### Stand out for the right reasons

Financial Services Risk and Regulation

# Hot Topic

## Acceleration of LIBOR transition

It has been nearly a year since FCA CEO Andrew Bailey's speech on the 'Future of LIBOR' alerted markets to the viability of the world's most widely-used benchmark. In that time, supervisors, administrators, global standard-setting bodies, industry organisations, and market participants have struggled to gauge the level of effort required to plan for transition. In the absence of a coordinated strategy, financial institutions and corporates alike have been forced to parse mixed messages on the degree of urgency. In the following paragraphs, the inputs from regulators and working groups give more clarity and direction.

While global supervisors encouraged action, activity stalled as market participants awaited an official response on three key outputs perceived as prerequisites for the transition from LIBOR. The post-LIBOR world requires:

- 1. Designation of robust alternative risk-free reference rates (RFRs) to replace LIBOR (near completion)
- 2. Revised contract provisions, identifying replacement rates and triggers to prevent frustration of contracts referencing LIBOR (in progress), and
- 3. Term rate representations of alternative RFRs (just starting).

Within a four-day period, the FCA, Financial Stability Board (FSB), International Swaps and Derivatives Association, Inc. (ISDA) and the Sterling RFR Working Group made a series of important public statements (three on the same day), significantly advancing the roadmap to transition away from LIBOR by end-2021.

#### Highlights

The FCA, FSB, ISDA and the Sterling Risk-Free Reference rate (RFR) Working Group issued successive communications which collectively urge action and further clarify how firms should manage the transition from IBORs to alternative RFRs by end-2021.



- On 12 July 2018, Bailey delivered a speech on *Interest rate benchmark reform: transition to*  a world without LIBOR, emphasising in the most unequivocal language from a regulator to date that all firms should plan for a transition to alternative RFRs, and pointing out risk management and disclosure requirements for firms continuing to use LIBOR.
- Within hours of the Bailey speech, the FSB published Interest Rate Benchmark Reform:
   Overnight RFR and Term Rates, drawing important distinctions between overnight RFRs, compounded overnight RFRs and term RFRs.
- Later the same day, ISDA launched the highly anticipated Consultation on Certain Aspects of Fallbacks for Derivatives Referencing GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW, proposing (1) amendments to the 2006 ISDA Definitions to include fallback rates for legacy derivatives contracts referencing LIBOR and other key interbank offered rates (IBORs), (2) the specific triggers that would activate the fallback provisions, and (3) adjustments to alternative overnight RFR to include term structure and risk premia.
- Finally, the Bank of England Working Group on Sterling RFRs published a Consultation Paper (CP) on Term SONIA Reference Rates (TSRR) on 17 July 2018, advancing the analysis on the development of an actual term RFR for cash products.

The order of these publications does not appear to be coincidental. Each successive document builds on the conclusions of the previous. Read in conjunction with the joint *IBOR Global Benchmark Transition Report* <sup>1</sup>, which ISDA and several industry organisations published on 25 June 2018, providing detailed next steps, global users now have adequate information to build out their change programs.

## The FCA urges preparation for a world without LIBOR

Bailey begins his speech on *Interest Rate Benchmark Reform: Transition to a World without LIBOR* with an unequivocal call to action. He urges firms to quicken the pace of preparations for the transition away from LIBOR by end-2021, when its 20 panel banks will no longer be required to contribute input data. After quickly dispatching the false hope that the cessation of the world's largest benchmark might be 'a remote probability 'black swan' event' or avoided altogether by a synthetic LIBOR, Bailey dedicates much of the remainder of his comments to reviewing the status of progress.

Since banks no longer actively seek funding in wholesale markets, which LIBOR purportedly measures, transactions are sparse. Consequently, LIBOR is now based on less reliable expert judgment which may inherently be vulnerable to manipulation. In response to supervisory recommendations and regulations which prioritise transaction data to ensure robustness<sup>2</sup>, public-private working groups in the jurisdictions of the five LIBOR currencies have developed transaction-based, alternative RFRs to replace LIBOR. (See Table 1.)

