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

November 2019

Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks

Contents

1. Overview

(1) Introduction

The Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks (referred to simply as "Committee" hereinafter) published the "Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks"[1] to outline the outcome of past Committee discussions in order to solicit comments regarding the future structure of Japanese yen (JPY) interest rate benchmarks from a wide range of relevant parties from July 2 to September 30, 2019. The purpose of this report is to present the results of the public consultation, based on the responses received.

(2) Background ― Developments surrounding interest rate benchmark reform[2]

The Financial Stability Board (FSB) published a report titled "Reforming Major Interest Rate Benchmarks"[3] in July 2014. In this report, the FSB recommended the following:

(i) improving the reliability and robustness of existing interbank offered rates (IBORs) such as LIBOR, EURIBOR, and TIBOR, and developing nearly risk-free reference rates (RFRs) without bank credit risk; and

(ii) promoting the usage of existing IBORs and RFRs, in ways suited to the characteristics of financial instruments and financial transactions (multiple-rate approach; Figure 1-1).

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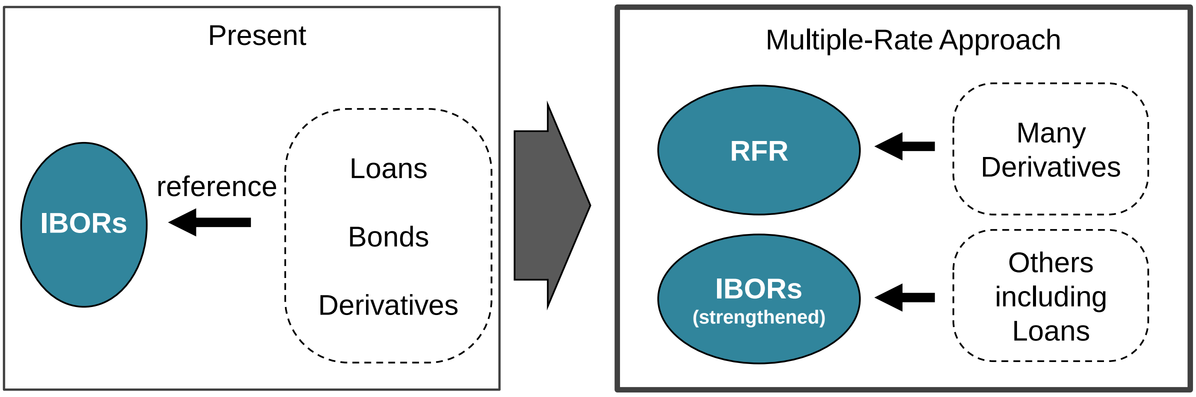
[1] For details, see the below links.
(Consultation paper): http://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt190702b.pdf
(Appendix): http://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt190702c.pdf
(Issues subject to public comments): http://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt190702d.pdf

[2] For details, see 1.(1)(p. 2) of the consultation paper.

[3] http://www.fsb.org/wp-content/uploads/r_140722.pdf

Figure 1-1: Multiple-rate approach



In line with the recommendation in (i) above, in Japan, the JBA TIBOR Administration (JBATA) implemented TIBOR reform[4] in July 2017, and the "Study Group on Risk-Free Reference Rates" identified the uncollateralized overnight call rate as the JPY RFR in December 2016. As a next step, in order to comply with the recommendation in (ii) above, it is important that market participants and interest rate benchmark users make preparations to appropriately choose and use interest rate benchmarks in ways suited to the characteristics of financial instruments and financial transactions.

Meanwhile, concerns about the sustainability of LIBOR beyond the end of 2021 have rapidly heightened.[5] Since the volume of transactions referencing LIBOR is considerably large in global markets, and various rules and business practices are interdependent and underpinned by LIBOR, the permanent discontinuation of LIBOR will have a wide-ranging impact.[6] Against this backdrop, for major currencies other than JPY, the identification of RFRs[7] and preparations for the discontinuation of LIBOR have been discussed. While bearing in mind these developments

[4] In July 2017, the JBATA implemented JBA TIBOR reform. The basic concepts of JBA TIBOR reform are to expand the scope of referenced actual transactions to make JBA TIBOR more anchored in actual transactions and integrate and clarify the calculation and determination processes of reference banks' submission rates based on which JBA TIBOR is calculated to enhance its transparency and integrity. In the processes of the calculation and determination of reference banks' submission rates, when actual transaction data or quotes data cannot be obtained from the underlying market (e.g., unsecured call market) or from the markets equivalent to the underlying market, actual transaction data of the wholesale funding markets (e.g., NCD transactions and large term deposits with corporates), which are the relevant markets, will be used. For details, see the below link.
http://www.jbatibor.or.jp/english/%E5%88%A9%E7%94%A8%E8%80%85%E5%90%91%E3%81%91%E8%AA%AC%E6%98%8E%E8%B3%87%E6%96%99%E6%A1%88_EN_100217.pdf

[5] In July 2017, Andrew Baily, Chief Executive of the Financial Conduct Authority (FCA) of the United Kingdom, announced in a speech that panel banks would no longer be obliged to submit to LIBOR after 2021. As a result, the likelihood that LIBOR will cease at end-2021 has rapidly increased. Reasons given by Mr. Bailey in his speech in July 2017 on why it would be difficult to continue with the publication of LIBOR despite the reform efforts were that (1) "the underlying market that LIBOR seeks to measure — the market for unsecured wholesale term lending to banks — is no longer sufficiently active," and (2) "panel banks feel understandable discomfort about providing submissions based on judgments with so little actual borrowing activity against which to validate those judgments."

[6] For details, see Appendix 1-a of the consultation paper.

[7] For details, see Appendix 1-b of the consultation paper.

overseas, it is also necessary in Japan to prepare for LIBOR discontinuation.[8]

(3) Summary of comments received

In the consultation paper, the Committee expressed its intention to solicit comments on various issues mentioned in the paper, and based on the results of this solicitation, publish the deliverables.

Specifically, based on the outcome of discussions in the Committee, the Committee widely solicited comments on 18 issues[9]—in particular, actions to prepare for the permanent discontinuation of JPY LIBOR, which is an urgent issue at the moment. As part of this, the Committee solicited comments on transition and fallbacks, focusing on the options for alternative benchmarks (Figure 1-2).

As a result of the public consultation, a total of 40 entities from a wide range of industries such as financial institutions, institutional investors, and non-financial corporates provided their comments (Figure 1-3). With regard to all issues subject to comments, respondents supported most of the deliberations and recommendations by the Committee and preferred to choose and use alternative benchmarks according to the nature of financial instruments and transactions.

The remainder of this report describes the comments received, focusing on actions to prepare for the permanent discontinuation of JPY LIBOR, and concludes by providing an overview and the next steps forward.

[8] "Interest rate benchmark reform – overnight risk-free rates and term rates," published by the FSB on July 12, 2018, states, "because derivatives represent a particularly large exposure to certain IBORs, . . . transition of most derivatives to the more robust overnight RFRs is important to ensuring financial stability."

