LIBOR: What you need to know at the beginning of 2019
Executive Summary

LIBOR transition remains a fundamental issue confronting financial markets. Regulators in both the United States and Europe have expressed the view that the discontinuation of LIBOR is a virtual certainty, and that market participants should plan accordingly.

- **LIBOR to cease at end of 2021**: The expectation remains that LIBOR will cease to be supported at the end of 2021, and that new reference rate benchmarks will need to replace it.

- **Major challenges remain**: Considerable developments for LIBOR transition occurred in 2018, but it is clear that major challenges remain. Some regulators have said that the pace of transition is not yet fast enough.

- **ESTER**: In 2018, ESTER was settled on as the recommended overnight risk-free rate (RFR) for euro, joining the overnight RFRs previously identified for the other LIBOR currencies.

- **Forward-looking term rates**: A significant challenge exists in the development of forward-looking term rates based on overnight RFRs. The Official Sector Steering Group of the Financial Stability Board (FSB) has stated that the development of these term rates is "less certain" than the development of RFRs. It is uncertain whether sufficient liquidity exists (or will exist) to construct forward-looking rates in all LIBOR currencies that would comply with benchmark regulations developed since the financial crisis. In Switzerland, the national working group for Swiss Franc reference rates has announced that, at present, it is not feasible to develop a term rate based on SARON, the Swiss franc RFR.

- **LIBOR transition at different stages in different jurisdictions**: LIBOR transition is at different stages of progress in the different jurisdictions of the LIBOR currencies. In the US and the UK, the official sector and working groups have taken more concrete steps and are further advanced than elsewhere. This is in part because the US and the UK derivatives markets and trading in LIBOR replacement rates are more developed and more liquid than in other jurisdictions.

- **Legacy contracts and new contracts referring to LIBOR**: There continues to be a large number of legacy contracts referring to LIBOR with maturities extending beyond 2021. Further, new contracts continue to be written that refer to LIBOR with maturities beyond that date.

- **Consultations on fallback rates and fallback provisions**: Major consultations were undertaken in 2018 by ISDA and by a number of US financial industry groups with respect to the development of robust contractual language in contracts referring to LIBOR with respect to fallback mechanisms and rates (including spread adjustments) in the event LIBOR were to cease. The US consultations also include proposals for pre-cessation triggers. Several trade organizations also made contractual fallback proposals for securitizations in the US and in Europe. Consultations were undertaken as to the development of forward-looking term rates for Sterling and euro.

- **ISDA consultation**: The ISDA consultation has concluded. A majority of respondents were in favor of a compounded setting in arrears rate for the fallback rate, and a "historical mean/median approach" for determining the spread adjustment. ISDA indicated that, based on the responses it had received to its consultation, it would proceed with developing fallbacks for inclusion in a revision to its standard definitions based on such rate and approach. Although the ISDA consultation covered currencies other than the US dollar and euro, it appears likely that the responses would apply equally.

- **Advance vs. arrears computation for term rates**: It is unclear at this point whether the term rates used in fallback provisions will be calculated in advance or in arrears. As noted above, the ISDA contractual fallback for LIBOR for all currencies will likely be a rate set in arrears. In addition, several noteworthy debt transactions referring to
overnight RFRs closed in 2018, and all refer to rates set in arrears. However, many lenders and borrowers would like rates set in advance for at least some products, to aid in cash flow planning and risk management.

- **Value transfer**: Working groups continue to attempt to develop fallbacks that will avoid value transfer in the implementation of contractual fallbacks by means of spread adjustment and through other methods.

- **Risk mitigation by regulated entities**: Regulators have indicated that they will continue to push regulated entities to take steps to mitigate risks arising from LIBOR discontinuance and transition.

- **Differing LIBOR fallbacks between derivatives markets and cash markets**: During 2018, it became clear that the LIBOR fallbacks for derivatives and cash markets will likely differ, with participants in the derivatives markets being less concerned about the need to develop forward-looking term rates and being satisfied (and more comfortable) with overnight rates.

- **Differing LIBOR fallbacks among cash products**: It is possible that LIBOR fallbacks developed for cash markets may differ among products. While a "one size fits all" solution would likely reduce many operational, legal and basis risks, differing needs of participants in the different products may prevent such a solution. In particular, fallback proposals for consumer products have yet to be made, and may require different (and simpler) provisions.

- **Iterative approaches**: The approaches taken by many of the working groups for contractual fallbacks are contemplated to be iterative in nature, with initial proposals anticipated to evolve as further developments occur in the market. These proposals may (and, it is hoped, will) become further refined over time. For example, the first steps in the waterfalls for fallback rates and spread adjustments in the US consultations refer to items that do not yet exist, but are hoped to exist in the future. At this point, it is difficult to predict with certainty what fallback rates will be developed. Accordingly, some of the contractual mechanisms currently proposed by the loan market in the US and the UK provide for future amendments to loan documents with a lender consent threshold of less than 100% instead of trying to "hardwire" a fallback rate and spread adjustment upfront.

- **Tension between waiting for clarification and need for current action**: Some market participants may consider it premature to consider alternative reference rates until matters become clearer, although regulators continue to argue for prompt action.

- **Remaining operational, legal and basis risks; need for coordinated response**: Considerable operational, legal and basis risks remain to be addressed by continuing LIBOR transition efforts. International and cross-market coordination will continue to be critically important.

- **Need to monitor ongoing developments**: Market participants should continue to closely monitor developments concerning LIBOR discontinuation and transition. It is hoped that 2019 will bring more clarity to these matters.
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Introduction

LIBOR transition remains a fundamental issue confronting financial markets. Regulators in both the United States and Europe have expressed the view that the discontinuation of LIBOR is a virtual certainty, and that market participants should plan accordingly.¹ The official sector of regulators and central banks has continued to stress the need to develop robust alternative reference rates and robust contractual fallbacks in the event that LIBOR were to cease or become unrepresentative of underlying financial reality, and to transition to such alternative rates.

Market participants have been actively involved in examining alternatives to LIBOR and other interbank offered rates (IBORs), and have also considered adding fallback provisions to new debt contracts and amending legacy debt contracts to add such fallbacks.

In November 2018, the Financial Stability Board (FSB) issued its 2018 progress report on reforming interest rate benchmarks.² In that report, the FSB noted that a great deal of progress had been made since 2017 to identify risk-free rates (RFRs) and other alternative reference rates and, in some markets, to begin to transition to identified RFRs. The FSB report also noted work currently being done to enhance contractual robustness through the implementation of fallbacks. The FSB report explicitly stated that "FSB member authorities consider that transition away from LIBOR is necessary, across the five LIBOR currencies (USD, EUR, JPY, GBP and CHF); it should be presumed that LIBOR will not be sustainable."

This report will examine developments that occurred in 2018 with respect to derivatives, syndicated lending, securitization and the bond markets, in the jurisdictions of each LIBOR currency. Several major consultations were launched by ISDA and by working groups with respect to USD LIBOR, Sterling LIBOR and euro LIBOR concerning alternative reference rates and contractual fallbacks.

While considerable progress was made in 2018, it is clear that many challenges remain. In particular, work performed in 2018 by the official sector, trade associations and working groups to develop forward-looking term rates derived from RFRs has confirmed the difficulty in coming up with such rates. The Official Sector Steering Group (OSSG) of the FSB has stated that the development of such rates is, at this point, at an earlier stage and less certain than the development of RFRs.³

Appendix 1 contains summaries of contractual fallback proposals from ISDA, the LMA and several official sector and industry working groups, as well as views of some other fallback clauses seen with respect to several financial products and markets.

This is the third in a series of reports Baker McKenzie has written since 2017 on LIBOR discontinuance and replacement. Our previous reports are available here and here.

¹ See, e.g., "Interest rate benchmark reform: transition to a world without LIBOR," speech by Andrew Bailey, Chief Executive, UK Financial Conduct Authority 12 July 2018 ("I hope it is already clear that the discontinuation of LIBOR should not be considered a remote probability ‘black swan’ event. Firms should treat it as something that will happen and which they must be prepared for."); "Opening Statement before the Market Risk Advisory Committee Meeting," speech by J. Christopher Giancarlo, Chairman, US Commodity Futures Trading Commission, 12 July 2018 ("The discontinuation of LIBOR is not a possibility. It is a certainty.")

Overnight RFRs and term rates

Many of the developments that occurred in 2018 have demonstrated the divergent interests of different financial markets and end-users with respect to RFRs. The developments in 2018 have also shown that a lot of work (much of it quite challenging) remains to be done before the deadline at the end of 2021.

The vast size of derivatives transactions referencing IBORs relative to transactions in non-derivatives markets has led the official sector to focus on solutions for the derivatives markets, with the expectation that other markets will derive solutions appropriate to those markets from what is being developed for derivatives. While considerable progress has been made on solutions for the derivatives markets, less progress has been made on such solutions for non-derivatives markets.

In July 2018, the OSSG expressed the view that transition efforts should focus on overnight RFRs as the primary IBOR fallback rates, rather than forward-looking term rates derived from RFRs. At this point, these forward-looking RFR-derived rates remain at an earlier stage of development than overnight RFRs.

The OSSG emphasized that the use of overnight RFRs by the derivatives markets is important to achieve financial stability. The OSSG has also stated that forward-looking term rates derived from RFRs may be more optimal in other markets.

The OSSG stated that the feedback it had received from market participants suggested that a prime motivation in the choice of an interest rate benchmark was the ability to transact at the tightest spreads (or lowest cost). This feedback also indicated that liquidity would likely concentrate in markets that focused on overnight RFRs, where spreads were expected to be tightest, and that markets that currently used term rates might well migrate to the overnight markets. Andrew Bailey, the chief executive of the Financial Conduct Authority (FCA), expressed the same view in a speech given on the same day as the OSSG report.

Overnight RFRs by definition do not reflect forward term risk. The OSSG recognized that in some cases the benefit of fixing the interest rate at the beginning of the period over which interest is paid using a "forward-looking" term rate might outweigh the cost savings and other benefits of using an overnight RFR. However, the OSSG expressed the view that the use of such "forward-looking" term rates would ideally be "more limited" than the current use of IBORs, "relatively narrow compared with current use of IBORs" and "largely concentrated in a segment of the cash rather than derivative markets" in order to be compatible with global financial stability.

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4 See OSSG Report, “Because derivatives represent a particularly large exposure to certain IBORs, and because . . . prospective RFR-derived term rates can only be robustly created if derivatives markets on the overnight RFRs are actively and predominantly used, the FSB believes that transition of most derivatives to the more robust overnight RFRs is important to ensuring financial stability.”

5 The OSSG contrasted term rates that were "backward-looking" from those that were "forward-looking" in the Annex to the OSSG Report:

A term rate could be calculated at the end of a period or term based on observed rates during the period ('backward-looking'). Such a calculation is generally done by compounding the actual overnight rate over the length of the period. So a compounded overnight rate refers to the realised rate calculated from overnight rates over a given period.

Another possibility for a term rate is for it to be fixed at the outset of a given period, hence capturing expected rates over the period ('forward-looking'). Most current IBORs are forward looking term rates.
Overnight RFRs have been observed to behave differently from LIBOR, particularly during periods of stress.\(^6\) Oliver Wyman has calculated that during the period from 2000 through 2017 the spread between three-month LIBOR and SOFR averaged 36 basis points, but widened to 460 basis points during the financial crisis.\(^7\) Similar market stresses might make overnight RFRs unreflective of bank funding costs in cash markets.

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\(^6\) Although SOFR was not published during the financial crisis, publicly available US Treasury repo rate information extends back more than 10 years. The ARRC has expressed the view that such information provides a reasonable proxy for modelling how SOFR would have behaved during this period.

ISDA Consultation

ISDA recently completed a consultation on technical issues related to new benchmark fallbacks for certain IBORs —GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW— in connection with the preparation of contemplated amendments to the 2006 ISDA Definitions. The consultation sought industry views on a number of options for adjustments that would apply to the fallback rate in the event an IBOR were to be permanently discontinued. ISDA published a summary of the preliminary results on 27 November 2018 and a final report summarizing the responses it had received on 21 December 2018.

The consultation asked respondents to consider four options for calculating an adjusted risk-free rate and three options for calculating a spread adjustment. ISDA proposes to publish its developed approach for comment in the first half of 2019, before implementing the fallbacks in an update to the 2006 ISDA Definitions.

ISDA has stressed that the fallback rates it is developing are intended to apply solely to derivatives, and that its consultation did not consider whether such rates were appropriate for other products. ISDA has stated however that it is committed to ensuring that, to the extent possible, fallbacks for derivatives are compatible with fallbacks for financial instruments that are hedged by derivatives.

A majority of respondents were in favor of the compounded setting in arrears rate coupled with the historical mean/median approach to the spread adjustment. ISDA indicated that, based on the responses it had received to its consultation, it would proceed with developing fallbacks for inclusion in its standard definitions based on such rate and approach to the spread adjustment for all of the benchmarks covered by the consultation.

Proponents of the compounded setting in arrears rate cited as advantages its compatibility with the overnight index swap (OIS) market and its ability to reflect the daily interest rate movements during the relevant period. A common reason given by respondents as to why they did not prefer a compounded setting in advance approach for the adjusted RFR was that it would not capture interest rate changes during the relevant period. The principal disadvantage of the compounded setting in arrears approach cited by respondents was that the information needed to determine the rate would not be available at the start of the relevant period. While this issue would likely not be of concern to many swaps dealers,

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8 See ISDA, Interbank Offered Rate (IBOR) Fallbacks for 2006 ISDA Definitions: Consultation on Certain Aspects of Fallbacks for Derivatives Referencing GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW. This consultation did not cover USD LIBOR, EUR LIBOR or EURIBOR, which ISDA stated would be the subject of subcontrary consultations. ISDA has stated that it expects the supplemental consultation for USD LIBOR to launch “once there is additional liquidity and trading in products referencing SOFR” and that it expects supplemental consultation for EUR LIBOR and EURIBOR to launch once the European Central Bank begins publishing ESTER and there is liquidity and trading in products referencing ESTER.

9 Available here

10 Anonymized Narrative Summary of Responses to the ISDA Consultation on Term Fixings and Spread Adjustment Methodologies (“Summary of Responses to ISDA Consultation”).

11 To account for the move from a “term” IBOR to the overnight RFR, the ISDA fallbacks will refer to an “adjusted RFR,” which will adjust each relevant overnight RFR so that it is comparable to IBOR tenors.

12 The overnight RFRs are by definition risk-free or nearly risk-free. LIBOR includes a bank credit risk premium and a variety of other factors (e.g., liquidity, fluctuations in supply and demand). The spread adjustment is intended to apply to the relevant adjusted RFR to account for these differences.

13 An advantage of the compounded setting in advance rate that was not set forth in the ISDA consultation but was brought up by a few respondents is that such approach could be applicable to the cash markets. Summary of Responses to ISDA Consultation, ¶73.
several respondents indicated that the lack of certainty for cashflow planning might be
difficult for end users from an operational standpoint.

Among the advantages cited by proponents of the historical mean/median approach were
robustness, simplicity, reduced potential for manipulation and resistance to market
distortions. Some respondents expressed concern that such approach might result in value
transfer (the concern that substituting an alternative reference rate for an existing
benchmark in a contract could result in a transfer of value from one party to another due to
an economic difference between the former benchmark and the substitute rate), and this
concern seemed to be the principal reason why some respondents preferred a forward
approach to spread adjustment, even though such an approach might be more susceptible
to manipulation risk\textsuperscript{14} and potential market distortions in the period immediately preceding a
transition to an alternative benchmark\textsuperscript{15} and would depend on whether a deep, liquid
market in relevant transactions existed at the time to enable the calculation of a forward
spread adjustment.

ISDA stated that it will work to determine the appropriate parameters for the historical
mean/median approach to the spread adjustment. As part of this work, ISDA stated that it
would publish the results of independent sensitivity analyses to provide all market
participants with a better understanding of the range of parameters in the historical
mean/median approach and potential variations to that approach. ISDA indicated that
during the first half of 2019 it will also address issues that respondents had raised in the
recent consultation. ISDA stated that it will solicit additional feedback from market
participants on the final parameters of the historical mean/median approach to the spread
adjustment and the equations that would be used to calculate such adjustment.

\textsuperscript{14} One respondent raised the concern that there could be "extreme moves (due to manipulation or otherwise) in
the run up to a potential trigger event." Summary of Responses to ISDA Consultation, ¶89.