Financial institutions are already beginning to issue RFR-linked products to further deepen liquidity in the new rates. The European Investment Bank issued £1bn bonds linked to SONIA in June.<sup>3</sup> In the US, the Federal National Mortgage Association issued \$6bn in SOFR-linked securities on 26 July 2018, the first of its kind.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> See our analysis of the Transition Report *here*.

<sup>&</sup>lt;sup>2</sup> See FSB work on reforming interest rate benchmarks, Wheatley Review, IOSCO Principles for Financial Benchmarks, and EU Benchmarks Regulation.

<sup>1 |</sup> **Hot Topic** | Financial Services Risk and Regulation

<sup>3</sup> EIB issues market's first SONIA GBP benchmark with GBP 1bn 5y issuance

Fannie Mae Pioneers Market's First-Ever Secured Overnight Financing Rate Securities

**Table 1. Designated RFR for remaining five LIBOR currencies** 

Jurisdiction	Working Group Sponsor	LIBOR currencies	Replacement RFR
United States	Federal Reserve Bank of New York	USD LIBOR	Secured Overnight Financing Rate (SOFR)
United Kingdom	Bank of England	GBP LIBOR	Reformed Sterling Overnight Index Average (SONIA)
Switzerland	Swiss National Bank	CHF LIBOR	Swiss Average Rate Overnight (SARON)
Japan	Bank of Japan	JPY LIBOR	Tokyo Overnight Average Rate (TONA)
European Union	European Central Bank	EUR LIBOR	Euro Short-Term Rate (ESTER) available as of October 2019

Noting previous 'complacency', Bailey lauds progress among industry associations in the derivatives, bond, syndicated loan and securitisation markets who are developing contractual language with fallback provisions and specific triggers in anticipation of the cessation of LIBOR. However, as echoed by Bailey, fallback language to ensure contract continuity should not be viewed as 'the primary mechanism for transition'. Firms must stop writing new contracts referencing LIBOR. Firms can also reduce reliance on the benchmark in legacy contracts through conversion and compression of derivatives contracts and by replacing LIBOR with RFRs in loans at the appropriate period.

Important work is still ongoing in the development of RFR term structures. Differences in the level of preparation in this area varies between derivatives and cash markets. LIBOR is available in various tenors, while the RFRs identified to date are limited to overnight rates. Derivatives markets rely most heavily on LIBOR, primarily in overnight interest rate swaps (OIS). Consequently derivatives markets are able to transition to the newly-designated overnight RFRs more readily to reduce future LIBOR exposure.

By contrast, cash markets (incl. bond issuers and lenders) commonly use 'forward-looking' term structures which permit counterparties to project coupon and interest payments at the beginning of the contract term. Developing term rates is the next stage of the work to be carried out by the respective public-private working groups with direction from the FSB (discussed below). Firms that do not require term rates should plan their transitions using the overnight RFRs.

Some firms continue to issue long-dated, LIBOR-referencing contracts with maturities after 2021 when the benchmark's future is no longer assured. Bailey draws important connections between continued use of LIBOR and regulatory obligations for sound risk management and increased

disclosure requirements. According to the UK regulator, firms should:

- Demonstrate risk mitigation and reduced reliance on LIBOR
- Disclose risks of LIBOR-related financial products (including its cessation) to investors
- Disclose LIBOR-related listed securities in prospectuses and fund memoranda
- Review the design and risks of new products referencing LIBOR, describe the impact of its cessation and share appropriate information with distributors, and
- Consider suitability and appropriateness of products referencing LIBOR for clients receiving investment advice or managed portfolios.

UK and EU readers will recognise these as obligations under the FCA 11 Principles, the EU Benchmarks Regulation, UCITS Regulation, Prospectus Regulations and MiFID II. Readers from other jurisdictions should likewise consider regulatory obligations to disclose increased risks of continued reliance on IBORs whose futures are not assured.

The Sterling RFR Working Group published *New Issuance of Sterling Bonds Referencing LIBOR* on 23 July 2018, detailing some of the risks for bond issuers who continue to issue new long-dated instruments linked to LIBOR. Issuers could risk litigation for mis-selling investment products or where switching to fallbacks after 2021 results in value transfer awarding an economic benefit to one party over the other.

