REFINITIV BENCHMARK SERVICES (UK) LIMITED

USD IBOR INSTITUTIONAL CASH FALLBACKS BENCHMARK

USD IBOR CONSUMER CASH FALLBACKS BENCHMARK

BENCHMARK STATEMENT

Effective Date: 03 July 2023

Refinitiv Document Classification: Public





Contents

1.	INTRODUCTION	3
	OVERVIEW OF METHODOLOGY	
	POTENTIAL LIMITATIONS OF THE BENCHMARKS	
	METHODOLOGY CHANGES AND BENCHMARK CESSATION	
	FURTHER INFORMATION	
	: CLIMATE RELATED DISCLOSURES	
DISCL A	MER	12

© Refinitiv 2023. All Rights Reserved.

Refinitiv, by publishing this document, does not guarantee that any information contained herein is or will remain accurate or that use of the information will ensure correct and faultless operation of the relevant service or associated equipment. Neither Refinitiv, nor its agents or employees, shall be held liable to any user or end user for any loss or damage (whether direct or indirect) whatsoever resulting from reliance on the information contained herein.

This document may not be reproduced, disclosed, or used in whole or part without the prior written consent of Refinitiv.

1. INTRODUCTION

The USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark (together the "Benchmarks") were launched on November 26th 2021 (USD IBOR Institutional Cash Fallbacks), January 3rd 2022 (USD IBOR Consumer Cash Fallbacks 1-Week and 2-Month) and July 3rd 2023 (remaining USD IBOR Consumer Cash Fallbacks) to provide fallback rates for existing financial products such as adjustable bilateral business loans, floating rate notes, securitizations, syndicated loans, adjustable rate mortgages and variable rate private student loans that currently reference US dollar (USD) LIBOR. ICE LIBOR® and LIBOR® are registered trademarks of ICE Benchmark Administration Limited (IBA) and are used by Refinitiv with permission under licence by IBA.

The UK Financial Conduct Authority (FCA) has confirmed that LIBOR settings including USD LIBOR settings will either cease to be provided by any administrator or no longer be representative¹:

- Immediately after December 31st 2021, in the case of all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month US dollar settings, and
- Immediately after June 30th 2023, in the case of the remaining US dollar settings

On March 17th 2021, the Alternative Reference Rates Committee (ARRC) announced² that it had selected Refinitiv to publish its recommended spread adjustments and spread-adjusted rates for cash products that transition away from USD LIBOR. The Benchmarks provide such spread adjustments and spread-adjusted rates for institutional cash products and for consumer cash products.

The Benchmarks are fallback rates for USD LIBOR in institutional and consumer cash products that are based on SOFR³ and SOFR averages⁴ published by the Federal Reserve Bank of New York or on the CME Term SOFR Reference Rates together, in all instances, with a spread adjustment. The spread adjustment is the average USD LIBOR® to SOFR spread calculated in accordance with the ISDA USD LIBOR® fallback rate methodology (Spread Adjustment). Following the FCA announcement regarding the cessation and non-representativeness of USD LIBOR settings, the Spread Adjustment for each USD LIBOR tenor was permanently fixed as of March 5th 2021.

The USD IBOR Consumer Cash Fallbacks 1-Week and 2-Month included a transition period from Monday January 3rd 2022 to Friday December 30th 2022 during which the Spread Adjustment was a linearly interpolated daily spread derived using an initial spread and the final spread calculated in accordance with the ISDA USD LIBOR fallback rate methodology. The remaining USD IBOR Consumer Cash Fallbacks include a transition period from Monday July 3rd 2023 to Friday June 28th 2024 during which the Spread Adjustment is a linearly interpolated daily spread using an initial spread and the final spread calculated in accordance with the ISDA USD LIBOR fallback rate methodology.

The Secured Overnight Financing Rate, SOFR, the SOFR averages and the CME Term SOFR Reference Rate are the only dynamic input data for the USD IBOR Institutional Cash Fallbacks benchmark. SOFR is a robust trade-based overnight benchmark representing repo transactions secured with US Treasuries. It is administered by the Federal Reserve Bank of New York using a volume weighted median methodology and typically represents transactions with

¹ www.fca.org.uk/publication/documents/future-cessation-loss-representativeness-libor-benchmarks.pdf

² www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/20210317-press-release-Spread-Adjustment-Vendor-Refinitiv.pdf

³ www.newyorkfed.org/markets/reference-rates/sofr

⁴ <u>www.newyorkfed.org/markets/reference-rates/sofr-averages-and-index</u>

an aggregate volume at or in excess of USD900 billion per day as of November 2021. The CME Term SOFR Reference Rate is a benchmark under the UK Benchmark Regulation.

