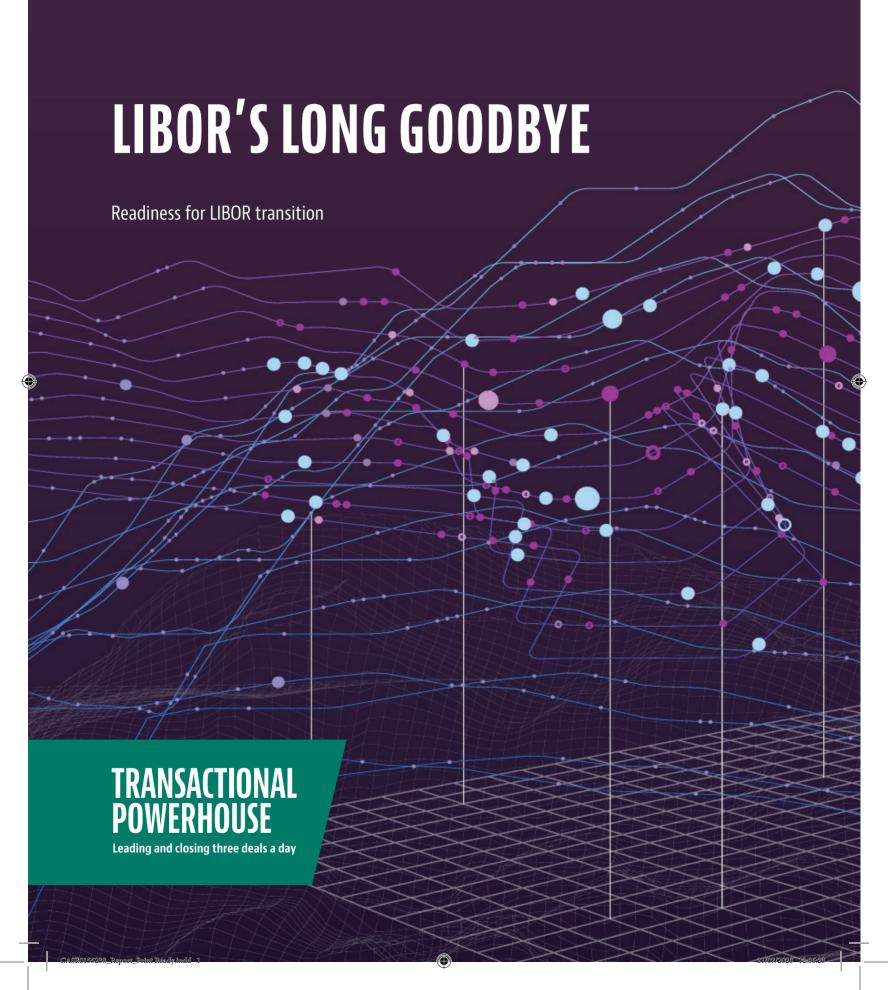
Baker McKenzie.



Introduction

As has been noted in a continuous drumbeat of warnings from major global, regional and local regulatory bodies, LIBOR is expected to go away at the end of 2021, when the UK Financial Conduct Authority (FCA) has announced it will withdraw support for the rate.

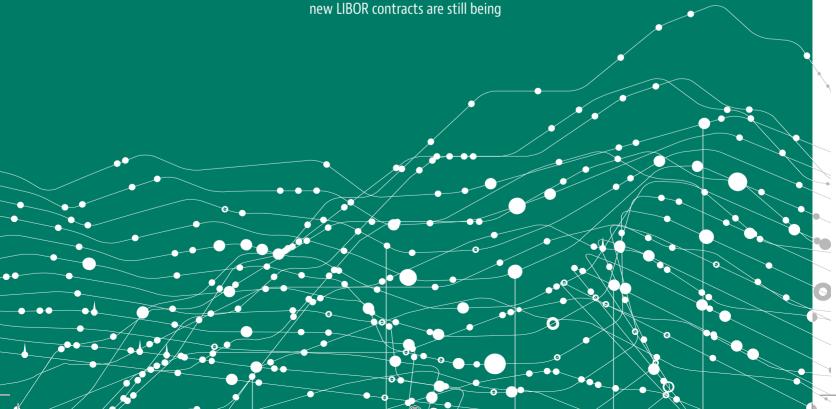
This deadline was first announced in a speech by Andrew Bailey, chief executive of the FCA, in July 2017. Since more than half of the roughly four-and-a-half-year-period that that speech gave until the deadline has now elapsed, it is perhaps fitting to consider how far markets have come in LIBOR transition, and how much further they need to go.

This report assesses the state of readiness for transition from LIBOR (and other interbank offered rates (IBORs)) to alternative interest rates in the jurisdictions of each LIBOR currency (and select other jurisdictions) with respect to derivatives, loans, bonds and securitizations.

This report also includes a matrix showing an assessment of readiness for transition by currency and product type. As we've noted previously, LIBOR transition is at different stages of progress in different jurisdictions and with respect to different financial products.

LIBOR transition remains a fundamental issue confronting financial markets. To date, transition has been slower than regulators would like, and considerable uncertainty still exists (and may well remain for some time). Time is growing shorter until the end of 2021, yet a large number of legacy contracts still refer to LIBOR, and new LIBOR contracts are still being

written, in each case that mature after 2021. The official sector of regulators and central banks continues to stress the need to develop robust alternative reference rates and robust contractual fallbacks in the event that LIBOR were to cease or become unrepresentative of underlying financial reality, and to transition to such alternative rates. Despite the uncertainty that exists, the FCA has stated firmly that the end-2021 deadline remains in effect, a statement it reiterated on 25 March 2020 in response to the Covid-19 pandemic.



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FSB 2019 Progress Report

In December 2019, the Financial Stability Board (FSB) stated that there had been "good progress" towards LIBOR transition in many derivatives and securities markets

"but progress in lending markets has been slower, and needs to accelerate. A wide range of new products based on . . . [risk-free rates (RFRs)] has been developed during 2019, while volumes in existing products have continued to grow. Use of compounded RFRs has rapidly become the market standard for new issuance of floating rate securities in some markets,

demonstrating how quickly these important changes can take place once the necessary conditions are established. Further foundational steps such as raising awareness of the need for transition across a wider range of cash market users are required to support transition in lending markets and will need to be prioritised in the coming year.

It may also be necessary to upgrade systems to support use of compounded RFRs in these markets."1.

The FSB stressed that LIBOR transition "now needs to accelerate, particularly in lending and securitisation markets."

¹ FSB, <u>Reforming major interest rate benchmarks</u>, <u>Progress report</u>, <u>December 2019</u>.







Adoption of RFRs in LIBOR currencies

Overnight RFRs have been identified for each LIBOR currency (and for the currencies of many other significant IBORs). Market participants can trade in overnight RFRs in each LIBOR currency now.

Further, there now exist futures contracts on exchanges for the RFRs for Dollars, Sterling, euro and Swiss Francs, SOFR, SONIA, €STR and SARON. The amount of liquidity in these markets varies by currency.

According to the FSB report, the aggregate market for cleared swaps in SONIA is "broadly equivalent to that linked to LIBOR, with SONIA starting to dominate at shorter maturities The share of futures referencing SONIA stands at around 7% of total sterling futures volumes." For 2019, aggregate SONIA traded notional was \$8 trillion, according to ISDA, compared to aggregate traded notional GBP LIBOR of \$10.3 trillion. Aggregate trading volume for SONIA futures was \$8.7 trillion for the year.

The aggregate market for cleared swaps in SOFR is much smaller relative to the market for cleared swaps in USD LIBOR. For 2019,

according to ISDA, aggregate SOFR traded notional was \$392.7 billion, compared to aggregate traded notional USD LIBOR of \$119 trillion. Aggregate trading volume for SOFR futures was \$30.8 trillion for the year.²

Cleared swaps volumes in €STR, TONA (the RFR for Yen) and SARON lag their LIBOR counterparts by more.^{3.}

€STR is, of course, the relative newcomer here, having only been published since 2 October 2019. For 2019, aggregate €STR traded notional was \$4.6 billion. Aggregate traded notional for EUR LIBOR and EURIBOR for such period was \$1.1 billion and \$22.9 trillion, respectively.⁴

For 2019, aggregate TONA traded notional was \$249.8 billion.
Aggregate traded notional for JPY LIBOR and TIBOR/Euroyen TIBOR for such period was \$3.985 trillion and \$10.5 billion, respectively.⁵

For 2019, aggregate SARON traded notional was \$25.6 billion. Aggregate traded notional for CHF LIBOR for such period was \$618.2 billion.⁶

Despite growth in RFR interest rate derivatives, ISDA stated that "RFR transactions continued to comprise a small percentage of total IRD trading activity, accounting for 3.4% of IRD traded notional [in each of 2018 and 2019]."

There is evidence that market participants consider swaps and derivatives markets for RFR alternatives in many LIBOR currencies to be immature (perhaps with the sole exception of SONIA), and that LIBOR transition will require not only a shift in swaps from LIBOR to RFRs but also the development of robust futures markets for RFRs.⁷ More particularly, market participants are working to understand volatility spikes in SOFR that occurred in 2019.⁸

²ISDA, Interest Rate Benchmarks Review: Full Year 2019 and the Fourth Quarter of 2019

³ISDA, Interest Rate Benchmarks Review: Full Year 2019 and the Fourth Quarter of 2019.

⁴ISDA, Interest Rate Benchmarks Review: Full Year 2019 and the Fourth Quarter of 2019

⁵ISDA, <u>Interest Rate Benchmarks Review: Full Year 2019 and the Fourth Quarter of 2019.</u>

⁶ISDA, Interest Rate Benchmarks Review: Full Year 2019 and the Fourth Quarter of 2019

¹See, e.g., "Banks Build New Tools to Shift Short-Term Borrowing," Wall Street Journal, 26 January 2020.

⁸⁻See, e.g., "September stress in dollar repo markets: passing or structural?", BIS Quarterly Review December 2019; "Central Bank Group's Report Points to Deeper Problems in Repo Market," Wall Street Journal, 11 December 2019; "Cash-Market Volatility Adds to Worries Facing Libor Replacement," Wall Street Journal, 30 October 2019; "The Benchmark Set to Replace Libor Suffers Volatility Spike," Wall Street Journal, 11 February 2019; and "After repo rates spike, leveraged loan investors raise concern about SOFR volatility," S&P Global Market Intelligence, 26 September 2019.