\textsuperscript{15} One respondent raised the concern that stated that the forward approach "[c]ould lock in spreads at
temporarily high levels if there was short term stress in the market at the time that the snapshot was taken." Summary of Responses to ISDA Consultation, ¶89.
In September 2018, ISDA published its Benchmarks Supplement.\textsuperscript{16} This supplement was primarily intended to assist parties in addressing the requirements of Article 28(2) of the BMR.\textsuperscript{17} ISDA prepared the supplement broadly, with an eye towards allowing parties not subject to the BMR to incorporate the terms of the supplement.\textsuperscript{18}

The ISDA Benchmarks Supplement is relevant for transactions that incorporate any of the 2006 ISDA Definitions, the 2002 ISDA Equity Derivatives Definitions, the 1998 FX and Currency Option Definitions or the 2005 ISDA Commodity Definitions.

The Benchmarks Supplement provides that the IBOR fallbacks set forth in the 2006 ISDA Definitions will apply in priority to the fallbacks set forth in the Benchmarks Supplement in the case of an "index cessation event." ISDA also proposes to publish amendments to the 2006 ISDA Definitions to include an "index cessation event" concept and related fallbacks, which will apply to transactions that incorporate the amended definitions (and to legacy transactions where the parties agree that this will be the case). The Benchmarks Supplement will not automatically apply to a derivatives transaction that is otherwise subject to the 2006 ISDA Definitions, but rather the parties to a specific transaction must specifically incorporate the terms of the Benchmarks Supplement to have such terms apply to such transaction.

\textsuperscript{16} Available here.

\textsuperscript{17} Article 28(2) of the BMR requires EU supervised entities that use a benchmark to "produce and maintain robust written plans setting out the actions that they would take in the event that a benchmark materially changes or ceases to be provided. Where feasible and appropriate, such plans shall nominate one or several alternative benchmarks that could be referenced to substitute the benchmarks no longer provided, indicating why such benchmarks would be suitable alternatives. The supervised entities shall, upon request, provide the relevant competent authority with those plans and any updates and shall reflect them in the contractual relationship with clients."

The BMR also provides that a supervised entity cannot use a benchmark or a combination of benchmarks in the EU unless the benchmark is (i) provided by an administrator located in the EU and included in the European Securities and Markets Authority's register of administrators and benchmarks or (ii) a benchmark included in such register. Article 35 of the BMR provides that, if a competent authority withdraws the authorization or registration of an administrator of a benchmark, then Article 28(2) shall apply.

\textsuperscript{18} On 5 January 2018, IOSCO published a Statement on Matters to Consider in the Use of Financial Benchmarks. This statement provides that users of benchmarks should consider (i) the appropriateness of a benchmark before using it and (ii) contingency plans in the event a benchmark is no longer available or materially changes, in order to mitigate risks, similar to the requirements of Article 28(2) of the BMR. ISDA stated that parties might choose to incorporate the Benchmarks Supplement if they chose to implement the guidance contained in this statement.
Working Group on Sterling Risk-Free Reference Rates (Sterling Working Group) Consultation

While the official sector has prioritized the development of overnight RFRs, a number of loan and debt capital markets participants have identified operational challenges associated with the use of overnight rates for loans and debt capital markets transactions, as well as risk management issues such as cash flow forecasting or managing interest rate risk arising as a result of the use of overnight rates. In the UK, reformed SONIA (Sterling Overnight Index Average) has been identified as the appropriate RFR replacement for GBP LIBOR. The Sterling Working Group recently published a summary of responses to its consultation on term SONIA reference rates (TSRRs), which the group defined to refer to the market's forward expectation of the average SONIA rate over a designated term. The group concluded that development of TSRRs for use in debt and capital markets can play an important role in facilitating the transition to SONIA by providing cash-flow certainty for the loan and mortgage markets, and to a lesser extent the bond and securitization markets.

The responses received identified a strong use case for small- and medium-sized corporates given the simplicity of a transparent forward-looking term rate. The results of the consultation published to date revealed that liquidity in the short-dated SONIA OIS market is sufficient to support TSRRs, although production of a TSRR using firm quotes would require further development in the trading of OIS. The Sterling Working Group stated that it anticipated that a TSRR could be available in the second half of 2019.

Respondents to the consultation indicated that a TSRR was generally not needed for sterling derivatives markets for two reasons: first, derivative markets have already adapted to the SONIA OIS market; and, second, the use of TSRR in the derivatives markets might undermine the development of a "so-far nascent" SONIA-referencing market. The majority of respondents felt that the use of TSRRs in derivatives should be limited.

The Sterling Working Group stated that any TSRR that was developed would need to be robust and comply with the IOSCO principles. The Sterling Working Group consultation suggested that the most feasible and robust methodology for the production of a TSRR in the near term would be the weighted average mid-point of the best, firm bids and offer quotes for listed SONIA-OIS products on a central limit order book (CLOB), which was confirmed by consultation responses. However, the group also expressed the view that the current market structure in short-dated SONIA OIS did not currently support the goal of price transparency, since sufficient OIS trading volume was not centrally cleared. The group concluded that, in the near term, the short-dated SONIA OIS market provided the best potential source of input data for the development of TSRRs, but that structural changes were necessary to list and trade more OIS transactions on a CLOB, and that moving to such a platform might present operational challenges. The group also stated that, if liquidity were to develop in SONIA futures, those transactions could also be a source of pricing information for TSRRs.

The Sterling Working Group also recognized that some end users would need to hedge obligations that referred to TSRRs (such as corporate loans, floating rate notes and securitizations), and that some derivatives would therefore refer to TSRRs. These hedges would most likely be effected in the bilateral (uncleared) market.

19 Available here.
20 Working Group on Sterling Risk-Free Reference Rates, Consultation on Term SONIA Reference Rates.
21 The CLOB would be a regulated electronic trading platform.
Working Group on Sterling Risk-Free Reference Rates (Sterling Working Group) Consultation

The Bank of England also published a "Next Steps" paper in December 2018 on behalf of the Sterling Working Group22 which invited benchmark administrators to consider the summary of responses to the consultation, and to share any views on the development of TSRRs, by 15 February 2019, ahead of further discussion on the topic at the Sterling Working Group’s scheduled meeting in March 2019.

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22 Available here.
In July 2018, the ARRC, a body convened by the US Federal Reserve, released its "Guiding Principles for More Robust LIBOR Fallback Contract Language in Cash Products." Among other things, these principles contemplate a desired course through which fallback language would evolve iteratively as further developments occur in the market. The principles recognize that, at the beginning of the process, fallback language might be less optimal than it might become later on, but that market participants should not wait for more robust language to be proposed before enacting early edition fallbacks. The early edition language might include higher degrees of flexibility or discretion to enable fallbacks to occur, but such language is hoped to later evolve to a point where such flexibility or discretion could be eliminated. The ARRC recognized that the exercise of flexibility and discretion could lead to divergent results.

The ARRC commenced four consultations on contractual fallbacks in 2018: consultations for syndicated loans and floating rate notes in September, and consultations for securitizations and bilateral loans in December. The comment period for the September consultations has ended. As of the time of this report, responses had been submitted for the September consultations and posted to the ARRC website, but the ARRC had not issued a report summarizing those results. Comments on the securitization and bilateral loans consultations must be submitted by 5 February 2019.

The ARRC consultations have highlighted many of the difficulties posed in developing fallback language. As a fundamental matter, the term rates that would replace USD LIBOR and related spread adjustments do not yet exist. The consultations have focused on identifying trigger events, which include triggers that correspond to the ISDA triggers, amendment methodology and waterfalls for replacement rates and spread adjustments. The consultations have also noted practical differences between some of the asset classes within cash products, and have suggested the possibility that language adopted will not be uniform among asset classes. Further, as we discuss below, fallback solutions will likely differ between derivatives, on the one hand, and cash products, on the other.

The consultations for syndicated loans and bilateral loans include a choice between an "amendment approach" and a "hardwired approach." The "amendment approach" would provide a mechanism for borrowers, lenders and agent banks to negotiate and implement a replacement benchmark rate by means of an amendment to the credit facility in the future, while the "hardwired approach" would implement a replacement benchmark rate without the need for a future amendment to the loan documents based on triggers, terms and conditions agreed to upfront. The loan consultations contain the amendment approach as an alternative due to the relative ease of obtaining amendments in bank markets compared to other cash products. The amendment approach is not offered in the consultations for floating rate notes or securitizations.

The "hardwired approach" for syndicated and bilateral loans is similar to the approaches proposed for floating rate notes and securitizations. All these approaches propose waterfalls of options to be applied to determine the contractual fallback rate and the

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23 Available here.
24 See Floating Rate Note Consultation, Syndicated Loan Consultation, Securitization Consultation and Bilateral Loans Consultation.
25 See here (comments received on the consultation for floating rate notes) and here (comments received on the consultation for syndicated business loans).
appropriate spread adjustment. While the fallbacks under the ISDA consultation would be triggered solely upon a permanent cessation of an IBOR, the ARRC consultations all propose pre-cessation triggers as well as triggers that correspond to the ISDA triggers upon permanent cessation.

The top priority for a fallback rate in each waterfall is a term SOFR (the RFR identified for USD LIBOR) that is selected, endorsed or recommended by a "Relevant Governmental Body" (which may be the ARRC or the Federal Reserve Bank). The top priority for a spread adjustment in each waterfall is an adjustment, or methodology, that is selected, endorsed or recommended by a Relevant Governmental Body. Neither such a term SOFR nor such a spread adjustment (or adjustment methodology) yet exists, and neither do several of the other options set forth in these waterfalls.

The ARRC has said that it intends to endorse forward-looking term SOFR rates provided that a consensus among its members can be reached that a robust, IOSCO-compliant term benchmark rate that meets appropriate criteria set by the ARRC can be produced. As for a spread adjustment, the ARRC has said that it could elect to recommend such an adjustment if "participants in cash markets conclude that it is useful to market functioning" for the ARRC to do so.

The ARRC syndicated loans consultation also recognized a possible distinction between loans priced by reference to LIBOR, which is intended as a cost-plus funding model, and loans priced by reference to SOFR, which "may or may not be reflective of a bank's internal funding costs." The ARRC also noted that there "are a number of customary credit agreement provisions that have developed around the historical construct of LIBOR and such provisions, e.g. break-funding, increased costs, and illegality may need to be reconsidered if LIBOR is not the reference rate." Changes to such operative provisions were outside the scope of the ARRC consultation.

Further discussions of the contractual fallbacks suggested by the ARRC are set forth in Appendix 1.
In September 2018, the private sector working group on euro risk-free rates (Euro Working Group) recommended the euro short-term rate (ESTER) as the new euro RFR. The Euro Working Group was established by the European Central Bank (ECB), the Belgian Financial Services and Markets Authority (FSMA), the European Securities and Markets Authority (ESMA) and the European Commission. ESTER completes the set of RFRs recommended by RFR working groups for the LIBOR currencies, joining SOFR, SONIA, TONAR (Yen) and SARON (Swiss Francs).

Each of the Euro Interbank Offered Rate (EURIBOR) and the Euro Overnight Index Average (EONIA) has been designated as a critical benchmark under the BMR. The European Money Markets Institute (EMMI), the current administrator for EURIBOR and EONIA, has determined that neither EURIBOR nor EONIA complies with the BMR. Currently, it is planned to reform EURIBOR by implementing a hybrid methodology that would supplement EURIBOR's current quote-based system with transaction data and other pricing information and expert judgment. There are no current plans to reform EONIA.

ESTER will reflect wholesale euro unsecured overnight borrowing costs of euro area banks. The ECB has committed to producing ESTER quotations by October 2019. ESTER is expected to both replace EONIA as well as serve as a basis for EURIBOR contractual fallbacks.

Under the terms of the BMR, neither EURIBOR (in its current form) nor EONIA may be used after 31 December 2019, unless an extension is granted under Article 51(4) of the BMR by the Belgian Financial Services and Markets Authority (FSMA). Due to the shortness of time between when ESTER quotations will be first produced and the BMR deadline, some EU legislators are pursuing an extension of the time during which EONIA may be used.

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26 Private sector working group on euro risk-free rates recommends ESTER as euro risk-free rate.
27 See EMMI, "State of play of the EONIA review"; EMMI, "EURIBOR pre-live verification program outcome" 4 May 2017; Working group on euro risk free rates, Slides on EURIBOR and EONIA, 26 February 2018.
28 See, e.g., EMMI, Consultation Paper on a Hybrid Methodology for EURIBOR, 28 June 2018.
On 20 December 2018, the Euro Working Group launched a consultation on determining an ESTER-based term structure methodology (in particular for fallbacks for contracts linked to EURIBOR).

While the group said it would ultimately consider both backward-looking and forward-looking approaches, the consultation focuses on forward-looking methodologies based on ESTER derivatives markets. The consultation requests feedback on four forward-looking methodologies: (i) an OIS transactions-based methodology; (ii) an OIS quotes-based methodology; (iii) an OIS composite methodology; and (iv) a futures-based methodology. The Euro Working Group's opinion at the present time is that the OIS quotes-based methodology is the most likely to be viable.

This methodology would use the mid-price for OIS tradable quotes obtained from regulated electronic trading venues (such as multi-lateral trading facilities (MTFs)). The term rate would be designed to be IOSCO-compliant.

The consultation makes a number of assumptions due to the embryonic nature of ESTER and the fact that ESTER is not yet quoted. The group acknowledged that any assessment of an ESTER-based risk-free term rate would require a successful transition from EONIA to ESTER together with a significant transfer of liquidity to ESTER OIS markets, a transparent and regulated underlying derivatives market such as trading on MTFs and sufficient sources of data to capture market activity. The group also assumed that a liquid underlying derivative market based on ESTER would exist, once ESTER becomes fully established, and that such liquidity would, at a minimum, be equal to the current market in EONIA swaps and futures. The group further assumed that there will be enough dealers committing to quote electronically on MTFs with a reasonable bid-offer spread.

The consultation also seeks feedback on the use cases for term structure methodologies. The group found that EURIBOR is used in a wide variety of contracts and products, and in particular that loans and mortgages are highly dependent on forward-looking rate determinations. However, the group noted that EURIBOR's significance and usage were not evenly distributed across countries or financial products.

The consultation indicates that the Euro Working Group is looking closely at whether a single fallback rate should be proposed for all products or whether different rates should

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30 Second public consultation by the working group on euro risk-free rates on determining an ESTER-based term structure methodology as a fallback in EURIBOR-linked contracts.

31 The Euro Working Group was of the view that (a) the OIS transactions-based methodology was not viable because of the likelihood that there would not be enough transactions and volumes to support it, (b) the OIS composite methodology would introduce an additional level of complexity without potentially providing much additional benefit and (c) the futures-based methodology would depend on the existence of a liquid futures market, which might be unlikely, given what the group termed "the historic lack of development of the EONIA futures market."

32 This methodology distinguishes between tradable quotes, where the dealer showing the quote must be able and willing to transact at the specific price in the specific volume at the specific time, from indicative quotes, where the institution is not required to trade.

33 The group stated that EURIBOR is very heavily relied on as a reference rate for mortgages in Spain, Italy, Portugal and Finland, while it is used far less for that purpose in other countries. On the other hand, the group found that floating rate bonds and corporate loans denominated in euro mostly refer to EURIBOR.
apply to different asset classes, and noted that different considerations could come into play with respect to consumer products.\textsuperscript{34}

The Euro Working Group said that in subsequent evaluations it would address the issue of the credit spread difference between EURIBOR- and ESTER-based curves and other factors that might impinge on a broad-based market adoption of the recommended term ESTER.

\textsuperscript{34} See also Euro Working Group, "Guiding principles for fallback provisions in new contracts for euro-denominated cash products," January 2019.
Swiss Francs

In Switzerland, the National Working Group on Swiss Franc Reference Rates (NWG) commenced an outreach to Swiss corporates on CHF LIBOR in June 2018. This outreach consisted of a survey, which included a part that solicited responses on a possible term rate based on SARON. The survey response period closed at the end of September 2018.

At a meeting on 31 October 2018, the NWG expressed the view that a robust derivatives-based term SARON rate is not currently feasible in the Swiss market, due to issues concerning lack of liquidity and data sourcing. The NWG stated that if the situation were to change in the future, it might reassess the feasibility of a derivatives-based term SARON rate. The NWG recommended that "wherever possible a compounded SARON should be used as a term rate," although it recognized that the use of such a rate could lead to cash flow uncertainty. At this meeting, a fallback template for new loans which continue to use CHF LIBOR as a reference rate was presented to the NWG and discussed. The LMA has noted its concern regarding the use of compounded SARON for some segments of the cash market that might be reliant on forward-looking term rates (in particular, multicurrency syndicated loans).

