



Benchmark Transition

From IBORs to Risk-Free Rates

May 2019

Introduction

- Policymakers around the world have determined that LIBOR and other similar benchmarks are no longer fit for purpose as they no longer reflect market financing practices and rely on “expert judgement” rather than recorded transactions, making them susceptible to manipulation. Policymakers have therefore decided to initiate a transition from IBORs to a new set of Risk-Free Rates (RFRs), which comply with new international standards for benchmarks.
- In some jurisdictions and for certain financial products, parties may not be able to reference benchmarks that fail to meet regulatory requirements such as those found in the International Organisation of Securities Commissions (IOSCO) standards¹ and the EU Benchmarks Regulation (BMR).
- The transition to RFR benchmarks is likely to be complex, given the size and diversity of the markets which reference IBORs. Financial contracts worth hundreds of trillions of US dollars reference IBOR benchmarks, in products as diverse as consumer loans, residential and commercial mortgages, corporate bonds and loans, interest rate swaps and other derivatives, as well as securitised products.
- The timescale for transition from IBORs to RFR-based benchmarks is short compared to the complexity and effort involved in the change. After the end of 2021, the UK’s FCA, which regulates LIBORs, will no longer consider it necessary for it “to persuade, or compel, banks to submit to LIBOR” or “to sustain the benchmark through [its] influence or legal powers” ([The Future of LIBOR](#), July 2017).
- This note describes the new RFRs in various jurisdictions, plans for the transition from IBOR-referencing to RFR-referencing benchmarks, and the development of fallbacks for legacy contracts referencing IBORs.
- BNP Paribas is committed to helping our clients manage the benchmark transition process. More details about benchmark reform can be found in our various publications on the BNP Paribas websites, including our [Markets 360 publications](#).

¹ IOSCO has member organisations in over 100 countries, which regulate more than 95% of the world's securities markets.

1. Reform of IBORS

- The methodologies for calculating IBORs are currently in the process of being reformed in order to help ensure that IBORs remain compliant with regulatory requirements and IOSCO standards for benchmarks.
 - Previous “expert opinion” surveys are being replaced by a “waterfall” or “hybrid” methodology referencing in the following order: transactions in defined tenors; transactions in nearby tenors (appropriately adjusted); expert judgement.
 - The new methodology for LIBORs has been accepted as compliant as the UK’s FCA has authorised the ICE Benchmark Administration Limited (IBA) as a regulated benchmark administrator under the BMR. For EURIBOR, EMMI will file for authorisation as a benchmark administrator with Belgium’s FSMA by Q2 2019; starting in Q2, EMMI will gradually implement the new methodology (to be completed by end of 2019).

- Nonetheless, regulators in the US, UK and in some other jurisdictions are committed to switching market benchmarks away from IBORs to the new RFRs. As a result, it is likely that LIBOR fixings will cease after the end of 2021.

- IBORs have faced less strong official opposition in some other jurisdictions, notably the euro area, Japan, Australia and Canada where it is contemplated that markets would continue to use IBORs while developing RFRs.

2. Risk-Free Rates

United States

- RFR: Secured Overnight Financing Rate (SOFR) is based on repo transactions reported by (i) General Collat Finance (GCF) repo, (ii) tri-party ex-GCF and (iii) FICC’s DVP repo service.
- Transition methodology: The Federal Reserve’s Alternative Reference Rate Committee (ARRC) has created a [Paced Transition Plan](#). SOFR futures were launched in May 2018, and some swaps and bonds referencing SOFR have already been transacted. SOFR swaps have been accepted by FASB for hedge accounting under US GAAP. By Q1 2020 central counterparties (CCPs) will accept SOFR to calculate variation margin (PAI) and discounting, alongside the existing Effective Federal Funds Rate (EFFR) framework. By Q2 2021 CCPs will no longer accept clearing with EFFR for PAI and discounting, except for closing out or reducing risk.
- Term rates: ARRC is encouraging the development of a market in term SOFR rates, starting with SOFR futures trading.
- Indicative levels: On average, SOFR has been fixed at the Federal Reserve’s interest rate on excess reserves (IOER).

United Kingdom

- RFR: Reformed Sterling Overnight Index Average (SONIA). Based on overnight unsecured transactions via brokers and negotiated bilaterally.
- Transition from “old” to “new” SONIA has already happened (April 2018).
- Term rates: Consultation on term SONIA reference rate (TSRR) is complete. The Working Group favours collecting firm quotes on spot-starting OIS swaps. TSRR is expected to be available from H2 2019.
- Indicative levels: Since April 2018 SONIA swap rate has fixed on average 4.5bp below the Bank of England’s Bank Rate.



