The transition from LIBOR to risk-free rates *By Paul Richards*

Summary

RFR This paper assesses progress in the transition from LIBOR to risk-free rates, with a particular focus on the transition in the international bond market: the adoption of risk-free rates in floating rate notes, securitisations and capital securities; the risks arising from new bond issues still referencing LIBOR; the feasibility of converting legacy bonds to risk-free rates; international coordination between different jurisdictions; and raising market awareness of the need to prepare for the transition to risk-free rates.[1]

Background

1 In July 2017, Andrew Bailey, the Chief Executive of the UK Financial Conduct Authority, said that the FCA would no longer intend to persuade or compel banks to submit contributions for LIBOR after the end of 2021, and he stressed the need to transition away from LIBOR before the end of 2021.[2]

2 When he spoke again about LIBOR at Bloomberg in London on 12 July 2018, Andrew Bailey said that the importance of transitioning away from LIBOR had not changed; discontinuation of LIBOR should not be considered a remote event; firms should treat it as something that will happen and which they must be prepared for. In conclusion, he said: "For firms who are not yet aware, not yet engaged, and without plans to address their LIBOR-related dependencies, I warn you again of the risks."[3]

3 Following Andrew Bailey's speech, In September 2018 the UK FCA and PRA wrote to the chief executives of banks and insurance companies that they supervise in the UK, asking them to provide details of their preparations to manage risks inherent in the transition from LIBOR to alternative interest rate benchmarks.

4 In the view of the authorities,[4] the problem with LIBOR can be summarised as follows:

- First, since the financial crisis, the underlying structure of financial markets has changed: LIBOR really has become the rate at which banks do *not* lend to each other.
- Second, LIBOR is a risk to financial stability: the pricing of hundreds of trillions of dollars of financial instruments rests on the expert judgment of relatively few individuals, informed by a very small base of unsecured interbank transactions.
- And third, in the period before the introduction of benchmarks regulation, there was more scope for LIBOR to be manipulated.

1. For more background, see the webpage on interest rate benchmark reform and the transition to risk-free rates on the ICMA website.

2. Andrew Bailey, Chief Executive of the FCA: *The Future of LIBOR*, 27 July 2017.

3. Andrew Bailey, Chief Executive of the FCA: *Interest Rate Benchmark Reform: Transition to a World Without* LIBOR, 12 July 2018.

4. See in particular the speeches by the Governor of the Bank of England and the President of the Federal Reserve Bank of New York at the Bank of England Markets Forum, 24 May 2018; and the speech by the Chair of ESMA at the ICMA Annual Conference in Madrid, 31 May 2018.

5 To avoid the problems associated with manipulation of LIBOR in the past and the financial stability risks arising from LIBOR in the future, the authorities want financial markets to transition away from LIBOR to near risk-free rates. In all the main jurisdictions, the chosen risk-free rates are overnight rates: SONIA in the UK; SOFR in the US; ESTER in the euro area; SARON in Switzerland; and TONA in Japan. A common objective is to make risk-free rates as robust as possible, with robustness measured primarily by the volume of underlying observable transactions.

The transition in the international bond market

6 The transition from LIBOR to risk-free rates is a major challenge, bearing in mind the risk of market disruption and litigation. It will only succeed if the authorities and market participants work together. To help organise the transition from LIBOR to risk-free rates, the authorities have set up a series of working groups involving market participants in each jurisdiction. In the UK, following a period in which only derivatives experts were involved, the Bank of England and the FCA decided in late 2017 to involve the cash markets (ie bonds and loans). ICMA is now involved in the working groups in the UK, the euro area and in Switzerland, and chairing the Bond Market Sub-Group in the UK, working closely with the FCA and the Bank of England.

7 The five key questions on which ICMA is engaged in the international bond market relate to: the adoption of risk-free rates in floating rate notes, securitisations and capital securities; the risks arising from new bond issues still referencing LIBOR; the feasibility of converting legacy bonds to risk-free rates; international coordination between different jurisdictions; and raising market awareness of the need to prepare for the transition to risk-free rates.

