The retirement of LIBOR and the adoption of SOFR in the U.S. in 2022 will likely affect trillions of dollars of financial transactions and involves a number of significant challenges. Credit basis risk, legal uncertainties, technological challenges and other factors could cause problems, but market participants are developing solutions.

Executive summary

- In the wake of the Great Financial Crisis, regulators recognized serious shortcomings in the widely used London Interbank Offered Rate (LIBOR) benchmark. LIBOR had become problematic because it was not a rate derived from actual market transactions but rather an estimation of bank unsecured funding costs. It was also compromised due to the of the limited volume of transactions underpinning the index.
- In February 2014, the Federal Reserve convened the Alternative Reference Rate Committee (ARRC) to find a new benchmark. It decided on the Secured Overnight Funding Rate (SOFR), a broad measure of overnight Treasury-secured borrowing with over $900 billion in overnight transactions.
- Market participants have identified three main concerns with SOFR: It is volatile, there is significant credit basis risk between it and LIBOR and there is currently no term structure.
- Also, the transition itself, involving an estimated trillions of dollars of transactions, could cause technological, legal and logistical problems, especially concerning how LIBOR-benchmarked transactions can be transferred to SOFR.
- Work by industry groups is addressing some of these concerns, and regulators are heavily incentivized to avoid any market disruption during the transition to SOFR.
- SOFR has been slowly gaining traction as a benchmark since its April 2018 introduction with over $60 billion in transactions. Serious challenges remain, however, for it to effectively replace LIBOR.

LIBOR’s retirement rationale

In the wake of the Great Financial Crisis, the Financial Stability Board (FSB) and the Financial Stability Oversight Council (FSOC) recognized that a secular decline in unsecured short-term funding by banks posed a serious structural risk to the LIBOR benchmark rate. In response, they convened the Alternative Rates Reference Community (ARRC) to find an alternative benchmark.

Regulators and market participants decided to retire LIBOR for a number of reasons. First and foremost, is the limited volume of transactions underpinning the index; it is not truly a measure of banks’ unsecured funding costs. Banks now estimate their funding costs and report LIBOR spreads based on these estimations.

Contributor:
Thomas Sweeney: Sector Head—Structured Finance
LIBOR to SOFR transition through the eyes of an investment manager

June 2019 /

Also, the rate has proven vulnerable to manipulation. Regulators have fined banks billions of dollars for “gaming the rate.” The ease with which banks did so caused LIBOR and the British Banker’s Association, the trade group that administered LIBOR until 2014, to lose credibility.

Nonetheless, there are currently trillions of dollars of assets benchmarked to LIBOR (market estimates as of year-end 2018). These include the entire $1.2 trillion leveraged loan market and $1.5 trillion in structured finance assets, including almost the entire $650 billion CLO market.

**SOFR’s challenges**

The proposed replacement, SOFR, is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities. SOFR is based on an estimated $900B in overnight transactions, satisfying the ARRC’s requirement that the replacement rate be robust. The New York Federal Reserve launched SOFR in April 2018, and a year later it had approximately $60 billion in issuance benchmarked to it. For example, issuers in that time have included Wells Fargo, MetLife, and RBC, as well as the US government sponsored agencies, Fannie Mae and Freddie Mac, being active. In addition, the CME has launched one- and three-month SOFR futures, providing the first chance to see what the term structure of the forward SOFR curve might look like.

Figure One shows the relationship between SOFR and Fed Funds. The first key takeaway is that SOFR does track Fed funds very closely. This would be expected given the high quality secured nature of the borrowing. However, it is a very volatile index, especially around quarter end. Banks tend to cut repo funding to clean up their balance sheet during quarter end, and that causes a spike in secured overnight funding. As the chart shows, at almost every quarter-end, there has been a pretty significant spike up.

**FIGURE 1: SOFR AND FED FUNDS**

This may provide an advantage for portfolio managers who buy SOFR-benchmarked securities before quarter-end. However, from a borrower’s perspective, the volatility and expense of this short-term hike in funding costs make SOFR an undesirable benchmark. Along with the volatility issue, there is a significant credit basis between LIBOR and SOFR because the former is unsecured and the latter is secured. And finally, there is no term structure for SOFR. Currently, only overnight SOFR is quoted whereas LIBOR is quoted on a one-week, one-month, three-month, and six-month basis, with three-month being the most popular.

Please note certain information in this presentation constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this presentation report may differ materially from those described. The information herein reflect our current views only, are subject to change, and are not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.
Proposed solutions

Different asset class working groups involved in facilitating the transition—ISDA in derivatives; the LSTA in loans; and SFIG for structured products—identified three main issues regarding the transition from LIBOR to SOFR.

Frist, to smooth the volatility in SOFR some have advocated a three- to six-month compounded average. This compounded average could be calculated in advance of the reset or in arrears. This is not, however, a perfect solution. The borrower would not know the benchmark rate in advance if calculated in arrears. Conversely, if calculated in advance, the benchmark would not accurately reflect a forecasted change in SOFR. Still, compounded SOFR could potentially address the problem of the quarter end spikes and would only be necessary if a term curve does not develop.