Euro area

- RFR: Euro Short-Term Rate (€STR) is based on unsecured overnight borrowing rates reported by 52 reporting agents for all of their financial counterparties. (Differs from EONIA which limited the pool of reported transactions to interbank and had fewer reporting agents.)
- Transition: €STR publication is scheduled to begin on 2 October 2019. "Pre-€STR" is already being published. EONIA in its current form will not be benchmark compliant at the end of the transition period (likely to be extended to end of 2021); the ECB working group has recommended that EONIA be re-defined as €STR plus a fixed spread in due course.
- Term rates: The ECB working group's consultations on term €STR reference rates have recommended a similar methodology to that for term SONIA. Such methodology will be used as a fallback in EURIBOR-linked contracts.
- Indicative levels: Since the inception of pre-€STR, it has fixed on average 4bp below the ECB's Deposit Rate.

Switzerland

- RFR: Swiss Average Rate Overnight (SARON) is a secured overnight rate published by SIX Swiss exchange.
- Transition: SARON has been established since 2009.
- Term rates: Attempts have been made to create SARON term rates, but it is likely not to happen.

Japan

- RFR: Tokyo Overnight Average Rate (TONAR) is based on unsecured overnight call money rates.
- Transition: The Bank of Japan has recently concluded a consultation on the outlook for onshore and offshore TIBOR. It seems likely that domestic TIBOR and TONAR will co-exist as benchmark reference rates.

Australia

- RFR: The RFR for the AUD is the interbank overnight cash rate (Cash Rate), which is administered by the RBA. The methodology is already aligned with IOSCO principles. The Cash Rate is calculated directly from the market transactions data with average daily transactions around AUD 5bn and has been in place for 20 years.
- Transition: Australia's credit based benchmark (BBSW) has undergone a methodology review to bring it in line with IOSCO principles and is now a VWAP transaction based price with a waterfall calculation methodology. Currently there are no plans for a formal transition and it is expected that both BBSW and the RFR can co-exist as the key benchmarks.
- Term rates: There is already a functioning basis market between BBSW and OIS allowing the use of both benchmarks.

3. Fallbacks for legacy IBORs

- The potential end of the publication of IBORs presents a challenge for existing contracts which reference an IBOR rate. Some contracts may already contain detailed fallback provisions, while some others specify fallbacks which may create their own difficulties, and some have no fallback provisions at all. Participants in IBOR-referencing contracts should ensure they understand each contract's fallback provisions. Gathering this information may in itself be an onerous exercise.
- Policymakers are working to help create fallback provisions in order to minimise adverse consequences from benchmark reform.



- Derivatives contracts make up the majority of IBOR-referencing contracts by face value. Fortunately, derivatives transactions are mostly governed by the ISDA documentation and are largely cleared through a few CCPs, and work on creating a fallback methodology for ISDA-governed transactions is at an advanced stage.
 - ISDA has completed consultations for GBP, JPY and CHF IBORs.
 - The consultations found strong support for fallbacks to be constructed using the RFR with a “term adjustment” compounded in arrears and a credit “spread adjustment” based on a historical average (See [Summary of Responses](#) for details).
 - Further consultations are planned for USD LIBOR (early 2019), EUR LIBORs and EURIBOR (from October 2019 onwards). The same preferences are expected.
 - Once fallback methodologies are agreed, ISDA will update its documentation for new swaps and create a protocol to which swap counterparties would be able to adhere to amend legacy swaps to incorporate the new fallbacks. Take-up is expected to be more or less universal among swap market participants, and would be helped along by CCPs’ adoption of an approach reflecting the protocol, and encouragement from regulators. No publication date for these initiatives has yet been given.

- Fallbacks for IBOR references in contracts and transactions outside the derivatives markets present much more of a challenge. In the US, ARRC has conducted consultations in USD markets for floating rate notes and syndicated loans, and for bilateral business loans and securitisations. Recommendations should be published early during this year. In Europe, the EUR RFR Working Group is considering a forward-looking term €STR as the basis for a fallback for EURIBOR-linked products.
 - A key difference between the cash market and derivatives market consultations has been that there is more support among cash market participants for a forward-looking “term adjustment” (vs the in-arrears term adjustment favoured in the derivatives market).

