

Private Bank



Interbank Offered Rate (IBOR) and Benchmark Reform Frequently Asked Questions

April 2023

These Frequently Asked Questions (FAQ) are provided for information purposes only and may not represent the views or opinions of Citigroup Inc. or its affiliates (collectively, "Citi"), employees or officers. The information contained herein does not constitute and will not be construed to constitute financial, legal, tax, accounting or other advice by Citi. Citi makes no representation as to the accuracy, completeness or timeliness of such information, which may also be subject to change.

These FAQs and any documents referenced in them (including any linked to FAQ responses) should not be used or relied upon by any person/entity for any purposes whatsoever, including: (i) for the purpose of making regulatory decisions or (ii) to provide regulatory advice to another person/entity based on matter(s) discussed herein. Recipients of this communication should obtain guidance and/or advice based on their own particular circumstances and from their own professional advisors (financial, legal, tax, accounting or otherwise) in light of IBOR and benchmark reform, as they consider necessary.

These FAQs are not a commitment or firm offer and do not oblige us to enter into such a commitment, nor are we acting as a fiduciary to you. Citi accepts no responsibility or liability to you with respect to the use of these FAQs or their contents or the contents of any linked document or webpage.

We encourage you to keep up to date with the latest industry developments in relation to IBOR and benchmark reform and to consider their impact on your business using independent professional advisors (financial, legal, tax, accounting or other) as you consider necessary. You should consider, and continue to keep under review, the potential impact of IBOR and benchmark reform on any existing product you have with Citi and/or any new product you enter into with Citi. The areas covered by these FAQs are continually evolving across multiple product areas and jurisdictions; you should consult the relevant sources. Links to some of the relevant working and industry groups are included throughout these FAQs.

The referenced FAQs in this document are intended to cover a variety of potentially impacted products and services offered to clients, however, the applicability to your situation should be discussed with your professional advisor as required.

Other than as expressly agreed in writing between you and Citi, Citi makes no representation, warranty or assurance, and does not owe you any duty, nor have any liability to you, in relation to any IBOR reform-related developments. Furthermore, Citi is not able to advise you in relation to any IBOR reform-related developments or in relation to individual products/services that might be impacted. These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting, or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated.

Contents

Page

THE BACKGROUND TO BENCHMARK TRANSITIONING	5
1. What is an IBOR rate?	5
2. Why are IBORs being reformed and / or why is a transition to alternative rates being proposed?	5
3. Has the publication of representative LIBOR ceased?	6
4. When should new USD LIBOR and USD LIBOR-linked products cease?	7
5. When should new non-USD LIBOR products cease?	7
RISK FREE RATES (RFRs)	8
6. How is each RFR calculated? How do they differ from IBORs?	8
7. What RFRs have been proposed as alternatives to IBORs?	8
8. Are there forward-looking term RFRs and, if so, when will these be introduced?	11
9. How is Term SONIA constructed?	12
10. Why have the Fixed Income, Currencies and Commodities Markets Standards Board (“FMSB”) and UK authorities recommended that use of Term SONIA is limited?	13
SYNTHETIC LIBOR	14
11. What is synthetic GBP LIBOR?	14
12. Will the FCA compel publication of synthetic USD LIBOR?	15
13. How will synthetic 1-month, 3-month and 6-month USD LIBOR settings be calculated?	15
14. What use of synthetic USD LIBOR is the FCA intending to permit?	16
15. Is synthetic JPY LIBOR still available?	16
16. Where can I find further information on synthetic LIBOR?	16
FURTHER BENCHMARK REFORM	17
17. Why do we need spread adjustments and how will they be calculated in the various markets?	17
18. What is the spread adjustment used for my existing loan and related hedge?	17
19. What about those rates which directly or indirectly reference IBORs, such as USD LIBOR?	18
CUSTOMER ENGAGEMENT WITH BENCHMARK TRANSITIONING	18
20. How do I know if I have an exposure to an IBOR?	18
21. How will my Citi portfolio be impacted by the discontinuation of any IBOR?	18
22. How will my IBOR-linked contract be changed to one which incorporates one of these new RFRs?	19
23. What happens if I do not amend my IBOR impacted contract?	19
24. What can I do to prepare for the transition away from IBORs?	19
25. What has Citi done so far in relation to IBOR transitioning?	19

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

FALLBACK LANGUAGE, LEGACY BUSINESS AND INTERACTION WITH THE BENCHMARKS SUPPLEMENT	20
26. What is meant by 'fallback language' and 'trigger events'?	20
27. Is there standardized fallback language?	20
28. What IBOR fallback language has ISDA developed for derivatives and why is this relevant?	20
29. If parties adhere to the IBOR Protocol, which existing contracts would be amended?	21
30. Following adherence to the IBOR Protocol and the conversion of existing contracts from the impacted IBOR to its RFR alternative, what happens to the calculation of interest for a period that starts before and ends after an IBOR cessation date?	22
LOANS	22
31. What will happen to my loan upon a permanent cessation of, or a non-representative determination in respect of, the benchmark rate and specifically the relevant IBOR (either an "Index Cessation Event")?	22
32. What will happen to my loan if it has fallback language and there is an Index Cessation Event?	23
33. What types of fallbacks are included in loans?	23
34. What types of fallbacks are included in loans?	24
35. Upon cessation of IBORs, will I have the ability to consent to the successor RFR and spread adjustment used in my loan? Will the consent of anyone else be required?	24
36. What types of RFRs are being used in loan markets?	25
37. What if I have hedged my IBOR based loan? Are my loan and related hedge expected to be aligned upon transition to RFRs?	25
38. When should I expect that my IBOR based loan will be triggered? Can my loan switch to a successor rate before occurrence of an Index Cessation Event?	26
39. What are "benchmark conforming changes"?	27
40. What should I do if I would like to discuss how the RFRs apply to my loan agreements with Citi?	28
THE BENCHMARKS SUPPLEMENT	28
41. What is the Benchmarks Supplement?	28
42. What is the BMS Protocol?	28
43. How does the Benchmarks Supplement interact with the IBOR Supplement and the IBOR Protocol?	29
44. Who can adhere to the BMS Protocol?	29
45. What should I do if I do not want to adhere to the BMS Protocol?	29
46. How do I adhere to the BMS Protocol?	29
47. What about benchmark user transactions with Citi that are not documented under an ISDA master agreement?	30
48. What should I do if I would like to discuss this topic with Citi?	30
LEGISLATIVE SOLUTIONS.....	30
49. Are legislative solutions being considered to help the market transition away from IBORs?	30

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

THE BACKGROUND TO BENCHMARK TRANSITIONING

1. What is an IBOR rate?

IBOR stands for "interbank offered rate" and "IBORs" is a general description for a number of different interest rate benchmarks that historically derive from the rate at which banks could borrow from other banks in particular markets and currencies. LIBOR (the London interbank offered rate) and EURIBOR (the Euro interbank offered rate) are both examples of IBORs.

IBORs are used to determine a range of interest rate benchmarks in a number of financial products and are used in a wide variety of markets.

2. Why are IBORs being reformed and / or why is a transition to alternative rates being proposed?

IBORs are generally determined by quotes submitted to the applicable benchmark administrator by panel banks. These submissions are intended to be based on actual transactions in the interbank market. However, over time banks have shifted away from unsecured interbank lending in favor of alternative funding models. As a result, the number of transactions underpinning a variety of IBORs has reduced, making many of the rates heavily reliant on "expert judgement" from the panel banks submitting the quotes that determine the rates.

This has led to various regulatory authorities, including the UK's Financial Conduct Authority ("FCA"), forming the view that a range of IBORs, including LIBOR, need to be replaced or reformed.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

3. Has the publication of representative LIBOR ceased?

- (a) Immediately after December 31, 2021, the following LIBOR settings permanently **ceased**:
- (i) all EUR and CHF LIBOR settings;
 - (ii) the overnight / spot next, 1-week, 2-month and 12-month GBP and JPY LIBOR settings; and
 - (iii) the 1-week and 2-month USD LIBOR settings.
- (b) Immediately after December 31, 2021, the 1-month, 3-month and 6-month GBP and JPY LIBOR settings were designated as Article 23A benchmarks under the UK Benchmarks Regulation (UK BMR) by the Financial Conduct Authority (FCA), meaning they became permanently **unrepresentative** of the underlying market they seek to measure and would be calculated using a different synthetic methodology for a limited time (together with the LIBOR settings described in above, the “**30 LIBOR Settings**”). Synthetic JPY LIBOR ceased permanently at the end of 2022, while publication of GBP LIBOR 1-month and 6-month synthetic settings ceased on March 31, 2023. Publication of the GBP LIBOR 3-month synthetic setting is expected to cease at the end of March 2024.
- (c) Overnight and 12-month USD LIBOR settings **will continue** to be calculated using panel bank submissions until June 30, 2023 after which date publication of such settings will permanently cease.
- (d) 1-month, 3-month and 6-month USD LIBOR settings **will continue** to be calculated using panel bank submissions until June 30, 2023. The FCA has announced that it will require IBA to **continue publishing** the 1-month, 3-month and 6-month USD LIBOR settings using an **unrepresentative synthetic methodology**, for a short period. The FCA intends for publication of such settings to cease on September 30, 2024.

As of January 4, 2022, an “Index Cessation Effective Date” has occurred under the IBOR Supplement and the IBOR Protocol in respect of the 30 LIBOR Settings, each of which were triggered by the FCA’s March 5, 2021 announcement (the “[FCA LIBOR Announcement](#)”). Derivative contracts that were remediated by the IBOR Protocol therefore started using the relevant fallback rates set out in the IBOR Supplement.

We would encourage you to assess the impact of the cessation or permanent unrepresentativeness of the 30 LIBOR Settings on your portfolio and to take appropriate independent professional advice (legal, tax, accounting, financial or other).