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

Figure 1-2: Issues subject to comments in the public consultation[10]

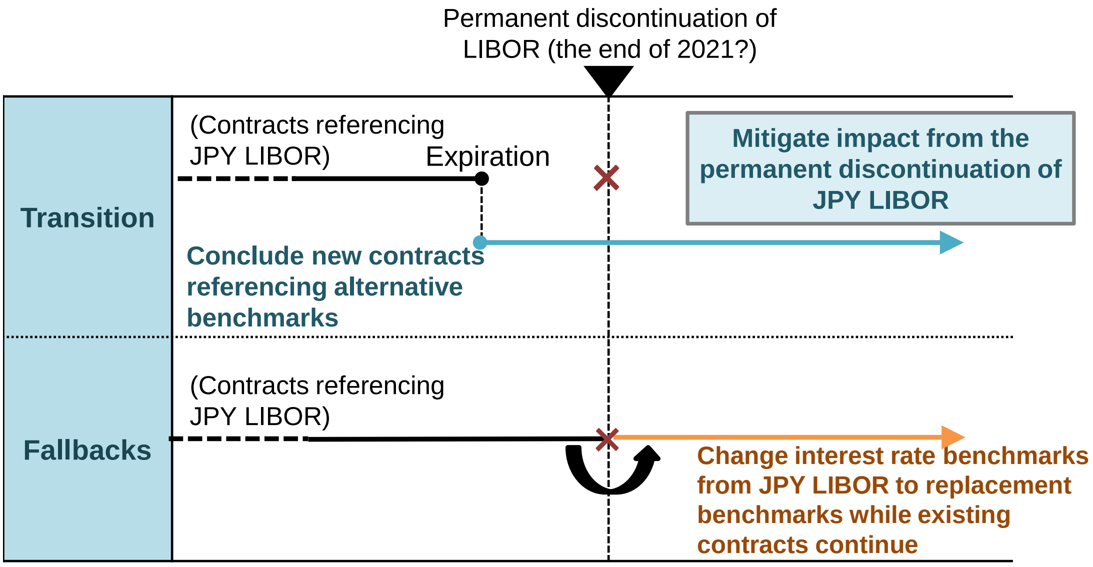


Figure 1-3: Overview of respondents[11]

Total	Banks	Securities Companies	Institutional Investors	Non-financial Corporates	Others
40	9	12	3	10	6

[10] For details, see 2.(1)(i)(p. 5) of the consultation paper.

[11] Industry groups are classified according to the type of industry that the constituent companies are in. Those which reach across multiple industries are classified as "Others." Please also note that comments from industry groups are regarded as one opinion regardless of the number of members in the group. (The same applies to the remainder of the report).

2. Results of the public consultation

(1) Transition

(i) Loans

(a) Options for alternative benchmarks[12,13]

In the consultation paper, the Committee, taking into account its past discussions, summarized its views on the options for alternative benchmarks for loans as follows.

> Given that Option 3 and Option 4 could become global standards, provide cash flow certainty because they are fixed in advance, and are thought to be highly compatible with the current administration and systems, accounting practices, and market conventions, it was the majority view that it would be desirable to use these options in the future.
>
> There was also a certain level of support for permanently using Option 5 because it provides cash flow certainty as it is fixed in advance, and it has basic characteristics similar to those of JPY LIBOR, such as that it includes credit risks of banks, while also taking into account that the existing administration and system may be used.[14]

As a result of this public consultation, Option 3 and Option 4 were most preferred, which agrees with the above views of the Committee, followed by Option 5 (Figure 2-1).

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12 For alternative benchmarks and replacement benchmarks, see Appendix 1. For details, see 2.(2)(i)(p. 7) of the consultation paper.

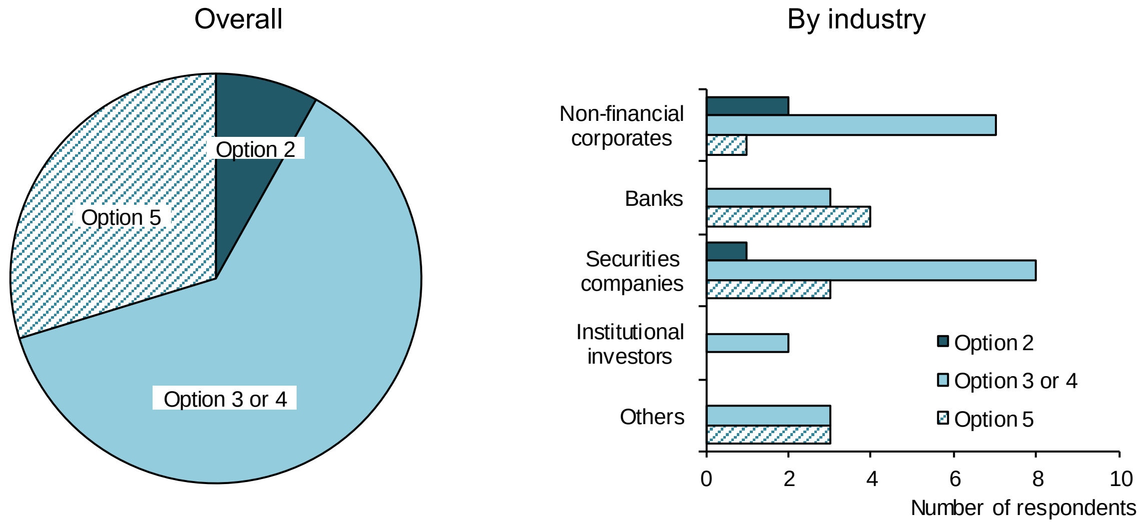
13 For details, see 2.(2)(ii)(p. 9) and 3.(1)(i)(p. 31) of the consultation paper.

14 "Reforming Major Interest Rate Benchmarks" published by the FSB in July 2014 suggested that existence of various interest rate benchmarks and corresponding market conventions would expand the room for market participants to flexibly select interest rate benchmarks most appropriate for their economic needs, and as an example of such selection, it cited the use of benchmarks including credit risk for bank lending. Furthermore, in Japan, it has been pointed out that it is important to have a two-track financial system with which indirect financing and direct financing work in balance ("Report by the Roundtable Committee on Fundamental Issues of the Financial System Council" [December 2009]). Recently, benchmarks which include credit risks of banks such as TIBOR and JPY LIBOR are used for both loans and bonds, but if such a situation changes, for example, if loans refer to TIBOR and bonds refer to RFRs, it is considered to be possible to avoid circumstances in which funding rates of bonds and other instruments rise in tandem with the rise in benchmarks such as TIBOR even when the banking sector faces a shock. On the other hand, in the case when the market of a sector other than the banking sector faces a shock due to some reason and direct funding such as for bonds and others becomes difficult, it is expected that indirect funding would play a role to complement the function of the overall financial market, and it is considered to be possible that indirect funding can avoid being easily affected by the shock by using a system of interest rates different from bonds and other instruments. Please also refer to BOX 3, footnote 68, and footnote 69 of the consultation paper.

A look at individual industries reveals that many non-financial corporates, securities companies, and institutional investors selected Option 3 or Option 4, whereas for banks, Option 5 was the most preferred.

With regard to the use of Option 5, banks which expressed positive opinions suggested that it is a widely used interest rate in Japan and is highly compatible with current business operations and systems. On the other hand, many non-financial corporates expressed negative opinions since JPY TIBOR is higher than JPY LIBOR, and hedging by derivatives is difficult.

Figure 2-1: Options for alternative benchmarks for loans



Note: Multiple answers allowed.

(b) Temporary use of alternative benchmarks until the development of Term Reference Rates

As described in (a) above, a majority of respondents supported Option 3 or Option 4; however, these options are not available at the moment and cannot be immediately used. Therefore, respondents were also asked about the temporary use of alternative benchmarks until Term Reference Rates[15] are developed, by around the middle of 2021.