Increased adoption of the Benchmarks is anticipated as the non-representativeness date for the most widely used USD LIBOR tenors approaches. In its Progress Report⁵ published March 2021, the ARRC estimated that there is around USD5.1 trillion of cash products that currently reference USD LIBOR that will mature after June 30th 2023. This comprises USD2.3 trillion of business loans, USD0.9 trillion of consumer loans, USD0.3 trillion of bonds and USD1.6 trillion of securitizations.

The ARRC noted in its Progress Report published March 2021 that over the preceding two years, use of the ARRC's recommended fallbacks or similar language has been fairly prevalent in most new issuances of cash products. To handle legacy financial products that lack suitable fallback language for a permanent cessation or non-representativeness of USD LIBOR, new Federal Legislation - the LIBOR Act – has been introduced. Under this legislation, contracts governed by US law adopt the Federal Reserve Board's selected benchmark replacement on July 3rd 2023.

Refinitiv Benchmark Services (UK) Limited (RBSL) is the administrator of the USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark. The Benchmarks are subject to the UK Benchmark Regulation (BMR). RBSL has adopted policies and procedures to comply with these regulations. As of their respective launches, the USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark are considered non-significant benchmarks for the purposes of the BMR.

The USD IBOR Institutional Cash Fallbacks benchmark comprises four types of rates: In-Advance, In-Advance (30-day Average SOFR), In-Arrears and Term. The USD IBOR Consumer Cash Fallbacks benchmark comprises two types of rate: In-Advance and Term.

The USD IBOR Institutional Cash Fallbacks (In-Advance) consist of three tenors (1-, 3- and 6-months) and are the sum of the SOFR averages (30-, 90- and 180-days) and the Spread Adjustment of corresponding tenor. The In-Advance Fallbacks are published on every day that the Federal Reserve Bank of New York publishes the SOFR averages.

The USD IBOR Institutional Cash Fallbacks (In-Advance, 30-day Average SOFR) consist of four tenors (1-, 3-, 6- and 12-months) and are the sum of the 30-day SOFR average and the Spread Adjustment of tenor corresponding to the fallback rate. The In-Advance Fallbacks (30-day Average SOFR) are published on every day that the Federal Reserve Bank of New York publishes the SOFR averages.

The USD IBOR Consumer Cash Fallbacks (In-Advance) consist of five tenors (1-week, 1-, 2-, 3- and 6-months) and are the sum of the relevant SOFR averages tenor and the corresponding Spread Adjustment for the same tenor.

The USD IBOR Institutional Cash Fallbacks (In-Arrears) consist of seven tenors (O/N, 1-week and 1-, 2-, 3-, 6- and 12-months) and are the sum of (i) the average of SOFR over an interest accrual period corresponding to a USD LIBOR accrual period (except that for the O/N tenor, a single SOFR value is used) and (ii) the Spread Adjustment of corresponding tenor. A variety of lookback and lockout versions together with versions based on compounded and simple averages of SOFR are included in the Benchmark. Each In-Arrears Fallback is published toward the end of the interest accrual period that follows the publication of the corresponding USD LIBOR setting once the final required daily SOFR rate has been published by the Federal Reserve Bank of New York.

⁵ www.newvorkfed.org/medialibrary/Microsites/arrc/files/2021/USD-LIBOR-transition-progress-report-mar-21.pdf

The USD IBOR Institutional Cash Fallbacks (Term) consist of four tenors (1-, 3-, 6- and 12 months) and are the sum of (i) the CME Term SOFR Reference Rate and (ii) the Spread Adjustment of corresponding tenor.

The USD IBOR Consumer Cash Fallbacks (Term) consist of four tenors (1-, 3-, 6- and 12 months) and are the sum of (i) the CME Term SOFR Reference Rate and (ii) the Spread Adjustment of corresponding tenor.

The USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark are considered to be reliable fallback rates provided that the Federal Reserve Bank of New York continues to publish SOFR and the SOFR averages and CME Group Benchmark Administration Limited continues to publish the CME Term Reference Rates.

This benchmark statement shall be reviewed at least every two years, or whenever there is a material change to either the type of the Benchmarks or to the Methodology used in the determination of the Benchmarks.

