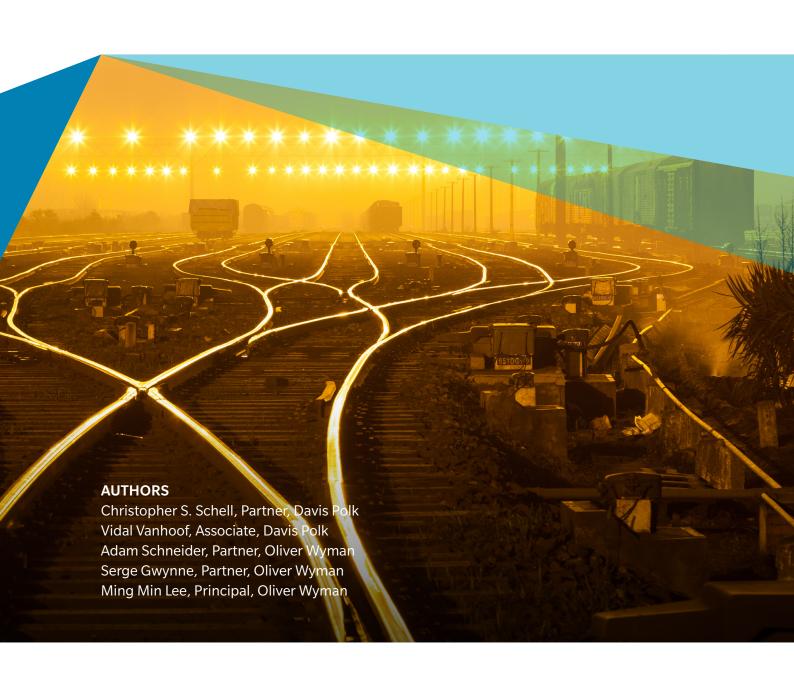


LIBOR FALLBACKS IN FOCUS

A LESSON IN UNINTENDED CONSEQUENCES



EXECUTIVE SUMMARY

Market participants are undertaking significant work to prepare for a transition away from LIBOR. The recent launch and reform of preferred alternative reference rates to USD LIBOR and GBP LIBOR, respectively, are important steps in this transition journey. However, LIBOR-based products are still being created, sold and entered into on a daily basis. A large book of financial instruments is likely to endure past 2021, when the Financial Conduct Authority (the "FCA") intends no longer to persuade or compel banks to submit to LIBOR.

The question then is what happens to these LIBOR-based products when LIBOR is no longer available? As Andrew Bailey, the Chief Executive of the FCA, has noted, this depends on "the preparations that users of LIBOR make in either switching contracts from the current basis for LIBOR or in ensuring that their contracts have robust fallbacks in place that allow for a smooth transition if current LIBOR did cease publication."

So, what contractual fallbacks are in place today and what would happen if publication of current LIBOR were to cease, triggering those fallbacks?

The answer is complex. Outside the derivatives world, fallback language is frequently inconsistent, particularly across products and institutions. The definition of LIBOR, the trigger for the fallbacks, and the fallbacks themselves vary significantly, even within the same product sets. Additionally, existing contractual fallback language was typically originally intended to address a temporary unavailability of LIBOR, not its permanent discontinuation.

This means that, in many cases, existing fallback language will produce unintended results that can dramatically affect the very structure and economics of the product. In some cases, floating rate products will become fixed, while in other cases, interest rates for the borrower may increase substantially.

Given the potential consequences of some existing fallback language, continuing to enter into contracts using such language carries real economic and potentially other risks. Market participants should move to using fallback language that is written with the permanent discontinuation of LIBOR in mind to minimize these risks.

This publication focuses on the legal framework and other issues related to fallback language. To give a more tangible sense of what may be at stake and the efforts required to transition, we provide in-depth analyses in three important product areas: derivatives, credit facility transactions, and unsecured securities issued in the capital markets.

¹ This publication is for general information only. It is not a full analysis of the matters presented and should not be relied upon as legal advice.

KEY CONCEPTS

We first address key concepts, including how legacy fallback language might be challenged, as well as possible contractual and regulatory and legislative responses to the LIBOR transition. We use "legacy fallback language" to refer to fallback language that does not explicitly contemplate the permanent unavailability of LIBOR (even if it does provide a framework governing how to determine the interest rate in such a circumstance).