The below table provides a summary of each LIBOR setting, and its respective last publication or last publication on a representative or non-representative basis (as applicable):

LIBOR Currency	LIBOR Settings	Last Date of Publication / Representativeness	Non-Representative, Synthetic Publication
USD	Overnight and 12-month	June 30, 2023	N/A
USD	1-week and 2-month	December 31, 2021	N/A
USD	1-month, 3-month and 6-month	June 30, 2023	Expected from June 30, 2023

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

			through September 30, 2024 [#]
GBP	Overnight, 1-week, 2-month and 12-month	December 31, 2021	N/A
GBP	1-month and 6-month	December 31, 2021	January 1, 2022 ⁺ through March 31, 2023 ^{**}
GBP	3-month	December 31, 2021	Expected January 1, 2022 ⁺ through March 31, 2024 ^{**}
JPY	Spot next, 1-week, 2-month, 12-month	December 31, 2021	N/A
JPY	1-month, 3-month and 6-month	December 31, 2021	January 1, 2022 ⁺ through December 31, 2022
EUR, CHF	All settings	December 31, 2021	N/A

[#] The FCA has confirmed the continued publication of non-representative, synthetic 1-month, 3-month and 6-month USD LIBOR settings. The FCA intends that publication of USD LIBOR 1-month, 3-month and 6-month synthetic settings will cease on September 30, 2024.

⁺Note that January 4, 2022 was the first date that synthetic LIBOR was published by the IBA.

^{**} Publication of GBP LIBOR 1-month and 3-month synthetic settings ceased on March 31, 2023 and publication of the 3-month synthetic setting is expected to cease at the end of March 2024.

4. When should new USD LIBOR and USD LIBOR-linked products cease?

Citi continues to align with regulatory guidance and legislation and expects that any client requests to enter into new USD LIBOR contracts will fall within the limited permissible circumstances described by regulators.¹

5. When should new non-USD LIBOR products cease?

New use of any LIBOR setting that has ceased to be published is no longer possible.

¹ US regulatory statements available [here](#) and [here](#). UK regulatory statement available [here](#).

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

New use of the permanently unrepresentative 3-month GBP LIBOR setting during its period of publication is subject to regulatory restrictions on new use. The FCA has stated that from January 1, 2022, any new use of synthetic GBP LIBOR settings (now only synthetic 3-month GBP LIBOR continues to be published) by UK supervised entities is prohibited without exception. Citi does not use synthetic LIBOR in any new contracts from January 1, 2022.

RISK FREE RATES (RFRs)

6. How is each RFR calculated? How do they differ from IBORs?

RFRs are calculated on a different basis and are not like-for-like replacements for IBORs. IBORs are set at or prior to the commencement of the period to which they relate, allowing certainty during such a period as to the amounts which will be due at the end of that period. Taking LIBOR as an example, set out below is a non-exhaustive list of the differences between LIBOR and RFRs.

- LIBOR is a term rate benchmark across multiple tenors (overnight, 1-week, 1-month, 2-month, 3-month, 6-month, and 12-month), whereas RFRs are overnight rates with no term element;
- LIBOR is a forward-looking rate, whereas RFRs are backward-looking rates;
- LIBOR contains a premium for bank credit and term liquidity risk. In contrast, while the precise nature of each RFR may vary, in general the RFRs contain little or no such additional premiums because they are overnight and sometimes secured; and
- For each LIBOR currency, the replacement RFR would have both distinct characteristics and a distinct RFR administrator, whereas LIBOR is administered by a single administrator for all currencies, according to a single set of characteristics.

7. What RFRs have been proposed as alternatives to IBORs?

Various authorities and industry working groups have identified certain RFRs as alternatives or fallbacks for IBORs and / or have considered how existing benchmark rates might be reformed in accordance with applicable regulation. For each existing IBOR and the alternative RFR, the proposals are at different stages and continue to evolve.

You should consider now, and continue to keep under review, the potential impact of current and future changes to the reference rate of financial products relevant to your portfolio and the services you receive, together with the fallback language used in contracts which reference an IBOR which has been discontinued. You should consider seeking independent professional advice (legal, tax, accounting, financial or other) as you consider necessary.

The table below sets out IBORs for fifteen currencies and corresponding RFRs which have been identified as fallback rates to ISDA and financial institutions by regulators and industry working groups as of the date of these FAQs. This is not an exhaustive list.

COUNTRY	IBOR RATE	STATUS	ALTERNATIVE RFR	TRANSITION COMMITTEE WEBSITE
---------	-----------	--------	-----------------	------------------------------

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

United States	USD LIBOR: 1-week and 2-month tenors	Ceased after December 31, 2021	SOFR ²	Alternative Reference Rates Committee (ARRC)
	USD LIBOR: Overnight and 12-month tenors	Cessation after June 30, 2023 [#]		
	USD LIBOR: 1-month, 3-month and 6-month tenors	Unrepresentative after June 30, 2023 [#]		
United Kingdom	GBP LIBOR	Ceased or unrepresentative after December 31, 2021 [†]	SONIA	Sterling Working Group on Risk-Free Rates
Japan	TIBOR	Reformed and expected to continue ³	TONA	JBA TIBOR Administration Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks
	JPY LIBOR	Ceased or unrepresentative after December 31, 2021	TONA	
	Euroyen TIBOR	Reformed but at risk of ceasing	TONA	
Europe	EUR LIBOR	Ceased after December 31, 2021	€STR / EuroSTR	ECB Working Group on Euro Risk-Free Rates European Money Markets Institute (EMMI) and Euro RFR Working Group
	EURIBOR	Reformed and expected to continue	€STR / EuroSTR	

² See [ARRC website](#) for specific recommendations for 1-week and 2-month tenors based on type of contract

³ 1-week, 1-month, 3-month, 6-month, and 12-month tenors or TIBOR continue to be published.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Canada	CDOR	6-month and 12-month tenors ceased to be published after May 14, 2021 All remaining tenors will cease following June 28, 2024	CORRA (CDOR will continue to be published in tandem with CORRA pending full CDOR cessation)	Canadian Alternative Reference Rate Working Group (CARR)
Switzerland	CHF LIBOR	Ceased after December 31, 2021	SARON	The National Working Group on Swiss Franc Reference Rates
Australia	BBSW	Reformed (and to continue)	RBA Cash Rate (AONIA) (existing alongside BBSW)	Australian Financial Markets Association
New Zealand	BKBM	Reformed (and to continue)	RBNZ Cash Rate (NZONIA) (existing alongside BKBM)	New Zealand Financial Markets Association
Hong Kong	HIBOR	Reformed (and to continue)	HONIA (this rate to exist alongside HIBOR)	Treasury Markets Association's Market Practices Committee
India	MIFOR	Cessation after June 30, 2023 (Proposed by Benchmark Administrator)	Modified MIFOR*	Financial Benchmarks India Pvt Ltd
Singapore	SOR	Cessation after June 30, 2023	SORA*	Steering Committee for SOR Transition to SORA
Thailand	THBFIX	Cessation after June 30, 2023	THOR*	Steering Committee on Commercial Banks' Preparedness on LIBOR Discontinuation

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Philippines	PHIREF	Cessation after June 30, 2023	PHIREF 2.0 [^]	Bankers Association of the Philippines
Malaysia	KLIBOR	Expected to continue (but 2-month and 12-month tenors to cease from January 1, 2023 while 1-month, 3-month and 6-month tenors to be reviewed in second half of 2022)	MYOR	Financial Markets Committee
Israel	TELBOR	TELBOR to be replaced by Bank of Israel interest rate in derivative transactions after June 30, 2023	Bank of Israel interest rate	Bank of Israel

* Subject to the continued publication of non-representative synthetic 1-month, 3-month and 6-month GBP LIBOR settings. Publication of GBP LIBOR 1-month and 6-month synthetic settings ceased on March 31, 2023 and publication of the 3-month synthetic setting is expected to cease at the end of March 2024.

Subject to the continued publication of non-representative synthetic 1-month, 3-month and 6-month USD LIBOR settings. The FCA intends that publication of USD LIBOR 1-month, 3-month and 6-month synthetic settings will cease on September 30 2024.

* Modified MIFOR, SORA and THOR will not be implemented as the contractual fallback rates.

[^] Bankers Association of the Philippines will only provide PHIREF 2.0 rates for the Overnight, 1-month, 3-month and 6-month tenors.

8. Are there forward-looking term RFRs and, if so, when will these be introduced?

As LIBOR and other IBORs are forward-looking term rates available in a number of tenors, industry working groups have developed a number of forward-looking RFR-derived term rates. The FSB has

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

emphasized that there are limitations to RFR-derived term rates, which may mean they are not a suitable choice in some markets⁴.

By way of example:

- In the US, the Alternative Reference Rate Committee (ARRC) has formally recommended the CME Group's forward-looking Secured Overnight Financing Rate (SOFR) term rates ("SOFR Term Rates"). Further detail is available in CME's [FAQs](#) and [IOSCO Compliance Statement](#). The ARRC has also published its [conventions](#) and [use cases](#) for SOFR Term Rates. In particular, the ARRC has announced that it does not support the use of SOFR Term Rates for derivatives markets, except for end-users facing derivatives intended to hedge cash products that reference the SOFR Term Rate. The CME has also published [FAQs](#) in relation to the use of the CME SOFR Term Rates, with particular regard to its licensing terms and restrictions on use similar to the ARRC recommendations. The 2021 ISDA Interest Rate Derivatives Definitions include a definition of "USD-SOFR CME Term".
- In Japan, QUICK Benchmarks Inc. (QBS) has been publishing the Tokyo Term Risk-Free Rate ("TORF") production rate since April 2021. The 2021 ISDA Interest Rate Derivatives Definitions include a definition of "JPY- TORF QUICK".
- In the UK, ICE Benchmark Administration and Refinitiv both publish term SONIA reference rates ("TSSRs"). The Bank of England Sterling Risk-Free Rate Working Group's ("RFRWG") Term Rate Use Case Task Force has published comparative detail on the IBA and Refinitiv TSRRs ([here](#)). The FMSB, the FCA and the RFRWG have each made it clear that they expect the use of TSRRs to be relatively limited. The 2021 ISDA Interest Rate Derivatives Definitions include definitions of "GBP-SONIA ICE Term" and "GBP-SONIA Refinitiv Term".

