



KKR

It's complicated: Leveraged loans and the LIBOR transition

Progress toward transitioning the global financial system from LIBOR continues to be positive yet uneven. We take a deep dive into the challenges posed by the transition to the leveraged loan market, which has become a key source of capital for companies and an important asset class for investors.

Solving the puzzle of LIBOR reform

A series co-authored by Lara Rhame,
Chief U.S. Economist at FS Investments,
and Tal Reback, Principal at KKR





Lara Rhame
Chief U.S. Economist, Managing Director, FS Investments

Lara is Chief U.S. Economist and Managing Director on the Investment Research team at FS Investments, where she analyzes developments in the global and U.S. economies and financial markets. Her fresh take on macroeconomic issues helps to inform and develop the firm's long-term views on the economy, investment trends and issues facing investors. Lara is committed to the Philadelphia community and serves on the boards of the Economy League of Greater Philadelphia, Hyperion Bank and Starr Garden Park.



Tal Reback
Principal, KKR

Tal is a Principal at KKR where she is responsible for leading the firm's global LIBOR transition effort across private equity, credit, capital markets and real estate. Day to day, Tal focuses on the firm's credit portfolios and leads KKR Credit's business content and branding initiatives. She serves as a member of the Federal Reserve Board and New York Fed's Alternative Reference Rate Committee ("ARRC"), the public-private sector working group to help ensure the market's successful transition to alternative rates, and a member of the LSTA. Tal previously worked as an analyst specializing in distressed debt, restructuring and event-driven investments. She holds a BA in Economics and Art History from Brandeis University.



Andrew Korz
Director, Investment Research

Andrew is a Director on the Investment Research team at FS Investments, where he leads research efforts on the energy sector and the U.S. commercial real estate market. He also assists in the development of the firm's long-term views on the economy and the impacts on the investing environment. Andrew holds a BBA in Finance and Economics from Villanova University and has prior experience with structuring and pricing interest rate derivatives.

Learn more

[Sign up to receive our emails](#)

This information is educational in nature and does not constitute a financial promotion, investment advice or an inducement or incitement to participate in any product, offering or investment. FS Investments is not adopting, making a recommendation for or endorsing any investment strategy or particular security. All views, opinions and positions expressed herein are that of the author and do not necessarily reflect the views, opinions or positions of FS Investments. All opinions are subject to change without notice, and you should always obtain current information and perform due diligence before participating in any investment. FS Investments does not provide legal or tax advice and the information herein should not be considered legal or tax advice. Tax laws and regulations are complex and subject to change, which can materially impact any investment result. FS Investments cannot guarantee that the information herein is accurate, complete, or timely. FS Investments makes no warranties with regard to such information or results obtained by its use, and disclaims any liability arising out of your use of, or any tax position taken in reliance on, such information.

Any projections, forecasts and estimates contained herein are based upon certain assumptions that the author considers reasonable. Projections are necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the projections will not materialize or will vary significantly from actual results. The inclusion of projections herein should not be regarded as a representation or guarantee regarding the reliability, accuracy or completeness of the information contained herein, and neither FS Investments nor the author are under any obligation to update or keep current such information.

All investing is subject to risk, including the possible loss of the money you invest.

About the series

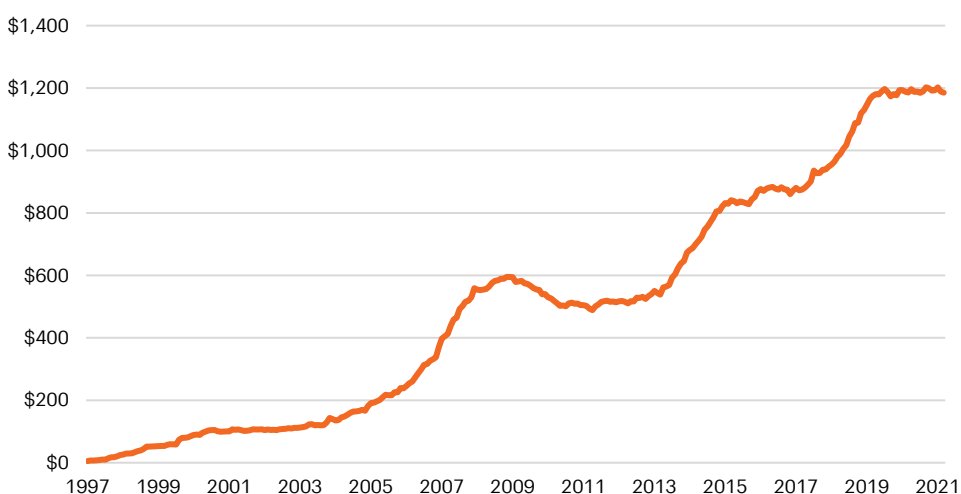
Solving the puzzle of LIBOR reform is a collaboration between FS Investments and KKR, two leading firms with experience in financial products benchmarked to LIBOR. Planning for the LIBOR transition has quickly gone from theoretical to tactical—and the stakes are high, as a smooth transition is vital for financial stability as the 2021 deadline looms.