Exhibit 1: Key concepts and considerations for fallback language

Concepts

Fallback terms and triggers



Considerations

- Often, LIBOR is first defined by reference to a particular offered rate for deposits that appears on a screen page
- Triggers for fallbacks are the events that result in the interest rate being determined other than in accordance with the standard approach under the contract (e.g., the rate does not appear on the screen page)
- · Fallbacks describe alternative ways to determine the interest rate

Enforceability of fallback language



Ability to compel performance based on fallback language, which may be subject to
potential challenges, including under contract interpretation doctrines such as
"frustration of purpose"

Amendments to fallback language



 Amendments to existing fallback language, such as to explicitly contemplate the discontinuance of LIBOR, typically subject to consent requirements

Regulatory or legislative actions



 Potential action by regulators or enactment of legislation to change fallback language or provide protection to market participants in connection with the LIBOR transition

CURRENT FALLBACK TERMS AND TRIGGERS

For any existing contract, understanding the definition of LIBOR is the first step in determining how the contract will be impacted by the transition. The definitions in legacy contracts in the three product areas under consideration often work as follows:

- Definition of LIBOR and source: Often, LIBOR is first defined by reference to the offered
 rate for deposits in the relevant currency having the relevant maturity that appears on
 a designated screen page (such as a Bloomberg or Reuters page and often including
 successor or replacement pages thereto).
- Trigger for fallbacks: The trigger to start to use the fallbacks is often that the relevant rate does not appear on the relevant screen page or is unavailable.

 Fallbacks: If the fallbacks are triggered, the rate will often be determined based on reference bank quotations, remain the rate for the previous interest period, or be determined by reference to another rate, such as the Federal funds effective rate.

Crucially, legacy fallback language was typically originally intended to address the temporary unavailability of LIBOR, such as a computer systems glitch affecting the designated screen page or a temporary market disruption. Until recently, such language was rarely written to address explicitly the possibility of the permanent discontinuance of LIBOR. As a result, legacy fallback language may result in unintended economic consequences.

ENFORCEABILITY AND LEGACY FALLBACK LANGUAGE

Legacy fallback language will likely generate winners and losers. Litigation regarding the interpretation and enforceability of legacy fallback cannot be ruled out. Counterparties may try to argue that the language was drafted to address the temporary unavailability of LIBOR, not its permanent unavailability, and that some other approach to calculating the interest rate should be adopted outside what is provided for in the contract (e.g., due to contract interpretation doctrines such as "frustration of purpose").

The potential merits of such claims will be highly fact specific and depend on, among other things, the governing law of the contract. However, as a matter of New York law, for example, to the extent that the contract does provide a clear and complete framework governing how to determine the interest rate if LIBOR is unavailable, such claims may be difficult to sustain.

AMENDMENTS TO LEGACY FALLBACK LANGUAGE

In order to avoid the potential economic impact and litigation risk related to legacy fallback language, some market participants have considered amending existing contracts to include more flexible fallback language, including language that explicitly contemplates the discontinuance of LIBOR and the use of an alternative reference rate to LIBOR. However, the process for amending existing contracts and the likely degree of difficulty required for any such amendment are dependent on the relevant contract's particular amendment provisions.

These amendment provisions generally seek to prevent unilateral changes to the agreement that could disadvantage one side or the other. As such, they typically require the consent of a majority or all counterparties to amend interest rate provisions.

The difficulty of amending such contracts varies considerably. While derivatives often have a limited number of counterparties, as do bilateral credit agreements, the process of obtaining consent to amend syndicated credit agreements with large numbers of lenders or widely held securities is likely to be difficult, if not impossible. In some cases, obtaining consent might also require across-the-board monetary or other economic incentives. In many cases, a counterparty or holder has the ability to withhold consent and prevent an amendment

from being effected. The different types of amendment provisions for the product areas under consideration are discussed in further detail below.

