

Overview of the Risk-Free Rate Transition

Working Group on Sterling Risk-Free Reference Rates: Infrastructure Forum

31 January 2019

The FSB's 'multiple rate approach'

The FSB's 2014 report built on the work of a number of national regulators, Central Banks and international standard setters.

'The cases of attempted market manipulation and false reporting of global reference rates, together with the post-crisis decline in liquidity in interbank unsecured deposit markets, have undermined confidence in the reliability and robustness of existing interbank benchmark interest rates'.

It suggested a 'multiple-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

Usage of IBORs – context

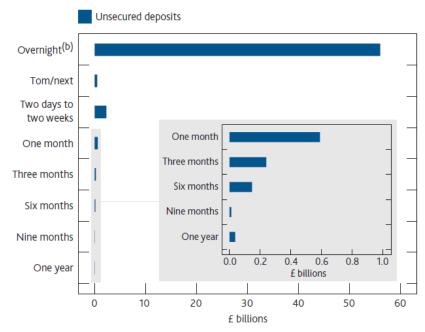
 IBORs are deeply embedded within the financial system, across a wide range of products...

	USD-LIBOR	GBP-LIBOR	EURIBOR	Euro-LIBOR	JPY-LIBOR	TIBOR	CHF-LIBOR
Syndicated Loans	High	Medium	Medium	Low	Medium	Medium	Low
Business Loans	High	Medium	High	Low	Medium	Medium	Medium
Retail Loans	Low	Low	Medium	Low	Low	Low	Medium
FRNs	High	Medium	High	Low	Medium	Low	Low
Securitisation	High	Medium	Medium	Low	Low	Low	Low
OTC Derivatives	High	High	High	Low	High	Medium	High
ETD	High	High	High	Low	Medium	Medium	Medium
Deposits	Low	Low	Low	Low	Low	Low	Low
High	>\$1tn		Medium	\$100bn < x < \$1tr		Low	<\$100bn

Source: 2014 MPG Report to OSSG

There is little activity in unsecured deposits at maturities beyond overnight

- The Bank published a Quarterly Bulletin article last year highlighting the lack of activity in term unsecured deposit markets which Libor seeks to measure
- In 2017 there were on average £187m of deposits per day with a 3m maturity and just £87m per day with a 6m maturity.
- There are c.\$30tn of financial contracts linked to GBP Libor at these respective tenors.



Sources: SMM data collection and Bank calculations.

- (a) Daily average from 1 September to 30 November 2017, by original maturity.
- (b) With a minimum transaction size of £1 million. Transactions underpinning reformed SONIA are £25 million or greater.

Financial Policy Committee ("FPC") has been monitoring the risks

From the FPC record of 19 June 2018 meeting:

- "Continued reliance of financial markets on Libor posed a risk to financial stability."
- "The risk that Libor would become unavailable after 2021 meant that market participants would – in managing their own financial exposures and risks – need to transition away from reliance on Libor."
- "The medium-term risks can be reduced only through a substantial and lasting transition away from reliance on Libor."

Transitioning to RFRs

- National Authorities have convened market-led groups:
 - Working Group on Sterling Risk-Free Reference Rates for GBP
 - Similar working groups set up for USD, EUR, CHF, JPY
 - These groups include a wide and diverse range of market participants, including banks, corporates, asset managers, insurers, trade associations and infrastructure firms.

