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The Bank of England's risk management approach to collateral referencing LIBOR for use in the Sterling Monetary Framework

A Discussion Paper

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1. Purpose of this discussion paper

The purpose of this paper is to seek initial feedback on the Bank's approach to the risk management of collateral that references the London Interbank Offered Rate (LIBOR) and is positioned at the Bank for use in its market operations, as sterling and other markets transition away from LIBOR towards alternative risk-free reference rates.

Section 2 provides a brief background to both the LIBOR transition process and the Bank's collateral framework. Section 3 describes some of the potential implications for the Bank's balance sheet from LIBOR transition. Section 4 outlines a number of possible risk management approaches currently under consideration by the Bank to ensure that it remains well placed to provide liquidity insurance in support of financial stability. It further poses some questions for discussion.

Views on these questions are sought, both from firms that are signed up (or expect to sign up) to the Sterling Monetary Framework (SMF) and from any other interested parties. Responses will be used to help frame the Bank's future risk management approach with regards to collateral referencing LIBOR, which it will publish in due course after careful consideration.

The Bank's assessment of collateral eligibility criteria and haircuts needed to protect public money are not normally informed by input from market participants. However, in this case, the unusually wide ramifications of LIBOR transition and the need to plan well ahead means that the Bank sees merit in seeking views at a relatively early stage in the process.

Comments should be sent by email to LIBORcollateralDP@bankofengland.co.uk and should reach the Bank by 27 September 2019

2. Background to LIBOR transition and the Bank's collateral framework

The financial crisis and its aftermath highlighted fundamental design weaknesses in the construction of LIBOR, which led to high profile instances of LIBOR being manipulated and undermined confidence in the benchmark. In response, the Financial Stability Board (FSB) was tasked by the G20 with undertaking a fundamental review of major interest rate benchmarks. In 2014 the FSB published a series of recommendations[1] for strengthening existing benchmarks for key interbank offered rates (IBORs) by anchoring them to a greater number of transactions where possible, and for development and adoption of near-risk-free rates for use in markets as an alternative to IBORs.

Although a number of reforms relating to the construction of LIBOR were subsequently implemented, it became apparent that following the financial crisis, banks had permanently tilted their funding away from the short term unsecured wholesale market (the market LIBOR sought to

[1] http://www.fsb.org/wp-content/uploads/r_140722.pdf

measure)[2]. This left LIBOR reliant primarily on 'expert judgement' by panel banks rather than underlying transactions and posed risks that, at some stage, panel banks might be unwilling to continue to submit. There was therefore a concern that LIBOR might fail before a broad transition away from the benchmark was complete. In July 2017 the Financial Conduct Authority (FCA), as the national competent authority for regulating benchmarks in the UK, announced that it had reached an agreement with the LIBOR panel banks to continue to submit until the end of 2021, after which it would no longer be necessary for the FCA to persuade, or compel, banks to submit to LIBOR[3]. The aim was to give markets sufficient time to achieve a managed transition away from LIBOR.

In the UK, the Bank and FCA are working with market participants through the Working Group on Sterling Risk-Free Reference Rates (the 'Working Group') to catalyse a transition to using the Sterling Overnight Index Average (SONIA) as the primary interest rate benchmark in sterling markets[4] - the sterling risk-free rate. Market uptake is growing: notional SONIA swaps volumes already rival those of GBP LIBOR swaps with liquidity across the yield curve; referencing SONIA is now the norm in sterling-denominated floating rate notes; and the first SONIA-referencing securitisations have been issued. There has also been good progress in the United States and some other jurisdictions using LIBOR or similarly-constructed benchmarks (known as 'IBORs').

LIBOR transition is a reality and firms must be prepared for it. The UK Financial Policy Committee (FPC) has highlighted the financial stability risks around LIBOR since 2017. In June 2018 it judged that continued reliance of financial markets on term Libor benchmarks created a risk to financial stability[5]. To underscore that, the Prudential Regulation Authority (PRA) and the FCA wrote to CEOs of major banks and insurers supervised in the UK in September 2018, seeking assurance that firms' senior managers and boards understood the risks associated with LIBOR transition and were taking appropriate action such that their firms can transition to alternative rates ahead of end-2021. The key findings from that exercise were published on 5 June and are available here.