2. OVERVIEW OF METHODOLOGY⁷

The three USD IBOR Institutional Cash Fallbacks (In-Advance) are the sum of the SOFR averages (30-, 90- and 180-days) and the Spread Adjustment of corresponding tenor.

The four USD IBOR Institutional Cash Fallbacks (In-Advance, 30-day Average SOFR) are the sum of the 30-day SOFR average and the Spread Adjustment of tenor corresponding to the fallback rate.

The USD IBOR Consumer Cash Fallbacks (In-Advance) 1-Week and 2-Month benchmarks are the sum of the 30-day SOFR average and the Spread Adjustment for the 1-week and 2-months tenors. During the transition period for the USD IBOR Consumer Cash Fallbacks (In Advance) 1-Week and 2-Month benchmarks from Monday January 3rd 2022 to Friday December 30th 2022, the Spread Adjustment was a linearly interpolated daily spread derived using an initial spread and the final spread calculated in accordance with the ISDA USD LIBOR® fallback rate methodology.

The USD IBOR Consumer Cash Fallbacks (In-Advance) 1-, 3- and 6-month benchmarks are the sum of the 30-, 90- and 180-day SOFR averages respectively and the Spread Adjustment of corresponding tenor. During the transition period for the USD IBOR Consumer Cash Fallbacks (In Advance) 1-, 3- and 6-Month benchmarks from Monday July 3rd 2023 to Friday June 28th 2024, the Spread Adjustment is a linearly interpolated daily spread derived using an initial spread and the final spread calculated in accordance with the ISDA USD LIBOR® fallback rate methodology.

Daily input data for the In-Advance Fallbacks are the SOFR averages and, for the Consumer In-Advance Fallbacks, the interpolated daily spread. The In-Advance Fallbacks are published at approximately 08:20am ET on every day that the Federal Reserve Bank of New York publishes the SOFR averages.

The USD IBOR Institutional Cash Fallbacks (In-Arrears) consist of seven tenors (O/N, 1-week and 1-, 2-, 3-, 6- and 12-months) and are the sum of (i) the average of SOFR over an interest accrual period corresponding to a USD LIBOR accrual period (Adjusted SOFR) and (ii) the Spread Adjustment.

For the O/N tenor, the single SOFR rate corresponding to the date on which a USD LIBOR O/N setting is published (or, following the cessation date for a representative USD LIBOR O/N setting, the date on which a USD LIBOR O/N setting would typically be published) is used as the Adjusted SOFR.

⁷ For further information and definitions, please to refer to the methodology at www.refinitiv.com/USDIBORCashFallbacks

For the 1-week to 12-months tenors, an interest accrual period following the date on which a USD LIBOR setting is published (or, following the cessation date for a representative USD LIBOR, the date on which a USD LIBOR setting would typically be published i.e. a London business day) and is defined as from and including the usual settlement date for a USD LIBOR-type deposit up to and including the maturity of that deposit. The start date is two London business days following the publication of the USD LIBOR setting subject to that date being both a London and SIFMA business day (and if it is not, the start date is rolled forward to the first subsequent date that is). The end date is then the start date plus the tenor of the USD LIBOR setting. For the 1-week tenor, if the end date is not both a London and SIFMA business day, it is rolled forward to the first subsequent day that is. For the 1-month-12-month tenors if the end date is not both a London and SIFMA business day, it is adjusted to the nearest day that is both a London and SIFMA business day subject to the modified following day adjustment convention.

For the 1-week to 12-months tenors, two Adjusted SOFR values are calculated for the interest accrual period: (i) the compounded average of SOFR and (ii) the simple average of SOFR. Both are expressed on an annualized basis. The Adjusted SOFR can only be determined once the final required daily SOFR rate is published by the Federal Reserve Bank of New York and this occurs toward the end of an interest accrual period.

A variety of lookback and lockout versions of Adjusted SOFR are calculated according to tenor as follows:

Tenor	No Lookback or Lockout	Lookback (no observation shift)	Lookback (with observation shift)	Lockout
O/N	✓	-	-	-
1-Week	✓	3 days	2 and 3 days	2 and 3 days
1-Month	✓	3, 5 and 10 days	2, 3 and 5 days	2 and 3 days
2-Month	✓	3, 5 and 10 days	2, 3 and 5 days	2 and 3 days
3-Month	✓	3, 5 and 10 days	2, 3 and 5 days	2 and 3 days
6-Month	✓	3, 5 and 10 days	2, 3 and 5 days	2 and 3 days
12-Month	✓	3, 5 and 10 days	2, 3 and 5 days	2 and 3 days
Compounded Rates	6	16	17	12
Simple Rates	7	16	17	12
Total Rates	13	32	34	24

Once an Adjusted SOFR has been calculated in respect of a USD LIBOR setting of a specific tenor and publication date (or, following the cessation date for a representative USD LIBOR, the date on which a USD LIBOR setting would typically be published), the Spread Adjustment of corresponding tenor is added to produce the USD IBOR Institutional Cash Fallbacks (In-Arrears).