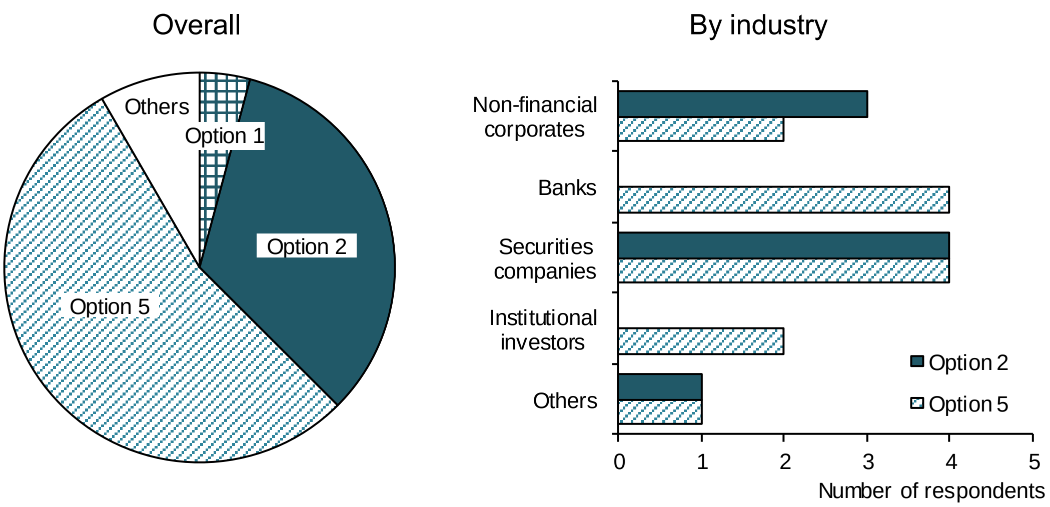
In this respect, responses from non-financial corporates and securities companies were divided between Option 2 and Option 5, whereas all banks and institutional investors selected Option 5 (Figure 2-2).

[15] Option 3 and Option 4. Option 3 is planned to be developed by around the middle of 2021, and resumption of trade in Over-Night Call Rate Futures listed on the Tokyo Financial Exchange in 2020, which is the precondition for the development of Option 4, is under discussion.

With regard to Option 2, it was pointed out that it poses many challenges[16] for the business operations and systems of companies. As for Option 5, non-financial corporates which supported its temporary use indicated that appropriate spread adjustment is necessary for adopting Option 5.

Meanwhile, several respondents requested the early development of Term Reference Rates in order to avoid temporary use of other options.

Figure 2-2: Temporary options for alternative benchmarks for loans



Note: Multiple answers allowed.

(ii) Bonds

(a) Options for alternative benchmarks[17]

In the consultation paper, the Committee, taking into account its past discussions, summarized its views on the options for alternative benchmarks for bonds as follows.

> Likewise with loans, given that Option 3 and Option 4 provide cash flow certainty because they are fixed in advance, do not include credit risks of banks, and are thought to be highly compatible with the current administration and systems, accounting practices, and market conventions, there was a majority view that it would be desirable to use these options in the future.
>
> Although it is expected to require many users to develop the administration and systems for Option 2, a considerable number of them expressed a view in favor of permanently using Option

[16] It was stated by some that system update costs for Option 2 would reach several billion yen.

[17] For details, see 2.(2)(iii)(p. 10) and 3.(1)(ii)(p. 32) of the consultation paper.

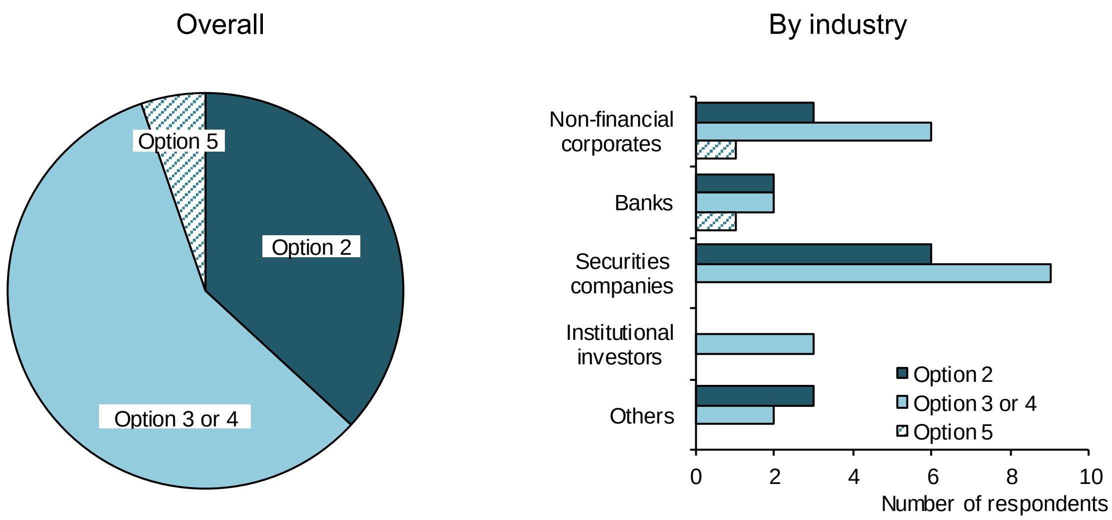
2, due to the track record of issuance overseas and advantages such as its consistency with derivatives.

As a result of this public consultation, a majority of respondents preferred Option 3 or Option 4, which agrees with the above views of the Committee. Furthermore, a considerable number of respondents supported Option 2 (Figure 2-3).

A look at individual industries reveals that many non-financial corporates and securities companies selected Option 3 or Option 4, while a considerable number of them also showed a preference for Option 2. All institutional investors selected Option 3 or Option 4, and none of them selected Option 2 or Option 5.

Most respondents who supported Option 2 highlighted the advantage of a hedge relationship between bonds to be hedged and hedging derivatives as well as the consistency with overseas bond markets. [18,19,20]

Figure 2-3: Options for alternative benchmarks for bonds



Note: Multiple answers allowed.

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[18] Specifically, with regard to derivatives, the use of Option 2 has been generally envisaged because it has an advantage of being consistent with the replacement benchmark for JPY LIBOR in derivatives governed by the ISDA Master Agreement (referred to simply as "ISDA derivatives" hereinafter). However, in the case that cash products to be hedged reference Option 3, Option 4, or Option 5, the corresponding derivatives are expected to be traded.

[19] In the United Kingdom and the United States, the track record of bonds issuance using Option 2 has begun to expand.