## The FSB analyses overnight and term RFRs

As a global standard-setting body comprised of regulators tasked with ensuring financial stability, the FSB established the Official Sector Steering Group (OSSG) in 2013 to coordinate its efforts to reform interest rate benchmarks. To further those ongoing reforms, the FSB published *Interest Rate Benchmark Reform: Overnight RFR and Term Rates,* (almost simultaneously with Bailey's speech) drawing important distinctions between overnight, compounded overnight and term RFRs.

#### **Overnight rates**

As noted by the FSB, an interest rate benchmark is robust when it is 'anchored in active, liquid underlying markets'. LIBOR is but one (albeit by far the largest) of several IBORs which no longer appropriately represent the underlying markets they purport to measure. The report indicates that '[w]here the value of contracts referencing the benchmark is very large, markets will need to reference a robust benchmark, such as overnight RFRs, to avoid systemic risk.' Global central banks in collaboration with administrators, contributors and users designated robust, alternative overnight RFRs grounded in either secured repo transactions or unsecured money market transactions. These fallback rates are founded on an underlying market which is liquid and deepening as financial institutions issue new products linked to them. Although most market participants can use overnight RFR, these rates are not suitable for all users.

## Compounded overnight rates vs. term rates

For some market participants, it is desirable to know at the start of each period what exact level of the interest rate will apply to determine payments at the end of the period. Public-private RFR working groups have turned their collective attention to the development of term RFRs derived from liquid overnight rates.

The FSB report defines a term rate as one which 'captures the observed or expected average rate over a given period'. While backward-looking rates set the actual rate at the end of the relevant period, forward-looking rates capture the expected rate at the beginning. A number of bond issuers and lenders continue to seek forward-looking term RFRs that permit the calculation of coupon or interest rate payments from the outset.

Some firms have delayed transition plans, awaiting the development of term RFRs deemed a prerequisite to effective change management programs. A year on from Bailey's original statement on LIBOR's future, the official sector is only belatedly considering the development of RFR-derived term rates. Term RFRs would be based on transactions or executable quotes in active markets for RFR-linked derivatives (e.g. OIS and futures).

Robust term rates require an active underlying derivatives market which may not exist (a) where the OIS and futures markets are illiquid or (b) in the rare circumstances where IBORs remain representative. The FCA and the FSB stress that only those firms that require forward-looking term rates to plan cash flows should wait on them because such rates at best are in the early stages of development, and at worst may provide no more stability to financial markets than unrepresentative IBORs. In the interim, both suggest that a backward-looking, compounded overnight RFR with interest payments set at the end of the period could provide a more suitable, liquid and indeed readily available alternative. (The ISDA consultation below proposes methods for adding term structure and risk premia to overnight RFR.)

Table 2. The expanding array of reference rates under discussion

Reference rate	Characteristics
Adjusted (overnight) RFR	Overnight with adjustments for term structure and risk premia
Overnight RFR	Overnight with no term structure
Compounded overnight RFR	Backward-looking term structure
Term RFR	Forward-looking term structure
IBORs	Multiple tenors, inclusive of credit risk premia

Echoing Bailey's comments, the FSB urges firms to start using overnight RFRs in new contracts now to reduce the stock of instruments reliant on IBORs. Avoiding continued use of IBORs is a more effective risk mitigant than revising contracts with fallback provisions. The FSB report ends with a statement of support for ISDA's focus on overnight RFRs in its CP released later the same day. As more market participants use overnight RFRs, activity will increase, liquidity will deepen and spreads will better reflect underlying market transactions.

A smaller segment of market participants, particularly debt capital markets and lenders, may value advance knowledge of cash flows over lower costs. The FSB acknowledges that the limited use of forward-looking term RFRs in cash products would not present systemic risks. As discussed below, public-private working groups in the UK and US are developing alternative reference rates with these characteristics.

The FSB plans to publish a progress report on the status of adoption in November 2018.