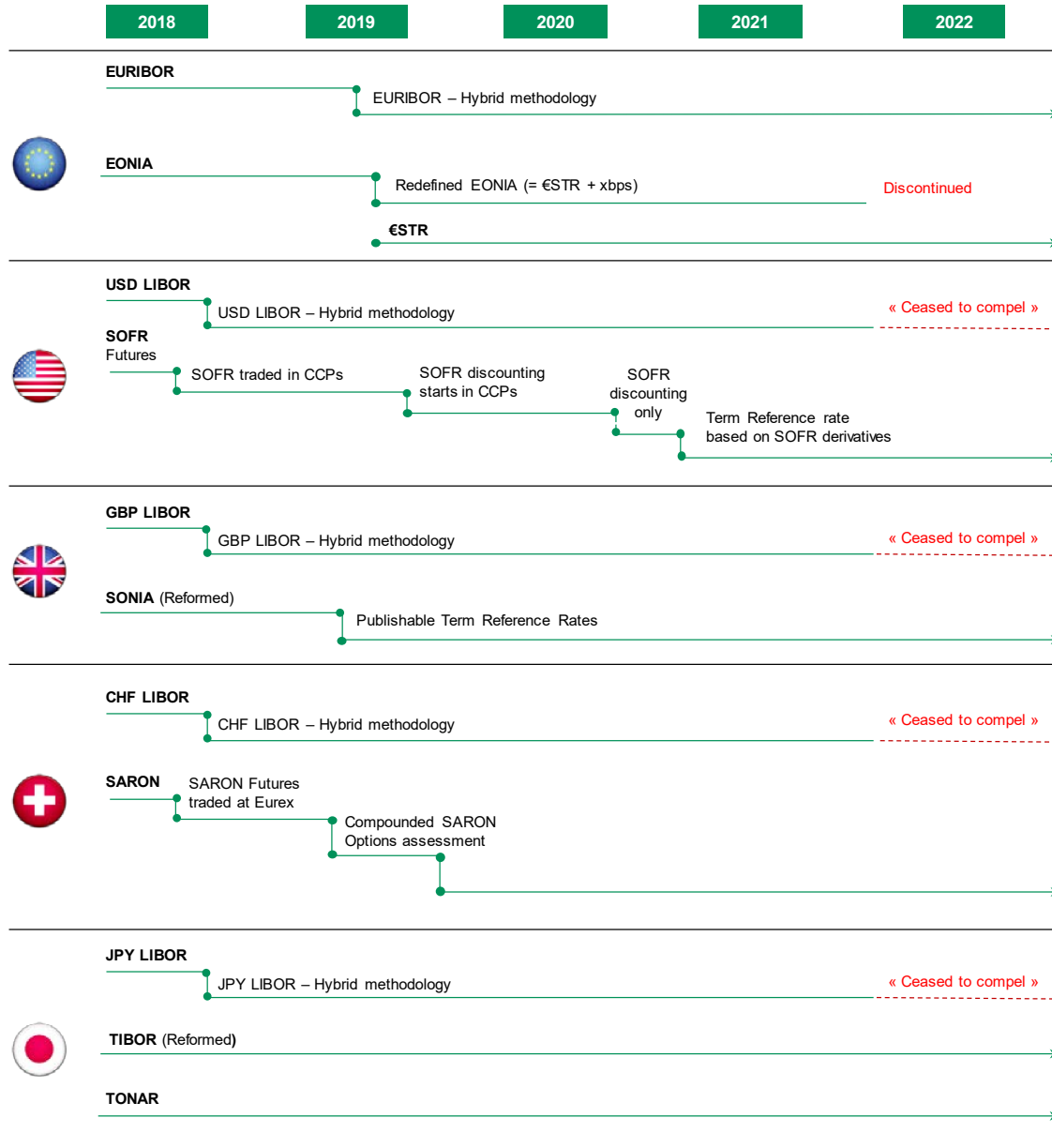
- Retail-facing contracts referencing IBORs may have to be renegotiated on a bilateral basis.