The [National Working Group on Swiss Franc Reference Rates](#) do not recommend the use of a forward-looking term RFR.

Citi Private Bank will continue to evaluate these developments and applicability to the lending products that are offered.

Please see the Appendix for links to further information in relation to what term SOFR may look like.

9. How is Term SONIA constructed?

Term SONIA is designed to measure average expected (i.e., forward-looking) SONIA rates over specified tenor periods. Term SONIA rates are calculated using eligible prices and volumes for specified SONIA-linked interest rate derivative products, such as futures or overnight indexed swaps, since these provide information on market expectations of SONIA over a future period.

⁴ FSB Interest rate benchmark reform – overnight risk-free rates and term rates (July 12, 2018) at: <https://www.fsb.org/wp-content/uploads/P120718.pdf>

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Term SONIA rates are calculated and produced by two independent benchmark administrators: ICE Benchmark Administration (IBA) and Refinitiv, each of which uses a different methodology and waterfall used.⁵

It is important to note that Term SONIA is a rate derived from executable quotes for SONIA-based interest rate swaps, the markets for which may have liquidity characteristics which are different to, and influenced by, the overnight lending market on which SONIA is based and markets for other products referencing overnight SONIA (including SONIA compounded in arrears).⁶

Additionally, since the methodology used for constructing Term SONIA relies on SONIA interest rate swap order book data from parties which may also provide swaps or other products based on Term SONIA, this potential conflict could impact the willingness of market participants to stream executable quotes to those order books which may in turn undermine the robustness of Term SONIA.⁷

10. Why have the Fixed Income, Currencies and Commodities Markets Standards Board (“FMSB”) and UK authorities recommended that use of Term SONIA is limited?

The FMSB, the UK FCA and the UK Bank of England Risk-Free Rate Working Group have made clear they expect the use of forward-looking benchmarks such as Term SONIA to be relatively limited.⁸ Guidance provided by the FMSB on use of Term Sonia reference rates (“the Standard”) seeks to be as consistent as possible with the Working Group on sterling Risk-Free Reference Rates Use Cases published in January 2020 (“RFR WG Use Cases”). Their expectation is that Sterling fixed income and wholesale lending markets should predominantly transition to SONIA compounded in arrears as part of the move away from LIBOR, on the basis that ‘overnight risk-free rates provide the most robust benchmark interest rate available, derived from markets that have remained active and reliable through times of stress’⁹. Amongst others, the RFR WG Use Cases states that risk free rates compounded in arrears are appropriate for ‘large’ and ‘mid to large’ corporates and leveraged loans use cases. The need for an alternative to SONIA compounded in arrears can be driven by product type or by client capability.¹⁰

Although authorities have recognized that SONIA compounded in arrears may not be the most appropriate or operationally viable rate in some use cases, (e.g., for market participants who need advance knowledge and certainty of their interest rate obligations or where the rate is used for discounting future cash flows such as in trade finance)¹¹, they have expressed a number of concerns regarding a broad-based adoption of Term SONIA.

⁵ Bank of England, Term SONIA Reference Rate Publication Summary, updated January 2021.

FTSE Russell ceased publication of their Term SONIA Rates <https://www.lexology.com/library/detail.aspx?q=106188c9-35a4-4d1d-aa6d-36de720e0413>

⁶ [FICC Markets Standards Board \(FMSB\)](#) (page 3)

⁷ [FICC Markets Standards Board \(FMSB\)](#) (page 4)

⁸ [FICC Markets Standards Board \(FMSB\)](#) (page 3)

⁹ LIBOR transition – the critical tasks ahead of us in the second half of 2020, Edwin Schooling Latter, FCA, July 2020

¹⁰ Use Cases of Benchmark Rates: Compounded in Arrears, Term Rare and Further Alternatives, January 2020 (page 11)

¹¹ [FICC Markets Standards Board \(FMSB\)](#) (page 4)

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

A broad based adoption of Term SONIA, beyond specific use cases, may detract from liquidity in products referencing SONIA compounded in arrears, directly or indirectly reducing volumes in the SONIA-based interest rate swaps from which Term SONIA is itself derived.¹²

This is taken alongside additional concerns that the robustness of the Term SONIA rate is dependent on the liquidity in SONIA-based interest rates swaps markets, from which Term SONIA is derived; and a potential conflict of interest where parties supplying executable quotes to construct the rate are also providing swaps or other products based on Term SONIA.¹³ The recommendation of the FMSB to limit use of Term SONIA therefore aims to preserve the necessary conditions for a robust Term SONIA rate for the benefit of all market participants.

The Standard provides limited examples of main circumstances where there is likely to be robust rationale for using Term SONIA. This includes for discounted trade finance products which require a forward-looking interest rate and for loan-type trade finance products such as export finance / emerging markets lending.¹⁴ These are not intended to be exhaustive and other instances where use of Term SONIA may be deemed necessary may arise. Market participants should however have robust rationales for each use case.

Citi Private Bank will offer specific RFR loan conventions based on the product, the region and the currency to best align to industry and market guidance. Term rates will be offered as the default recommendation for certain loan products. Users of these products prefer interest rate calculations that are easy to understand and / or require payment flow certainty.

SYNTHETIC LIBOR

11. What is synthetic GBP LIBOR?

To help avoid disruption to legacy contracts that reference the **1-month, 3-month and 6-month GBP LIBOR settings**, the FCA [used its powers](#) to require the LIBOR benchmark administrator to continue to publish these settings using a changed or synthetic methodology for a limited time. The methodology used does not rely on submissions from panel banks but instead uses:

- forward-looking term versions of the relevant risk-free rate, [plus](#)
- the respective [ISDA fixed spread adjustment](#).

The FCA initially [stated](#) that synthetic LIBOR will not be published indefinitely and that firms should be amending their contracts wherever practicable to remove reliance on LIBOR.

¹² [FICC Markets Standards Board \(FMSB\)](#) (page 4)

¹³ [FICC Markets Standards Board \(FMSB\)](#) (page 4)

¹⁴ FMSB response to The Bankers Association for Finance and Trade (BAFT)

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

- Synthetic 1-month and 6-month GBP LIBOR ceased to be published at the end of March 2023; and
- Synthetic 3-month GBP LIBOR is expected to cease to be published after March 2024.

For certain entities and contracts, the use of synthetic GBP LIBOR is subject to regulatory restrictions¹⁵. Even where a contract is able to use synthetic GBP LIBOR, alignment with supervisory expectation may be relevant. Citi continues to pursue active transition of contracts currently referencing synthetic GBP LIBOR wherever possible. Further, Citi does not use synthetic LIBOR in any new contracts.

If relevant to you, you should obtain your own legal advice on the use of synthetic LIBOR.

12. Will the FCA compel publication of synthetic USD LIBOR?

The FCA has confirmed that it will require publication of **1-month, 3-month and 6-month USD LIBOR settings** under a synthetic methodology after June 30, 2023. The FCA intends to require publication until September 30, 2024. The FCA has made it clear that publication of synthetic USD LIBOR is only a temporary bridge, and synthetic settings will not continue simply for the convenience of those who could have transitioned their contracts but have not done so.

The FCA's view is that a further 15 months after end-June 2023 should provide sufficient extra time for an orderly wind-down.

The FCA has confirmed that overnight and 12-month USD LIBOR settings will cease permanently after final publication on June 30, 2023. The FCA is not proposing to require the publication of a synthetic rate for these tenors.

13. How will synthetic 1-month, 3-month and 6-month USD LIBOR settings be calculated?

The FCA confirmed that it will require LIBOR's administrator to calculate these synthetic rates using a:

- forward-looking term rate derived from the relevant CME Term SOFR Reference Rate, plus
- the respective ISDA fixed spread adjustment (i.e. for the 1-month, 3-month and 6-month USD LIBOR setting).

¹⁵ The FCA published a [notice](#) permitting all legacy "use" of the synthetic GBP LIBOR rates from January 1, 2022 by supervised entities (as such term is defined in the UK BMR) other than in cleared derivatives. The FCA has stated that all other use is prohibited and that they may revisit the scope of permitted legacy use in the future.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

14. What use of synthetic USD LIBOR is the FCA intending to permit?

For certain entities and contracts, the use of synthetic USD LIBOR is subject to regulatory restrictions¹⁶. Even where a contract is able to use synthetic USD LIBOR, alignment with supervisory expectation may be relevant. Citi intends to continue to pursue active transition of contracts currently referencing USD LIBOR wherever possible. Further, Citi does not intend to use synthetic USD LIBOR in any new contracts.

15. Is synthetic JPY LIBOR still available?

No. The FCA compelled the LIBOR benchmark administrator to continue to publish the 1-month, 3-month and 6-month JPY LIBOR settings after end-2021 on a synthetic basis, for one additional year. Consequently, publication of these settings ceased permanently immediately after final publication on December 30, 2022.

16. Where can I find further information on synthetic LIBOR?

The FCA has released several publications related to LIBOR.

- Questions and answers relating to LIBOR cessation and the FCA's powers under UK BMR, including implementing synthetic LIBOR can be found on: <https://www.fca.org.uk/markets/about-libor-transition/libor-and-fcas-powers-under-uk-benchmarks-regulation-questions-and-answers>
- Further information on the changes to LIBOR as of end 2021 can be found on: <https://www.fca.org.uk/news/news-stories/changes-libor-as-of-end-2021>
- Information on the FCA synthetic US dollar LIBOR decision can be found on: <https://www.fca.org.uk/news/news-stories/fca-announces-decision-synthetic-us-dollar-libor>
- Information on the FCA's winding down of synthetic sterling LIBOR can be found on: <https://www.fca.org.uk/publications/consultation-papers/cp22-11-winding-down-synthetic-libor-us-dollar-libor>

For further information in relation to the transition of any of your contracts referencing synthetic LIBOR you should contact your Citi representative or IBORQ@citi.com.