Daily input data for the In-Arrears Fallbacks is SOFR. Publication of a USD IBOR Institutional Cash Fallback (In-Arrears) setting occurs at approximately 08:20am ET on the day that the final required daily SOFR value is published by the Federal Reserve Bank of New York.

The four USD IBOR Institutional Cash Fallbacks (Term) benchmarks are the sum of the CME Term SOFR Reference Rates (1-, 3-, 6- and 12-months) and the Spread Adjustment of corresponding tenor. Daily input data for the Term Fallbacks are the CME Term Reference Rates. Publication of the USD IBOR Institutional Cash Fallbacks (Term)

settings occurs at approximately 08:20am ET following the publication of the CME Term Reference Rates at 06:00am ET on each business day in accordance with the SIFMA US holiday schedule.

The four USD IBOR Consumer Cash Fallbacks (Term) benchmarks are the sum of the CME Term SOFR Reference Rates (1-, 3-, 6- and 12-months) and the Spread Adjustment of corresponding tenor. During the transition period for the USD IBOR Consumer Cash Fallbacks (Term) 1-, 3-, 6- and 12-Month benchmarks from Monday July 3rd 2023 to Friday June 28th 2024, the Spread Adjustment is a linearly interpolated daily spread derived using an initial spread and the final spread calculated in accordance with the ISDA USD LIBOR® fallback rate methodology.

RBSL may at its discretion delay publication of the Benchmarks in the event that technical difficulties prevent receipt of input data or if RBSL has reason to believe that either the input data or the determination of the Benchmarks includes a potential error. In such cases, all reasonable efforts will be made to publish the Benchmarks at the earliest opportunity. If the potential error cannot be resolved or rectified, "No Fix" will be published for the affected tenor(s) and setting(s).

If following publication, a material error is identified in the input data or the determination of the benchmarks before 12:00 ET, Refinitiv shall endeavour to refix the benchmarks. A material error is one that results in a change of + or – 0.001 basis points to the published value. If there are any revisions to the published SOFR or the three compounded averages of daily SOFR with tenors of 30-, 90-, and 180-calendar days by the Federal Reserve Bank of New York at or prior to approximately 14:30 ET, Refinitiv will refix the benchmarks. Refinitiv will aim to refix the benchmarks in such scenarios by 16:00 ET. No refix will be issued after 23:59ET in either scenario.

The only interpolation used by RBSL when determining the Benchmarks is to determine the Spread Adjustment for the In-Advance USD IBOR Consumer Cash Fallbacks (excluding the 1-week and 2-month benchmarks) and the Term USD IBOR Consumer Cash Fallbacks during the transition period. No models or method of extrapolation are used by RBSL when determining the Benchmarks. Further, the Benchmarks are not determined by means of a portfolio of constituents. No discretion or expert judgment is exercised by RBSL in the determination of the Benchmarks.

The Benchmarks do not have corresponding ISINs. The Benchmarks are determined using readily available input data and are not based on contributed input data. Consequently, the Benchmarks are not any of the following types of benchmark as specifically defined by the BMR: regulated data, interest rate or commodity.

The Federal Reserve Bank of New York is the administrator of SOFR and the SOFR averages which themselves comprise multiple transactions among many market participants. CME Group Benchmark Administration Limited is the administrator of the CME Term SOFR Reference Rates which are derived using data from a liquid futures market. Consequently, RBSL considers that the use of such data ensures reliable and representative input data and avoids concentration of input data.

3. POTENTIAL LIMITATIONS OF THE BENCHMARKS

The primary potential limitation of the Benchmarks is the ongoing availability of SOFR and the SOFR averages from the Federal Reserve Bank of New York. SOFR and the SOFR averages are robust benchmarks based on a high volume of transactions in markets involving many participants. The USD IBOR Institutional Cash Fallbacks (Term) require the publication of the CME Term Reference Rates by CME Group Benchmark Administration Limited. The CME Term SOFR Reference Rate is a benchmark under the UK Benchmark Regulation.