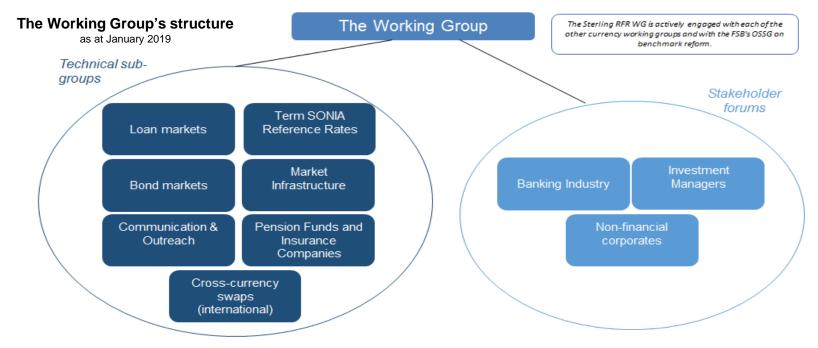
What is happening internationally

Jurisdiction	Working Group	Alternative Ref Rate	Rate Name	Administrator	Collateralisation	Publication Date	Description
	Working Group on Sterling Risk-Free Reference Rates	SONIA	Sterling Overnight Index Average	Bank of England	Unsecured	Reformed 23/04/2018 Legacy 31/03/1997	Unsecured rate that covers overnight wholesale deposit transactions
	Alternative Reference Rates Committee	SOFR	Secured Overnight Financing Rate	Federal Reserve Bank of New York	Secured	02/04/2018	Secured rate that covers multiple overnight repo market segments
	The National Working Group on CHF Reference Rates	SARON	Swiss Average Rate Overnight	SIX exchange	Secured	22/09/2009	Secured rate that reflects interest paid on interbank overnight repo
	Study Group on Risk- Free Reference Rates	TONAR	Tokyo Overnight Average Rate	Bank of Japan	Unsecured	30/12/1992	Unsecured rate that captures overnight call rate market
0	Working Group on Risk- Free Reference Rates for the Euro Area	ESTER	European Short Term Euro Rate	European Central Bank	Unsecured	October 2019	Unsecured rate that captures overnight wholesale deposit transactions

The **Working Group on Sterling Risk-Free Reference Rates** was initially convened by the Bank of England in 2015 to identify the preferred risk-free rate for sterling markets.

In January 2018, the Working Group was reconstituted and now includes banks and dealers, investment managers, non-financial corporates, infrastructure providers, trade associations and professional services firms.

The Group's overall objective is to catalyse a broad-based transition to SONIA by end-2021 across sterling bond, loan and derivative markets



SONIA – the sterling RFR

What is SONIA?

Statement of underlying interest

SONIA is a measure of the rate at which interest is paid on sterling short-term wholesale funds in circumstances where credit, liquidity and other risks are minimal.

Statement of methodology

On each London business day, SONIA is measured as the trimmed mean, rounded to four decimal places, of interest rates paid on eligible sterling denominated deposit transactions.

The trimmed mean is calculated as the volume-weighted mean rate, based on the central 50% of the volume-weighted distribution of rates.

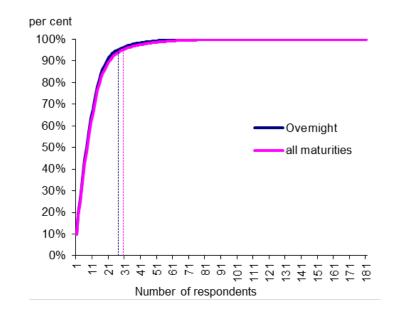
Eligible transactions are:

- reported to the Bank's Sterling Money Market daily data collection, in accordance with the effective version of the 'Reporting Instructions for Form SMMD';
- unsecured and of one business day maturity;
- executed between 00:00 hours and 18:00 hours UK time and settled that same day; and
- greater than or equal to £25 million in value.

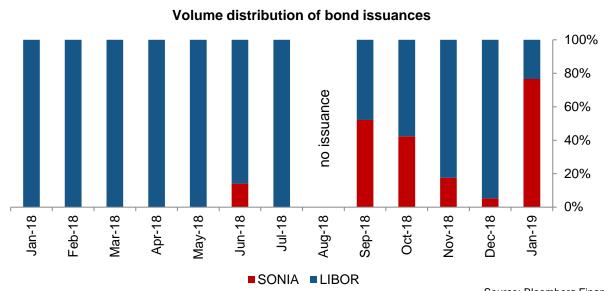
The input data: Sterling Money Market data collection

- The Bank uses it statutory powers to collect unsecured borrowing data from all sterling deposit taking institutions: the Sterling Money Market data collection
- We use an annual survey to identify who the most active participants are. Those that represent the top 95% of activity are required to report to the Bank on a daily basis.
- This daily collection (called Form SMMD) is the input data for the calculation of SONIA.

Cumulative distribution of unsecured borrowing, over 2017

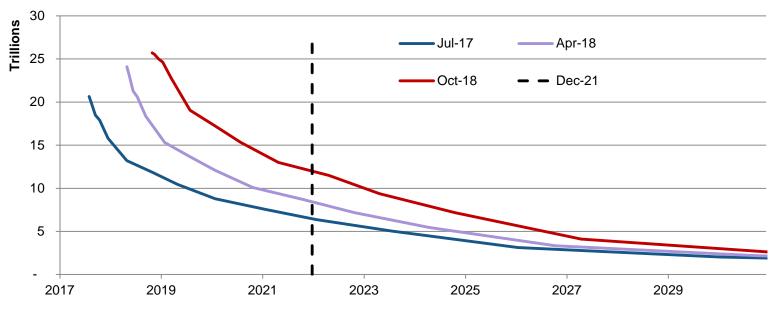


Bond issuances referencing LIBOR and SONIA



Source: Bloomberg Finance L.P. and Bank of England calculations

Roll-off of outstanding notional for cleared GBP LIBOR swaps

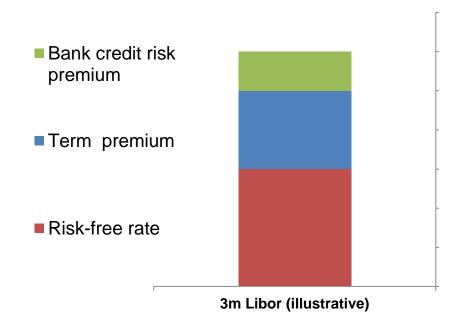


Source: Bank and FCA estimates based on LCH data provided to the FCA

What's the difference between Libor and RFR?