¹⁶ The FCA will permit legacy use of any synthetic USD LIBOR setting in all contracts except cleared derivatives (whether directly or indirectly cleared). From July 1 2023, all new use of synthetic US dollar LIBOR will be prohibited under UK BMR. The synthetic settings are intended for use in legacy contracts only, to help ensure an orderly wind-down of LIBOR.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

FURTHER BENCHMARK REFORM

17. Why do we need spread adjustments and how will they be calculated in the various markets?

RFRs generally do not include the bank credit or term liquidity risk elements that are included in IBOR rates. To account for this difference and to minimise the economic effects of transitioning from an IBOR to an RFR, a Credit Adjustment Spread (or CAS) is likely to be added to the RFR as part of the transition.

Working groups, trade associations and regulators are generally focusing on a “historic median approach” to determining the spread adjustment. This approach uses the median spot spread between the relevant IBOR and the RFR over a five-year lookback period.

Following consultation with the market, ISDA and Bloomberg have developed a methodology based on the “historical median approach” (among other components) that will be used to facilitate the transition of the swaps markets to RFRs. On March 5, 2021, ISDA confirmed that, following the FCA’s announcement in relation to the permanent cessation and non-representativeness of all LIBOR settings, the “Spread Adjustment Fixing Date” had occurred and, accordingly, the credit spread adjustment had been fixed for all 35 LIBOR settings under the Bloomberg IBOR Fallback Rate Adjustments Rulebook. On such date, Bloomberg (who began publishing indicative calculations in May 2020) published the fixed spread adjustment as calculated in respect of each IBOR tenor (available here).

The ARRC has recommended that spread adjustments for USD LIBOR cash products (other than consumer products) transitioning to SOFR match the value of ISDA’s spread adjustments and, on March 17, 2021, announced Refinitiv as the publisher of its spread adjusted rates for cash products. The ARRC’s recommended methodology is for market participants’ voluntary use, to produce spread adjustments intended for USD LIBOR contracts that have incorporated the ARRC’s recommended hardwired fallback language, or for legacy USD LIBOR contracts where a spread-adjusted Secured Overnight Financing Rate (SOFR) can be selected as a fallback.

The Sterling RFRWG endorsed the use of the “historical median approach” when calculating the spread adjustment for GBP LIBOR loans transitioning to SONIA but did not recommend a specific methodology or specify the timing of the calculation.

While progress has been made, complete alignment of the methodologies across products and markets may not be possible. Further, it is not possible to confirm that an RFR plus a spread adjustment will serve as an economic alternative to a particular IBOR. Basis risk may therefore arise at a broad portfolio level or at a specific transaction level — for example, a derivative hedging IBOR risk on a cash product might transition to a different outcome at a different point in time and may therefore cease to provide as good a hedge as prior to the transition.

18. What is the spread adjustment used for my existing loan and related hedge?

The standard methodology used by Citi Private Bank to determine the appropriate spread adjustment for loan products is based on the forward Credit Adjustment Spread as defined by the market at point of transaction (which maintains the marked-to-market value of the hedge).

If you hold a loan and related hedge position that is actively transitioned ahead of cessation, a forward-looking Credit Adjustment at current market level for your loan and derivative holdings will be offered. Loans with a hedged position transitioned after cessation will utilize the backward 5 year ISDA Credit Adjustment Spread, as per ISDA fallback.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

With regard to new RFR based loan contracts, there would not be any spread adjustment added to the RFR because the spread adjustment will already be embedded in the overall rate for such loans.

For further information regarding the spread adjustments please refer [ARRC](#) and [SONIA RFR Working group](#) papers.

You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of cessation on different products, including identifying resulting rate and spread mismatches, and determine an appropriate course of action.

19. What about those rates which directly or indirectly reference IBORs, such as USD LIBOR?

The permanent cessation of overnight and 12-month USD LIBOR after June 30, 2023 (with the remaining settings being non-representative after June 30, 2023) has (or will) impact various rates that either directly or indirectly reference USD LIBOR. In order to prepare for this discontinuation, you should consider which contracts are affected and the potential application of RFRs as proposed by relevant industry groups and trade associations. You should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

For derivative contracts, there are instances where "LIBOR" is referenced in the 2006 ISDA Definitions or utilized in the methodology for a rate but that rate does not reference the full LIBOR Rate Option. In these instances, the new fallbacks for LIBOR Rate Options in the ISDA IBOR Protocol will not automatically apply to these other rates. ISDA's IBOR Protocol and the IBOR Supplement includes fallbacks for SOR and THBFIX in the event of a permanent cessation in respect to USD LIBOR (which is used to calculate these rates).

CUSTOMER ENGAGEMENT WITH BENCHMARK TRANSITIONING

20. How do I know if I have an exposure to an IBOR?

You should review your documentation carefully to determine what elements of your portfolio reference and services an IBOR, what fallbacks would apply and consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

21. How will my Citi portfolio be impacted by the discontinuation of any IBOR?

Citi has completed or is currently in the process of remediating legacy IBOR-impacted contracts prior to the relevant cessation dates and in line with regulatory guidance. There are various industry standards for alternative RFRs to facilitate this remediation process, and Citi will continue to follow these industry standards consistently wherever practicable (for example, Citi has adhered to the IBOR Protocol). However, industry-working groups may not be able to provide appropriate fallback language and RFR transition solutions for each impacted product in different markets. We would encourage you to take appropriate independent professional advice (legal, tax, accounting, financial or other) so that you understand the impact of the discontinuation of any IBOR on your portfolio with Citi and your business more generally.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

22. How will my IBOR-linked contract be changed to one which incorporates one of these new RFRs?

To the extent you have an impacted product with Citi Private Bank, you should expect to receive the proposed amendments / new contracts specific to your product, prior to the cessation of LIBOR to ensure a smooth transition and to minimize the impact to you. Citi will strive to meet recommended timelines provided from the Industry and Regulators to enable this transition. We may contact you should you have a complex portfolio that we would like to discuss with you prior to issuing amendments.

23. What happens if I do not amend my IBOR impacted contract?

This will depend on many things, including the contractual provisions for the financial product or service and the alternative RFR solutions available. Failing to amend your IBOR impacted contracts may lead to unintended economic and operational consequences. You should review your portfolio carefully and consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

24. What can I do to prepare for the transition away from IBORs?

We encourage you to keep up to date with the latest industry developments in relation to benchmark transitioning (e.g., monitoring the announcements of industry working groups, trade associations and international bodies, such as IOSCO and the relevant product groups) and to consider their impact on your own business, using independent professional advisors (legal, tax, accounting, financial or other) as appropriate.

For example, the ARRC in its [Best Practices for Completing the Transition to LIBOR](#) have suggested that impacted institutions establish a clear IBOR transition plan. For further detail and guidance on how to prepare for transitioning to certain RFRs, see [here](#) for the ARRC's Internal Systems & Processes: Transition Aid for SOFR Adoption and [here](#) for the ARRC's Practical Implementation Checklist for SOFR Adoption in relation to SOFR.

25. What has Citi done so far in relation to IBOR transitioning?

Citi has completed or is currently in the process of remediating legacy IBOR-impacted contracts prior to the relevant cessation dates and in line with regulatory guidance. We are actively engaged with clients in relation to IBOR reform, through a variety of initiatives such as webinars, client outreaches and client conversations. We are keen to support our clients by helping to facilitate their transition plans and continue to develop our product offerings to ensure we are able to offer a full range of transition solutions.

We are also actively involved in industry efforts to manage the transition from IBORs. Citi has also set up an IBOR governance and implementation program and remains focused on identifying and addressing the transition impact to our operational capabilities and financial contracts, among others.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

FALLBACK LANGUAGE, LEGACY BUSINESS AND INTERACTION WITH THE BENCHMARKS SUPPLEMENT

For any further questions on fallback language you may have that is not covered in this section, you should review your portfolio carefully and consider seeking independent professional advice (legal, tax, accounting, or other) as appropriate. Your advisor can best help answer any questions on fallback language and trigger events you have specific to your portfolio and / or contract.

26. What is meant by ‘fallback language’ and ‘trigger events’?

In this context, ‘fallback language’ refers to the legal provisions in a contract that apply if the underlying reference rate in the product is permanently discontinued, ceases to be available or there has been a pre-cessation announcement that the rate is no longer, or will at some point in the future no longer be, representative. A fallback will generally consist of two components:

- the trigger event: which is an event that brings about the need to use the fallback (such as the IBOR rate not being available or, in the case of LIBOR, such rate no longer being representative); and
- the fallback rate: the rate (including any spread adjustment), or approach to determining the rate (including any spread adjustment), which will replace the relevant IBOR rate following the trigger event

For any further questions on fallback language you may have that is not covered in this section, you should review your portfolio carefully and consider seeking independent professional advice (legal, tax, accounting, or other) as appropriate. Your advisor can best help answer any questions on fallback language and trigger events you have specific to your portfolio and / or contract.

27. Is there standardized fallback language?

There are a range of market standard fallbacks, which existed prior to IBOR discontinuation, intended in order to cater for a temporary pause in availability of the relevant IBOR rate (for example due to market disruption). These fallbacks may already be included in your contracts and may operate differently for different rates as applied to various financial products. You should review your documentation closely to determine the position for each contract in your portfolio, in relation to existing or legacy products, as well as for any new products you are considering entering into.

For cash products, the ARRC has provided recommended fallback language for USD LIBOR-referencing contracts across a range of different asset classes, including loans, securitizations and floating rate notes (all available on the [ARRC Fallback Contract Language webpage](#)). Specifically for loans, the LSTA and LMA have provided standardized fallbacks.