POTENTIAL REGULATORY OR LEGISLATIVE SOLUTIONS

In addition to the potential solutions described in this publication, there is a question as to whether there may be potential regulatory or legislative solutions to deal with contracts that contain legacy fallback language. While the regulators have repeatedly acknowledged the issues raised by this transition for legacy contracts, there has been little evidence to date that they might intervene and use their powers to impose any kind of solution. For example, the Federal Reserve's Alternative Reference Rates Committee's Second Report noted:

"The ARRC's focus was directed toward identifying alternatives to USD LIBOR and developing plans to encourage voluntary adoption of its recommended rate rather than a mandated transition away from USD LIBOR."

Potential legislative solutions also appear unlikely in the United States and any such legislative solution could be susceptible to legal challenge if it is seen to favor particular classes of counterparties.

Nevertheless, given the ubiquitous nature of LIBOR in the financial system, including in retail and consumer products, it is likely that regulators will continue to monitor the transition readiness of market participants. As with other significant market developments requiring transition planning, such as Brexit, it is likely that regulators, especially those of financial institutions, will ask market participants about their transition plans as part of this monitoring effort.

"Synthetic LIBOR" - Might this be a viable solution?

One idea recently floated by, among others, Andrew Bailey of the FCA, is the possible creation of a LIBOR proxy that would stand in for LIBOR in instruments that contain legacy fallback language.

In a speech in March, Mr. Bailey said that he would not rule out the possibility of producing "a form of LIBOR proxy which could satisfy the legal definition of what LIBOR is taken to be and serve as a legacy benchmark." In other words, "a synthetic LIBOR which amounts to a risk-free rate plus an add-on." In practice, this could mean announcing a replacement rate, calling it "LIBOR" and posting it on the relevant Bloomberg and Reuters page so that legacy instruments with contractual provisions that expressly identify that page as the source for the interest rate would still work, without needing to use the fallback language.

We believe that Mr. Bailey noted the concept more as a suggestion to see if the market might develop the idea, but that he was not suggesting that regulators will endorse or impose it as a universal solution. So far, there is not much evidence that the market is seriously pursuing it. The approach may gain traction as the transition period proceeds; however, it is worth noting that the concept could raise tough contractual interpretation and enforceability issues, particularly whether synthetic LIBOR would actually satisfy the definition and description of LIBOR included in the contract.

LIBOR itself has undergone substantial change recently, such as changes in administrator and submission protocol, without raising enforceability concerns. But it has remained a measure of the interbank offered rate on deposits. The likely key question will be whether synthetic LIBOR is sufficiently substantively different that, notwithstanding the use of the same name and data source, the new rate amounts to a change in pricing or economic terms and therefore requires a formal amendment or consent process. For example, many definitions describe LIBOR expressly as an offered rate for deposits, which would likely not be the case for synthetic LIBOR.

Legal challenges claiming the unenforceability of the change would be market disruptive at the least. While we recommend that market participants not assume that synthetic LIBOR will solve the transition problem, it is worth watching this space.

GENERAL RECOMMENDATIONS

There are product-agnostic actions that market participants can take now with respect to their contracts for both existing and new products. Our recommendations are grounded by the following transition needs:

- Eliminate or minimize value transfer;
- Account for the varying nature of relationships with counterparties and others, such as retail customers and investors, as well as fiduciary relationships;
- Approach solutions holistically across product areas, contract types, business units and geographical locations;
- Manage conduct, franchise, litigation and other risks that might arise from any approach considered inequitable or unfair, especially related to adjustments to economic terms; and
- Demonstrate transition readiness to the market and regulators.

Exhibit 2: Key contract-related actions to prepare for LIBOR transition



- Identify scope and assess possibility of consistency across product areas and market participants
- 2 Develop new fallback language, recognizing that it may evolve over time
- 3 Stage the transition and have a plan to show regulators
- 4 Advocate and get involved with industry efforts
- 5 Keep customers and clients informed

1. IDENTIFY SCOPE

The first step for market participants will be to identify the scope of potentially affected contracts by identifying affected product areas and how the legacy fallback language for each product type works. Though fallback language may vary by individual contract, fallback language for each product type tends to follow a similar approach.

An understanding of the affected product areas will help ensure that any solutions can be applied as consistently as possible across product areas and market participants. Moreover, an understanding of how legacy fallback language works will inform how market participants think about developing new fallback language for new contracts.

This product area-focused approach is not a substitute for individual contract review, but is an important first step.