Yen

The Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks was formed by the Bank of Japan in July 2018.

Three sub-groups were initially established focusing on: (i) loans; (ii) bonds; and (iii) the development of term reference rates based on TONAR. An additional working group on currency swaps was established in November.

The committee expects to take two steps: (i) the sub-groups will conclude deliberations by March 2019 and (ii) the committee will review the deliberations of the sub-groups and draw conclusions, and then publish its conclusions after public consultation by autumn 2019. At the 24 October meeting of the committee, various issues concerning term reference rates were discussed.
ICE Benchmark Administration (IBA), the current LIBOR administrator, has launched a survey\(^\text{41}\) on the use of LIBOR currencies and tenors to identify the most widely used LIBOR settings. The survey closes on 15 February 2019.

In addition, in October 2018 the IBA established the ICE Term RFR Portal\(^\text{42}\) and published a paper on potential term structures for RFRs.\(^\text{43}\) The paper proposes a preliminary methodology, based on futures contracts data, to derive a forward-looking term rate for SONIA, and outlines some other approaches that could be used to derive forward-looking term rates for SONIA. The portal provides rate information on a daily basis.

The IBA has invited feedback from market participants on the proposed methodologies and on the portal.

On 24 January 2019, the IBA published a paper proposing a U.S. Dollar ICE Bank Yield Index for review and comment by market participants.\(^\text{44}\) The index is intended to meet the specific needs of participants in the cash markets. The index proposes to derive a yield curve for one-month, three-month and six-month term forward-looking interest rates from two types of USD transactional input data: primary market wholesale, unsecured funding transactions for banks that meet certain eligibility criteria; and secondary market transactions in wholesale, unsecured bonds issued by such banks. The transactions measured would also need to meet eligibility criteria. The IBA conducted preliminary testing on the index for 2018. The results are set out in the paper and are also available on the IBA’s website.

The IBA has asserted that the transactional underpinnings of the proposed index are sufficient to render the index robust.

Under the proposal, primary market transactions would have a weighting of 100% and bond transactions would have a weighting of 50%, subject to further adjustments for issuer concentration and other matters. The IBA has noted that its preliminary test results have not attempted to adjust for outlier results, and is seeking feedback on potential techniques for dealing with such results. To provide context, we note that currently LIBOR is calculated as a trimmed mean which excludes the highest and lowest panel bank submissions.

In the paper, the IBA solicits input on the index and its proposed methodology.

\(^{41}\) Available here.

\(^{42}\) Available here.

\(^{43}\) ICE Term Risk Free Rates, October 2018.

\(^{44}\) Available here.
Noteworthy transactions

In the second half of 2018, several noteworthy bond and commercial paper transactions were priced by reference to RFRs. The World Bank, the European Investment Bank, Lloyds Bank, RBC and the Asian Development Bank each issued SONIA bonds.45 Fannie Mae, the FHLB, Freddie Mac, the World Bank, Credit Suisse, Wells Fargo, JPMorgan, Bank of Montreal, Bank of Nova Scotia, Landeskreditbank, Natixis, the African Development Bank and MetLife each issued SOFR bonds.46 The TriBorough Bridge & Tunnel authority in New York issued municipal bonds due in 2032 that bear interest by reference to SOFR.47 Each of Barclays and Toyota Motor Credit Corporation launched a commercial paper program tied to SOFR48 and Lloyds also issued two SONIA-linked securitizations (Elland RMBS 2018 and Wetherby 2).

These debt issuances calculate interest by reference to RFRs in arrears and on a compounded or average basis during the interest period. While transactions of this type are new, the markets are developing payment mechanics which often provide for a time lag between the end of an interest period and the due date for the payment of such interest, to enable the issuer to determine the amount (and arrange for the payment) of the interest payment then due.49 These mechanics also need to be coordinated with principal payment dates.

As yet, there do not seem to be any syndicated loan facilities that are priced by reference to RFRs.50

Intercontinental Exchange, Inc. (ICE) launched trading in SONIA futures in December 2017, with a one-month contract, and followed with the launch of trading three-month contracts in June 2018. CurveGlobal also offers trading in three-month SONIA. The CME launched trading in SONIA futures contracts in October 2018. The CME currently has trading in one-month and three-month SOFR contracts.

In October 2018, Eurex Exchange launched trading in three-month SARON contracts.

In January 2019, ISDA published a research paper on interest rate benchmarks, which examined trading volumes of interest rate derivatives transactions in the US that refer to SOFR and other RFRs.51 That report found that less than 5% of total notional amount of interest rate derivatives traded during 2018 were denominated in RFRs. According to ISDA:

46 Fannie Mae, "Fannie Mae Pioneers Market's First-Ever Secured Overnight Financing Rate (SOFR) Securities," 26 July 2018; Bloomberg, "MetLife Breaks Ground With $1 Billion Bond Based on Libor Heir," 30 August 2018; ThinkAdvisor,"Libor Replacement Begins to Take Root" 15 August 2018 (noting recent World Bank SOFR issuance); Reuters, FHLB sells first-ever SOFR-based bonds, 13 November 2018; see generally CME Group, SOFR Futures (listing SOFR issuance).
49 An alternative operational mechanism is the use of a lock-out period, which sets the interest rate as of a predetermined number of days prior to the interest payment date related to the end of an interest period.
50 See, e.g., Sterling Working Group paper, "New and legacy loan transactions referencing Sterling LIBOR," at n. 7 ("We are not aware of any loan agreements that currently reference SONIA.").
51 Available here. The report incorporated data from the Depository Trust & Clearing Corporation and Bloomberg swap data repositories and therefore only covered trades required to be disclosed under US regulations.
Noteworthy transactions

“SONIA swaps represented the majority of the transactions referencing RFRs, which is expected as SONIA is currently used as the reference rate for sterling overnight index swaps (OIS). Trading volumes of [interest rate derivatives] referencing SOFR (the first of which were executed in the third quarter of 2018) were negligible. This is also expected, as the effective federal funds rate (EFFR), not SOFR, is still widely used as the reference rate for US dollar OIS, and SOFR was not published until the second quarter of 2018.”

ISDA stated that it would continue to monitor the trading volumes of derivatives referencing RFRs and major IBORs and report on the market. ISDA stated that it expected that “volumes of [interest rate derivatives] referencing alternative RFRs are expected to increase, while volumes referencing major IBORs are expected to decrease.”
On the regulatory front

It is clear that governmental regulators will continue to push market participants to take steps to mitigate the risks to financial stability from LIBOR cessation and transition to RFRs and other benchmarks.

In his speech in July 2018, Mr. Bailey urged market participants in the UK to "start moving away from LIBOR in new contracts" and to "look for ways of reducing exposure to LIBOR in legacy contracts, where practicable." Mr. Bailey also stressed that the development of contractual fallbacks should not be viewed as "the primary mechanism for transition." Rather, he urged firms to stop writing new contracts referencing LIBOR: "The most effective way to avoid LIBOR-related risk is not to write LIBOR-referencing business."

The Sterling Working Group issued a paper on "New issuance of Sterling bonds referencing Libor" in July 2018, which echoed Mr. Bailey's advice to switch to SONIA for Sterling floating rate notes. The paper also encouraged regulated entities to be mindful of their regulatory obligations to the extent that they continue to participate in the issuance of LIBOR-denominated FRNs going forward, particularly in terms of evaluating risks to such entity from such activity, and in ensuring that "communications with investors relating to benchmark replacement must be fair, clear and not misleading."53

In December, the Sterling Working Group issued a paper "New and legacy loan transactions referencing Sterling LIBOR." That paper stated that "it is important that end users continue to have uninterrupted access to financing and risk management products. Over the near term, Libor usage might continue whilst firms take steps to mitigate the risks of a discontinuation and reduce their dependency on Libor." Similar to the group's paper on FRNs, this paper encouraged regulated entities to be mindful of their regulatory obligations to the extent that they continued to participate in LIBOR loans.

It is likely that the governmental "push" of regulated entities will not be limited to prudential advice and suggestions of best practices, but instead will include pressure on senior management and enhanced scrutiny.

On 19 September 2018, the FCA and the UK Prudential Regulatory Authority (PRA) wrote letters to the CEOs of major banks and insurers supervised in the UK to request details of the steps they have taken to manage the transition from LIBOR to alternative interest rate benchmarks. The letters seek assurance that senior management and boards understand the risks associated with the transition from LIBOR and that they are taking appropriate actions to facilitate the transition to alternative rates before the end of 2021. The basis for these inquiries relates to supervised firms' obligations under MiFID II, CRD IV, UCITS or one of the other EU regulations as specified under the BMR, and in respect of the PRA, includes its wider macro-prudential role with regard to financial stability.

The FSB has said that the OSSG has recently intensified its monitoring and coordination efforts and has continued to meet regularly (including with stakeholders outside the official sector) to coordinate efforts across member jurisdictions, as well as to monitor progress. The OSSG has worked extensively with ISDA and other trade associations on derivatives and cash markets fallbacks. Regulators have worked closely with benchmark

52 Available here.
53 Id. at ¶15.
54 Available here.
On the regulatory front

administrators, trading platforms and central counterparties (such as exchanges) to encourage the development of replacement rates and work towards an orderly transition away from LIBOR and other IBORs.

On 12 July 2018, the ARRC sent a letter\(^{55}\) to several US regulators requesting specific inter-agency guidance regarding the treatment under Title VII of the US Dodd-Frank Act of existing derivatives contracts that would be amended to include new fallbacks or otherwise refer to RFRs and of new derivatives contracts that refer to RFRs. The letter requests regulatory clarification on a number of points relating to the transition of legacy swaps from current benchmarks to RFRs, including with respect to swap margin rules, mandatory clearing and reporting obligations. While this request is specific to the US, similar issues may arise under non-US regulatory regimes, as swap participants that benefit from a current exemption or regulatory treatment will not want to lose such benefit through benchmark transition. Regulators should be incented to remove hurdles to benchmark transition that exist under current law or regulation.

\(^{55}\) Available here.
In order to look at the 2018 ISDA, USD LIBOR, Sterling LIBOR and euro LIBOR consultations in context, it is necessary to briefly review the benchmark reform efforts that have been made since the financial crisis.

In the aftermath of the LIBOR scandal that came to light during the crisis, financial regulators moved to strengthen LIBOR and other benchmarks to make them less susceptible to manipulation, as well as more robust, more grounded in actual transactions, less reliant on expert judgment and more transparent. Mr. Bailey's speech in 2017 made clear that the official sector no longer views strengthening LIBOR as a feasible goal due to the declining number of underlying interbank lending transactions that have historically supported LIBOR quotations. Regulators have instead emphasized the need to replace LIBOR with a new kind of interest rate benchmark, one that meets regulatory standards developed since the financial crisis.

In 2013, the International Organization of Securities Commissions (IOSCO) set forth its Principles for Financial Benchmarks, which have been endorsed by the FSB and which greatly informed the EU Benchmarks Regulation (BMR), which became effective on 1 January 2018. These principles apply to a broad universe of financial benchmarks used in many different asset classes, including (but certainly not limited to) LIBOR, are intended to promote the reliability of benchmark determinations and, in order to promote integrity, establish requirements relating to governance, quality and accountability.

LIBOR is currently a poll, derived from information provided by third-party submitters, its panel banks. The IOSCO principles contemplate (and may be viewed to prefer) that benchmark information be derived from objective sources less susceptible to manipulation or conflict of interest, such as public indices or centrally cleared trading platforms. The IOSCO principles distinguish between those benchmarks that are derived from third-party submissions and those that are not, applying more regulatory scrutiny to benchmarks to the extent they are derived from information given by third-party submitters, in order to address risks arising from potential conflicts of interest and the opportunity for manipulative conduct.

It is clear that the regulators do not want any LIBOR replacement to repeat LIBOR's flaws. Certain LIBOR panel banks have expressed unwillingness to continue to submit LIBOR quotes under the reformed and more stringent LIBOR governance regimes indefinitely (although they have committed to continue doing so through to 2021). The RFRs selected for the LIBOR currencies have focused on observed transactions and have in part been chosen because they do not use third-party submissions, but are rather based on information derived from regulated central trading or clearing platforms or other sources. In order to be acceptable going forward, any interest rate benchmark — whether an RFR, a forward-looking rate based on an RFR or another rate, and however used, whether in a contractual fallback provision or otherwise — will need to comply with the IOSCO principles.

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57 Available here.
58 Available here.
59 Within principles 4, 5, 11, 14 and 18, the IOSCO principles include a subset of provisions that apply to benchmarks that rely on third-party submissions, but do not apply to other types of benchmarks.
Importantly, the BMR now requires EU-supervised entities to use these types of benchmarks. Compliance with the IOSCO principles is also necessary outside of the BMR’s jurisdiction, given their global acceptance. As we note below, the US Alternative Reference Rates Committee (ARRC) consultations have stressed that any forward-looking term rate to be produced must be "robust" and "IOSCO-compliant," as determined by consensus among ARRC’s members, and in addition must meet "appropriate criteria set by the ARRC."

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60 See, e.g., BMR Art. 29.
A key component of the long-term regulatory plan for a transition from LIBOR and other IBORs has been the development of liquidity in derivatives markets of transactions that refer to RFRs and in other benchmark rates that might replace the IBORs.

There is already substantial liquidity in overnight RFRs. This liquidity — which supports the regulatory goals of having reference rates that are robust by virtue of being anchored in what the OSSG describes as “active, liquid underlying markets” — is a fundamental reason these rates were selected as LIBOR replacements.

The liquidity that exists in overnight RFRs does not exist with respect to forward-looking rates that would address the needs of market participants in some cash markets, including syndicated loans. The OSSG stated that it was possible that forward-looking term rates might be derived from RFRs, as forward expectations of overnight RFRs over a designated period, or might be derived from other liquid markets. In cases where forward-looking rates would be derived from an overnight RFR, the OSSG has stated that it expects the markets in forward term rates derived from RFRs to be less robust than the overnight RFR markets.

The last step of the "paced transition plan" put forth in the US by the ARRC in 2017 was the creation of a term reference rate based on SOFR-derivatives markets "once liquidity has developed sufficiently to produce a robust rate." The term rate that the ARRC refers to is one that would comply with the IOSCO principles and one that would be accepted by market consensus. The ARRC's paced transition plan indicated that such a rate was anticipated to be available by the second half of 2021, meaning that it might only be available for a short period before the likely discontinuance of LIBOR at the end of 2021, assuming such a rate is developed at all.

We note the unusual nature of this exercise, as well as its complexity. In most cases, the development of derivatives markets has followed the development of physical or spot markets in the underlying assets. While it is theoretically possible to do the reverse in this case, as the OSSG, the ARRC and the Sterling Working Group have posited, it is a novel experiment. Being able to accomplish this for each LIBOR currency, where the amount of liquidity is fragmented from the total amount of overnight derivatives liquidity, may be challenging. Other challenges may lie in the details of how each currency is traded, and whether there are deep, liquid markets with sufficient transparent price information that exist to construct yield curves from which IOSCO-compliant rates can be developed, which rates market participants will find useful and accept. Although the development of the RFRs and liquidity in them was a necessary predicate to the development of forward-looking term rates under the new benchmark regulation regimes, it is clear that one of the toughest jobs has been saved for last, with time growing shorter until the end of 2021.

The Sterling Working Group's work in connection with its consultation on TSRRs has brought to the surface many of the thorny issues involved in coming up with a forward-looking term rate based on an RFR, some of which issues have also been observed by the OSSG. Both groups found that many end users in the derivatives markets were satisfied with the use of overnight RFRs and that only some cash markets desired forward-looking

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61 The ARRC paced transition plan was adopted 31 October 2017. See here.

62 For example, some respondents to the Sterling Working Group consultation on TSRRs expressed concern that derivatives market liquidity could suffer if the market was split between derivatives referencing a TSRR and derivatives referencing overnight SONIA.
Development of liquidity

term RFRs in addition to overnight rates. One reason for this is that a large volume of interest rate derivatives seek to hedge the general direction of interest rates, rather than hedging specific underlying transactions and, by excluding bank credit risk, the RFRs closely track central bank policy rates.\

The establishment of IOSCO-compliant forward-looking term rates will require robust underlying derivatives markets, which at the current time are in an early stage of development. It is uncertain whether the necessary liquidity will develop to support term rates in all the LIBOR currencies. Mr. Bailey stated in his speech that market participants for which forward-looking term rates were not necessary or desirable should not wait for the arrival of such rates. Market participants that need or desire forward-looking term rates may have a long wait for such rates to arrive.