28. What IBOR fallback language has ISDA developed for derivatives and why is this relevant?

Fallback provisions in the unamended 2006 ISDA Definitions (which are standard terms often incorporated into interest rate derivatives pre January 25, 2021) were drafted primarily for a temporary cessation of an IBOR (e.g. many ISDA definitions require quotes to be obtained from certain reference banks if the applicable reference rate is not available).

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

In this context, and at the request of the Financial Stability Board's Official Sector Steering Group, ISDA produced more robust fallback language (the "ISDA IBOR Fallbacks") for certain key IBORs which will replace the Relevant IBOR with an adjusted RFR on the date on which the Relevant IBOR is discontinued (or, in the case of certain Relevant LIBORs, is deemed non-representative).

As part of this initiative, ISDA has updated the 2006 ISDA Definitions through Supplement 70 (the "IBOR Supplement") to include the ISDA IBOR Fallbacks (subsequently included in the [2021 ISDA Interest Rate Derivatives Definitions](#), published October 4, 2021).

The IBOR Supplement launched on October 23, 2020 and became effective 3 months thereafter on January 25, 2021. All derivative transactions that are traded on or following January 25, 2021 that incorporate the 2006 ISDA Definitions now include this fallback language.

ISDA also published the ISDA 2020 IBOR Fallbacks Protocol (the "IBOR Protocol") at the same time as the IBOR Supplement, which allows adhering parties to include the ISDA IBOR Fallbacks in certain existing covered contracts with other adhering parties. The IBOR Protocol is still open for adherence for any firm that has not yet done so. Given the 30 LIBOR Settings have now ceased or become permanently unrepresentative, the agreement to include the fallback language in the IBOR Supplement in respect of those 30 LIBOR Settings would come into effect immediately upon your adherence, and your contract would reference the relevant fallback rate.

In addition to the IBOR Supplement, ISDA published Supplement 75 to assist parties with alternative compounding and averaging calculations for new RFR-referencing derivatives. This will provide parties with the optionality to align the RFR calculations used in derivatives more closely with those used in cash products, in particular for hedging purposes. The FAQs for Supplement 75 can be found [here](#).

In respect of fallbacks for derivatives that reference ICE Swap Rates, ISDA has also published Supplement 82, which contains a fallback for derivatives referencing the GBP LIBOR ICE Swap Rate. ISDA has also published Supplement 88 related to fallbacks for the USD LIBOR ICE Swap Rate and JPY LIBOR Tokyo Swap Rate. The FAQs can be found [here](#).

ISDA published the [June 2022 Benchmark Module](#) for the purposes of the ISDA 2021 Fallbacks Protocol. It enables parties to Protocol Covered Documents which incorporate or reference the USD LIBOR Swap Rate as defined in a "Covered ISDA Definitions Booklet" (as defined therein) to amend the terms of each such Protocol Covered Document to include the relevant defined term included in either version 3.0 of the 2021 Definitions or Supplement 88 to the 2006 Definitions.

29. If parties adhere to the IBOR Protocol, which existing contracts would be amended?

Following adherence, the IBOR Protocol would apply the ISDA IBOR Fallbacks to a broad range of existing ISDA and non-ISDA documents – including master agreements, credit support documents and related confirmations (together, "Protocol Covered Documents") that:

- incorporate an ISDA IBOR Protocol Covered Booklet;
- reference an IBOR included in the scope of the IBOR Protocol (a "Relevant IBOR") as defined in an ISDA IBOR Protocol Covered Booklet; or
- reference a Relevant IBOR howsoever defined (for instance "LIBOR").

Adherence to the IBOR Protocol is expected to reduce the complexity of contract repapering, improve contractual robustness and promote global consistency, and as such, Citi entities globally:

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

- (i) have adhered to the IBOR Protocol, such that the ISDA IBOR Fallbacks now apply to existing derivative contracts with other adhering parties; and
- (ii) are incorporating the IBOR Supplement into any new derivative contracts (such incorporation occurring automatically from January 25, 2021 for all new trades referencing the 2006 ISDA Definitions).

To the extent that you have not already adhered to the IBOR Protocol, we encourage you to review which existing documents in your portfolio would be Protocol Covered Documents, the suitability of any amendment made by the IBOR Protocol to those documents and the effectiveness of the amendment for any non-ISDA Protocol Covered Document and to consider whether to adhere. You should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Incorporation of the IBOR Protocol via bilateral adoption is offered by Citi for those clients who prefer not to adhere to the IBOR Protocol. Citi will continue to work with clients on more complex exposures where the IBOR Protocol or other industry standard solutions may not be appropriate.

For further information please refer to ISDA's [IBOR Protocol FAQs](#).

30. Following adherence to the IBOR Protocol and the conversion of existing contracts from the impacted IBOR to its RFR alternative, what happens to the calculation of interest for a period that starts before and ends after an IBOR cessation date?

Using USD LIBOR on a derivatives trade as an example, the USD LIBOR interest rate would be used in calculation of interest for the full period. Subsequent interest periods would no longer be calculated based on the relevant USD LIBOR tenor and would now observe the interest calculation methodology as per the fallback language on the trade. Thus, if both parties on the trade have adhered to the IBOR Protocol, or have bilaterally adopted the terms of the IBOR Protocol, subsequent interest periods post the USD LIBOR cessation date would be calculated as per the first fallback terms of the IBOR Protocol for USD LIBOR, i.e. on a compounded SOFR in arrears basis plus the credit spread adjustment.

LOANS

31. What will happen to my loan upon a permanent cessation of, or a non-representative determination in respect of, the benchmark rate and specifically the relevant IBOR (either an "Index Cessation Event")?

It depends on the language of your loan agreement. You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of an Index Cessation Event. Loan agreements can vary greatly in how they define an IBOR and may not address temporary or permanent unavailability (or non-representativeness) of the rate. Some definitions include fallback language that addresses temporary unavailability of the relevant IBOR but may not contemplate all Index Cessation Events; in those cases the resulting rates may be less desirable but these fallbacks provide a contractual basis on which the loan will continue.

For this reason and because a change to the interest rate in a loan will generally require the consent of all parties to the loan agreement, more robust fallback language has been developed to assist in a more orderly amendment to loan documents to account for all Index Cessation Events.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

In relation to USD LIBOR and loans using US-style documentation, please refer to the ARRC website¹⁷ for a library of fallback clauses across a range of asset classes, including bilateral business loans and syndicated loans.

In relation to non-USD, on November 23, 2020 the Loan Market Association (“LMA”) published an exposure draft multicurrency term and revolving facilities agreement incorporating rate switch provisions (“Rate Switch Exposure Draft”). This draft is an update of the earlier rate switch exposure draft published on September 11, 2020. The Rate Switch Exposure Draft provides a hardwired approach to LIBOR transition with provisions that automatically convert the facility from an IBOR rate to an RFR following the occurrence of specific triggers related to Index Cessation Events without the need for parties to further amend the agreement at a later stage. The LMA has also published a supplement to its “replacement of screen rate clause”, which allows parties to a syndicated facility agreement to agree a replacement benchmark rate using a lower consent threshold than would otherwise be required and to establish a date to transition a replacement rate subject to good faith negotiations to agree the relevant replacement rate and applicable calculation conventions.

We encourage you to familiarize yourself with the fallbacks published by industry groups for use in loans.

32. What will happen to my loan if it has fallback language and there is an Index Cessation Event?

This will depend on the type of fallback language set out in your loan. In most cases, loans with fallback language will need to be amended in order to transition to a new rate (and in the case of LIBOR, a new RFR) although many fallback provisions contain special provision to make such amendments more streamlined than other amendments that you might enter into in the ordinary course.

33. What types of fallbacks are included in loans?

Fallback language in loan agreements may include:

- (i) temporary fallback provisions, which address a temporary interruption in the availability of the relevant IBOR (but which may produce less desirable economic outcomes upon a permanent cessation of the relevant IBOR);
- (ii) amendment approach fallbacks, which facilitate a future amendment to the loan agreement to introduce RFRs but that do not necessarily identify the specific RFRs to be adopted or any related mechanics; and
- (iii) hardwired or switch approach fallbacks, which identify the new RFR rate to be used based on a pre-agreed waterfall of rates and adjustment spreads following specified trigger events and provide the lender or agent (in multi-lender loans) the ability to amend the loan agreement to implement the new RFR, or, as in the case of the Rate Switch Agreement, which set out detailed provisions relating to relevant RFRs that come into effect at a future specified date or following a specified trigger event.

¹⁷ Available at: <https://www.newyorkfed.org/arrc/fallbacks-contract-language>

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

We encourage you to familiarize yourself with the fallbacks published by industry groups for use in loans.

34. What types of fallbacks are included in loans?

In respect of IBOR cessation, whether your loan has fallback language that contemplates IBOR cessation or not, it will likely need to be amended or otherwise remediated to ensure that the recommended replacement RFR is being utilized. However, if your loan does not have fallback language that contemplates IBOR cessation, the fallbacks provided may be impractical upon cessation. Where Citi is the sole lender or agent bank on a loan that references LIBOR, Citi is in the process of engaging with borrowers in order to amend or otherwise remediate such loans with the recommended replacement RFR.

You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of an occurrence of Index Cessation Events.

35. Upon cessation of IBORs, will I have the ability to consent to the successor RFR and spread adjustment used in my loan? Will the consent of anyone else be required?

Your legal rights to require consent to the successor RFR and spread adjustment will depend on the contractual terms of the loan documentation, and particularly the terms of any fallback language. We note that ARRC has published both hardwired and amendment approach language, if ARRC hardwired approach is utilized you generally will not have a consent right to the successor RFR and spread adjustment unless the benchmark replacement rates specified in the fallback language (and its related spread adjustment) are not available. If a loan agreement uses amendment approach, ARRC recommended amendment approach fallback language for loans provides for the following:

- **syndicated (multi-lender) fallback language** utilizing the amendment approach and requires the agent to identify the rate and spread adjustment in consultation with the borrower (with a negative consent of a specified number of lenders (meaning that the amendment would become effective unless the specified percentage of lenders objects within a specified time period)); and
- **bilateral loan fallback language** utilizing the amendment approach and requiring the lender to identify the rate and spread adjustment and providing an option for either no consent right of the borrower or a negative consent right of the borrower (meaning that the amendment would become effective unless the borrower objects within a specified time period).

