

LIBOR transition – The operations perspective

Brian Fraser – Lloyds Banking Group

Kam Mahil – LMA



Agenda

- LIBOR alternatives: what are risk-free rates (“RFRs”)?
- Differences between LIBOR and RFRs
- How can overnight RFRs be turned into term rates?
- Impact of RFR transition on loan operations teams
- LMA response
- Questions



Audience poll

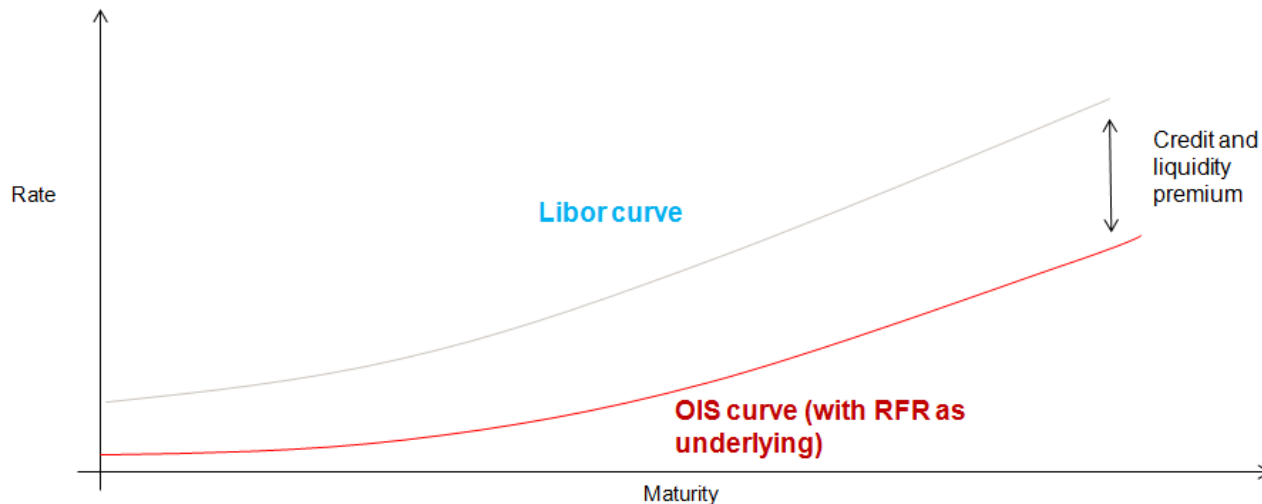
- Is the transition from LIBOR to RFRs a big change for the loan market?
 - What's an RFR?
 - What's the big deal? It's just another benchmark
 - It is a big change, but one that the market can manage
 - This is the biggest change the market has ever experienced!



What are risk-free rates (“RFRs”)?

Currency	RFR	Administrator	Secured?	Publication time
Sterling (£)	SONIA (Sterling Overnight Index Average) <i>SONIA reform completed by 23 April 2018</i>	Bank of England	N	09:00 GMT <i>T+1</i>
Euro (€)	€STR (Euro Short-Term Rate) <i>This is a new overnight rate being developed by the ECB and expected to begin publication on 2 October 2019</i>	European Central Bank	N	09:00 CET <i>T+1</i>
US Dollar (\$)	SOFR (Secured Overnight Funding Rate) <i>This is a new rate which has been published since 3 April 2018</i>	Federal Reserve Bank of New York	Y	08:00 ET <i>T+1</i>
Swiss Franc (CHF)	SARON (Swiss Average Rate Overnight) <i>This replaced TOIS fixing in December 2017</i>	SIX Swiss Exchange	Y	12:00, 16:00 and 18:00 CET same day
Japanese Yen (¥)	TONAR (Tokyo Overnight Average Rate)	Bank of Japan	N	10:00 JST <i>T+1</i>