In principle, Libor for a given tenor (e.g. 3m) can be deconstructed into component parts:

- Bank credit risk premium Libor includes term bank credit risk and has historically spiked during times of perceived stress in the banking system.
- Term premium a 3m Libor rate will include a term premium to reflect interest rate expectations over the period and the cost of lending money for a term period.
- Risk-free rate which reflects the general level of interest rates. SONIA is a good measure of the RFR as it includes virtually no credit risk or term premium.



Term Rates

- Market participants note that one of the challenges ahead is end-user demand for Term reference rates, based on products linked to the alternative risk-free rates
- For loans, bonds, swaps payments are made in arrears (at end of interest period)
- Question is when payment amount is known

The Sterling Working Group on RFR and the ARRC have each established a term rates sub-

group Interest rate Interest payment made at known end of interest period 3m Libor at 3m Libor at T T+6 Libor-referencing loan 3m Libor at 3m Libor at T+3 T+9 **T+3m** T+9m T+12m T+6m Overnightreferencing loan Compounded Compounded Compounded Compounded **SONIA** since T **SONIA since T+3 SONIA since T+6 SONIA** since T+9

Working Group on Sterling Risk-Free Rate Transition

(*) methodology can vary

Achieving a Successful Transition

Orderly transition from Libor to RFRs, preserving financial stability, avoiding unnecessary structural changes and minimising pricing impacts/wealth transfers.

There is broad adoption of the RFR with robust documentation and liquidity in RFR-linked products

Financial Stability risks, Legal risks, accounting considerations, regulatory landscape, International Coordination Agreeing on a fall-back rate, introducing robust fall-back clauses, building template documentation for new products referencing RFR.

Further information on transition

Working Group on Sterling Risk-Free Reference Rates:

https://www.bankofengland.co.uk/markets/transition-to-sterling-risk-free-rates-from-libor

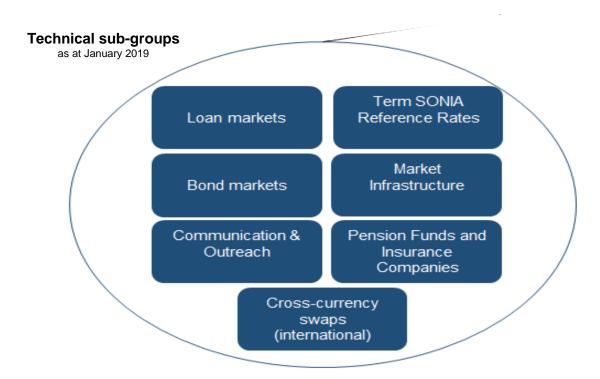
"Overall, the sub-group will

catalyse the necessary development by technology, infrastructure and service firms

so that the necessary facilities, infrastructure and tools are available to market participants to enable the adoption of risk free rates"

"The types of market participants who may be invited to attend, or be consulted, include but is not limited to:

issuers, arrangers, investment firms, asset managers and trading firms."



Preliminary priority list

UK Working Group on Risk-Free Reference Rates - Infrastructure and Systems Work Stream

Preliminary Priority List

Below is a **provisional** priority list with regard to infrastructure developments for the RFR transition in UK markets agreed by the Working Group on Risk-Free Reference Rates 'RFRWG'. This document does not constitute an exhaustive or final list and will be updated on a regular basis with amendments and additional information to reflect ongoing progress on plans for benchmark transition, and further work from the infrastructure sub-group and the RFRWG.

To provide feedback and comments, please contact RFR.Secretariat@bankofengland.gsi.gov.uk

1. Infrastructure Information and analytics

- a. Publication of SONIA compounded over standard interest periods, as an accrual and as a final rate, on a daily basis or a calculator to calculate the rate
- h solution could be for some and sine are the sine of

https://www.bankofengland.co.uk/markets/transition-to-sterling-risk-free-rates-from-libor

Infrastructure and systems preliminary priority list (PDF)

What is next?

recommendations, consultations documents on Bank of England website, panels, events

How to contact us:

RFR.Secretariat@bankofengland.co.uk