Similarly, the rights of other parties to the loan agreement to give or withhold consent will depend on the loan agreement; for multi-lender (syndicated) loans, both the ARRC recommended fallback language and LMA benchmark replacement language contain “amendment approach” fallback language, meaning the consent of a proportion of lenders (as set out in the document) will be necessary. ARRC language provides for negative consent, meaning that the amendment is effective unless a specified percentage of lenders (by value) object within a specified time period. In LMA language, an affirmative consent is required, but often (although not always) the consent is subject to a “you snooze you lose” provision meaning that the amendment vote only counts those who respond within a specified time period.

You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of cessation and your rights with respect to transitioning to new RFRs.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

36. What types of RFRs are being used in loan markets?

In general, Citi's approach is to follow the recommendations of applicable regulators or working groups. Certain RFRs have "term rates" (which are forward looking rates that allow the interest to be fixed at the beginning of an interest period), where other RFRs may use compounded or daily simple "in arrears" rates (which calculate interest at the end of a period using either a compounding formula or by calculating the interest due each day over a period, in each case, based on a daily rate).

We note that a SOFR based term rate (for US Dollars) and a TONA based term rate (for Japanese Yen) have been developed and are used in business loans; but even though a SONIA based term rate has been published, the Sterling Risk Free Rate Working Group has stated a preference for a transition to SONIA compounded in arrears for most corporate and syndicated loans, and that term SONIA rates are applicable for only a minority of cases based on characteristics of the borrower or the transaction.

For purposes of transition from USD LIBOR to SOFR, the AARC recommended hardwired fallback rate waterfall is:

- (i) term SOFR;
- (ii) daily simple SOFR; or
- (iii) a rate chosen by the lender or, for syndicated loans, the borrower and the agent.

However, ARRC also provided alternative options for those choosing to utilize compounded SOFR rates. Specifically it provided (1) a compounded SOFR in arrears option (which ARRC indicated may more closely align with derivatives) and (2) a compounded SOFR in advance option.

37. What if I have hedged my IBOR based loan? Are my loan and related hedge expected to be aligned upon transition to RFRs?

If your loan and hedging products are based on the same IBOR, it's possible that the recommended successor rate and spread adjustment for each of them may not match and that they may not transition at the same time, given that different products may have different recommended methodologies and calculation conventions in respect of the same RFR and that the transition itself may rest on different triggers. It may be possible to deviate from the relevant recommended methodologies and calculation conventions to address these mismatches. In particular, ISDA published Supplement 75 on June 28, 2021 to assist parties with alternative compounding and averaging calculation for new RFR- referencing derivatives — which allows parties to align the RFR calculations more closely with those used in loans in the context of hedging. However, such amendments may give rise to undesirable economic and operational impacts. For example, deviations from the relevant market standard may impact liquidity and pricing and it may not be operationally possible to adopt the derivatives market "two day lookback" in a loan context.

You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of cessation on different products, including identifying resulting rate and spread mismatches, and determine an appropriate course of action. Where CPB has hedged a CPB loan for you, we will be contacting you to discuss a proposal of amending both contracts (the loan and hedge) based on your evaluation of potential basis risk using standard RFR rate types. You may also contact your Private Banker or CPB@ibor.citi.com who will help direct you to a specialist that can review your contracts.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

38. When should I expect that my IBOR based loan will be triggered? Can my loan switch to a successor rate before occurrence of an Index Cessation Event?

Private Bank will contact impacted clients before the trigger event to mutually agree the new terms based on ARR. However, if Citi and client are not able to agree on the new terms, the loan switch to successor rate would be determined by the terms of the existing contract / the applicable fallback language.

To the extent your loan has not already transitioned to an RFR, the exact mechanism for switching to an RFR will depend on the terms of individual loan agreement. You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the timing of any such transition.

ARRC's recommended fallback language includes triggers upon:

- a public statement from the administrator of the benchmark announcing that the administrator has ceased or will cease to provide LIBOR;
- a public statement by the regulatory supervisor for the administrator of the benchmark, the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York or a court with similar insolvency authority over the administrator that the administrator has ceased or will cease to provide LIBOR; and
- a public statement by the regulatory supervisor for the administrator of the benchmark announcing that LIBOR is no longer representative.

In addition, ARRC language includes an "early opt-in" provision which would permit the loan to move to a new rate ahead of cessation (or pre-cessation as the case may be) upon a certain number of loans being executed or amended to incorporate a SOFR based rate as a benchmark rate (with a negative consent contemplated in this instance for majority lenders in multi-lender loans).

The LMA rate switch trigger events provided in the Rate Switch Agreement include:

- a public statement made by the administrator of the rate or its supervisor that such administrator is insolvent with no successor administrator to continue to provide the rate;
- publishing information in any order, decree, notice, petition or filing of or filed with a court, tribunal, exchange, regulatory authority or similar administrative, regulatory or judicial body reasonably confirming that the administrator of the rate is insolvent with no successor administrator to continue to provide the rate;
- the administrator of the rate publically announcing that it has ceased or will cease to provide the rate permanently or indefinitely with no successor administrator to continue to provide the rate;
- the supervisor of the administrator of the rate publicly announcing that the rate has been or will be permanently or indefinitely discontinued;
- the administrator of the rate or its supervisor publicly announcing that the rate may no longer be used; and
- the supervisor of the administrator of the rate publicly announcing or publishing information stating that the rate is no longer or, as of a specified future date will no longer be, representative of the underlying market or the economic reality that it is intended to measure and that such representativeness will not be restored (and as determined by such supervisor) made with awareness that any such announcement or publication will engage certain triggers for fallback

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

provisions in contracts which may be activated by any such pre-cessation announcement or publication.

In addition, the Rate Switch Agreement also provides for a “Backstop Rate Switch Date” which allows for the loan to switch to a successor rate on a specified fixed date agreed between the parties (which can vary according to currency). The mechanics provide for the loan to switch upon the earlier to occur of the Backstop Rate Switch Date and the rate switch trigger event, such that the loan can switch to a successor rate ahead of cessation (or pre-cessation as the case may be) where the parties provide for this.

On March 5, 2021, the IBA stated that it would cease publication of all 35 LIBOR settings immediately after certain specified dates (see Question 4 above). On the same date, the FCA made a separate statement confirming that the IBA had notified them of its intent to cease providing the LIBOR settings and that the FCA would consult on requiring the IBA to produce certain LIBOR tenors on a synthetic basis, but confirmed that all 35 settings will either cease or will no longer be representative on specified dates in the announcement (see Question 4 above). The ARRC subsequently stated that these announcements constitute a “Benchmark Transition Event” with respect to all USD LIBOR settings under ARRC-recommended fallback language. Loans based on the Rate Switch Agreement may also contain language to clarify the effect of the FCA announcement (for example to specify that the FCA’s announcement constitutes a trigger event or specifying that the cessation of 1 week and 2 month USD LIBOR may not cause a trigger event in respect of the remaining USD LIBOR tenors).

The ARRC further noted that the FCA is considering whether, at a later date, it can and will use its powers to compel the administrator of LIBOR to publish 1-month, 3-month and/or 6-month USD LIBOR settings on a synthetic basis for a period of time after June 30, 2023 and that the FCA had made it clear that, if it were to take this action, those USD LIBOR settings would not be representative after June 30, 2023. In respect of this, the ARRC stated that, for the purposes of clarity, a statement by the FCA immediately after June 30, 2023 that any remaining USD LIBOR settings are no longer representative would also result in a “Benchmark Transition Event” under ARRC-recommended fallback language, but that this would not impact the spread adjustments that have been set based on the March 5, 2021 announcements (see the ARRC FAQs Regarding the Occurrence of a Benchmark Transition Event, published on March 8, 2021).

Immediately after December 31, 2021 each of the 30 LIBOR Settings ceased or became permanently non-representative. We encourage you to review the terms of your loan and consider whether a fallback rate is now effective. You should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

39. What are “benchmark conforming changes”?

The ARRC-recommended fallback language includes the concept of “benchmark conforming changes”. Such changes are needed to address the fact that RFRs do not operate in the same way as IBORs, particularly those that use an in-arrears formulation. Amending an IBOR-based loan agreement to reflect RFRs will require a number of technical, administrative and operational changes to switch to the new RFR rates. These are sometimes referred to as conventions.

Some examples include changes to the definition of “ABR” (US only), “Business Day,” “Interest Period,” the timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods that might be necessary for calculating interest and the applicability of breakage provisions. In the ARRC-recommended fallbacks language, changes like this can be implemented by the lender or agent (in multi-lender loans) without the consent of other counterparties.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

You should review your documentation carefully and seek independent professional advice (legal, tax, accounting, financial or other) to understand the consequences of cessation their impact on your loan agreements.

40. What should I do if I would like to discuss how the RFRs apply to my loan agreements with Citi?

You should contact CPB@ibor.citi.com in the first instance or contact your Private Banker who will be able to direct you to a Specialist to review your specific query.

THE BENCHMARKS SUPPLEMENT

41. What is the Benchmarks Supplement?

The ISDA Benchmarks Supplement (the “Benchmarks Supplement”) was published by ISDA in September 2018 primarily to facilitate compliance with certain benchmark requirements under the EU BMR.

In summary, the Benchmarks Supplement enables the parties to certain derivative contracts to comply with certain requirements of the EU BMR by introducing robust fallbacks into the contract which apply in the event a benchmark referred to in that contract materially changes or ceases to be provided, or is no longer authorised under Applicable Law.