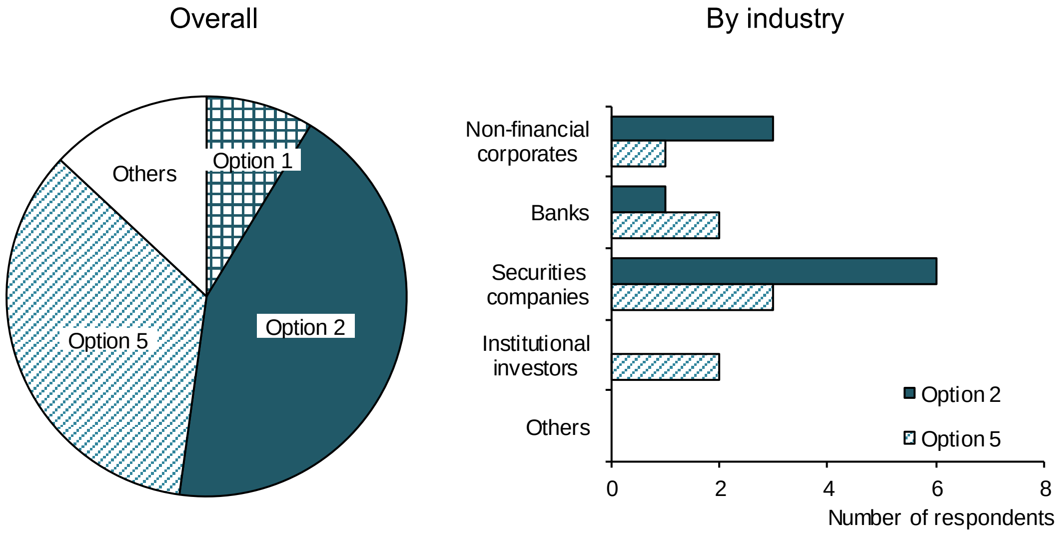
[20] It should be noted that, depending on trends in derivatives markets and overseas bond markets, as well as whether or not hedge accounting continues to be applied, other options could be preferred.

(b) Temporary use of alternative benchmarks until the development of Term Reference Rates

As described in (a) above, a majority of respondents preferred Option 3 or Option 4. However, as with loans, respondents were asked about the temporary use of alternative benchmarks until Term Reference Rates are developed, by around the middle of 2021. In this respect, many respondents, mainly non-financial corporates and securities companies, preferred Option 2 due to relevance to ISDA derivatives (Figure 2-4).

On the other hand, all institutional investors selected Option 5 highlighting its compatibility with current business operations and systems, and none of them selected Option 2.

Figure 2-4: Temporary options for alternative benchmarks for bonds



Note: Multiple answers allowed.

(2) Fallbacks[21]

(i) Loans[22]

(a) Replacement rate[23]

Option 3 and Option 4 were most supported as replacement benchmarks, followed by Option 5 (Figure 2-5).

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[21] For details, see 2.(3)(p. 17) of the consultation paper.

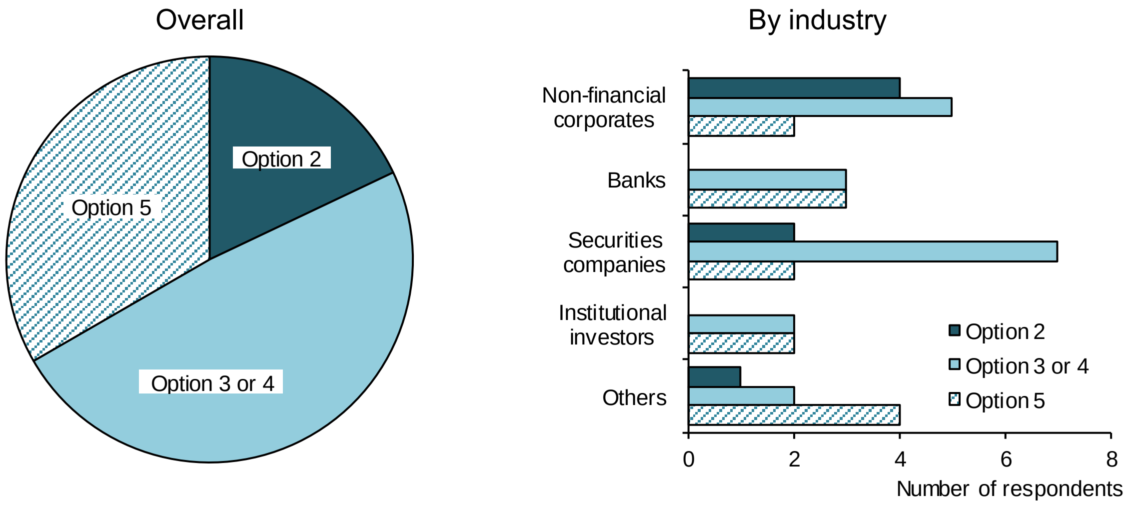
[22] For details, see 2.(3)(ii)(p. 22) of the consultation paper.

[23] With regard to fallbacks, "replacement rate" hereinafter refers to the replacement benchmark plus the spread adjustment that corresponds to it. For more specific information, see Figure 2-6.

A look at individual industries reveals that non-financial corporates most preferred Option 3 or Option 4, followed by Option 2. A majority of securities companies preferred Option 3 or Option 4. Responses from banks were divided between Option 3 or Option 4, and Option 5.

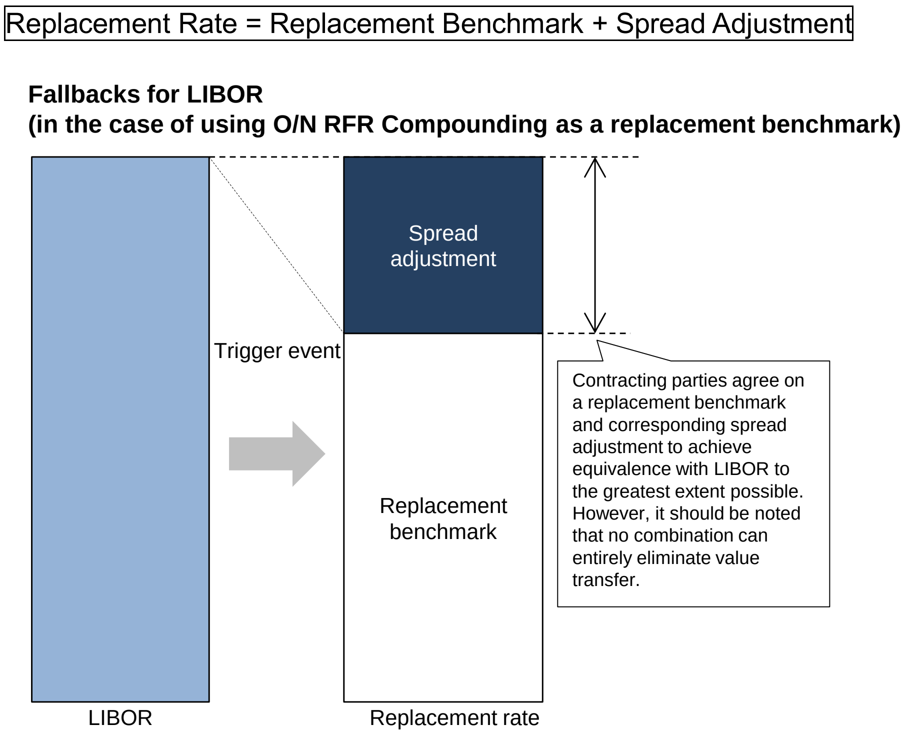
With regard to spread adjustment (Figure 2-6), while the number of responses totaled only 12, few respondents expressed negative opinions against the Historical Mean/Median Approach.

Figure 2-5: Replacement benchmarks for loans



Note: Multiple answers allowed.

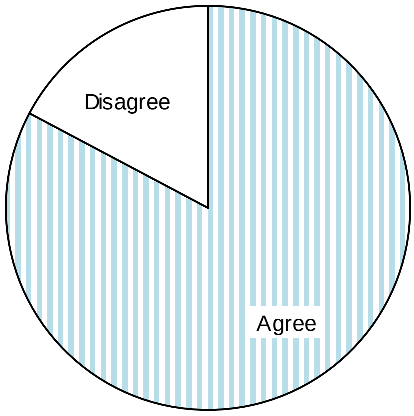
Figure 2-6: Spread adjustment



(b) Trigger events

For consistency with ISDA derivatives, a majority of respondents agreed that, at a minimum, permanent cessation triggers should be introduced, while other triggers should be introduced as necessary[24] (Figure 2-7).