Differences between LIBOR and RFRs



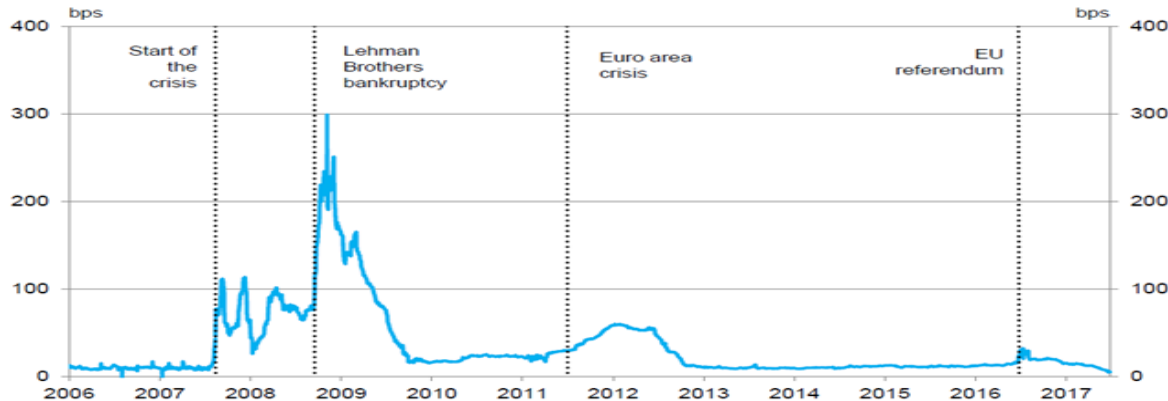
Source: Bank of England

- **Term benchmarks:** LIBOR is a forward-looking term rate published for 7 tenors (e.g. 1, 3, 6 months); *RFRs are backward-looking overnight rates and do not compensate lenders for making longer-term funds available*
- **Credit premium:** LIBOR includes term bank credit risk; *RFRs are near risk-free*
- **Term liquidity premium:** LIBOR will include the premium paid on longer-dated funds; *RFRs will not include a premium for term*

Differences between LIBOR and RFRs

- In most cases, the RFRs are lower than their LIBOR equivalents. They also do not reflect periods of credit stress, unlike LIBOR. This is illustrated by the graph below:

Historical 3m GBP Libor-OIS Spread



Source: Bank of England

- The spread differential between RFRs and LIBOR has varied throughout the business cycle. In periods of credit stress, bank cost of funds increases and LIBOR also increases. However, RFRs would remain flat or may decline

How do you turn overnight RFRs into term rates?

- The overnight RFRs can be aggregated or averaged in some way to derive term interest payable
- Averaging v compounding

ISDA Formula

or is it

this Daily Compound Interest Calculator?

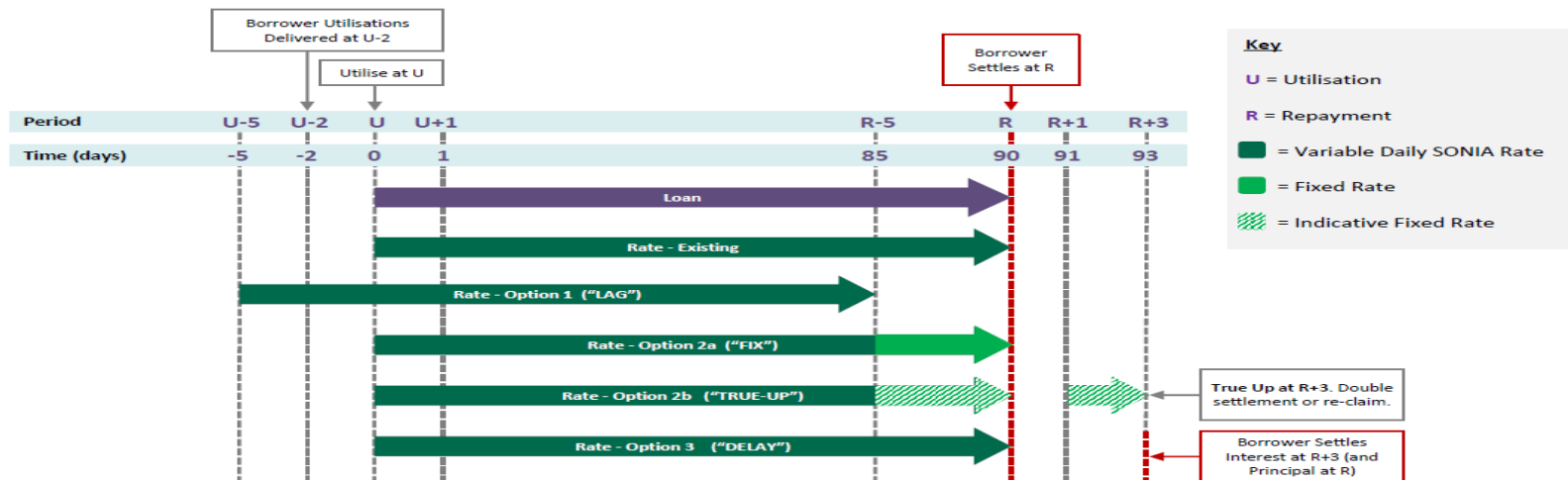
$$= N \times \left[\prod_{t=1}^T (1 + (R_t + S) \times d_t) - 1 \right]$$