Lack of IOSCO-compliant forward term rates derived from RFRs

To date, no forward term rate derived from an RFR has been determined to comply with the IOSCO principles for benchmarks.

These principles are reflected in the EU Benchmarks Regulation (BMR) and include standards for robustness and transparency, as well as a marked preference for pricing information derived from actual transactions. Regulators have urged firms not to wait for these rates before transition.

In the LIBOR jurisdictions, compliant forward term rates may emerge from transaction data in OIS and futures markets after such markets develop sufficient volume and depth (including as to longer maturities).

Because SONIA has existed since 1997 and has a relatively mature trading market, a compliant SONIA term rate may exist before such a rate exists for any other LIBOR currency.

Markets are coming to grips with the possibility that no IOSCO-compliant, RFR-derived forward term rate for any LIBOR currency may exist at the time that LIBOR is expected to cease at the end of 2021, and are turning

attention to overnight RFR LIBOR replacements compounded in arrears and the development of commercial conventions to address these rates in transactions. Many SONIA and SOFR floating rate notes (FRNs) use compounded RFRs in arrears, and there have been some USD and Sterling securitizations that refer to these rates.

Loan transactions have been slower to use RFRs in arrears. Among the reasons for this seem to be lack of borrower demand (borrowers like being able to set rates in advance, as they can for LIBOR), and that screen rates do not yet exist. Additionally, some lenders do not currently have in place systems to support RFRs, and many borrowers do not have corresponding treasury management systems. For multicurrency facilities, the issue is further complicated by differences in IBOR transition between jurisdictions. An expectation (once held and now frustrated) that forward term rates

would emerge may have led some firms to delay action in the loan markets.

The LMA has published exposure drafts of facility agreements for SONIA and SOFR compounded in arrears, and the LTSA has published two concept credit agreements referencing SOFR in arrears, one compounded and one simple average.9. In a noteworthy transaction, Royal Dutch Shell announced that it had entered into a syndicated USD 10 billion revolving credit facility where LIBOR will be replaced by SOFR as early as the first anniversary of closing.^{10.} In addition, British American Tobacco announced that it had executed a new £6 billion multi-currency revolving credit facility linked to both SOFR and SONIA.11.







Some regulators (including the FSB's Official Sector Steering Group (OSSG)) have expressed the view that use cases for forward term rates should be limited.^{12.} The Working Group on Sterling Risk-Free Reference Rates (Sterling Working Group) has stated that the use case for a forward term SONIA rate should be limited relative to the use case for compounded SONIA in arrears.^{13.} The Sterling Working Group expressed the view that the use of SONIA compounded in arrears was appropriate and

likely operationally achievable for approximately 90% of the total value of the Sterling LIBOR loan market, and that the remaining 10% would likely require a term rate or other rate. Loans for sponsors and large and medium-sized corporates are within the 90%. Trade and export finance, which often use discounting, and Islamic finance were among the types of transactions the Sterling Working Group viewed as having a use case for a term SONIA rate.

The OSSG has also suggested that, over time, liquidity would likely concentrate in markets that focused on overnight RFRs, and that markets that currently used term rates might well migrate to the overnight markets for pricing reasons, since the concentrated liquidity might well result in tighter spreads. The amount of liquidity in forward term rates based on overnight RFRs would necessarily be less than in the overnight RFRs themselves.¹⁴

⁹See LMA documents <u>here</u> and LSTA documents <u>here</u> and <u>here</u>.

^{10.}See <u>here.</u>

¹¹ British American Tobacco, news release 12 March 2020, <u>British American Tobacco signs £6 billion SONIA and SOFR linked revolving credit facility.</u>

¹²See FSB OSSG, <u>Interest rate benchmark reform – overnight risk-free rates and term rates</u>, 12 July 2018. In this report, the OSSG emphasized that the use of overnight RFRs by the derivatives markets was important to achieve financial stability. The OSSG recognized that in some cases the benefit of fixing the interest rate at the beginning of the period over which interest is paid using a forward-looking term rate might outweigh the cost savings and other benefits of using an overnight RFR. However, the OSSG expressed the view that the use of such forward-looking term rates would ideally be "more limited" than the current use of IBORs, "relatively narrow compared with current use of IBORs" and "largely concentrated in a segment of the cash rather than derivative markets" in order to be compatible with global financial stability.

¹³Sterling Working Group, <u>Use Cases of Benchmark Rates: Compounded in Arrears, Term Rate and Further Alternatives.</u>

¹⁴See FSB OSSG, Interest rate benchmark reform – overnight risk-free rates and term rates, 12 July 2018.







Multiple-rate jurisdictions

With respect to euro and Yen, local authorities have not determined that a transition solely to RFRs is necessary,

and have gone forward with a multiple rate approach under which non-LIBOR IBORs for such currencies, EURIBOR, TIBOR and Euroyen TIBOR (in each case, reformed to meet new benchmark criteria) exist as forward term rates alongside the RFRs (and are intended to exist alongside any RFR-derived term rate that may emerge) for such currencies. Several non-LIBOR jurisdictions have taken similar approaches. The attached matrix considers several of them, including Australia, Canada and Hong Kong.

While the non-LIBOR IBORs in the multiple-rate jurisdictions may provide viable forward term rate options, local regulators will continue to examine them to see whether such rates (even as they have been reformed) continue to be rooted in a sufficient volume of transactions in active, liquid underlying markets to reflect underlying financial reality and qualify under the IOSCO benchmark principles.

In the jurisdictions that have adopted multiple-rate approaches, there is some expectation that, in the long run, an RFR-derived term rate may prove to be more robust than a legacy reformed IBOR. However, this will depend on the development of such RFR-derived rates. Additional challenges may also arise for participants in those jurisdictions due to potentially different types of bases for cross-currency swap transactions.

15.In its response to a consultation, JBA TIBOR Administration, the administrator of TIBOR and Euroyen TIBOR, stated that it was likely that Euroyen TIBOR would be discontinued (and that TIBOR would be retained). JBA TIBOR Administration, Result of public consultation: 1st Consultative Document / Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR 30 May 2019







Development of market conventions and information

During 2020, several developments are expected that may spur market activity.

Market conventions for RFRs calculated in arrears (whether compounded or simple average) continue to develop, particularly in the loan markets; to date, the lack of established conventions has likely contributed to the relative lack of syndicated facility agreements that refer to such rates (although there are some bilateral facilities¹⁶). To the extent that the markets coalesce around standard conventions, activity may increase.

There remain differences of opinion over how best to calculate rates in arrears, whether to use simple average or compounding, and whether to use a lag period or an observation shift.¹⁷

In January 2020, the US Alternative Reference Rates Committee (ARRC) released final recommendations for new interdealer cross-currency basis swaps that use SOFR and overnight RFRs in certain other jurisdictions.^{18.} The conventions focus on interdealer transactions and are for market participants' voluntary use. Conventions for both RFR-RFR cross-currency swaps and RFR-IBOR cross-currency swaps are covered. In addition, there are potential fallbacks for cross-currency swaps currently referencing IBORs, to cover one or both counterparties in an IBOR-based swap transitioning from an IBOR to an RFR.

In addition, new rate and pricing information is expected to become publicly available, which should provide accessible, consistent pricing indices and thereby promote transition. ISDA and Bloomberg are expected to finalize methodologies for swap fallback rates, and

Bloomberg is expected to publish indicative adjusted RFRs, spread adjustments and "all-in" fallback rates (the combination of the adjusted RFR and the spread adjustment) for each relevant IBOR tenor at some point during the first half of 2020.

The Federal Reserve Bank of New York recently began publishing: (i) three compounded averages of SOFR with tenors of 30, 90 and 180 days; and (ii) a daily SOFR index to support the calculation of compounded average rates over custom time periods. The Bank of England recently announced its intention to publish a SONIA-linked index beginning in July 2020. The publication of these averages and indices should provide important pricing information and reference points to the market.



¹⁶See, e.g., Reuters, "Sonia benchmark makes loan market debut," 8 July 2019.

¹⁷See, e.g., Sterling Working Group, <u>Statement on bond market conventions</u>: <u>Use of the SONIA Index and weighting approaches for observation periods</u>.

¹⁸ ARRC, Recommendations for Interdealer Cross-Currency Swap Market Conventions.

¹⁹ Federal Reserve Bank of New York, <u>Statement Regarding Publication of SOFR Averages and a SOFR Index</u> 12 February 2020; <u>Statement Introducing the SOFR Averages and Index</u> 2 March 2020.

²⁰ Turbo-charging sterling LIBOR transition: why 2020 is the year for action – and what the Bank of England is doing to help, Speech given by Andrew Hauser, Executive Director, Markets, Bank of England, at International Swaps and Derivatives Association/SIFMA Asset Management Group Benchmark Strategies Forum, 26 February 2020. Relatedly, the Bank of England (BofE) also published a discussion paper seeking views from market participants on: (i) the BofE's intention to publish a daily SONIA compounded index; and (ii) the usefulness of the BofE publishing a simple set of compounded SONIA period averages, which would give users easy access to SONIA interest rates compounded over a range of set time periods. Responses to the questions are due by 9 April 2020. BofE, Supporting Risk-Free Rate transition through the provision of compounded SONIA February 2020.



Legacy agreements

Perhaps the biggest remaining issue is the conversion of legacy LIBOR instruments to alternative rates.

Researchers at the Bank of International Settlements (BIS) estimated that, as of mid-2018, there was about USD 400 trillion worth of financial contracts that referred to LIBOR.²¹ At a roundtable convened by the FSB in July 2019, private sector representatives stated that dealing with legacy positions was more problematic than writing new business referring to RFRs. As noted above, market receptivity to LIBOR alternatives varies by market.

