

A future beyond LIBOR

LIBOR – Looking back

In 2012, following widespread allegations of LIBOR manipulation and numerous fines imposed on several international banks, the UK Government conducted the **Wheatley Review (2012)**, which:

- Recommended reform, rather than replacement, of LIBOR;
- Called for strict processes to verify submissions with transaction data;
- Suggested that market participants should play a significant role in LIBOR production and oversight.

In early 2014, the Intercontinental Exchange (ICE) took over the administration of LIBOR, prompting a **Review of the Implementation of IOSCO's Principles for Financial Benchmarks (2014)**, which found that ICE LIBOR was more “closely aligned” to IOSCO Principles than BBA LIBOR, but also:

- Questioned whether LIBOR provided an accurate and reliable representation of the economic realities it sought to measure;
- Criticised lack of any transition plans for cessation/discontinuation (but noted ICE's successful discontinuation of several currencies and tenors in absence of such plans);
- Accepted that, since LIBOR had only recently been taken over by ICE, time would be needed to implement the changes required to attain total compliance.

The FSB's 'multi-rate approach'

The FSB released a report on **Reforming Major Interest Rate Benchmarks (2014)** suggesting a 'multi-rate' approach to reforming interest rate benchmarks across currencies:

1) **Strengthen existing IBORs**

- Anchor in transactions
- Fully implement IOSCO principles

2) **Develop alternative nearly risk-free reference rates**

- As robust alternatives for IBORs
- Which are better suited for use in many applications

The Future of LIBOR- 27 July 2017- Andrew Bailey speech

Limitations to LIBOR reform

- Significant improvements have been made to LIBOR since 2013.
- But the absence of active underlying markets raises a serious question about the sustainability of the LIBOR benchmarks that are based upon these markets.

The way forward

- Panel bank support to sustain LIBOR until end-2021 will enable a transition that can be planned and executed smoothly.
- Work must begin in earnest on planning the transition to alternative reference rates that are based firmly on transactions.
- **“Our intention is that, at the end of this period, it would no longer be necessary for the FCA to persuade, or compel, banks to submit to LIBOR.”**

IBOR alternatives for the LIBOR currencies - 'Risk Free Rates'

USD

- Secured Overnight Funding Rate (SOFR)
- New UST repo rate to be published by FRBNY

CHF

- Swiss Average Overnight Rate (SARON)
- Developed by the SNB in collaboration with SIX Swiss Exchange
- Replaced TOIS benchmark upon termination December 2017

JPY

- Tokyo Overnight Average Rate (TONAR)
- Existing uncollateralised overnight call rate published by the BOJ

EUR

- ECB to develop euro unsecured overnight rate
- Private sector working group to select RFR for euro area