Figure 2-7: Trigger events for loans



(c) Procedures for introducing fallback provisions

A majority of respondents preferred the Hardwired Approach, in which a replacement rate is agreed when introducing a fallback provision, in order to reduce their negotiation and decision-making burden in dealing with fallback provisions (Figure 2-8). On the other hand, some respondents preferred the Amendment Approach, in which a replacement rate is agreed when trigger events occur, indicating that they needed to consider market trends at the time when selecting the replacement rate.

A look at individual industries reveals that many non-financial corporates, banks, and institutional investors preferred the Hardwired Approach, whereas many securities companies preferred the Amendment Approach.

With regard to the Amendment Approach, slightly over half of the respondents opposed the "negative consent" procedure, in which provisions such that "the replacement rate proposed by lender shall be deemed consented to unless the borrower sends a notice to the lender rejecting it" are stipulated when amending the contract (Figure 2-9). Meanwhile, many proponents of the procedure suggested that the lender should provide sufficient explanation to the borrower in advance.

[24] For ISDA derivatives, ISDA has continued to deliberate on pre-cessation triggers based on the premise that permanent cessation triggers will be introduced. Please also refer to footnote 27.

Figure 2-8: Procedures for introducing fallbacks for loans

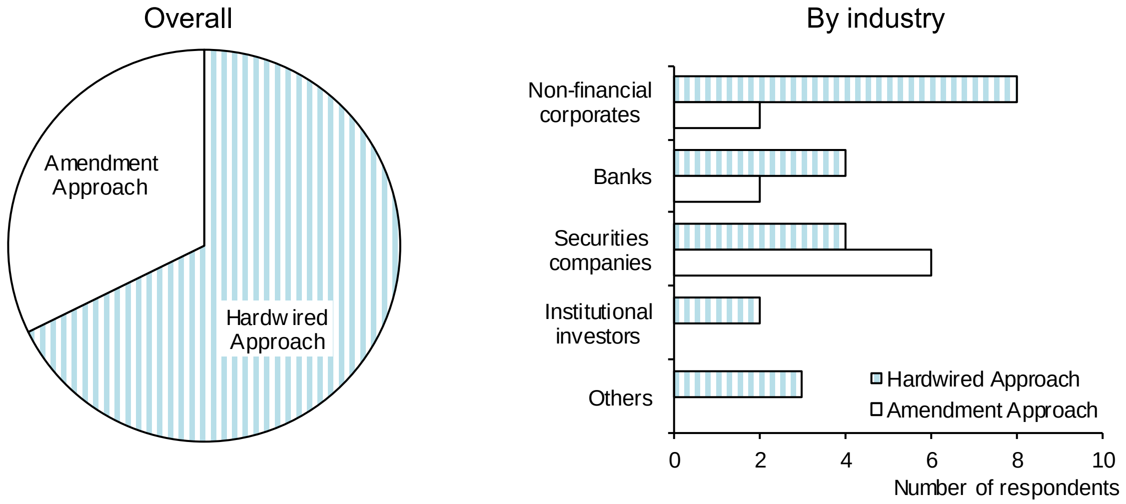
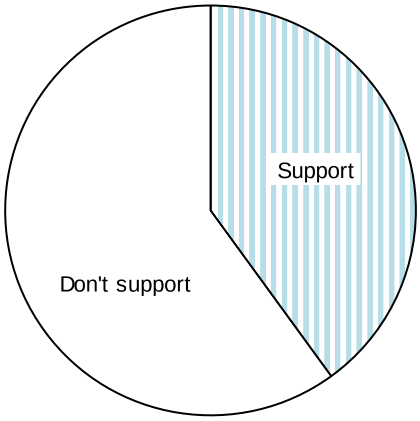


Figure 2-9: Negative consent procedure for loans



(ii) Bonds[25]

(a) Replacement rate and trigger events

A large majority of respondents agreed that the replacement rate[26] and triggers should be aligned with the fallbacks for ISDA derivatives[27] in order to maintain a hedge accounting relationship[28] (Figure 2-10).

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[25] For details, see 2.(3)(iii)(p. 26) of the consultation paper.

[26] For the definition of a replacement rate, see footnote 23.

[27] Based on ISDA's consultation on the replacement rate for when fallbacks are triggered in derivatives contracts referencing benchmarks such as JPY LIBOR and which are governed by the ISDA master agreement, the following are envisaged: (1) that the compounded setting in arrears rate (Option 2) would be adopted as the replacement benchmark and the Historical Mean/Median Approach would be adopted in spread adjustment, and (2) that permanent cessation triggers would be introduced (ISDA has continued to deliberate on pre-cessation triggers). Please also refer to 3.(1)(iii)(p. 33) of the consultation paper.

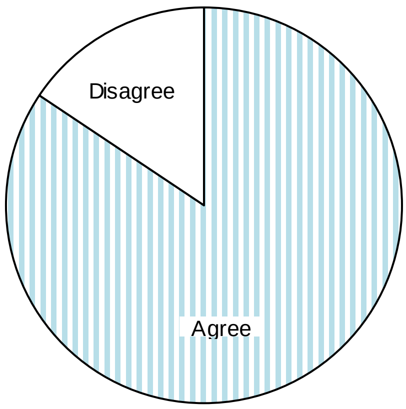
[28] Please refer to 2.(4)(p. 28) of the consultation paper. After the consultation paper was published, the International Accounting Standards Board finalized the revised standards for some issues in September 2019. In Japan, the Accounting Standards Board of Japan has started to deliberate how to address accounting issues arising from interest rate benchmark reform.

Even among the proponents who highlighted the advantage of maintaining a hedge accounting relationship, some preferred to adopt a waterfall structure which places first priority on using Option 3 as the replacement rate.[29]

Opponents pointed out that Option 2, which is the replacement benchmark for ISDA derivatives, imposes a large practical burden by requiring the development of business operations and systems compatible with fixing interest rates in arrears.

Figure 2-10: Replacement rate and trigger events for bonds

Agree or disagree to the alignment with the fallbacks for ISDA derivatives



(b) Procedures for introducing fallback provisions

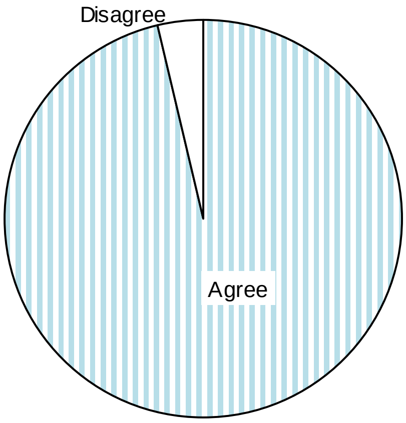
Almost all respondents agreed with the Hardwired Approach for introducing a fallback provision (Figure 2-11).

With regard to contract amendment, many respondents expressed concerns that the administrative burden for holding bondholders' meetings would be substantial. Most of them indicated that they have yet to start deliberating on other measures to amend contracts, or that it would be difficult to do so. Meanwhile, for privately placed bonds, it was noted that obtaining consent directly from all bondholders was being considered.

[29] With regard to this, please also refer to footnote 20.

Figure 2-11: Procedures for introducing fallbacks for bonds

Agree or disagree with the Hardwired Approach



(3) Specific requirements for alternative benchmarks

(i) Option 1[30]

Many respondents suggested excluding Option 1 from the options for alternative benchmarks, raising concerns that it could deviate from market rates, as the Reference Period and Calculation Period are not identical.