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63 For example, the Sterling Working Group noted high trading volumes in overnight SONIA on meeting dates of the Bank of England’s Monetary Policy Committee, on days with significant economic data releases or on International Money Market dates.

We note that one of the CME SONIA futures contracts is for MPC SONIA, which has a reference interval between scheduled announcement dates of the Bank of England Monetary Policy Committee (MPC).

64 In its June 2018 report, the OSSG stated that the development of new term rates was "less certain" than the development of RFRs.
Contractual fallback provisions

Differences between proposed fallback provisions for cash products and derivatives

It is becoming increasingly clear that contractual fallbacks will likely differ between many derivatives and other financial products. The ARRC has noted that ISDA has not analyzed the appropriateness of its proposed fallbacks for non-derivative products, and that therefore it may be appropriate in certain instances for the fallback language for cash products to differ from the fallback approach proposed by ISDA for derivatives.

Fallbacks generally

Many working groups and others have proposed contractual fallbacks for new originations and to replace fallbacks in many legacy transactions, which are widely thought to be unsuitable because they do not contemplate a permanent cessation of LIBOR.65

In addition to the ARRC's guiding principles for contractual fallbacks that we refer to above, in January 2019 the Euro Working Group published a paper, "Guiding principles for fallback provisions in new contracts for euro-denominated cash products."66 These principles state that participants should enhance the robustness of fallback language in new contracts for euro-denominated cash products now, before ESTER is published and before the group finalizes its recommendation for an ESTER term structure. The principles also state that the new fallback provisions should include a trigger event for the permanent cessation of EURIBOR/EONIA, and that, where appropriate and feasible, market participants should seek to use ESTER as the primary basis for a fallback rate. The principles also recommend that market participants consider a spread adjustment.

In several markets, contractual fallbacks have been implemented in some transactions that have not been proposed by an RFR working group, but rather have been developed in that market. These provisions permit the substitution of some to-be-developed "industry standard" rate, with wiggle room for adjustments, in some circumstances.

As part of the overall transition from LIBOR to RFRs, contractual fallback rates should comply with the IOSCO principles, in particular with respect to integrity and robustness. In the cash markets, IOSCO-compliant fallback rates do not yet exist in many contexts, which has complicated the task of devising model contractual language.

The proposals for contractual fallbacks and fallback rates described in Appendix 1 also attempt to deal with the issue of value transfer. In many cases, the spread adjustments included in the proposals are meant to address this issue.

It seems likely that fallback provisions will differ between currencies (although perhaps not with respect to trigger events).

The fallbacks suggested in Appendix 1 by the various RFR working groups and others are not binding on any market participant. Any adoption by market participants of these suggestions will likely be completely voluntary. However, the markets would likely benefit

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65 See, e.g., ARRC Second Report March 2018 (examining current contractual fallbacks).
66 Available here.
Contractual fallback provisions

from adopting uniform solutions to these issues, since they would afford consistency among products and likely reduce operational, legal and basis risks.

Other issues: mismatches, replacement rates and spread adjustments between derivatives and cash products

The derivatives triggers proposed by ISDA focus on the permanent cessation of a benchmark rate. Most of the proposals for cash products described in Appendix 1 include pre-cessation triggers; a mismatch could result if a facility agreement trigger event occurred that did not have a corresponding trigger event in a related hedge. The term rates that market participants hope to develop for cash products, and the related spread adjustments, may differ from the rates and spread adjustments used in derivatives. The ARRC has suggested that loan market participants that execute interest rate hedges might prefer to fall back to the same rate that applies to their ISDA hedges even if a term SOFR rate became available.

It will also be necessary to consider market conventions with respect to fixing and settlement, calculation basis and day count when hedging obligations in the cash markets to ensure there is no mismatch.

Market participants should continue to monitor developments on the issue of basis risk and how the various proposals address this issue.
Remaining challenges

In his speech in July 2018, Mr. Bailey noted that significant progress had been made since his speech in 2017, when he stated explicitly that the markets must transition away from LIBOR before the end of 2021. However, he also said that the pace of the transition was not yet fast enough, and that there was much more work to be done.

In June, ISDA, AFME, ICMA and SIFMA released an "IBOR Global Benchmark Transition Report,"\(^{67}\) which contained a survey of market participants. The survey showed that awareness of benchmark transition was relatively high among respondents, but that a gap existed between awareness and taking concrete steps to prepare for the adoption of alternative benchmark rates. The report recommended increased mobilization and engagement by market participants.

Respondents to the ISDA consultation noted the operational and economic challenges that exist in transition to RFRs and spread adjustments, with some expressing a view that the challenges could take several years to sort out (especially with respect to legacy contracts) and that the operational challenges could be considerable and require the devotement of significant resources.

Many challenges remain in connection with the probable discontinuation of LIBOR and the transition to replacement rates, not least the significant challenge in determining new forward-looking term benchmark rates for the syndicated loan and other non-derivatives markets. Significant questions remain as to whether IOSCO-compliant rates for forward-looking term RFRs will be developed in all the existing LIBOR currencies that market participants will find useful and accept. We have already seen the NWG conclude that a SARON term reference rate is not currently feasible. Will overnight derivatives in other currencies have sufficient liquidity to construct a viable forward yield curve for such currency to enable quotes in each existing LIBOR tenor? Will a deep, liquid futures market develop in the overnight RFR for each LIBOR currency? LIBOR tenors and margins in multicurrency credit facilities have typically been uniform across currencies. Will that remain the case? In a joint statement on forward-looking term rates, the LMA and the Association of Corporate Treasurers (ACT) stated that, to the extent LIBOR substitutes did not adequately reflect bank credit risk and term risk, lenders would need to be compensated for such risks in other ways, most likely through an increase in margin, which might lead to a pricing environment that was less transparent for borrowers.\(^{68}\)

Cross-market and cross-currency coordination among the official sector, working groups and market participants remains critically important. We will continue to monitor and provide updates on the many separate workstreams addressing LIBOR replacement now going forward.

\(^{67}\) Available here.

Appendix 1
Specific fallback proposals; fallbacks for certain markets and products

**ISDA**

(i) **Triggers**

The fallbacks in the 2006 ISDA Definitions will be triggered solely upon a permanent cessation of the relevant IBOR, as evidenced by a public statement to such effect by the administrator of the IBOR or the administrator's regulatory supervisor:

- "a public statement or publication of information by or on behalf of the administrator of [the relevant IBOR] announcing that it has ceased or will cease to provide [the relevant IBOR] permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide [the relevant IBOR]"

- "a public statement or publication of information by the regulatory supervisor for the administrator of [the relevant IBOR], the central bank for the currency of [the relevant IBOR], an insolvency official with jurisdiction over the administrator for [the relevant IBOR], a resolution authority with jurisdiction over the administrator for [the relevant IBOR] or a court or an entity with similar insolvency or resolution authority over the administrator for [the relevant IBOR], which states that the administrator of [the relevant IBOR] has ceased or will cease to provide [the relevant IBOR] permanently or indefinitely, provided that, at that time, there is no successor administrator that will continue to provide [the relevant IBOR]."

These IBOR fallbacks will not apply until the discontinuation of the relevant IBOR has actually occurred (if this occurs after the announcement date).

The ISDA Benchmarks Supplement includes the permanent index cessation events listed above, and also includes a separate trigger event (an Administrator/Benchmark Event) if (x) a benchmark or an administrator is not approved by the relevant governmental authority or other official body (or any such approval is suspended or withdrawn) with the effect that (y) the parties are not permitted to use such benchmark under applicable laws and regulations.

Under the terms of the Benchmarks Supplement, an IBOR fallback under the revised 2006 ISDA Definitions will automatically constitute a "priority fallback" for the purposes of an index cessation event once the IBOR fallback is incorporated into the terms of a transaction. The fallbacks set out in the Benchmarks Supplement will thus only be applied if the fallbacks designated to apply following a permanent cessation of an IBOR (such as the IBOR fallbacks under the 2006 ISDA Definitions) fail to produce an outcome.

However, the priority IBOR fallbacks will not apply upon the occurrence of an Administrator/Benchmark Event unless there is also a permanent cessation of the relevant benchmark, and in such a case the fallbacks set out in the Benchmarks Supplement will apply instead. The occurrence of an Administrator/Benchmark Event can affect certain timing requirements under the Benchmark Supplement, and would trigger the obligation of the parties to negotiate with each other (see below).

(ii) **Fallback rate**

The fallback rate for the IBOR in a given currency under the 2006 ISDA Definitions will be the overnight RFR identified for such currency by the RFR working group for such currency. The definitions of those IBORs in the 2006 ISDA Definitions will be amended to include the
Appendix 1
Specific fallback proposals; fallbacks for certain markets and products

The concept of an "index cessation event" and related fallbacks to the specific overnight RFR that will apply when such an event occurs.

The ISDA Benchmarks Supplement requires that parties to a transaction act in good faith and use commercially reasonable efforts in seeking to apply several fallbacks (Alternative Continuation Fallbacks) following the occurrence of a trigger event, in order to allow the swap transaction to continue. The supplement contains a hierarchy if more than one of these fallbacks can be used. The Alternative Continuation Fallbacks are:

- agreement between the parties (this would include any agreement to incorporate the terms of the 2006 ISDA Definitions, as revised to give effect to the IBOR fallbacks listed above);
- use of a replacement benchmark specified by the parties at the time of trading (an Alternative Pre-nominated Index), plus an adjustment payment or adjustment spread;
- use of a substantially equivalent replacement benchmark nominated by the administrator or use of a benchmark nominated by a Relevant Nominating Body\(^\text{69}\) (an Alternative Post-nominated Index), plus an adjustment payment or adjustment spread;
- use of a replacement benchmark nominated by the calculation agent for the transaction, plus an adjustment payment or adjustment spread.

If, after a specified period, the parties are unable to implement a fallback in accordance with the Benchmarks Supplement, then either party could terminate the swap transaction on a no-fault basis. The right of termination will expire after 10 business days if it has not been exercised. Thereafter, the transaction will continue with the relevant "Alternative Continuation Fallback" being applied (using the determination made by the calculation agent for the transaction).

ISDA intends that the same fallback rate will apply to all tenors of a particular IBOR even though the fallback rates are overnight rates and the IBORs have a variety of terms\(^\text{70}\). However, see the section entitled "Term adjustment" below.

(iii) Means to effect fallback rate in legacy transactions

It is currently contemplated that the ISDA IBOR fallbacks would apply to transactions referring to the 2006 ISDA Definitions that are entered into on or after the date the amendments to the 2006 ISDA Definitions become effective (for transactions that incorporate such definitions), but would not apply to legacy transactions entered into prior to that date. ISDA also contemplates publishing a multilateral protocol pursuant to which parties could agree that for transactions between adherents to the protocol referring to one of the relevant IBORs, the new fallback provisions would apply, regardless of the date of the transaction.

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\(69\) A "Relevant Nominating Body" is a relevant supervisor, central bank or any working group or committee officially endorsed or convened by a relevant supervisor, central bank, group of supervisors/central banks, the FSB or any part thereof.

\(70\) ISDA, IBOR Fallbacks for 2006 ISDA Definitions – FAQs, question 8.
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(iv) Spread adjustment

As a result of the ISDA consultation, ISDA has announced on a preliminary basis that, subject to completing ongoing work and the ultimate decision of the ISDA Board Benchmark Committee, ISDA would develop a spread adjustment fallback based on a historical mean/median approach for all benchmarks covered by the consultation. This rate would be based on the mean or median spot spread between the relevant IBOR and the adjusted RFR calculated over a to-be-determined lookback period (such as 5 or 10 years) prior to the relevant announcement or publication triggering the fallback provisions. This spread adjustment would then be used from the end of a one-year transitional period after the fallback takes effect. During the transitional period, the spread adjustment to be used would be calculated using linear interpolation between the spot IBOR/adjusted RFR spread at the time the fallback takes effect and the spread that would apply after the end of the one-year period. Preliminary feedback to ISDA from the consultation indicates that these fallbacks may also be appropriate for USD LIBOR, and potentially other benchmark rates (including EUR LIBOR and EURIBOR).

This spread adjustment mechanism was supported by a significant majority of respondents to the ISDA consultation. This selection suggests a strong preference in the derivatives market for calculations rooted in historical actual spreads, rather than forward estimates or “day before” spreads, both of which could be unduly affected by short-term market shocks around the time that an IBOR ceased to be published.

ISDA has stated that the spread adjustment it will propose will be “static” rather than “dynamic” — that is, the adjustment will not vary as a result of changes in the interbank market after the relevant IBOR ceases publication, but instead will be set at the time of the trigger.

Approximately 49% of respondents preferred an approach based on the historical median, and a majority of those respondents cited as their principal reason that such approach removed the impact of outliers and was more stable/less volatile than the mean approach. 19% of respondents preferred an approach based on the historical median, and some of the proponents of such approach suggested using a “trimmed” mean to exclude outlier data. ISDA has said that it considers such preferences to be informative but not dispositive.

104 respondents selected one of the options provided by ISDA (5 years, 10 years or neither), while five respondents indicated that they did not have a preference and the remaining 38 respondents did not answer the question. Of the 104 respondents that selected one of the three options, 50 percent selected 5 years, approximately 20 percent selected 10 years and the remaining 30 percent selected neither. ISDA has said that it considers such preferences to be informative but not dispositive.

Some respondents expressed a preference for a 10-year (or longer) period on the grounds that doing so would include an entire economic cycle. Others expressed a preference for a shorter period specifically to exclude the effects of the 2008 financial crisis.

There was no clear consensus among respondents on the appropriate length of a lookback period. However, a larger number of respondents indicated a preference for a 5-year period. A number of respondents indicated that a shorter period could reflect more recent market conditions, but could also be affected by potentially large short-term volatility. In addition, some respondents expressed concern about data availability for longer lookback periods.

Several respondents indicated that the issue of the appropriate length of the lookback period is closely related with whether the mean or the median approach is selected.

The transition period is intended to soften the impact of mark-to-market differences immediately following an IBOR cessation and thus mitigate value transfer. Respondents expressed mixed views on the function of the transition period, with some noting that it might add further complexity to risk management and others noting that it might not be necessary to avoid value transfer.

There was no clear consensus among respondents on the appropriate length of a lookback period. However, a larger number of respondents indicated a preference for a 5-year period. A number of respondents indicated that a shorter period could reflect more recent market conditions, but could also be affected by potentially large short-term volatility. In addition, some respondents expressed concern about data availability for longer lookback periods.

Several respondents indicated that the issue of the appropriate length of the lookback period is closely related with whether the mean or the median approach is selected.

Summary of Responses to ISDA Consultation, ¶109.

ISDA FAQ, q. 10.
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A substantial majority of respondents desired that the same spread adjustment methodology be used across all benchmarks for all currencies, in order to enable market participants to better manage risk exposures, reduce the chance of market disruption and avoid complexity in cross-currency hedges.

The ISDA Benchmarks Supplement permits the parties to agree to an adjustment payment upon the replacement of a benchmark in order to reduce or eliminate, to the extent reasonably practicable, any transfer of economic value from one party to the other as a result of the replacement. The parties may also agree to an adjustment spread for the same purpose, or if no such agreement is reached, to have an adjustment spread calculated by the calculation agent for the transaction. However, in relation to an Alternative Post-nominated Index, if a spread or methodology for calculating a spread has been formally designated, nominated or recommended by any Relevant Nominating Body in relation to the replacement of the benchmark with the Alternative Post-nominated Index, then, unless otherwise agreed between the parties, such spread or methodology shall be used to determine the adjustment spread.

(v) Term adjustment

To account for the move from a "term" IBOR to the overnight RFR, the ISDA fallbacks will also refer to an "adjusted RFR," which will adjust each relevant overnight RFR so that it is comparable to IBOR tenors. As a result of the ISDA consultation, ISDA has announced on a preliminary basis that, subject to completing ongoing work and the ultimate decision of the ISDA Board Benchmark Committee, ISDA would develop a fallback based on a "compounded setting in arrears rate" for all benchmarks covered by the consultation. Proponents of this approach cited as advantages its compatibility with the OIS swap market and its ability to reflect the daily interest rate movements during the relevant period.