The challenge of consistency

While much assessment work will be undertaken within product areas, market participants have focused on solutions that will work consistently across product areas, especially for related contracts, such as securities that are hedged using derivatives. Nevertheless, there continues to be a risk that different parts of the market will move in different directions. In some cases, market participants will have to respond to the approaches adopted by major counterparties, such as government-sponsored enterprises that buy mortgages. In addition, the fact that different jurisdictions are taking different approaches to identifying alternative reference rates (e.g., secured or unsecured) will present particular challenges in working across geographical locations. Among other things, it will mean that assessments of how to use a particular alternative reference rate as a substitute for LIBOR will involve different considerations on a currency-by-currency basis.

Notwithstanding these challenges, market participants should work to ensure that:

- There is a holistic customer and client view (e.g., where related contracts are used together, there should be as close to a zero net impact as possible);
- If there are differences in treatment between different types of customers and clients, such differences can be explained, justified and defended; and
- To the extent possible, there is consistency across market participants for each product type.

DEVELOP NEW FALLBACK LANGUAGE

Given the possible inadequacies of existing fallback language, market participants should look to stop using legacy fallback language and begin developing and incorporating new fallback language where such inadequacies exist. Market participants need to balance the need for flexibility to adapt to market developments with the need to give counterparties some degree of certainty as to the approach to be followed.

If new fallback language is to contemplate selecting a replacement rate for LIBOR, market participants will need to consider whether or not that selection should be subject to agreement between the parties. This will depend on whether obtaining such agreement will be feasible given the product area, contract type and other considerations. In addition, new fallback language should address not only the selection of a replacement rate for LIBOR, but any other related adjustments to the terms that might be required. Most importantly, with the goal of minimizing value transfer, this should include adjustments to the spread.

A number of approaches in the market have given the power to select a replacement rate (and to make related adjustments to the spread and other terms) to a single entity, which is able to make determinations without the consent of all the counterparties to the contract. We expect that the degree of discretion, as well as the entity who is given the power to

exercise discretion (especially if there may be perceived conflicts of interest), are likely to impact how acceptable the market deems any new fallback language.

In every case, the goal should be to ensure, to the extent possible, that the parties are in the same economic position once the fallback language is triggered.

3. STAGE THE TRANSITION AND HAVE A PLAN TO SHOW REGULATORS

We expect that new fallback language will continue to evolve over time as the alternative reference rate for the relevant LIBOR currency and the conversion methodology from LIBOR (e.g., how to effect the types of spread and other adjustments referred to above) become clearer. We further expect that, once these conditions have been satisfied and publication of the relevant alternative reference rate has begun, instruments that previously would have referenced LIBOR will reference the alternative reference rate as the base rate (and not contemplate it or refer to it as a potential replacement rate for LIBOR) and no longer reference LIBOR at all.

However, the fact that fallback language may evolve over time is not a reason to delay developing new fallback language. While market participants may use different formulations over time, that is a better solution than continuing to use legacy language in new contracts and compounding any potential issues presented by that language. Further, as discussed above, it is likely that regulators will ask about transition plans.

Rather than adopting a "wait-and-see" attitude, market participants should start developing and incorporating new fallback language now. Market participants can then monitor market developments to guide when they might further refine new fallback language. The following types of events will help frame this process:

- Development of standardized language by ISDA or similar bodies: ISDA, whose work
 to develop a protocol is discussed in more detail below, has been working to identify
 a set of more objective triggers based on public statements by the relevant supervisor
 of the LIBOR administrator or the LIBOR administrator itself. Once ISDA's protocol
 has been finalized, market participants might consider following ISDA's triggers,
 both to strengthen the argument that their provisions are as objective and robust as
 possible and, in the case of non-derivative contracts, to align the approach with any
 related derivatives.
- Public statements by GSEs: Public statements by the government-sponsored enterprises will inform the approach of any market participant that interacts with such enterprises.
- Market transition away from LIBOR: In addition, as further described above, there will
 come a time when instruments that would previously have referenced LIBOR will no
 longer reference LIBOR at all. The final step in the transition will be when these kinds of
 contracts reference an alternative reference rate as the base rate.