The adoption of risk-free rates in the bond market

8 The first question relates to the adoption of risk-free rates in new bond issues. There are two main options, which are not mutually exclusive, as the market could be offered a choice:

- One option is to replace term LIBOR with a backward-looking risk-free rate. For example, interest on the risk-free rate could be compounded daily in arrears over each interest period. That was the case with a new EIB five-year floating rate note referencing SONIA, which was successfully launched at the end of June. Overall, there were 13 new FRNs referencing SONIA in the second half of 2018 with a total value of nearly GBP 7 billion, all using the same market conventions as the EIB issue and based on UK practice; and the first SONIA-linked residential mortgage-backed securitisation with a value over GBP 7 billion was issued in December. There were also a number of FRNs in the US referencing SOFR, starting with Fannie Mae and the World Bank, and using slightly different market conventions based on US practice.[5] As risk-free rates are overnight rates, which have the largest volume of underlying observable transactions, backward-looking rates are the most robust, on the basis described in the statement by the Financial Stability Board in July 2018.[6] But interest payments are not known at the start of the interest period.
- Another hypothetical option is to replace term LIBOR in new bond market transactions with a forward-looking term rate derived from the risk-free rate. With a forward-looking term rate, floating rate interest payments would be known in advance, as they are with LIBOR. But forward-looking rates are not as robust as backward-looking rates, as forward-looking rates are derived from risk-free rates, rather than referencing risk-free rates directly themselves, and have a lower volume of underlying observable transactions.[7] In July 2018, the Sterling RFR Working Group published a consultation paper on forward-looking term rates. Following the deadline for responses, the Bank of England published in November 2018 a summary of responses on behalf of the Sterling Risk-Free Rate Working Group. (See box.)[8]

5. The main differences are between compounding over the interest period in the UK and averaging in the US; and between interest payment "lags" in the UK and "lockouts" in the US. But an EIB SOFR transaction in early December used compounding rather than averaging.

6. "The RFRs are based on overnight trades in markets, whether unsecured or secured, where liquidity is deep enough to allow the rate to be strongly anchored in transactions, including in more adverse market conditions. To the extent that overnight RFRs are more strongly rooted in transactions than alternative measures, they represent the most robust alternatives available to the market. The RFRs, by largely excluding bank credit risk, also closely track central bank policy rates, offering a more efficient and transparent way of measuring, managing, and hedging movements in those rates.": FSB: *Interest Rate Benchmark Reform – Overnight Risk-Free Rates and Term Rates,* 12 July 2018.

7. "The FSB does not expect such RFR-derived term rates to be as robust as the RFRs themselves, and they should be used only where necessary.": FSB, *op.cit*.

8. The Bank of England also published a *Next Steps* document in December 2018 on behalf of the Sterling RFR Working Group, which invites interested benchmark administrators to consider the summary of responses to the consultation, and to share any views on the development of term SONIA reference rates, by 15 February 2019.

Sterling RFR Working Group Consultation on Term SONIA Reference Rates: summary of responses

Key takeaways from the 45 responses to the consultation have been summarised by the Bank of England as follows:

"A Term SONIA Reference Rate (TSRR) would facilitate the transition for some cash market segments.

Current SONIA-referencing derivatives markets were seen as capable of providing the basis for a TSRR, but would need a step change before such a measure would be sufficiently robust.

An alternative way forward could be to use a consistent methodology with inputs from both futures contracts and OIS swaps contracts.

Building a robust TSRR would benefit from further development and growth in OIS and SONIA futures markets.

Compliance with IOSCO principles is necessary, including appropriate governance and controls, to ensure risks related to TSRR production are appropriately managed.

Finding ways to avoid the systematic usage of TSRRs in derivatives markets will be essential as TSRRs develop.

International consistency across currencies was viewed as desirable."