ISDA proposes to publish a substantial revision to the 2006 ISDA Definitions by way of a Supplement that contains fallback provisions applying the applicable term-adjusted RFR plus a spread in the event of a permanent cessation of 11 key IBORs: LIBOR (for each LIBOR currency), EURIBOR, TIBOR, Euroyen TIBOR, BBSW, CDOR and HIBOR. These revised definitions will apply by their terms to transactions referring to the 2006 ISDA Definitions that are entered into on or after the date on which the revisions become effective, but not to transactions incorporating the

2006 ISDA Definitions and entered into before that date. ISDA also proposes to publish the ISDA 2020 IBOR Fallbacks Protocol (Protocol), a multilateral protocol that will enable parties to derivatives transactions to agree that the new IBOR triggers and fallback provisions as set out in the revised 2006 ISDA Definitions will apply to legacy transactions between Protocol adherents that incorporate the 2006 ISDA Definitions, the 2000 ISDA Definitions or the 1991 ISDA Definitions, and in existing ISDA Master Agreements and ISDA collateral support documentation, as well as certain non-ISDA documentation, that refer to a relevant IBOR.22.

In the Sterling FRN markets, to date, eight consent solicitations with a total nominal value of GBP 4.2 billion have been announced publicly as successful in transitioning English law legacy bond contracts from LIBOR to SONIA in arrears.²³ Because US FRNs invariably require a 100% vote to change interest rates, it is unlikely that a similar trend will

emerge there, and issuers will need to instead refinance current LIBOR FRNs with SOFR FRNs. Despite FRNs often having relatively short maturities, there seem to be some legacy FRNs outstanding that mature after 2021 and have fallback provisions that revert to a fixed rate (the last quoted LIBOR rate), rather than having a more robust fallback.²⁴

In the loan markets, there has been some success in inserting robust LIBOR fallback provisions. In most cases, these would trigger a negotiation for an amendment that could be passed without a 100% lender vote.

The LMA has published an exposure draft of a reference rate selection agreement²⁵ with the aim to streamline the amendment process for legacy syndicated loans by allowing the required lenders (and borrowers) to agree to the key amendment terms, but delegating agreement of the technical details to the facility agent (and borrowers).





However, there is no avoiding the need for each and every affected loan agreement to be amended individually. The Bank of England and FCA have also recently endorsed a target of Q1 2021 for lenders to "significantly reduce the stock of LIBOR referencing contracts." ²⁶.

Regulators have cautioned that market participants should not view fallbacks as the primary means of effecting LIBOR transition, but should rather focus their efforts on using RFRs instead of LIBOR.

The ARRC recently released a proposal for legislation under New York law that would address LIBOR transition.^{27.} This proposal would apply chiefly to situations where a fallback from LIBOR did not exist in a contract, or fell back to a LIBOR-based rate (such as the last quoted LIBOR).

Parties could opt out of the statute by contract. Although the Sterling Working Group has established a "tough legacy" sub-committee to address contracts that are unable to convert away from Sterling LIBOR by market solutions, the FCA has been clear that the market should transition and not rely on a possible legislative fix.²⁸.



²²We note that the ARRC Market Structures Working Group has identified nine possible models of conversion that market participants may use when voluntarily transitioning derivatives transactions that reference IBORs to RFRs. See Letter to J. Christopher Giancarlo, chair of US CFTC, Re: Follow-up Letter Regarding Treatment of Derivatives Contracts Referencing the Alternative Risk-Free Rates, 13 May 2019.





²³Sterling Working Group, Progress on the Transition of LIBOR Referencing Legacy Bonds to SONIA By Way Of Consent Solicitation

²⁴ICMA, The transition to risk-free rates in the bond market, ICMA Quarterly Report, first quarter 2020.

^{25.}Available here.

^{26.}See here

²⁷ARRC, <u>Proposed Legislative Solution to Minimize Legal Uncertainty and Adverse Economic Impact Associated with LIBOR Transition.</u> We note that Jerome Powell, the chair of the US Fed, has expressed the view that a US federal legislative solution was not necessary at the present time. Law 360, <u>Fed Chair Throws Cold Water On Libor Legislation Idea</u>, 11 February 2020.

²⁸See, e.g., <u>LIBOR: Preparing for the end</u>, speech by Andrew Bailey, Chief Executive of the FCA, at the SIFMA LIBOR Transition Briefing, 15 July 2019: "Market participants will also ask whether legislation could help. For example, could legislators redefine LIBOR as RFRs plus fixed spreads for those tough legacy contracts? Or could they create safe harbours for those adopting consensus industry solutions which enjoy authorities' support such as compounded RFRs and fixed spreads? These measures are not in the gift of regulators, but it is sensible to consider their pros and cons.



Derivatives

Fallback rates based on RFRs have been identified for the relevant IBORs by ISDA industry working groups. The transition to RFRs is happening across all major currencies, although the process and amount of progress varies by jurisdiction.^{29.}

ISDA has already published Supplements to the 2006 ISDA Definitions including definitions for new risk-free rates (such as compounded SOFR and €STR). Of particular note is the FCA and the Bank of England statement published in January 2020 encouraging the change of the market convention for Sterling interest rate swaps from Sterling LIBOR to SONIA on 2 March 2020.30. This is intended to shift new trading in Sterling interest rate swaps to SONIA and limit risks from new LIBOR exposures. In addition, a top priority identified by the Sterling Working Group is that new issuances of Sterling LIBOR-based cash products maturing beyond 2021 cease by the end of the third quarter of 2020.^{31.} As market participants start issuing more cash products that reference SONIA, SOFR and other RFRs, it is expected that this will increase market demand for RFRbased derivative hedging products. As the transition away from LIBOR progresses, the focus will move towards the practical implementation of new RFR products.

Significant progress has been made by ISDA to prepare the derivatives markets for the adoption of RFRs in place of IBORs, but issues remain. Market consensus is still to be achieved with respect to precessation fallbacks. There are also issues relating to basis risk for LIBOR referenced derivatives linked to, or hedging a floating rate loan or other debt instrument. Other challenges include, for example, market adoption of RFRs (the "chickenand-egg" problem), liquidity of RFR-referenced markets, legal issues relating to contract amendments, issues relating to valuation and risk management as well as accounting and tax treatment.32.

The proposed Supplement to the 2006 ISDA Definitions for new transactions and the Protocol for existing transactions will be effective on a "big bang" date to be announced. This is currently expected to be approximately three to four months after the Supplement and Protocol have been published by ISDA, which is currently expected to be in the third quarter of 2020.

New interest rate derivatives transactions entered into after the "big bang" date will incorporate the amended 2006 ISDA Definitions. If they wish to ensure that both new and legacy IBOR contracts reference the same fallbacks, market participants will need to transition their legacy trades by adherence to the new Protocol.

However, market acceptance of the transition of legacy contracts to the new fallbacks will depend on the market having more visibility of the calculations of the adjustments to the RFRs and clarity on the regulatory, accounting and tax implications of the transition. In order to value portfolios and make decisions as to the timing of transition of existing legacy IBOR transactions to RFRs, market participants require information that is not currently available. The efficiency of interest rate risk management is also affected by the lack of liquidity in RFRs. Bloomberg Index Services Limited is expected to produce and publish the compounded setting in arrears rate, the spread adjustment and the "all-





in" fallback rate (i.e., the compounded setting in arrears rate plus the spread) in the first half of 2020. The publication of these rates will provide market participants with more clarity on the calculation of the spread and term adjustments to the RFRs that would apply to fallback rates, increasing market acceptance and liquidity. Accordingly, the publication of adjusted RFR fallback rates are expected to be a significant catalyst for market participants to effect transition in earnest.

There could be possible distortion in the cross-currency markets if the transition to the various RFRs occurred at different times. It has been noted that "substantial risks could stem from low market awareness and acceptance of the [RFR] benchmarks. In particular, benchmark reforms in major currency areas could affect regional markets through the use of cross-currency basis or foreign exchange swap related products in certain market segments, thereby posing potential risks to market functioning." 33.

The largest central counterparties (CCPs) have indicated they will adopt the amended definitions and thereby achieve an equivalent outcome as under the new Protocol for their legacy cleared portfolios.

For market participants using interest rate derivatives as a hedging tool, a particularly salient issue is the potential basis risk between the derivative and the underlying cash product it hedges, should the agreed fallbacks in the derivatives markets differ from those adopted in the market for the underlying product. The current ISDA proposals include template documentation to exclude transactions from the scope of the Protocol at the option of the parties, thereby affording the parties the ability to agree to bespoke fallback provisions so that the fallback for an excluded derivative should match that in the related hedged product.

ISDA recently launched a public consultation regarding whether to include a pre-cessation trigger in the ISDA fallbacks,³⁴ which would

apply in the event that LIBOR is declared unrepresentative, following some clarification from the FCA and IBA that the publication of a non-representative LIBOR would be limited in duration.^{35.} A precessation trigger is included in many fallback provisions for cash products. However, an earlier ISDA consultation^{36.} did not yield market consensus on how to implement pre-cessation fallbacks in derivatives contracts. The new consultation is open until 1 April 2020.

This new ISDA consultation will ask whether the 2006 ISDA Definitions should be amended to include fallbacks that would apply on the first to occur of a permanent cessation of an IBOR or on a precessation event. If there is not sufficient support for this approach, ISDA proposes to amend the 2006 ISDA Definitions to enable derivatives counterparties to incorporate pre-cessation fallbacks alongside permanent cessation fallbacks if they choose to.







The timing of publication of the Supplement to the 2006 ISDA Definitions and the Protocol will now be subject to the results of the new consultation. The proposed timing of the consultation, publication of results and publication of the Supplement to the 2006 ISDA Definitions and the Protocol are set out opposite.

New consultation on combination of permanent cessation fallbacks and precessation fallbacks	25 February 2020
Deadline for consultation responses	25 March 2020
Publication of consultation results and announcement of next steps for implementing permanent cessation and pre-cessation fallbacks	Late April 2020-Early May 2020
Publication of Bloomberg indicative fallback rates	First half of 2020
Publication of final form of Supplement to the 2006 ISDA Definitions and of ISDA 2020 IBOR Fallbacks Protocol	Targeting Q3 2020
Effectiveness of Supplement to the 2006 ISDA Definitions and of ISDA 2020 IBOR Fallbacks Protocol	3-4 months after publication



^{30.}FCA and Bank of England encourage switch from LIBOR to SONIA for sterling interest rate swaps from Spring 2020, available at: https://www.fca.org.uk/news/statements/fca-and-bank-england-encourage-switch-libor-sonia-sterling-interest-rate-swaps-spring-2020.