This rate would measure the relevant RFR observed over the relevant IBOR tenor and compounded daily during that period. The rate would be set in arrears, and would not be known at the beginning of the tenor. Preliminary feedback to ISDA from this consultation indicates that these fallbacks may also be appropriate for USD LIBOR, and potentially other benchmark rates (including EUR LIBOR and EURIBOR).

We note that this adjustment was selected by an overwhelming majority of the respondents to the ISDA consultation, and this indicates that the derivatives market prefers a term adjustment mechanism rooted in actual observed overnight rates during the period in question, at the expense of having a rate that is available only at the end of a calculation period.
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Syndicated lending
US/ARRC

The ARRC consultation on syndicated business loans relates solely to business loans in USD.

The ARRC's syndicated loan consultation considers two different approaches to effecting a contractual fallback: (i) an "amendment approach," which would provide a mechanism for borrowers, lenders and agent banks to negotiate and implement a replacement benchmark rate by means of an amendment to the credit facility in the future; and (ii) a "hardwired approach," which would implement a replacement benchmark without the need for a future amendment to the loan documents, based on triggers, terms and conditions agreed to upfront.

In our experience, those syndicated lending transactions that have included LIBOR contractual fallbacks to date in the US have used language that permits, upon a permanent cessation of LIBOR, the approval of a replacement rate identified by the borrower and the agent (which would include margin and other adjustments) on an affirmative or negative consent basis, while requiring less than a 100% vote or negative consent. The amendment approach seeks to build from these market developments, and also seeks to take advantage of the fact that syndicated loans are relatively easier to amend than many other types of debt instruments. The amendment approach would enable market participants to "negotiate the specifics of a replacement rate at a future date when more is known about term SOFR rates and credit spread methodologies."

Potential disadvantages to the amendment approach include an increased risk of loan market disruption on a macro level, owing to the possibility that many loan facilities might need to be amended simultaneously upon a LIBOR discontinuance. In addition, the amendment approach may have a greater risk of value transfer due to the vicissitudes of market cycles and variations in the relative negotiating leverage of the parties. 76

By contrast, the hardwired approach would work similarly to the approaches set forth in the ARRC's consultations for floating rate notes and securitizations, and would not depend on the parties negotiating an amendment to the loan documents (with exceptions for negative consent rights in the event that the top priority rate and spread adjustments in the waterfalls set forth below were not able to be used). The hardwired approach would in some respects provide clarity upfront. The hardwired approach is intended by the ARRC to be "generally consistent" with the approach taken by ISDA for derivatives.

The responses received by the ARRC indicated that respondents were divided on whether the amendment approach or the hardwired approach was preferable, even as respondents saw the advantages of the hardwired approach from the standpoint of market stability. The

76 "In a borrower-friendly market, a borrower may be able to extract value from the lenders by refusing to include a compensatory spread adjustment when transitioning to SOFR. Non-consenting lenders still would be subject to the lower rate. In a lender-friendly market, lenders might block a new proposed rate, forcing the borrower to pay a higher interest rate, such as the alternate base rate for a period of time." (citation omitted). ARRC Syndicated loans consultation.
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ARRC expressed the view that the hardwired approach would become more appropriate over time.

(i) Triggers

The ARRC approach includes the two triggers put forth by ISDA referring to a permanent cessation of LIBOR, and proposes three additional pre-cessation triggers for market participants to consider:

- An unannounced stop to LIBOR: a LIBOR rate/benchmark is not published by the administrator of LIBOR/such benchmark for five consecutive business days and such failure is not the result of a temporary moratorium, embargo or disruption declared by the administrator of LIBOR/such benchmark or by the regulatory supervisor for the administrator of LIBOR/such benchmark;

- Insufficient submissions from the panel banks: a public statement or publication of information by the administrator of LIBOR/benchmark that it has invoked or will invoke, permanently or indefinitely, its insufficient submissions policy;

- Regulator expressing a view that LIBOR is unrepresentative: a public statement by the regulatory supervisor for the administrator of LIBOR/benchmark or any governmental authority having jurisdiction over the administrative agent announcing that LIBOR/such benchmark is no longer representative or may no longer be used.\(^{77}\)

The last two items above are intended to address what some market participants have referred to as a potential "zombie LIBOR" problem, where LIBOR would continue to exist and be quoted, but would be supported by only a few panel banks submitting quotes.\(^{78}\)

The amendment approach also includes an optional early "opt-in" trigger that allows the administrative agent or majority lenders, at their election, to determine that syndicated loans in the market are being executed or amended to incorporate or adopt a LIBOR replacement (which need not be term SOFR). The adoption of a replacement rate following this opt-in trigger would be subject to an affirmative majority lender vote.

The hardwired approach also includes an optional early "opt-in" trigger that either the borrower or the administrative agent may initiate, but with a different trigger. The trigger under the hardwired approach is based on the existence at that time of at least two identifiable and publicly available new or amended syndicated loan facilities referring to term SOFR plus a replacement benchmark spread. The adoption of a replacement rate following this opt-in trigger would be subject to an affirmative majority or supermajority lender vote.

Many respondents supported the concept of additional early "opt-in" triggers.

\(^{77}\) This trigger is modeled after language of Article 20(3) of the BMR to the effect that supervised entities would be prohibited from new use of a benchmark if it is determined that the benchmark is "no longer representative of the underlying market or economic reality."

\(^{78}\) This issue is addressed in Principle 7 of the IOSCO principles (the Data Sufficiency Principle), which requires that price information be "based upon (i.e., anchored in) an active market having observable Bona Fide, Arms-Length Transactions." ICE Benchmark Administration's policy for insufficient submissions for LIBOR currently applies when four or fewer panel banks complete submissions for a given currency.
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(ii) Fallback rate

Under both proposals, if a trigger event occurred, the interest rate would fall back to the alternate base rate\(^{79}\) until a replacement rate was established. The alternate base rate is a standard pricing option in USD lending which, due to it being normally more expensive than LIBOR, is widely regarded as not being a practical long-term option in the event of LIBOR discontinuance.

The amendment approach would replace LIBOR with "an alternate benchmark rate (which may include Term SOFR, to the extent publicly available quotes of Term SOFR exist at the relevant time), including any Replacement Benchmark Spread, in each case giving due consideration to any evolving or then existing convention for similar US dollar denominated syndicated credit facilities for such alternative benchmarks and adjustments or any selection, endorsement or recommendation by the Relevant Governmental Body with respect to such facilities (any such proposed rate, together with the Replacement Benchmark Spread, a 'Replacement Benchmark'), together with any proposed Replacement Benchmark Conforming Changes."\(^{80}\)

The hardwired approach would use a waterfall to select a fallback rate. The ARRC has cautioned that its proposals in this regard refer to some concepts "that do not yet exist but are anticipated to exist at some future date." These concepts include the forward-looking Term SOFR referred to in step 1 of the waterfall below.

"Hardwired approach" syndicated loan replacement benchmark rate waterfall

\[
\text{Step 1: Term SOFR}\(^{81}\) recommended by a Relevant Governmental Body\(^{82}\) + Spread}
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\(^{79}\) The "Alternate Base Rate" in a USD credit facility is typically defined as the highest of (x) the prime rate, (y) the federal funds rate + 0.50% and (z) 1-month LIBOR + 1% (with this last prong being disregarded if LIBOR is no longer available).

\(^{80}\) "Replacement Benchmark Conforming Changes" is defined to mean "with respect to any proposed Replacement Benchmark, any technical or operational changes [(including, for the avoidance of doubt, changes to the definition of 'Interest Period')], in the discretion of the Administrative Agent, to reflect the adoption of such Replacement Benchmark and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of the Replacement Benchmark exists, in such other manner of administration as the Administrative Agent determines is reasonably necessary in connection with the administration of this Agreement)."

\(^{81}\) "... the first priority replacement rate is a forward-looking term SOFR (e.g. 1-month SOFR, 3-month SOFR) that is selected, endorsed or recommended by the Relevant Governmental Body. While there is currently no commitment by a regulatory authority or third party to publish forward-looking term SOFR rates, the ARRC intends to endorse forward-looking term SOFR rates provided that a consensus among its members can be reached that a robust, IOSCO-compliant term benchmark that meets appropriate criteria set by the ARRC can be produced." (footnote omitted). If a trigger event occurs and at the time of the replacement, forward-looking term SOFR rates exist, but not for a maturity matching the existing LIBOR maturity, then the hardwired approach attempts to identify an interpolated SOFR term rate, using the available SOFR term periods. The ARRC cautions that it is possible in these circumstances that other SOFR term periods may also be unavailable, which would make interpolation impossible.

\(^{82}\) "Relevant Governmental Body" is defined as the Federal Reserve Board, the Federal Reserve Bank of New York or a committee established by either thereof, such as the ARRC.
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Step 2: Compounded SOFR\textsuperscript{83} + Spread

Step 3: Overnight SOFR\textsuperscript{84} + Spread

Step 4: Streamlined amendment process to select a replacement benchmark

In each case, the benchmark rate would be set for some tenors (although the ARRC consultation does not say what those tenors would be).

Although the Term SOFR referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to evaluate the production and governance structures of potential forward-looking term SOFR rates and to recommend such a rate, provided that the ARRC is able to conclude that SOFR derivatives markets have developed to a sufficient level and an administrator has created a sound governance structure to produce a robust, IOSCO-compliant term benchmark.\textsuperscript{85}

With respect to step 2, it is unclear at this point whether Compounded SOFR would be set in arrears or in advance; the ARRC noted issues with each.\textsuperscript{86}

In the ARRC's bilateral loan consultation, which was launched after ISDA announced the preliminary results of its consultation, the waterfall corresponding to the above was modified to delete step 3. In the ARRC's view, "[g]iven ISDA's announcement concerning the results of its consultations for other currencies, it now seems more likely that ISDA would choose to fallback to a compounded SOFR rather than overnight SOFR for USD LIBOR. Further, the responses to the FRN and Syndicated Loans consultations indicated substantial concerns with use of overnight SOFR as a potential fallback in the waterfall."\textsuperscript{87} Some of the concerns with using an overnight rate for an entire interest period had been noted by the ARRC in the syndicated loans consultation: "some market participants have expressed concern that using an overnight rate for an extended period would expose borrowers and lenders to unnecessary risk. Rather than averaging the rate over a particular period, the

\textsuperscript{83} "Compounded SOFR" is defined in the proposal as a compounded average of daily SOFR over the relevant compounding period ('in advance' or 'in arrears', as discussed below) for the relevant period of days/months (e.g., one-month, three months, etc.) depending on the term of the Benchmark being replaced." (footnote omitted)

The ARRC FRN consultation proposes that Compounded SOFR may be either: (i) calculated at the start of the interest period using the historical Compounded SOFR rate for the interest period that ends immediately prior to that date ("in advance") or (ii) calculated over the relevant interest period for the FRN with a lock up period prior to the end of the interest period, in which case the rate will not be known at the start of the interest period ("in arrears").

\textsuperscript{84} This would be set once, at the beginning of the interest period, and remain in effect for the duration of the interest period.

\textsuperscript{85} See "Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes.,” (29 October 2018), question 4.

\textsuperscript{86} "Some market participants have expressed concern that there may be operational issues that arise in connection with the 'in arrears' approach because this rate would not be known until the end of the interest period. Other market participants, however, have expressed concerns with the inherent backward-looking nature of the 'in advance' approach as this rate is likely to deviate from the forward-looking term rate."

\textsuperscript{87} ARRC Consultation regarding more Robust Libor Fallback Contract Language for New Originations of LIBOR Bilateral Business Loans, 7 December 2018, at Part II.C.
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use of an overnight rate could deviate from the typical rate or the average rate over the prior or successive period.”88

(iii) Means to effect fallback rate in legacy transactions
The ARRC language is intended to apply solely to new syndicated loan transactions, although it is certainly possible that lenders in a legacy transaction could agree with the borrower to adopt the ARRC proposal to govern the replacement of USD LIBOR on a go-forward basis.

(iv) Spread adjustment
The amendment approach allows for a “Replacement Benchmark Spread” to be implemented by the amendment process. “Replacement Benchmark Spread” is defined to mean, with respect to any replacement of LIBOR with an alternate benchmark rate for each applicable interest period, "a spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) as may be agreed between the Administrative Agent and the Borrower, in each case giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated syndicated credit facilities for such adjustments, which may include any selection, endorsement or recommendation by the Relevant Governmental Body with respect to such facilities for the applicable alternate benchmark rate."

The hardwired approach would use a waterfall to select a spread adjustment. The ARRC has cautioned that its proposals in this regard refer to some concepts "that do not yet exist but are anticipated to exist at some future date." These concepts include the replacement spread referred to in step 1 of the waterfall below.

Hardwired approach syndicated loan replacement benchmark rate spread waterfall

Step 1: Spread recommended by Relevant Governmental Body

Step 2: Spread in fallbacks for derivatives in ISDA Definitions (which may be a positive or negative value or zero)

Step 3: Streamlined amendment process to select a replacement benchmark rate spread

Although the replacement referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to recommend a spread adjustment or methodology.89 The ARRC has said it would conduct a separate market consultation on the spread adjustment.90

The hardwired approach would use static adjustments for each tenor of the relevant benchmark rate at the time the replacement benchmark rate is selected in order to

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88 ARRC Syndicated Loans Consultation at Part II.C.
89 See “Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes,” (29 October 2018), question 2.
90 See “Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes,” (29 October 2018), question 2.
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encompass "all credit, term and other adjustments" that may be appropriate for a given tenor of the rate.

We note that, based on the preliminary results of the ISDA consultation, the ISDA spread adjustment for USD LIBOR referred to in step 2 above will likely be determined from a "historical mean/median" approach.

We note that any spread adjustment for derivative fallbacks in the ISDA definitions will become effective only upon a permanent cessation of LIBOR. However, the ARRC believes that this spread adjustment could be used in connection with a "pre-cessation" trigger in a syndicated loan transaction because ISDA has stated that it expects that a third-party vendor will eventually publish the spread adjustment on a daily basis up until the time an ISDA trigger event occurs.

Note that the spread adjustments for syndicated business loans determined based on the spread methodology for derivatives in the ISDA definitions would result in different spreads than those used for standard derivatives if such calculations were performed at a time prior to the permanent cessation of LIBOR, which would be the case if one of the "pre-cessation" trigger events occurred.

EMEA/LMA
The Loan Market Association (LMA) published a Recommended Revised Form of Replacement Screen Rate Clause and Users Guide in October 2018. A sub-group of the Sterling Working Group supported the LMA in the preparation of this clause. Since November 2014, the LMA has published an optional "replacement of screen rate" clause. This clause qualifies the "All Lender matters" clause by providing that if a screen rate is unavailable for any currency, any amendment replacing that screen rate may be made with majority lender and obligor consent. The LMA acknowledges, however, that while requiring the consent of the majority of lenders for a replacement of the Screen Rate may be an appropriate threshold, there might be circumstances where a higher threshold may need to be considered.

To use the ARRC concepts, the LMA clause is an "amendment approach" and not a "hardwired approach." The LMA issued a comment letter to the ARRC in response to the ARRC syndicated loans consultation in which the LMA expressed the view that a "hardwired approach" was premature given that the fallback rates to be included in such approach did not yet exist.91 "In our opinion, it would be more appropriate to 'hardwire' fallbacks into documentation at a time when there is much more clarity on these matters."

The Sterling Working Group recognized that the parties to a LIBOR loan agreement could adopt a hardwired approach, but also noted that "the efficacy of these provisions will depend upon it being possible to select and apply an alternative rate, calculate any necessary adjustment spread and provide for any other related changes at the relevant time in accordance with the relevant provisions of the loan agreement. Given the current uncertainty surrounding each of these aspects, alternative fallback provisions may not operate as expected in the event of Libor discontinuation (for example, if provisions referred

91 LMA comment letter to ARRC 21 November 2018, available here.
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to a method of calculating a rate or spread but the use of another method became market practice). Market participants may find that the return on a loan might be significantly different to what they expected once any new rate is applied.\(^92\)

(i) Triggers

The LMA clause defines a "Screen Rate Replacement Event" to include (A) the two triggers put forth by ISDA referring to a permanent cessation of the relevant IBOR benchmark for the relevant currency and (B) the following additional pre-cessation triggers:

- **Material change in means of determining LIBOR**: "the methodology, formula or other means of determining that Screen Rate has[, in the opinion of the [Majority Lenders], and the Parent] materially changed"

- **Regulator expressing a view that LIBOR is unsuitable**: "the administrator of that Screen Rate or its supervisor announces that that Screen Rate may no longer be used"

- **Implementation of reduced submissions or other contingency or fallback arrangements**: "the administrator of that Screen Rate determines that that Screen Rate should be calculated in accordance with its reduced submissions or other contingency or fallback policies or arrangements and either:

  - the circumstance(s) or event(s) leading to such determination are not (in the opinion of the [Majority Lenders] and the Parent) temporary; or

  - that Screen Rate is calculated in accordance with any such policy or arrangement for a period no less than the period opposite that Screen Rate in Schedule [15] (Screen Rate contingency periods)."