Against this backdrop, the Bank has initiated a review of its own exposures, or potential exposures, to LIBOR. One key area of investigation has been the collateral that banks and other financial firms are asked to provide when borrowing from the Bank under the SMF.

The SMF supports the Bank's mission to promote the good of the people of the United Kingdom through the maintenance of monetary and financial stability. Amongst other things, it does this by providing liquidity insurance for banks and certain other financial firms during periods of firm-specific or market-wide stress. These operations play an important role in safeguarding stability, but they also expose the Bank, and hence public money, to financial risks, which must be carefully managed.

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[2] *"Sterling money markets: beneath the surface"* Bank of England Quarterly Bulletin, Q1 2018

[3] https://www.fca.org.uk/news/speeches/the-future-of-libor

[4] *"Preparing for 2022: What you need to know about LIBOR transition"*, produced by the Working Group on Sterling Risk Free Rates provides information regarding the transition from LIBOR.

[5] https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2018/june-2018.pdf?la=en&hash=9D057C7302B80EF57D634020F50C6F46D782904C#page=65

A key part of the Bank's risk management framework involves the specification and valuation of eligible collateral. When the Bank lends in its operations, it only lends against collateral of sufficient quality and quantity to protect itself from counterparty credit risk. If the counterparty fails to repay when due, the Bank can sell or retain the collateral to make good any loss it may face.

The Bank accepts a wide range of eligible collateral, which includes but is not limited to, gilts, sterling treasury bills, sovereign debt, securitisations, covered bonds and un-securitised pools of residential mortgage loans, consumer loans, auto loans, social housing loans, private finance initiative loans and corporate loans[6].

A subset of this collateral references LIBOR in some way, including:

- securities where the coupon pays a rate of interest calculated by reference to LIBOR;
- securitisations where associated swap payments are calculated by reference to LIBOR;
- securitisations backed by loans where the borrower pays a rate of interest calculated by reference to LIBOR; and
- un-securitised 'raw' loans where the borrower pays a rate of interest calculated by reference to LIBOR.

In value terms, roughly a tenth of SMF drawing capacity is collateralised by assets that reference sterling LIBOR. Collateral denominated in other currencies is eligible in the SMF, subject to it meeting the Bank's eligibility criteria. However, collateral referencing non-sterling IBORs currently accounts for less than 1% of SMF drawing capacity.

3. Implications of LIBOR transition for the Bank's balance sheet

A measured and orderly market transition away from LIBOR by end-2021 will enhance financial stability and establish a more robust foundation for cash and derivatives markets, grounded in SONIA and other currency risk-free rates. As part of that transition, forward planning will be required, both by the Bank and by SMF member firms, to ensure that borrowing capacity at the Bank is maintained and that public money on the Bank's balance sheet is appropriately protected.

Against that backdrop, it is important that firms make the most of the time between now and end-2021 to bring about that transition. That means:

- First, that newly-issued sterling collateral should reference alternative risk-free rates rather than LIBOR;
- Second, where firms have existing LIBOR-linked sterling collateral that matures beyond end-2021, they should seek wherever possible to have it re-referenced to an alternative risk-free rate. The Bank will take steps to ensure that these new instruments are eligible for prepositioning in a timely way, where a request for eligibility is received and the Bank's

[6] The Bank of England's eligibility criteria can be found on our website here.

published eligibility criteria are met. Indeed, the Bank has already made certain collateral that references new risk-free rates eligible for use in the SMF; and

- Third, at a minimum, the Bank expects LIBOR-linked collateral to include adequate fallback language specifying an alternative rate in the event that LIBOR ceases to exist.