^{31.} Sterling Working Group 2020 Top Level Priorities.

³²See, e.g., <u>Study on the Implications of Financial Benchmark Reforms EMEAP Working Group on Financial Markets</u> September 2019.

³³ Study on the Implications of Financial Benchmark Reforms EMEAP Working Group on Financial Markets September 2019.

³⁴ISDA, <u>2020 Pre-Cessation Fallback Consultation</u>.

³⁵ See ISDA 4 December 2019 letter to FSB OSSG re: ISDA Pre-Cessation Triggers for Derivatives Fallbacks; November 2019 letter from the OSSG to ISDA regarding pre-cessation triggers; January 2020 letter from FCA to ISDA; and January 2020 letter from the IBA to ISDA.

^{36.}See here.



Enhanced scrutiny

Many regulatory bodies have indicated that they will actively monitor LIBOR transition at regulated institutions in 2020 and will urge such institutions to accelerate matters.^{37.}

³⁷See, e.g., the FSB (supra n. 1); the US Office of the Comptroller of the Currency, <u>Semi-Annual Risk Assessment</u>, December 2019 §§3.3, 6.3; the US Financial Stability Oversight Council, <u>2019 Annual Report</u>; the FCA, <u>Conduct risk during LIBOR</u> <u>transition</u> and <u>"Dear CEO" letter to asset management firms</u> 27 February 2020; and FINMA, <u>FINMA Risk Monitor 2019</u>.





When transitioning from LIBOR, product governance and conduct obligations must be met.

In the UK, at a high level, this manifests itself in the regulatory obligation on authorized firms to treat customers fairly and analogous provisions may apply to other jurisdictions. The FCA has published information to help firms in this respect while setting out their regulatory expectations. The consequences of this duty vary depending on whether customers are market counterparties, professional clients and retail investors — the last receiving the greatest protection.

A key aspect of treating customers fairly is effective communication, for example, explaining how fallback

provisions that replace LIBOR are expected to work. As with all communications, those around LIBOR transition should be clear, fair and not misleading. Additionally, they should be timely, allowing customers sufficient opportunity to make informed decisions. Firms should describe the risks and impacts, including the benefits and costs of alternative products. It goes without saying that communications should not "disquise, reduce or hide" relevant information. It is essential to consider the knowledge and experience of the intended audience — retail mortgage borrowers will have a lower level of knowledge compared to corporates

and, of course, as regards professional investors. To fulfill this duty client facing staff must have adequate knowledge and receive appropriate training.

As a corollary, firms should consider whether variations of contracts to introduce fallbacks or alternative rates are fair and lawful. This issue is particularly acute where retail clients are concerned. The FCA suggests that firms that can show that a replacement rate represents the market consensus, possibly agreed though industry working groups and after consultation, are more likely to be acceptable. ISDA's work on fallback rates is cited as an example in this regard.



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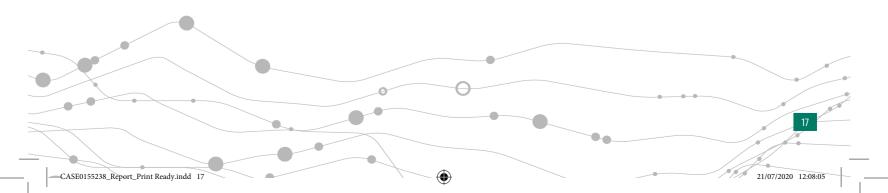
Where firms do offer LIBOR-linked products maturing after 2021, they should take care to see customer needs are met and products will continue to perform as expected (despite the uncertainty over how rates will be calculated in the future). The regulatory preference nonetheless is to avoid such contracts. For firms, such as asset managers, that use LIBOR-referencing

interest rate derivatives to hedge interest rate risk and that invest in bonds or other securities which refer to LIBOR, steps should be taken to assess client exposures and plan the transition with the best interests of customers to the fore. This may include revising investment strategy and best execution policies.

Regulators have also warned regulated institutions of the litigation risk that may be inherent in LIBOR transition.^{39.} This risk may arise particularly from value transfer and from dealings with retail customers, and may be especially pronounced in the US.

^{38.}See FCA webpage on conduct risk during LIBOR transition at https://www.fca.org.uk/markets/libor/conduct-risk-during-libor-transition.

^{39.}See, e.g., Remarks by Michael Held, Executive Vice President of the Legal Group of the Federal Reserve Bank of New York, at the SIFMA C&L Society February Luncheon, New York City, 26 February 2019: "You can imagine the litigation risk when the reference rate for a 20-year contract disappears and there's no clear path to replace it. Now imagine 190 trillion dollars' worth of those contracts. This is a DEFCON 1 litigation event if I've ever seen one."









Key upcoming developments and potential developments

2020 will be a critically important year for LIBOR transition.

There are many separate workstreams currently involved in LIBOR transition, and these are scheduled to produce a number of items during the year that should clarify matters by reducing uncertainty, removing legal, regulatory or tax obstacles and providing additional and improved pricing information concerning RFRs and how they behave.

Many regulators and working groups, including the FSB, the ARRC and the Sterling Working Group, have committed to make efforts to increase the awareness of end users in the cash markets of the need to engage in LIBOR transition, to build demand and trading volumes in RFR products and to reduce the stock of legacy transactions that refer to LIBOR in advance of LIBOR's expected demise at the end of 2021.

As noted above, it is expected that the publication and effectiveness of

the Supplement to the 2006 ISDA Definitions and related Protocol will act as a catalyst for market participants to transition legacy LIBOR portfolios. The expected publication by Bloomberg of indicative fallback rates and spread adjustments in the first half of 2020 should provide clarity to market participants to assist in this transition.

Importantly, several major CCPs have announced plans to shift discounting and price alignment interest (PAI) for cleared USD and euro derivatives to RFRs. On 16 October 2020, LCH and CME have stated that they will: (i) use SOFR (instead of the Effective Federal Funds Rate (EFFR)) for PAI and discounting of new USD swap contracts going forward; and (ii) modify outstanding USD swap contracts to replace EFFR with SOFR for PAI and discounting. Further, LCH, Eurex and CME are scheduled

to transition discounting and PAI for cleared euro products from EONIA to €STR on or about 22 June 2020. These changes are expected to drive liquidity in €STR and SOFR products.^{40.} These changes will also result in valuation changes for affected transactions that the CCPs propose to address through compensation mechanisms.^{41.} In February 2020, the ARRC also issued a consultation on swaptions based on USD LIBOR that could be affected by the discounting change for cleared derivatives from the use of EFFR to SOFR.^{42.} The working group on euro risk-free rates recently launched a consultation on the impact of the transition from EONIA to €STR transition on the swaptions market.43.







The ARRC has also commenced a consultation on spread adjustment methodologies for fallbacks in cash products referencing USD LIBOR.^{44.} Responses are due by 25 March 2020. This rate would be the first step in the ARRC hardwired approach waterfall for a spread adjustment. Also with respect to spread adjustments, the Sterling Working Group has an ongoing consultation on credit adjustment spread methodologies for fallbacks in cash products referencing GBP LIBOR,^{45.}

and is expected to publish summary results during Q2 2020. Responses were due by 6 February 2020.

In October 2019, the US Treasury department issued proposed tax regulations intended to address the possibility that an alteration of the terms of a debt instrument or a modification of the terms of other types of contracts to replace an IBOR with a new reference rate could result in the realization of income or other tax items for US federal income tax

purposes or could result in other tax consequences.^{46.} The comment period for the proposed regulations has ended, and the regulations are expected to be finalized at some point in 2020.



⁴¹ISDA Research Note, Adoption of Risk-Free Rates: Major Developments in 2020 February 2020.





⁴²ARRC Consultation on Swaptions Impacted by the CCP Discounting Transition to SOFR.

⁴³·euro Working Group, <u>Public consultation on Swaptions impacted by the CCP discounting transition from EONIA to the €STR;</u> the response date is 3 April 2020.

⁴⁴ ARRC Consultation on Spread Adjustment Methodologies for Fallbacks in Cash Products Referencing USD LIBOR; the response date (originally 6 March 2020) was extended to 25 March 2020.

⁴⁵Consultation on credit adjustment spread methodologies for fallbacks in cash products referencing GBP LIBOR.

^{46.}The proposed regulations are available here.



Remaining Challenges

Despite all the work done to date on LIBOR transition, a vast amount of work remains to be done.

The FCA and other regulators appear firm in holding to the end-2021 deadline. Further, it is widely thought that the current LIBOR panel banks want to stop making LIBOR submissions as soon as possible, and will likely stop doing so when their agreement ceases at the end of 2021 (unless they are compelled otherwise).

There has perhaps been some inertia in the market to date as parties have waited for further clarification or for better alternatives to emerge. However, to the extent the situation has been clarified, the alternatives that have emerged may not be perfect or what some had once hoped for. In particular, users of cash products that are used to LIBOR are likely to need to switch to backward-looking benchmark rates calculated in arrears.

Because time is growing shorter, parties no longer have the option of kicking the can down the road. Parties to contracts that refer to LIBOR must now change those contracts or replace them, using those alternatives that have been developed. Despite the many warnings from the official sector and others, awareness of the issue among corporate entities seems to be mixed. The scale of the operational challenge cannot be understated: any single bank or other financial institution may have an enormous number of these contracts.

Several of the transition target dates that have been set by the regulators and working groups may be hard to achieve at this point. As a further complication, the effect that the Covid-19 pandemic will have on LIBOR transition has yet to be determined. At a minimum, Covid-19 appears to be significantly diverting the

resources and attention of regulators and market participants from many other projects, not limited to LIBOR transition. In many respects, the timeline for transition was extremely ambitious when set, and the many issues posed by Covid-19 may make it more difficult for markets to achieve the remaining goals of that timeline by the original target dates.^{47.} On 25 March 2020, the FCA, the BofE and the Sterling Working Group issued a statement on the impact of Covid-19 on firms' LIBOR transition plans.48. The statement said that "[t]he central assumption that firms cannot rely on LIBOR being published after the end of 2021 has not changed and should remain the target date for all firms to meet." They conceded that there had been an impact on the timing of some aspects of the transition programs of many firms, and indicated that some of the interim transition milestones might be affected.