Second, to compensate for the basis risk between the unsecured and secured benchmark rates, an average basis between SOFR and LIBOR could be calculated. This could be a three- to six-month look-back at the end of 2021. For example, if LIBOR was not quoted on January 1, 2022, the new benchmark basis would be SOFR plus the last three- to six-months’ average basis between LIBOR and SOFR in perpetuity. While that does not reflect LIBOR’s actual unsecured credit risk, it does compensate investors for some level of static credit risk going forward. Finally, with more robust issuance and increased futures volume, we do expect a term curve to be established prior to 2022.

Key transition risks

The LIBOR language in transactions is not uniform among asset classes or from asset to asset. In some cases it “freezes” LIBOR at the last quoted print. For example, on January 1, 2022, some of these floating rate assets would convert to fixed rate assets at the last LIBOR quoted rate for the remainder of their life. There is other fallback language that synthetically tries to recreate LIBOR by getting funding quotes from different banks. Yet, other transactions have language that, if LIBOR is not quoted, switches automatically to prime rate, which is very expensive relative to LIBOR.

In addition to the fallback language, basis risk between the assets of a deal and the liabilities (bonds) could be a risk. Under some circumstances, particularly in structured finance, assets of the deal may be quoted off one benchmark and the deal liabilities off another. This basis risk could affect the economics of the transaction and may threaten the ratings of the deal.

Finally, regarding technology risk, it must be acknowledged that the trustees who are charged with transferring the benchmarks will have thousands of transactions to process over to the new benchmark in a short amount of time.

There are a few remedies to these problems. The ARRC has recommended standardized LIBOR fallback language for new deals. While these guidelines may take some time to become standard, we expect that vast majority of new deals to have somewhat standardized fallback language well prior to 2021.

One of the solutions that the ARRC has proposed to limit basis risk are automatic triggers. These triggers automatically convert the benchmark on the liabilities when certain asset thresholds are met. For example, in CLOs, if the underlying leverage loans are more than 50% benchmarked to something other then LIBOR, the underlying CLO tranches will automatically convert to that benchmark.

Broadly speaking, the market should have adequate time to prepare for the transition; the SOFR market already exists. Most of the “plumbing” should be in place by the time the transition occurs. And finally, regulators appear to be heavily incentivized to avoid chaos during the transition. They recognize the importance of this benchmark and will be watching the transition very carefully.

Alternatives to SOFR

The FCA will no longer compel banks to submit LIBOR data after 2021, but banks may still voluntarily submit quotes. However given the litigation risk with estimating their funding costs, banks may not be incentivized to submit bids. Even so, ICE has put out “feelers” for quoting LIBOR after 2021. This may be necessary to facilitate the wind-down of a lot of legacy transactions that do not have effective fallback language. Any continued existence of LIBOR is not supposed to compete with SOFR, just allow for the orderly wind-down of older transactions.
In addition to SOFR, there have been some ideas discussed among fixed income market participants regarding alternatives:

**A commercial paper index.**
This would be an index of short-term commercial paper issued by banks.

**The Ameribor index.**
This reflects an actual quoted unsecured interbank borrowing rate used primarily by regional banks.

**Conclusion**

Well in advance of LIBOR’s expected discontinuation, we would advocate that investors be proactive in analyzing asset fallback language. It is our view that floating rate assets without precise alternative rate LIBOR fallback language may trade at a discount to floating rate assets with clear and precise alternative rate language. Additionally, assets that freeze LIBOR, or convert to another index, may have different characteristics and valuations post-LIBOR. For assets that do have precise fallback language, it’s imperative to stay abreast of the expected alternative rate and the economic and tax implications of the change to it. We prefer deals that automatically convert to new alternative rates and have imbedded triggers that limit basis risk. It is DWS’s belief that LIBOR could still exist at the end of 2021, but we are planning for a worst case scenario of a complete cessation of LIBOR in 2022.

**For institutional investor and registered representative use only. Not to be shared with the public.**

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries such as DWS Distributors, Inc. which offers investment products or Deutsche Investment Management Americas Inc. and RREEF America L.L.C. which offer advisory services.

The material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It is for professional investors only. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for Deutsche Bank AG and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein.

Please note that this information is not intended to provide tax or legal advice and should not be relied upon as such. DWS does not provide tax, legal or accounting advice. Please consult with your respective experts before making investment decisions.

Neither DWS nor any of its affiliates, gives any warranty as to the accuracy, reliability or completeness of information which is contained. Except insofar as liability under any statute cannot be excluded, no member of DWS, the issuer or any officer, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered.