The Bank protects public money through its collateral policies in two key ways:

- First, whilst the Bank's eligible collateral list is broad, it only accepts collateral that it judges can be valued and effectively risk managed; and
- Second, the Bank seeks to mitigate loss by applying a 'haircut' so that it lends an amount less than the market value of the collateral it takes. The haircuts are designed to protect the Bank against possible further falls in the value of collateral in the period between counterparty default and the sale of the collateral, including in times of stress. The Bank also holds loss-absorbing capital[7].

LIBOR transition, should it be disorderly, poses challenges under both headings. In particular there is a risk that, as the end date for transition approaches, some types of LIBOR-linked collateral could become increasingly difficult to value and effectively risk manage. Should that collateral be delivered to the Bank against a live lending operation, it could expose the Bank's balance sheet to financial risks that would be difficult to quantify.

The risks the Bank could face in a disorderly LIBOR transition would in some ways be similar to those faced by other financial institutions. A full summary of those market-wide risks is beyond the scope of this paper. But the points below give a sense of the range of issues that could arise, drawing on papers published by the Working Group (referenced below) in order to raise market awareness. These examples are not exhaustive and do not constitute a comprehensive outline of all relevant considerations for the Bank. SMF and wider market participants should seek their own advice in relation to their legal, regulatory and other obligations and as to any considerations or risks that may arise or be relevant to them in this regard.

1. Risks associated with LIBOR-referencing long dated securities have been highlighted in a paper published by the Working Group[8]. For long dated securities where the coupon pays a rate of interest calculated by reference to LIBOR, the liquidity of LIBOR-linked assets may deteriorate, or in extremis be absent if uncertainty in documentation of fallback language and/or spread adjustments result in the coupon reverting to a fixed rate and/or being lower than expected. Valuation risks could be exacerbated for un-traded or rarely traded collateral where there is a lack of transparency on market price. Furthermore, liquidity could be impacted if any amendments to the terms and conditions are proposed whilst decisions are pending in

[7] https://www.bankofengland.co.uk/-/media/boe/files/memoranda-of-understanding/financial-relationship-between-hmt-and-the-boe-memorandum-of-understanding.pdf

[8] For a discussion of risks associated with LIBOR-referencing long dated securities, which are summarised in points (1) and (2), please refer to the paper New issuance of Sterling bonds referencing LIBOR.

response to a discontinuation of LIBOR or if LIBOR is no longer an acceptable benchmark rate to reference. These amendments would likely require bondholder consent by way of bondholder meetings, involving formal notice periods and usually a high consent or quorum requirement. There is no guarantee that proposed amendments will be accepted.

2. For asset-backed securities and covered bonds where embedded swap payments are calculated by reference to LIBOR, the fallbacks for swaps and bonds may operate differently or may be triggered at different times, which could result in payment disruptions and asset and liability mismatches, exposing the Bank to loss and potentially resulting in downgrades of the securities. This could also have a negative impact on liquidity.

3. The Working Group has also published a paper raising awareness of the potential considerations for loan market participants in relation to new and legacy loan agreements which reference LIBOR[9]. For un-securitised 'raw loans' or securities backed by loans where the borrower pays a rate of interest calculated by reference to LIBOR, the terms and conditions of the loans may not allow for LIBOR replacement and will likely need amendment to provide for alternative benchmark rates. Value transfers may result from the use of an alternative reference rate which may be open to challenge and subsequently result in cash flow shortages. Furthermore, for securitisations, a change in the reference rate could result in asset and liability mismatches if structural features and/or any embedded swaps do not address this effectively. Securities could suffer losses and/or be downgraded with a knock on impact for liquidity. Similarly, for raw loans pools, the aforementioned factors could negatively impact the value of the pool and its saleability.

Intensive efforts are underway by market participants and public authorities globally – including the Bank of England – to deliver a smooth transition away from LIBOR, minimising the chances of these risks crystallising. However, if they did crystallise in an unanticipated way, the Bank could either find itself facing financial loss (if it took no action), having to make large and unexpected changes to its haircuts (undermining clarity on firms' drawing capacity), or making sudden margin calls on SMF participants. There is therefore significant merit in planning ahead to ensure these risks are minimised.