The FCA, the BofE and the Sterling Working Group indicated that they would continue to monitor the situation.

Contractual fallbacks continue to be developed, although the regulators have been clear that fallbacks (however robust) should not be viewed as the most effective or primary means of handling the transition, and that parties should instead use alternative interest rates so that reliance on fallbacks is not necessary. Although fallback provisions may improve as rate options and spread adjustments develop, reliance on fallbacks may involve an increased risk of value transfer.

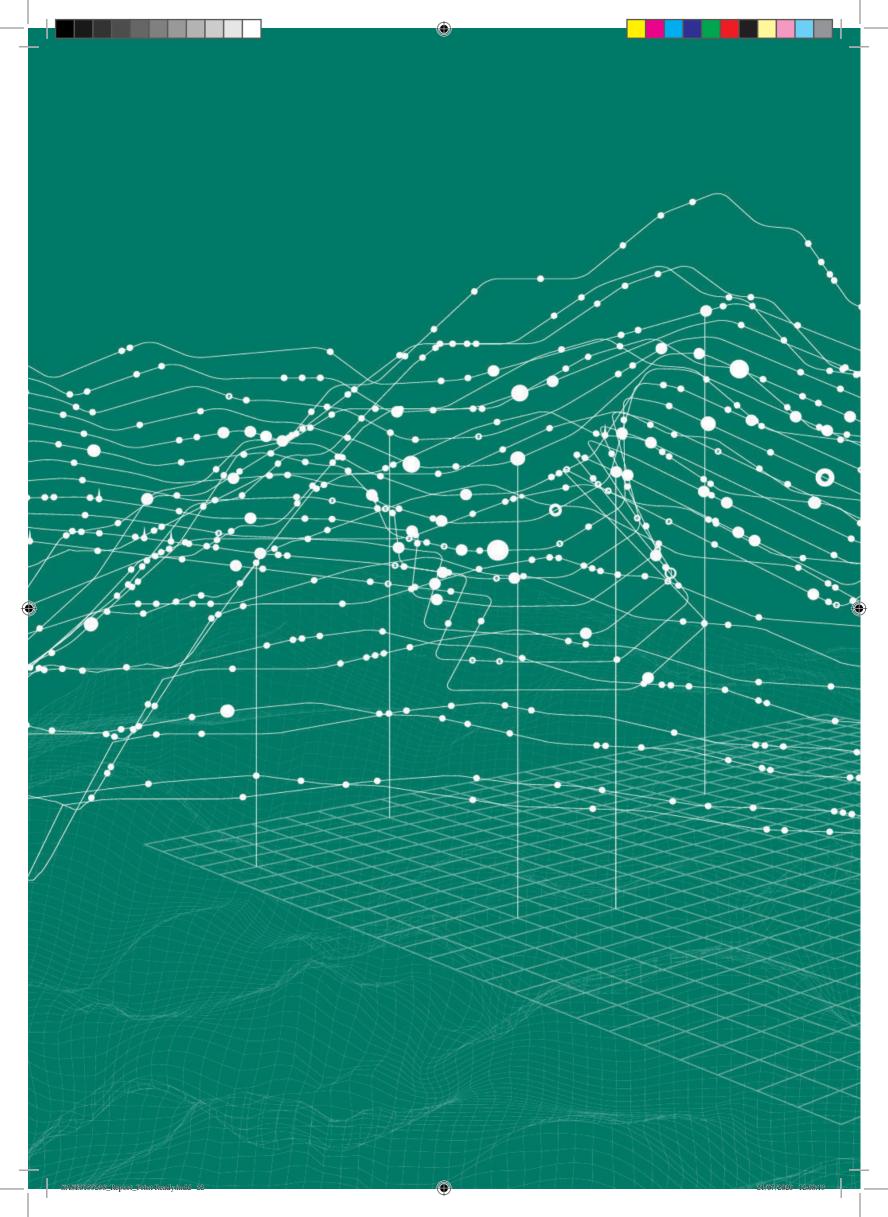
Further, it would be a systemic nightmare if the many agreements that have included an "amendment approach" fallback all needed to be amended at the same time. Finally, market participants will need to consider whether fallbacks in different currencies and asset classes are aligned.

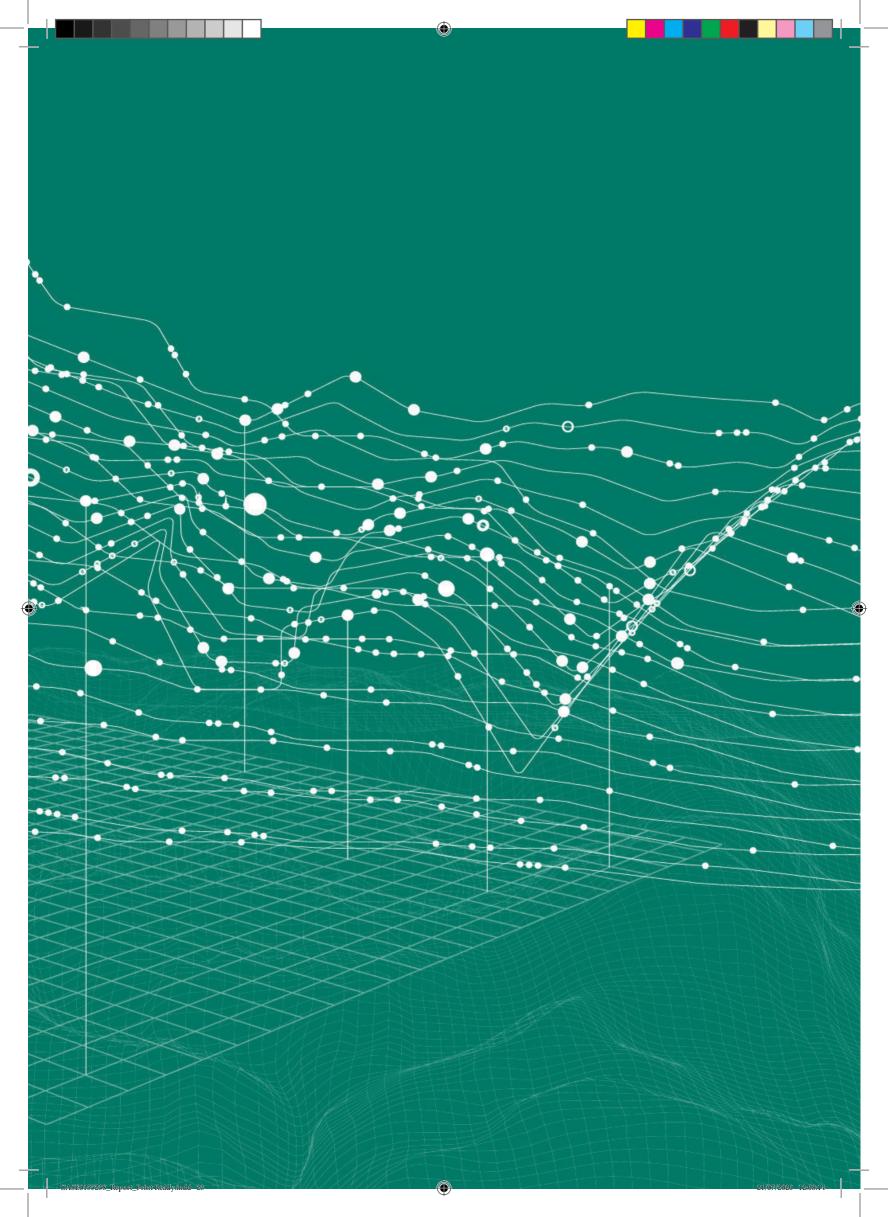
Developments in LIBOR transition have been uneven among currencies and products, and market participants need to consider that there may well be considerable disparity among currencies and products at the end of 2021. ~ For example, as noted above, a SONIA term rate may exist sooner than a SOFR term rate.

There may be a difference in whether a pre-cessation trigger is included in fallbacks for derivatives and cash products. Further, LIBOR might be declared unrepresentative earlier than 2021 (which might trigger some fallback clauses, but not others), and this declaration might be made only with respect to some LIBOR currencies, but not all of them. Depending on their LIBOR exposures, firms may need to create decision trees that consider many possible variations of an already complex theme.

⁴⁷See Risk.net, <u>Pandemic threatens Libor transition plans</u>, 13 March 2020.

^{48.}Available here.







IBOR Transition Readiness Matrix

This matrix ranks LIBOR (and select other IBOR) jurisdictions and products according to the level of readiness for LIBOR transition, on a scale of 1 to 5, with 1 indicating the least ready, and 5 indicating the most ready.

A "5" grade indicates that substantial certainty exists and that there are no or very few additional steps that need to be taken; a "1" grade indicates that substantial uncertainty exists, and

that significant developments need to occur in order to achieve readiness.^{49.}

Grade Key:











IBOR Jurisdiction	UK/Sterling /SONIA	US/USD /SOFR	Euro zone/euro /€STR	Japan/Yen /TONA
Click the flag for more information →	730111			O
Derivatives -in overnight RFRs*	5	4	3	3
Derivatives -in forward term rates **50.	4	2	EURIBOR 1 RFR-derived	TIBOR/Euroyen TIBOR TRFR-derived
Derivatives- fallbacks	3	3	3 53.	3
FRNs -in overnight RFRs, compounded in arrears*	5	5	2	2
FRNs – in forward term rates**	2	0	EURIBOR 1 RFR-derived	TIBOR/Euroyen TIBOR TRFR-derived
FRNs- fallbacks	3	3	3	2
Loans-in overnight RFRs *51.	3	2	2	2
Loans -in forward term rates**	2	•	EURIBOR 1 RFR-derived	TIBOR/Euroyen TIBOR 1 RFR-derived
Loans –fallbacks ^{52.}	5	5	3	0
Securitizations - in overnight RFRs*	4	4	0	0
Securitizations- in forward term rates**	2	0	EURIBOR 1 RFR-derived	TIBOR/Euroyen TIBOR TRFR-derived
Securitizations – fallbacks	5	5	3	0