- **Change in view of parties as to the appropriateness of LIBOR**: "in the opinion of the [Majority Lenders] and the Parent, that Screen Rate is otherwise no longer appropriate for the purposes of calculating interest under this Agreement."

(ii) Fallback rate

The LMA clause defines the contractual fallback rate as follows:

"Replacement Benchmark" means [ ] /[a benchmark rate which is:

(a) formally designated, nominated or recommended as the replacement for a Screen Rate by:

(i) the administrator of that Screen Rate [(provided that the market or economic reality that such benchmark rate measures is the same as that measured by that Screen Rate)]; or

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(ii) any Relevant Nominating Body,\(^93\)

and if replacements have, at the relevant time, been formally designated, nominated or recommended under both paragraphs, the "Replacement Benchmark" will be the replacement under paragraph (ii) above;

(b) in the opinion of the [Majority Lenders] and the Parent, generally accepted in the international or any relevant domestic syndicated loan markets as the appropriate successor to a Screen Rate; or

(c) in the opinion of the [Majority Lenders] and the Parent, an appropriate successor to a Screen Rate.]

(iii) Means to effect fallback rate in legacy transactions

The LMA Replacement Screen Rate Clause can be incorporated in all new loan agreements. However, all legacy agreements will need to be amended if the parties agree to incorporate it.

Asia Pacific/APLMA

The Asia Pacific Loan Market Association (APLMA) formed a LIBOR Working Group and participated in the LIBOR Trade Association Working Party Meeting held in October 2018. The APLMA noted the need to aid market awareness on the global transition from LIBOR in Asia. Close attention is being paid to developments in the US and the ARRC fallbacks consultation, given the widespread use of USD LIBOR in Asia.

A footnote was added in August 2018 to the "replacement of screen rate" clause in the APLMA recommended forms of loan agreements for syndicated lending to remind users to consider whether they wish to expressly address the consequences of LIBOR not being available after 2021 and reference has been made to the Recommended Revised Form of Replacement Screen Rate Clause and Users Guide published by LMA.

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\(^93\) "Relevant Nominating Body" is defined to mean "any applicable central bank, regulator or other supervisory authority or a group of them, or any working group or committee sponsored or chaired by, or constituted at the request of, any of them or the Financial Stability Board."
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Floating rate notes

US

(1) ARRC

The ARRC consultation on LIBOR floating rate notes relates solely to floating rate notes denominated in USD.

For purposes of the ARRC FRN consultation, floating rate notes include several types of notes, and would include publicly traded notes as well as privately placed debt and municipal securities.\(^{94}\)

In our experience, those floating rate note transactions that have included LIBOR contractual fallbacks to date in the US have used language that has permitted, upon a permanent cessation of LIBOR, the designation of a replacement rate by the issuer which is either an "industry-accepted successor rate" or a rate in "customary market usage," or if no such rate exists, the most comparable substitute or successor rate to the relevant LIBOR. Such rate might include margin and other adjustments.

(i) Triggers

The ARRC approach includes the two triggers put forth by ISDA referring to a permanent cessation of LIBOR, and proposes three additional pre-cessation triggers for market participants to consider:

- **An unannounced stop to LIBOR:** "a Benchmark rate is not published by the administrator of such Benchmark for five consecutive business days and such failure is not the result of a temporary moratorium, embargo or disruption declared by the administrator of such Benchmark or by the regulatory supervisor for the administrator of such Benchmark and the Benchmark cannot be determined by reference to an Interpolated Period"

- **Insufficient submissions from the panel banks:** "a public statement or publication of information by the administrator of such Benchmark that it has invoked or will invoke, permanently or indefinitely, its insufficient submissions policy"

- **Regulator expressing a view that LIBOR is unrepresentative:** "a public statement by the regulatory supervisor for the administrator of such Benchmark announcing that such Benchmark is no longer representative or may no longer be used."\(^{95}\)

In contrast with the consultations for syndicated loans and bilateral loans, the FRN consultation does not include an optional early "opt-in" trigger.

(ii) Fallback rate

The ARRC has proposed a waterfall approach to select a fallback rate. The ARRC has cautioned that its proposals refer to some concepts "that do not yet exist but are anticipated

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\(^{94}\) We note that an association of officers of governmental issuers, the Government Finance Officers Association, became a member of the ARRC in March 2018, and submitted comments to the FRN consultation.

\(^{95}\) This trigger is modeled after language of Article 20(3) of the BMR to the effect that supervised entities would be prohibited from new use of a benchmark if it is determined that the benchmark is "no longer representative of the underlying market or economic reality."
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to exist at some future date." These concepts include the forward-looking Term SOFR referred to in step 1 of the waterfall below.

ARRC FRN replacement benchmark rate waterfall

Step 1: Term SOFR\textsuperscript{96} recommended by a Relevant Governmental Body + Spread

Step 2: Compounded SOFR\textsuperscript{97} + Spread

Step 3: Spot SOFR\textsuperscript{98} + Spread

Step 4: Replacement rate recommended by Relevant Governmental Body + Spread

Step 5: Replacement rate in ISDA Definitions at such time + Spread

Step 6: Replacement rate determined by issuer or its designee + Spread

In each case, the benchmark rate would be set for some tenors (although the ARRC consultation does not say what those tenors would be).

Although the Term SOFR referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to evaluate the production and governance structures of potential forward-looking term SOFR rates and to recommend such a rate, provided that the ARRC is able to conclude that SOFR derivatives markets have developed to a sufficient level and an administrator has created a sound governance structure to produce a robust, IOSCO-compliant term benchmark rate.\textsuperscript{99}

\textsuperscript{96} "The first priority for the Unadjusted Replacement Benchmark is a forward-looking term SOFR (e.g. 1-month SOFR, 3-month SOFR) that is selected, endorsed or recommended by the Relevant Governmental Body. While there is currently no commitment by a regulatory authority or third party to publish forward-looking term SOFR rates, the ARRC intends to endorse forward-looking term SOFR rates provided a consensus among its members can be reached that a robust, IOSCO-compliant term benchmark that meets appropriate criteria set by the ARRC can be produced." (footnote omitted). If a trigger event occurs and at the time of the replacement, forward-looking term SOFR rates exist, but not for a maturity matching the existing LIBOR maturity, then the hardwired approach attempts to identify an interpolated SOFR term rate, using the available SOFR term periods. The ARRC cautions that it is possible in these circumstances that other SOFR term periods may also be unavailable, which would make interpolation impossible.

\textsuperscript{97} “Compounded SOFR’ is defined in the proposal as a compounded average daily SOFR over the relevant compounding period ('in advance' or 'in arrears,' as discussed below) for the relevant period of days/months (e.g., one-month, three months, etc.) depending on the term of the Benchmark being replaced.” (footnote omitted)

The FRN consultation proposes that Compounded SOFR may be either: (i) calculated at the start of the interest period using the historical Compounded SOFR rate for the interest period that ends immediately prior to that date ("in advance") or (ii) calculated over the relevant interest period for the FRN with a lock up period prior to the end of the interest period, in which case the rate will not be known at the start of the interest period ("in arrears").

\textsuperscript{98} This would be overnight SOFR. This would be set once, at the beginning of the interest period, and remain in effect for the duration of the interest period.

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With respect to step 2, it is unclear at this point whether Compounded SOFR would be set in arrears or in advance; the ARRC noted issues with each.\textsuperscript{100} The methodology used to determine Compounded SOFR would be the same methodology used in the ISDA definition of USD-SOFR-COMPOUND.\textsuperscript{101} However, the ARRC cautions that "the actual replacement rate that goes into effect at this order of priority is not the USD-SOFR-COMPOUND itself (which contains other fallbacks imbedded in the terms of that rate . . .). If the relevant Compounded SOFR is published as so described, this rate would be used. Otherwise, one of the parties to the transaction (or a third party) would need to calculate Compounded SOFR according to that method."\textsuperscript{102}

In the ARRC's bilateral loan consultation, which was launched after ISDA announced the preliminary results of its consultation, the waterfall corresponding to the above was modified to delete the step containing a reference to overnight SOFR (similar to step 3 above). In the ARRC's view, "[g]iven ISDA's announcement concerning the results of its consultations for other currencies, it now seems more likely that ISDA would choose to fallback to a compounded SOFR rather than overnight SOFR for USD LIBOR. Further, the responses to the FRNs and Syndicated Loans consultations indicated substantial concerns with use of overnight SOFR as a potential fallback in the waterfall."\textsuperscript{103} Some of the concerns with using an overnight rate for an entire interest period had been noted by the ARRC in the FRN consultation: "Some market participants have expressed concern that using an overnight rate for an extended period would expose issuers and investors to unnecessary risk. The use of an overnight rate could deviate from the average rate over the prior or successive period."\textsuperscript{104}

We also note that, based on the preliminary results of the ISDA consultation, the ISDA replacement rate for USD LIBOR referred to in step 5 above will likely be a "setting in arrears" rate. While this may work for the derivatives market, where many instruments are intended to hedge the general direction of rates, for the cash market, there has traditionally been a preference for forward-looking term rates to be available in advance, which is important for cash flow management. There are strong incentives to using the same fallback methodology for both derivatives and cash products, particularly where they are linked in the same transaction, so if the "setting in arrears" term adjustment methodology is widely adopted, we would expect investors to adopt their own internal hedging strategies to cover the difference in rates set in advance as opposed to rates set in arrears.

(iii) Means to effect fallback rate in legacy transactions

Legacy FRN transactions invariably require 100% noteholder approval to amend the interest rate provisions. The ARRC language is intended to apply solely to new issuances, although it is conceivable that noteholders to a legacy transaction could agree with an

\textsuperscript{100} Some market participants have expressed concern that there may be operational issues that arise in connection with the 'in arrears' approach because this rate would not be known until the end of the interest period. Other market participants, however, have expressed concerns with the inherent backward-looking nature of the 'in advance' approach as this rate is likely to deviate from the forward-looking term rate.

\textsuperscript{101} The ISDA definition of USD-SOFR-COMPOUND is available here.

\textsuperscript{102} ARRC FRN Consultation at Part II.C.

\textsuperscript{103} ARRC Consultation regarding more Robust Libor Fallback Contract Language for New Originations of LIBOR Bilateral Business Loans, 7 December 2018, at Part II.C.

\textsuperscript{104} ARRC FRN Consultation at Part II.C.
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issuer to adopt the ARRC proposal to govern the replacement of USD LIBOR on a go-forward basis.

(iv) Spread adjustment

As with the fallback rate, the ARRC has proposed a waterfall approach to select a spread adjustment. The ARRC has cautioned that its proposals refer to some concepts "that do not yet exist but are anticipated to exist at some future date." These concepts include the replacement spread referred to in step 1 of the waterfall below.

ARRC FRN replacement benchmark rate spread waterfall

- Step 1: Spread recommended by Relevant Governmental Body
- Step 2: Spread in fallbacks for SOFR derivatives in ISDA Definitions (which may be a positive or negative value or zero)
- Step 3: Spread determined by issuer or its designee

Although the replacement referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to recommend a spread adjustment or methodology. The ARRC has said it would conduct a separate market consultation on the spread adjustment.

The ARRC proposal would use static adjustments for each tenor of the relevant benchmark at the time the replacement benchmark is selected in order to encompass "all credit, term and other adjustments" that may be appropriate for a given tenor of the rate.

We also note that, based on the preliminary results of the ISDA consultation, the ISDA spread adjustment for USD LIBOR referred to in step 2 above will likely be determined from a "historical mean/median" approach. We note that any spread adjustment for derivative fallbacks in the ISDA definitions will become effective only upon a permanent cessation of LIBOR. However, the ARRC believes that this spread adjustment could be used in connection with a "pre-cessation" trigger in an FRN transaction because ISDA has stated that it expects that a third-party vendor will eventually publish the spread adjustment on a daily basis up until the time an ISDA trigger event occurs.

Note that the spread adjustments for FRNs determined based on the spread methodology for derivatives in the ISDA definitions would result in different spreads than those used for standard derivatives if such calculations were performed at a time prior to the permanent cessation of LIBOR, which would be the case if one of the "pre-cessation" trigger events occurred.

105 See "Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes," (29 October 2018), question 2.
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(2) American College of Investment Counsel (ACIC)

In the US insurance company debt private placement market (i.e., non-144A, non-Reg S), the LIBOR Sub-Committee of the Transaction Process Management Committee of the ACIC circulated draft LIBOR fallback language to ACIC members in December 2018 for review and comment. Although the ACIC proposal refers to Sterling, it appears that the proposal would apply equally to private placement notes denominated in each LIBOR currency.

(i) Triggers

The ACIC fallback language would be triggered solely upon the "Floating Rate Required Holders" (defined as the holders of 100% of the FRNs) determining that LIBOR (a) has been discontinued, (b) is no longer being published or (c) "is no longer recognized as an industry standard benchmark interest rate."

(ii) Fallback rate

Upon the occurrence of a trigger event, the Floating Rate Required Holders "in consultation with" (but without the consent of) the issuer may designate "a substitute or successor reference rate to be applicable to the Floating Rate Notes, taking into account general comparability to LIBOR and acceptance as a market-based benchmark interest rate."

The ACIC proposal includes optional language to apply during the period after a trigger event has occurred and before a substitute or successor reference rate shall be determined. The first option would be to have the notes bear interest at the prime rate. The second option would give the issuer an opportunity to propose a rate, subject to disapproval by 100% of the holders. The rate under this second option would be as follows:

the arithmetic mean of the per annum rate of interest for deposits of U.S. dollars in immediately available funds quoted at 11:00 a.m. (London, England time) on the date two Business Days before the Interest Rate Determination Date by two major financial institutions based in London for a term of [insert term] months for an amount equal to the aggregate outstanding principal amount of the Floating Rate Notes as of the Interest Rate Determination Date, as selected by the [issuer] in good faith and notified to the holders of the Floating Rate Notes; provided that if the Floating Rate Required Holders do not concur with the determination of such interest rate, as evidenced by a written notice delivered to the [issuer] by the Floating Rate Required Holders within 10 Business Days after receipt by the holders of the Floating Rate Notes of notice of such interest rate from the [issuer], the determination of "LIBOR" for the Floating Rate Notes shall be made by the Floating Rate Required Holders, and any such determination made as set forth above in this sentence shall be conclusive and binding absent manifest error.

The prospect of having a replacement rate imposed on them without their consent may well give some issuers pause, and cause them to examine whether they can refinance floating rate notes having such a provision without incurring a prepayment premium or other cost.

107 Available here.
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(iii) Means to effect fallback rate in legacy transactions

The ACIC language is intended to apply solely to new issuances, although it is conceivable that noteholders to a legacy transaction could agree with an issuer to adopt the ACIC proposal to govern the replacement of LIBOR on a go-forward basis.

(iv) Spread adjustment

The ACIC proposal provides that the issuer and the Floating Rate Required Holders shall agree to amend the notes in certain respects in order to implement the substitute or successor interest rate, "including any adjustment factor needed to make such substitute or successor reference rate comparable to LIBOR, in a manner that is consistent with industry accepted practices for such substitute or successor reference rate."

EMEA

The Sterling Working Group issued a paper "New issuances of Sterling bonds referencing Libor" in July 2018. That paper did not make suggestions for concrete fallback provisions to apply to Sterling FRNs. The paper did state that "[t]he most effective way of avoiding risks related to Libor discontinuation in relation to new issues of Sterling bonds would be for new issues of Sterling bonds to reference alternative benchmarks, in particular SONIA."

(footnote omitted). If an FRN did not bear interest by reference to an RFR at issuance, the paper did state that it could include an alternative fallback to a replacement rate upon a trigger event.
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Securitization

US

(1) ARRC

The ARRC consultation on securitizations relates solely to USD securitizations.

The markets have not yet had time to digest the ARRC proposal. In our experience, those securitization transactions that have included LIBOR contractual fallbacks have used language similar to that used in syndicated loans. This language has permitted, upon a permanent cessation of LIBOR, either the approval of a replacement rate identified by the issuer and the agent or trustee (which would include margin and other adjustments) on a negative or affirmative consent basis, while requiring less than a 100% vote or negative consent.