#### ISDA proposes fallbacks, triggers and adjustments for overnight RFRs

The FSB OSSG tasked ISDA with developing robust fallback arrangements should permanent cessation or serious disruption prevent publication of key IBORs. ISDA issued a *Consultation on Certain Aspects of Fallbacks for Derivatives Referencing GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW*, proposing fallback provisions for derivative contracts that reference LIBOR. The consultation sets out various options for (i) identifying fallback trigger events, (ii) converting from a term rate LIBOR to an overnight rate (e.g., converting from 1-mo USD LIBOR to SOFR), and (iii) calculating a credit spread adjustment between the successor rate and LIBOR (where the successor rate references a risk-free rate).

The fallbacks would apply if the relevant LIBOR is permanently discontinued; an event which may also be triggered by a public statement by/on behalf of the administrator or by a regulatory supervisor for the administrator that the LIBOR will cease to be provided or should no longer be relied upon.

There are 4 proposed approaches for converting from term rate LIBOR to an overnight rate):

 Spot Overnight Rate: The fallback could be to the RFR that sets on the date that is one or two business days prior to the beginning of the relevant LIBOR tenor.

- 2. **Convexity Adjusted Overnight Rate:** This is similar to the spot overnight rate, with a first-order modification to adjust for convexity. The modification attempts to account for the difference between the overnight rate versus the realised rate of interest that would be delivered by daily compounding the RFR over the relevant LIBOR term.
- Compounded Setting in Arrears Rate: The fallback would use the RFR observed over the relevant LIBOR tenor and compounded daily during that period.
- 4. **Compounded Setting in Advance Rate:**Mathematically, this is the same as compounding setting in arrears. While the observation period would be equal in length to the relevant LIBOR tenor, it would end immediately prior to the start of the relevant LIBOR tenor so the rate would be known at the beginning of that period.

There are 3 proposed approaches for credit spread adjustments:

- Forward Approach: Calculated based on observed market prices for the forward spread between the relevant LIBOR tenor and the tenor-adjusted RFR at the time the fallback is triggered.
- 2. **Historical Mean/Median Approach:**Calculated based on the mean/median spot spread between the relevant LIBOR tenor and the tenor-adjusted RFR calculated over a significant, static lookback period prior to the fallback trigger.
- 3. **Spot-Spread Approach:** Calculated based on the spot spread between the relevant LIBOR tenor and the tenor-adjusted RFR on the day preceding the fallback trigger.

Once defined, amendments to the ISDA definitions to include these fallbacks will become effective for derivatives executed after the amendment date. ISDA also intends to publish a protocol to allow market participants to bi-laterally agree to elect to include the fallbacks within legacy LIBOR contracts. Market participants are encouraged to follow ISDA protocol rather than making individual contractual amendments. It is in the best interest of market participants to assess the various fallback alternatives and provide input to ISDA's LIBOR Fallbacks consultation to ensure (response deadline October 12, 2018). Once decided, adjustments will be calculated by a third party vendor and made available on-screen.

The ISDA CP is limited to GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and the Australian Bank Bill Swap Rate (BBSW). Further proposals applicable to the three largest IBORs - USD LIBOR, EUR LIBOR and EURIBOR - are planned. ISDA also notes that a proposal for HIBOR is possible, but provided no dates.

Table 3. ISDA consultation outreach

Activity	Date
Webinar	26 July 2018
FAQs to be launched	30 July 2018
Webinar	Week of 10 September 2018
Responses due	12 October 2018
CP on USD LIBOR, EUR LIBOR, EURIBOR, HIBOR	TBD

Given the FSB's analysis on overnight RFRs, it is evident that ISDA's work may reverberate beyond derivative markets, affecting cash markets as well.