With regard to specific requirements,[31] for consistency with the current convention for JPY LIBOR, a certain number of respondents suggested that the first day of the Calculation Period should be brought forward from the last day of the Reference Period by two business days so that the last day of the Calculation Period and the Payment Date match.

(ii) Option 2[32]

A majority of respondents agreed with the proposed requirements in the consultation paper which assume publication of two types of interest rates, i.e., those with two business days from the Calculation Date to the Payment Date and those with five business days.

However, respondents were divided on the methodologies[33] for calculating Option 2 (i.e., Lock out, Delay, Reset days prior), pointing to the advantages and disadvantages of each calculation methodology.

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30 For details, see 2.(2)(iv)a.(p. 11) of the consultation paper.

31 For details, see Appendix 2.

32 For details, see 2.(2)(iv)a.(p. 11) of the consultation paper

33 For details, see Appendix 2.

No overwhelming consensus was reached on the period from the Calculation Date to the Payment Date, as a diverse set of opinions[34] were presented in terms of (1) the number of business days (i.e., two business days, five business days, other) and (2) flexibility and optionality.

(iii) Option 3[35]

Given the need to improve the accuracy of data and develop the administrative framework and operational systems of interest rate benchmark users, almost all respondents agreed with taking a two-phase approach: Phase 1 to calculate and publish the prototype rate and Phase 2 to calculate and publish the production rate. Meanwhile, many respondents desired for the production rate to be published as early as possible, before the middle of 2021. As mentioned in 2.(1)(i)(b) above, some provided feedback that temporary use of other options until the development of Term Reference Rates should be avoided to the extent possible.

On the other hand, a few respondents opposed the phased approach, requesting that the production rate be published immediately without implementing Phase 1.

Among the proponents of the phased approach, a considerable number of respondents emphasized the need for initiatives toward revitalizing trading of JPY OIS, suggesting that the enhancement of liquidity of JPY OIS, as a basis of Option 3, would be key to selecting alternative benchmarks and replacement benchmarks.[36]

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[34] Some respondents emphasized the importance of consistency with the current JPY OIS convention, and others emphasized the importance of alignment with the alternative benchmarks in foreign currencies, considering the impact on cross-currency swaps. Furthermore, in light of the Japan Securities Depository Center (JASDEC)'s current system for interest payments, which is designed so that interest rates are entered seven business days before the Payment Date, some respondents deemed it necessary to set a longer period (i.e., eight to ten business days) from the Calculation Date to the Payment Date. Please also refer to footnote 23 of the consultation paper.

[35] For more details, see 2.(2)(iv)b.(p. 14) of the consultation paper. In order for Option 3 to be widely used internationally as a benchmark, it is necessary to take account of the consistency with the International Organization of Securities Commissions (IOSCO) Principles for Financial Benchmarks. Moreover, in the European Union (EU), it is likely that for financial institutions within the EU to use benchmarks provided by an administrator located in a third country (third country benchmarks), it will be required to fulfill the requirements set out in the EU Benchmarks Regulation. If the said benchmark is deemed to have a material impact on Japan's capital market when its credibility declines, it will be designated as a "Specified Financial Benchmark" under the Financial Instruments and Exchange Act and its administrator as a "Specified Financial Benchmark Administrator." Please also refer to footnotes 30 to 34 of the consultation paper.

[36] Regarding the specific requirements for Option 3, some respondents requested clarification on calculation and data acquisition methodologies.

3. Conclusion and next steps

The responses received were well-aligned with the issues subject to the public consultation and reflected feedback from a wide range of industries, including non-financial corporates. Therefore, the intended purpose of the public consultation to obtain feedback from a wide range of entities, representing broad insight, has been achieved.

The consultation mainly asked market participants for feedback on alternative interest rate benchmarks for JPY LIBOR. Specific evaluations of the five options presented by the Committee according to the nature of financial instruments and transactions were gathered reflecting feedback from a wide range of industries.[37]

Overall evaluation

In general, most respondents supported Option 3 or Option 4, highlighting their compatibility with current business operations and systems, and trading practices.

The development of Term Reference Rates would take a certain amount of time; for the development of Option 3, a consensus was consequently reached on the need to take initiatives toward enhancing its liquidity, aiming to ensure its robustness and reliability, by taking a phased approach. The need for the temporary use of other options until its development was also shared.

Key takeaways for each type of financial instruments and transactions

For loans, as different views were presented by lenders and borrowers, it was confirmed that they would need to reach a mutual agreement on the path for permanent measures, which includes the selection of the temporary options described above, by engaging in sufficient communication with each other.

For bonds, while Option 2 was supported by a relatively large number of respondents including those who envisage using it temporarily, it was confirmed that a sufficient period for preparation is necessary in order to accommodate business operations and systems, as well as trading practices for Option 2, which differ from the current systems and practices.

[37] A mutual agreement by parties would be necessary when engaging in contractual arrangements or other arrangements for the transition from JPY LIBOR or introduction of fallback provisions. When selecting alternative benchmarks from Option 1 to Option 5 and calculating the spread adjustment between JPY LIBOR and the replacement benchmark, the trends and features of each option should be carefully considered by each firm (please also refer to Appendix 3). Please note that this final report shall not preclude parties from engaging in contractual arrangements agreed otherwise.

The Way Forward

As a common issue across each type of financial instruments and transactions, it was pointed out that initiatives led by industry groups and other relevant bodies to establish, for example, transparent guidelines are required to develop market practices and enhance appropriate client services. Some respondents also indicated that appropriate involvement by the relevant authorities is necessary to promote such initiatives.

Going forward, this final report on feedback obtained through the public consultation will be used as reference. In the next phase, the following contractual arrangements[38] will be introduced according to the transition plan indicated in Section 4 of the consultation paper. This will be based on firm-wide initiatives to identify specific financial instruments and transactions referencing LIBOR, and a market-wide action plan toward the development of Term Reference Rates[39] (see Appendix 4).

(i) Approach to new contracts

As soon as the contracting parties decide on their preferred regime, there will presumably be a transition to an alternative benchmark for each new contract. This approach – and not fallbacks – is recommended to the extent possible because there will be no value transfer during the contract period in the case of transition.

(ii) Approach to existing contracts

As soon as the contracting parties decide on their preferred regime, it is deemed to be necessary that the following approach be taken for existing contracts (including those referencing JPY LIBOR to be closed going forward) with a maturity before the end of 2021 and that beyond the end of 2021.

a. Contracts with a maturity before the end of 2021

Transition to alternative benchmarks at the time of maturity.

b. Contracts with a maturity beyond the end of 2021

Contracting parties will choose which transition method to adopt for individual contracts. These parties could cancel the existing contract before the end of 2021 to conclude a new one referencing an alternative benchmark or agree to introduce a fallback provision at an early stage.

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38 For details, see 3.(2)(p.34) of the consultation paper.

39 In overseas discussions, it has been pointed out that transitioning from LIBOR to RFR for the discount rate and price alignment interest (PAI) for interest rate swaps will become a key milestone to facilitate market-wide initiatives. In the case of Japan, however, TONA is already being used by the Japan Securities Clearing Corporation for the discount rate and PAI and initiatives to shift from JPY LIBOR to OIS are ongoing.