4. Risk management approaches currently under consideration

SMF participants should be aware that, in responding to requests for eligibility confirmation for new collateral, the Bank has already started to consider how any exposures to LIBOR have been mitigated. Headway has already been made with regards to LIBOR transition in certain asset classes. For example, the Bank has observed that for new securitisation issuance, bonds have either

[9] New and legacy loan transactions referencing Sterling LIBOR

referenced SONIA or included fallback language where bonds reference LIBOR. In making eligibility decisions on collateral, one factor the Bank will consider is whether widely-adopted standards to minimise LIBOR-related risks have been incorporated.

However, in order to ensure a timely transition which maintains the stock of lendable resources in the SMF, whilst also protecting the Bank's balance sheet against the risks arising from LIBOR-referencing assets that are already prepositioned, the Bank is considering the following risk management approaches, both in isolation and in combination. The Bank is also considering its risk management approach for collateral linked to other interbank offered rates (IBORs). At this early stage, the Bank is seeking views on three possible alternative approaches, labelled Options A, B and C below.

Option A: The Bank expects market participants to work actively towards a successful transition away from LIBOR to collateral referencing new risk-free rates, such as SONIA, rather than waiting for market solutions to develop over time. Therefore, option A would be for the Bank to announce, at some future point in the transition period, that all collateral referencing LIBOR that matures beyond end-2021 would become ineligible, regardless of the issue/origination date, unless mitigated by adequate market solutions, such as fallback language, that appropriately mitigates the risks to the Bank's balance sheet. Such 'legacy' collateral could include assets issued/originated prior to the knowledge of LIBOR transition risks and/or prior to the emergence of adequate market solutions. Under this approach, the Bank would need to consider how to evaluate fallback language and to establish if that language had been adequately incorporated into the underlying documentation.

Option B: Another option would be for the Bank to make ineligible all collateral issued/originated after a certain date that references LIBOR and matures beyond end-2021 unless it incorporates adequate market solutions, such as fallback language, that appropriately mitigates the risks to the Bank's balance sheet. As with Option A, criteria for evaluating fallback language would have to be determined.

Option C: Rather than making collateral ineligible (as in Options A and B), an alternative possibility could be for the Bank to apply an additional haircut and/or a haircut that increases over time, to all collateral that references LIBOR and matures beyond end-2021.

Discussion point 1 – What are the positives and negatives of implementing each of the Options A, B and C?

Discussion point 2 – If implemented, how would each of the Options A, B and C impact SMF participants?

Discussion point 3 – What assurances, legal or otherwise, could SMF participants provide to satisfy the Bank that fallback language was sufficient to mitigate the risks to the Banks balance sheet?

Discussion point 4 – If Option B was adopted, what should the Bank consider in determining a possible cut-off date for eligibility?

Discussion point 5 – What considerations are SMF and wider market participants taking into account when determining the value of securities and loans that reference LIBOR and mature beyond end-2021, particularly un-traded or rarely traded collateral where there is a lack of transparency on the price?

The options described above may not be the only risk management approaches that the Bank would have at its disposal. There may be other alternatives that become clearer at a later stage and the Bank retains full flexibility and discretion to adopt them.

Discussion point 6 – Are there any additional policy options that the Bank should consider which have not been discussed in this paper? What would the positives and negatives be of these alternative options?

It is the Bank's intention that the implementation of any risk management approach should be structured and introduced in a clear and well-signposted manner, given the Bank's commitment to its financial stability objective, and its desire to maintain the strongest possible level of lending capacity in the SMF. The Bank intends to give the market prior notice of the implementation date, but SMF participants should be cognisant of the Bank's intention to act and be prepared for it.

The Bank of England invites views on this discussion paper. Comments should reach the Bank by 27 September.

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