4. ADVOCATE AND GET INVOLVED WITH INDUSTRY EFFORTS

Successfully amending legacy fallback language and implementing new fallback language will likely depend on consistency and agreement across the industry. Trade groups provide a forum where market participants can discuss both legacy and new fallback language. In these forums, trade groups are well-positioned to develop solutions that are likely to have broad uptake by market participants.

Standardized language will serve to simplify the LIBOR transition. Market participants that are involved in the development of this language will have the opportunity to advocate and lead the change.

5. KEEP CUSTOMERS AND CLIENTS INFORMED

Market participants should also work to ensure that their customers and clients are kept informed about their approach to the transition. In developing new fallback language and thinking about conversion methodologies, it will be important for customers and clients to understand the approach so that they can react in an informed and educated manner. This will be particularly important in explaining conversion methodologies, so that customers and clients understand, for example, why the spread will need to be different between LIBOR and the relevant substitute rate.

WHAT CONSIDERATIONS APPLY TO CONTRACTS THAT USE LEGACY FALLBACK LANGUAGE?

Because the three product areas under consideration have historically had different approaches to fallback language, we consider each of them separately. Legacy fallback language varies and, as a result, the analysis below considers typical provisions at a high level.

DERIVATIVES

TYPICAL LEGACY FALLBACK LANGUAGE AND AMENDMENT PROVISIONS

The LIBOR definition typically used for U.S. dollar-denominated swaps is "USD-LIBOR-BBA" under the 2006 ISDA Definitions. Under this definition, if LIBOR does not appear on the relevant Reuters screen page, the rate falls back to another definition, "USD-LIBOR-Reference Banks." In turn, this provides for the rate to be determined by reference to quotations by reference banks. Given potential liability and other concerns, there is a significant risk that reference banks may not be willing to quote at all. In this case, the fallback language does not provide a clear answer as to what to do.

Derivatives documented under ISDA Master Agreements typically provide for amendments executed or otherwise confirmed by each of the parties. In some cases, ISDA develops protocols aimed at assisting with the implementation of large-scale amendments to derivatives documentation. However, ISDA cannot impose amendments; such protocols require that all parties to an agreement adhere to the protocol before the amendments apply to the agreement. ISDA is considering a protocol related to LIBOR, which is discussed in more detail in the next section.

INDUSTRY DEVELOPMENTS

In a publication entitled *Development of Fallbacks for LIBOR and other Key IBORs*, ISDA indicated that working groups covering the U.S. dollar and the pound, among others, are expected to address the suggestion of a fallback rate or rates and/or other fallback mechanisms that would apply in the event that the applicable LIBOR is permanently discontinued. Proposed amendments to the 2006 ISDA Definitions would add selected fallbacks that would apply upon permanent discontinuation of LIBOR.

The working groups are also developing a plan to amend legacy contracts referencing the applicable LIBORs to include the amended definitions, including potential development of a protocol mechanism to facilitate multilateral amendments. ISDA has further indicated that the proposed protocol would provide that any existing contracts referencing LIBOR would be deemed to reference the new fallback language.

As with other ISDA protocols, the amendments would apply to contracts between adhering parties, but would not amend contracts that adhering parties entered into with non-adhering parties.

Exhibit 3: Economic impact on derivatives if legacy fallback language is triggered

DERIVATIVES IMPACT

ISDA is developing new language to 1) allow for fall back to an alternative rate and 2) incorporate a spread to compensate for the difference between LIBOR and the alternative rate; economic impact stems from a few factors

IODA I'I I - II - I -	Drivers	Impact
1. Eliminate or minimize value transfer at the time the fallback is applied 2. Eliminate or minimize any potential for manipulation 3. Avoid distortion due to market stress at the time the fallback is applied	Value transfer at the time the fallback is applied	Economic impact even if minimal spread exists between LIBOR and replacement rate at time fallback is applied
	Future cashflows	Uncertainty around expected future floating leg cashflows at time fallback is applied may impact value of swap
	Future sensitivities (e.g., DV01)	Differences in rate sensitivities of LIBOR versus replacement rate instruments may warrant rebalancing of the book
	Margin requirements	Through rate or fallback language amendment is not expected to trigger application of margin requirements, further clarification is required across jurisdictions to ensure no impact

^{1.} https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/OMaliaDarraspresentation.pdf

RECOMMENDATIONS

The approach that the market follows for derivatives is likely to depend on ISDA's work. From the perspective of market participants managing large books of derivatives, the best outcome would be an approach that is widely and consistently adopted across the market.