In either case, it will require procedures to conclude or amend a contract. Thus, it could be considered to proceed to the extent possible with transition which does not entail value transfer, or negotiate between contracting parties to minimize value transfer to the extent possible when introducing a fallback provision which could entail value transfer.[40]

The Committee will continue to examine the progress of interest rate benchmark reform and to provide support for market-wide initiatives toward the development of Term Reference Rates including those to enhance the liquidity of JPY OIS. In this regard, the Committee, on October 29, 2019, began to solicit entities that are contemplating becoming future administrators of Option 3 and that will for the time being calculate and publish prototype rates in Phase 1.[41] In view of the publication of prototype rates of Option 3, the Task Force on Term Reference Rates[42] and the Committee plan to evaluate the applicant entities (Figure 3).

(Figure 3) Tentative Plan for the Publication of Prototype Rates for Option 3

Nov. 2019 until around Jan. 2020	[The Task Force] ・Receive presentations by applicants ・Evaluate applicants [The Committee] ・Discuss and evaluate each entity after receiving an explanation of the reasoning behind the evaluations from the Task Force ・Prepare for the publication of prototype rates
until around 2020/Q1	・Start the publication of prototype rates

40 For details on value transfer at the time of fallbacks, see 2.(3)(p. 17) of the consultation paper.

41 For details, see 4.(1)(ii)(p. 37) of the consultation paper. Please also refer to the below link.

"Solicitation of the Calculating and Publishing Entities of Prototype Rates for Term Reference Rates (Swap)" (October 29, 2019):
http://www.boj.or.jp/en/announcements/release_2019/rel191029b.pdf

42 The Task Force on Term Reference Rates was established on August 28, 2019 in cooperation with the Committee to provide the calculating and publishing entities of Term Reference Rates with practical support. For details, see the below links.

"Establishment of the 'Task Force on Term Reference Rates'" (July 30, 2019):
http://www.boj.or.jp/en/announcements/release_2019/rel190730b.pdf

"Establishment of the 'Task Force on Term Reference Rates' and Holding of the First Meeting" (August 28, 2019):
http://www.boj.or.jp/en/announcements/release_2019/rel190828a.pdf

Appendix 1: Alternative benchmarks and fallback options

The public consultation sought feedback from market participants on five options to be used as alternative benchmarks upon transition and replacement benchmarks. More specifically, the options are Term Reference Rates based on the uncollateralized overnight call rate (TONA), which is a risk-free rate (RFR), and TIBOR, which is an existing benchmark.

Option / Item	1 O/N RFR Compounding (Fixing in Advance)	2 O/N RFR Compounding (Fixing in Arrears)	3 Term Reference Rates (Swap)	4 Term Reference Rates (Futures)	5 TIBOR
Underlying rate	Uncollateralized overnight call rate (TONA)		JPY OIS	Overnight call rate futures	TIBOR
Reference Period	Image A	Image B	Image C		

Images (e.g., 3 month)

Image A

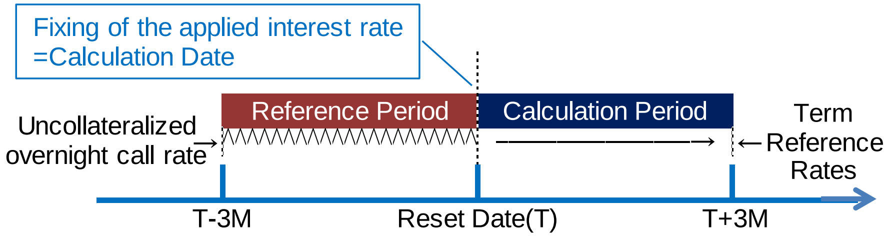


Image B

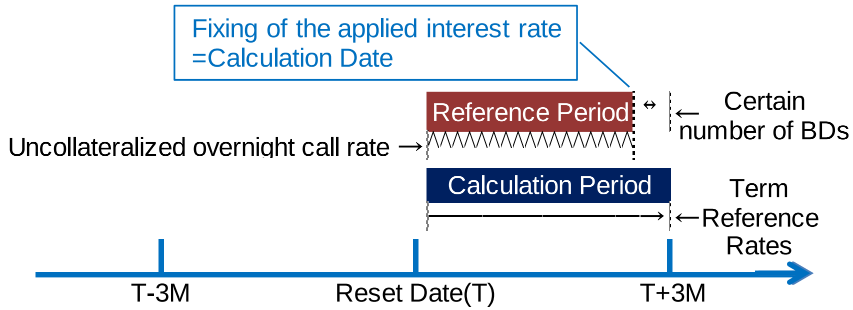
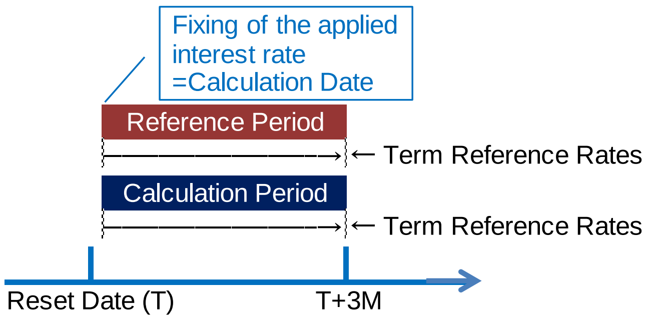


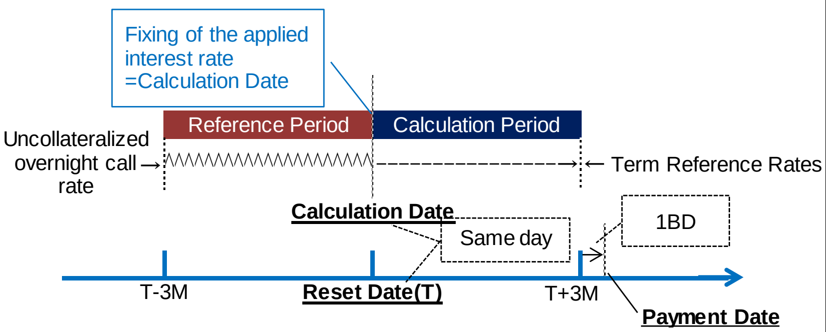
Image C



Appendix 2: Specific requirements for Option 1 and Option 2

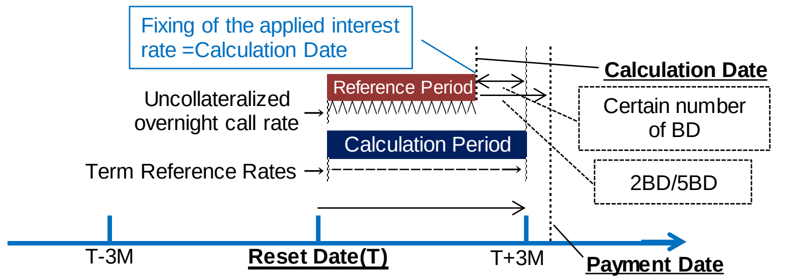
<table>
<tr><th rowspan="2">Item</th><th rowspan="2">Option 1</th><th colspan="3">Option 2</th></tr>
<tr><th>Lock out</th><th>Delay</th><th>Reset days prior</th></tr>
<tr><td>Interval between the Calculation Date and the Reset Date or the Payment Date</td><td>Calculation Date = Reset Date</td><td>2-business-day and 5-business-day interval between the Calculation Date and the Payment Date</td><td colspan="2">(The number of business days is not relevant to the calculation of interest rates)</td></tr>
<tr><td>Calculation methodology for interest rates and daycount fraction</td><td colspan="4">Calculate by compounding RFR without adding spreads*
Act/365</td></tr>
<tr><td>Calculation Period</td><td>—</td><td colspan="3">Set the Calculation Period based on the Reset Date and tenor</td></tr>
<tr><td rowspan="2">Images</td><td colspan="2">