The global transition away from LIBOR is progressing, but while some market segments have already embraced SOFR, other markets remain behind. In this note, we cover two topics: First, we discuss the implications of the recent USD LIBOR extension. Second, we focus on leveraged loans, a critical area which has so far been slower to address the fact that global markets are leaving LIBOR.

Business loans are an integral part of the U.S. economy and impact a significant group of small and medium-sized issuers who, unlike large corporations, may not have direct access to the capital markets. Bloomberg estimates that \$4.7 trillion worth of business loans are tied to LIBOR. This includes \$3.4 trillion in loans for revolving credit facilities and term loans to investment-grade (“IG”) companies, most of which are held on bank balance sheets.¹ Here, we will focus on the sub-IG part of the syndicated loan market, commonly referred to as leveraged loans, which has become an important asset class for many fixed income investors. The leveraged loan market came onto the scene in the mid-1980s and helped fuel the leveraged buyout boom that swept Wall Street during that period. Since then, the market has grown to ~\$1.2 trillion and in the last 10 years has averaged ~10.5% annual growth.²

Nearly all leveraged loans pay a floating rate coupon tied to LIBOR, putting the asset class particularly top of mind in the transition away from LIBOR. With a keen focus on a smooth and orderly transition for the financial system and capital markets, regulators announced on November 30, 2020, that they would consult on extending the cessation date of USD LIBOR only to provide the legacy cash market additional time to naturally roll down exposure and navigate an extremely complex process. Meanwhile, the industry deadline for banks to stop using LIBOR in new loans continues to draw nearer, and the market has yet to see new SOFR loan issuance.

Total leveraged loans outstanding \$ billion par amount



Source: S&P Market Intelligence, as of February 28, 2021.

Key takeaways

- USD LIBOR was granted an 18-month extension to ensure markets have ample time to incorporate robust fallback language into existing financial contracts, such as loans.
- Regulators have made it clear that while USD LIBOR will be quoted until June 2023, the rate should not be utilized in any new contracts after 2021.
- While issuance of SOFR-linked debt by GSEs and banks continues to grow, the leveraged loan market has been slower to embrace the rate.
- A “trigger event” on March 5 marked the official beginning of the end for LIBOR, providing clarity and a sense of urgency for the loan market.

¹ Bloomberg Finance, L.P.

² S&P/LSTA Leveraged Loan Index.

USD LIBOR gets new lease on life—sort of

On November 30, 2020, the ICE Benchmark Administration (“IBA”), which publishes and oversees LIBOR, announced an intention to extend publication for most USD LIBOR tenors (except 1-week and 2-month) through June 30, 2023. All other LIBOR currencies, which include GBP, EUR, CHY and JPY, would stay the course for cessation at the end of 2021. For many, the extension prompted a sigh of relief, but it has become increasingly clear that while this is a reprieve that provides legacy contracts more time to naturally roll off LIBOR, it was not a shortcut to the transition.

U.S. regulatory agencies, including the Fed, OCC and FDIC, stated on the same day that they supported the measure to ensure that all legacy contracts would either mature or have time to incorporate robust fallback language prior to LIBOR’s cessation. The regulators made clear in their statement that while an extension of USD LIBOR would provide needed time for legacy contracts, they strongly encouraged banks “to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021.”³ The upshot is that this extension is about existing contracts, and it does not give markets a reprieve to continue using LIBOR in newly issued loans past 2021. For the loan market, this means that borrowers, banks and investors must continue preparing to stop using LIBOR this year.