The risks arising from new bond issues referencing LIBOR

9 The second question is how to avoid the risks arising from new bond issues referencing LIBOR and maturing beyond 2021, when LIBOR may no longer be available. The most effective way of avoiding risks related to the discontinuation of LIBOR is for new bond issues to reference risk-free rates. In the UK since the EIB bond issue referencing SONIA in June, there has been some success in encouraging the issue of bonds referencing SONIA rather than LIBOR. But some issuers and investors are not yet able to use SONIA: for example, some have not yet completed the adjustment of their IT systems; and some may be waiting for a term SONIA reference rate, which has not yet been developed. In those cases, they need to be aware of the risks of continuing to issue new bonds referencing LIBOR. In July, the Sterling Risk-Free Rate Working Group published a paper on the risks of issuing new sterling bonds referencing LIBOR for maturities beyond 2021, when LIBOR may no longer be available, and ways of mitigating those risks.[9]

10 One possible way of mitigating the risks of LIBOR discontinuation is for any new bond issues referencing LIBOR to include robust fallbacks, which are now required for supervised entities under the EU Benchmarks Regulation (BMR). However, many legacy bonds referencing LIBOR fall back to a fixed rate. These fallbacks were originally designed in case LIBOR becomes temporarily unavailable. Falling back to a fixed rate may not be commercially acceptable to issuers or investors, if LIBOR becomes unavailable permanently. Since the FCA's statement in July 2017, new fallbacks have been introduced in new LIBOR bonds, though it is not always clear how they will operate in the event of LIBOR discontinuation.

11 There are two recent consultations involving fallbacks, with global implications:

- In the US, the Alternative Reference Rate Committee (ARRC) published a consultation paper on a proposal to introduce new fallbacks to risk-free rates in new FRN transactions referencing US dollar LIBOR, covering: the triggers for the fallback to risk-free rates; a waterfall for the choice of replacement benchmarks; and a waterfall for the equivalence spread between LIBOR (which includes bank credit risk) and the relevant replacement benchmark such as SOFR (which, as a risk-free rate, does not include bank credit risk). The choice of some of the key steps down the waterfalls depends on official endorsement by a body such as the ARRC. The deadline for responses was in November 2018.[10]
- In addition, ISDA consulted the sterling market, and some other markets, on new fallbacks to risk-free rates in the derivatives market referencing LIBOR, in the event that LIBOR is no longer available.[11] The final results were published by ISDA in December 2018. (See box.)

9. Sterling RFR Working Group: *New Issuance of Sterling Bonds Referencing LIBOR,* July 2018. This paper is available on the Bank of England website.

10. The ARRC has also published consultation papers on fallbacks in new loan and securitisation transactions.

11. The consultation related to GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW. ISDA received 152 responses from 164 entities.

ISDA Consultation on Fallbacks for Derivatives Referencing LIBOR: final results

"The overwhelming majority of respondents preferred the "compounded setting in arrears rate for the adjusted risk-free rate" (RFR), and a significant majority across different types of market participants preferred the "historical mean/median approach" for the spread adjustment. The majority of respondents preferred to use the same adjusted RFR and spread adjustment across all benchmarks covered by the consultation, and potentially other benchmarks (such as US dollar LIBOR, euro LIBOR and EURIBOR).

In accordance with these results, ISDA will proceed with developing fallbacks for inclusion in its standard definitions based on the compounded setting in arrears rate and the historical mean/median approach to the spread adjustment for all of the benchmarks covered by the consultation. In the coming months, ISDA and its independent advisors will work to determine the appropriate parameters for the historical mean/median approach to the spread adjustment (including, for example, whether to use a mean or median calculation and the length of the historical lookback period)."

12 It is sometimes argued that the introduction of robust fallbacks for new bond market transactions referencing LIBOR may reduce the incentive to transition to risk-free rates. However, the BMR requires supervised entities to have robust fallbacks; and it is also preferable for fallbacks to be robust because, if they are not robust, the number of legacy bonds referencing LIBOR without robust fallbacks will continue to increase. In conclusion, promoting new issues referencing risk-free rates and ensuring that any new issues referencing LIBOR have robust fallbacks both help to cap the size of the legacy problem. But they do not solve it.