This document is intended for discussion purposes only and does not create any legally binding obligations on the part of DWS and/or its affiliates. Without limitation, this document does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS to enter into or arrange any type of transaction as a consequence of any information contained herein. The information contained in this document is based on material we believe to be reliable; however, we do not represent that it is accurate, current, complete, or error free. Assumptions, estimates and opinions contained in this document constitute our judgment as of the date of the document and are subject to change without notice. Past performance is not a guarantee of future results. Any forecasts provided herein are based upon our opinion of the market as at this date and are subject to change, dependent on future changes in the market. Any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets is not necessarily indicative of the future or likely performance. Investments are subject to risks, including possible loss of principal amount invested.
Certain DWS products and services may not be available in every region or country for legal or other reasons, and information about these products or services is not directed to those investors residing or located in any such region or country. The material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only and it is not intended that it be relied on to make any investment decision. It is for professional investors only. It does not constitute investment advice or a recommendation or an offer or solicitation and is not the basis for any contract to purchase or sell any security or other instrument, or for DWS and its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein. Investment decisions should always be based on the Sales Prospectus, supplemented in each case by the most recent audited annual report and, in addition, by the most recent half-year report, if this report is more recent than the most recently available annual report. Past performance is not indicative of future results. No representation or warranty is made as to the efficacy of any particular strategy or the actual returns that may be achieved.

For investors in Bermuda: This is not an offering of securities or interests in any product. Such securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

For investors in Peru: The Products may not be offered or sold to the public in Peru. Accordingly, the Products have not been nor will they be registered with the Peruvian Superintendence of Capital Markets – Public Registry of the Capital Markets- nor have they been submitted to the foregoing agency for approval. Documents relating to the Products, as well as the information contained therein, may not be supplied to the public in Peru, as the offering of the Products is not a public offering of securities in Peru, and may not be used in connection with any offer for subscription or sale of securities to the public in Peru.

For investors in Chile: The information contained in this document is not intended to be an offer of securities. This information is subject to General Rule No. 336 of the Superintendencia de Valores y Seguros de Chile ("SVS"). The units issued under this fund are not registered with the SVS. The issuer is not required to provide information in Chile on the units issued under the fund. The units may not be publicly offered unless they are properly registered with the SVS. Without limitation, this document does not constitute an offer or a recommendation to enter into any transaction neither does it constitute the offer of securities or funds. The offer of any services and/or securities or funds will be subject to appropriate local legislation and regulation.

The products and services in this communication shall not involve or be deemed to be considered an offering of securities or gathering of financial resources or savings in Argentina.

In EMEA
This marketing communication is intended for professional clients only.

Important information:
DWS is the brand name under which DWS Group GmbH & Co. KGaA and its subsidiaries operate their business activities.

Clients will be provided DWS products or services by one or more legal entities that will be identified to clients pursuant to the contracts, agreements, offering materials or other documentation relevant to such products or services.

The information contained in this document does not constitute investment advice.

All statements of opinion reflect the current assessment of DWS Investment International GmbH and are subject to change without notice.

Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical performance analysis, therefore actual results may vary, perhaps materially, from the results contained here. Past performance, [actual or simulated], is not a reliable indication of future performance.
In AsiaPacific
DWS is the brand name of DWS Group GmbH & Co. KGaA. The respective legal entities offering products or services under the DWS brand are specified in the respective contracts, sales materials and other product information documents. DWS Group GmbH & Co. KGaA, its affiliated companies and its officers and employees (collectively “DWS Group”) are communicating this document in good faith and on the following basis.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by DWS Group, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not constitute an offer, recommendation or solicitation to conclude a transaction and should not be treated as giving investment advice.

DWS Group does not give tax or legal advice. Investors should seek advice from their own tax experts and lawyers, in considering investments and strategies suggested by DWS Group. Investments with DWS Group are not guaranteed, unless specified.

Investments are subject to various risks, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. The terms of any investment will be exclusively subject to the detailed provisions, including risk considerations, contained in the offering documents. When making an investment decision, you should rely on the final documentation relating to the transaction and not the summary contained herein. Past performance is no guarantee of current or future performance. Nothing contained herein shall constitute any representation or warranty as to future performance.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

Although the information herein has been obtained from sources believed to be reliable, DWS Group does not guarantee its accuracy, completeness or fairness. No liability for any error or omission is accepted by DWS Group. Opinions and estimates may be changed without notice and involve a number of assumptions which may not prove valid. All third party data (such as MSCI, S&P, Dow Jones, FTSE, Bank of America Merrill Lynch, Factset & Bloomberg) are copyrighted by and proprietary to the provider. DWS Group or persons associated with it may (i) maintain a long or short position in securities referred to herein, or in related futures or options, and (ii) purchase or sell, make a market in, or engage in any other transaction involving such securities, and earn brokerage or other compensation.

The document was not produced, reviewed or edited by any research department within DWS Group and is not investment research. Therefore, laws and regulations relating to investment research do not apply to it. Any opinions expressed herein may differ from the opinions expressed by other DWS Group departments including research departments. This document may contain forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author’s judgment as of the date of this material. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS Group as to the reasonableness or completeness of such forward looking statements or to any other financial information contained herein.

This document may not be reproduced or circulated without DWS Group’s written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries, including the United States. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject DWS Group to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Unless notified to the contrary in a particular case, investment instruments are not insured by the Federal Deposit Insurance Corporation (“FDIC”) or any other governmental entity, and are not guaranteed by or obligations of DWS Group.

© 2019 DWS Investments Singapore Limited.

© 2019 DWS GmbH & Co. KGaA. All rights reserved. I-067716-2