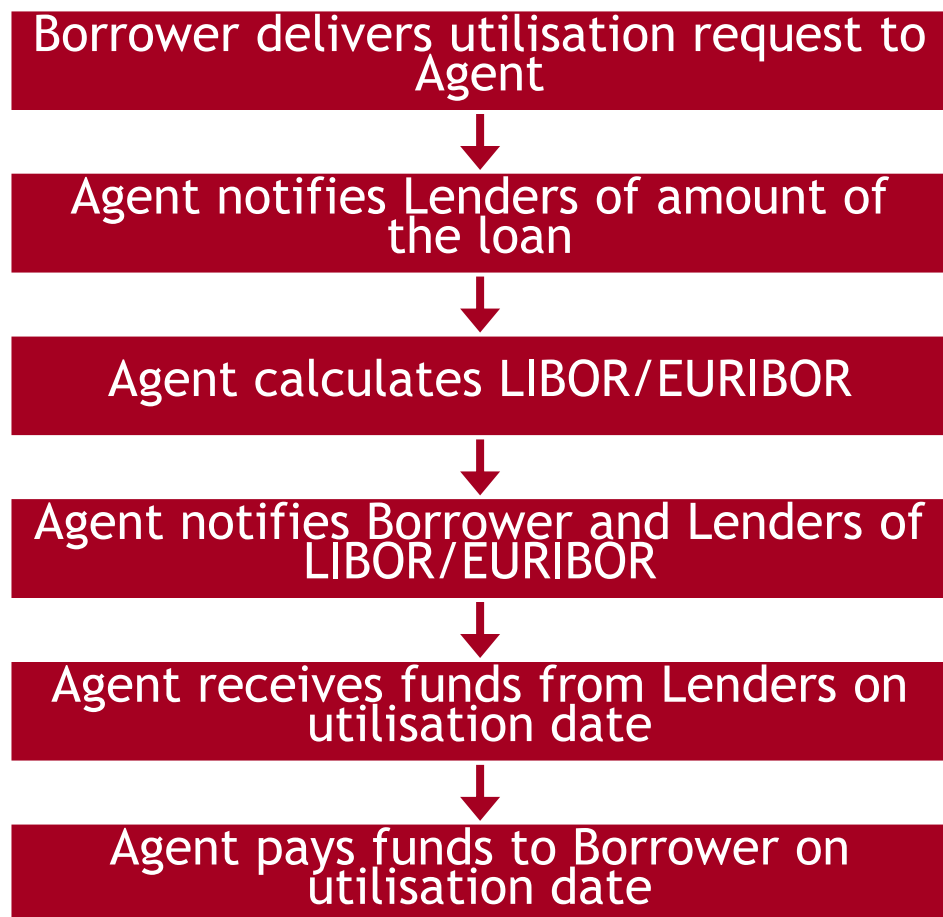
GBP

- Sterling Overnight Index Average (SONIA)
- Reform of SONIA to be completed by 23rd April 2018

History of LIBOR in syndicated loans

- Origins of LIBOR believed to be in 1969 when a \$80mn syndicated loan was made to the Shah of Iran based on the reported funding costs of a set of reference banks
- This type of lending became successful because:
 - London had become a hub for dollar deposits outside the US
 - Deployment of “Eurodollars” enabled groups of lenders to lend large amounts according to individual capacities, to those wanting to borrow dollars (outside the US)
 - Equated to a rate that all parties were happy to use
 - In a period of high interest rates and high inflation, banks were wary of committing to lending at a fixed rate for long periods. A solution was therefore to charge borrowers an interest rate, recalculated every few months and funded by rolling deposits
 - The formula at the time was simple: syndicate banks reported their funding costs prior to a loan-rollover date
 - LIBOR then became a proxy for bank borrowing costs across the financial markets

Utilisation – Agent's Role



NB: this is a manual process!