If ISDA does propose a protocol mechanism, counterparties to derivatives are likely to find it significantly easier to amend their contracts through adherence to the protocol rather than trying to engage in negotiations with all of their counterparties. However, as noted above, the protocol mechanism will require that both counterparties agree to adhere to it to amend their contracts. If adherence is not widespread, it is more likely that market participants will need to expend more effort examining their existing contracts and trying to negotiate amendments on a counterparty-by-counterparty basis, which is likely to be administratively difficult, if not impossible, to effect on a wide scale.

CREDIT AGREEMENTS

TYPICAL LEGACY FALLBACK LANGUAGE AND AMENDMENT PROVISIONS

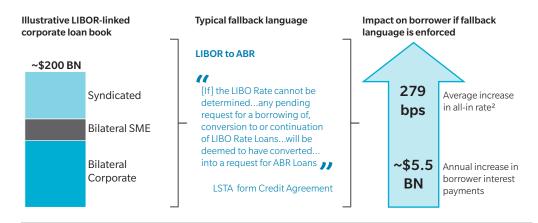
Legacy fallback language in credit agreements varies. Many agreements provide that if LIBOR is unavailable, the administrative agent will determine the rate based on reference bank quotations (including through the use of interpolation if there is no quotation for the relevant interest period), and, if means do not exist for ascertaining the interest rate (which means are typically subject to some standard such as "reasonable" or "adequate and fair"), the lenders will be entitled to cease making loans in LIBOR (although this would not affect non-LIBOR loans) and LIBOR loans will be converted into base rate loans that pay interest by reference to, among other things, the prime rate. In addition, many agreements provide that each lender may determine that it is illegal or impracticable for that lender to make LIBOR loans, with similar consequences.

Credit agreements typically require the consent of the borrower and all of the lenders to amend the economic terms, for example, to reduce the rate of interest on a loan. As a result, it is likely that credit agreements will require the consent of all of these parties in order to make changes to the reference rate.

Exhibit 4: Economic impact on credit agreements if legacy fallback language is triggered

ILLUSTRATIVE CORPORATE AND SME LENDING PORTFOLIO IMPACT

Fallback language typically stipulates the use of an alternate base rate (ABR), 1 and in the case of syndicated loans has specific consent requirements for amendments



ECONOMIC IMPACT ASSESSMENTS SHOULD CONSIDER THAT:

- · Current fallback language does not provide for changes in the spread to account for differences in base rate
- The spread between LIBOR and ABR may vary over time; this is not a linear change to the loan economics
- · Clients are unlikely to accept action that significantly increases the all-in rate, resulting in potential litigation
- 1. ABR is typically defined as the greater of the Prime Rate or EFFR (or other successor rate) plus a spread
- 2. Average spread between the Prime Bank Loan Rate and 3M USD LIBOR from 1998 to 2017

Source: Federal Reserve Bank of St. Louis

INDUSTRY DEVELOPMENTS

On March 27, 2018, the Loan Syndications and Trading Association (the "LSTA") issued a statement noting that it has been working on the LIBOR transition with regulators, other trade associations, and its members. The LSTA went on to highlight that, as it monitors developments in the loan market, "we are mindful of the different approaches being adopted in credit agreements to accommodate the possibility that another reference rate will be required in approximately four years." The LSTA further indicated that "[c] onsistent with ISDA's objective to eliminate or minimize value transfer, we believe that by taking into account the interests of all parties to a credit agreement, the potential for value transfer upon transition to a new rate may be reduced."

While trade associations undertake the work of analyzing potential updates to their standard forms, market participants have started to make changes to more recent credit agreements in response to these developments. This has included provisions permitting the selection of a replacement rate for LIBOR with majority, rather than unanimous, lender consent.

RECOMMENDATIONS

Counterparties to credit agreements should consider amending existing credit agreements to reflect more flexible fallback language, particularly where the existing language would convert LIBOR loans into base rate loans or suspend the obligation to make or continue LIBOR loans.