Option 1



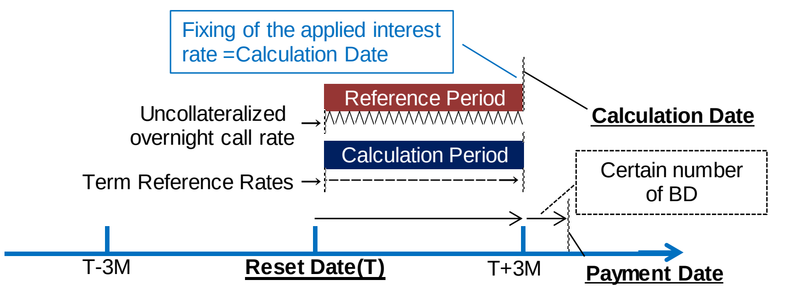
</td><td colspan="2">

Option 2, Lock out



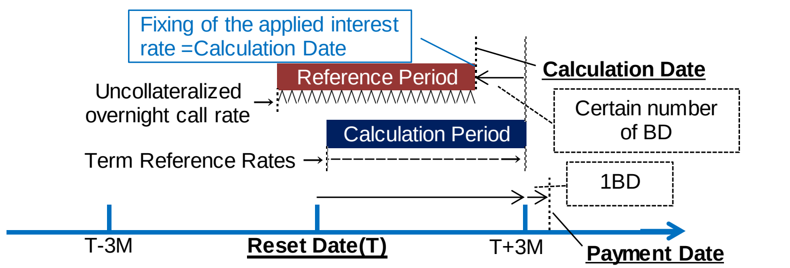
</td></tr>
<tr><td colspan="2">

Option 2, Delay



</td><td colspan="2">

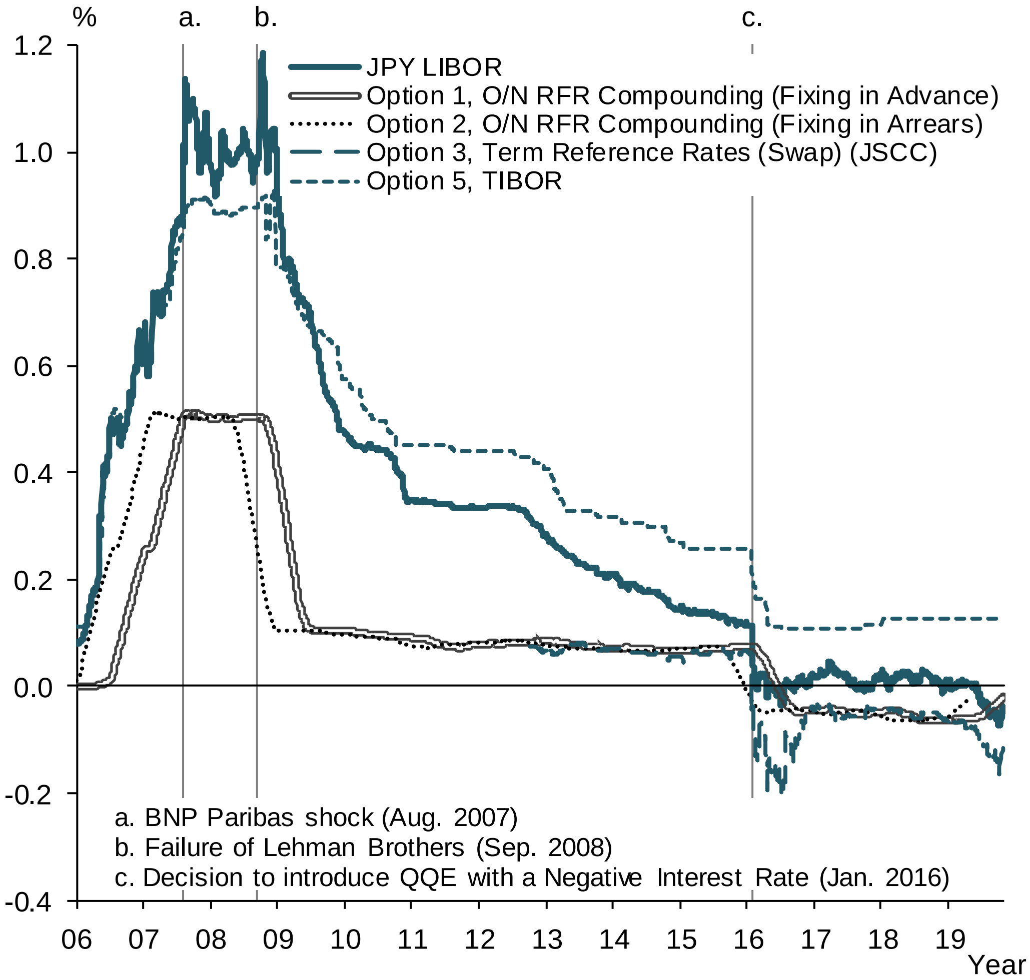
Option 2, Reset days prior



</td></tr>
</table>

* When the final requirements are decided, it is necessary to be aware that there are cases overseas where the simple average is used, in addition to compounding, and that there are several cases overseas regarding the number of business days from the last day of the Calculation Period to the Payment Date.

Appendix 3: 6-month rates for each option



*1 The latest data for Option 2 are as at Apr. 26, 2019. The latest data for options other than Option 2 are as at Oct. 31, 2019.

*2 Because Option 3 has yet to be developed, the data are substituted with JPY OIS data published by the JSCC on every business day. The data are only available since Oct. 2012.

Source: Refinitiv

Appendix 4: Phased transition plan in preparing for the permanent discontinuation of LIBOR

Item		2019 3Q	2019 4Q	2020 1Q	2020 2Q	2020 3Q	2020 4Q	2021 1Q	2021 2Q	2021 3Q	2021 4Q	2022 1Q	2022 2Q
Development of Term Reference Rates*	Option 1 and Option 2 Publication		Publish the deliverables	Publication by information vendors, etc.									
	Option 3 (Phase1) Publication of prototype rates		Preperation for publication	Publication of prototype rates / Data validation and deliberation whether the requirements should be improved									
	Option 3 (Phase2) Publication of production rates			Establishment of administrator framework and actions for the establishment of such a framework (including regulatory compliance)						Publication of production rates *while making best efforts to move forward the schedule			
Use of alternative benchmarks	Temporarily use Option 1, Option 2, or Option 5			Temporary use of Option 1, Option 2, or Option 5						Permanent use of Option 3 or Option 4			
	Permanently use Option 1, Option 2, or Option 5 from the beginning			Permanent use of Option 1, Option 2, or Option 5 from the beginning									
New contracts	Use alternative benchmarks as a reference rate			Transition to alternative benchmarks									
Existing contracts	Hardwired Approach			Introduction of fallback provisions									
	Amendment Approach			Introduction of fallback provisions *An "opt-in" trigger allows parties to initiate a transition to a new reference rate according to the situation, even if LIBOR continues to exist and be representative.									
	Reference rate replacement			Reference rate replacement from LIBOR to alternative benchmarks									

*The publication timing may be moved around depending on the progress made in preparation by information vendors and the administrator, etc. It is necessary to continue monitoring the progress made in deliberation about Option 4.