The upshot is that the LIBOR extension is about existing contracts, and it does not give markets a reprieve to continue using LIBOR in newly issued loans past 2021.

On March 5, the U.K. Financial Conduct Authority (“FCA”), which regulates LIBOR, made an official announcement that panel bank submissions for all LIBOR settings will cease, after which representative LIBOR rates will no longer be available. IBA, ISDA, ARRC, Bank of England and Bloomberg all followed with confirmatory statements that morning that the ubiquitous reference rate would finally enter retirement. This announcement did two things: First,

it formally set the LIBOR end date for all currencies (June 2023 for USD, December 2021 for all other currencies). Second, it constituted a “benchmark transition event,” meaning the spread adjustments to be added to alternative reference rates upon LIBOR’s cessation were officially struck.

USD LIBOR tenor	Adjusted rate
1-month	SOFR + 11 bps
3-month	SOFR + 26 bps
6-month	SOFR + 43 bps
12-month	SOFR + 72 bps

Source: Bloomberg Finance, L.P., as of March 5, 2021.

Ultimately, regulators decided the best way to ensure no disruption to financial stability when rolling off LIBOR was to extend publication of the USD rate to help amortize the balance of existing legacy contracts down and provide more runway for U.S. legislation. Today, there are still hundreds of billions of dollars in loans with inadequate fallback language, and the extension will provide needed time for parties to incorporate robust fallback language.

The clock continues to tick for the loan market to move away from issuing new LIBOR-linked debt, and while hardwired SOFR fallbacks have made progress in the leveraged loan market, we have yet to see any new issuance or direct refinancing activity into SOFR. In the rest of this note, we will discuss the outlook for new loans and the progress that must be made on legacy contracts, and look at the bilateral business loan market, where loans are negotiated between one borrower and one lender—an increasingly important area of focus for the market.

Outlook for new loan issuance

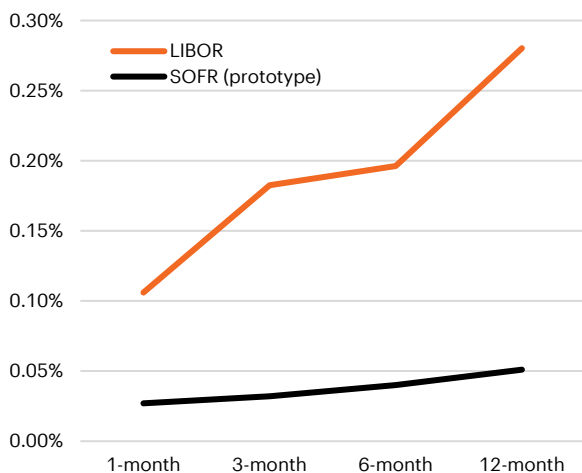
Since 2018, guidance from the Alternative Reference Rate Committee (ARRC), the Fed-backed industry group overseeing benchmark reform in the U.S., has stated that issuance of LIBOR-linked business loans should cease by June 30, 2021, six months prior to the planned date for LIBOR’s official sunset. Despite this industry guidance, progress in the syndicated loan market has been slow, especially compared to the derivative market, where SOFR futures and swap volumes continue to climb. In cash markets, issuance of SOFR-linked floating rate notes (FRNs) has been dominated by GSEs and

³ SR 20-27, “Statement on LIBOR Transition.” November 30, 2020. <https://www.federalreserve.gov/supervisionreg/srletters/SR2027a1.pdf>.

banks, which comprise nearly all of the \$1.1 trillion in total SOFR issuance.¹

The transition in the loan market has been slow. In our view, there are two reasons for the lack of new SOFR loan issuance, one of which should self-correct with time, and the other of which may be viewed as an inherent limitation of the new rate by certain market participants. First, SOFR today lacks a term structure, a stark difference from LIBOR that impacts borrowers' ability to understand and manage their interest expense in advance. Leveraged loan coupons have historically referenced 1-month or 3-month LIBOR, which was made possible by the ability of panel banks to estimate their cost of unsecured borrowing for 1-month and 3-month periods. The market underlying SOFR is composed entirely of overnight lending transactions, meaning a term structure will have to be created using futures and swap prices.