4. Action points

- Institutions and firms with IBOR-referencing contracts should ensure they understand the contractual terms, especially regarding fallback provisions, which determine their IBOR exposures.
- There may also be exposure to different fallback provisions in the event an IBOR ceases to be published. For example, where fallback provisions differ for different products (e.g. swaps vs bonds) or for different currencies (e.g. cross-currency basis) hedging mismatches may arise between fallback rates which do not exist as long as IBORs are published.
- Renegotiation of contract terms (“repapering”) may be necessary outside areas governed by officially-sanctioned protocols (and in some cases, perhaps, also where protocols do exist).
- BNP Paribas is committed to helping our clients manage the benchmark transition process. Please contact your BNP Paribas representative with any questions.



Timeline across currencies and benchmarks



Legal Notice: This document/communication may contain “Research” as defined under MiFID II unbundling rules; any such Research is intended either (i) for those firms who are in scope of the MiFID II unbundling rules and have signed up to a BNP Paribas Global Markets Research package, or (ii) for firms that are out of scope of the MiFID II unbundling rules and therefore are not required to pay for Research under MiFID II. Please note that it is your firm’s responsibility to ensure that you do not view or use any Research in this document if your firm has not signed up to a BNP Paribas Global Markets Research package, unless your firm is out of scope of the MiFID II unbundling rules. This document may also be regarded as a minor non-monetary benefit (MNMB) and it is your firm’s responsibility to consider its own regulatory obligations in relation to inducements and accepting MNMBs.

This document is **FOR DISCUSSION PURPOSES ONLY**; it constitutes a marketing communication and has been prepared by BNP Paribas and/or its subsidiaries or affiliates (collectively “we” or “BNP Paribas”). As a confidential document it is submitted to selected recipients only and it may not be made available (in whole or in part) to any other person without BNP Paribas’ written consent.

This document is not a recommendation to engage in any action, does not constitute or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision.

The information contained in this document has been obtained from sources believed to be reliable, but there is no guarantee of the accuracy, completeness or suitability for any particular purpose of such information or that such information has been independently verified by BNP Paribas or by any person. None of BNP Paribas, its members, directors, officers, agents or employees accepts any responsibility or liability whatsoever or makes any representation or warranty, express or implied, as to the accuracy or completeness of the information, or any opinions based thereon, contained in this document and it should not be used in place of professional advice. Additional information may be provided on request, at our discretion. BNP Paribas gives no assurance that any favourable scenarios described are likely to happen. This document is current as at the date of its production and BNP Paribas is under no obligation to update or keep current the information herein. In providing this document, BNP Paribas offers no investment, financial, legal, tax or any other type of advice to, and has no fiduciary duty towards, recipients. Recipients must make their own assessment of the matters detailed herein, using such professional advisors as they deem appropriate. BNP Paribas accepts no liability for any direct or consequential losses arising from any action taken in connection with or reliance on the information contained in this document even where it has been advised of the possibility of such losses.

The information in this document is not intended for distribution to, or use by, any person or entity in any jurisdiction where (a) the distribution or use of such information would be contrary to law or regulations, or (b) BNP Paribas or a BNP Paribas affiliate would become subject to new or additional legal or regulatory requirements. Persons in possession of this document should inform themselves about possible legal restrictions and observe them accordingly.

This document is intended for, and is directed at, (a) Professional Clients and Eligible Counterparties as defined by the European Union Markets in Financial Instruments Directive (“MiFID”), and (b) where relevant, persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, and at other persons to whom it may lawfully be communicated (together “Relevant Persons”). Any investment or investment activity to which this document relates is available only to and will be engaged in only with Relevant Persons. Any person who is not a Relevant Person should not act or rely on this document or its content.

This document is being communicated by BNP Paribas London Branch, 10 Harewood Avenue, London NW1 6AA; tel: +44 (0)20 7595 2000; fax: +44 (0)20 7595 2555 (www.bnpparibas.com). Incorporated in France with Limited Liability. Registered Office: 16 boulevard des Italiens, 75009 Paris, France. 662 042 449 RCS Paris. BNP Paribas London Branch is lead supervised by the European Central Bank (ECB) and the Autorité de Contrôle Prudentiel et de Résolution (ACPR). BNP Paribas London Branch is authorised by the ECB, the ACPR and the Prudential Regulation Authority and subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct Authority are available from us on request. BNP Paribas London Branch is registered in England and Wales under no. FC13447. © BNP Paribas 2019. All rights reserved.

BNP Paribas Securities Corp., an affiliate of BNP Paribas, is a U.S. registered broker-dealer and a member of FINRA, the NYSE and other principal exchanges.