SECURITIES

TYPICAL LEGACY FALLBACK LANGUAGE AND AMENDMENT PROVISIONS

Securities issued in the capital markets that reference LIBOR typically provide that if LIBOR is not available for an interest determination date, the rate will be determined by reference to quotations by reference banks, and, if the reference banks are not quoting, LIBOR for the relevant interest determination date will remain LIBOR for the immediately preceding interest reset period. If there was no interest reset period, the rate of interest payable will be fixed at the initial interest rate.

This fallback language was typically drafted to address the temporary unavailability of LIBOR, not its permanent unavailability. However, it is likely to be difficult to argue that the contract should be reformed or that the issuer, the calculation agent or the trustee should otherwise be permitted to ignore the fallback language and adopt some other approach, such as selecting a replacement rate for LIBOR. In all likelihood, these institutions will not want the responsibility and risks associated with having the discretion to select a replacement rate in the absence of clear language permitting them to do so. Potential challenges to this approach are likely to come from investors who consider that they would have benefited from another approach.

The net effect will be that instruments that were intended to be floating rate securities become fixed rate securities, with the fixed rate based on LIBOR at a point in time during the term of the security, no longer fluctuating based on changes in interest rates. There will be winners and losers based on future interest rate movements. Consequently, we believe that there is likely to be regulatory scrutiny of the impact of this outcome on retail investors.

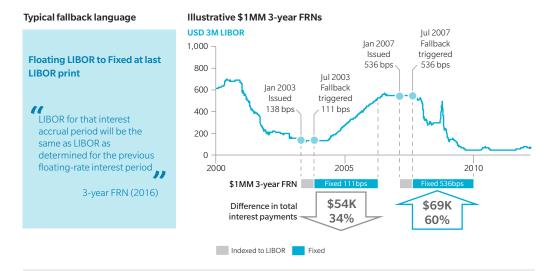
The terms of securities invariably include a framework for amendments with holder consent. However, for a number of reasons, obtaining the consent of the parties to amend existing securities is likely to be significantly more difficult than with respect to derivatives or bilateral credit agreements. New York law-governed securities typically require the consent of each holder to change the interest rate. Issuers considering amending the terms of existing securities will need to review the exact requirements that apply to such securities.

In any event, while obtaining consent may be possible for some instruments, particularly those with a single or small number of sophisticated holders, it is unlikely to be a complete solution for issuers with a large number of outstanding issuances, especially those that are widely held and/or held by retail investors. This is because of the administrative burden and potential high costs of having to deal with large numbers of investors, particularly when a single investor may be able to prevent the amendment by withholding consent. Moreover, even if investors are amenable to giving consent, they will likely expect improvements to the terms or other economic incentives in exchange, particularly if they think it would be to their advantage to have the security pay interest based on the legacy fallback language.

Exhibit 5: Economic impact on floating rate notes if legacy fallback language is triggered

ILLUSTRATIVE FLOATING RATE SECURITY IMPACT

Fallback language typically stipulates the use of last available LIBOR; amendment of which typically requires unanimous consent from noteholders



ECONOMIC IMPACT ASSESSMENTS SHOULD CONSIDER THAT:

- Fixing a floating rate instrument fundamentally alters the economics of the contract
- Impact depends on economics at the time of fixing this may differ significantly in a short time period
- · Some investors may be prevented from holding fixed rate instruments; widespread selling may depress values
- · Potential capital implications if issuers buy back and reissue FRNs to avoid fallback language being triggered

These issues may partly be attenuated by the fact that many floating rate notes have a relatively short term, so some portion of such notes with legacy fallback language will mature prior to the end of 2021. Of course, to the extent that new securities continue to be issued with legacy fallback language, the issue will be compounded. In addition, there are longer-dated securities (and perpetual instruments, such as preferred stock) that reference LIBOR and include legacy fallback language that will continue to remain outstanding beyond the end of 2021. Counterparties will need to review the maturity profile of their contracts to help determine the extent of the issues they need to consider.