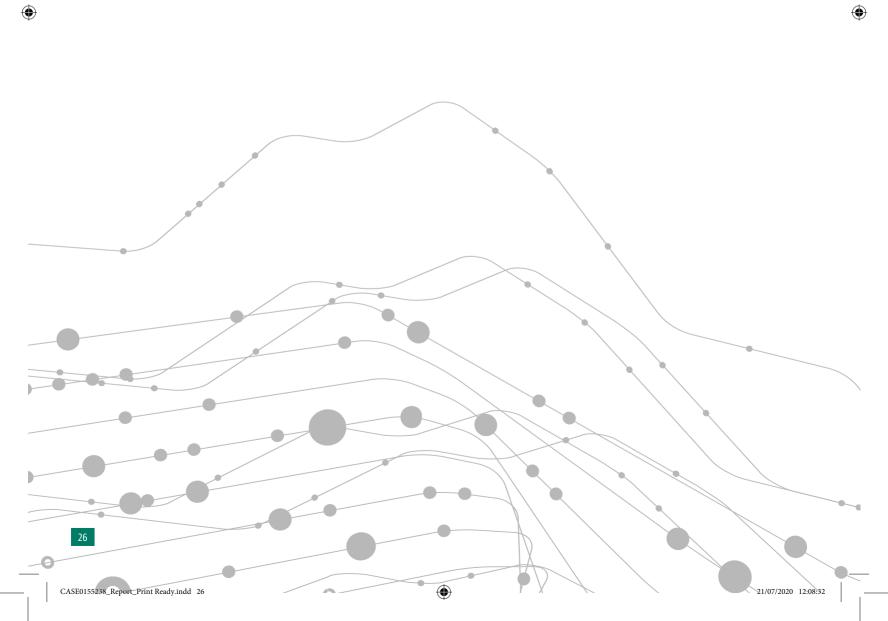
IBOR Jurisdiction Click the flag for	Switzerland/ CHF/SARON	Australia/A\$/ AONIA	Canada/C\$/ CORRA	Hong Kong/ HK\$/HONIA	Singapore/S\$/ SORA
more information \rightarrow	•	1	*	**	
Derivatives -in overnight RFRs*	3	4	4	2	2
Derivatives -in forward term rates ** 50.	0	BBSW RFR-derived	CDOR RFR-derived	HIBOR THE REPORT OF THE PROPERTY OF THE PROPER	54. SIBOR 1 RFR-derived
Derivatives- fallbacks	3	3	3	2	0
FRNs -in overnight RFRs, compounded in arrears*	3	3	0	0	0
FRNs – in forward term rates**	0	5 BBSW 1 RFR-derived	CDOR RFR-derived	5 HIBOR 1 RFR-derived	SIBOR RFR-derived
FRNs- fallbacks	3	3	4	0	0
Loans-in overnight RFRs * 51.	2	0	0	0	0
Loans -in forward term rates**	0	BBSW RFR-derived	CDOR RFR-derived	HIBOR THEORETER STATES AND ADMITS	SIBOR RFR-derived
Loans –fallbacks ^{52.}	3	3	4	0	0
Securitizations - in overnight RFRs*	0	3	0	0	0
Securitizations- in forward term rates**	0	BBSW 1 RFR-derived	CDOR RFR-derived	5 HIBOR 1 RFR-derived	SIBOR RFR-derived
Securitizations – fallbacks	3	3	4	0	0







- *Rankings of overnight RFRs include an assessment of receptivity to transition of legacy IBOR books to compounded RFRs, in arrears.
- **Forward term rates refer to rates other than LIBOR. For forward term rates in multiple-rate jurisdictions, two rankings are given: (i) one for such jurisdiction's existing non-LIBOR IBOR; and (ii) one for a forward term rate derived from such jurisdiction's identified RFR.
- ⁴⁹Among the factors examined are: the degree of liquidity that exists; the degree of consensus achieved regarding market conventions; whether impediments exist with respect to the development or adoption of a product; and the degree of uncertainty remaining with respect to market consensus or legal, regulatory, accounting or tax treatment.
- 50. We note that derivatives trading in forward term rates based off RFRs does not necessarily involve the use of a rate that is being used as a benchmark.
- ^{51.}Some market appetite exists in the US for simple average SOFR in arrears because it may be easier to operationalize a simple average rate than a compounded rate with respect to loans, which are relatively easier to prepay than other debt. In addition, a simple average may be easier to use to calculate prices for loan trades with delayed settlement.
- ^{52.}To date, most fallbacks with respect to loans have adopted an amendment approach, rather than a hardwired approach.
- 53. This assessment includes not only a contractual fallback from EUR LIBOR, but also a contractual fallback from EURIBOR.
- ⁵⁴As currently constituted, SIBOR is vulnerable to a discontinuation of USD LIBOR, since SIBOR relies on the SGD Swap Offer Rate (SOR), which is an FX swap implied interest rate computed from actual transactions in the USD/SGD FX swap market, and which uses USD LIBOR as an input in its waterfall methodology. For this reason, regulators in Singapore determined that SIBOR would not be a suitable alternative to SOR in SGD interest rate derivatives. See below.





UK/Sterling/SONIA



SONIA is the identified RFR for Sterling and has existed since 1997. In its 2019 progress report, the FSB found that "[t]here has been good progress in establishing SONIA as the successor to sterling LIBOR." The FSB noted increases in Sterling FRNs and securitizations denominated in compounded SONIA, and the development of liquidity in SONIA swaps and futures.

In January 2020, the Bank of England (BofE), the FCA and the Working Group on Sterling Risk-Free Reference Rates (Sterling Working Group) published a set of documents that outline LIBOR transition priorities and milestones for 2020.^{55.}

The Sterling Working Group's priorities include a target that the markets cease issuing cash products linked to sterling LIBOR by the end of the third quarter of 2020, and also include considering how best to address issues of "tough legacy" contracts (which refers to contracts that cannot transition from LIBOR by means of market-based solutions).⁵⁶

These priorities also include a March 2020 target date to switch from LIBOR to SONIA for Sterling interest rate swaps.

With respect to a forward term rate based on SONIA, "Beta" testing of term rates being developed by FTSE Russell, ICE Benchmark Administration (IBA), IHS Markit and Refinitiv has been targeted for February 2020.^{57.} In addition, the BofE and the FCA have obtained commitments from large liquidity providers to stream executable quotes for SONIA OIS for 1-, 3- and 6-month terms for a testing period. Live production of those rates (which could be the basis for a

provisional SONIA forward term rate) is expected by the end of Q3 2020.^{58.}

The BofE has also announced that (i) from October 2020, it will make newly issued LIBOR-linked collateral ineligible to be lent against as part of the BofE's Sterling Monetary Framework and (ii) it will progressively increase the haircuts on existing LIBOR-linked collateral it lends against. ^{59.} The haircut add-on will be 10 percentage points from 1 October 2020, 40 percentage points from 1 June 2021 and 100 percentage points from 31 December 2021. This development is expected to increase SONIA trading. ^{60.}





^{55.} See Sterling Working Group 2020 Top Level Priorities; BofE and FCA, Next steps for LIBOR transition in 2020: the time to act is now

^{56.} Sterling Working Group, Minutes of 7 November 2019 Meeting.

⁵⁷Sterling Working Group, <u>2020 Top Level Priorities</u>; Sterling Working Group, <u>Progress on adoption of risk-free rates in sterling</u> markets 15 May 2019; <u>IHS Markit presentation September 2019</u>.

^{58.} Sterling Working Group, Minutes of 7 November 2019 Meeting.

⁵⁹BofE, The Bank's risk management approach to collateral referencing LIBOR for use in the Sterling Monetary Framework - Market Notice, 26 February 2020.

^{60.}See, e.g., <u>BoE's Libor collateral haircut set to accelerate Sonia trading</u>, IFLR Practice Insight, 28 February 2020.



US/USD/SOFR



According to IOSCO, "USD LIBOR is by far the most significant and widely used benchmark." The US has not adopted a multiple-rate approach and has identified SOFR as its RFR. SOFR has been published since the second quarter of 2018.

In its 2019 progress report, the FSB found that "[a]Ithough USD LIBOR remains the dominant rate, SOFR cash markets have begun to grow," and noted significant issuances of SOFR FRNs and securitizations.

In October 2017, the US Alternative Reference Rates Committee (ARRC) set forth its Paced Transition Plan, 62. which sets out six steps and target completion dates for the transition from USD LIBOR. In 2019, the ARRC issued a set of incremental objectives. 63.

The ARRC has stated that it views the first four steps as having been accomplished on or prior to their target completion dates, and that the fifth step will likely be accomplished at least six months earlier than its target completion date.

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ARRC Paced Transition Plan				
Step	Original target completion date	Actual completion date		
1. Infrastructure for futures and/or OIS trading in the new rate is put in place by ARRC members.	2018 H2	Began in 2018		
2. Trading begins in futures and/or bilateral, uncleared, OIS that reference SOFR.	End of 2018	Began in May 2018		
3. Trading begins in cleared OIS that reference SOFR in the current (EFFR) PAI and discounting environment.	2019 Q1	Began in 2018		
4. CCPs begin allowing market participants a choice between clearing new or modified swap contracts (swaps paying floating legs benchmarked to EFFR, LIBOR, and SOFR) into the current PAI/discounting environment or one that uses SOFR for PAI and discounting.	2020 Q1	Began in 2018		
5. CCPs no longer accept new swap contracts for clearing with EFFR as PAI and discounting except for the purpose of closing out or reducing outstanding risk in legacy contracts that use EFFR as PAI and discount rate. Existing contracts using EFFR as PAI and the discount rate continue to exist in the same pool, but would roll off over time as they mature or are closed out.	2021 Q2	CME and LCH have announced that they expect to move SOFR PAI/ discounting on both new and legacy swaps on 16 October 2020.		
6. Creation of a term reference rate based on SOFR derivatives markets once liquidity has developed sufficiently to produce a robust rate.	End 2021	?		