Term structure of interest rates



Source: Bloomberg Finance, L.P., IBA, as of March 5, 2021.

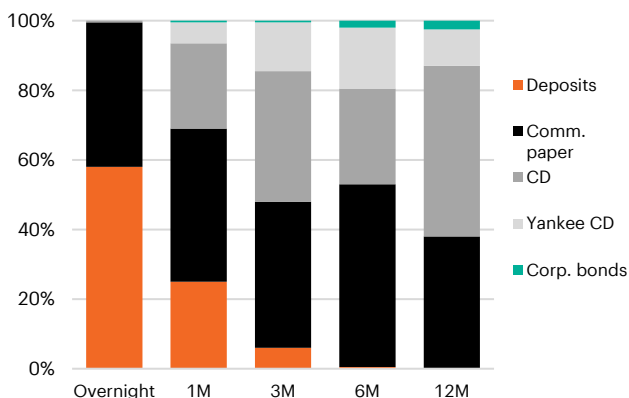
At this time, a benchmark-ready executable SOFR term structure is not yet available. For existing loans, the market has coalesced around a backward-looking average of daily SOFR as a temporary fallback rate upon the cessation of USD LIBOR. This methodology is not ideal for new loan issuance, as borrowers and lenders prefer continued certainty around rate resets. With that said, this impediment should self-correct over time. SOFR derivative volume is growing, and both CME and IBA have begun publishing preliminary term SOFR levels based on derivative pricing. IBA recently submitted a methodology for publishing official SOFR term rates, which is under review by the ARRC, which is actively

evaluating a viable term structure for SOFR. In our view, while the lack of a term rate may be a moderate deterrent to new issuance, we do not believe it is the primary holdup, and we do expect a reliable term curve to be developed at some point in the future.

The second reason is an intrinsic characteristic of SOFR and therefore will not change with time. The Treasury repo market that underlies SOFR is secured and risk-free, determined by lending transactions collateralized by U.S. Treasury securities. As such, SOFR is always going to be a fundamentally different rate from LIBOR, which incorporated the element of unsecured credit risk inherent in a bank's marginal funding cost. Banks and other lenders have become increasingly wary of utilizing a rate that does not reflect their cost of capital, especially during times of market disruption. The COVID-19 crisis exacerbated these concerns as the spread between LIBOR and SOFR widened rapidly in March 2020. SOFR fell to 1 bps; LIBOR initially rose but then also plummeted to historically low levels, illustrating both the potential issues faced by banks during times of stress but also the unreliability of LIBOR inputs and methodology.¹

Bloomberg Short Term Bank Yield Index

Index underlying inputs



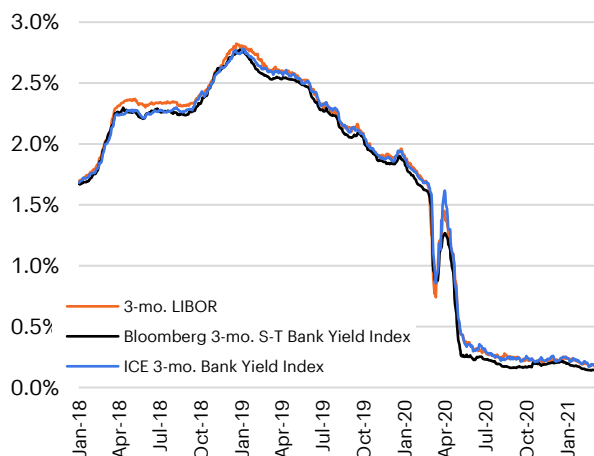
Source: Bloomberg Finance, L.P., as of March 5, 2021.

For some lenders, the answer is to embrace a credit-sensitive rate ("CSR") that can coexist alongside SOFR. Currently, there are three contenders: the ICE Bank Yield Index and Bloomberg Short Term Bank Yield Index, which are already being published, and a SOFR credit spread adjustment from IHS Markit

that we expect to begin publishing in Q2 2021.⁴ While these methodologies differ slightly, all three aim to measure the yield required by investors to lend to banks on a senior, unsecured basis. Unlike LIBOR, the rates are based completely on actual transactions, namely primary market funding, via deposits, commercial paper and certificates of deposit, and secondary market corporate bond transactions.