The Citi entities below have adhered to the BMS Protocol and exchanged questionnaires with counterparties on ISDA Amend, where possible, so that new and legacy transactions with clients under existing master agreements have robust fallback language:

- Citibank Europe Plc., LEIN1FBEDJ5J41VKZLO2475
- Citibank, National Association, LEIE57ODZWZ7FF32TWEFA76
- Citigroup Global Markets Europe AG. LEI 6TJCK1B7E7UTXP528Y04
- Citigroup Global Markets Ltd. , LEIXKZZ2JZF41MRHTR1V493

Citi has currently elected to incorporate the Benchmarks Supplement into new and legacy transactions under existing master agreements. In summary, this means that legacy transactions with Citi under existing master agreements will be amended to incorporate the Benchmarks Supplement, to the extent Citi’s counterparty has also adhered to the Benchmarks Supplement, exchanged applicable questionnaires and similarly elected to amend legacy transactions.

For further information please refer to ISDA’s [Benchmarks Supplement FAQs](#).

42. What is the BMS Protocol?

The ISDA 2018 Benchmarks Supplement Protocol, published on December 10, 2018 (the “BMS Protocol”), was created to allow market participants to incorporate the ISDA Benchmarks Supplement into relevant transactions under existing master agreements quickly and efficiently by adhering to the Protocol and exchanging Questionnaires.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

43. How does the Benchmarks Supplement interact with the IBOR Supplement and the IBOR Protocol?

The Benchmarks Supplement covers a much broader range of benchmarks than the IBOR Protocol and IBOR Supplement. Where contracts incorporate both the Benchmarks Supplement and the IBOR Supplement, the IBOR Supplement will take precedence following an index cessation event and the fallbacks under the IBOR Supplement will constitute 'Priority Fallbacks' under the Benchmarks Supplement. This means that following the FCA LIBOR Announcement on 5 March 2021, Index Cessation Events (under the IBOR Supplement) have occurred with respect to all Relevant LIBORs under contracts incorporating both the Benchmarks Supplement and the IBOR Supplement.

BMS PROTOCOL ADHERENCE

44. Who can adhere to the BMS Protocol?

The BMS Protocol is open to adherence by any entity regardless of where it may be domiciled or the regulations to which it is subject. You may adhere individually in your own capacity or as an agent on behalf of your clients. You do not have to be an ISDA member to adhere to the BMS Protocol.

45. What should I do if I do not want to adhere to the BMS Protocol?

If you would prefer not to adhere to the BMS Protocol and instead implement the Benchmarks Supplement by way of bilateral agreement, please contact iborq@citi.com.

46. How do I adhere to the BMS Protocol?

To adhere to the BMS Protocol you will need to send an adherence letter to ISDA.

You can access the form of the adherence letter on the [ISDA website](#). However, unlike some ISDA protocols where amendments are effected solely by delivery of an adherence letter by each party, the BMS Protocol requires that adherents must also exchange completed questionnaires for amendments to be effective between them.

You can exchange these questionnaires with Citi via ISDA and IHS Markit's technology-based solution, "ISDA Amend", or through the exchange of soft copy versions by email to iborq@citi.com. The questionnaire allows you to make certain elections, such as whether legacy transactions under existing master agreements should be amended to incorporate the Benchmarks Supplement or only new transactions under existing master agreements.

The use of ISDA Amend is Citi's preferred method of election as it ensures robust industry-wide fallback language is put in place, helping to protect clients and their assets. We would encourage you to review the terms of the BMS Protocol and consider whether the BMS Protocol will work for your remediation purposes. You should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Please see the [ISDA website](#) for additional information in relation to the BMS Protocol and the relevant questionnaire forms.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Further information on ISDA Amend can be found [here](#).

47. What about benchmark user transactions with Citi that are not documented under an ISDA master agreement?

The BMS Protocol was created to allow market participants to include the terms of the ISDA Benchmarks Supplement in covered confirmations which incorporate, or which are entered into under a master agreement which incorporates, one or more of the following ISDA definitional booklets:

- 2006 ISDA Definitions;
- 2002 ISDA Equity Derivatives Definitions;
- 1998 FX and Currency Option Definitions; and
- 2005 ISDA Commodity Definitions.

Further information on transactions and agreements that would be captured by the BMS Protocol can be found [here](#).

Agreements which are not covered by the BMS Protocol and in which benchmarks are used may also need to be updated with more robust fallback language to satisfy regulatory requirements.

To the extent that this applies to you, please email iborg@citi.com to discuss how to incorporate the required fallback language.

48. What should I do if I would like to discuss this topic with Citi?

You should contact iborg@citi.com in the first instance.

LEGISLATIVE SOLUTIONS

49. Are legislative solutions being considered to help the market transition away from IBORs?

Legislative measures have been developed and passed into law in a number of jurisdictions.

Legislation has been passed in the United States at the federal level¹⁸. The EU¹⁹ and UK²⁰ have also passed legislation.

¹⁸ Division U – Adjustable Interest Rate (LIBOR) Act ([link here](#)) of the Consolidated Appropriations Act, 2022, passed by the US Congress and signed by the President on March 15, 2022.

¹⁹ [EU \(Regulation \(EU\) 2021/168 of the European Parliament and of the Council amending Regulation \(EU\) 2016/1011\(EU BMR\), dated 10 February 2021 \(and effective from 13 February 2021\)\)](#)

²⁰ <https://www.legislation.gov.uk/ukpga/2021/22/contents/enacted>

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

Generally, these legislative solutions are designed to target “tough legacy” contracts i.e. LIBOR contracts which: (1) have either no LIBOR fallbacks or no suitable LIBOR fallbacks and (2) which are difficult or impossible to transition (either by active remediation to a new rate or by the inclusion of suitable fallbacks). To the extent a LIBOR contract can be practically amended, “active remediation” is preferred to relying on the legislation. This is in line with regulatory expectations.

U.S. Federal Legislation

The U.S. federal legislation (the “LIBOR Act”) involves replacing USD LIBOR with a Federal Reserve Board (the “Board”) recommended SOFR-based benchmark replacement rate (which can differ by contract / product type) (the “Board Replacement”) by operation of law in contracts where there is no fallback or where a fallback identifies neither a specific alternative rate nor a determining party.

On December 16, 2022, the Board adopted a final rule (the “Final Rule”)²¹ which contains the Board Replacement for each set of in-scope contracts, as follows:

- Derivatives will use the “Fallback Rate (SOFR)” identified in the IBOR Protocol²²;
- All other in-scope contracts (other than consumer loans, Federal Home Loan Bank advances, Federal Housing Finance Agency (FHFA)-regulated-entity contracts, or FFELP ABSs as described below), will use:
 - For overnight USD LIBOR, SOFR plus the relevant static spread adjustment in the LIBOR Act;
 - For 1-month, 3-month, 6-month, and 12-month USD LIBOR, the corresponding CME Term SOFR plus the relevant static spread adjustment in the LIBOR Act.
- Consumer Loans will also use SOFR (for overnight USD LIBOR) and the corresponding CME Term SOFR (for 1-month, 3-month, 6-month, and 12-month USD LIBOR) but will have a one year “transition spread adjustment” that transitions linearly for each business day during that one-year period.
- Different Benchmark Replacements apply to Federal Family Education Loan Program asset backed securitizations (FFELP ABS) and FHFA-regulated entity contracts.

The LIBOR Act also:

- overrides dealer-poll fallbacks for USD LIBOR and any fallback to the last USD LIBOR fixing;
- contains a safe harbor from liability for the selection and use of the recommended benchmark replacement;

²¹ The Final Rule is available [here](#). The Final Rule will be effective 30 days after publication of the Final Rule in the Federal Register.

²² Please see question 21 for further information regarding the IBOR Protocol.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

- provides that a party to a contract will be prohibited from declaring a breach or refusing to perform as a result of another party's selection or use of the recommended benchmark replacement rate;
- identifies specific conforming changes to be applied when the Board Replacement becomes the benchmark replacement for a LIBOR contract; and
- supersedes any similar State or local laws, rules or regulations of the United States.

The LIBOR Act does not affect contracts governed by laws other than the laws of the United States or override fallbacks to non-USD LIBOR rates (e.g. PRIME or FedFunds).

Notwithstanding the U.S. federal legislation, to the extent a LIBOR contract can be practically amended, "active remediation" is preferred to relying on the legislation. This is in line with regulatory expectations. Citi will be reaching out to you with respect to remediation of your LIBOR-linked loans or derivatives issued from Citibank N.A. or its affiliates.

You may also hold investment products (such as fixed income securities, structured products, securitized bonds or notes, exchange traded and listed funds, municipal bonds, or preferred stock) which may be tied to LIBOR or LIBOR may be used to determine the benchmark rate for these investment products. For each of these investment products, the issuer's prospectus, offering document or agreement should describe the investment product's benchmark rate and, if it is LIBOR, how a replacement rate may be determined. Ultimately, each issuer of impacted investment products will determine the transition plan for their securities based on the provisions of the existing contract and applicability of any legislation solutions such as U.S. federal legislation.

EU Legislation

The EU legislation involves replacing the relevant rate with a replacement rate by operation of law. The relevant replacement rates have now been selected or recommended in accordance with the terms of the legislation for the EU legislation (in respect of CHF LIBOR and EONIA only), as follows. In October 2021, the final implementing acts for the EU legislation were published in the Official Journal of the EU²³:

- In respect of CHF LIBOR - to designate "last reset" (i.e. of the relevant period preceding the interest period concerned) compounded SARON plus the ISDA spread adjustment as the replacement for 1-month, 3-month, 6-month and 12-month CHF LIBOR. Note that the implementing act replaces 6-month and 12-month CHF LIBOR with the SARON 3-month Compound Rate. The implementing act applied as of January 1, 2022; and
- In respect of EONIA - to designate EuroSTR + 8.5bps as the statutory replacement rate for EONIA as of January 3, 2022.