The ARRC consultation noted an issue particular to securitizations relative to other asset classes. This issue relates to the fact that a securitization relies on the cash flow from the underlying assets of the securitization vehicle to support the payments on the securities issued by the securitization vehicle. As a result, any fallback language recommended by the ARRC will need to take into account fallback language of the underlying securitized assets and any considerations the market participants (including borrowers on the underlying assets)\(^{108}\) may have with the language. The extent to which the securitization fallback language is able to be aligned with the fallback language of the underlying assets may vary based on the nature of the underlying assets.

(i) Triggers

The ARRC approach includes the two triggers put forth by ISDA referring to a permanent cessation of LIBOR, and proposes four additional pre-cessation triggers for market participants to consider, with an added option that would allow the effectiveness of the fallback rate to be accelerated by up to 30 days:

- An unannounced stop to LIBOR: "a LIBOR rate is not published by the administrator of LIBOR for five consecutive business days and such failure is not the result of a temporary moratorium, embargo or disruption declared by the administrator of LIBOR or by the regulatory supervisor for the administrator of LIBOR"
- Insufficient submissions from the panel banks: "a public statement or publication of information by the administrator of LIBOR that it has invoked or will invoke, permanently or indefinitely, its insufficient submissions policy"
- Regulator expressing a view that LIBOR is unrepresentative: "a public statement by the regulatory supervisor for the administrator of LIBOR or any Governmental

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\(^{108}\) The ARRC noted that special considerations may apply in the context of contractual fallbacks for consumer products, for which the ARRC had not yet issued a consultation (but is expected to do so at some point), which the ARRC expected to be “simpler and involve less optionality and complexity.” To the extent that a securitization related to consumer assets, the fallbacks would be expected to be aligned.
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Authority having jurisdiction over the Administrative Agent announcing that LIBOR is no longer representative or may no longer be used.109

- A material increase in basis risk caused by the underlying assets of a securitization having converted to an alternate rate: "the Asset Replacement Percentage is greater than [50]%, as reported in the most recent servicer report." For purposes of this trigger, "Asset Replacement Percentage" is defined as "a fraction (expressed as a percentage) where the numerator is the outstanding principal balance of the assets that were indexed to the Replacement Benchmark [for the Relevant Tenor] as of such calculation date and the denominator is the outstanding principal balance of the assets as of such calculation date."

This fourth pre-cessation trigger is intended to be tailored to the specifics of a particular securitization transaction. The ARRC consultation notes that "different securitized products may wish to revise the Asset Replacement Percentage definition to better fit the particular transaction structure. For example, parties to a managed pool may wish to delete the reference to 'Relevant Tenor' because the asset eligibility criteria applicable to the transaction would typically specify tenor requirements for any eligible assets. Finally, there may be certain transactions for which this trigger is inappropriate, such as one that has been specifically designed with LIBOR-based liabilities where the underlying assets bear interest based on another reference rate (e.g., Prime) or on a fixed interest rate, in which the relevant spread between the two was accounted for in the structuring of the transaction."111

The LSTA has noted that this trigger may be particularly relevant for CLOs for two reasons. First, according to the LSTA, "lenders expect new loans will be done on SOFR before the end of LIBOR." Second, the LSTA expects that loans will move to adopt optional "opt-in" triggers (consistent with the ARRC proposals) such that if SOFR loans are being originated in the market, "an existing LIBOR loan can flip to SOFR. Thus, a CLO's assets may quickly flip to SOFR while its liabilities are still tied to LIBOR. This can introduce basis risk."112

- Designated Transaction Representative ability to accelerate the Benchmark Replacement Date by up to 30 days: in order to take advantage of possible operational benefits that might be available upon an early transition (in particular, if there is a significant period of time between the announcement of LIBOR discontinuance and the otherwise-scheduled Benchmark Replacement Date), the Designated Transaction Representative113 would be given the ability to accelerate the Benchmark Replacement Date by up to 30 days upon giving 30 days' advance notice to the security holders. In such a circumstance, the Designated Transaction

109 This trigger is modeled after language of Article 20(3) of the BMR to the effect that supervised entities would be prohibited from new use of a benchmark if it is determined that the benchmark is "no longer representative of the underlying market or economic reality."

110 "Relevant Tenor" means "(1) with respect to LIBOR, [X months/days] and (2) with respect to any Replacement Benchmark, the period or maturity (including overnight) having approximately the same length (disregarding business day adjustments) as the Relevant Tenor for LIBOR."

111 ARRC Securitization Consultation, at Part II.B.


113 Defined to mean "the party identified by the transaction documents to perform that obligation."
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Representative must represent that the acceleration "will facilitate an orderly transition of the transaction to the Replacement Benchmark."

In contrast with the consultations for syndicated loans and bilateral loans, the securitization consultation does not include an optional early "opt-in" trigger.

(ii) Fallback rate

The ARRC has proposed a waterfall approach to select a fallback rate. The ARRC has cautioned that its proposals refer to some concepts "that do not yet exist but are anticipated to exist at some future date." These concepts include the forward-looking Term SOFR referred to in step 1 of the waterfall below.

ARRC securitization replacement benchmark rate waterfall

Step 1: Term SOFR\textsuperscript{114} recommended by a Relevant Governmental Body + Spread

Step 2: Compounded SOFR\textsuperscript{115} + Spread

Step 3: Replacement rate recommended by Relevant Governmental Body + Spread\textsuperscript{116}

Step 4: Replacement rate in ISDA Definitions at such time + Spread

Step 5: Replacement rate determined by Designated Transaction Representative + Spread

In each case, the benchmark rate would be set for some tenors (although the ARRC consultation does not say what those tenors would be).

\textsuperscript{114} "The first priority for the Replacement Base Rate is a forward-looking term SOFR (e.g. one-month SOFR, three-month SOFR, etc.) that is selected, endorsed or recommended by the Relevant Governmental Body. While there is currently no commitment by a regulatory authority or third party to publish forward-looking term SOFR rates, the ARRC intends to endorse forward-looking term SOFR rates provided a consensus among its members can be reached that a robust, IOSCO-compliant term benchmark that meets appropriate criteria set by the ARRC can be produced." (footnote omitted). If a trigger event occurs and at the time of the replacement, forward-looking term SOFR rates exist, but not for a maturity matching the existing LIBOR maturity, then the hardwired approach attempts to identify an interpolated SOFR term rate, using the available SOFR term periods. The ARRC cautions that it is possible in these circumstances that other SOFR term periods may also be unavailable, which would make interpolation impossible.

\textsuperscript{115} "Compounded SOFR" is defined in the proposal as a compounded average daily SOFR over a Relevant Tenor or Interpolated Period, as applicable, for the relevant compounding period ("in advance" or "in arrears", as discussed below) for the relevant period of days/months (e.g., one-month, three months, etc.) depending on the term of the Benchmark being replaced. " (footnote omitted)

The securitization consultation proposes that Compounded SOFR may be either: (i) calculated at the start of the interest period using the historical Compounded SOFR rate for the interest period that ends immediately prior to that date ("in advance") or (ii) calculated over the relevant interest period for the FRN with a lock up period prior to the end of the interest period, in which case the rate will not be known at the start of the interest period ("in arrears").

\textsuperscript{116} Unlike the earlier ARRC consultations on syndicated loans and FRNs, step 3 of the waterfall does not propose Spot SOFR + a Spread. "Given ISDA's announcement concerning the results of its consultations for other currencies, it now seems more likely that ISDA would choose to fallback to a compounded SOFR rather than overnight SOFR for USD LIBOR. Further, the responses to the FRNs and Syndicated Loans consultations indicated substantial concerns with use of overnight SOFR as a potential fallback in the waterfall."
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Although the Term SOFR referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to evaluate the production and governance structures of potential forward-looking term SOFR rates and to recommend such a rate, provided that the ARRC is able to conclude that SOFR derivatives markets have developed to a sufficient level and an administrator has created a sound governance structure to produce a robust, IOSCO-compliant term benchmark.117

With respect to step 2, it is unclear at this point whether Compounded SOFR would be set in arrears or in advance; the ARRC noted issues with each.118 The methodology used for determining Compounded SOFR would be the same methodology used in the ISDA definition of USD-SOFR-COMPOUND. However, the ARRC cautions that "the actual Replacement Base Rate that goes into effect at this order of priority is not the USD-SOFR-COMPOUND itself (which contains other fallbacks imbedded in the terms of that rate . . .). If there is an eligible source that calculates and publishes Compounded SOFR in this manner, that rate would be used. Otherwise, one of the parties to the transaction (or a third party) would need to calculate Compounded SOFR according to that method."119

We also note that, based on the preliminary results of the ISDA consultation, the ISDA replacement rate for USD LIBOR referred to in step 4 above will likely be a "setting in arrears" rate. While this may work for the derivatives market, where many instruments are intended to hedge the general direction of rates, for the cash market, there has traditionally been a preference for forward-looking term rates to be available in advance, which is important for cash flow management. There are strong incentives to using the same fallback methodology for both derivatives and cash products, particularly where they are linked in the same transaction, so if the "setting in arrears" term adjustment methodology is widely adopted, we would expect investors to adopt their own internal hedging strategies to cover the difference in rates set in advance as opposed to rates set in arrears.

With respect to steps 4 and 5, we note that step 5 is triggered upon (A) steps 1 through 3 failing to determine the fallback rate and (B) either (i) the inability to determine the ISDA replacement rate or (ii) the Designated Transaction Representative determining in its sole discretion that the ISDA rate replacement is not at the time an industry-accepted successor rate for securitizations. If the ISDA replacement rate is unavailable, or if the Designated Transaction Representative makes such determination, the Designated Transaction Representative is required to propose an industry-accepted successor rate (which must include a spread adjustment or spread adjustment methodology (which may produce a result that is positive, negative or zero)) for securitization issues at that time.

(iii) Means to effect fallback rate in legacy transactions

Legacy securitization transactions invariably require 100% noteholder approval to amend the interest rate provisions. The ARRC language is intended to apply solely to new issuances, although it is conceivable that noteholders to a legacy transaction could agree

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118 “Some market participants have expressed concern that there may be operational issues that arise in connection with the ‘in arrears’ approach because this rate would not be known until the end of the interest period. Other market participants, however, have expressed concerns with the inherent backward-looking nature of the ‘in advance’ approach as this rate is likely to deviate from the forward-looking term rate.”

119 ARRC Securitization Consultation, at Part II.D.
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with an issuer to adopt the ARRC proposal to govern the replacement of USD LIBOR on a go-forward basis.

(iv) Spread adjustment

As with the fallback rate, the ARRC has proposed a waterfall approach to select a spread adjustment. The ARRC has cautioned that its proposals refer to some concepts "that do not yet exist but are anticipated to exist at some future date." These concepts include the replacement spread referred to in step 1 of the waterfall below.

ARRC securitization replacement benchmark rate spread waterfall

Step 1: Spread recommended by Relevant Governmental Body

Step 2: Spread in fallbacks for SOFR derivatives in ISDA definitions (which may be a positive or negative value or zero)

Step 3: Spread determined by issuer or its designee

Although the replacement referred to in step 1 above does not yet exist, the ARRC has stated that it currently intends to recommend a spread adjustment or methodology. The ARRC has said it would conduct a separate market consultation on the spread adjustment.

The ARRC proposal would use static adjustments for each tenor of the relevant benchmark at the time the replacement benchmark is selected in order to encompass "all credit, term and other adjustments" that may be appropriate for a given tenor of the rate.

We also note that, based on the preliminary results of the ISDA consultation, the ISDA spread adjustment for USD LIBOR referred to in step 2 above will likely be determined from a "historical mean/median" approach. We note that any spread adjustment for derivative fallbacks in the ISDA definitions will become effective only upon a permanent cessation of LIBOR. However, the ARRC believes that this spread adjustment could be used in connection with a "pre-cessation" trigger in a securitization transaction because ISDA has stated that it expects that a third-party vendor will eventually publish the spread adjustment on a daily basis up until the time an ISDA trigger event occurs.

Note that the spread adjustments for securitizations determined based on the spread methodology for derivatives in the ISDA definitions would result in different spreads than those used for standard derivatives if such calculations were performed at a time prior to the permanent cessation of LIBOR, which would be the case if one of the "pre-cessation" trigger events occurred.

120 See "Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes," (29 October 2018), question 2.

121 See "Frequently Asked Questions, ARRC Consultation Regarding More Robust Libor Fallback Contract Language For New Issuances of Libor Floating Rate Notes," (29 October 2018), question 2.
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(2) Structured Finance Industry Group (SFIG)

A week after the ARRC issued its securitization consultation, the SFIG's LIBOR Task Force issued a "green paper" titled "A Set of Recommended Best Practices for LIBOR Benchmark Transition." The SFIG is a co-chair of the ARRC's securitizations working group. The SFIG approach is a hardwired approach.

(i) Triggers

Like the ARRC securitization consultation, the SFIG proposal includes the two triggers put forth by ISDA referring to a permanent cessation of LIBOR. The SFIG proposal contains three additional pre-cessation triggers for market participants to consider, with an added option that would allow the effectiveness of the fallback rate to be accelerated by up to 60 days:

- **An unannounced stop to LIBOR:** "... a Benchmark is not published by the Benchmark administrator and such failure is not a result of a temporary moratorium, embargo or disruption declared by the Benchmark administrator or any regulator or relevant regulatory supervisor"

- **Regulator expressing a view that LIBOR is unrepresentative:** "... a published statement by the administrator of the Benchmark, or the regulatory supervisor for the administrator of the Benchmark that has the effect that such Benchmark is no longer representative or may no longer be used as a benchmark reference rate in new transactions"

- **A material increase in basis risk caused by the underlying assets of a securitization having converted to an alternate rate:** "... the Asset Replacement Percentage is greater than [50]%, as reported in the most recent servicer report." For purposes of this trigger, "Asset Replacement Percentage" is defined as "a percentage where the numerator is the outstanding principal balance of the assets included in the securitization that were indexed to [the Relevant Tenor Benchmark][any tenor of the Benchmark] but that are indexed to a reference rate other than the [Relevant Tenor Benchmark][any tenor of the Benchmark] as of such calculation date and the denominator is the outstanding principal balance of the assets, as of such calculation date, that are or were previously indexed to [the Relevant Tenor Benchmark][any tenor of the Benchmark]."

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122 Available here. The green paper was titled "First Edition." The SFIG task force stated that the "green paper" was the first of a series of steps expected to lead to a final recommendation "white paper" at the end of a consultative process.

123 The SFIG task force noted that the ARRC securitization consultation "was informed by the collective views of members of the ARRC as well as the [securitization working group], and as such may differ from the recommendations that SFIG membership will develop under the leadership of the LIBOR Task Force. For this reason, SFIG is publishing this First Edition Green Paper which sets forth SFIG members' initial views on how structured finance market participants may navigate this significant transition, including recommended trigger events, a fallback benchmark rate waterfall, and calculation methodologies for replacement reference rates."

124 The SFIG task force states that "This language is intended to account for a situation where the assets were initially pegged to LIBOR then transitioned to being based off a non-SOFR rate. For example, if the assets in a transaction were initially LIBOR-based but later transitioned to being based off the treasury rate, this would result in the occurrence of a Benchmark Discontinuance Event."

125 The SFIG task force notes that "In certain transactions, there may be a mismatch between the tenor of the assets and liabilities at the time of issuance. For example, some CLOs include assets tied to 1MO LIBOR but have liabilities tied to 3MO LIBOR. In such a case, even though the Relevant Tenor Benchmark is 3MO LIBOR, we would want to trigger a Benchmark Discontinuance Event based on the assets switching to the
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According to the SFIG task force, this third pre-cessation trigger is intended to be tailored to the specifics of a particular securitization transaction, "including the structure of the deal and the nature of the underlying assets as well as the specific reporting mechanics (i.e., how it should be specifically calculated; who should calculate, notify and report the Asset Replacement Percentage; how often and on what date(s)). Additionally, if this trigger is to be included, it should only be included in transactions where both assets and liabilities were LIBOR-based at the time of the transaction."