1 institution = 170,000 payments processed per quarter across the UK and the US

Steps 3 and 4 are repeated on every interest payment date until loan is repaid

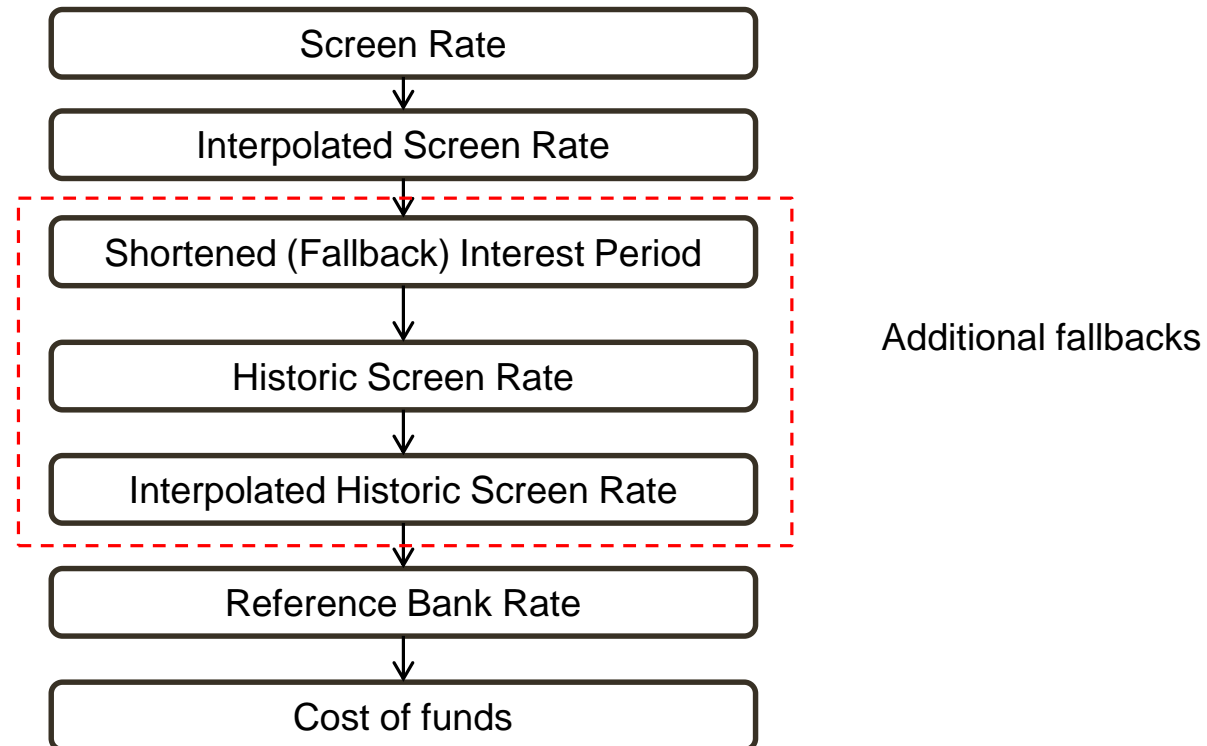
Implications for borrowers and lenders

- Individual loans cannot be amended unilaterally
- Loans are a “relationship” product, not easy to automate
- Borrowers expect direct human interaction (via relationship manager or agent)
- Borrowers are not always sophisticated e.g. in terms of use of derivatives and more complex structures
- Agents deal with large number of queries (both borrower side and lender side)
- Flexibility and optionality is key for the product to work e.g. multicurrency facilities

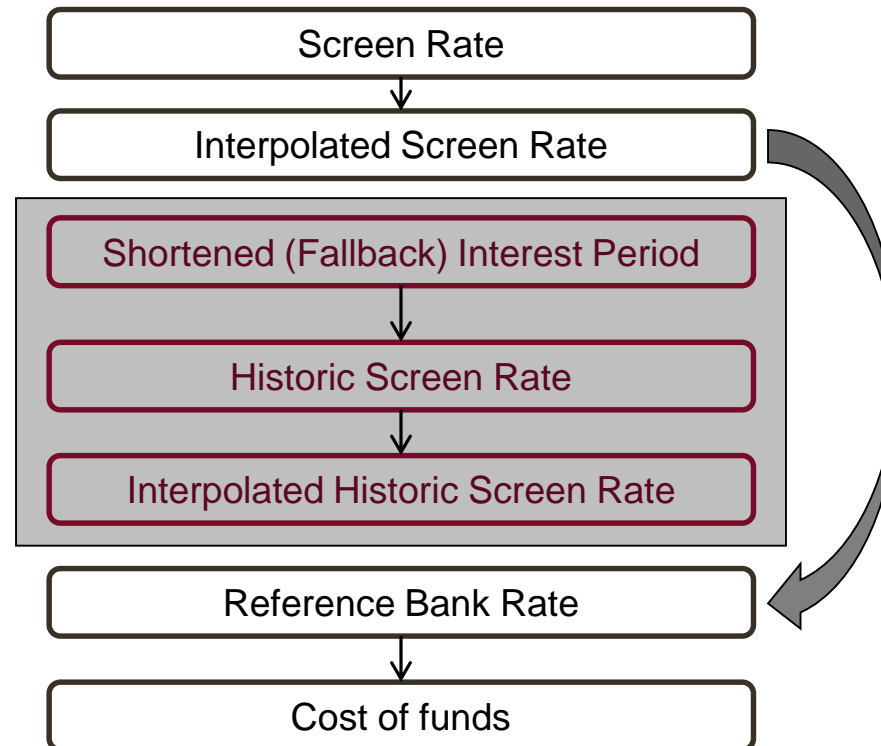
Calculating interest: LIBOR and the LMA documents

- Changes were made to the interest rate fallback provisions in LMA documentation in November 2014 following reforms to LIBOR
- Disappearance of LIBOR for “less common” currencies and tenors caused unexpected difficulties

Post-November 2014 fallback waterfall: Option 1



Post-November 2014 fallback waterfall: Option 2



Use of fallbacks

- Not designed to be used long-term, or where LIBOR has been replaced by a different rate with a different methodology for calculation
- Difficult to get Reference Banks to quote; may not quote if LIBOR ceases to exist and the LMA documentation does not compel them to do so
- Ultimate fallback would be to cost of funds, which as we saw from 2014 is not administratively workable long-term
- So a longer-term solution was included:
 - Majority lender and borrower consent to move to a new benchmark

Replacement of Screen Rate

- Optional provision: Majority Lender (and Obligor) consent required for replacing a Screen Rate which is not available for a currency
 - “*any amendment or waiver which relates to providing for another benchmark rate to apply in relation to that currency in place of that Screen Rate...*”
- Commercial acceptability?