These rates suffer from much the same vulnerabilities that beset LIBOR—namely the lack of a robust underlying market. Daily transactions underlying the ICE Bank Yield Index and Bloomberg Short Term Bank Yield Index averaged \$10 billion–\$30 billion from 2018–2020, depending on the term. This level of volume is relatively insignificant compared to SOFR, which has averaged roughly \$1 trillion per day in underlying transactions.⁵ Lenders will have to weigh the importance of using a rate that acts much like the rate they are used to (LIBOR) and one that will be supported by robust activity in both the underlying market and the derivative market.

Credit-sensitive rates



Source: Bloomberg Finance, L.P., IBA, as of March 5, 2021.
Note: Levels prior to index inception dates represent a back test.

Ultimately, we could see a world where the loan market coalesces around a CSR that may live beside SOFR. In a potential multi-rate environment, it will be even more important for both borrowers and lenders to understand the merits and risks of both options as well as their underlying documentation and market mechanics. Right now, it seems as though banks are engaged in a bit of a staring

contest, and the market continues to wait to see who will blink on the inaugural SOFR loan issuance. We do believe one of the larger U.S. banks will eventually arrange a loan deal that references SOFR, and that could set the tone for the rest of the market.

Hundreds of billions of dollars in loans contain no fallback language, presenting risk to both banks and borrowers, and the CLO market adds another layer of complexity.

Additionally, there continues to be dispersion among amendment and hardwired fallback language in the current leveraged loan repricing wave, though we do continue to see more loans starting to incorporate hardwired fallbacks to SOFR. This is a positive for the market. If regulators' response to the USD LIBOR extension is a prelude to how this year will continue to unfold, perhaps ironclad banking regulation will shift the landscape for discontinued LIBOR issuance by year-end, which would truly promote the use of SOFR and any other alternative reference rates, such as the CSRs.

Despite the slow progress, we are seeing some momentum. The market recently saw Enbridge, a pipeline operator, become the first nonfinancial corporation to issue a SOFR-linked FRN. The \$500 million February issuance was seven times oversubscribed, a sign of strong demand, and represents a landmark for the broader utilization of SOFR. There are a number of industry and trade groups that are spending time educating nonfinancial corporations and investors on the importance of being proactive around managing LIBOR risk today, despite the sunset publication date of June 30, 2023.¹

A look at legacy contracts

The extension of USD LIBOR through June 2023 was primarily to provide needed time for existing loans without adequate fallback language to address those issues. We estimate that only about 6% of the \$1.2 trillion in outstanding leveraged loans matures prior to the June 2023 cessation date. Loans generally do not carry call protection, so we would expect some post-2023 loans to pay off prior to maturity, though regulators have made it clear that

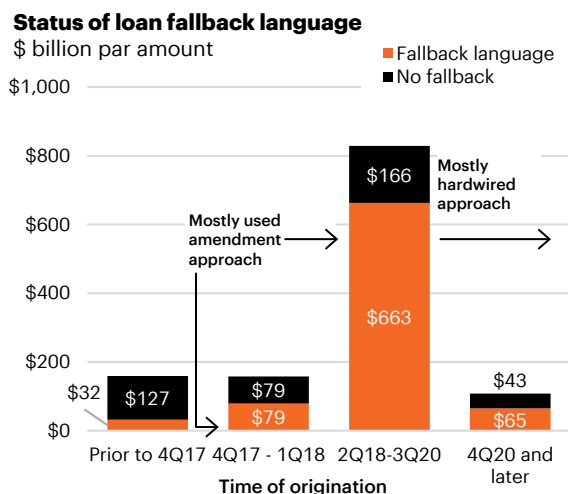
4 IHS Markit.

5 Macrobond, FS Investments.

all borrowers and lenders should still be sure to have fallback language in place.

Within this pool of more than \$1 trillion in loans that mature post-June 2023, roughly 67% already have fallback language in place in their loan documents. For those issued between the end of 2017 and mid-2020, which encompasses the majority of outstanding deals, most loans with fallback language utilized the “amendment approach.” This provides the parties with flexibility in determining the replacement rate. This was the mainstream approach at the time, as SOFR had not yet been crowned as the regulators’ preferred replacement for LIBOR.