INDUSTRY DEVELOPMENTS

The general trend in the United States has been towards the addition of new fallback language that provides that, if LIBOR is discontinued, the calculation agent will select a substitute rate that is the industry-accepted successor rate, most comparable to LIBOR or subject to some similar requirement, often coupled with discretion to make adjustments to the economic terms of the securities. This discretion is intended to allow adjustments to take into account differences between the substitute rate and LIBOR and to preserve the bargain between the parties, not to advantage or disadvantage the issuer or investors. While no single formulation has been broadly adopted, the key concepts have been relatively consistent across issuers. In addition to new fallback language developed by individual market participants, different industry groups have also been starting to propose language.

RECOMMENDATIONS

The potential difficulties related to amendments have been discussed above. As an alternative, issuers could consider exchange offers, offering to exchange securities with legacy fallback language for securities with new fallback language or that reference some other base rate or an alternative reference rate to LIBOR. However, this is likely to be difficult to coordinate on anything other than a small scale and costly. In addition, there is no guarantee as to what portion of investors will be interested in agreeing to an exchange, and the same considerations described above about investors potentially expecting improvements to the terms or other economic incentives will apply.

Issuers that are considering amendments or exchange offers will also need to consider the impact on any hedging arrangements related to the relevant securities.

Because of these issues, the most likely outcome seems to be that there will be some significant amount of outstanding securities that contain legacy fallback language that become fixed rate instruments, as further described above.

CONCLUSION

The transition from LIBOR to alternative reference rates presents numerous challenges for both existing and new products. Although uncertainty remains and industry direction continues to evolve, we believe that adopting a "wait-and-see" attitude is unwise. Financial institutions and other market participants should act now to develop and use contract language appropriate for a permanent discontinuance of LIBOR, both for new contracts and for any existing contracts that are amended before 2021.

ABOUT OLIVER WYMAN

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

Oliver Wyman has a global team supporting the industry's LIBOR transition. For more information, please visit www.libortransition.com.

CONTACTS:

Oliver Wyman LIBOR Transition Team

libor@oliverwyman.com

AMERICAS EMEA ASIA PACIFIC +1 212 541 8100 +44 20 7333 8333 +65 6510 9700

ABOUT DAVIS POLK

Davis Polk & Wardwell LLP (including its associated entities) is a global law firm with offices strategically located in the world's key financial centers. For more than 165 years, our lawyers have advised industry-leading companies and global financial institutions on their most challenging legal and business matters. Davis Polk ranks among the world's preeminent law firms across the entire range of its practice, which spans such areas as capital markets, mergers and acquisitions, credit, antitrust and competition, litigation and enforcement, private equity, tax, financial regulation, investment management, restructuring, executive compensation, FinTech, intellectual property and technology, real estate, and trusts and estates. Davis Polk has more than 900 lawyers in offices located in New York, Northern California, Washington DC, São Paulo, London, Paris, Madrid, Tokyo, Beijing and Hong Kong.

For more information, please visit: http://www.davispolk.com.

CONTACTS

Associate, Davis Polk

vidal.vanhoof@davispolk.com john.taylor@davispolk.coм

Nick Benham J.W. Perry Gabriel D. Rosenberg Christopher S. Schell
Partner, Davis Polk Partner, Davis Polk Partner, Davis Polk Partner, Davis Polk

nick.benham@davispolk.com john.perry@davispolk.com gabriel.rosenberg@davispolk.com christopher.schell@davispolk.com

Shane Tintle Reuven B. Young Derek Walters
Partner, Davis Polk Partner, Davis Polk Counsel, Davis Polk
shane.tintle@davispolk.com reuven.young@davispolk.com
Vidal Vanhoof Iohn Taylor

European Counsel, Davis Polk

$Copyright @ 2018 \, Oliver \, Wyman$

All rights reserved. This report may not be reproduced or redistributed, in whole or in part, without the written permission of Oliver Wyman and Oliver Wyman accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Oliver Wyman. This report is not investment advice and should not be relied on for such advice or as a substitute for consultation with professional accountants, tax, legal or financial advisors. Oliver Wyman has made every effort to use reliable, up-to-date and comprehensive information and analysis, but all information is provided without warranty of any kind, express or implied. Oliver Wyman disclaims any responsibility to update the information or conclusions in this report. Oliver Wyman accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. The report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities. This report may not be sold without the written consent of Oliver Wyman.