Use of alternative benchmarks – key issues

- Need for a term rate
 - Overnight rate v term rate
 - Backward v forward-looking
 - Certainty of funding costs
- Operational issues
 - Loan systems
 - Multiple v single benchmark(s)

Use of alternative benchmarks – key issues

- No clear alternative as yet
 - Focus has been on the derivatives market rather than cash markets (note inter-relationship of products)
 - Some RFRs not yet in existence
 - How to document deals today?
 - Updating of templates absent alternative
- Different rates across different jurisdictions
 - Coordination between jurisdictions and product areas (common concerns)
 - Secured v unsecured
 - Pricing / value shift
 - Publication times

Use of alternative benchmarks – key issues

- Legacy contracts
 - Suitability of existing fallbacks long-term
 - Amendment process (no protocol system, cf ISDA)
 - Deals documented today

- Market led solution
 - Competition concerns
 - Regulator support

LIBOR currencies moving forward

Currency	Working Group	Key sub-groups established	Timescale
GBP	Bank of England Working Group on Sterling Risk-Free Rates	“Term-rate”, “Loan market transition” & “Bond market transition”	Reform of SONIA to be completed by 23 April 2018 (<i>term-rate consultation H1 2018</i>)
USD	Alternative Reference Rates Committee	“Market Structures”, “Regulatory Issues”, “Term Rate” & “Legal”	Production to begin H2 2018 (<i>see next slide</i>)
EUR	European Central Bank Working Group on Euro Risk-Free Rates	-	New euro RFR to be finalised before 2020
CHF	Swiss National Working Group	“Loan and deposit market” & “Derivatives and capital market”	Switched from TOIS to SARON on 29 December 2017
JPY	Study Group of Market Participants / Working Group on Use of the Risk-Free Rate	-	-

Next steps for SOFR transition

Q1 2018 – Announcement of exact production date for SOFR

H2 2018 – Federal Reserve Bank of New York (FRBNY) to begin publishing SOFR

Q4 2018 to Q2 2021 – Transition by ARRC members to SOFR in derivatives markets with aim of building up liquidity to produce a SOFR term reference rate for cash markets

By end of 2021 – Creation of a term reference rate based on SOFR-derivatives markets once liquidity is sufficient to produce a robust rate

Next phase of work on sterling LIBOR transition

Mandate	Catalyse a broad-based transition to SONIA by end-2021
Membership	RFR WG broadened to include: <ul style="list-style-type: none">• Investment managers;• Non-financial corporates and other sterling issuers;• Infrastructure firms;• Trade associations; and• Banks and broker deals
Key sub-groups	<ul style="list-style-type: none">• Term SONIA reference rates• Loan market transition• Bond market transition• Other issues, as appropriate
Stakeholder forums	Open discussion forums focused on particular sectors to raise awareness and provide input to RFR WG.

Term SONIA reference rates

Chair and membership

- Sub-group of RFR WG chaired by Nick Saggars of BAML and including a broad cross-section of market participants. The LMA and ACT are actively involved in this work.
- Plan is to publish consultation in first half of 2018.

Key objectives and deliverables

- Assess relevant potential use cases.
- Review potential data inputs and calculation methodologies (e.g. 1, 3 and 6 month rates derived from regulated OIS prices).
- Propose measures to limit systemic reliance on these indices.
- Agree design criteria for potential administrators and data providers.

Transition issues in syndicated loan markets-sterling

Chair and membership

- New sub-group of the RFR WG to be chaired by Clare Dawson (Chief Executive, LMA) and include a broad cross-section of loan market participants.

Key objectives and deliverables

- Develop documentation which could allow discretionary transition to new benchmark.
- Develop template documentation for SONIA referencing loan facilities.
- Develop contingency plans for legacy LIBOR loans.
- Promote the use of RFRs in syndicated loan facilities.

Next steps

- The reconstituted RFR WG will focus on:
 - Catalysing liquidity in SONIA listed and OTC derivatives
 - Potential development of term SONIA reference rates
 - Adoption of SONIA in sterling bond and loan markets
 - International coordination of RFR adoption
- ISDA working groups remain focused on establishing robust contingency rates for derivatives contracts.
- During the next phase of work, engagement from all types of market participants will be required.
- Loan market participants can engage via the LMA or by contacting RFR.Secretariat@bankofengland.gsi.gov.uk