#### The Sterling RFR Working Group develops term SONIA RFR (TSRR)

Whereas ISDA implements the alternative overnight RFR with adjustments to replicate term structures for derivatives markets, the Sterling RFR Working Group issued a *CP on Term SONIA Reference Rates (TSRR)*, proposing the development of an actual forward-looking term RFR for use in cash markets (i.e. bonds, notes, securitisations and loans), where term structuring is deemed an essential prerequisite to transitioning from LIBOR.<sup>5</sup>

A TSRR seeks to measure the market's forward expectation of an average SONIA over a certain term. In principle, TSRRs can be generated from the prices of derivatives referencing RFRs such as OIS and futures because these instruments provide information on market expectations of reformed SONIA over a future period. The sterling public-private working group considers that there is sufficient liquidity in the current SONIA OIS market to support TSRRs, but there is insufficient price transparency. Thus, to ensure publication of bid and offer prices, the working group encourages market participants to list and trade SONIA OIS on regulated electronic trading platforms.

Responses to the CP are due by **30 September 2018**. The working group plans to publish a TSRR by H2 2019.

<sup>&</sup>lt;sup>5</sup> The Federal Reserve Bank of New York's Alternative Reference Rates Committee (ARRC), the USD LIBOR public-private working group, is

also developing a term RFR for cash markets. See *Second Report: The Alternative Reference Rates Committee* (March 2018).

#### What do firms need to do?

For a year, firms have awaited more direction from supervisors and regulators on how to prepare for transition away from LIBOR and other key IBORs. Firms now have a path forward which starts with the FCA's admonition to quicken the pace of change. Firms should:

- Carefully consider the regulatory implications of continued IBOR use (e.g. sound risk management, disclosure, product governance, suitability and appropriateness, and mis-selling).
- Reduce the stock of IBOR-linked instruments by (1) transitioning to the overnight RFRs in new
  contracts and (2) reducing reliance on IBORs in legacy contracts through convergence and compression
  of derivatives contracts or by replacing LIBOR with RFRs in loans due for renewal, renegotiation
  or rollover.
- Build liquidity in the new rates by buying, selling and issuing products referencing the alternative RFRs.
- Develop transition programs with a governance strategy and perform an assessment of the impact on commercials, contracts and front-to-back operations.

#### **Contacts**

#### **UK Team**

#### **Karyn Daud**

Partner

T: +44 (0) 7795 617469

E: karyn.daud@pwc.com

#### Nassim Daneshzadeh

Partner

T: +44 (0) 7850 515679

E: nassim.daneshzadeh@pwc.com

#### Mike Wallace

Partner

T: +44 (0) 7841 803061

E: mike.j.wallace@pwc.com

#### **Cheryl McGee Wallace**

E: cheryl.m.wallace@pwc.com

Senior Manager

**T:** +44 (0) 7725 632492

#### **US Team**

#### **Adam Gilbert**

Partner

T: +1 646 471 5806

E: adam.gilbert@pwc.com

#### **Justin Keane**

Principal

T: +1 646 471 7379

E: justin.keane@pwc.com

#### Frank Serravalli

Partner

T: +1 646 471 2669

E: frank.serravalli@pwc.com

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2018 PricewaterhouseCoopers LLP. All rights reserved. In this document, "PwC" refers to the UK member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

## Stand out for the right reasons



Alert



**Protect** 



Adapt



## Financial services risk and regulation is an opportunity

At PwC we work with you to embrace change in a way that delivers value to your customers, and long-term growth and profits for your business. With our help, you won't just avoid potential problems, you'll also get ahead.

We support you in four key areas.

- By alerting you to financial and regulatory risks we help you to understand the position you're in and how to comply with regulations. You can then turn risk and regulation to your advantage.
- We help you to prepare for issues such as technical difficulties, operational failure or cyber attacks. By working with you to develop the systems and processes that protect your business you can become more resilient, reliable and effective.

- Adapting your business to achieve cultural change is right for your customers and your people. By equipping you with the insights and tools you need, we will help transform your business and turn uncertainty into opportunity.
- Even the best processes or products sometimes fail. We help repair any damage swiftly to build even greater levels of trust and confidence.

Working with PwC brings a clearer understanding of where you are and where you want to be. Together, we can develop transparent and compelling business strategies for customers, regulators, employees and stakeholders. By adding our skills, experience and expertise to yours, your business can stand out for the right reasons.

For more information on how we can help you to stand out visit www.pwc.co.uk