.jp/en/paym/market/jpy_cmte/cmt201130a.pdf

Box: Preparation for the publication of production rates for Term Reference Rates

QUICK Corp., the calculating and publishing entity of prototype rates for Term Reference Rates, started the daily publication of the rates on October 9, 2020.[30] It has been making progress in accordance with the schedule for publication of production rates for Term Reference Rates[31] and has already started to exchange views with the supervisory authority regarding practical issues. Since the fifteenth meeting of the Committee held on July 16, the following progress has been made.

(1) Preparation for the development of governance structures

QUICK Corp. has begun the process of establishing internal governance structures, including the formulation of operational rules, and structures to govern brokers. It has also been proceeding with necessary preparations by, for example, exchanging views with the supervisory authority, so that the operational rules with regard to publishing Term Reference Rates would be approved, which are one of the requirements for Term Reference Rates to be designated as a Special Financial Benchmark and for QUICK Corp. to be designated as a Specified Financial Benchmark Administrator. In addition to the preparations above, QUICK Corp. will make further efforts to develop robust governance structures in cooperation with relevant parties, for example, by establishing an external audit committee and exchanging views with brokers to develop a code of conduct for submitters.

(2) Improvement in the calculation methodology and its transparency

QUICK Corp. has examined the rules for reducing the use of indicative quotes quantitatively. It subsequently decided to change the calculation methodology by around the end of November 2020. Indicative quotes will not be used after the change in the calculation methodology if the data on the first to fifth priorities are observed.[32] In a case where the data on the first to fifth priorities are not observed, QUICK Corp. will continue to use indicative quotes at least in Phase 1 to calculate and publish the prototype rates. Additional deliberations concerning indicative quotes will be conducted in Phase 2 to calculate and publish the production rates, while taking account of the liquidity in the JPY OIS market.

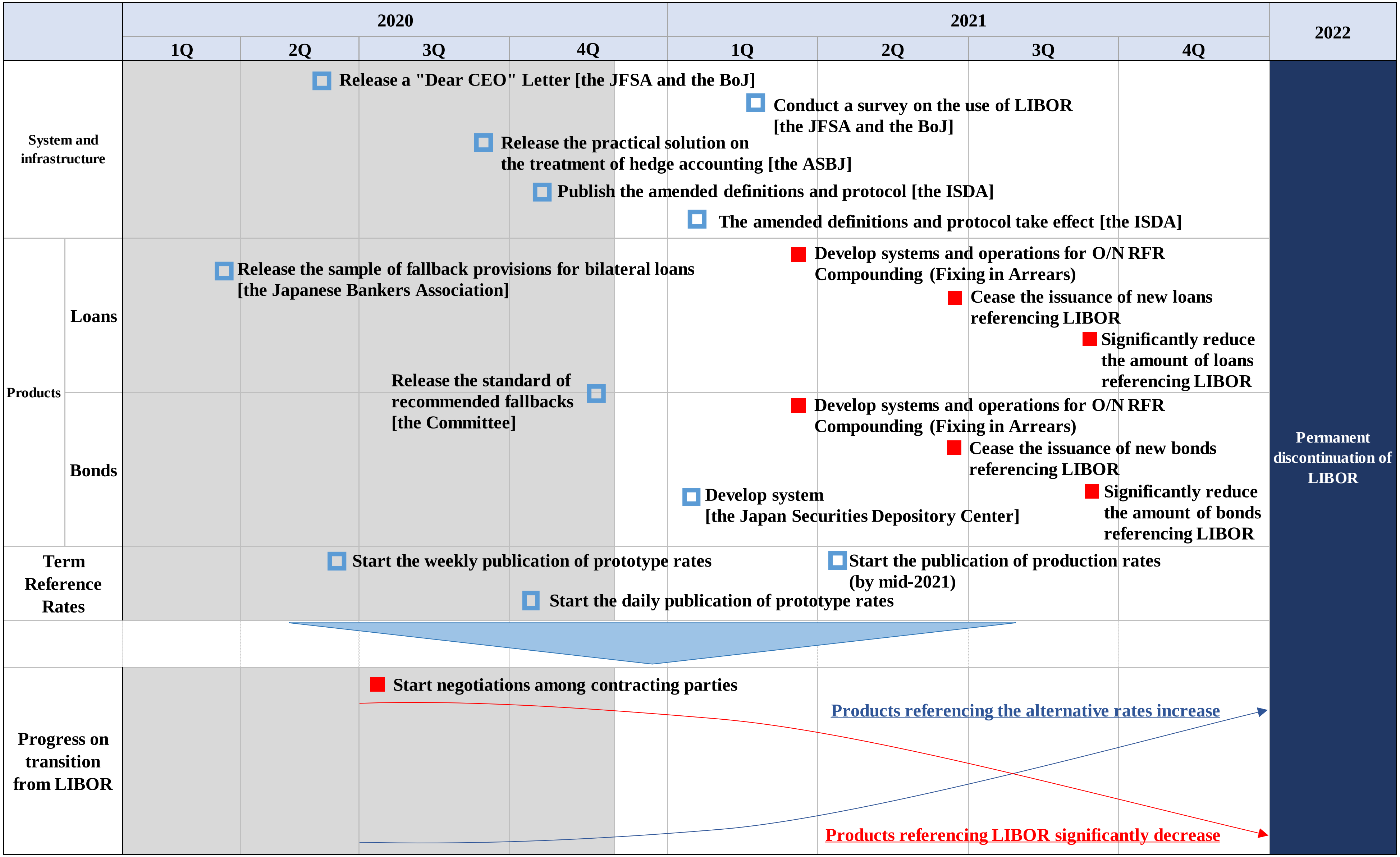
30 https://moneyworld.jp/page/qtrf001.html