28





In its recent consultation on swaptions, ^{64.} the ARRC noted that, following consultation with their users, LCH and CME had announced plans that would replace steps 4 and 5 of the original paced transition plan with a plan to take the following steps effective at the close of business on 16 October 2020: (i) use SOFR (instead of EFFR) for PAI and discounting of new USD swap contracts going forward; and (ii) modify outstanding USD swap contracts to replace EFFR with SOFR for PAI and discounting.^{65.}

Unfortunately, the sixth and last step, the development of a term reference rate based on SOFR, appears unlikely to occur by its target completion date. At the October 2019 meeting of the ARRC, staff from the US Federal Reserve Board made a presentation which noted that, while SOFR futures volumes have grown significantly since the inception of SOFR, current market depth and trading volumes significantly lag fed funds futures and do not yet appear to be sufficient to create a robust IOSCO-compliant SOFR term rate.^{66.}

The ARRC has not retreated from step 6's target completion date. It has said that it intends to endorse a forward term rate for SOFR, provided consensus can be reached among its members that a robust, IOSCO-compliant term benchmark that meets appropriate criteria set by the ARRC can be produced. However, it has cautioned that the production and timing of such a rate cannot be guaranteed.



^{62.} See here.





^{63.} See here.

⁶⁴ARRC, Consultation on Swaptions Impacted by CCP Discounting Transition to SOFR.

^{65.}See CME, SOFR Discounting & Price Alignment Transition Plan for Cleared USD Interest Rate Swaps and LCH, letter to SwapClear users re: Proposed next steps for transition to USD SOFR discounting in SwapClear, 26 July 2019.

^{66.} Minutes of 22 October 2019 meeting of the ARRC. The Federal Reserve Staff stated that volume in SOFR trades was concentrated in near-term contracts and that there was a lack of depth in the order book for SOFR futures. The Federal Reserve Staff also stated that, "[w]ith regard to benchmark robustness, the IOSCO principles embed a sense of proportionality – the more widely a reference rate is used, the more robust it needs to be." The staff said that the limited futures market depth risks SOFR term rates that may be overly volatile or inconsistent with other market term rates sensitive to spurious trades and subject to manipulation.



Euro zone/euro/€STR



The European Central Bank launched €STR on 2 October 2019. As part of a multiple-rate approach for euro, €STR is set to exist alongside reformed EURIBOR. EONIA, which is currently quoted, is to transition out of existence. From and after 2 October 2019 until 3 January 2022 (when EONIA will cease), EONIA has been recalibrated to refer to €STR plus a fixed spread of 8.5 basis points.

Because EONIA will be discontinued completely in 2022, the Working Group on euro risk-free rates (euro Working Group) has recommended that market participants transition from EONIA to €STR as soon as possible.^{67.} The euro Working Group has also published a recommended legal action plan for a transition from EONIA to €STR^{68.} and (in February 2020) a report on the transfer of EONIA's cash and derivatives markets liquidity to €STR.^{69.}

In July 2019, the European Money Markets Institute (EMMI), the EURIBOR administrator, published the EURIBOR Benchmark Statement, which sets out a new hybrid methodology for calculating EURIBOR. This reformed methodology includes a waterfall of inputs, including expert judgment as the lowest tier. Also in July 2019, the Belgian Financial Services and Markets Authority confirmed that the reformed

EURIBOR hybrid methodology meets the requirements contained in the EU Benchmarks Regulation (which reflects the IOSCO principles).^{70.} The transition to the new methodology occurred in phases. In November 2019, EMMI confirmed that such transition had been completed.^{71.}

LCH, Eurex and CME are scheduled to transition discounting and PAI for cleared euro products from EONIA to €STR on or around 22 June 2020.

The euro Working Group has published recommended language for EURIBOR fallbacks. 72. The euro Working Group has also published fact sheets on EONIA to €STR transition and EURIBOR fallbacks. 73. The euro Working Group plans to issue two consultations on fallbacks in the second quarter of 2020, with recommendations expected for June 2020.

Forward looking term structures for €STR will depend on the development of liquid €STR swaps and futures markets, which appear to be in their infancy at this point.

ISDA received feedback in response to a consultation on spread and term adjustments for derivatives referencing EUR LIBOR and EURIBOR. The overwhelming majority of respondents agreed with an implementation based on the compounded setting in arrears rate approach with a backward-shift adjustment and a spread adjustment based on a historical median over a five-year lookback period for fallbacks in derivatives referencing EUR LIBOR and EURIBOR.74. These results are consistent with the results of prior ISDA consultations for other IBORs.



⁶⁷See https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190314_1~af10eb740e.en.html.

^{68.}See https://www.ecb.europa.eu/paym/pdf/cons/euro_risk-free_rates/ecb.eurostr_eonia_legal_action_plan_20190716.en.pdf.

⁶⁹euro Working Group, Report on the transfer of EONIA's cash and derivatives markets liquidity to the €STR.

^{70.}See https://www.fsma.be/en/news/fsma-authorises-emmi-administrator-euribor-benchmark

^{71.}See https://www.emmi-benchmarks.eu/euribor-org/about-euribor.html. For more on EURIBOR and €STR generally, see <u>Euribor transition: €STR can learn from Sonia and SOFR, IFLR Practice Insight</u> 5 September 2019.

⁷²euro Working Group, <u>High level recommendations for cash products and derivatives transactions referencing EURIBOR</u>, 6 November 2019.

⁷³euro Working Group, <u>factsheet on EONIA to €STR transition</u> and factsheet on EURIBOR fallbacks.

⁷⁴See ISDA, Results of ISDA Supplemental Consultation on Spread and Term Adjustments, including Final Parameters thereof, for Fallbacks in Derivatives Referencing EUR LIBOR and EURIBOR, as well as other less widely used IBORs; and Anonymized Summary of Responses to the ISDA Supplemental Consultation on Fallbacks in Derivatives Referencing EUR LIBOR and EURIBOR and Other Less Widely Used IBORs



Japan/Yen/TONA



As part of a multiple-rate approach for yen, TONA is set to exist alongside reformed TIBOR and Euroyen TIBOR. In its response to a consultation, JBA TIBOR Administration, the administrator of TIBOR and Euroyen TIBOR, stated that it was likely that Euroyen TIBOR would be discontinued (and that TIBOR would be retained).⁷⁵

The report of the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks (Japan Working Group) on its benchmark consultation indicated that the target date for introducing LIBOR fallbacks was Q1 2020.76. The report did not discuss fallbacks from TIBOR. The importance of alignment of fallbacks for Yen bonds with ISDA fallbacks was emphasized by a majority of respondents in order to maintain a hedge accounting relationship.77.

Currently, the trading of Over-Night Call Rate Futures on the Tokyo Financial Exchange is suspended and is expected to resume trading at some point in 2020.^{78.} The Japan Working Group had proposed an OIS rate (Option 3 of the consultation) for a forward term rate for TONA, and

not a rate that included information derived from futures trades. The resumption of trade in Over-Night Call Rate Futures on the Tokyo Financial Exchange is a precondition for the development of Option 4 of the consultation, a forward term rate based on futures. Option 5 of the consultation for a JPY LIBOR fallback was TIBOR.

The Japan Working Group agreed to begin initiatives toward the publication of Option 3, and to begin to publish this rate on a phased basis: (i) first calculating and publishing a "prototype" rate; and (ii) then publishing a "production" rate.

The production rate of Option 3 is planned to be developed by mid-2021. The Japan Working Group also announced that it had selected

Quick Corp. to calculate and publish prototype rates for JPY term reference rates.^{79.}

In March 2020, the Financial Services Agency and the Bank of Japan released a "Summary of Survey Results on the Use of LIBOR and Main Actions Needed" with respect to a survey undertaken of Japanese financial institutions.⁸⁰

That summary indicated that "most of the survey items chosen indicate that preparations as a whole [for LIBOR transition] are still in process or not yet started."

⁷⁵ JBA TIBOR Administration, Result of public consultation: 1st Consultative Document / Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR 30 May 2019.

⁷⁶Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks, <u>Final Report on the Results of the Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks.</u>

⁷⁷Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks, <u>Final Report on the Results of the Public Consultation on the Appropriate Choice and Usage of Japanese Yen Interest Rate Benchmarks.</u>

⁷⁸See https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129b.pdf and FSB 2019 https://www.boj.or.jp/en/paym/market/jpy_cmte/data/cmt191129a.pdf. See also <a href

^{79.} Japan Working Group, <u>Determination of the Calculating and Publishing Entity of Prototype Rates for Term Reference Rates</u> 26 February 2020.

^{80.} Available here.



Switzerland/CHF/SARON



SARON was established in 2009 and has been calculated back to 1999.⁸¹ In October 2018, the National Working Group on CHF Reference Interest Rates (Swiss Working Group) stated that a forward term SARON was not currently feasible and recommended using compounded SARON whenever possible as an alternative to a term rate.⁸²

At its 5 February 2019 meeting, the Swiss Working Group stated that it found no impediment to issuing FRNs referring to compounded SARON in arrears.^{83.} In July 2019, the Swiss Working Group issued a <u>Discussion</u>

paper on SARON Floating Rate Notes. This discussion paper included sample

This discussion paper included sample interest provisions for FRNs referring to SARON compounded in arrears, including fallback language.

SIX Group, the SARON benchmark administrator, has announced that it is in the process of launching SARON compound indices.⁸⁴







^{81.} See Swiss Working Group, Summary of reform efforts until 2016.

^{82.} See Minutes from the meeting of the National Working Group on CHF Reference Interest Rates 31 October 2018.

^{83.} See minutes 5 February 2019 meeting.

⁸⁴See SIX, <u>Compounded SARON for illustrative purposes</u> and SIX, <u>Compounded SARON and the SARON Compound indices</u>, February 2020.



Australia/A\$/AONIA



AONIA is the RFR for Australia, which has adopted a multiple-rate approach. This RFR (also referred to as the "cash rate") is set to exist alongside BBSW.

In June 2019, the first FRN referencing AONIA was issued by the South Australian Government Financing Authority.

According to the Reserve Bank of Australia (RBA) website on Interest Rate Benchmark Reform, Australian market participants have been engaged in the ISDA Asia-Pacific Benchmark Working Group. This resulted in BBSW being included in ISDA's Consultation on Benchmark Fallbacks, with AONIA as the fallback rate. The RBA expects market participants to adopt more robust fallbacks for BBSW following this process.