Since fall 2020, the ARRC’s best practices have urged banks to instead incorporate “hardwired language,” which leaves significantly less wiggle room once LIBOR goes away. Under this approach, once a cessation “trigger event” occurs, all references to LIBOR will be replaced pursuant to a waterfall: The first choice is term SOFR plus a spread. If term SOFR is not yet available, the next option is daily SOFR in arrears plus a spread. If for some reason neither of these rates is available (highly unlikely), the process will revert to something resembling the earlier amendment approach. Of course, this is industry guidance, and parties may negotiate alternate terms if they choose.



Source: Bloomberg Finance, L.P., as of February 28, 2021.

The aforementioned definitive early-March announcement from the U.K. FCA constitutes a benchmark trigger event for many credit agreements, meaning that not only is the official end date for USD LIBOR (and date on which the waterfall goes into effect) set as June 30, 2023, but the SOFR adjustment spread would also be fixed. The spread

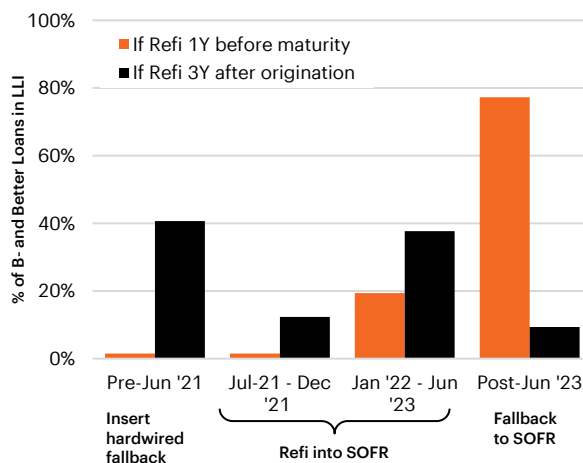
FS Investments

adjustment is the five-year historical median between LIBOR and SOFR, which strives to achieve net present value neutrality for the converted contract for the duration of its life. This methodology was pioneered by ISDA and the derivative market and has since been adopted by the cash market as well to best manage basis risk between assets and liabilities.

The significance of the March 5 trigger event is that it provides much-needed clarity and certainty for the market that the transition away from LIBOR is real and is happening. Unfortunately, it also means that the adjustment spread will be fixed more than two years in advance of USD LIBOR cessation, leaving lenders with what will feel to them like an arbitrary and possibly inaccurate adjustment. This illustrates the paradox that we alluded to earlier—the USD extension does not come without added complexity.

While the USD LIBOR extension reprieve was welcomed in relation to legacy agreements and also affords time for U.S. legislation, it is still too far off in the future for a spread adjustment struck today to be relevant for loans in June 2023. With a bifurcation in cessation dates between USD and the other currencies, the FCA was stuck between a rock and a hard place. If it waited longer to make its announcement, perhaps the market wouldn’t have been as convinced of the enormity and reality of the transition, which would risk transition progress. We are also sympathetic with lenders, who understandably view setting a spread to be used in June 2023 in March 2021 as perhaps more arbitrary.

When loans may refi and/or switch to SOFR

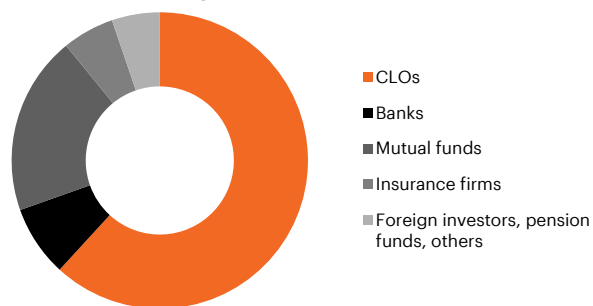


Source: S&P/LSTA Leveraged Loan Index, LSTA calculations, as of March 1, 2021.

Now that a trigger event has occurred, the market will continue its quest to ensure that existing contracts include robust fallback language in preparation for June 2023. The missing component during the long, arduous LIBOR transition has been actual legislation. The ARRC, while convened by the Federal Reserve, does not hold enforcement powers, and market participants are merely strongly encouraged to adopt its practices. The State of New York, which governs most contracts, has introduced legislation that would automatically replace LIBOR with a rate recommended by the Fed or the ARRC (i.e., SOFR) for all contracts that lack fallback language.