The design of the Benchmarks is therefore resilient in a wide range of market conditions. However, technical problems or an extreme market event leading to a loss of liquidity in the underlying US Treasury repo market represented by SOFR or the SOFR futures market represented by the CME Term Reference Rates thereby inhibiting the availability of sufficient input data for the determination of the Benchmarks may result in a "No Fix" being issued.

4. METHODOLOGY CHANGES AND BENCHMARK CESSATION

The USD IBOR Institutional Cash Fallbacks benchmark Methodology has been adopted as being a reliable and resilient means for providing a benchmark that complies with the ARRC's requirements and serves as a fallback for USD LIBOR in institutional and consumer cash products.

The Methodology is subject to a review in order to assess its ongoing fitness for purpose on at least an annual basis. In the event that the review leads RBSL to believe that a change to the Methodology is required and that the change is material in its effect on the Benchmarks, a market consultation will be conducted in accordance with the RBSL Methodology Change Procedures⁸ in order to seek feedback from a range of stakeholders including the Federal Reserve and the ARRC (or any successor to the ARRC). RBSL will review all feedback and if following such review it resolves to proceed with the proposed change or changes, it will provide advance notice in accordance with the RBSL Methodology Change Procedures to users of the benchmark before implementing such change or changes.

Circumstances beyond the control of RBSL may necessitate an immediate change to or the cessation of the Benchmarks. Such circumstances include without limitation a loss of input data such that a reliable fallback for USD LIBOR cannot be determined.

In the event that an immediate change is required, RBSL will provide as much notice as is practicable and following such change will conduct an internal review of the Methodology.

If it becomes necessary to cease calculation and distribution of the Benchmarks, RBSL will implement the RBSL Benchmark Cessation Policy⁹. This includes conducting an analysis of the estimated usage of the Benchmarks and, where feasible, the selection of a credible alternative benchmark. In all cases, RBSL will take all reasonable steps to ensure that all users and other stakeholders are made aware as soon as possible of any intention or possible necessity to cease the Benchmarks.

Any material change to the Methodology or cessation of the Benchmarks may have an impact on any financial contract or financial instrument that references the Benchmarks or on the measurement of the performance of an investment fund that uses or refers to the Benchmarks. A material change to the Methodology may lead to a change in the economic reality represented by the Benchmarks and therefore to the economic exposure of any financial contract or financial instrument that references the Benchmarks. Any financial contracts or other financial instruments that reference the index or investment funds which use the Benchmarks to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the Benchmarks.

⁸ www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/rbsl-benchmark-methodology-change-cessation-policy.pdf

⁹ www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/rbsl-benchmark-methodology-change-cessation-policy.pdf

FURTHER INFORMATION 5.

Further information including the Methodology used in the determination of USD IBOR Institutional Cash Fallbacks benchmark and the USD IBOR Consumer Cash Fallbacks benchmark is available on Refinitiv's USD IBOR Cash Fallbacks website¹⁰. For any questions or queries about the Benchmarks, please contact RBSL at $index_queries@refinitiv.com.\\$

¹⁰ www.refinitiv.com/USDIBORCashFallbacks

ANNEX: CLIMATE RELATED DISCLOSURES

SECTION 1 – CONSIDERATION OF ESG FACTORS					
Item 1. Name of the benchmark administrator.	Refinitiv Benchmark Services (UK) Limited				
Item 2. Type of benchmark or family of benchmarks.	Other				
Choose the relevant underlying asset from the list provided in Annex II.					
Item 3. Name of the benchmark or family of benchmarks.	USD IBOR Institutional Cash Fallbacks				
	USD IBOR Consumer Cash Fallbacks benchmark				
Item 4. Are there in the portfolio of the benchmark administrator any EU Climate□ Yes ⊠ No					
Transition Benchmarks, EU Paris-aligned Benchmarks, benchmarks that					
pursue ESG objectives or benchmarks that take into account ESG factors?					
Item 5. Does the benchmark or family of benchmarks pursue ESG objectives?	□ Yes ⊠ No				
SECTION 3 – DISCLOSURE OF THE ALIGNMENT WITH THE OBJECTIVES	OF THE PARIS AGREEMENT				
Item 10. By the date of application of this Regulation, for significant equity and bond benchmarks, EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks, benchmark administrators shall also disclose the following information. By 31 December 2021, benchmark administrators shall, for each benchmark or, where applicable, each family of benchmarks, disclose the following information:					
(a)Does the benchmark align with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement;	e□ Yes ⊠ No				
Date on which information has last been updated and reason for the update:	July 03, 2023				
	Methodology updated to include USD IBOR				
	Consumer Cash Fallbacks (In-Advance) 1-				
	Month, 3-Month and 6-Month benchmarks and				
	the USD IBOR Consumer Cash Fallbacks				
	(Term) 1-Month, 3-Month, 6-Month and 12-				
	Month benchmarks				

DISCLAIMER

2023 © Refinitiv. All rights reserved.