31 See Appendix 2-b in the second public consultation paper.

32 For details, See Supplement to Appendix 2-c in the first public consultation paper.

While QUICK Corp. seeks to publish the production rates by around the middle of 2021 at the latest, the Task Force on Term Reference Rates will continue to provide practical support on the initiatives of QUICK Corp. so that the publication date for the production rates can be moved up as much as possible.

Appendix 1: Roadmap to prepare for the discontinuation of LIBOR (as at the end of November 2020)



Note: ■ indicates measures to be taken by each firm.

Appendix 2: Points to note[33]

➢ The Committee shall not preclude contracting parties from selecting waterfall structures using TIBOR as long as the parties concerned agree, although TIBOR is not included in the waterfall structure for loans recommended by the Committee. In the case of using the "historical median approach over a 5-year lookback period" as the spread adjustment methodology for TIBOR as the replacement benchmark, there may be conduct risk if the lender does not at least explain the following issues to the borrower sufficiently. Specific examples of the points concerned that both the lender and the borrower should understand and confirm are provided below.

- In the case of calculating the spread adjustment applicable to TIBOR as the replacement benchmark, there could be a difference between the "historical median over a 5-year lookback period" and forward curves that incorporate market conditions. The difference between the spread calculated by the "historical median approach over a 5-year lookback period" and the spread calculated based on the forward curves may especially widen (becoming more disadvantageous for the borrower) as the maturities become longer. Both the lender and the borrower need to understand and confirm this risk when they introduce a fallback provision for contracts for loans, especially in the case of contracts with longer maturities.
- In a case where the borrower has a need for derivative transactions either currently or in the future for the purpose of hedging interest rate risk, both the lender and the borrower should understand and confirm the following points when they enter into contracts using the spread adjustment applicable to TIBOR as the replacement benchmark:

  (1) Even if the "historical median approach over a 5-year lookback period" for TIBOR as the replacement benchmark is adopted for loans, a different fallback methodology that utilizes spreads based on the pricing reflecting current market conditions (e.g., TIBOR + spread adjustment reflecting current market conditions) may be applied for derivative transactions,

[33] The Committee will not preclude contracting parties from adding other points to understand and confirm other than those indicated in this example.

(2) On the other hand, in the case of adopting the "historical median approach over a 5-year lookback period" for the pricing of both loans and derivative transactions, either the lender or the borrower would have to bear the additional cost to adopt such approach.

— In addition, there are differences in the accounting treatment between loans and derivative transactions. In the case of considering the use of TIBOR as the replacement benchmark, the lender needs to inform the borrower of those accounting differences appropriately within the scope of their businesses by, for example, encouraging the borrower to confirm the accounting standards beforehand, together with the points to note described above. Subsequently, the lender and the borrower need to discuss and negotiate on the issue of economic value transfer (such as the spread between JPY LIBOR and the replacement benchmark, as well as that between JPY LIBOR and the replacement rate).

- In the case of choosing TIBOR as the replacement benchmark, it should be noted that publishing entities of the spread adjustments have not been determined by the Committee. Both the lender and the borrower should understand and confirm the fact that the spread adjustments would be determined by the contracting parties' agreements, utilizing, for example, the methodology deliberated by the Sub-Group on Loans.