According to the FSB, "It could be possible to generate a term rate using transactions and executable prices from the OIS market, futures market or the repo market. The RBA has expressed support for efforts by the

private sector to develop such term rates. However, there would need to be significant effort to develop the appropriate market infrastructure and practices before these could be considered robust benchmarks. Given this, the RBA has encouraged market participants to consider using the Cash Rate rather than waiting for the development of a term rate."

The Australian Securitisation Forum conducted a survey in 2019 regarding interest rate benchmarks, and published the results of the survey in November.^{85.} Survey respondents indicated that the use of 1 month BBSW in securitizations was well supported by respondents for the twelve-month period following

the date of the survey (referred to in the results as the short term), but respondents were uncertain of the utility of such rate in securitizations after that period. For the medium term, there was no clearly preferred alternative to BBSW, but three alternatives had support: 3-month BBSW, AONIA and Term AONIA (which does not yet exist). Several respondents expressed the view that Australian markets should be cognizant of changes in global markets in order to remain competitive. In addition, some respondents noted that debt fallback language and securitization fallback provisions should be aligned with each other and might differ slightly from derivatives provisions.

85. Australian Securitisation Forum, Interest Rate Benchmark Survey Report.





Canada/C\$/CORRA



CORRA is the RFR for Canada, which has adopted a multiple-rate approach. This RFR is set to exist alongside CDOR.

CORRA is expected to be reformed. In February 2019, the Canadian Alternative Reference Rate Working Group (CARR) published a consultation paper for an enhanced methodology to calculate CORRA. The results of the consultation and the final methodology were published in July 2019.

On 20 February 2020, The Bank of Canada published the methodology it will use to publish CORRA.^{86.} The Bank of Canada also announced its intention to become the administrator of CORRA and stated that it would take over the

responsibility for calculating and publishing CORRA effective from 15 June 2020.87.

CARR's Term Risk-Free Rate subgroup is planning to launch a survey to determine whether there is a need for a forward-looking term RFR in the Canadian market.^{88.} According to the FSB, "Based on feedback and analysis, CARR will potentially develop a methodology and specifications for the Canadian term risk-free rate benchmark, including how to ensure that it is IOSCO-compliant and which maturities should be published."

CARR published <u>Principles for Enhancements to Fallback Language</u> in January 2019. In May 2019, CARR proposed draft fallback language for cash products that reference CDOR. This language will be finalized and published after the results of ISDA's consultation on fallbacks for derivatives that reference CDOR are finalized.⁸⁹

Bourse de Montréal Inc. is currently working on a three-month CORRA futures product.^{90.}

86.See here.

87. See here.

88. See Minutes of CARR 16 December 2019 meeting

89. See Minutes of CARR 2 May 2019 meeting.

90.See here.







Hong Kong/HK\$/HONIA



HONIA is the RFR for Hong Kong, which has adopted a multiple-rate approach. This RFR is set to exist alongside HIBOR.

According to the FSB, "The Hong Kong Monetary Authority (HKMA) continues to work with the [Hong Kong Treasury Markets Association (TMA)] to ensure that HIBOR follows better the IOSCO Principles for Financial Benchmarks, having regard to local market conditions. The TMA is planning to conduct its regular review on the tenor structure and calculation methodology of HIBOR in due course. In doing so, the TMA will gather industry feedback and take into account other jurisdictions' experience. On HONIA, the TMA completed an industry consultation in May 2019 on some technical

refinements to HONIA. This was part of its ongoing initiative to enhance the robustness of the benchmark. Taking into account feedback from the consultation, the TMA will consider how best to put in place the relevant refinements and publish the consultation conclusions in the second half of 2019. It will further engage market participants in Hong Kong to explore means of encouraging the adoption of HONIA in their business activities. The TMA is also exploring other possible means of developing term rates for HKD, such as an OIS market for HONIAbased transactions.

It will draw reference from other jurisdictions' experience in promoting the development of OIS market in Hong Kong."

In December 2019, the TMA published a consultation conclusion on technical refinements to HONIA. The publication included feedback received from an April 2019 consultation conducted by the TMA, as well as the TMA's responses.^{91.}

^{91.}Consultation conclusion on technical refinements to HKD Overnight Index Average (HONIA); see also TMA, Alternative Reference Rate for Hong Kong Interbank Offered Rate (HIBOR) - Consultation with Industry Stakeholders April 2019.







Singapore/S\$/SORA



SORA is the identified RFR for Singapore, which has adopted a multiplerate approach. This RFR is set to exist alongside SIBOR. SORA has been published by the Monetary Authority of Singapore (MAS) since 2005.

As noted by the FSB 2019 report, "Unlike other jurisdictions where IBOR rates are used in derivatives, Singapore Dollar (SGD) derivatives do not reference SIBOR but reference the SGD Swap Offer Rate (SOR) instead. SOR is an FX swap implied interest rate, computed from actual transactions in the USD/SGD FX swap market, and utilising USD LIBOR as an input. As SOR relies on USD LIBOR in its computation methodology, the outlook for USD LIBOR beyond end-2021 has implications on the long-term viability of SOR."

In effect, SOR reflects the cost of a synthetic borrowing of SGD envisaged by notionally (i) borrowing USD and (ii) "swapping" the "borrowed" USD to SGD by means of an FX transaction. 92. SIBOR (which has been reformed) is in the process of being further reformed.

The ABS Benchmarks Administration Co Pte Ltd and the Singapore Foreign Exchange Market Committee (jointly known as ABS-SFEMC) finalized proposals to enhance SIBOR in July 2018.93. The key recommendations aim to increase reliance on market transactions by using a waterfall of inputs. Transitional testing of a new enhanced waterfall methodology for SIBOR was conducted in the second half of 2019. ABS-SFEMC are expected to provide an update on the proposed enhancements to SIBOR during Q2 2020, including the targeted implementation date of the new waterfall methodology.

However, ABS-SFEMC have stated that SIBOR, as currently constructed, is vulnerable to a discontinuation of USD LIBOR, since it relies on SOR as an input in its waterfall methodology. ^{94.} For this reason, ABS-SFEMC

determined that SIBOR would not be a suitable alternative to SOR in SGD interest rate derivatives.^{95.}

ABS-SFEMC recommended that SGD interest rate derivatives transition from SOR to SORA.96. ABS-SFEMC recommended that "SGD cash markets could continue to use multiple rates as is the case today, where various interest rates (e.g., SORA, SIBOR, bank deposit/board rates) would coexist as reference rates" and that "forward looking interest rate benchmarks based on derivatives referencing SORA (henceforth labelled as 'term-SORA') could be developed later when activity in the SORA-based derivatives market picks up. Such benchmarks could serve as alternative reference rates for cash market users."







The Steering Committee for SOR Transition to SORA (SC-STS), which was established by the MAS,^{97.} is reviewing the results of ISDA's supplemental consultation concerning fallbacks for derivatives contracts that reference SOR. The SC-STS is expected to work with ISDA to

incorporate contractual fallbacks for SOR, at the same time as for LIBOR, in the amended ISDA definitions and protocol. ABS-SFEMC further stated that "[t]he establishing of new market conventions for the trading of SORA-based cash and derivatives market products would be among

the first priorities of [SC-STS]. It is expected that industry guidance on these matters should be made available in 1H 2020."98.



- ^{92.}See ABS, <u>Calculation Methodology for the ABS Benchmarks</u> 1 October 2019.
- ^{93.}See <u>here.</u> See also ABS-SFEMC, <u>Response to Feedback Received from the Consultation Paper on the Evolution of SIBOR</u> 24 July 2018. Among other things, 12-month SIBOR is expected to be discontinued, and a waterfall of inputs to SIBOR has been established
- ⁹⁴·ABS-SFEMC, <u>Roadmap for Transition of Interest Rate Benchmarks: From SGD Swap Offer Rate (SOR) to Singapore Overnight Rate Average (SORA)</u> 30 August 2019, FAQs, Q5.
- ⁹⁵.ABS-SFEMC, Roadmap for Transition of Interest Rate Benchmarks: From SGD Swap Offer Rate (SOR) to Singapore Overnight Rate Average (SORA) 30 August 2019, §2.2.2.
- ⁹⁶ABS-SFEMC, <u>Roadmap for Transition of Interest Rate Benchmarks: From SGD Swap Offer Rate (SOR) to Singapore Overnight</u>
 Rate Average (SORA) 30 August 2019 §§3.1.1, 3.1.2.
- ^{97.}See here.
- ⁹⁸ABS-SFEMC, Roadmap for Transition of Interest Rate Benchmarks: From SGD Swap Offer Rate (SOR) to Singapore Overnight Rate Average (SORA) 30 August 2019, FAQs, Q9.







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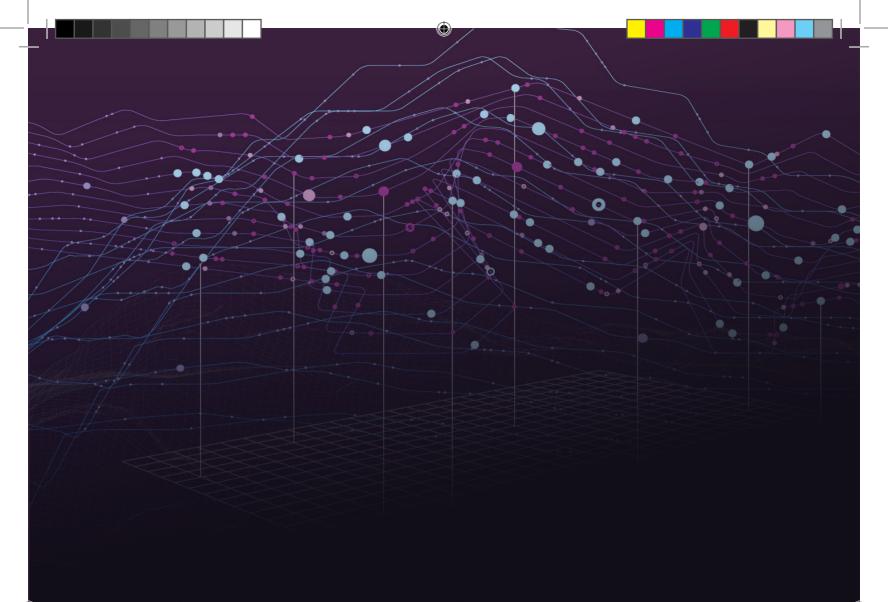
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