While still in progress, passage could happen in the first half of the year and would be positive for those market participants with tough legacy contracts. Another source of uncertainty in the market comes from collateralized loan obligations (“CLOs”), which represent about 65% of syndicated loan holders. CLO managers buy a pool of syndicated loans and securitize the pool, in essence selling tranches of various risk levels to outside investors. Most newly issued CLOs are incorporating ARRC-recommended fallback language, but there is a significant amount of previously issued CLOs outstanding that still have inadequate language.

Holders of leveraged loans



Source: Federal Reserve, as of December 31, 2019.

Along with implementing robust fallback language, uncertainty exists around a future mismatch between CLO assets and liabilities, especially if multiple different rates are eventually utilized within the loan market. A scenario where some of the underlying loans utilize a CSR and/or LIBOR while the CLO liabilities reference SOFR would introduce some level of basis risk that could be exacerbated due to leverage and rate movement in times of stress. CLO market participants will need to monitor this risk and actively manage their portfolios as the transition progresses.

FS Investments

There is still work to be done to prepare existing loans for the end of USD LIBOR in June 2023.

The decision also demonstrates the immense difficulty of the LIBOR transition—moving a financial system as large and complex as the U.S.’ away from the ubiquitous rate is tantamount to turning around an oil tanker.

Hundreds of billions of dollars in loans contain no fallback language, presenting risk to both banks and borrowers, and the CLO market adds another layer of uncertainty. To the extent that new issuance includes some utilization of a credit-sensitive adjustment, there may be some demand by lenders to amend existing contracts to include a dynamic credit adjustment, but it is still too early to know. Ultimately, we expect that the combination of the extra runway provided by the extension, continued pressure by regulators, and legislation will help minimize transition risks for existing loans.

Bilateral loan agreements

On the other side of the loan market are bilateral loan agreements—those that involve a borrower and a single lender, possibly a bank, insurance company or alternative lender such as a debt fund or BDC. Private debt has become a significant asset class, with assets approaching \$900 billion in the U.S., and represents a critical source of funding for smaller middle market companies who have difficulty accessing the syndicated loan market.

The ARRC revised guidance for bilateral loans in 2020 to recommend utilizing hardwired fallback language, making it very similar to that of the syndicated loan market. The only difference is for loans where the borrower has entered into a completely offsetting interest rate swap, effectively turning their loan into a synthetic fixed rate loan. Under the “hedged loan approach,” to avoid any basis mismatch between swap and loan payments, the loan would follow fallback language guidance for derivatives rather than cash products.

Bottom line

As we wrote in the [first note of our series](#), the transition away from LIBOR continues to gain steam, shifting from theoretical to tactical. In just the past six months, we have seen major derivative

exchanges switch to SOFR discounting, the extension of USD LIBOR, and an announcement from the U.K. FCA that represents a “trigger event.” The leveraged loan market sits at the center of the transition and will be closely watched in the coming months and quarters.

Progress on getting market participants to begin utilizing SOFR in new loans continues to be more challenging. The lack of a credit component and, to a lesser extent, a term rate has caused pause for some borrowers and lenders. Still, regulators have made it clear they expect markets to cease utilizing LIBOR by December 31, 2021, making it a race against time. It is still possible some lenders would prefer to use a credit-sensitive rate, though it’s still too early to know how prominent they will be and which, if any, will gain traction.

We believe the decision to extend USD LIBOR through June 2023 gives the loan market ample time to deal with legacy contracts with inadequate fallback language, though it comes with its own drawbacks. The decision also demonstrates the immense complexity of the LIBOR transition—moving a financial system as large and complex as the U.S.’ away from the ubiquitous rate is tantamount to turning around an oil tanker.

While the transition has been slow and arduous, there are solutions on the horizon for the challenges faced by the loan market. On the legacy side, the extension provides much-needed time, and the potential for federal and/or state legislation could help boost the process of ensuring adequate fallback language. On new issuance, regulators have made it clear that LIBOR should not be used post-2021, and we would expect that once one of the large banks arranges a deal using SOFR or a different rate, others will follow. Though challenging, the transition continues to gain steam, with the leveraged loan market at the heart of it.