$$A = \left(p \left(1 + \frac{r}{n} \right)^{nt} \right) - p$$

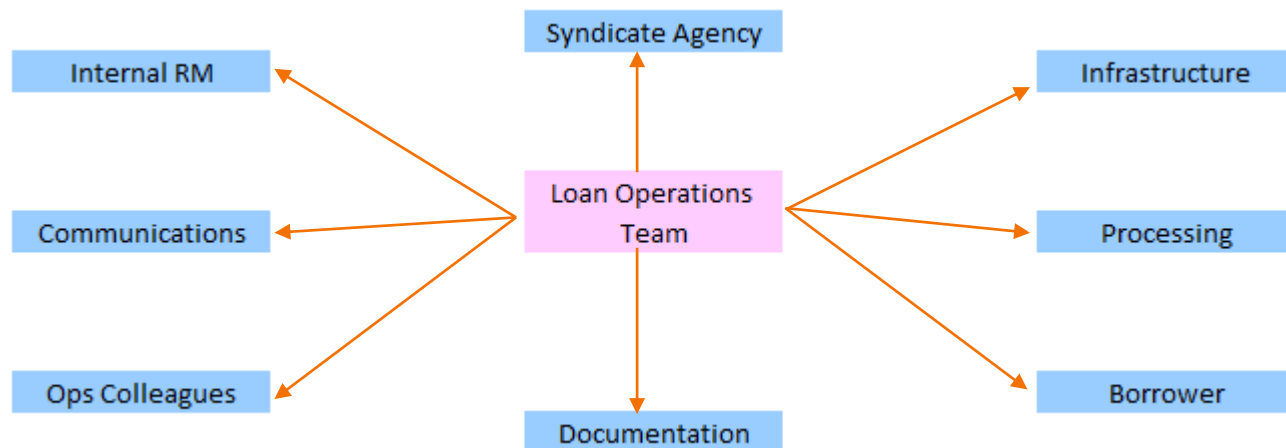
- No screen rates / calculators available as yet

How do you turn overnight RFRs into term rates?

- There are different options for creating a “term rate”. Here is an illustration of some of the options:



Impact of RFR transition on loan operations teams



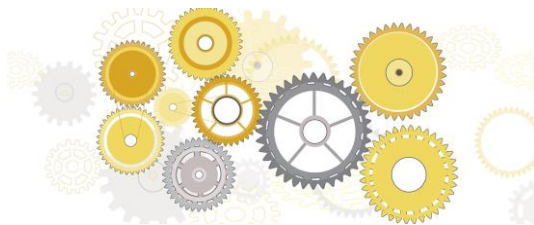
Audience poll

- Are you talking to your loan systems providers about the transition to RFRs?
 - No, not yet
 - Yes, although very early stages as we don't know what rate(s) we are moving to
 - Yes, and we are clear about the systems updates we require



Impact on infrastructure

- Considerations
 - time to develop and deploy systems
 - platform version?
 - currencies – are they adopting the same methodology?
 - central benchmark availability?
- Can build process start before we know the ask?
- Infrastructure working groups



Impact on processing

- What is the operational best case / worst case?
 - operational compression
 - dual running LIBOR / EURIBOR and RFRs
 - withholding tax
 - caps / floors
 - invoices / pay offs
 - loan breaks and trades
 - credit adjustment spreads



Communications, borrowers, colleagues and RM

- What are we all saying to borrowers today?
- Education: borrowers, colleagues and RM's
- What will notices look like in a RFR world?
- Notice volumes – day one and final
- Defaults – charging basis
- Delayed compensation – how to calculate?



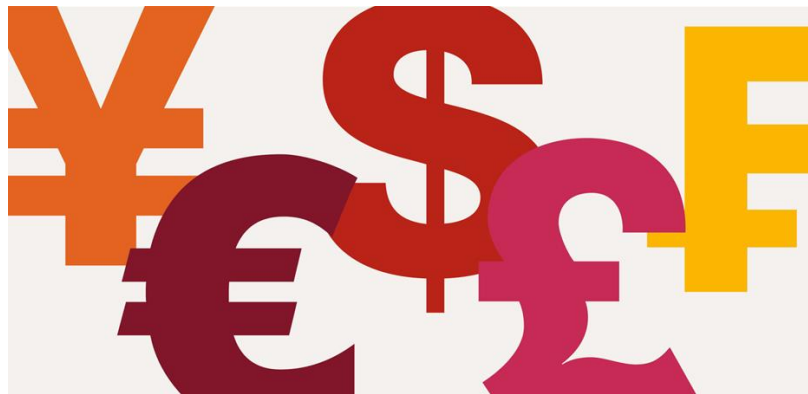
Documentation

- How are you dealing with the transition in new facility agreements being entered into today?
 - LMA revised replacement of screen rate clause
 - ARRC fallback language
- What about the legacy book?
 - no ISDA style protocol available to amend the legacy book
 - which type of legacy document do you have?
 - LMA work on amendment agreement – how helpful is this likely to be from an operations perspective?
 - CPs, legal opinions, security, etc.



LMA response

- LMA interaction with regulators, national working groups and other trade associations
 - Sterling, Euro and Swiss RFR working groups
 - joint trade association monthly meetings (minutes published on the website)
- Education
 - ACT/LMA Guide
 - LIBOR Spotlight interviews
 - LIBOR Webinars / Seminars
 - newsletter articles
- LIBOR Microsite
- Work on documentation



Key considerations

- On what basis should interest be calculated?
- Speak to your infrastructure providers, borrowers, colleagues and RM's
- Respond to consultations and feed back views

Note: 2021 is not far away and there is a lot to do!