UK Legislation

²³ See Commission Implementing Regulation (EU) 2021/1847 in respect of CHF LIBOR and Commission Implementing Regulation (EU) 2021/1848 in respect of EONIA.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

In contrast to the U.S. and EU legislation, the UK legislation permits the FCA to direct a methodology change for LIBOR and, consequently, certain LIBOR settings²⁴ continue to exist with a modified methodology (so called “synthetic LIBOR”²⁵). These settings are published on the same screen page currently referenced by contracts globally. Under the UK legislation, the FCA is also able to prohibit use of “synthetic LIBOR” (for supervised entities) whilst permitting temporary²⁶ limited continued use in certain contracts (i.e. legacy contracts).

We encourage you to review relevant legislation, consider the impact of such legislation on your contracts and obtain professional independent advice (legal, financial or otherwise) where necessary.

²⁴ 3-month setting for GBP LIBOR which the FCA intends to require publication of until end March 2024. The FCA has also confirmed the publication of synthetic 1-month, 3-month, and 6-month USD LIBOR settings from June 30, 2023 and this is expected to continue until September 30, 2024. Synthetic yen LIBOR ceased permanently at the end of 2022 and the 1-month and 6-month settings for GBP LIBOR ceased publication at end March 2023.

²⁵ Please see questions 11-15 for further information regarding synthetic LIBOR.

²⁶ The FCA has [announced](#) that it will no longer compel IBA to publish (i) synthetic 1-month and 6-month GBP LIBOR after March 2023, and (ii) synthetic 3-month GBP LIBOR after March 2024. Synthetic yen LIBOR ceased permanently at the end of 2022.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

DEFINITIONS

"**ABS-SFEMC**" means the Association of Banks in Singapore and the Singapore Foreign Exchange Market Committee.

"**AONIA**" means the AUD Overnight Index Average.

"**ARRC**" means the Alternative Reference Rates Committee, the working group established by the Federal Reserve that has identified SOFR as the preferred replacement RFR in respect of USD LIBOR.

"**ASX**" means the Australian Securities Exchange.

"**Australian Financial Markets Association**" means one of the three committees working on benchmark reform which has identified AONIA as the preferred replacement RFR in respect of BBSW.

"**Australian Securitization Forum**" means one of the three committees working on benchmark reform which has identified AONIA as the preferred replacement RFR in respect of BBSW.

"**BBSW**" means the bank bill swap interest rate, a term rate commonly used for Australian Dollar transactions and which is administered by the ASX.

"**Belgian Financial Services and Markets Authority**" means the national competent authority responsible for the authorization and supervision of EMMI as administrator of EURIBOR.

"**Bloomberg**" means Bloomberg Index Services Limited.

"**Canadian Alternative Reference Rate Working Group**" means the working group including the Bank of Canada which has established two working subgroups, the Transition Subgroup and the Term Rate Subgroup.

"**Canadian Dollar Offered Rate**" is a term rate commonly used in transactions denominated in Canadian dollars.

"**Canadian Overnight Repo Rate Average**" means the reference rate in Canadian dollar financial products currently proposed by the Canadian Alternative Reference Rate Working Group as the replacement RFR in respect of the Canadian Dollar Offered Rate.

"**Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks**" is the working group established by the Bank of Japan that is consulting on alternative rates for JPY LIBOR.

"**EU 27**" means the remaining 27 member states of the European Union following the UK's withdrawal from the European Union.

"**EU BMR**" means the Benchmarks Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds

"**EONIA**" means the Euro Overnight Index Average.

"**EuroSTR**" means the Euro short-term rate.

"**FSMA**" means the Belgian Financial Services and Markets Authority.

"**FSB**" means the Financial Stability Board.

"**HIBOR**" means the Hong Kong Interbank Offered Rate.

"**Hong Kong Treasury Markets Association**" means the working group which has identified the Hong Kong Dollar Overnight Index Average as the preferred replacement RFR in respect of HIBOR.

"**IBA**" means ICE Benchmark Administration.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

"**ISDA**" means the International Swaps and Derivatives Association.

"**International Organization of Securities Commissions**" or "**IOSCO**" means the international body formed of securities regulators from around the world which develops, implements and promotes adherence to internationally recognized standards for securities regulation.

"**LIBOR**" means the London Interbank Offered Rate.

"**National Working Group on Swiss Franc Reference Rates**" means the working group established by the Swiss National Bank which has identified SARON as the preferred replacement RFR in respect of CHF LIBOR.

"**MIFOR**" means the Mumbai Interbank Forward Offer Rate.

"**MMSR Regulation**" means the Money Markets Statistical Reporting Regulation (EU) No 1333/2014 which entered into force on 1 January 2015 and which regulates the reporting of money market data in the EU.

"**PHIREF**" means the implied Peso interest rate derived from done deals in the interbank foreign exchange swap market. The PHIREF is used as the benchmark for the reset value for the peso floating leg of an Interest Rate Swap.

"**Protocol Covered Documents**" has the meaning given to it in the IBOR Protocol.

"**Relevant IBOR**" has the meaning given to it in the IBOR Protocol.

"**Relevant LIBOR**" means each of Sterling LIBOR, Swiss Franc LIBOR, USD LIBOR, Euro LIBOR and Japanese Yen LIBOR.

"**SARON**" means the Swiss Average Rate Overnight, the RFR identified as the preferred replacement for CHF LIBOR by the National Working Group on Swiss Franc Reference Rates.

"**SOFR**" means the Secured Overnight Funding Rate.

"**SONIA**" means the Sterling Overnight Index Average.

"**SOR**" means the Singapore Dollar Swap Offer Rate, an implied interest rate determined by examining the spot and forward foreign exchange rate between the USD and SGD and the appropriate US dollar interest rate for the term of the forward.

"**Supplement 70**" means supplement number 70 to the 2006 ISDA Definitions.

"**Supplement 75**" means supplement number 75 to the 2006 ISDA Definitions.

"**Supplement 82**" means supplement number 82 to the 2006 ISDA Definitions.

"**THBFIX**" means the synthetic rate for deposits in Thai Baht, which represents the effective cost of borrowing the Thai Baht synthetically by borrowing the US dollar for the same maturity, and swapping out the US dollar in return for the Thai Baht.

"**TONA**" means the Tokyo Overnight Average Rate, the RFR being consulted on by the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks as a potential alternative to JPY LIBOR.

"**UK BMR**" means the UK version of the EU BMR.

"**Working Group on Euro Risk Free Rates**" is the working group established by the ECB, ESMA, FSMA and the European Commission that was established to identify and recommend risk-free rates that could serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area, such as EONIA and EURIBOR.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

"Working Group on Sterling Risk Free reference rates" means the working group established by the Bank of England which has identified SONIA as the preferred replacement RFR in respect of GBP LIBOR.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.

INVESTMENT PRODUCTS: NOT FDIC INSURED • NOT CDIC INSURED • NOT
GOVERNMENT INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

Citi Private Bank is a business of Citigroup Inc. ("Citigroup"), which provides its clients access to a broad array of products and services available through bank and non-bank affiliates of Citigroup. Not all products and services are provided by all affiliates or are available at all locations.

In the U.S., investment products and services are provided by Citigroup Global Markets Inc. ("CGMI"), member FINRA and SIPC, and also Citi Private Advisory, LLC ("CPA"), member FINRA and SIPC and Citi Global Alternatives, LLC ("CGA"). CGMI accounts are carried by Pershing LLC, member FINRA, NYSE, SIPC. CGMI, CPA, CGA and Citibank, N.A. are affiliated companies under the common control of Citigroup.

Outside the U.S., investment products and services are provided by other Citigroup affiliates. Investment Management services (including portfolio management) are available through CGMI, CGA, Citibank, N.A. and other affiliated advisory businesses.

In Canada, Citi Private Bank is a division of Citibank Canada, a Schedule II Canadian chartered bank. References herein to Citi Private Bank and its activities in Canada relate solely to Citibank Canada and do not refer to any affiliates or subsidiaries of Citibank Canada operating in Canada. Certain investment products are made available through Citibank Canada Investment Funds Limited ("CCIFL"), a wholly owned subsidiary of Citibank Canada. Investment Products are subject to investment risk, including possible loss of principal amount invested. Investment Products are not insured by the CDIC, FDIC or depository insurance regime of any jurisdiction and are not guaranteed by Citigroup or any affiliate thereof.

This document is for information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any securities to any person in any jurisdiction. The information set out herein may be subject to updating, completion, revision, verification and amendment and such information may change materially.

Citigroup, its affiliates and any of the officers, directors, employees, representatives, or agents shall not be held liable for any direct, indirect, incidental, special, or consequential damages, including loss of profits, arising out of the use of information contained herein, including through errors whether caused by negligence or otherwise.

CCIFL is not currently a member, and does not intend to become a member of the Mutual Fund Dealers Association of Canada ("MFDA"); consequently, clients of CCIFL will not have available to them investor protection benefits that would otherwise derive from membership of CCIFL in the MFDA, including coverage under any investor protection plan for clients of members of the MFDA.

© 2023 Citigroup Inc., All Rights Reserved. Citi, Citi and Arc Design and other marks used herein are service marks of Citigroup Inc. or its affiliates, used and registered throughout the world.

These FAQs are not intended to be, and should not be relied upon, as a representation, warranty or other assurance or as financial, legal, tax, accounting or other advice. These FAQs are not intended to be comprehensive and material developments may have occurred since they were last updated. This document was first prepared prior to the date indicated above and may not have been updated to reflect recent market developments. It contains information on IBOR and benchmark reform that is intended for the use of Citi clients only and it should not be shared with third parties. The information this document contains is general and does not constitute advice. Citi accepts no responsibility or liability to you with respect to the use of this document or its contents. If you have questions in relation to the contents of this document, you should consider seeking independent professional advice (legal, tax, accounting, financial or other) as appropriate.