USD IBOR Cash Fallbacks.

If you have not signed up to a licensing agreement with Refinitiv for the use of Refinitiv USD IBOR Cash Fallbacks ("Fallback Rates") you are not permitted to use Fallback Rates for any Commercial Purposes. "Commercial Purposes." includes but is not limited to (i) using Fallback Rates as a reference rate in financial instruments, financial contracts or for valuation and pricing activities, (ii) using Fallback Rates as an input into a benchmark or an index or otherwise, (iii) this website being accessed by or on behalf of the same group of companies at least once per month for 3 consecutive months for the purpose of viewing or downloading Fallback Rates. We may use your personal data in order to determine whether we believe you are using the Fallback Rates for Commercial Purposes and, if we reasonably believe this is the case, we may contact you in order to arrange for a licensing agreement to be put in place.

Refinitiv Limited, its affiliates ("Refinitiv") and its third party providers (together "Refinitiv and Third Parties") do not guarantee the quality, accuracy and/or completeness of the Fallback Rates or any data included therein. Refinitiv and Third Parties make no express or implied warranties, representations or guarantees concerning the accuracy or completeness of the Fallback Rates or as to the results to be obtained by you, or any other person or entity from the use of the Fallback Rates or any data included therein. In no event shall Refinitiv and Third Parties have any liability for any loss of profits, special, punitive, indirect, incidental, or consequential damages or loss, relating to any use of the Fallback Rates.

Third party accreditation/disclaimers

USD ICE LIBOR, which is administered and published by ICE Benchmark Administration Limited (IBA), serves as an input for the Fallback Rates. LIBOR®, ICE LIBOR® and ICE Benchmark Administration® are registered trade marks of IBA and/or its affiliates. USD ICE LIBOR, and the registered trade marks LIBOR, ICE LIBOR and ICE Benchmark Administration, are used by Refinitiv with permission under licence by IBA. The Fallback Rates are not sponsored, endorsed or provided by IBA or any of IBA's affiliates. IBA and its affiliates make no claim, predication, warranty or representation whatsoever, express or implied, as to the results to be obtained from any use of LIBOR® or Fallback Rates, or the appropriateness or suitability of LIBOR® or the Fallback Rates for any particular purpose to which it might be put, including with respect to the Fallback Rates. To the fullest extent permitted by applicable law, all implied terms, conditions and warranties, including, without limitation, as to quality, merchantability, fitness for purpose, title or noninfringement, in relation to LIBOR® and Fallback Rates, are hereby excluded and none of IBA or any of its affiliates will be liable in contract or tort (including negligence), for breach of statutory duty or nuisance, for misrepresentation, or under antitrust laws or otherwise, in respect of any inaccuracies, errors, omissions, delays, failures, cessations or changes (material or otherwise) in LIBOR® or Fallback Rates, or for any damage, expense or other loss (whether direct or indirect) you may suffer arising out of or in connection with LIBOR® or Fallback Rates or any reliance you may place upon it.

The Fallback Rates are subject to the Terms of Use posted at newyorkfed.org. The New York Fed is not responsible for publication of the Fallback Rates by Refinitiv, does not sanction or endorse any particular republication, and has no liability for your use. Refinitiv is not affiliated with the New York Fed. The New York Fed does not sanction, endorse, or recommend any products or services offered by Refinitiv.

CME Group Benchmark Information is used under license as a source of information for certain Refinitiv products. CME Group has no other connection to Refinitiv products and services and does not sponsor, endorse, recommend, or promote any Refinitiv products or services. CME Group has no obligation or liability in connection with the Refinitiv products and services. CME Group does not guarantee the accuracy and/or the completeness of any benchmark information licensed to Refinitiv and shall not have any liability for any errors, omissions, or interruptions therein. There are no third-party beneficiaries of any agreements or arrangements between CME Group and Refinitiv.w

Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in approximately 190 countries. It provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community - driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime.