The feasibility of converting legacy bonds

13 So the third question concerns the feasibility of converting legacy bonds referencing LIBOR to risk-free rates, if LIBOR ceases to be available. Conversion from LIBOR to a risk-free rate like SONIA would be more complex in the bond market than in the derivatives market: protocols, which are used in the derivatives market, cannot be used to amend bond market contracts; amending the terms of bond contracts requires bondholder consent, the threshold for which is generally set at a high level. In addition, LIBOR and SONIA are economically not the same, and so conversion from one to the other could be expected to require an adjustment spread.

14 There is less of a problem with short-dated legacy bond issues, which will mature while LIBOR continues to be available, as long as they can continue to be hedged effectively in the meantime. But there is much more of a problem in the case of longer-dated bond issues. It has been estimated that at least the equivalent of $864 billion bonds referencing LIBOR is currently outstanding and due to mature beyond 2021, of which at least the equivalent of $78 billion is referenced to sterling LIBOR, and these figures exclude some issues and issuers, such as sovereigns.[12] The Sterling RFR Working Group's Bond Market Sub-Group in the UK is considering the options for the conversion of legacy bonds referencing LIBOR with traditional fallbacks and consent thresholds.

The need for international coordination

15 The fourth question relates to the need for coordination between the bond, loan and derivatives markets and between different IBOR jurisdictions globally. Work at global level is coordinated by the Official Sector Steering Group (OSSG), set up by the Financial Stability Board. The FSB OSSG is co-chaired by Andrew Bailey, Chief Executive of the FCA, and Jerome Powell, the Chair of the Federal Reserve Board, and consists of the benchmark authorities around the world. At its meeting in London on 4 June, the FSB OSSG held a session with trade associations, including ICMA, focusing both on the importance of global coordination and on the need in the bond and loan markets to provide forward-looking term rates as well as backward-looking rates. The FSB OSSG published a statement on 12 July to coincide with Andrew Bailey's speech at Bloomberg.[13]

16 On international coordination, there are two points to emphasise:

- One is that there are of course some differences between the five main IBOR jurisdictions – the UK, the US, the euro area, Switzerland and Japan – both as regards the timing of the transition to risk-free rates, and as regards the approach to the transition, so as to take account of local circumstances: for example, whether risk-free rates

12. Source: Royal Bank of Canada Capital Markets.

13. FSB: *Interest Rate Benchmark Reform – Overnight Risk-Free Rates and Term Rates,* 12 July 2018.

are secured or unsecured. But the question is how much these differences matter, as the underlying direction of travel in all jurisdictions is the same.

- The other point to emphasise is that, in addition to coordination between the authorities, there needs to be close market coordination internationally: not just between the bond market, the loan market and the derivatives market in each individual jurisdiction, but between market participants in the different jurisdictions.

The need to raise market awareness

17 The final question is how to raise awareness in the market of the need to prepare for the transition to risk-free rates. While the level of awareness of the proposed transition to risk-free rates has grown, market preparations are still at an early stage, particularly – though not only – in the cash markets.

- The authorities themselves play an important role in raising market awareness: for example, through official speeches; through involvement in working groups and events; and, in the UK case, through letters from supervisors to chief executives of supervised firms to encourage them to prepare.
- Trade associations like ICMA can also help. For example:
  - At the 50th ICMA AGM and Conference in Madrid at the end of May 2018, ICMA arranged a panel of senior officials representing the Bank of England, the FCA, the European Central Bank, the Federal Reserve in the US and the Swiss National Bank to explain to ICMA members why the transition to risk-free rates is important, and to discuss what market firms need to do to prepare.
  - ICMA provides updates on the transition to risk-free rates in the ICMA Quarterly Report and holds conference calls for ICMA members.
  - ICMA also has a specific webpage on the ICMA website dedicated to information about interest rate benchmark reform and the transition to risk-free rates.
- And finally, individual market firms have an important role to play, not only in becoming well prepared for the transition to risk-free rates themselves, but also in helping their clients to do the same.

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