- [Sponsor/Servicer/Independent Third Party] ability to accelerate the Benchmark Discontinuance Event Date by up to 60 days: following the occurrence of a permanent cessation of LIBOR, the transaction sponsor or servicer, or a designated independent third party, would be given the ability to accelerate the Benchmark Discontinuance Event Date by up to 60 days upon giving 30 days' advance notice to the noteholders. In such a circumstance, the party giving the notice must represent or confirm that the acceleration "is required to [ensure][facilitate] an orderly transition to the Replacement Rate." 126

Like the ARRC securitization consultation, the SFIG proposal does not include an optional early "opt-in" trigger.

(ii) Fallback rate

Upon the occurrence of a trigger event, the fallback rate under the SFIG proposal would be determined by a waterfall.

Step 1: term SOFR127 recommended by a Relevant Governmental Sponsor128 + Spread

Step 2: the SFIG proposal offers a choice of either

- Compounded SOFR129 + Spread
- Average SOFR130 + Spread

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127 This would be the "Relevant Tenor SOFR rate (or, if there is no Relevant Tenor SOFR Rate, such rate for the Interpolated Term Period, if available)."
128 Defined to mean "the Federal Reserve Board and/or the Federal Reserve Bank of New York, or by a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto."
129 "Compounded SOFR" is defined to mean "the compounded average of daily SOFR, either (i) as published by the Relevant Governmental Sponsor for the Relevant Tenor or (ii) if not so published, then calculated according to the provisions describing the methodology for compounding as set forth in the definition of "USD-SOFR-COMPOUND" published by ISDA on May 16, 2018 . . . ."
130 Defined to mean "the average of daily SOFR for each day in the [X] month period ending on the day prior to [the determination date]; provided, that if SOFR is not published on any day during such period, for the purposes of this definition, SOFR for such day shall be deemed to be SOFR as published on the most recent day preceding such date." The SFIG proposal indicates that the proviso is intended to cover any non-business
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Step 3: SOFR\textsuperscript{131} + Spread

Step 4: Replacement rate recommended by Relevant Governmental Sponsor + Spread

Step 5: Replacement rate in ISDA Definitions at such time + Spread

Step 6: Substitute rate proposed by transaction sponsor through amendment process + Spread

Similar to the ARRC securitization consultation, the SFIG proposal notes that forward-looking term SOFR rates do not exist today, but also notes that "it is anticipated that such rates will be available ahead of LIBOR cessation, and that these rates will be based on market transactions in derivatives contracts and futures trading that will reference SOFR."\textsuperscript{132}

With respect to step 2, the SFIG proposal suggests that market participants consider using average SOFR instead of compounded SOFR. The proposal states that "[m]any SFIG members have expressed concerns over the compounding calculation and indicated that an average would be simpler to calculate." The SFIG proposal leaves open the question of whether average or compounded SOFR should be calculated in advance or in arrears.\textsuperscript{133}

With respect to step 3, the SFIG proposal contains an open discussion point asking respondents to consider whether this step can be deleted: "Presumably, if overnight SOFR is available, the Compounded SOFR would always be available. As such, this clause might be duplicative of step 2." This makes sense in the context of a determination of compounded/average SOFR to apply in advance, as opposed to one to apply in arrears.

We also note that, based on the preliminary results of the ISDA consultation, the ISDA replacement rate for USD LIBOR referred to in step 5 above will likely be a "setting in arrears" rate.

With respect to steps 5 and 6, in the event that the rate is determined pursuant to step 5, step 6 permits the securitization sponsor to propose an amendment to replace the ISDA rate with a substitute rate (which may include a spread adjustment). Unlike the ARRC consultation, there is no requirement for a determination by the sponsor that the ISDA rate is not an industry-accepted rate under the SFIG proposal. The proposal sets forth three alternatives for approval of such an amendment by noteholders: affirmative consent of a

\textsuperscript{131} This would be the overnight SOFR in effect as of the determination date with respect to each interest rate reset date to occur after the Benchmark Discontinuance Event Date.

\textsuperscript{132} SFIG Green Paper, p. 5.

\textsuperscript{133} The SFIG proposal noted issues with each approach. The SFIG had responded to the ISDA consultation, and the SFIG's comment letter to ISDA, which contains a detailed discussion of the arrears/advance issue (among other things), is attached as Exhibit A to the SFIG proposal.
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majority (or a majority of those that respond to a solicitation, subject to any quorum requirement), negative consent and no consent or objection rights.  

(iii) Means to effect fallback rate in legacy transactions

The SFIG proposal would apply to new securitization transactions. It is conceivable that participants to a legacy transaction could agree to adopt the SFIG proposal to govern the replacement of LIBOR on a go-forward basis.

(iv) Spread adjustment

The SFIG proposal provides that, if the fallback rate is determined pursuant to any of steps 1 through 4 of the fallback rate waterfall, then the spread adjustment shall be "the base rate modifier that shall have been selected, endorsed or recommended by the Relevant Governmental Sponsor, as the spread, or method for calculating or determining the spread, which is necessary to be added to or subtracted from the applicable Replacement Base Rate to make it comparable to Relevant Tenor Benchmark."  

If the fallback rate is determined pursuant to step 5 of the fallback rate waterfall (the ISDA fallback rate), then the spread adjustment shall be "the base rate modifier that shall have been selected, endorsed or recommended by ISDA as the spread, or method for calculating or determining the spread, which is necessary to be added to or subtracted from the applicable Replacement Rate to make it comparable to the Relevant Tenor Benchmark."  

After the spread has been determined pursuant to the above, the SFIG proposal permits the securitization sponsor to propose an amendment to replace the spread so determined with a substitute spread. The proposal sets forth three alternatives for approval of such an amendment by noteholders: affirmative consent of a majority (or a majority of those that respond to a solicitation), negative consent and no consent or objection rights.

The SFIG proposal noted that some parties indicated that current market practice in CLOs and some other asset classes allowed for the spread to be changed to be the spread used in a majority of similar new issue transactions. The proposal asked respondents to consider whether such an approach should be included.

EMEA

Many of the issues raised above in the context of US securitizations will also apply to securitizations in EMEA. In particular, the linkage between the securitization note terms and the terms of the underlying assets and the need to take into account fallback language of the underlying securitized assets and embedded swaps have been cited in industry surveys as key considerations for market participants.

134 The SFIG proposal states that "changes to this amendment provision may need to be considered on a transaction specific basis. There are certain asset classes, e.g., mortgage loans in a REMIC securitization, for which this language may not be appropriate."

135 SFIG Green Paper, p. 16.

136 SFIG Green Paper, p. 16.

137 The SFIG proposal states that "changes to this amendment provision may need to be considered on a transaction specific basis. There are certain asset classes, e.g., mortgage loans in a REMIC securitization, for which this language may not be appropriate."
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The Association of Financial Markets in Europe (AFME), with input from other industry bodies including ICMSA, has proposed fallback wording for inclusion in European securitization documentation. The provision was drafted principally to relate to RMBS transactions, but (according to the AFME) may be adapted for use in other asset classes.

The AFME clause would qualify the amendments clause in securitization indentures by providing that the note trustee and the issuer may make changes that the issuer considers necessary or advisable to change the benchmark rate to an alternative benchmark rate, without any consent or sanction of the noteholders or any of the other issuer secured creditors (unless such creditors expressly provide in their documentation that their consent is necessary for a benchmark rate modification), provided that the issuer must certify to the note trustee that the modification is being undertaken pursuant to a triggering event set forth below, the alternative benchmark rate is one of the fallbacks set forth below and several other conditions are met.

(i) Triggers
The AFME clause includes (A) triggers conceptually similar to the two triggers put forth by ISDA referring to a permanent cessation of the relevant IBOR benchmark for the relevant currency and (B) the following additional triggers:

- **Material disruption to benchmark, material change in means of determining benchmark rate or use of fallback to determine benchmark**: "a material disruption to the Applicable Benchmark Rate, a material change in the methodology of calculating the Applicable Benchmark Rate . . . or the administrator of the Applicable Benchmark Rate having used a fallback methodology for calculating the Applicable Benchmark Rate for a period of at least 30 calendar days"

- **Insolvency of benchmark rate administrator**: "the insolvency or cessation of business of the administrator of the Applicable Benchmark Rate (in circumstances where no successor administrator has been appointed)"

- **Announcement of forthcoming material change in means of determining benchmark rate**: "a public statement by the supervisor of the administrator of the Applicable Benchmark Rate that . . . there will be a material change in the methodology of calculating the Applicable Benchmark Rate with effect from a date no later than 6 months after the proposed effective date of such Benchmark Rate Modification"

- **Regulator stating that the benchmark rate is prohibited or subject to adverse consequences**: "a public statement by the supervisor of the administrator of the Applicable Benchmark Rate that means the Applicable Benchmark Rate will be prohibited from being used or that its use is subject to restrictions or adverse consequences with effect from a date no later than 6 months after the proposed effective date of such Benchmark Rate Modification"

- **Change in market practice**: "a change in the generally accepted market practice in the [publicly listed asset backed floating rate notes] market to refer to a Benchmark Rate endorsed in a public statement by [the Bank of England, the Financial Conduct Authority or the Prudential Regulation Authority or any relevant committee or other body established, sponsored or approved by any of the foregoing, including the\footnote{Available here.}"

\footnote{Available here.}
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Working Group on Sterling Risk-Free Reference Rates [citation omitted], despite the continued existence of the Applicable Benchmark Rate"

- **Unlawfulness, impossibility or impracticability:** "it having become unlawful and/or impossible and/or impracticable for any Paying Agent, Calculation Agent, the Issuer or the Issuer Cash Manager to calculate any payments due to be made to any Noteholder using the Applicable Benchmark Rate"

(ii) Fallback rate

The AFME approach includes three possible fallback rates:

- "a benchmark rate with an equivalent term to the Applicable Benchmark Rate as published, endorsed, approved or recognised as a replacement to the Applicable Benchmark Rate by [the Bank of England, the Financial Conduct Authority or the Prudential Regulation Authority or any relevant committee or other body established, sponsored or approved by any of the foregoing, including the Working Group on Sterling Risk-Free Reference Rates] (which, for the avoidance of doubt, may be an alternative Benchmark Rate together with a specified adjustment factor which may increase or decrease the relevant alternative Benchmark Rate)" [citations omitted]

- "a benchmark rate with an equivalent term utilised in a material number of publicly-listed new issues of [asset backed floating rate notes] denominated in [sterling] in the six months prior to the proposed effective date of such Benchmark Rate Modification" [citation omitted]

- "such other benchmark rate as the Issuer[, or the Issuer Cash Manager on behalf of the Issuer,] reasonably determines, provided that this option may only be used if the Issuer[, or the Issuer Cash Manager on behalf of the Issuer,] certifies to the Note Trustee that, in the reasonable opinion of the Issuer[, or the Issuer Cash Manager on behalf of the Issuer,], neither . . . [of the two rates specified above] are applicable and/or practicable in the context of the Transaction, and sets out the rationale in the Benchmark Rate Modification Certificate for choosing the proposed Alternative Benchmark Rate"

The AFME approach contemplates an amendment that can be effected without noteholder consent, but allows for noteholders having at least 10% of the most senior class of notes to object to any issuer proposal for a benchmark rate modification. If such an objection is made, the requested modification will not be made unless an extraordinary resolution is passed in favor of such modification provided that (a) in circumstances where the issuer proposes a lower note rate maintenance adjustment on any class of notes other than the most senior class than that which is proposed for the most senior class of notes or another class of notes which ranks senior to the class of notes to which the lower note rate maintenance adjustment is proposed to be made, such extraordinary resolution must be passed by the noteholders of the most senior class of notes then outstanding and by the noteholders of each class of notes then outstanding to which the lower note rate maintenance adjustment is proposed to be made, and (b) in other circumstances, such extraordinary resolution must be passed by noteholders of the most senior class of notes then outstanding.
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(iii) Means to effect fallback rate in legacy transactions

The AFME proposal would apply to new securitization transactions if built into the transaction documentation. It is conceivable that participants to a legacy transaction could agree to adopt the AFME proposal to govern the replacement of LIBOR on a go-forward basis. Building this in would require contractual amendments based on the embedded procedures included in those legacy transactions (which are likely to require consent from a high proportion of noteholders). We note in this regard that different noteholders may have different priorities and concerns depending on where they sit in the capital structure.

(iv) Spread adjustment

The AFME approach allows the issuer to propose a "note rate maintenance adjustment" in connection with proposing a benchmark rate modification. These note rate maintenance adjustments are as follows:

- "in the event that [the Bank of England, the Financial Conduct Authority or the Prudential Regulation Authority or any relevant committee or other body established, sponsored or approved by any of the foregoing, including the Working Group on Sterling Risk-Free Reference Rates] has published, endorsed, approved or recognised a note rate maintenance adjustment mechanism which could be used in the context of a transition from the Applicable Benchmark Rate to the Alternative Benchmark Rate, then the Issuer shall propose that note rate maintenance adjustment mechanism as the Note Rate Maintenance Adjustment, or otherwise the Issuer shall set out in the Benchmark Rate Modification Noteholder Notice the rationale for concluding that this is not a commercial and reasonable approach in relation to the Notes and the proposed Benchmark Rate Modification" [citation omitted]

- "in the event that it has become generally accepted market practice [in the [publicly listed asset backed floating rate notes[, Eurobond or swaps market]] to use a particular note rate maintenance adjustment mechanism in the context of a transition from the Applicable Benchmark Rate to the Alternative Benchmark Rate, then the Issuer shall propose that note rate maintenance adjustment mechanism as the Note Rate Maintenance Adjustment, or otherwise the Issuer shall set out in the Benchmark Rate Modification Noteholder Notice the rationale for concluding that this is not a commercial and reasonable approach in relation to the Notes and the proposed Benchmark Rate Modification"

- "in the event that neither . . . [of the above] apply, the Issuer shall use reasonable endeavours to propose an alternative Note Rate Maintenance Adjustment as reasonably determined by the Issuer[, or the Issuer Cash Manager on behalf of the Issuer,] and shall set out the rationale for the proposal or otherwise the Issuer shall set out in the Benchmark Rate Modification Noteholder Notice the rationale for concluding that this is not a commercial and reasonable approach in relation to the Notes and the proposed Benchmark Rate Modification"

The AFME proposed language further states that, if the issuer proposes a lower note rate maintenance adjustment on any class of notes other than the most senior class than it proposes for the most senior class of notes or another class of notes which ranks senior to the class of notes to which the lower note rate maintenance adjustment is proposed to be
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made, the benchmark rate modification will not be made unless an extraordinary resolution is passed in favor of such modification by the noteholders of each class of notes then outstanding to which the lower note rate maintenance adjustment is proposed to be made.
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Bilateral loans

US

The ARRC consultation for fallback rates for bilateral loans is similar to the ARRC consultation for syndicated loans in many respects. The bilateral loans consultation relates solely to USD loans.

Like the syndicated loans consultation, the bilateral loans consultation considers two different approaches to effecting a contractual fallback: (i) an "amendment approach," which would provide a mechanism for borrowers and lenders to negotiate and implement a replacement benchmark rate by means of an amendment to the credit facility in the future; and (ii) a "hardwired approach," which would implement a replacement benchmark without the need for a future amendment to the loan documents, based on triggers, terms and conditions agreed to upfront.

As is the case in the syndicated loans consultation, the amendment approach seeks to take advantage of the fact that bilateral loans are relatively easier to amend than many other types of debt instruments.

Under the amendment approach, unlike the case for syndicated loans, only the lender may request an amendment based on a benchmark transition event (not the borrower).

Under the "hardwired approach," the bilateral loans consultation offers a different mechanism for determination of the replacement benchmark if neither term SOFR nor compounded SOFR is available than does the syndicated loans consultation. The syndicated loans consultation proposes that the borrower and the administrative agent agree on a replacement benchmark if neither such SOFR-based alternative is available. The bilateral loans consultation instead provides that the lender will select, in its sole discretion, an alternate rate of interest as the replacement benchmark (which may include a reference to market convention), which rate would become effective unless the borrower delivers to the lender, within five or 10 business days of receipt of notice of the lender's selection, a written notice rejecting such amendment.

The bilateral loans consultation contains a discussion of hedging issues with respect to loans that was not in any of the other ARRC consultations, and contains proposed language for a fallback approach for loans that would align the loan with the fallbacks contained in an interest rate hedge that was tied to the loan. This would minimize the likelihood of a mismatch, but the ability to take advantage of such language would depend on running a hedge that matched the loan. It would be more complicated to use in the case of partially hedged loans.

139 See ARRC Consultation regarding more Robust Libor Fallback Contract Language for New Originations of LIBOR Bilateral Business Loans, 7 December 2018, at Part II.G and Appendix VI.
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